

## **The impact of new technologies on the predictability of the tax system and on the efficiency of tax administration**

### **Uticaj novih tehnologija na predvidivost poreskog sistema i na efikasnost poreske administracije**

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**Abstract:** Technological development stimulates changes in many spheres of business, so the national tax administration has made significant steps in the digitalization process. The changes refer to the transition from paper to digital form of data, creation of e-taxes portal. The introduction of the e-taxes portal achieves the goal of easier and simpler fulfillment of obligations towards the tax administration. Increasing the collection of public revenues is the main goal of every tax administration, and in order to achieve it, it is necessary to increase the efficiency of the tax administration through the redesign of existing business processes. New business models and technological development lead to changes in the tax administration office, which is reflected in more sophisticated analyses, development of new tools and application of the advantages of digital development. It is necessary for the national tax administration to actively cooperate with all actors in its environment, from tax experts, academic communities, IT experts to the taxpayers themselves. The goal of the paper is to show how the use of new technologies can affect the minimum administrative burden while providing better services to taxpayers. This implies optimization of existing, introduction of new and exclusion of outdated business processes. In order for this to be possible, it is necessary to optimally use the means of tax control through the risk analysis system, which gives priority to prevention over repression. In this way, by using the possibilities of various digital platforms, the state would have stable revenues for a longer period of time, and taxpayers a predictable tax system.

**Keywords:** fiscal policy, digitalization, e-taxes, tax control, risk analysis.

**Sažetak:** Tehnološki razvoj stimuliše promene u mnogim sferama poslovanja, pa je tako i nacionalna poreska administracija napravila značajne korake u procesu digitalizacije. Promene se odnose na prelazak sa papirne na digitalnu formu podataka, stvaranje portala e porezi. Uvođenje portala e porezi, ostvaruje se cilj lakšeg i jednostavnijeg ispunjavanja obaveza prema poreskoj administraciji. Povećanje naplate javnih prihoda je glavni cilj svake poreske administracije, a da bi se ostvarilo, neophodno je povećati efikasnost poreske administracije kroz redizajn postojećih poslovnih procesa. Novi poslovni modeli i tehnološki razvoj dovode do promene uradu poreske uprave, što se ogleda kroz sofisticiranije analize, razvijanje novih alata i primenjivanje prednosti digitalnog razvoja. Neophodno je da nacionalna poreska uprava aktivno saradjuje sa svim akterima u svom okruženju od poreskih stručnjaka, akademskih zajednica, IT stručnjaka do samih poreskih obveznika. Cilj rada je da prikaže kako se korišćenjem novih tehnologija, utiče na minimalno administrativno opterećenje uz pružanje kvalitetnijih usluga poreskim obveznicima. To podrazumeva optimizaciju postojećih, uvođenje novih i isključivanje zastarelih poslovnih procesa. Da bi to bilo moguće, neophodno je optimalno upotrebiti sredstva poreske kontrole kroz sistem analize rizika, čime dajemo primat prevenciji nad represijom. Na ovaj način, korišćenjem mogućnosti različitih digitalnih platformi, država bi imala stabilne prihode u dužem vremenskom periodu, a poreski obveznici predvidiv poreski sistem.

**Ključne reči:** fiskalna politika, digitalizacija, e porezi, poreska kontrola, analiza rizika.

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## INTRODUCTION

Digital transformation is a global phenomenon, so it has not bypassed Serbia either. The Government of the Republic of Serbia has recognized the importance of digitization and the development of electronic administration, so the transformed public administrations will change the way they work, become more economical, perform their tasks better and be more transparent in their work.

The tax system is one of the most important elements of a country's economic system. It plays a key role in financing the public sector, providing funds for the provision of public goods and services, such as health, education, infrastructure and social welfare. Also, the tax system can be a means to achieve socio-economic goals, such as reducing poverty, encouraging economic growth and development, as well as equal distribution of wealth (Aleksić, 2018).

The Tax Administration in Serbia, like other administrations in the state apparatus, saw the need to improve its operations and adapt to the development of technology. The Tax Administration has made significant steps in the digitization process, which are related to the transition from paper to digital data, the creation of the e-tax portal. This portal is a set of electronic services of the Tax Administration of the RS that give all taxpayers the opportunity to submit electronically signed tax return forms, to monitor the status of sent returns, and to have insight into the state of the taxpayer's account. The introduction of the e-tax portal achieves the goal of easier and simpler fulfillment of obligations towards the tax administration. This system meets high security standards and enables secure data transmission electronically.

A big challenge of the tax system in Serbia is the high rate of the gray economy. The gray economy is a part of the economy that includes informal, illegal and undeclared activities, which are carried out outside the official tax system (Program to suppressing the gray economy, 2018). A large part of the economy in Serbia is still in the gray zone, which makes it difficult to collect taxes and reduces budget revenues. In order to face this challenge, the tax system in Serbia requires strengthening tax discipline, increasing the efficiency of tax administration and reducing administrative barriers for legal business.

### 1. COMPLIANCE WITH THE EU LEGAL FRAMEWORK AND IMPACT ON THE DIGITALIZATION PROCESS OF TAX ADMINISTRATION

Establishing an efficient tax administration is part of a successful tax policy. A well-functioning tax administration aims to reduce the costs of controlling

compliance with tax obligations, and thus administrative costs would be reduced to a minimum. Reforms in the tax administration are aimed at modernizing the management of their operational structure, as well as improving and increasing the range of services for taxpayers (Aleksić, 2018).

The Stabilization and Association Agreement (SAA) regulates numerous issues not only in the field of trade, but also issues related to harmonization and application of laws, public procurement, free movement of capital, all with the aim of creating a favorable economic environment, stimulating legal business and strengthening domestic competitiveness of the economy.

Negotiated Chapter 16 regulates indirect taxation, i.e. taxes on consumption such as value added tax (<https://ec.europa.eu/>) and excise duties (EMCS), which assesses the compliance of our legal system with EU directives. The directives regulate taxable turnover, taxpayers, the moment of tax liability, minimum rates or amounts (in the case of certain excise products), exemptions, and refunds. Harmonization of taxation in the EU, in addition to harmonizing the legislative framework with directives, also implies the fulfillment of administrative and technical capacities for the implementation of that regulation, that is, the establishment of appropriate capacities for the exchange of information and data, as well as the coordination of activities.

The tax administrations of the EU member states must be connected to appropriate electronic systems for monitoring and controlling data, with the aim of detecting and reducing tax evasion and fraud, and thus reducing the volume of the gray economy. On the day of accession to the EU, it will be necessary to enable full integration of the tax system of Serbia into the electronic system of VAT data exchange between member countries. At the same time, at the EU level, there is a unique electronic system for monitoring the movement of excise goods in real time, with the aim of facilitating the fight against tax evasion, by ensuring the safe movement of goods on which excise duty has not yet been paid. pay, simplifying the procedure for sellers of excise goods, create relevant documents in electronic form.

The Government of the Republic of Serbia has recognized the importance of digitization and the development of electronic administration, and the transformed public administration will change the way it works, become more economical, perform its tasks better and be more transparent in its work. Thus, in 2014, it adopted the Recommendations of the OECD Council on digital government strategies, in which it is emphasized that the introduction of digital technologies in public administration leads to the modernization of the entire public sector.

Also, in 2017, the RS Government established the Office for Information Technologies and Electronic Government (Regulation on the Office for Information Technologies and Electronic Administration; Law on Ministries), which performs state administration tasks related to: development and application of standards and measures in the introduction of information and communication technologies in state administration bodies and government services. During 2019, the Digital Summit of the Western Balkans was held, initiated by the Berlin Process in Belgrade, and great political support and understanding for the process of digital transformation was expressed then.

Digital services are provided through electronic portals (web pages) of public administration bodies and organizations, through which service users are enabled to access the request form, pay for the service and submit a request. A digital service implies a fully automated process, that is, it means that the citizen's request is processed electronically and that the final decision or some other act is delivered to the user of the service electronically in electronic form.

## 2. MODERNIZATION OF TAX ADMINISTRATION AND THE INFORMATION SYSTEM OF THE TAX ADMINISTRATION

The role of the national tax administration in suppressing the gray economy is crucial, and therefore administrative, technical-technological and other capacities should be strengthened in order to improve its efficiency. The goal is to establish effective tax supervision through the automation of processes and the improvement of risk analysis, while at the same time relieving the administrative burden on employees of the Tax Administration, as well as citizens and the economy.

The gray economy is a complex phenomenon that has a negative impact on numerous areas in society, and is manifested through non-payment of taxes, non-reporting of workers, non-respect of intellectual property rights, unfair market competition, etc. In order to make the approach to suppressing the gray economy comprehensive, the Program for suppressing the gray economy for the period 2023-2025 was adopted (Official Gazette of RS, 30/2018), and it was adopted by the Government of the Republic of Serbia on the basis of the Law on the Planning System of the Republic of Serbia. The document covers the implementation of a number of activities, among them the modernization of the tax administration and the information system of the Tax Administration. The modernization of the tax administration is accompanied by the adoption of new and amendments to existing laws and programs:

- The adoption of the Transformation Program of the Tax Administration for the period 2021-2025 created the conditions for building capacities to fight the gray economy. This document is a continuation of the previous Transformation Program 2015 - 2020, with the aim of modernizing and increasing the efficiency of the Tax Administration, which is one of the key bearers of measures and activities to suppress the gray economy.

- The law on tax procedure and tax administration is a procedural law, it should be predictable and efficient because the tax procedure is important in subsidizing the gray economy, its importance for the development of the economy is reflected in the reduction of the administrative burden and the creation of better conditions for legal business. The ZPPPA regulates the procedure for determining, collecting and controlling public revenues on this basis, the rights and obligations of taxpayers, the registration of taxpayers, as well as tax crimes and misdemeanors.

- The adoption of the Law on Fiscalization created the conditions for the introduction and transition to a new system of fiscalization, in which it will be possible to monitor traffic in real time. The program includes the incorporation of a module for risk analysis for non-recording of turnover, as well as the development of advanced analytical methods for using data obtained from fiscalization, so that supervision by tax inspectors can be better targeted.

- According to the Stabilization and Association Agreement, in order to harmonize the regulations of the RS with the legal acquis of the European Union, the Republic of Serbia introduced electronic invoices into the legislative framework. Electronic invoices contribute to reducing the value added tax gap and reducing the risk of tax evasion, as well as increasing the success of tax collection. It was adopted by the Law on Electronic Invoicing, which is in force since May 1, 2022, i.e., January 1, 2023. It regulates the issuance, sending, receiving, processing, storage, content and elements of electronic invoices, in transactions between entities of public sector, between private sector entities, that is, between public and private sector entities, electronic recording of value added tax and other issues that are important for electronic invoicing and electronic recording of value added tax. The provisions of this law do not apply to natural persons who are not liable for income tax from self-employment in the sense of the law governing personal income tax. In order for this to be possible, it is necessary to strengthen the IT sector and the analytical capacities of the Tax Administration in collecting and processing data relevant for a more efficient implem-

entation of inspection supervision, but also strengthening the advisory function. It is necessary to establish data exchange with other registers (CROSO, NBS, APR, MUP, Cadastre), and develop risk analysis within the Tax Administration.

### 3. THE EFFECTS OF DIGITIZATION ON THE PROCEDURES CARRIED OUT BY THE NATIONAL TAX ADMINISTRATION

Measures for the modernization of the tax administration and the information system of the Tax Administration are aimed at organizational and administrative strengthening of the capacities of the tax administration, at the digitization process through the linking of various information systems, databases and registers and records of the state and public administration. All the mentioned processes would contribute to the improvement of tax control.

A number of activities have been carried out on the digitalization (Ministry of Finance - Tax Administration of the Republic of Serbia, 2021) of the tax administration in Serbia, and they all together strengthen the fight against the gray economy:

- From March 2014, the application of the unified collection of taxes and contributions by deduction.

- At the beginning of 2018, the tax administration completed the process of digitalizing the submission of tax returns.

- A number of useful electronic services for taxpayers is introduced, of which perhaps the most significant is the issuing of electronic certificates introduced in the first half of 2019 (on paid obligations on all public revenue payment accounts, certificates on paid health insurance contributions, certificate on paid value added tax and certificate of paid taxes and withholding tax contributions).

- In the first half of 2020, an electronic mailbox for self-employed income tax payers who are taxed flat-rate, in electronic form through the portal of the Tax Administration without the need for physical contact.

- For many years, the prize game "Take the bill and win" has been held, with the aim of motivating citizens to take fiscal bills and raising citizens' awareness of the importance of the fight against the gray economy and tax evasion both for society and for each individual.

- In the previous period, the Tax Administration made it possible to submit requests for the issuance of certain types of tax certificates, as well as download them through the ePorezi portal, without going to the Tax Administration counter. A software was created and put into use that enables

taxpayers to submit requests for refunds/de-registration of more or wrongly paid public revenues electronically, as well as to submit the decisions made according to the mentioned requests in electronic form, both to the taxpayer and to the Treasury Department on implementation, all with the aim of reducing costs, taxpayers going to the Tax Administration counter and relieving the employees of the Tax Administration.

- It was possible to deliver tax solutions to entrepreneurs in electronic form and software for flat-rate taxation was developed and put into use - Flat-rate calculator, which reduced the administrative burden and increased business predictability for slightly more than 110,000 flat-rate entrepreneurs. In order to obtain certificates of paid national and local taxes, citizens and the economy continue to visit several counters - some in branches of the Tax Administration, some in local tax administrations. In order to further relieve not only entrepreneurs, but also other businessmen and citizens, it is necessary to ensure that a certificate of paid taxes is obtained in one place both at the national and local level, as well as to enable the payment of taxes using instant payment and payment cards.

- It is possible to submit an application for realized income from real estate through the ePorezi portal. This way of submitting the application contributed to the administrative relief of citizens. The application procedure has been simplified, but the collection of tax on income from real estate is still at a low level. That is why it is necessary to carry out an analysis of the degree of compliance with regulations during the application and collection of real estate taxes, potential revenues as well as ways to stimulate their collection.

- In order to improve the capacity of the Tax Administration and companies to implement the Law on Fiscalization, trainings were held for Tax Administration officials to use the new fiscalization system, as well as the development of advanced analytical methods for using data obtained from e-fiscalization. The number of Tax Administration officials trained in the use of tools to control the recording of transactions via electronic fiscal devices in 2023 was 150 officials (Program to suppressing the gray economy).

- In order to improve the system of electronic exchange of invoices, the Ministry of Finance held training for the public sector in 2023 for the use of the system for 200 participants (Program to suppressing the gray economy). The effects of this measure are reflected in the fact that the implementation of trainings will contribute to a better application of the new system and thus increase the transparency

and efficiency of the electronic exchange of invoices, and at the same time significantly reduce the level of the gray economy.

- The campaign for the promotion of fiscal responsibility and discipline and the promotion of the fight against the gray economy, is carried out by the Tax Administration in the form of a prize game "Take the bill and win". The number of participants is 130.190.100 in 2021 and 131.000.000 in 2023. The campaign is implemented through the organization of annual conferences on the implementation of the Program (one was held in 2024) and through the organization of press conferences and briefings on the topic of the gray economy (3 were held in 2024) (Program to suppressing the gray economy). The effects of this measure are reflected in the increase in the number of citizens which through greater fiscal responsibility contribute to reducing the gray economy, as well as improving reporting on the gray economy, which will contribute to a better understanding of this phenomenon by the general public and thereby greater participation of citizens in the fight against the gray economy.

- Strengthening of the IT sector and analytical capacities of the Tax Administration, carried out by the Tax Administration. The number of registers connected with the Tax Administration is 75% (2021) and 85% (2024), and the number of trained Tax Administration officials for risk analysis and use of new IT systems is 10 (2021) and 15 (2024) (Program to suppressing the gray economy). It is necessary to define a minimum technical standard in the exchange of data between registers (CROSO, NBS, Government, APR, MUP, etc.) in the sense that PU has the authority to download data necessary for taxation from registers under the jurisdiction of other bodies or organizations. The measure also includes the development and implementation of employee training programs aimed at acquiring advanced analytical and other relevant skills - training for risk analysis, use of new IT systems. The effects of this measure are reflected in the automated exchange of data between the Tax Administration and other registers and the improvement of risk analysis during surveillance targeting.

#### *Challenges in the process of implementing digitization*

- *Personnel* - in order for the digitalization process to be successful in any public administration body, it is necessary for the readiness of the officials to transform the service into a digital one, as well as the necessary knowledge and skills of the employees to effectively ensure the provision of the service within the prescribed deadlines in digital form.

- *Finances* - i.e. whether you have secured funds for the digitization of the service and how much financial funds are needed for the digitization of the service if the funds are not secured. Here it is important to list all the costs related to the digitization of the services as well as the funds needed for training and equipment in order to ensure a smooth providing services in digital form.

- *Information security* - citizens and the economy could feel it during a cyber-attack on the digital infrastructure of the Republic Geodetic Institute (RGZ), which resulted in the impossibility of trading real estate, registering mortgages and realizing other jobs related to real estate. According to the RGZ, after the cyberattack, the entire RGZ system was locked as a precaution to protect data, and all of the above resulted in the fact that citizens, banks, notaries and state institutions did not have access to the property register for several weeks.

- In order to successfully deal with the gray economy, the national tax administration should influence the reduction of the tax burden, but also the complicated procedures for filling out and submitting the tax return.

#### CONCLUSION

Increasing the collection of public revenues is the main goal of every tax administration, and in order to achieve it, it is necessary to increase the efficiency of the tax administration through the redesign of existing business processes. This implies optimization of existing, introduction of new and exclusion of outdated business processes. By using new technologies, it affects the reduction of costs and the time required to fulfill tax obligations, which makes tax administration more efficient and present for the taxpayer in any place and at any time. Therefore, by using the possibilities of various digital platforms, the state would have stable revenues for a longer period of time, and taxpayers a predictable tax system.

In addition to the challenges that exist in the tax system in Serbia: the gray economy, tax laws and by-laws that are often complex and require a high level of expertise in order to be properly applied, the capacities and expertise of the tax administration, the high tax burden on the economy, uneven practice, tax discipline, there are certain perspectives for improving the tax system in Serbia. One of the perspectives is the digitalization of the Tax Administration, which would enable more efficient communication between the tax administration and taxpayers, reduce administrative costs and increase transparency in the tax system. The introduction of electronic invoicing, electronic tax reporting and the

use of data from other sources, such as bank data, is a good way to increase the efficiency of the tax system and reduce tax evasion.

Following the example of a large number of EU countries, it is extremely important to use centralized databases and enable the exchange of data between the Tax Administration and companies, especially financial institutions.

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