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**Digitalisation of the Fiscal System in Romania  
Qualitative Research**

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**Abstract**

*In recent years, the digitalisation of the fiscal system in Romania has been a priority and has increased significantly. In this regard, the fiscal authorities have been implementing a series of measures to increase efficiency, bring more transparency, and prevent tax evasion. Starting with January 2020, the electronic bill has become mandatory for all taxpayers, and in September 2020, has been launched e-Invoice, the national system for issuing and receiving electronic invoices through an online platform. In 2021, The National Authority for Fiscal Administration (ANAF) has launched an electronic system for accounting reporting (SAF-T – Standard Audit File for Taxation) that allows real time of the accounting reports of the companies through a public online platform. Moreover, ANAF provides to the taxpayers an online web interface for fiscal declarations and for payment of taxes and fees online – [www.ghiseul.ro](http://www.ghiseul.ro). Since 2019, the fiscal authorities in Romania have launched a lot of projects that use blockchain technology for preventing fiscal evasion. For example, they have launched a pilot project using blockchain technology to use and register transactions with excise duties on petroleum products.*

*The following paper aims to present the actual context in fiscal digitalisation in Romania based on the research carried out so far by reviewing the specialised literature as well as consulting the information on digital payments at the level of Romania and the European Union. This paper represents an initial part of a study to demonstrate that there is a direct correlation between the degrees of digitalisation in the fiscal system and the volume of tax collection. The study will propose measures to provide support in the digitalisation of services, the increase of tax collection and mitigations measures for the possible informational and logistical risks that may occur in technological implementation. This research will bring a significant contribution to the existing specialised literature regarding fiscal digitalisation in Romania and will offer a useful perspective for the development of the fiscal system.*

**Keywords:** fiscal digitalisation, tax collection, reporting, digital payments, electronic system.

**JEL Classification:** O33, H87.

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## 1. Introduction

Romania is one of the European countries with the most important IT industry in the region, having an important contribution to GDP (+12 % yearly increase in 2021 and 0.8 p.p contribution to GDP increase in 2021).

Nevertheless, the digitalisation of the services is still incipient in some industry sectors or regions of the country. Although in the private sector important progress has been made on digitalisation of the services, in the public sector, most of the services and processes are still executed manually, bureaucratic, risky, inefficient, and not sustainable (use of excessive paper, space, and utilities). This is translated into a supplementary activity executed by the taxpayers. Moreover, in the actual context of technological advance and the increasing tendency of the population to adopt digital services as a way of living, the necessity of this type of services is becoming mandatory in the public sector as well.

Romania is on the last place in Europe in the digital economy and society index classification, being one of the least digitised countries in terms of digital public services.

**Figure 1. Digital Economy and Society Index**



Source: <https://digital-strategy.ec.europa.eu/en/policies/desi>.

In the context of the COVID-19 pandemic, the lack of digitalised services in the public sector led to difficulties in delivering services to the taxpayers, in some cases creating real bottlenecks. At the same time, COVID-19 showed that the public sector could manage this type of crisis. The emergency period accelerated digitalisation of important services for collecting the fiscal information from the taxpayers and online taxes payments. Moreover, in the context of the Next Generation EU (PNRR), important funds were allocated for digitalisation of the public sector.

The final study aims to analyse the digitalisation in the fiscal system in Romania, measuring the impact of digitalisation through a synthetic index determined by a series of metrics, and the results will be validated through a quantitative study.

This study will bring a significant contribution to the existing specific literature regarding the digitalisation of the public sector and will offer a useful perspective for the economic decision-making and interested persons in the development of the fiscal system in Romania.

## **2. Problem Statement**

In the context of technological advancement, the digitalisation in the public sector is becoming increasingly relevant. Therefore, not only do companies but also researchers show a great deal of concern in this regard and are interested in demonstrating the importance of digitalisation to ease the interaction between the taxpayers and fiscal authorities, increasing the level of tax collection.

Mammadli and Klivak (2020) conducted a qualitative analysis to determine a digitalisation index based on metrics. The article is also proposing a quantitative analysis for validating the index and measuring the impact of digitalisation on the dependent variable GDP.

McKinsey & Company (2020) are presenting the necessity of rethinking the fiscal activities in order to intensify working in the digital environment, mostly in regards with collecting the fiscal information.

The Organisation for Economic Cooperation and Development, OECD (2020) identifies several phases of tax administration, the first phase being based entirely on paper, characterised by many manual and isolated processes. As digitisation entered the government environment and several processes could be carried out remotely or electronically, the fiscal administration has moved into another, the one in which the data is used digitally, and analytical tools can be used. This phase was called e-administration, but in Romania we cannot say that there is complete integration. The third phase of the fiscal administration has the role of establishing the compliance of certain fiscal processes, for example, the establishment of VAT taxation or payments, and to integrate the reporting systems of taxpayers with the capture systems of fiscal administration reports. Greater emphasis is placed on data capture and processing to determine how taxpayers act and establish tax obligations more quickly.

Along with the digitalisation of business, companies like Google and Amazon had put under pressure the traditional tax rules and profit allocation as mentioned by Kim (2019). The author has identified that because of the digital economy, the profits can be easily generated in countries without physical presence. This is imposing a new tax, called digital service tax (DTS), applied to digital business models. The author challenges that DST can be a good solution for taxation of the digital economy.

The interest in digitalisation of the public sector is shown also by the World Economic Forum (2021), where it presents a short analysis of the way the fiscal authorities could improve the interactions with the taxpayers and increase the number of fiscal information through the digitalisation.

As Andrei and Petras (2021) mentioned, the fourth industrial revolution is centred around technology and the way we interact with it. The concept was introduced

by Klaus Schwab, the founder and Executive President of the World Economic Forum, and presented in his book “The fourth industrial revolution” published in 2016. The World Economic Forum organised in Davos in 2019 has dedicated the reunion to this subject. Modern technology means not only using the mobile phone for opening the personal car, it has a greater meaning, such as using the technology for collecting data about consumer behaviour and fiscal information. In this way, the fiscal authorities could have better transparency and accountability on tax collection. The authors are mentioning that SAF-T (Standard Audit File – Tax) project developed by OECD from 2010 and having as a main objective to setting a digitalised framework for reporting the accounting and fiscal data from the taxpayers. A digitalisation process means more than an electronic transfer of the information, it is important to efficiently the fiscal data collected, and the question is of the SAF-T project to contribute to the decrease of the tax evasion and increase of tax collection?

### **3. Research Questions**

This paper is part of the final thesis “Digitalisation of the Fiscal System in Romania” and the aim of the thesis is to demonstrate the following hypotheses:

H0: There is no direct correlation between the digitalisation of the processes in the fiscal system and the tax collection to the state budget.

H1: There is a direct correlation between the digitalisation of the processes in the fiscal system and the tax collection to the state budget, and an increase of the services digitised will lead to an increase of the amount of taxes collected.

H2: There is a direct correlation between the digitalisation of the processes in the fiscal system and the tax collection to the state budget, and an increase of the services digitised will lead to a decrease of the tax evasion, therefore, to an increase of the taxes collected.

The aim of this paper research is to present the result of the online survey, part of the qualitative analysis of the final thesis research.

### **4. Research Methods**

The research will be structured into a qualitative analysis and a quantitative analysis.

Qualitative analysis will consist in evaluation of the digitalisation degree of a component of the state budget of the respective service based on clearly defined criteria. The objective is to evaluate the digitisation degree in the fiscal system by determining a synthetic index based on a series of metrics.

The following metrics will be analysed:

- number of online fiscal declarations;
- number of electronic invoices;
- the degree of fiscal processes automation;
- VAT collection.

The index in digitalisation will be validated through a quantitative analysis, by panel data modelling where the dependent variable is the level of tax collection. The results of the study will confirm the influence of the digital process at the level of tax collection.

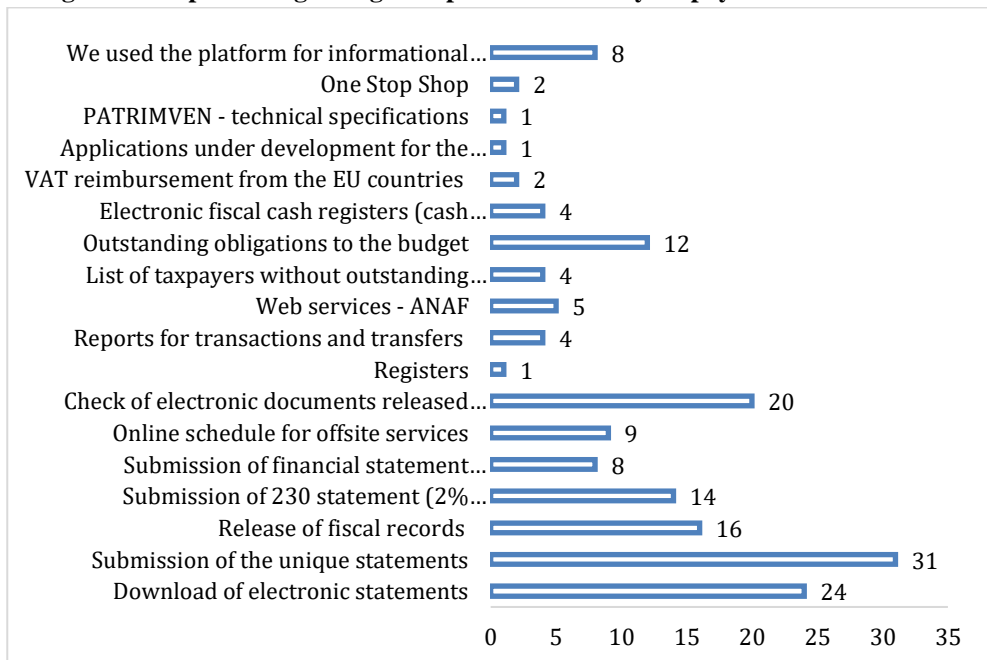
## 5. Findings

According to Johnston (2021), the pandemic accelerated the digitalisation and our lives became digitally transferring the way people made payments, increasing the number of online and contactless payments. This happened also in Romania, when along with the pandemic, the authorities faced an urge to digitalise the process in order to be able to sustain tax collection.

Part of the paper research was an online survey regarding the digitalisation services that the Romanian authorities implemented for the taxpayers until now: SPV (Virtual Private Space), ANAF, electronic invoices, and Ghiseu.ro.

Following the survey organised online in February 2023, with 57 respondents, 73.7 % of respondents mentioned that they used the SPV platform. 36 % of the respondents who used the SPV platform mentioned that they found the platform very useful, and 52.3 % of respondents found the process of online validation of the documentation acceptable. Almost 70 % of the respondents accessed the platform for reporting the financial statement online.

**Figure 2. Responses regarding the operations done by taxpayers on SPV – ANAF**



Source: Online survey, February 2023.

82.5 % of the respondents had accessed Ghiseul.ro for payments, and 7 % accessed the platform just for finding useful information. In terms of electronic invoices, 56.1 % of the respondents used electronic invoices in their activities.

68.4 % of the respondents have sent a fiscal document through an online platform and 84.2 % had received notifications regarding the fiscal information or and have received notifications in this regard.

Although there is an important degree of adoption of the digitalisation of the online fiscal services in Romania, and taxpayers are starting to use the platforms to interact with the authorities, there is still a lot of reticence regarding access to the assistance channels of the authorities like chat or phone, 75.4 % of the respondents said they did not access those channels for support. Moreover, 92.9 % of the respondents mentioned that they have never participated in training or information sharing sessions on how to learn to use the platform.

Pástor and Veronesi (2009) consider that when a new technology appears, there are three possible situations: 1) economic agents adopt the new technology, 2) adopt gradually the technology and learn about it and 3) don't adopt new technology.

According to the ANAF performance reports, in 2020, 4.4 million tax statements were filed online at ANAF and in 2021, 1.1 million invoices issued electronically, and 31 million payments made through the SPV platform.

The number of users is increasing, the authorities are making investments in digitalisation; in 2021 the degree of fiscal statements online was 98.3 % against 93.9 % in 2018, therefore, we can conclude that the Romanian population is gradually adopting this technology while learning about it.

Nevertheless, there is a huge potential for developing the manner of interaction between authorities and taxpayers and a lot of risks besides the adversity to change and rate of the technology adoption, such as data quality assurance and cybersecurity. Baur et al. (2020) fiscal accounting is part of the modern administration and according to Max Weber, this is representing an essential condition for economic development.

## **6. Conclusions**

The fiscal authorities in Romania have made a lot of progress in the last years in improving the interaction with the taxpayers and invested in digitalisation. The first trigger was the COVID-19 pandemic that forced the authorities to change the process, otherwise all the collection of taxes would have been blocked. Along with the private sector, digitalisation of services become necessary also for the public sector.

The consumers of services from the private sector are the taxpayers of the public sector, they have similar behaviour and expectations when it comes to interacting with an institution. They prefer seamless services, easy access to services, and transparency in relation with the authorities. In this regard, the authorities must observe the taxpayer's behaviour and evolution and to help them to adopt the new technologies. By having the necessary information, easy access to the payment and collection platforms, and transparency, the taxpayers will be more willing to pay

their contributions. In this way, the amount of taxes collected will increase along with the transparency and the taxpayers trust in the fiscal authorities. Nevertheless, the digital transformation must consider data quality assurance and cybersecurity of the process of tax collection and fiscal reporting.

This paper is part of the final thesis “Digitalisation of the Fiscal System in Romania” and for demonstrating the economic impact of the digitalisation of the fiscal system, the next steps of the research will focus on the establishment of indicators and subsequent data collection, measurement for the construction of the digitisation index and application of panel data models.

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