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Financial Management of Budgetary Revenues via Enhanced Digital Tax Literacy in Serbia

GORAN RADOSAVLJEVIĆ, ALEKSANDRA LAZEVSKI, MIHAJLO BABIN & MILOŠ ERIĆ

Abstract The topic of this paper is the research of digital tax literacy (DTL) conducted with 385 participants in Serbia and based on a survey in the OECD. DTL can be defined as usage of digital tools for fulfilling tax obligations and evaluating the tax collection risks. The aim of this paper is to provide empirical evidence related to the potentials for DTL enhancement, which results in more efficient and transparent tax collection, lower costs, and higher productivity. The paper provides three groups of guidelines for further DTL enhancement. First, the benchmarking of the DTL level in Serbia with the OECD. Next, an overview of the DTL structure in Serbia shows a good basis for further development via three channels: acquired digital habits by taxpayers, deficient use of existing digital services and preferred electronic communication with the tax administration. Finally, the analysis provides a determination of the main impediments to DTL enhancement that must be addressed.

Keywords: • financial management • digital tax literacy • tax administration • Serbia

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1 Introduction

This research aims to analyze why digital tax literacy is important through the changes in the digital society, which, due to new technologies, affect the relationship of citizens with tax administrations and the transformation of tax administrations in general. The growth of e-commerce and the usage of digital platforms have increased substantially in the past several years and have revealed some new vulnerabilities in tax systems, such as online tax fraud. At the same time, technology provides tools for combating fraud and increasing government revenue through the effective digital transformation process (Malaszczyk and Purcell, 2016: 7). One of the preconditions for the effective digital transformation of tax administration (TA) is the digital tax literacy. Digital tax literacy can be defined as using digital tools to fulfil tax obligations and evaluate possible tax risks.

The importance of this topic is numerous. First, the concept of digital tax literacy (DTL) has yet to be recognized as a unique element in contemporary literature. Many authors still see two terms, digital and tax literacy, as separate categories, and therefore the importance could be the launch of a new idea that is a consequence of current events in the digital realm of tax administrations. The relevance of the topic is supported by the fact that countries such as Spain and Australia already use virtual assistants – chatbots, that robotic process automation is already part of tax administrations in France and Finland, that the Netherlands uses predictive analytics, while Brazil and China partly use blockchain, and most of the OECD countries are preparing and planning to go that way (OECD, 2020a).

The changes in the global economy will affect the transformation of tax administrations worldwide. However, the question arises about the significance of these transformations for the citizens themselves and how capable (digitally mature) taxpayers can absorb all the new technologies available to tax administrations. For example, one of the OECD reports indicated that despite the introduction of electronic service channels, some countries have experienced that citizens prefer the old way through personal mediation or contact centers (call centers), and that during the transformation, it is important to be guided by strategies demand management strategies (OECD, 2020a). This is exactly the importance of this research, which will answer the question of what Serbian taxpayers are looking for and whether they understand the benefits brought to them by the digital transformation of the tax administration.

Finally, the limited number of papers deal with the topic of digital transformation of the tax administration in Serbia (Pitić, Radosavljević, Babin, Erić, 2018; Atanasijević et al., 2018; Babin, Ivanov, Radosavljević, 2021), so the research in this paper will be a contribution to this field and its additional importance can be seen in this.

2 Literature overview

With the Fourth Industrial Revolution and the development of the knowledge economy, the need to become digitally literate and combine financial (including tax literacy as its element) and digital literacy growth. The use of new digital technologies not only transforms traditional ways of doing business but enables the creation of new business models that bring with them challenges in taxation and questions about traditional ways of taxation (Lucas-Mas and Junquera-Varela, 2021). According to Hadzhieva (2019), these characteristics "make it difficult to implement tax policy, collect taxes, and identify tax functions within companies (that is, the required people, systems, and use of financial data), especially concerning cross-border trade in services and intangibles" (Hadzhieva, 2019: 17). taxation of the digital economy will become an important policy of future governments that will create new fiscal space and the possibility to increase tax revenues (Lucas-Mas and Junquera-Varela, 2021).

Digitalization has triggered many direct challenges for tax administrations, mainly relating to how tax rights to income generated from cross-border activities in the digital age should be distributed among countries. (ICC, 2020: 4). If digitization allows companies based on new business models to conduct their business in one country without a physical presence in the same country, this presents a significant tax challenge, since in the traditional way of taxation, physical presence was the main factor used to determine the right of a country to tax a foreign company operating within its borders. This further means that if the digital income of companies in one country is taxed, and those companies do not have a representative office in that country, then the local population will bear the burden on top of the already additional burden they suffer from indirect taxes (Lucas-Mas and Junquera-Varela, 2021: xvii).

As technology has expanded in the modern world, our world has become more connected than ever. This created a global virtual world in which all technology users live, and as a result of modern technology, users had to learn how to become "digital citizens" (Spiers et al., 2018: 238). Digital identity (e-Residency) is offered to individuals who want to start a business in the country so that companies can be launched online, without the need to appoint local staff or open a local bank account as PayPal or other services can be used online payments (Pitić, Radosavljević, Babin, Erić, 2018: 132).

Most of tax administrations have moved from the analog to the digital way of functioning. The Inland Revenue Authority of Singapore (IRAS) has changed its procedures to be able to send digital notices to taxpayers based on service design and user behavior (IRAS, 2021). The Australian Taxation Office uses an SMS to inform its taxpayers promptly about their tax obligations (IOTA, 2017). It also introduced the mobile application *myTax*, an online system that makes a tax return in just 20 minutes (Parliament of the Commonwealth of Australia, 2018). The tax administration of Georgia implements a program for students who can meet and try all the services offered online by the tax

administration on the demo version of the user tax portal (IOTA, 2017). To raise awareness and consent to pay taxes, the tax administration in France created a special website where, in a practical sense, every taxpayer can see what the collected tax revenue is used for (IOTA, 2017). Several times they gathered developers, experts, companies, startups and tech-labs through multi-day hackathons to work on developing new computer solutions and creating algorithms (based on data provided by the tax administration), which led to the creation of 21 solutions which are currently under development or in initial use (Charrié and Janin, 2015).

In Norway, there is a strategy that says if we would involve taxpayers actively in process transformation, our focus must shift from our own processes to the taxpayers themselves. This means we must look from the taxpayers' point of view, not from the point of view of the tax administration (NTA, 2020, p. 14). In the Netherlands, they apply a strategy of connecting with taxpayers. The Netherlands Tax and Customs Administration has a strategy of social media presence to communicate with taxpayers, provide the necessary information, maintain good relations and build the role of the tax administration as a service to citizens. The Spanish tax authority has a chatbot that provides value-added tax information (OECD, 2019: 180). In Sweden, there is also a similar solution called Skatti, while in Australia, a chatbot called Alex is available to citizens that answers questions on the portal of the tax administration.

However, most TAs are still far from a digitally transformed tax administration (Radosavljević, Babin, Erić, 2023). The aim of the digital transformation of the tax administration is to enable efficient, constant and continuous provision of services over time, which can only be achieved if we cooperate with taxpayers, the public sector, as well as with partners from the private sector, all with the aim of building confidence in the use of data and the security of its use (OECD, 2020: 3). Interested parties in the digitalization of the tax system are individual taxpayer, who see tax filing as an unnecessary and frustrating chore while wanting a simple and understandable way to interact with the tax system; companies that have already begun to digitally transform their business; tax agents whose job is changing into tax advisors for choosing the appropriate business model in the digital economy; software producer who will receive another cash flow as a source of income through the digitization of tax administrations; government as the most complex participant that should act in the interest of all other participants (ICEAW, 2019: 5).

A larger part of the economy is moving to the digital economy, where the business environment is changed (Rosario and Chavali, 2020: 62). Transactions can be concluded in the form of real money or virtual currencies. Even when these transactions are virtual, they still have tax consequences for the participants. Taxpayers, therefore, need knowledge of both taxation and digital to be able to account for these transactions on their tax returns (Bornman and Wasserman, 2020: 2). Almost two and a half decades ago, Gilster defined digital literacy as "the ability to understand and use information in

multiple formats from a wide variety of sources when presented via a computer" (Glister, 1997: 1). A decade and a half later, Spiers and Bartlett point out that digital literacy in the future rests on the ability to decode and construct meaning from the ever-evolving digital environment (Spiers and Bartlett, 2012: 8).

At the same time, if the efforts to improve financial ability are such that there is the creation of new taxpayers and an increase in the tax revenue base, then the lack of financial, and therefore tax literacy, would certainly represent a risk for tax revenues (Chardon, 2011: 58). Issues such as tax complexity, low tax morale, low tax liability and shadow economy can be reduced by increasing the level of financial literacy of taxpayers (Cvrlje, 2015: 157). Genest-Grégoire et al. define tax literacy as "the knowledge, skills and confidence to make responsible tax decisions" (Genest-Grégoire et al., 2017: 2). Bornman and Wasserman propose that tax literacy consists of three elements - tax awareness, which implies that the individual understands his role in the fiscal system and the social contract with the state; contextual knowledge, which refers to knowledge of procedural activities in communicating with tax institutions and having legal knowledge about why and how an individual is taxed; and finally, informed decision-making in fulfilling tax obligations arising as a consequence of the previous two elements (Bornman and Wasserman, 2018: 1). Alexander and Balavac suggest that improving tax literacy among young people is a central and important goal of tax authorities in educational programs. The intention is to improve the tax awareness and morale of young people at important stages in secondary and higher education, before the next generation enters the labor market (Alexander and Balavac, 2018: 5). Mouchkova and Vitek define "tax literacy is a specialized branch of financial literacy. Currently, there is no single methodology for measuring and assessing tax literacy" (Mouchkova and Vitek, 2018: 553). Making economic decisions without an adequate, up-to-date and accurate set of knowledge could have short-term and long-term consequences both at the individual and societal level, according to Nichita, et al. These authors define "tax literacy as the ability of taxpayers to understand their rights and obligations, to use their tax knowledge and skills to properly complete tax returns and to comply with applicable tax laws" (Nichita, et al., 2019: 398).

3   Research

In order to evaluate digital tax literacy in Serbia, we started with the OECD analysis, which has been conducting ISORA research (International Survey on Revenue Administration) for the last few years (ISORA, 2020; OECD, 2019). We also used other OECD research which follows the digital transformation of tax administrations (OECD, 2016; IOTA, 2017; OECD 2020a; OECD 2021). Based on that, we selected several case studies and asked taxpayers in Serbia whether they supported their application. To analyze the demand for the digital transformation of the Tax Administration, we use a comparative analysis of the digital habits that we consider generators of that demand (OECD, 2020b). We also considered the survey conducted by Alghamdi A., Rahim M. (2016) in Australia on satisfaction with implementing the e-tax system.

Finally, we benchmark a level of digital maturity and digital tax literacy in Serbia with the OECD level based on the first two pillars of Digital Transformation Maturity Index (Radosavljević, Babin, Erić, 2022: 232; OECD, 2022: 16).

Based on OECD methodology, we surveyed 385 participants divided into three groups, individuals (66.3%), entrepreneurs (17%) and companies (16.7%). In the gender structure, there were more men, 52.3%, while the share of women was 47.7%. According to the age structure, the largest number of respondents belongs to the group 36-54 (45%), followed by the 25-34 age group (32.4%), 55-64 group (11.8%), 6.7% of respondents aged 18-24 years and 4% over 65. Regarding work status, 68.6% of respondents are employed, 15% are self-employed, 9.4% are unemployed, 4.3% are retired, and the remaining 2.7% declared themselves as "other" ". About 45% of respondents filled out the questionnaire via social networks, while about 55% received the questionnaire by e-mail. The majority of the sample consists of individuals with completed higher education, 80%, secondary education 18.6% and only 0.8% of respondents with primary education. We started from the assumption that they are taxpayers, which should be more tax-literate and digital-literate than the others. Thus, the sample has a positive bias. Also, our goal was a greater coverage of individuals (66%), considering that greater digital tax literacy will facilitate their access to the tax administration to a greater extent since legal entities have other channels, such as accountants, tax advisors, etc. Finally, the survey was used as a model for the research of tax administrations in OECD countries where tax administrations are at a higher level of digital maturity than the Tax Administration of Serbia (Radosavljević, Babin, Erić, 2022: 236).

Research shows that a fairly high percentage of respondents use payment cards and electronic banking whenever possible. The high percentage of use of electronic banking and payment cards can be explained by the fact that these are services that banks have been offering for many years, and they work on their additional promotion every day. This is particularly pronounced in the conditions caused by the Covid-19 pandemic when the reduced use of paper money is encouraged. Furthermore, these habits represent a good basis for the development and use of online commerce, and yet the majority of respondents (64%) tend to buy online, but only sometimes.

The reasons can be found on two sides - the subjective feeling of shopping "live" and safety on the internet when shopping. While the first reason is somewhat justifiably understandable, the second reason could indicate poor digital literacy and misunderstanding of what internet payment looks like and what is behind it. In addition, almost 40% do not actively use mobile banking, so it is justified to ask why a service that exists and has the function of improving the efficiency of communication with the bank and performing daily activities is not used to the greatest possible extent, or at least to a greater extent. The answer can be twofold: users need to learn how to use mobile bank applications (they need to be digitally literate enough) or be more user-oriented. In the

latter case, there is still a gap in the need for more understanding between supply (banks) and demand (users), which points to a different level of digital knowledge and skills.

As a prerequisite for digital tax literacy, we see widespread digital services such as electronic banking, mobile banking, online trade, credit/debit cards, electronic wallet (eWallet), social networks, etc. This means that we could expect that an individual who uses more digital services has a higher level of digital literacy and a potentially better base for DTL. We assume that this digital literacy is a consequence of the experience of use. That is why, in the research, we first examined the digital habits related to digital services. Electronic wallet is not excessively used, considering that the survey showed that the vast majority of respondents do not use this product (79%). However, two things should be kept in mind when it comes to its use. First, this is a relatively new service in the Serbian market. Second, the eWallet option is offered by only a few banks and one telecommunications operator.

On the other hand, this service is used by all generations, indicating its future potential. As for social networks, the survey showed that only 6.5% of them have no social network accounts at all. Also, 70.6% of respondents have accounts on several social networks. Such a high percentage indicates that today almost all generations of users can be found on social networks, especially when it comes to Facebook, and increasingly Instagram. The results are summarized in Table 1 below.

Table 1: Digital habits

|	
Use bank cards for payment	77%
Pay electronically whenever possible	74%
Has accounts on several social networks	70%
Buys online, but only sometimes	64%
Actively uses all functions of mobile banking	59%
Use the eWallet app	21%

Source: Authors' calculation based on the survey.

The previous conclusions lead us to believe that the basic digital literacy caused by everyday digital habits is at a satisfactory level. This basis shows that there is a need and space for further improvement of digital services in other spheres as well.

Also, we wanted to check how respondents log in to the electronic service of public administration, *eUprava (eGovernment)*. This is important because *eUprava* represents a big step towards the digitalization of public administration and follows modern trends in the establishment of electronic administrations around the world. A more complex method of registration should also represent a higher degree of digital literacy. In addition, it also enables users to have more services and information at their disposal. Almost half of the respondents log in with a username and password (46.8%), about one-third use an

electronic certificate (30.4%), and only 7.2% use two-factor authentication. Results are presented in Graphic 1. The low use of two-factor authentication is that it is the most complex and difficult to understand. When it comes to an electronic certificate, in addition to requiring you to understand how it works and the knowledge to start and install it, one also needs to pay for its creation (it can also be provided for free by Government). The remaining option is the easiest and represents the lowest level of digital literacy but provides the least information and services available. Among the respondents, there are 15.6% of them who do not use eGovernment services at all. These are respondents with a high degree of education, which raises doubts as to whether the reason for their non-use is ignorance that such a service exists, lack of interest in using such a service, or lack of competence to use it. However, it is surprising that respondents of this age (almost half of them are 34-56 years old) and education level as someone certain a taxpayer is not involved in using this digital service. In general, a certain digital literacy exists, but according to the choice of solutions, it is at the basic level because the largest number still choose the basic usage level.

**Graph 1:** Method of logging in to the portal *eUprava*, in %
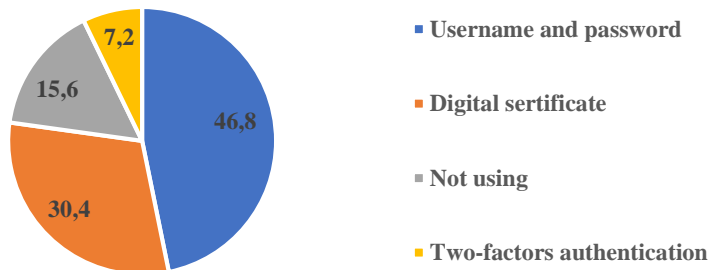
Source: Authors' calculation based on the survey.

We also analyze the usage of digital services provided by the Tax Administration of the Republic of Serbia. The results of using digital services will give us a better indication of digital tax literacy. Having in mind that taxpayers are using more than one service, we allowed multiple answers. In addition to what they use to perform their tax obligations, we will analyze digital tax literacy through the usage of a channel of communication with the Tax Administration. Our goal is to get an impression of the easiest way for the user, providing them with enough information for their competence level. Ways of communication with the Tax Administration also speak to the level of digital habits of taxpayers.

As expected, most of the respondents use the website of the Tax Administration (41%), but it is unexpected that almost 39% of them do not use any digital service offered by TA. Slightly more than one-third use the portal *ePorezi* (*eTax*), while one-fifth of the respondents use the Local Tax Administration (LPA) service (Graph 2 below). Most of the respondents who do not use any of TA's digital services are individuals (87%). Such results can be explained by the fact that individuals either need to learn that such services exist in the Tax Administration or do not need these services. However, if we look at the fact that most respondents aged 25-54 (69%), it is simply impossible that they cannot find usefulness, at least when it comes to paying property taxes under LPA. The question arises whether the problem here is that they may be digitally literate but not tax literate, so they do not use digital services because they are safer to go to the Tax Administration and have the tax officer do something for them or is the problem that they are tax literate, and they are not digitally literate, so they cannot fulfil their tax obligations digitally. Suppose 40% of respondents do not even use a basic online tool, which is a website. In that case, both are likely at issue, i.e. that in terms of digital and tax literacy, taxpayers are insufficiently competent when it comes to fulfilling their tax obligations digitally.

Graph 2: Use of digital services of the Tax Administration of the Republic of Serbia
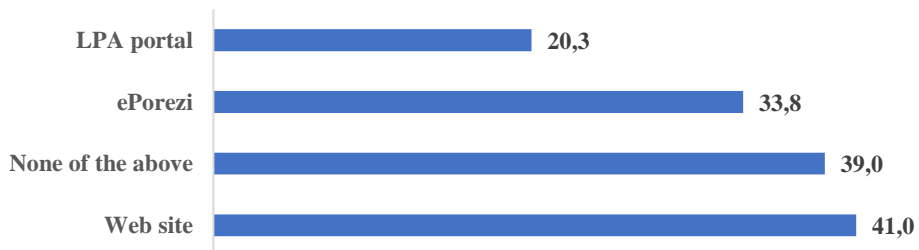
Source: Authors' calculation based on the survey.

Contrary to the fact that 46% of respondents recognize that the Tax Administration informs them mostly by post, when asked for the most convenient way for them to communicate with the Tax Administration, almost half of the respondents said that it is e-mail (Graph 3 below). Sending information by post is the least convenient way for them to communicate (1.8%), as well as social networks (1.8%). When it comes to other means of communication, the remaining half of respondents more or less equally declared that the most convenient way for them to communicate with TA is the website (18.4%), followed by a visit to the tax administration (15.1%) and finally, the phone (13.5%). If we were to add up all the methods of electronic communication, we would realize that 69.3% of the respondents prefer this type of communication (e-mail, social networks and website) against the traditional methods of communication (letter, phone and going to the Tax Office).

Graph 3: Preferred way of communication with the Tax Administration
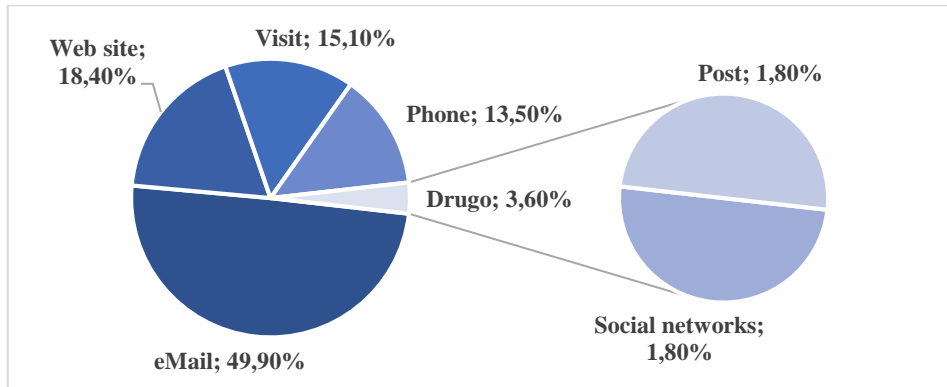
Source: Authors' calculation based on the survey.

Around 30% of respondents still prefer the "old" way of communication, which is small but not insignificant. To that should be added the fact that for sources of tax information, one-fifth of the respondents turn to Tax Administration officials (21.3%), while slightly fewer use social networks (19.1%) and traditional media (TV, radio or newspapers). Around 34.5% of respondents use tax advisors or accountants. The use of e-mail significantly shortens the time for obtaining information but does not testify to high digital tax literacy, just as hiring tax advisors (mostly in the case of legal entities, but also entrepreneurs) can indicate deficiencies in tax literacy.

Finally, we analyzed the potential future demand for digitalization of tax administration. Among other things, it is significant because it shows the readiness of current and future taxpayers to move to a higher level, from analog to digitally transformed tax administration. This is only possible if taxpayers are digitally and tax literate enough to follow this transition. In this context, the demand for the future digitization of tax administration indirectly reflects the digital tax literacy of taxpayers. Inspired by examples and practices from OECD countries, we asked taxpayers in Serbia if they would like some of those solutions implemented in the domestic tax administration. Questions concern the use of chatbots, demo versions, electronic tax solutions, and SMS notifications, but also the organization of hackathons and other forms of cooperation, with the use of facial recognition techniques.

Out of the total number of respondents, 71.8% stated that they would like the Tax Administration to introduce some virtual assistant or chatbot. As reasons for this request, the respondents state that they would rather consult a virtual assistant than go to the tax office for information (62%), that it would significantly shorten the time needed to obtain information (55%), and that they would significantly shorten the time necessary for the

entire tax payment process (53%). In addition, chatbots enable the improvement of tax literacy by providing feedback that is subject to storage.

A total of 67.3% of respondents would like the Tax Administration of Serbia to have demo versions of its services where they could practice using them (Table 2). Respondents believe that demo versions of user tax portals are the right way to get to know the services offered by the tax administration. They will allow users to be sure that they are doing the right thing several times before performing a certain transaction or activity on the Internet portal or mobile application, thereby contributing to the development of digital tax literacy. The demand for demo versions directly indicates the need to improve digital tax literacy, as it suggests that taxpayers need to be more confident in themselves when using the Tax Administration's existing digital services. In addition, such services contribute to the literacy of the older population of taxpayers and provide an interesting way to introduce tax obligations to future taxpayers.

Table 2:   Digital habits

Question	Yes	No
TA should introduce face or fingerprint recognition as an option for logging into systems	54.0%	45.0%
TA should introduce some virtual assistant/chatbot	71.7%	28.3%
TA should introduce demo versions of their services where I could practice using them	67.3%	9.3%
I would like to receive the tax documents electronically instead of by post office	87.0%	13.0%
I would like to be able to see exactly for what purpose the particular tax I pay goes	95.6%	4.4%
An institution like TA should have accounts on social networks	60.5%	12.0%
I would like that TA inform me about my status via SMS messages	74.8%	25.2%
I would like that TA cooperate with taxpayers through a collaborative platform	80.3%	19.7%
I would like that TA cooperate with taxpayers through a hackathon	81.3%	18.7%
User education through social networks is appropriate	36.4%	29.4%

Source: Authors' calculation based on the survey.

Facial or fingerprint recognition is not dominantly recognized as an adequate solution. The fact that more than half of the respondents are in favor of this solution is supported by the fact that younger respondents aged 18-34 are in favor of the introduction option. Given that facial or fingerprint identification is currently present on smartphones, it is clear that these recognition techniques are much closer to younger people, while the elderly are still getting used to using smartphones in general and express distrust in new technologies. On the other hand, 87.1% of respondents would like to receive documentation from TA electronically, and 75% of respondents would like to get information about their status via SMS messages, which is already the practice in some

countries around the world. In addition to contributing to the personalization of services through unique content, SMS and electronic solutions enable more efficient execution of tax payments.

The cooperation of taxpayers and the Tax Administration to create successful user experiences and digital solutions can be a good indicator of digital tax literacy. We proposed to the respondents the Austrian solution, collaboration through a collaboration platform (OECD, 2020) and the French solution, collaboration through hackathons (OECD, 2020a) and received positive opinions. Regarding the Austrian example, 80.2% of respondents declared that this tax administration approach would be useful for them. On another side, 81.2% declared that hackathons would also be useful for them. If we analyze these results from the aspect of the status of legal entities, we can see that 52% of companies and 47% of entrepreneurs want to participate in the creation of services, while when it comes to consultations, those percentages are slightly higher - 71% of companies and 65% of entrepreneurs. The collaborative platform is supported by an equal number of legal entities and entrepreneurs (87%), while around 90% of companies and 76% of entrepreneurs, consider hackathons as appropriate. Such a great demand may indicate a higher readiness and digital tax literacy in the private sector compared to individuals. The fact that someone knows what a hackathon is or understands what collaboration through a collaboration platform means (and consequently knows how to use it) speaks of the level of digital literacy.

A high proportion of respondents, 95.7%, would like to see exactly for what purpose the particular tax they pay goes. When formulating this question, we were guided by the French example, which includes a platform where taxpayers can see the item in the budget where the tax they paid went. However, slightly fewer respondents, 90.1% of them, would use the option regularly if there was an option to track where their tax is going. After all, 84.2% agree with the statement that being able to track the spending of the taxes we pay is a good way digital technology can contribute to transparency. This is where the part of the definition of tax literacy comes to the fore, which says that tax knowledge also includes why it is important to pay taxes and directly points to taxpayers' knowledge to follow their country's public finances.

Speaking of taxpayer education, the answers are fairly uniform regarding whether education through social media is appropriate. About 36.4% of respondents believe that social networks are appropriate for education, while slightly fewer are against it (29.4%). However, two important points should be kept in mind here. The first is that undoubtedly the majority of respondents, namely 4 out of 5 people, believe that it is absolutely necessary to explain and educate future taxpayers about why it is important to pay taxes. If we look only at respondents in that age group (18-24), 83.7% of them agreed with this statement. This means that future generations of taxpayers are aware of education's importance and desire education in this matter. Also, with the encouragement of entrepreneurship among young generations, their education on the importance of paying

taxes must also go hand in hand. When we consider only the respondents who consider it a good way, we will see that 46.6% of them are in the age group 18-34 years, while of the total number of this age, 42% of them think that social networks are an appropriate channel for education. In addition, 59% of respondents are interested; that is, they would like to be able to contact the Tax Administration via social networks. Half of the respondents aged 18-24 voted for this option. This result is significant because it speaks to the communication preferences of future taxpayers.

At the very end, in Graphic 4, we can see the preferred ways of paying taxes. Half of the residents declared that it should be within the existing *eUprava* system (53.2%). On the other hand, we saw that a much smaller number of respondents apply for *eUprava* through an electronic certificate, so not everyone could use this service. In addition, there is a significant source of demand for two more ways - through the existing *ePorezi* application (42.1%), but also as an option of direct withdrawal from the current account with the prior approval of the taxpayer (like Netflix and similar services) (37.4%). Nevertheless, only one-fifth of respondents still think that the existing methods are adequate (19,7%).

Graph 4:   Preferred way of paying taxes

Preferred way	Percentage
eUprava app	53,2
ePorezi app	42,1
Direct withdrawal from the account	37,4
The existing ways are adequate	19,7
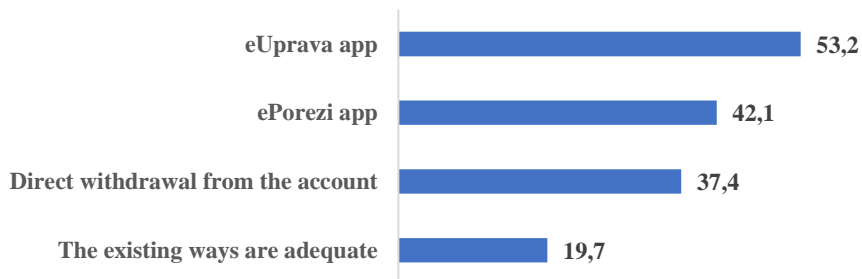
Source: Authors' calculation based on the survey.

These ways of paying taxes should not be exclusive, but complementary, given the fact that everyone has a significant percentage of the desire to introduce it. Among other things, digital transformation should contribute to the personalization and individualization of services. Institutions must also have an omnichannel experience, i.e. provide omnichannel access to their users to choose the one or more channels they need.

4   Discussion

The results from the previous analysis show a fairly high level of basic digital habits in Serbia, especially regarding the use of social networks, electronic and mobile banking, payment cards and, to some extent, online shopping. That's the case for all age groups, which indicates the basis for upgrading digital tax literacy. At the same time, one-third of

respondents use every TA digital solution individually, indicating that we are at the basic level of digital tax literacy. The high demand for electronic means of communication indicates good potential, but there is a critical 30% of the population who still prefer traditional ways of communication (going personally to TA, communicating through the post office, by phone, etc.). This can be an indicator of still insufficient digital tax literacy.

The fact that there is still a certain scepticism in digital use is indicated by the fact that the majority buy online only sometimes, that 15% of respondents (mostly highly educated) do not use the governmental portal *eUprava*, that the existing TA digital services are used by barely a third of the respondents, and that even 40% declared that they do not use a single service. Also, one-fifth of the respondents believe that the existing methods of tax payment are adequate and see no reason for new, improved methods that include a digital component.

A high level of potential future demand indicates that those with a basic level of digital tax literacy today are willing to move to a higher level. Interestingly, this demand, among other things, is increased by respondents of a younger age, i.e. future taxpayers. Through research, it has been shown that this group of respondents is more digital and less tax literate, in contrast to older respondents, where the situation is more or less uniform, and in some categories, the opposite.

Finally, the digital transformation of the Serbian Tax Administration is lagging behind OECD countries (Radosavljević, Babin, Erić, 2022: 236). Based on the self-assessment received from 47 tax administrations in OECD countries Digital Transformation functions of OECD countries have "Established" maturity level (level 3/5) while in Serbia average maturity level is "Progressing" (level 2/5). Moreover, the indicator "Uses of digital identity" is a good proxy for the digital tax literacy level of taxpayers, where more mature taxpayers use a wider range and more sophisticated digital tax services. The average level of that indicator in Serbia is 2/5. Also, 37 of 47 OECD countries have recorded a higher level of that indicator than Serbia (Radosavljević, Babin, Erić, 2022: 232; OECD, 2022: 19). Therefore, we can conclude that the digital tax literacy of Serbian taxpayers is lower than the OECD average.

5   Conclusion

Results showed a good basis for enhancing digital tax literacy in the form of digital habits, partial use of current digital services of the Serbian Tax Administration and preferred electronic communication with the tax administration. Also, it is important to highlight that the current level of digital tax literacy in Serbia is rather basic and unevenly spread between generations. On the other side, the usage of existing TAs digital services in Serbia is low. We conclude that one of the reasons is the insufficient competence of taxpayers to perform tax obligations digitally. However, high interest in using digital services in the future is optimistic, and the sources of that demand are taxpayers who

currently possess a basic level of digital skills and future taxpayers (youth) who are advanced digitally literate but poor in tax literacy. Finally, the ultimate conclusion and recommendation are that Serbia's TA and public authorities must focus more on taxpayer education and establish effective cooperation with education and research institutions.

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