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**DIGITALIZATION OF TAX CONTROL IN THE RUSSIAN
FEDERATION: ANALYSIS AND TRENDS**

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Abstract

The results of the control work of the Federal Tax Service of the Russian Federation, the amount of funds allocated for financing activities and digitalization are analysed. Priority measures on informatization are indicated, Associated with the optimization and reduction of labor intensity of the execution of work processes, On-site and off-site tax audits efficiency is estimated. The results of the tax monitoring in the Russian Federation as a digital future of the tax control are presented, the experience of various countries in terms of applying of this control is described. The Drill-down and Standard Audit File for Tax technologies are explored. They allow one to conduct more effective and efficient tax audits and identify the main areas of inconsistency in the tax report system faster. Prospects for further development of the tax administration using computer-assisted learning are outlined, which provides less bias towards taxpayers, and understand the needs and problems of the taxpayer.

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1. Introduction

With economy being digital, informational technologies' implementation becomes one of the factors that ensures high speed of management decision making process which in its turn requires immediate receipt and analysis of information from all possible sources. Digital transformation influencing the work of tax authorities has two main directions:

- electronic services for taxpayers,
- using big data for risk analysis and tax requirements compliance.

Undoubtedly data digitization facilitates the exponential development of new solutions and business models that make new problems for tax administrations. But the transition to digital technology is not only a challenge, it is an unprecedented opportunity. (Impact of digitalization on the transformation of tax administrations, 2020).

2. Methodology and theory

Modern technologies provide tax administrations with unlimited opportunities for improvement and control. A key principle in the inspection (control) work is to start checking only when predictive analytics tools have identified tax evasion schemes. The choice of objects for the purpose of an on-site tax audit is not accidental. It is based on a detailed data analysis of the ACS (automated control systems) VAT-2 (valued added tax) that allows one to control products chains. The results of the inspection (control) work are presented in the Table 1.

Table 1. Results of the control work of the Federal Tax Service (FTS) of Russia (Report on form..., 2020)

	At the date of 01.01.2019	At the date of 01.01.2020	Deviation, %
Off-site tax inspection, unit	67 889 283	62 802 102	92.51
where: identified violations	3 531 116	2 447 065	69.30
Additionally charged payments (including tax penalties and interest), thousand rubles	55 631 081	37 743 893	67.85
Field inspections of organizations, individual entrepreneurs and other persons engaged in private practice, units.	14 156	9 047	63.91
where: identified violations	13 842	8 694	62.81
Additionally charged payments (including tax penalties and interest), thousand rubles	307 769	299 895	97.44
Number of legal entities, units.	124	113	
	4 085 035	3 715 287	90.95
Coverage of organizations with field inspections, %	0.3	0.2	66.67
Coverage of organizations with off-site inspections, %	1661.9	1690.3	101.71
Effectiveness of on-site tax inspections *, thousand rubles	22234	34494	155.14
Effectiveness of off-site tax inspections *, thousand rubles	15.8	15.4	97.47

* Efficiency of tax inspections $E = P / Q$,

P – amount of additional back payments based on the results of tax audits, million rub.;

Q – the number of tax audits that found out violations of the law on taxes and fees

In 2019 the number of on-site inspections decreased by 36% to 9.0 thousand (in 2017 – 20, 2 thousand). The coverage of organizations with field inspections comprises only 0.2% — this is two

organizations or individual entrepreneurs out of a thousand, along with this one organization has an average of 16 in-house inspections. Indicative indicators that characterize the immediate state of the controlled sphere indicate an increase in efficiency, so on the basis of one on-site tax audit, an average of 34.4 billion rubles is accrued, which is 55% higher than the previous period.

Digitalization requires significant resources during development and operation; however, it also guarantees significant cost savings and efficiency. Table 2 shows the financial indicators of digitalization results.

Table 2. Financing of the Federal Tax Service (Federal treasury...2020; Informatization plan of the Federal Tax Service, 2020)

	At the date of 01.01.2018	At the date of 01.01.2019	At the date of 01.01.2020	Deviation 2020 from 2018, %
Allocated budgetary provisions for the Federal Tax Service, thousand rubles.	159 091 047	165 640 777	185 747 655	116.8
Financing of Informatization of the Federal Tax Service, thousand rubles, including	17 632 501	18 961 840	7 610 315	43.2
- priority measures for informatization, AIS "Tax-3", "EGR ZAGS", FIAS, AIS Marking'	7012640	3687364	2084369	29.7
- Exploitation of Data Storage and Processing Center system	59785	9214257	539331	902.1
- other operational and development activities	10560076	6060219	4986615	47.2
The share of spending on informatization, %	11.0	11.4	4.1	37.3
Revenues administered by the Federal Tax Service of Russia to the budget system of the Russian Federation, billion rubles	23 143	27 745	29 964	129.5
The cost of collecting 100 rubles of taxes, rubles.	0.68	0.59	0.61	89.7

Budget expenditures for financing the Federal Tax Service increased by 16%, with the costs of automating the information system of the Federal Tax Service began to decrease significantly, and the share of these expenses began to make 4% of the total funds.

The priority measures of informatization are the following: AIS "Tax-3", its goal is to optimize and reduce the complexity of the workflow, increase transparency and openness (publicity) of tax authorities, the integrated and efficient use of information, FIAS is a joint federal resource containing reliable, uniform, accessible, structured address information, AIS "Marking" regulates the scope of trade and helps to get rid of fakes and illegal importation of products into the territory of the Russian Federation, information base (database) of The first registry office allows you to create a population register of the Russian Federation.

The amount of funding for the project to create and operate a data center (data processing center) has increased by 9 times, the goal of data consolidation is to assess the quality of disparate data, make it suitable for analysis, and ensure their integrity, consistency, reliability, and relevance, as well as ensuring high speed access to them and flexibility of analytical queries.

The efficiency of spending Federal budget funds shows that 60 kopecks are allocated for collecting and raising 100 rubles of taxes, and this level has decreased by 10% for the last three years. At the same time, the lowest value among the OECD countries is shown in Estonia, where the tax administration spends 37 Euro cents to collect 100 Euros (Impact of digitalization on the transformation of tax administrations 2020).

Big data analysis helps one to conduct more targeted tax audits. The exchange of documents (information) in the electronic form also promotes further transformation of the business model and business processes of organizations, as well as the traditional concept of the tax control. In this context, such a form of tax control as tax monitoring, which the Federal tax service has been implementing since January 1, 2016, has become a new tool — the digital future of the tax control. Tax monitoring data is presented in table 3.

Table 3. Information about tax monitoring in the Russian Federation

	Fact 2019	Prospects
Criteria for the taxpayer's entry into the tax monitoring,		
- taxes paid out per year, million rubles.	300	200
- total revenue for the year, billion rubles.	3	2
- value of assets, billion rubles.	3	2
Number of companies meeting the criteria, units.	1905	3879
The number of participants in the tax monitoring, units	44	96
Share of taxes came in the budget from tax monitoring participants, %	12	30

Tax monitoring implies enhanced information interaction, within the frames of which the organization provides the tax authority with real-time access to accounting and tax accounting data, and in return it gets the right in case occurring any doubts to request a reasoned opinion from the tax authority on the tax consequences of transactions. The tax monitoring regime significantly accelerates the resolution of disputes about the application of tax legislation and allows the taxpayer to avoid additional charges of taxes, penalties and fines in the future, as well as reduces the burden of tax control.

Tax monitoring provides access to taxpayer's data in a real time regime. Primary documents are launched into the system – this is the manual work of the accountant-operator. Control is carried out from two sides: the tax inspector controls at his workplace, and the payer controls from the inside. When any deviations occur, they are recorded, the tax inspector sees what the organization has corrected and how. If necessary, additional data may be requested. In addition, the system possesses a history of requests.

Tax monitoring is based on the online access to the taxpayer's accounting system. This allows one to track instantly operations and evaluate the correctness of reporting indicators, and the drill-down technology decrypts the data of declarations even up to the primary documents.

The main areas of the development of tax monitoring are standardization of requirements for disclosure of tax accounting indicators, tax and financial reporting, as well as the development of a standard tax audit file Standard Audit File for Tax (SAF-T) for automatic verification of accounting and reporting data. This file will allow one to automatically test and verify the completeness of your credentials, track the history of each operation and the availability of documents-bases for it, as well as generate a crypto key. The purpose of SAF-T is to conduct more effective and efficient tax audits, making it easier to identify the main areas of non-compliance in tax reporting.

Electronic audit based on the tax audit file is performed through several stages. First, the taxpayer generates data in a standard electronic reporting format. On the second stage, the auditor uploads the data from a secure server and begins its analysis with the help of special software. And after completing the control procedures, the taxpayer receives an audit report that contains the conclusions made during the electronic tax audit. As a result of such an audit, the taxpayer is provided not only with a preliminary Declaration, but also with a corresponding calculation. Then the taxpayer has the opportunity to review the information and confirm or argue it (Kosarin et al., (2019).

With a large number of new streams of information about taxpayers, tax authorities become government's informational agencies. Their goal is to learn how to effectively process and apply this big data. New methods and techniques are required in order to use all this data. Machine learning methods provide opportunities for data analysis in contrast to other conventional methods (Digitalisation of tax: international perspectives, 2020).

Using machine learning methods, tax administrations are able:

- to increase efficiency by allowing the computer to analyze data and perform random check-ups, identify informational needs or identify risks;
- to understand better the needs and concerns of the taxpayer which will allow one to adapt information and other actions to these needs and respond faster;
- to ensure less bias against taxpayers.

Thus new ethical dilemmas are occurring. The lion's share of data that can be analyzed in almost countless possible ways allows one to see patterns and predict results with a high degree of probability. Using machine learning, it is possible, for example, to predict bankruptcies and wage growth. Moreover, since the tax administration has access to the population register, in some cases we can predict life-changing events, such as divorces. Learning models are often biased. Providing not fully or excluding certain groups or subgroups, this type of "sampling error" results in false results. Machines learn from what we tell them. If we provide incorrect data then the machine will make biased predictions. To overcome this, you should control the input data and provide unbiased input data. (Transformation of the tax function using technologies 2020; United Nations conference on trade and development review of UNCTAD, 2019).

3. Results

The coverage of organizations with on-site inspections is only 0.2%. The effectiveness of the control work is increasing, so according to the results of one field tax audit, an average of 34.4 billion rubles is charged, which is 55% higher than the previous period. Budget expenditures for financing the tax service increased by 16%. The priority measures of informatization are: AIS "Tax-3" - this is a program that keeps records of all taxpayers; a single federal resource containing reliable, structured address information; AIS Markirowka regulates the sphere of trade; creation of data centers.

The development of tax control is the introduction of tax monitoring, in which an organization provides the tax authority with real-time access to accounting and tax accounting data, and in return receives the right, in case of doubt, to request from the tax authority a motivated opinion on the tax consequences of transactions. With a large number of new streams of information about taxpayers, the tax authorities are becoming government news agencies. Their goal is to learn how to efficiently process and apply this big

data, which requires new methods and techniques. We consider that machine-learning methods provide data analysis capabilities unlike other traditional methods.

4. Discussion

Meanwhile within the international practice, forms of tax control similar to the tax monitoring have been known for a long time. This is an enhanced relationships and a more developed form of it — cooperative compliance for the purposes of compliance with the law. The Netherlands, Ireland, the United Kingdom, and the United States were the first to implement this practice. Today, programs for enhanced interaction between taxpayers and tax authorities are in place in many OECD countries (Research on the tax provision, 2020; Zhang, & Wang, 2017).

Among the first European countries to introduce the practice of SAF-T was the tax administration of Portugal, and since 2008, SAF-T in this country is a mandatory system for all legal entities that conduct accounting in electronic form. The list of countries that use the SAFT system also accounts for the United Kingdom, the Netherlands, Sweden, and Norway. Germany also has an electronic tax balance (EBS) that is comparable to SAF-T. The transfer of an electronic tax balance is mandatory for all companies in Germany from fiscal year 2013. Starting from January 1, 2014, it is mandatory to fill out all tax balances in electronic form. (Afonasova et al., 2019).

5. Conclusion

Tax control will be integrated into the internal business processes of organizations and will be carried out unnoticeably by taxpayers. Tax monitoring will provide a qualitatively new level of tax control aimed at building mutual trust between business and the state. In our opinion, the advantages of using tax monitoring for the Federal Tax Service of Russia, are the ability to more quickly, prudently and accordingly better monitor compliance with tax legislation, the correctness of calculation and timeliness of payment of taxes and fees, i.e. the activities of the Federal Tax Service of Russia will be prudential. It is prudential control - preliminary, "early" - that will allow one to quickly register potential complications and problems in the activities of taxpayers and make corresponding adjustments in real time to eliminate them.

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