

SUMMARY

General elements regarding the management of the digitization of public services

The diversification and increase of the quality of public services offered to citizens, as well as the development of instruments that allow free, permanent, fast access and at the lowest possible costs represent the image of the degree of civilization of a society, of the increase in living standards. To the same extent, the use of automated means of access to these services offers the dimension of the degree of education of the population, of development of digital skills. Public services, whether we are talking about road infrastructure, railways, medical services, education, health, civil protection, etc., must respond qualitatively and quantitatively to the needs of all citizens, contributors through the taxes and fees paid. The digitization of public services has gone beyond the innovative element of a political discourse, becoming a state of affairs, an absolute priority in the national institutional development strategy. The period 2019-2021, characterized by extensive measures to restrict free access to public spaces, brought to general attention the need to speed up concrete measures to create an environment that would face the current challenges. If the process of digitization of the activity of public institutions was not an absolutely new one (some services to the population have already been automated: ghiseul.ro for the payment of taxes and fees, the SPV virtual private space for access to information specific to the activity of ANAF, e-government for the fulfillment of declarative tax obligations), the interconnection of institutions for data exchange and efficient management of the collected data has become the real challenge. I say challenge because the public interest has not always been prioritized, but the unconstructive pride, the lack of capacity for open and conciliatory dialogue. Each entity that manages a set of information/data considers that it is the only one entitled to use them, invoking absolutely unnatural regulations and procedures that are outdated by reality. In all this amalgam of reluctance to change, decision-making incoherence and visionary opacity, those who bore the consequences and saw their natural rights to benefit from quality public services limited were the citizens, the taxpayers.

In essence, digitalization is the response of the authorities to the increasingly diversified requirements of society to create an optimal climate for economic and social development and to balance the gap between the quality of existing services in the competitive, private and public environment.

Public services must be seen from two complementary perspectives:

- the totality of the economic and non-economic needs of a community,
- the quality of the response of the responsible public institutions to these needs.

The economic and social evolution translates into the diversification of the mechanisms for satisfying the increasingly complex needs of citizens. Whether we are talking about social protection, education, public health services, public order, tax administration, all these aspects must find their counterpart in concrete and efficient actions of central and/or local institutions. Each segment of this complex of needs exerts its influence on the others and that is why their development and efficiency policy must be a unitary one that does not create major imbalances or discrepancies in the relationship with citizens.

As a whole, public services reflect the degree of development of a society. An economically advanced community has always been defined by a superior state organization, with institutions actively involved in the life of the community, rigorously structured on specific activity, with functioning mechanisms and administrative apparatus built on the principles of efficiency, effectiveness and fairness.

The response of public institutions to the needs of the community transposed into public services must include the efficiency of the use of available resources and the quality of the result of use.

A public service does not only translate into requesting and obtaining a right, but also through the permanent information of those to whom it is addressed, in order to raise individual awareness of the indissoluble link between rights and obligations. A society that is correctly and constantly informed becomes an educated society.

The management of this complex process of rethinking and reorienting the organization towards the efficiency of information processing, decision-making transparency, effectiveness in achieving target results and simplification of work procedures actually involves a series of other thematic managerial approaches, practically structured in process stages:

- project management,
- human resources management,
- change management,
- Measuring the user satisfaction index.

The digitization process must be structured on rigorously established management principles and adapted to such an approach:

1. Vision
2. Increasing efficiency by setting targets and standards
3. Citizen-oriented
4. Organisational alignment
5. Proactive involvement of all structures
6. Flexibility and continuous improvement
7. Measurement and liability.

The digitization of public services must be based on a predictable project, with clearly defined stages and objectives. The principles that must govern such a broad approach, strategic by implications, start from the general and are completed with principles applicable to the stages taken.

Thus, the European Commission, in the process of monitoring the digital competitiveness of member states (DESI), through the report elaborated, places Romania at the bottom of the ranking. The low level of use of digital public services is the effect of an individual development of digitization processes, low skills in the use of technical equipment, both among citizens and employees, low connectivity and inadequate technical infrastructure. Each institution has foreseen the development needs (technical hardware and software infrastructure, professional training in perfecting the digital skills of employees) strictly referring to their own volume of activity, to the flow of information at that time, without having an overview of what the interinstitutional transfer of information entails. Hence the problems generated by the inability of servers to support an increased flow of information per unit of time.

The role and place of marketing in modern society define almost all sectors of activity. Marketing is by the nature of the concepts, principles, techniques and methods developed a fundamental element in the activity of public institutions in the process of adapting to social evolution and understanding the needs of citizens.

Marketing is also a set of rules of conduct that public officials must adopt in the performance of their duties. Every action or inaction of a civil servant during and even outside the working hours has an impact on the general image of the institution he represents.

The marketing of public services must have at the center of concerns the orientation towards citizens, the activity of public institutions must have as its purpose the efficient satisfaction of the community's

demands and performance in the administration of the general interest. Although the public system is outside a "direct competitive market" with an absolute and intangible monopoly on certain segments of activity (public order, tax administration, national defense), an extensive transformation can be observed through institutional reform.

The modernization of the technical infrastructure, the taking over of high-performance models of tax administration and their adaptation to the specificity of society (education, degree of use of electronic means of communication) is essentially a policy of openness, of transparency of the activity.

Marketing is an image - that's why all these reforms redefine the institution-citizen relationship in the sense of regaining confidence in the public sector's ability to provide quality public services.

In general, the implementation of marketing policy and market strategies focuses on four basic components

- Product
- Promoting
- Price
- Distribution

The product that public institutions put on the market must meet the quality standards imposed by society. Each service must correspond to a market research in order to identify collective needs, to understand the factors that can influence the quality and usefulness of the product. In the current approach that refers to the process of digitization of public services, the product that citizens receive must first of all offer them the comfort of the benefit without additional costs transposed into allocated time, unavailable material resources or repeated actions

The promotion of newly implemented public services or simplified access procedures must reach the target audience. If important steps have been taken in terms of assimilating innovative and successful concepts in other countries (development of electronic platforms for citizens - e-vignette, ghișeul.ro, SPV, websites of local public administrations, etc.), the information and promotion campaigns of these new concepts of public services still fail to achieve their goal.

The price must be seen from the citizens' perspective as a ratio between the cost of access and the benefit of using a service and from the institution's perspective as an added value in the current activity compared to periods prior to the implementation/development of a public service.

The price of a public service is found in the reduction of the costs of administering the set of data that underpins it (the digitization of a public service will reduce the costs of office work, of the spaces intended for archiving, of the additional human resource allocated to the handling of documents in physical form and the efficient management of a non-renewable resource - TIME). To the same extent, the price can also be translated into streamlining the activity (increasing the degree of collection through voluntary compliance, immediate collection through the use of electronic means of payment)

The distribution of public services aims to simplify citizens' access to these services. This component of public service marketing has the role of improving the performance of the staff of public institutions and streamlining the citizens' experience.

Regarding the marketing principles applicable in the area of public services, we can identify:

- the public institution is at the disposal of the citizen - it is necessary to establish very clearly the place of the citizen within the general concerns by clearly addressing the idea that all the resources available to an institution are channeled towards satisfying the needs of the community
- adaptability and improvement - public services must be flexible so as to keep up with the evolution of society. Perhaps the most eloquent example is the vehemence with which public institutions had to adapt

their services to the realities imposed by the global pandemic situation, which implied limitations on the right of physical access to certain spaces or access conditional on certain criteria (vaccination, presentation of proof of health). The answer that the authorities had to give was, or should have been: "we are here, we are prepared, the rights of citizens to benefit from public services are not altered"

- permanent knowledge of the degree of satisfaction of citizens' demands and the provision of new concepts of public services. This principle implies, on the one hand, a deep analysis of the community, of the way in which it perceives the services offered, as well as the study of the trends/orientations of those societies perceived as sources of good practices in the configuration of new and performing aspects of the development of public services.

The current state of digitization of the National Agency for Fiscal Administration

Education, industry, health, economy, commerce, media, social life, everything is transforming and adapting to the new wave: digitalization. If 10 years ago the need for technology largely concerned the industry, now everything is moving online. The effervescence and speed with which society "moves" no longer leave room for lost seconds, everything acquires sometimes dizzying speeds, which have caused an almost imposed evolution of the digital environment. Social conservatism, based on the direct interaction of the parties participating in an agreement process, has been crushed by the need for a higher speed of reaction.

Training and education can no longer be dissociated from the gadget, the school itself being subjected almost imperially to technology. And if there were still skeptics about the place of online in education, the immediate reality counteracts any controversy on the subject, see the measures imposed by decreeing the state of emergency in the context of health protection and security measures following the COVID 19 pandemic, respectively the "online school".

Time has become a currency far too precious to be converted into "dead moments" and perhaps more than ever the famous lexical construction "time is money" acquires the valences of an axiom. So, if time means money, then wasting it means economic loss. This is how the need to compress time imposed the adoption of digitization measures.

Digitalisation is more necessary than ever to better serve taxpayers and the business environment, to ensure the coordination of administrative efforts with the way taxpayers use digital technology, to increase the performance of public services offered in the field of tax and customs administration and to reduce the administrative burden.

The digitization process will determine the achievement of the institution's objectives regarding improving voluntary compliance, combating tax evasion and increasing the efficiency of collection, ensuring both the decrease of the cost of collection (at the level of the agency) and the cost of compliance (at the level of taxpayers).

The National Agency for Fiscal Administration is in the midst of a digitalization process, carrying out a series of initiatives in order to increase the collection rate and support tax compliance, such as simplifying and making available in a digital environment the tax documents necessary for taxpayers and collaborating online with taxpayers, both by offering electronic services and in the field of tax control.

Currently, there are plans to develop, with financing from structural funds, an integrated tax administration system with two major components, namely the digitization of the flow of administration processes and interoperability with institutional partners.

The complex digitization projects proposed for financing through structural funds will significantly reduce the fiscal gap and ensure an increase in the collection rate, without putting additional pressure on the state budget through spending.

The implementation of digitization projects will involve significant investments in technology, the reengineering of business processes through the development and centralization of IT applications and the increase of interoperability possibilities with other institutions and public authorities. Digitalization offers both improved administration performance and new ways of interacting with taxpayers, allowing administrations to capitalize on data that offers customers new proactive services, decreasing both the cost of collection (at the agency level) and the cost of compliance (at the taxpayer level). The National Agency for Fiscal Administration is subordinated to the Ministry of Finance. It is an organ of the central public administration, established by OG 86/2003 and became operational starting with 2004. The National Agency for Fiscal Administration emerged as a necessity on the one hand to modernize and streamline the activity of collecting taxes, social contributions and other amounts due to the general consolidated budget, and on the other hand to boost the consolidation of a taxpayer-institution relationship based on transparency, fairness, efficiency, effectiveness, legality and morality.

The National Agency for Fiscal Administration operated on the basis of Government Decision 520/2013 on the organization and functioning of the National Agency for Fiscal Administration published in the Official Gazette no. 473 of 30 July 2013 – "*The National Agency for Fiscal Administration, hereinafter referred to as the Agency, is organized and functions as a specialized body of the central public administration, a public institution with legal personality, subordinated to the Ministry of Public Finance, financed from the state budget, according to the law*" (GD 520/2013, Chapter I, Sect.1, art.1), is headed by a president with the rank of secretary of state, appointed by Decision of the Prime Minister and "*ensures the administration of taxes, duties, contributions and other budgetary revenues given by law in its competence, the application of customs policy and regulations and the exercise of the duties of customs authority, as well as the operative and unannounced control regarding the prevention, detection and combating of any acts and facts that have the effect of tax evasion and tax and customs fraud, as well as other facts given by law in its competence*" (GD 520/2013, Chapter I, Sect.1, art.4).

The structure of the National Agency for Fiscal Administration includes:

- General Directorate for the Administration of Large Taxpayers
- General Directorate for Tax Anti-Fraud
- Regional General Directorates of Public Finance (and their subordinate units)

According to the normative act of establishment, the National Agency for Fiscal Administration, in the exercise of its activity, performs the following functions:

- strategy and management;
- management of taxpayers and taxes, fees, contributions and other budgetary revenues given in its competence, according to the law;
- tax inspection and tax verification;
- to collect state revenues;
- providing services for taxpayers;
- operative and unannounced control;
- to prevent and combat tax evasion and tax fraud;
- specialized technical support provided to the prosecutor in carrying out the criminal investigation;
- fiscal supervision;

- coordination, guidance and control of the application of legal regulations in the field of activity, as well as of the functioning of the structures that carry out their activity under its subordination;
- support, respectively management of human, financial and material resources, support of specific activities through information and communication technology, legal representation, internal public audit, as well as internal and external communication;

- international cooperation,

with attributions

*General

* in the tax field

* attributions in the field of preventing, detecting and combating tax evasion and tax fraud.

Having as a principle of operation the efficiency of the collection of budget revenues, the technologization of the National Agency for Fiscal Administration has become an absolute priority. In order to stimulate the fulfillment of tax obligations and increase the degree of voluntary compliance, ANAF has started projects and strategies to improve the quality of the services offered, structural modernization, creation of accessible and high-performance platforms for online interaction with taxpayers.

The steps you need National Agency for Fiscal Administration were towards creating an environment for digitized access to information about procedures, legislation, filling in online forms on platforms, online payment of taxes, filing tax returns via the Internet, using e-mail or electronically signed documents in relation to the institution, and all these are just normal ways of interacting with a modern public administration.

The digitization of the services offered to taxpayers, beyond the economic aspects (reduction of some costs with consumables, with spaces for storing and archiving documents, with physical travel to the headquarters of the tax units) offers the possibility of accessing the services offered by the institution 24/7, consulting the legislation and accessing remote assistance and guidance.

The services offered by ANAF are not entirely and exclusively moved online. These are offered:

-directly

-Phone

- and electronic

The institution's modernization efforts must not create the premises for discriminatory policies towards taxpayers. The technology must be done in accordance with the human factor. Conditioning the fulfillment of the tax obligation on the ability to access the devices can create discomfort and indignation within some social categories, up to total rejection. All this technological effort must also take into account the type of taxpayer it addresses. First of all, a distinction must be made between legal entity taxpayers and individual taxpayers.

If in the case of legal entities we are mostly addressing knowledgeable persons, mainly accountants, with knowledge in the tax field and work experience, as far as individuals are concerned, here we must take into account factors related to

-age

-schooling

-Training.

In 2019, through OPANAF 49/2019, the submission of the form "Single Declaration on Income Tax and Social Contributions Due by Individuals" was exclusively electronic, through the e-government platforms and the Virtual Private Space. Although the measure was meant to facilitate citizens' access

to the electronic services offered by ANAF and to avoid the discomfort of traveling to the headquarters of the tax units, it created almost equally contradictory reactions

- on the one hand there were those who welcomed the initiative and complied,
- On the other hand, there were the conservatives, those who are generally reluctant to change, and the elderly. The reasons invoked were some objectives: limited knowledge in the tax field, lack of technical equipment, lack of internet access, lack of computer operating knowledge, but also subjective reasons generated especially by the idea of constraint.

This measure was revisited, the "Single Declaration on Income Tax and Social Contributions Due by Individuals" can now be submitted both electronically and physically, at the counter or by mail. But it is worth noting that the number of individuals who fulfill their tax obligations using electronic transmission services is constantly increasing.

In order to maintain and accelerate the move of interaction with taxpayers online, ANAF must adapt its electronic services to the needs of those they address, simplify access and modernize its technical infrastructure so as to limit the moments when servers fail.

Accessibility implies the existence of means of information within the reach of the widest possible categories, with quick results and low costs. In this regard, the Call Center services, the ANAF portal and e-mail correspondence have been developed. At the moment, the telephone service with a single number – Call Center has national coverage with clear performance targets, a waiting time of up to 6 minutes and a target for 70% of calls to be answered within a waiting time of up to 6 minutes, complete and correct information. The ANAF portal is in a continuous process of adapting to the needs and demands of users. It can be accessed at any time, provides complex information, from applicable legislation, legislative guides, calendar of tax obligations, to forms and completion rules. At the same time, in an attempt to get closer to taxpayers, information, assistance and guidance sessions are organized through facebook. They are interactive sessions in which, as far as the complexity of the questions allows, immediate answers and appropriate guidance and assistance are provided.

The diversification of the means of communication is a broad process, meant to stimulate voluntary compliance, ensure the transparency of the activity, streamline the collection and increase the quality of the services offered.

It should also be noted that, by accessing the https://static.anaf.ro/static/33/Anaf/20210316192634_strategia_anaf_2021-2024.pdf link, you can consult the ANAF Strategy 2021-2023, a document that presents the Agency's vision and strategic objectives for the next four years, including the projects being implemented at the institution's level, including:

1. One Stop Shop (OSS_RO) information system according to intra-community, national and specific customs requirements
2. Redesign and optimization of the information system – VIES_RO (Value Added Tax Information Exchange System)
3. Information system regarding the connection of fiscal electronic cash registers for data transmission
4. Standard Audit File for Taxation
5. Electronic invoicing system
6. Extension of the system - AEOI_RO (Automatic Exchange of Information)
7. Information System for Monitoring Intra-Community Transactions of Goods (SIMTIC)
8. The NOES (Operational Level of Forced Execution) information system
9. Efficient tax services for the administration and citizens – SFERA

10. High-performance administration through consolidated information – APIC
11. Integrated Tax and Customs Administration System - SIAFV
12. Increasing the administrative capacity of the MFP and subordinated institutions in order to improve the interaction of citizens and the business environment in order to obtain extended electronic services through the ANAF portal
13. Development of electronic and telephone services offered to taxpayers through the Call-Center
14. Digitization of the valorization activity - Computerization and streamlining of the valorization activity of the goods entered, according to the law, into the private property of the state
15. Increasing the administrative capacity of the National Agency for Fiscal Administration through the digitized management of the activity in the legal field
16. MFP - ANAF: a collaborative and innovative tax administration for the benefit of taxpayers
17. Development of the Integrated Customs Information System
18. Car fleet management system for the means of transport from the ANAF patrimony

The modernization of ANAF is therefore a broad process, adapted to the needs of the economic environment, to the increasingly diversified and complex realities and situations. The institutional reorganization of ANAF, as stated by the president of ANAF, Mrs. Mirela Călugăreanu, has as its main target the digitization of services, permanent and continuous access.

At the moment, through the e-government platforms and the Virtual Private Space, economic agents can fulfill their tax obligations, obtain information directly or through the contact form. The next target of ANAF is the implementation of the SAF-T project. It is a system of electronic transfer of information between legal entities and ANAF. The implementation of this project has positive implications both on ANAF's activity and on the business environment. It represents a reduction on both sides of the allocation of human resources and expenses, shortening the deadlines for carrying out controls, streamlining the fight against fraud.

The computerization of the tax system has been requested for years by the honest business environment, which sees the implementation of an integrated system for the administration of tax revenues as a vital necessity for Romania.

The digitalization of ANAF has always been a problem widely debated by specialists and carefully monitored by the media and the private economic sector. It has been and remains a priority both in the national development strategy and in its own strategy – as part of an integrated national system of institutionally interconnected functionalities.

In the development and implementation of the policies for the automation of ANAF's functionalities, we must take into account the fundamental acts of will that converge towards achieving the proposed targets:

- political will,
- setting up a firm, coherent and innovative digitization strategy,
- the ability to implement new software technologies and maintain the hardware infrastructure through its own specialists,
- aligning legislation as well as system procedures and internal operational procedures to the digital reality,
- reviewing the human resources policy regarding the recruitment of IT specialists,
- active participation in tax education programs,
- Developing employees' digital skills.

At a Conference on the digitalization of the administration^[1], George Anghel from the Romanian Electronic Payments Association made an absolutely enlightening remark regarding Romania's entire digital policy process: *"Romania's digitalization is not a public procurement process, but a research/development process. We have to understand this, not to imagine that we are doing 1, 2, 10 projects and we will have digitalization. No, we will only have digital islands"*.

Indeed, without a coherent government policy, the entire process of digitization of institutions would only allow citizens to access fractionally, on certain segments of interest. Moreover, the state would only be the administrator of databases with vital information for the development of sectoral policies, without having the ability to configure a general dashboard appropriating the data of interest of several institutions in real time. And as far as each institution is concerned, it is difficult to develop an intuitively operable information system, easy for the benefit of citizens, as long as each entity considers that it is the owner of the managed data and does not allow its own information system to interconnect, within the limits of competence, with the other management information systems.

Political will has proven to be fundamental in terms of carrying out the entire digitization strategy. The institutional modernization is constantly found in all the framework projects of governmental policies drawn through the targets of the government programs.

The digitalization of the Ministry of Finance has been and remains the test stone of the ability to align with the European Union standards in terms of administrative efficiency and functional debureaucratization policies.

For the period 2017-2020, the government programme, as regards the public system as a whole, envisaged: *"the computerization of the public system of institutions in Romania and its interoperability will be priorities in the coming year (n.a. 2018), in order to achieve the goal (...), which also includes the prohibition of the possibility of a public institution to ask the citizen or legal entity for an act or document that another public institution already has. In order for this to be achieved, the Government will present, by January 1, 2018, the calendar and the implementation of the integrated information system for the entire public administration in Romania"*.

In the 2020-2024 government program, the section Ministry of Finance – Medium-term vision, it is emphasized: *"the digitization and simplification of the interaction between the institutions subordinated to the Ministry of Public Finance and taxpayers will be a priority by continuing and expanding the debureaucratization projects at all levels"*.

Therefore, the political will regarding the information standardization of state institutions at the level imposed by the rigors of the European Union is constantly positive.

The digitalization projects undertaken for the immediate period, with a deadline for completing their implementation 2021-2025, aim to:

- creating a collaborative institution-citizen environment based on transparency, efficiency, professionalism and proactive approach to measures to adapt fiscal policy according to economic and social realities,
- concrete measures to combat tax evasion, increase the collection rate and stimulate voluntary compliance,
- modernization of ANAF, both conceptually – by opening up to dialogue and involvement/consultation of citizens on some fiscal measures, and informationally by redesigning the IT architecture and improving ethnic support.

But the political will outlined at the central level must also be doubled by the will of local decision-makers, sometimes dictated by political reasons. And here we are considering the decision-making

capacity at the local level as a result of decentralization. (*“Decentralization The public administration involves a process of increasing the autonomy of local authorities through the transfer of new decision-making responsibilities, as well as financial and patrimonial resources, in compliance with the principle of subsidiarity, reducing current expenses and increasing transparency in relation to citizens and increasing the quality and access to public services. In other words, it is a process of transferring authority and administrative responsibilities from the central to the local public administration in the areas of planning, decision-making, legal responsibility and management of public services”*).

An enlightening example in this regard is the share of public institutions that have joined the PatrimVen platform. Thus, out of 13,458 public institutions (town halls, educational units, hospitals, decentralized directorates, prefectures) joined this platform, according to the latest data accessed in April 2021, in number of 2,746 – about 20%.

What is the PatrimVen secure information system under the administration of ANAF?

This secure IT service was implemented to streamline the activity of institutions and equally to support citizens. By enrolling public institutions on the PatrimVen platform, certain documents necessary for taxpayers in relation to them and issued by ANAF, can be obtained directly, in electronic format (income certificates, tax certificates, income information, etc.). In the same way, ANAF could also obtain the necessary information from the enrolled institutions, without the taxpayer having to travel to obtain it.

The Protocol for joining the services of the PatrimVen information system, as well as the Procedure for approving access to the services available within the system were regulated by the Order of the Minister of Public Finance no. 2632/2016 for the development of the services of the Ministry of Public Finance made available to public authorities and institutions through its own information system.

In a case study built precisely to emphasize the need to promote this service and to encourage local public authorities to enroll in PatrimVen as a gesture of responsibility and respect for the citizens they represent or with whom they come into contact, the data on the income certificates requested at the counters of ANAF structures throughout the country between August and September 2020 and which subsequently served in the relationship with third party public authorities were centralized (hospitals, town halls, schools, various decentralized directorates). The result: 519,000 documents issued at the counter. 519,000 citizens traveled to obtain a document that his applicants would have obtained in a few seconds by enrolling in PatrimVen.

The construction of ANAF's digitization strategies, so far, has had as a structure for the development and implementation of applications, its own specialists from the National Center for Financial Information (hereinafter referred to as CNIF).

The CNIF was created in order to unify the databases in the fiscal area with the support of the STS. Emergency Ordinance no. 77 of 26 October 2017 on the establishment of the National Center for Financial Information.

The substantiation of the act of establishment of the CNIF provides:

" Considering the increase in the frequency of negative events generated by cyber attacks that can generate significant losses to the financial-fiscal system, since in such emergency situations the institutions concerned must apply coherent, unitary response measures within the same system and with celerity, considering the importance of the information managed at the level of the public finance system for the stability of the financial-fiscal system, Taking into account the public benefit generated by the implementation of a single information and communication technology management system at the level of the public finance system managed by the Ministry of Public Finance and its subordinate units,

whereas failure to take urgent action can lead at any time to the occurrence of a security incident with the consequence of massive data loss,"

Given the particular complexity of the collected, centralized and stored data, their strategic importance in defining short- and medium-term tax policies and long-term economic forecasts and ensuring the security and integrity of the information managed, both from the point of view of personal data protection and tax secrecy, the challenges are permanent and diverse. The device is still undersized compared to the digitization projects envisaged to be implemented. Moreover, CNIF also coordinates the information technology structures within ANAF (the Agency does not yet have its own IT specialists). However, only in the first quarter of 2021, at the initiative of the spatiality directorates within ANAF, CNIF managed, through its own resources, to digitize 84 tax forms that were submitted in physical format, at the counters of the tax units (now they can be submitted with a qualified digital certificate through e-government or SPV).

The entire set of institutional modernization measures must be correlated with a new vision of the working procedures and adaptation of the legislation to electronic communication.

If we consider the working procedures, it should be noted that at the moment they are outdated, based on the submission of documents in letter format, the physical presence of taxpayers in the institution's premises and most of the time they provide for absurd situations in which citizens are obliged to submit copies of the documents issued by the institution in question. Beyond the opacity of the system, still anchored in the conservatism of the registers and the famous "rail files", we also come up against the lack of enthusiasm in the implementation of modern working methods. And where there is a will, legislation intervenes, which in turn becomes a factor in slowing down technology. In this regard, we exemplify those situations in which the documents issued by an institution in electronic format, based on a qualified digital certificate, are not recognized by other institutions in the absence of the handwritten signature and stamp of the head of the issuing entity.

A very important aspect in the context of the digitization process of ANAF services is also the revision of human resources policies, especially in the IT segment. The automation of internal processes (data collection/processing and information security) and external processes (data transmission/request and security of communication channels) implies new forms of specialization in the IT field and the attraction of qualified human resources. With the expansion of computerization processes in all fields of activity, new professions have appeared:

- Information Security Analyst
- Information Systems Analyst
- Data Analyst
- Software developer
- Digital Content Specialist

Given the labor market's appetite for information technology specialists, ANAF must update its salary policies so that it is a competitor with real recruitment chances. The digitization process is one that involves both the implementation of innovative automation solutions and strict data security policies. Behind each of the stages taken there must be perfect specialists, properly remunerated and stimulated.

One of the opportunities at hand would be the partnership with higher education institutions, the development of a scholarship system based on an individual institution-student protocol with clear clauses regarding the maintenance of educational performance qualifications, the minimum amount of post-graduate activity (employment) within the specialized structures of ANAF.

A very important role in ensuring the transmission of the message to the receivers, in our case to the taxpayers, is the dissemination of the basic elements of what defines tax education: the totality of tax obligations and rights.

In practice, the shortcomings in terms of taxation are obvious, starting from basic elements – primary obligations, compliance with deadlines and assumption of consequences (otherwise). It is very important for a young entrepreneur to have knowledge about what tax compliance entails, to be informed about tax systems, filing deadlines, tax rates, etc. Most of the time, taxpayers end up in delicate situations precisely because of the lack of information. The appetite of the young generation for entrepreneurship is to be appreciated and this should be a catalyst in starting an interministerial partnership on the introduction of one hour of taxation, at least at high school level – final years.

Vocational training is one of the most important investments. Technology itself is not the recipe for a certain success in terms of ensuring the quality of the services offered or carrying out the internal activity. With this extensive digitization process, there is a risk of certain malfunctions caused by a human resource insufficiently prepared to deal with new technologies. The transition from the traditional administration, based on pen and paper, to almost total communication in electronic format is not easy to manage in an aged, undersized system with capped employees.

The introduction of test servers, designed to allow familiarization with new applications, running programs and identifying data processing errors, would contribute to the active improvement of both the functions and the applications themselves.

The general objective from an ICT perspective, for the next 5 years, is the digital transformation of the tax administration, by:

- the use of digitalisation as a smart approach for the functional areas of tax administration,
- strengthening the administrative capacity necessary for the digital transformation process,
- Ensuring the technological framework necessary for the transition to a digital tax administration.

The 3 specific objectives take into account the recommendations of the European Commission to have an approach that includes both the IT applications and the human resources trained to use them, the infrastructure necessary to support these IT developments and last but not least, the interoperability component.

The actions related to the strategy also aim to capitalize on the financing opportunities from structural funds that are configured with the new financial framework 2021-2027, through PNRR and POCIDIF, for major digitization projects.

Romania has tried through fiscal policies to reduce tax evasion and improve the capacity and degree of collection without having the expected results. Therefore, the implementation of the SAF-T project is an important step both in the direction of modernization and streamlining of the activity.

Two questions arise in relation to what ANAF currently represents in relation to taxpayers:

- Is today's ANAF the ANAF I want in the future?
- Are ANAF's information platforms for everyone?

The business environment wants a different kind of ANAF – debureaucratized, efficient, modern, with simplified procedures and short deadlines.

Since 2015, the European Commission has been monitoring Member States' Digital Competitiveness (DESI).

According to this report, in 2019 Romania ranked 27th out of 28 EU member states in the Digital Economy and Society Index (DESI). The index monitors Europe's overall digital performance and tracks EU countries' progress on digital competitiveness.

In the report for Romania, in chapter 5 – Digital public services, The following observations are made:

- in terms of digital public services, Romania ranked last in the European Union,
- in the case of certain indicators, however, Romania registers performing developments:
- seventh place in the EU in terms of users of the e-government platform (82% of internet users compared to the European average of 64%),
- Virtual Private Space – the system for managing taxpayers' tax returns and obligations does not include the payment method.
- the information system of the national administration is fragmented, representing an administrative burden for citizens and the business environment,
- The IT connection and the online transfer of data between institutions are low, as a consequence of the fact that there was no joint integrated digital development plan at national level, but each institution developed its own development plan and project.

Although in terms of digital public services, Romania ranked last among EU member states in the last three years, in terms of users of e-government services, Romania ranks 8th with 82% of internet users, compared to the EU average of 67

Also for this segment of reporting the evolution of the use of digital public services, a series of determining factors have been identified:

"The lack of interoperability of IT systems in public administration is an old problem, which no government has yet managed to solve. In June 2019, a public consultation was launched on the draft law on the implementation of the National Reference Framework for Achieving ICT Interoperability ("CNRTIC"). The purpose of the law is to implement the vision expressed in the government's program 2017-2020 (in particular, in the chapter "Communications Policies – Digital Convergence") in order to simplify procedures and reduce bureaucracy through e-government. The draft law would establish a general framework for managing the interoperability of the information systems of public institutions providing services to the public. The draft law is to be voted on in parliament.

Romania's eIDAS (Electronic Identification) node is still under construction, through the ERDF-funded project ("SITUE"), which should be completed by the end of 2020. The high cost of a qualified digital signature (around €40/year/user) is the main problem for providing a digital identity to all citizens. The main barriers to the realization of digital public services in Romania are:

- *lack of coordination between public institutions in terms of setting up such services;*
- *migration of IT specialists from the public sector to the private sector or to other countries;*
- *general lack of digital skills"* (excerpt from the DESI 2020 report)

For the ANAF of tomorrow, the citizen wants complete services, simplified procedures, permanent access and stability. Organizational development programs offer all these services.

Are ANAF IT platforms for everyone? Are the access procedures simplified? By creating the Virtual Private Space (VPS) platform, this was precisely the target: an electronic service available to everyone. The SPV addresses all citizens, provides real-time information about the income collected, the payment obligations, about the employer's fulfillment of the obligations to pay social contributions.

There are indeed certain social categories for which the electronic environment raises difficulties of access and use. The purpose of modernizing ANAF services must in no case have the effect of excluding or limiting the interaction with certain categories of taxpayers. The aim is to reduce both the time and cost of tax compliance. Measures were analyzed and taken to limit the negative impact among citizens. The online environment is an alternative, not an obligation. New services were constantly introduced –

obtaining the tax record, submitting the documentation on establishing tax residence precisely in response to the suggestions received.

At the same time, in order to increase accessibility, audio support was added to the assistance regarding the procedures for enrolling in the SPV and filling in the tax returns. An important point in ANAF's development strategy is also the modification and modernization of the ANAF website so that it is friendlier, easier to access and with a more condensed content, while updating the information.

The data of the report are eloquent for raising awareness of where we are as users of digital technology and for framing the pace of implementation of the new automatic mechanisms for receiving/transmitting/processing data. I insisted on faithfully reproducing the conclusions on the five levels of reporting precisely to highlight the need for a unitary digitization policy, the interconnection of institutions and the creation of an intuitive framework for citizens who access the platforms of public institutions.

The fact that a very high percentage of Romanians access social networks, communicate with each other through video call means denotes that civil society is not resistant to technology, does not reject and does not refuse the use of technology, but that the platforms developed by public institutions are not user-friendly, both visually and structurally.

Regarding accessing e-government services in order to submit forms, ANAF managed to digitize the tax forms in a proportion of 85%. In 2021, all forms for the avoidance of double taxation and international tax agreements and tax residency were digitized.

A special attention was channeled towards the fiscal activity specific to individuals. A first step was to pre-fill the income statement and send it to the users enrolled in the SPV (Virtual Private Space). This initiative aims to popularize the ANAF platform and at the same time capitalize on the data already existing in the databases to facilitate the fulfillment of tax obligations by taxpayers. The digital reform must reduce the administrative burden on taxpayers and optimise the institution's data processing processes.

The concern for adapting the functionalities and services offered through the ANAF.ro platform to the citizens' requirements for optimizing their presentation is a must-do. In this regard, the way of presentation, the structure of information have been rethought

The digitization of the forms, at least in the segment of activity of individuals, does not imply the elimination of the possibility of direct interaction. We are aware that civil society is not yet ready for this leap. Any automation process must be correlated with the ability of users to access it, with the possibilities of using technical equipment, the internet connection. Objectively analyzing the factual situation, ANAF is not currently prepared to offer exclusively online services, neither technically (old servers, morally worn out technical equipment) nor as an available human resource (aging staff, undersized collection structures, low digital skills).

The services offered by ANAF are remote services and services at the headquarters of the tax unit. Remote services can be grouped into three categories

- mail order services
- telephone services
- electronic services

The Virtual Private Space (VPS) is an electronic service through which all information and documents about the holder's tax situation are communicated. SPV is addressed to both individuals and legal entities, registration as a user is done by accessing the website www.anaf.ro.

The advantages of using this service are generated by the fact that it can be accessed from any device with an internet connection, it offers permanent informational support, free of charge and very easy to access. Intended mainly for filing tax returns, the SPV has been permanently adjusted and new functions have been introduced, so that the services offered are as complete as possible.

Through the Virtual Private Space you can get:

- income certificates,
- tax certificates,
- information on payment obligations and note of payment obligations,
- tax record,
- documents regarding tax residence.

The processes of adaptation to the current needs of citizens and of putting into practice the policies of digitization and synchronization with national institutional policies, developed on the immediate realities (quarantine measures, restriction of the number of people simultaneously present in the same determined space, limitation of free movement without solid motivations – generally measures imposed by exceptional situations) have generated prompt reactions transposed into projects with implementation Immediate. In this regard, the services offered through the SPV have been extended:

- online payment of tax obligations (even for third parties)
- the introduction of the video identification system for taxpayers who create a user account, taxpayers no longer have to go to the headquarters of the tax authority
- online appointment for face-to-face assistance at the headquarters of the tax authority. In this way, by setting the day and time of the meeting, the waiting time in the room will be eliminated.

The immediate projects that will be allocated in the process of improving the quality of services offered through the Virtual Private Space are aimed at:

- increasing the number of tax forms that can be submitted using electronic means of remote communication,
- the introduction of a new service in the area of assistance for taxpayers – chatbot.

All projects and procedures implemented or in the process of being implemented have as their purpose institutional debureaucratization, the creation of an efficient, constructive, transparent and cost-decreasing working environment and the efficient allocation of human resources.

Conclusions on the current state of digitization of public services offered by the National Agency for Fiscal Administration

The digitalization of ANAF is a requirement and a necessity for/for the business environment. However, this process must be integrated into the national program, which provides inter-institutional operability, facilitating the rapid exchange of data in real time. The effects of this process must be reflected in the efficiency of collection and the reduction of economic crime, tax evasion.

The increase in the quality of public services for companies and individuals has the effect of simplifying the declaration procedures, access to the ANAF website with results in increasing the degree of compliance.

An integrated system for tax revenue management is a modern solution implemented in recent years by other European tax administrations. Naturally, the business environment understands that a large-scale project for the digitization and reform of ANAF cannot be done in the short term, but it has expectations related to the rapid start of the process.

According to IT and change management specialists, such a project can last 2-3 years and involves a long-term financial investment: software and hardware, but also a plan to reform the institution's operating mode, staff training, etc. The recovery of such an investment will be done over time, by increasing the percentage of declaration, payment and recovery of tax receivables, reducing the VAT gap and evasion, in general.

Last but not least, the deepest gain has to do with the state-citizen trust, by improving the relationship with the taxpayer, encouraging and facilitating the tax payment process and the general attitude of the authorities to be "at the service of the taxpayer".

Adapting the policy of development and modernization of modern concepts of interaction between the public institution and the citizens/business environment to the general policies is a necessity and an obligation.

It is a necessity for reducing the costs of the activity, allocating the human resource responsibly, increasing the pressure and image in relation to the other subjects of the interaction. Technologization implies at the same time the allocation of resources for professional training, the correlation of electronic information processing tools with the legislation and work procedures. The costs involved in such a modernization process are costs borne by each citizen, so the purpose is to satisfy the needs and demands of those to whom it is addressed. Respect for the user must be the principle from which an effective system must be built.

Digitalisation must not be an element of discrimination, exclusion and coercion. The electronic communication environment must coexist with traditional, conservative systems, but a policy of stimulating the use of modern concepts of interaction by adopting a system of bonuses must be introduced.

Digitalization is an obligation in the context of diversifying taxpayers' needs. The state institutions must create a fair and equitable climate, protect the honest business environment and combat tax evasion. Shortening the information processing periods, the exchange of information and the use of unified databases are all aimed at streamlining the collection process.

The digitalization of ANAF is a priority, aware that it offers both improved administration performance and new ways of interacting with taxpayers, allowing the capitalization of data that offers proactive services and reduces both the cost of collection (at the agency level) and the cost of compliance (at the taxpayer level).

The process of institutional modernization, both in terms of technical infrastructure and in terms of orientation towards transparency and active institution-taxpayer partnership, is a dynamic one, adaptable to increasingly complex economic and social realities.

Thus The general objective from the ICT perspective, for ANAF for the next 5 years, is the digital transformation of the tax administration, through:

- the use of digitalisation as a smart approach for the functional areas of tax administration;
- strengthening the administrative capacity necessary for the digital transformation process;
- Ensuring the technological framework necessary for the transition to a digital tax administration.

The aim is to capitalize on the opportunities offered by the structural funds and in this regard, at the level of the MF/ANAF, a set of reforms and ambitious investments has been outlined. They will bring real benefits to the tax administration and taxpayers in terms of reducing the administrative burden and developing interaction based on digital solutions. For these large-scale projects, it is aimed at attracting European funds related to PNRR and POCIDIF.

At the same time, in achieving the goal of digital transformation, ANAF also relies heavily on its own development capacity. Following an in-depth analysis of the development needs and the recommendations received from the dialogue partners, it is intended to focus efforts and work together at the level of ANAF/MF to simplify workflows, optimize applications and develop electronic services in order to facilitate and streamline the relationship between ANAF and taxpayers. In this regard, the automation of some processes of receiving-issuing documents in the interaction between taxpayers and ANAF is envisaged, respectively a transition to the digital format for the forms related to tax obligations.

Certainly, ANAF's actions are guided by the desire to respond faster and better to taxpayers' needs, to adapt to the dynamic economic environment, strongly influenced by the COVID-19 pandemic and to align with European and international trends in tax matters. In its approaches, it is based on openness and collaboration with partners – civil society, regardless of the type of taxpayers it represents, for the successful implementation of these digitization measures.

ANAF always has a direct communication channel open both with taxpayers (regardless of category) through the assistance service, but also with representatives of the business environment, their feedback being treated with due importance, in order to be able to adapt the tools to be implemented to their current needs.

In determining future actions, it is necessary to take into account not only internal analyses and consultations, but also external reports, such as the Doing Business ranking, published annually by the World Bank, which measures indicators on starting a business, registering properties, paying taxes, etc. Romania ranks in the top of countries in terms of the ease with which business is done, with a score of 73.3, placing us on the 55th place (out of a total of 190) in this ranking. Moreover, in 2020, in terms of the indicator on the payment of taxes, there was an increase of 4.9% compared to 2019, and the indicator on the ease of starting a business in Romania shows a progress of 3.8%. Considering that these are good indicators, based on which the construction and development of more services is attempted, especially on the part of facilitating the fulfillment of tax obligations in the online environment.

Directions, main objective and research and development methodology for identifying innovative solutions in the digitization of public services offered by the National Agency for Fiscal Administration

A correct approach to the strategy of simplifying access to public services offered to citizens through modern means of distance communication through various electronic media/channels (mobile telephony, dedicated platforms, specialized websites, etc.) requires an in-depth knowledge of the users, the final beneficiaries of the entire designed technical architecture.

The digitization of some processes only for the online transfer of certain categories of services without a correlation with the ability of citizens to comply represents not only a failure of vision but also a failure of communication. The vision must encompass the entire social whole, without limitations, or with minimum limitation values, determined by the level of professional training, without discrimination generated by the ability to use technical equipment or age and without exclusions due to the geographical area (rural or urban).

In the current digital age, process automation has become an essential component in the development and optimization of different sectors of society. This is also true with regard to the relationship between the National Agency for Fiscal Administration (ANAF) and taxpayers. The digitization of this process has a direct impact on efficiency, reducing bureaucracy and increasing transparency.

In this current context, 3 courses of action are distinguished, with the objective of improving the relationship between ANAF and taxpayers through digitization:

- *the need to improve the relationship between ANAF and taxpayers*: the relationship between ANAF and taxpayers is essential for the proper functioning of the tax system. However, in the past, this relationship has often been plagued by issues such as excessive bureaucracy, long document processing times, and a lack of transparency. These issues generated dissatisfaction among taxpayers and created an environment in which tax compliance was often difficult to achieve.
- *Digitalization as a solution through*
 - process automation. Digitalization can allow the automation of many processes within ANAF, such as the registration and verification of tax documents, declaration and online payments. This can lead to a significant reduction in the time and effort required for taxpayers to meet their tax obligations.
 - Easy access to information. Through digital platforms, taxpayers can quickly and easily access relevant information on their tax obligations, such as deadlines for filing returns and payment methods. This transparency can help improve tax compliance and avoid errors.
 - Effective communication. Digitalization allows for fast and efficient communication between ANAF and taxpayers through digital channels, such as electronic messaging or specialized online platforms. It facilitates the exchange of information, questions and answers between the two parties, thus reducing the need for physical meetings and traditional correspondence.
- *Promoting digitalization initiatives in the relationship between ANAF and taxpayers*:
 - online declaration system: ANAF has developed an online system through which taxpayers can file tax returns and make electronic payments.
 - Switching to electronic invoicing: ANAF encourages the use of electronic invoices, which allows both ANAF and taxpayers to save time and resources.
 - Tax information portals: ANAF has developed online platforms where taxpayers can access up-to-date information on tax legislation, guides and specific information on tax obligations.

In conclusion, referring to the current context, the digitization of the ANAF-taxpayers relationship is a necessity for improving the efficiency and transparency of the tax process. By automating processes, easy access to information and effective communication, digitalization can contribute to creating a better relationship between ANAF and taxpayers. Examples of digital initiatives already implemented demonstrate the efforts made to modernise this area. However, there are still technical and implementation challenges that we need to overcome in order to fully realize the potential of digitalization in the ANAF-taxpayer relationship.

This paper aims to explore and highlight different types of research used in studies on electronic communication between ANAF and citizens. We will look at three major types of research:

quantitative research,
qualitative research

and

mixed research,

each having its own specific characteristics and benefits, proposes a comprehensive approach to research on electronic communication between ANAF and citizens, by analyzing and evaluating the different types of research used in this field. We hope that this study will contribute to a better understanding of

citizens' needs and expectations regarding the interaction with ANAF through electronic means and will provide suggestions for improving this important aspect of public administration.

Statistical research is a scientific method used to collect, analyze, and interpret data with the aim of making relevant understandings, inferences, and generalizations from a population or sample of subjects. To ensure the success of statistical research, it is essential to clearly and precisely define the objectives of the study from the outset.

Importance of goal setting: Goals set the overall goal of statistical research and provide direction and coherence to the whole process. They clarify what the researcher wants to learn, understand or demonstrate and are the basis for choosing data collection and analysis methods.

The objectives are: general and specific

The *general objective* of statistical research should be a concise statement of what is intended to be achieved by the study. For example, the overall objective of a study might be to investigate the relationship between variable X and variable Y in a given population,

- On the other hand, *the specific objectives* are more detailed and precise, setting out the particular issues that need to be examined in order to achieve the overall objective.

As for the formulation of the objectives, they must be SMART: Specific, Measurable, Attainable (approachable), Relevant (realistic) and Time-bound. They must be clear and unambiguous, so that they are easy to understand and quantify in the research process.

Relevance and usefulness of objectives: statistical objectives must be relevant to the field of research and provide added value in existing knowledge. They need to answer important questions and provide useful information for policymakers and the scientific community.

Flexibility and adaptability: In some cases, the initial objectives may require adjustments during the course of the research. Depending on the data collected and preliminary analyses, the researcher may find that the original objectives cannot be directly achieved or that other important aspects to investigate may arise.

Limitations and restrictions: It is important to recognise and clarify the limitations of statistical research from the outset. These may be related to sample size, data availability, or other factors that may influence the interpretation of the results.

In conclusion, the establishment of statistical objectives is a fundamental step in statistical research, ensuring that the study has a well-defined purpose and that all efforts are concentrated to achieve those objectives. By clearly and precisely formulating objectives, the researcher creates a solid foundation for data collection and analysis, thus providing relevant and meaningful results for knowledge development and informed decision-making

Objectives of the Citizenship on Communication by Electronic Means between Taxpayers and ANAF

Objective 1: evaluation of the level of use of electronic means of communication with ANAF

This objective focuses on determining the degree of adoption and use of the electronic means of communication offered by ANAF by taxpayers. Within the research, it is possible to identify the percentage of taxpayers who use electronic means (web portals, mobile applications, etc.) to communicate with ANAF instead of traditional methods (mail, physical counters, etc.).

Objective 2: analysis of taxpayers' satisfaction with electronic communication

Through this objective, the research aims to assess the level of satisfaction of taxpayers with the electronic communication offered by ANAF. Taxpayers' feedback and opinions on their experience in

using electronic means can be collected, including what they are satisfied with and what could be improved.

Objective 3: identifying the advantages and disadvantages of electronic communication with ANAF. This objective focuses on identifying the benefits and problems associated with the use of electronic means of communication. Advantages such as speed and efficiency, as well as disadvantages such as security problems or technical difficulties encountered by taxpayers, can be assessed.

Objective 4: analysis of factors influencing the use of electronic means of communication. Through this objective, the research aims to identify the factors that influence the taxpayers' decision to use or not the electronic means of communication with ANAF. Aspects such as the degree of familiarity with technology, the level of trust in data security or the accessibility of electronic means for various groups of taxpayers can be analyzed.

Objective 5: proposals to improve electronic communication with ANAF. This objective aims to formulate suggestions and measures to improve communication by electronic means between taxpayers and ANAF. Strategies can be proposed to increase usability and satisfaction, improve data security and privacy, and promote electronic means among taxpayers.

These objectives can provide a broad and structured perspective on the research on the use of electronic means of communication with ANAF in Romania. It must be taken into account that each objective must be specific, measurable, achievable, relevant and well-defined within the research.

Purpose of the research

1. Evaluation of the efficiency and impact of the use of electronic means of communication with ANAF in Romania.

This purpose aims to measure the degree of efficiency of the electronic means of communication offered by ANAF and the impact they have on the relationship between the institution and taxpayers. The research will focus on the analysis of how the use of electronic means has influenced the administrative processes and services offered by ANAF, as well as the perception and satisfaction of taxpayers.

2. Analysis of the level of adoption and use of electronic means of communication with ANAF by taxpayers from different categories (individuals, legal entities, etc.).

This purpose aims to identify the percentage of taxpayers from various categories who use the electronic means of communication made available by ANAF instead of traditional communication. The research will explore the reasons why some taxpayers choose to use electronic means, while others prefer other methods of communication.

3. Identifying the advantages and disadvantages of electronic communication with ANAF for taxpayers and the tax institution.

This purpose aims to assess the benefits and problems associated with the use of electronic means of communication with ANAF. Advantages such as saving time and easy access to information will be identified, as well as disadvantages, such as technical difficulties or data security concerns.

4. Study the factors that influence the taxpayers' decision to use or avoid electronic means of communication with ANAF.

This purpose aims to identify the factors influencing the taxpayers' decision to use or avoid the electronic means of communication offered by ANAF. Aspects such as the degree of comfort with technology, the level of trust in data security or the presence of convenient alternatives for communicating with ANAF will be explored.

5. Assessing the level of taxpayers' satisfaction with electronic communication and identifying aspects that can be improved.

This purpose focuses on measuring the degree of satisfaction of taxpayers with the use of electronic means of communication with ANAF. The research will identify the aspects that contribute to the level of satisfaction and propose improvements to better meet the needs and expectations of taxpayers.

6. Proposal of measures and strategies for optimizing electronic communication between taxpayers and ANAF.

This objective aims to develop concrete solutions and strategies to optimize communication by electronic means between taxpayers and ANAF. The research will identify good practices from other countries or similar institutions and propose specific measures to increase the use and satisfaction of electronic communication.

Each purpose has its own relevance in the context of the research and will bring valuable information to understand and improve the relationship between taxpayers and ANAF through the use of electronic means of communication. Make sure that these goals are clearly defined and that your research will address each of them appropriately.

In the context of research on improving the relationship between ANAF and taxpayers through digitalization, the use of focus groups with ANAF employees and taxpayers can bring multiple advantages, can determine a series of factors with direct and determined influence on the quality of services, the amount of targeted payments, the efficiency of the management of the collected data, the receptivity to change and the willingness of the parties to be part of this process.

As we have previously presented, focus groups are a qualitative research method that involves small group discussions, focused on specific topics, in order to obtain valuable information and insights.

In this chapter, we will explore the usefulness of focus groups with ANAF employees and taxpayers in such research. The data obtained from a double perspective will be analyzed:

A Obtaining the perspectives of ANAF employees.

1. **Identification of challenges and needs:** through focus groups, ANAF employees can directly share the challenges and difficulties they face in their relationship with taxpayers. These discussions can reveal issues such as the high volume of documents to be processed, delays in the verification and approval of applications, difficult communication and clarification of tax legislation. By understanding these challenges, solutions and improvements can be identified to facilitate the work of ANAF employees and optimize processes.

2. **Evaluation of the efficiency and usability of current solutions:** ANAF employees can provide valuable feedback on existing digital solutions. They can indicate what works well and what could be improved in the digital systems and tools used. For example, new functionalities could be identified that support verification processes or provide a more efficient workflow. Thus, the feedback of ANAF employees can contribute to the development of more efficient digital solutions and to the optimization of existing ones.

B Understanding the taxpayers' perspective:

1. **Identification of taxpayers' needs and expectations:** the focus group with taxpayers allows obtaining a direct perspective on their experiences in interacting with ANAF. Participants can express frustrations with tax processes, such as difficulty filling out returns, confusion about tax rules, or delays in getting answers to questions. This information can be used to identify and address weaknesses in the current system, adapting it to the real needs and expectations of taxpayers.

2. **User Experience Assessment:** Focus groups provide a platform for contributors to directly express their experiences with current or proposed digital solutions. These discussions can highlight

issues such as difficulties navigating platforms, lack of clarity about instructions, or the need for online support. Taxpayer feedback can be used to improve the user interface and experience in digital solutions, ensuring that they are intuitive, easy to use, and meet the real needs of end users.

When setting up the group, I considered joining ANAF employees who would meet several criteria, so as to obtain an objective and comprehensive overview. Among the 8 participants there are employees who interact directly with taxpayers (physically or through remote communication channels) through assistance services, employees who directly process the data received from taxpayers (through all forms of communication, but without frequently interacting with them, except at the request of taxpayers), employees who manage the data without receiving them directly and without processing them. Each participant will be identified with a set of two initials, the same throughout the focus group questionnaire.

Each participant had to answer the same set of questions:

- 1) *What are the main challenges you have encountered in using electronic means of communication with taxpayers?*
- 2) *What are the benefits you have noticed in using electronic means of communication with taxpayers compared to traditional methods? How do you think the use of electronic means of communication has influenced your productivity and efficiency? in relation to taxpayers?*
- 3) *How do you think electronic means of communication have influenced the relationship with taxpayers? Have there been any significant changes?*
- 4) *What are the main questions or concerns you receive from taxpayers in relation to the use of electronic means of communication and how do you manage them?*

Next, I will present the answers to all of them in parallel, with the acronymized respondents

When setting up the group for taxpayers, we considered including taxpayers who correspond to certain characteristics:

- have accessed at least one public service by electronic means
- to have used both methods of communication with ANAF (physical and online)
- to be diversified in terms of the occupational sphere
- What digital skills require to be found between experienced and less experienced users.

Given that the focus group activity was physical, all participants were from Bucharest and the age range was between 25 and 51 years old. The number of participants was also 8 people

Keeping the similarity with the previous focus group, the number of questions was the same and they started from the same premises pursued so that we have in the mirror the perception of the two groups, each from its own perspective:

- 1) *What were the main challenges or difficulties encountered in using electronic means of communication with ANAF?*
- 2) *Do you have any suggestions or recommendations to improve the experience of using electronic means of communication with ANAF? What improvements would you like to see?*
- 3) *How do you assess the level of assistance and technical support offered by ANAF in terms of the use of electronic means of communication?*
- 4) *How do you think ANAF could facilitate and encourage the use of electronic means of communication among taxpayers?*

As a conclusion, a summary of what was extracted from the discussions held within the two groups, the lack of a well-defined strategy for the digitization of public services is reflected in the degree of

knowledge among citizens of the electronic services offered by public institutions (ANAF not being an isolated or singular case). The implementation/development of a service offered to citizens must be based on analyses of the current context:

- Can the IT system cope with an increased flow of users?;
- it is related to the average level of understanding of those to whom it is addressed. The functional specifications must correspond to the level of users;
- an opportunity analysis must be done (is it really necessary?)
- Impact on users
- economic relevance;
- mediatization/popularization actions
- professional training sessions with those who provide assistance (both technical and communication).

Developing an effective questionnaire is an essential component of statistical and scientific research. A well-designed questionnaire ensures the relevance, validity and fidelity of the data collected, contributing to obtaining accurate and correctly understood results. It is therefore important to pay special attention to the planning and development stages of the questionnaire in order to ensure the quality and efficiency of the research.

Starting from the objectives set for the statistical research on electronic communication between taxpayers and ANAF:

- Objective 1: Evaluation of the level of use of electronic means of communication with ANAF
 - Objective 2: Analysis of taxpayers' satisfaction with electronic communication
 - Objective 3: Identifying the advantages and disadvantages of electronic communication with ANAF
 - Objective 4: Analysis of the factors influencing the use of electronic means of communication
 - Objective 5: proposals to improve electronic communication with ANAF,
- and based on assumptions derived from objectives
- Hypothesis 1: The use of electronic means of communication with ANAF is influenced by the level of technological knowledge of taxpayers.
 - Hypothesis 2: The main motivation for using electronic means of communication with ANAF is the efficiency and time savings it offers compared to traditional communication methods.
 - Hypothesis 3: The degree of satisfaction of taxpayers with the use of electronic means of communication with ANAF is influenced by the ease of use of the available platforms and tools.
 - Hypothesis 4: The use of electronic means of communication with ANAF is more frequent among younger taxpayers and with higher levels of education.
 - hypothesis 5: The availability and accessibility of electronic means of communication with ANAF influences the degree of their use by taxpayers,

The questionnaire presented below has been developed

The questionnaire includes 28 questions, closed, with a minimum degree of difficulty, with an average completion time of 15 minutes.

Questionnaire structure

1. To what extent do you feel comfortable using electronic means of communication (e.g. online platform, e-mail) to interact with ANAF?

- Very comfortable
- Comfortable
- Neutral

- Uncomfortable
 - Very uncomfortable
2. How familiar are you with the electronic tools and platforms made available by ANAF for online communication?
- Very familiar
 - Familiar
 - Neutral
 - Ne familiar
 - Unfamiliar
3. Which of the following reasons is the main reason for the use of electronic means of communication with ANAF?
- Efficiency and time saving
 - Accessibility and convenience
 - Cost reduction
 - Flexibility in scheduling
 - Other (Please specify: _____)
4. Did you consider that the use of electronic means of communication with ANAF brought improvements in your relationship with the institution?
- Yes, to a large extent
 - Yes, to a moderate extent
 - I'm not sure
 - No, to a moderate extent
 - No, not at all
5. How easy do you find it to use the electronic communication platforms offered by ANAF?
- Very easy
 - Easy
 - Neutral
 - Difficult
 - Very difficult
6. Do you feel comfortable using the electronic tools available to send documents or information to ANAF?
- Very comfortable
 - Comfortable
 - Neutral
 - Uncomfortable
 - Very uncomfortable
7. Do you consider that the electronic means of communication offered by ANAF are easily accessible to you?
- Yes, very affordable
 - Yes, affordable
 - Neutral
 - Not very affordable
 - Not at all accessible

8. Have you encountered difficulties in accessing and using electronic means of communication with ANAF?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- No, not at all

9. Do you think that your level of technological knowledge influences your ability to successfully use electronic means of communication with ANAF?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- Not at all

10. Have you participated in training sessions offered by ANAF on the use of electronic means of communication?

- Yes, and I thought it was helpful
- Yes, but I didn't think it was helpful
- I did not participate in such sessions
- I don't know

11. Do you consider that the use of electronic means of communication with ANAF has reduced the time needed to get answers to your requests?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- Not at all

12. How do you assess the level of transparency of the information provided by ANAF through electronic means of communication?

- Highly transparent
- Transparent
- Neutral
- Slightly transparent
- Non-transparent

13. Which of the following characteristics of the electronic means of communication with ANAF do you consider to be the most important to address taxpayers?

- Simplicity and clarity of messages
- Personalization and relevance of information
- Fast and efficient responses
- Data security and privacy
- Other (Please specify: _____)

14. How often do you use electronic means of communication with ANAF to obtain information about tax legislation or to submit documents?

- Very often

- Frequently
- Occasional
- Rarely
- Not at all

15. Do you think that the use of electronic means of communication with ANAF is more common among young people than among older people?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- No, not at all

16. How do you assess the level of availability of the technical support offered by ANAF for the use of electronic means of communication?

- Very good
- Good
- Neutral
- Satisfactory
- Weak

17. Have you encountered difficulties in obtaining the necessary information for the use of electronic means of communication with ANAF?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- Not at all

18. Do you think that ANAF should provide more resources and instructions to facilitate the use of electronic means of communication?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- Not at all

19. Have you encountered difficulties in accessing the ANAF online platform?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- Not at all

20. Did you need to call ANAF's telephone assistance to solve problems related to the use of electronic means of communication?

- Yes, on several occasions
- Yes, occasionally
- I did not call ANAF's telephone assistance
- I'm not sure

21. How much do you think that the use of electronic means of communication has improved the efficiency of communication with ANAF?

- A lot
- Much
- I don't know
- Little
- Very little

22. Have you found it useful to use electronic messaging services (e.g. e-mail) to send documents to ANAF?

- Yes, to a large extent
- Yes, to a moderate extent
- I don't know
- No, to a moderate extent
- Not at all

23. Did you have difficulties in finding the necessary information on the ANAF website?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- Not at all

24. Do you think that ANAF should provide online support (live chat, forums) to solve questions and problems related to the use of electronic means of communication?

- Yes, to a large extent
- Yes, to a moderate extent
- I'm not sure
- No, to a moderate extent
- Not at all

25. How much do you consider that the income level of taxpayers influences the use of electronic means of communication with ANAF?

- A lot
- Much
- I don't know
- Little
- Very little

26. Do you consider that the level of education of taxpayers has a significant impact on the use of electronic means of communication with ANAF?

- A lot
- Much
- I don't know
- Little
- Very little
-

27. What age group do you fall into?

- Under 25 years old

- 26-45 years old
- 46-60 years old
- Over 60

28. Which of the following levels of education best represents you?

- Secondary education
- High school education
- University studies
- Postgraduate
- I don't answer

After the establishment of the representative sample and the dissemination and collection of the questionnaire responses, the results will be analysed and the conclusions as well as the assumptions resulting from the analysis will be presented.

In scientific research, hypothesis testing is a fundamental pillar in evaluating and confirming or refuting statements or ideas. This critical stage of the research process has the role of testing the hypotheses formulated before drawing conclusions or making definitive statements about the phenomena observed in the real world. Hypothesis testing not only confirms or disproves initial assumptions, but also contributes to advancing our knowledge and understanding of the world around us.

By exploring these concepts and methodological practices in hypothesis testing, we aim to shed light on the rigorous and necessary process of evaluating ideas in the scientific field, thus emphasizing the importance of empirical verification and validation of theories based on the empirical evidence obtained.

Following the documentary study and depending on the objectives of the research on the use of electronic means of communication with the Financial Administration (ANAF) in Romania, the hypotheses could be formulated as follows:

- **Hypothesis 1:** The use of electronic means of communication with ANAF is influenced by the level of technological knowledge of taxpayers.
- **Hypothesis 2:** The main motivation for using electronic means of communication with ANAF is the efficiency and time savings it offers compared to traditional communication methods.
- **Hypothesis 3:** The degree of satisfaction of taxpayers with the use of electronic means of communication with ANAF is influenced by the ease of use of the available platforms and tools.
- **Hypothesis 4:** The use of electronic means of communication with ANAF is more frequent among younger taxpayers and with higher levels of education.
- **Hypothesis 5:** The availability and accessibility of electronic means of communication with ANAF influences the degree of their use by taxpayers.

These assumptions can be used as starting points to test the relevant relationships and variables in the questionnaire and to collect the necessary data for further analysis.

Before exploring the importance of hypothesis testing, it should be clarified what is meant by hypothesis. A hypothesis is a statement or assumption that we make about a certain situation or phenomenon. In the decision-making process, hypotheses help us formulate an idea or assumption about the relationship between the variables we are studying.

Hypothesis testing allows us to assess the validity of these assumptions and obtain solid statistical evidence to support or disprove our hypotheses. This stage is crucial in the decision-making process, as it helps us make decisions based on concrete data.

In order to verify the hypotheses, the answers to the questionnaire were centralized (grouped by hypotheses), as follows:

For hypothesis 1 "The use of electronic means of communication with ANAF is influenced by the level of technological knowledge of taxpayers".

1. To what extent do you feel comfortable using electronic means of communication (e.g. online platform, e-mail) to interact with ANAF?

Graph 5.1 representation of answers to question 1

2. How familiar are you with the electronic tools and platforms made available by ANAF for online communication?

9. Do you think that your level of technological knowledge influences your ability to successfully use electronic means of communication with ANAF?

10. Have you participated in training sessions offered by ANAF on the use of electronic means of communication?

19. Have you encountered difficulties in accessing the ANAF online platform?

For hypothesis 2 "The main motivation for using electronic means of communication with ANAF is the efficiency and time savings it offers compared to traditional communication methods".

3. Which of the following reasons is the main reason for the use of electronic means of communication with ANAF?

4. Did you consider that the use of electronic means of communication with ANAF brought improvements in your relationship with the institution?

11. Do you consider that the use of electronic means of communication with ANAF has reduced the time needed to get answers to your requests?

12. How do you assess the level of transparency of the information provided by ANAF through electronic means of communication?

20. Did you need to call the ANAF call center to solve problems related to the use of electronic means of communication?

For hypothesis three: "The degree of satisfaction of taxpayers with the use of electronic means of communication with ANAF is influenced by the ease of use of the available platforms and tools".

5. How easy do you find it to use the electronic communication platforms offered by ANAF?

6. Do you feel comfortable using the electronic tools available to send documents or information to ANAF?

13. Which of the following characteristics of the electronic means of communication with ANAF do you consider to be the most important to address taxpayers?

14. How often do you use electronic means of communication with ANAF to obtain information about tax legislation or to submit documents?

21. How much do you think that the use of electronic means of communication has improved the efficiency of communication with ANAF?

22. Have you found it useful to use electronic messaging services (e.g. e-mail) to send documents to ANAF?

For hypothesis four: "The use of electronic means of communication with ANAF is more frequent among younger taxpayers and with higher levels of education".

15. Do you think that the use of electronic means of communication with ANAF is more common among young people than among older people?

16. How do you assess the level of availability of the technical support offered by ANAF for the use of electronic means of communication?

25. How much do you consider that the income level of taxpayers influences the use of electronic means of communication with ANAF?

26. Do you consider that the level of education of taxpayers has a significant impact on the use of electronic means of communication with ANAF?

27. What age group do you fall into?

28. Which of the following levels of education best represents you?

For hypothesis five: "The availability and accessibility of electronic means of communication with ANAF influences the degree of their use by taxpayers".

7. Do you consider that the electronic means of communication offered by ANAF are easily accessible to you?

8. Have you encountered difficulties in accessing and using electronic means of communication with ANAF?

17. Have you encountered difficulties in obtaining the necessary information for the use of electronic means of communication with ANAF?

18. Do you think that ANAF should provide more resources and instructions to facilitate the use of electronic means of communication?

23. Did you have difficulties in finding the necessary information on the ANAF website?

24. Do you think that ANAF should provide online support (live chat, forums) to solve questions and problems related to the use of electronic means of communication?

This research aimed to analyze the factors influencing the use of electronic means of communication with ANAF, based on three fundamental hypotheses: the level of technological knowledge, the motivation for use and the degree of satisfaction of taxpayers. By applying the Chi-square and Kolmogorov-Smirnov (KS) statistical tests, the results obtained provided a clear insight into the relationships between these factors and the use of digital tax platforms.

The results of the research indicate the need for specific measures to increase the use of ANAF electronic platforms and to ensure the digital inclusion of all categories of taxpayers. Key findings include:

The need for digital education campaigns – Taxpayers with a lower level of education and the elderly need training programs to be able to access e-services effectively. ANAF could implement online tutorials, interactive guides and support sessions to reduce technological barriers.

Optimizing the interface of digital platforms – If the platforms are difficult to use, even people with high digital skills can face difficulties. A more intuitive interface, clear instructions, and a user-friendly design could improve the taxpayer experience.

Expanding access to technical support – A more efficient online help center and a real-time support service would help people who encounter problems in using the ANAF platform, thus reducing frustration and increasing satisfaction.

Improving accessibility for older people – The results showed that users over 60 rarely use electronic platforms. This could be the result of a lack of familiarity with the technology or a preference for direct interaction. By implementing alternative solutions, such as explanatory video guides or dedicated telephone support, this category of taxpayers could be better integrated into the digital ecosystem.

While the analysis provides valuable insights, there are a few limitations that should be noted:

- The sample used – although representative, the study is based on a questionnaire applied to a limited number of taxpayers, which can influence the extrapolation of the results to the entire population.
- Subjective factors – users' perception of digital platforms can vary depending on previous experiences, level of trust in technology, and other individual variables.
- Other factors that can influence the use of platforms – the study focused on age and educational level, but factors such as income level, internet access or the availability of technological devices can also play an important role.

The study confirmed that the level of technological knowledge, the motivation for using and the ease of use of the platforms significantly influence the use of electronic means of communication with ANAF. The results showed that people with high digital skills and higher educational level are more active in using these services.

Also, efficiency and time savings are the main motivational factors for users, indicating the need for continuous optimization of digital platforms. In addition, user satisfaction depends on the clarity of the information and the technical support provided.

For future research, it is recommended to expand the study by analyzing larger samples and including other variables that could influence the use of electronic means of communication with ANAF. It would also be useful to compare the results at international level, analyzing how other states have implemented and optimized the digitization of tax services.

The digitalisation of tax administration is an inevitable process, but its success depends on the degree of acceptance and accessibility for all taxpayers. The study demonstrates that age and educational level significantly influence the use of ANAF platforms, which requires strategies for digital improvement and inclusion.

By optimizing digital platforms, increasing the level of digital education and expanding technical support, ANAF can ensure a wider and more efficient use of electronic means, thus reducing the administrative burden and improving the taxpayer experience. In this way, digitalization not only facilitates access to services, but also contributes to the modernization of public administration and to increasing citizens' trust in the tax system.

Proposals regarding the implementation of modern technologies in accessing public services offered by ANAF

In an era characterized by accelerated digitalization, the interaction between taxpayers and the National Agency for Fiscal Administration (ANAF) has been deeply influenced by the evolution of information and communication technologies. This chapter aims to analyze the results of a statistical research aimed at investigating the use of electronic means of communication with ANAF, highlighting the impact of technical knowledge, motivation and user satisfaction on this process. The verification of the hypotheses formulated in the study will provide a clear understanding of the dynamics of the interaction between taxpayers and tax authorities, in the context of the implementation of modern technologies.

The research aims to answer the fundamental question: "To what extent is the use of electronic means of communication with ANAF influenced by the age and educational level of taxpayers?". This is essential in the context of the digital transformation of public administration, where success depends on the degree of acceptance and adaptability of the population. By analyzing the data collected from a questionnaire applied to a representative sample, the research will highlight the trends in the use of

ANAF's digital platforms and identify the determining factors that influence taxpayers' interaction with the tax institution.

From a methodological perspective, the study relies on rigorous statistical tests, such as the Chi-square test and the Kolmogorov-Smirnov test, to assess the relationships between the analyzed variables. The results obtained will provide valuable information about the degree of use of electronic means of communication, taxpayers' motivation and their satisfaction with ANAF services. In addition, the analysis will highlight the importance of the accessibility and availability of these digital tools, taking into account the specific needs of different categories of users, such as the elderly or those with low digital skills.

Through this approach, the chapter will contribute to a better understanding of how the digitization of tax services can influence the relationship between taxpayers and ANAF, as well as to formulate concrete proposals to improve access to and use of these platforms. In a society where administrative efficiency and quick access to information are priorities, this study proves to be an important tool for decision-makers, in order to optimize public services and ensure a more efficient interaction between citizens and the tax administration.

In the context of the rapid evolution of information and communication technologies, the integration of digital solutions in public administration becomes an imperative necessity to increase the efficiency and transparency of the services offered to citizens. The National Agency for Fiscal Administration (ANAF) faces significant challenges in managing income declaration processes and interacting with taxpayers. In this regard, the adoption of modern technologies, such as artificial intelligence (AI) and voice assistants, can radically transform the way ANAF conducts its activity, facilitating access to more efficient and accessible tax services for all citizens, including people with disabilities.

OCR allows for the conversion of physical documents, such as forms, applications, and other types of written documents, into digital formats that can be easily accessed, edited, and searched. This technology has evolved significantly in recent decades, moving from simple text-reading applications to advanced solutions that integrate artificial intelligence and machine learning. Thus, OCR not only facilitates digitization, but also improves the accuracy and speed of information processing.

An essential aspect of OCR technology is that it not only benefits people with advanced digital skills, but also those who do not have developed technical skills. By automating the data entry process, OCR reduces the need for users to be familiar with complex software or have advanced technical knowledge. For example, citizens who submit applications for public services can fill in physical forms, which are then scanned and processed automatically, without requiring their intervention in the digital process. It provides them with a more accessible and user-friendly experience, encouraging them to use public services without fear of being confronted with technology.

However, despite the obvious advantages, the implementation of OCR technology in public services is not without its challenges. The quality of the original documents, the digital skills of the staff and the cybersecurity risks are just some of the aspects that need to be considered. Also, the effective integration of OCR systems with existing IT infrastructure is essential to ensure a smooth transition and efficient workflow.

The present research aims to explore in detail the operation, advantages and challenges associated with the use of OCR technology in public services. By analysing these aspects, we want to highlight not only the importance of this technology, but also how it can contribute to creating a more efficient, transparent and accountable public administration. We will also include relevant case studies, technical

data, and literature references to provide a comprehensive picture of the impact and potential of OCR in the digital transformation of public services.

The integration of artificial intelligence (AI) into public service processes, especially in the field of income declaration, has become a strategic necessity for the modernization of tax administration. This approach not only optimizes operational efficiency, but also improves user experience and increases compliance among taxpayers.

Currently, traditional income declaration systems face numerous challenges that limit their efficiency and effectiveness. These challenges include:

1. Complexity of the process: The tax filing process is often perceived as complicated and time-consuming, leading to non-conformities and delays. A study conducted by the European Commission showed that about 30% of taxpayers have difficulties in completing tax returns due to the complexity of the regulations.
2. Human errors: The manual processing of tax returns is prone to errors, which can lead to financial penalties for taxpayers or losses for the state. Statistics show that data entry errors can reach 20% of the total returns, seriously affecting the accuracy of income collection.
3. Limited human resources: Tax authorities face a shortage of trained staff capable of handling the growing volume of returns and responding to taxpayers' requests. This leads to a backlog of work and an increase in waiting time for tax services.
4. Technological shortcomings: Many institutions lack the necessary infrastructure to support modern digital processes. This includes high-performance servers, data storage systems, and customer relationship management software, all of which are crucial for effective tax return management.

✓ Benefits of Using AI Technologies

Integrating AI into the tax reporting process can address these challenges through a number of significant benefits:

1. Process automation: AI allows for the automation of data checks and the processing of returns, reducing the time it takes to complete them. For example, machine learning systems can analyze data in real-time, identifying errors and inconsistencies before statements are submitted.
2. Improved accuracy: AI algorithms can significantly reduce error rates by applying predictive data analysis models. They can identify patterns of tax behavior and flag possible fraud based on historical data, thus improving the accuracy of the tax collection process.
3. Reduced processing time: Using AI to automate repetitive tasks allows employees to focus on more complex activities, such as strategic analysis and tax consulting. The processing time for returns can be reduced from weeks to days or even hours.
4. Taxpayer experience: AI technologies such as chatbots and virtual assistants can provide 24/7 support for taxpayers by answering frequently asked questions and guiding them through the filing process. This not only improves user satisfaction, but also reduces the workload for tax staff.
5. Predictive analytics: Machine learning algorithms can analyze data from previous returns to predict future taxpayer behaviors. This can help tax authorities develop more effective tax collection strategies and identify areas at high risk of fraud.

✓ Future prospects for tax administration

As technology advances, AI integration is expected to continue to evolve. Tax authorities will need to invest in smart infrastructures that allow for more efficient data exchange between institutions, thus facilitating collaboration and transparency. Tax regulations are also expected to adapt to new

technological realities, ensuring that AI developments are properly integrated into the existing legislative framework.

In conclusion, integrating artificial intelligence into the tax filing process represents a major opportunity to transform tax administration, improving efficiency, accuracy, and user experience. This change will require commitment and investment, but the long-term benefits will far outweigh the initial challenges.

✓ Current challenges in declaring income

In Romania, the income declaration process faces a number of significant challenges that affect efficiency, accuracy and taxpayer satisfaction. These challenges include limited digital skills, insufficient human resources, long processing time and technological shortcomings. Each of these aspects contributes to a tax system that fails to meet the current needs of taxpayers and tax authorities.

1. Limited digital skills

According to a study conducted by the European Union, approximately 42% of Romania's population does not have the necessary digital skills to effectively use online income declaration systems. This lack of skills translates into various problems:

- Inappropriate use of technology: Many taxpayers fail to fill out electronic forms correctly, leading to reporting errors. For example, an analysis of data from 2022 showed that 30% of the returns filed contained incorrect or incomplete information, thus affecting the tax assessment process.
- Fear of technology: Another important aspect is the fear of the use of technology, especially among the elderly or those with a low level of education. This leads to a reluctance to adopt online systems, and many taxpayers prefer to use traditional methods, which are more time-consuming and error-prone.
- Lack of training: there is a widespread absence of training programs to help taxpayers become familiar with digital filing platforms. This underlines the need for educational initiatives by tax authorities to improve citizens' digital skills.

2. Insufficient human resources

The Romanian tax authorities are facing a shortage of qualified personnel, which leads to significant delays in the processing of returns. This issue can be broken down as follows:

- limited number of employees: according to official data, the number of employees within ANAF (National Agency for Fiscal Administration) has decreased by 15% in the last five years, while the workload has increased significantly. This has led to an increase in waiting time for taxpayers, who can wait up to two weeks to get answers to their questions.
- Lack of specialization: Even among existing employees, there is a lack of specialization in the use of modern data analytics technologies. This limits the authorities' ability to detect and prevent fraud, leaving the system vulnerable to abuse.
- Ageing workforce: a large part of the tax staff is approaching retirement, and attracting young IT or data analytics specialists is proving to be a challenge. This requires not only an attractive working environment, but also competitive wage policies.

3. Long processing time

Manual income filing processes are often slow and inefficient, which affects both taxpayers and state revenues. This is manifested by:

- Manual processes: Many tax returns are processed manually, which increases the time it takes to validate and approve them. For example, a standard return can take up to 10 business days to process, which is a major challenge if taxpayers have questions or require assistance.

- Delays in reporting: If a taxpayer files an incomplete or erroneous return, the correction process can take weeks, increasing frustration. This leads to a negative perception of tax authorities and a decrease in trust in the tax system.
- Impact on state revenues: Delays in processing returns affect state revenues because tax collection is delayed. This can directly affect the financing of essential public services.

4. Technological shortcomings

Many institutions do not have the necessary technological infrastructure to support modern digital processes. These deficiencies can be detailed as follows:

- Inadequate IT infrastructure: Many of the servers used by tax authorities are outdated and cannot handle the increased volume of data. This leads to slow response times and a negative user experience.
- Lack of specialized software: Tax authorities lack modern customer relationship management (CRM) software or data analytics systems that allow them to analyze taxpayers' behaviors in real time. This limits the ability to identify fraud and respond quickly to taxpayers' needs.
- Data security: Another major challenge is data security. Without adequate safeguards, taxpayers' sensitive information is at risk of a security breach, which can seriously damage trust in the tax system.

The current challenges encountered in the income declaration process in Romania are complex and interconnected. Addressing these issues requires a comprehensive strategy that includes investment in technology, staff training, and taxpayer education. By adopting these measures, tax authorities can considerably improve the efficiency of the income declaration process, thus increasing taxpayer satisfaction and ensuring more efficient tax collection.

Effectively implementing AI in the income declaration process is a complex endeavor that requires a structured approach. By assessing needs, selecting the right technologies, training staff and continuous monitoring, tax authorities can make the income declaration process more efficient, accurate and accessible. This integration not only improves the taxpayer experience, but also supports the development of a modern tax administration capable of meeting current and future challenges.

In conclusion, the implementation of artificial intelligence (AI) technologies in the income declaration process represents a significant opportunity to improve the efficiency and accuracy of the tax system. Among these technologies, the voice assistant stands out for its ability to transform taxpayers' interaction with tax authorities, facilitating a more accessible and friendly environment.

By using the voice assistant, taxpayers benefit from a simplified process of filling out tax returns, eliminating the need to navigate through complex interfaces. This is particularly valuable for people with disabilities, who may face difficulties in using traditional technologies. The voice assistant not only improves the user experience, but also increases the compliance rate, as taxpayers are more likely to interact with an accessible and user-friendly system.

The impact of the voice assistant on accessibility is considerable. By providing a voice interface, technological barriers are removed, thus allowing people with disabilities to manage their tax obligations in an independent way. It promotes autonomy and confidence, which are essential for an active and integrated life in society. The customizable functionalities of the voice assistant help to adapt the system to the individual needs of users, ensuring an optimized experience.

Looking to the future, it is anticipated that AI technologies will continue to evolve, bringing even more innovative solutions that will transform the way taxpayers interact with tax authorities. The integration of the voice assistant with other emerging technologies will enable the provision of personalized advisory services and increase the efficiency of tax processes. It is crucial for tax authorities

to monitor the impact of these solutions and make adjustments based on user feedback, thus ensuring that systems remain adherent to accessibility requirements.

In conclusion, the voice assistant is an important step towards creating a more transparent, efficient and inclusive tax system that meets the needs of all citizens, especially people with disabilities. This digital transformation not only improves tax services, but also contributes to building a fairer and more accessible society.

The practical importance of this doctoral thesis lies in the fact that it reduces the exclusion on criteria of low digital competences (Romania being the tail in the statistics at European level), stimulates an opening of citizens to the online environment, facilitates an efficient allocation of the institution's human resource in the sense of allocating specialists from the activity of data collection and mechanical insertion in databases to data analysis activities and design prevention measures and policies predictable fiscal project.

The issue of identifying innovative solutions in the digitization of public services offered by the National Agency for Fiscal Administration regarding electronic communication between taxpayers and ANAF requires a continuous and analytical research and development activity, aimed at:

1. Optimization and automation of administrative and tax processes
2. Increasing the cybersecurity of ANAF systems
3. Integration of emerging technologies
4. Improving the user experience of electronic platforms
5. Streamlining the tax collection process
6. Integration with other institutions and harmonisation of data
7. Assessing the managerial impact on the implementation of digital solutions
8. Comparative analysis of international electronic tax systems