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Postgraduate Dissertation

The marketing channels that AADE uses in order to promote its
vision and mission

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Patras, Greece, March 2025

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“To my forever companion Petros for his endless support.”

Abstract

The aim of the present study is the investigation of the factors that can promote adoption of new technological tools of AADE and, particularly, digital and mobile applications. The investigation was held applying the Technology Acceptance Model of Davis (1983), known as TAM, adjusted for the needs of the present research. The questionnaire of TAM was selected as research tool which was improvised by adding scales for payment compliance, voluntary tax compliance and enforced tax compliance. Hence, seven dimensions are recognized as independent variables (perceived convenience, perceived ease of use, perceived usefulness, attitude towards using, payment compliance, voluntary and enforced tax compliance) along with demographic factors. On the other hand, the dimension of intention to use was determined as the dependent variable. Answers from a sample of 107 taxpayers were gathered and analyzed using frequency tables, descriptive statistics of central tendency and variability, t-tests, ANOVA tests, correlation analysis and regression analysis. The results are quite interesting. First, all research variables are positively correlated indicating that increased levels of compliance can be achieved by promoting in the right way the digital applications. Second, intention to use is enhanced by all research variables. But, only general attitude towards using has a crucial role, since it is the only one retaining its importance no matter what. Third, evidence is provided that male and younger taxpayers, and the ones with higher education lie more positively towards AADE's digital applications. Fourth, out of all characteristics examined, the extent to which a taxpayer already uses digital applications seems to be a determinant factor of the intention to use. All above conclusions are very useful for Greek Tax Authority and can largely help its advancements and digital transformation, while, simultaneously, supporting the tax revenues.

Keywords

Marketing channels, Digital Application, Technology Acceptance Model, Tax compliance, Greek Tax Authority (AADE)

Τα κανάλια μάρκετινγκ που χρησιμοποιεί η ΑΑΔΕ ώστε να προωθήσει το όραμα και την αποστολή της.

Χατζηφωτεινού Μαρία

Περίληψη

Ο σκοπός της παρούσας μελέτης είναι η διερεύνηση των παραγόντων που μπορούν να προάγουν την υιοθέτηση νέων τεχνολογικών εργαλείων της ΑΑΔΕ και, συγκεκριμένα, ψηφιακών και κινητών εφαρμογών. Η έρευνα πραγματοποιήθηκε εφαρμόζοντας το Μοντέλο Αποδοχής Τεχνολογίας του Davis (1983), γνωστό ως TAM, προσαρμοσμένο στις ανάγκες της παρούσας έρευνας. Το ερωτηματολόγιο του TAM επιλέχθηκε ως εργαλείο έρευνας και τροποποιήθηκε προσθέτοντας κλίμακες για τη συμμόρφωση στις πληρωμές, τη συμμόρφωση με τον εθελοντικό φόρο και τη συμμόρφωση με τον υποχρεωτικό φόρο. Έτσι, επτά διαστάσεις αναγνωρίζονται ως ανεξάρτητες μεταβλητές (αντίληψη ευχρηστίας, αντίληψη ευκολίας χρήσης, αντίληψη χρησιμότητας, στάση προς τη χρήση, συμμόρφωση πληρωμών, εθελοντική και υποχρεωτική συμμόρφωση με τον φόρο) μαζί με δημογραφικούς παράγοντες. Από την άλλη πλευρά, η διάσταση της πρόθεσης χρήσης καθορίστηκε ως η εξαρτημένη μεταβλητή. Απαντήσεις από ένα δείγμα 107 φορολογούμενων συγκεντρώθηκαν και αναλύθηκαν χρησιμοποιώντας πίνακες συχνότητας, περιγραφικά στατιστικά μέτρα κεντρικής τάσης και μεταβλητότητας, t-tests, δοκιμές ANOVA, ανάλυση συσχέτισης και ανάλυση παλινδρόμησης. Τα αποτελέσματα είναι παρουσιάζουν μεγάλο ενδιαφέρον. Πρώτον, όλες οι ερευνητικές μεταβλητές είναι θετικά συσχετισμένες, υποδεικνύοντας ότι μπορεί να επιτευχθεί αύξηση των επιπέδων συμμόρφωσης προάγοντας με τον σωστό τρόπο τις ψηφιακές εφαρμογές. Δεύτερον, η πρόθεση χρήσης ενισχύεται από όλες τις ερευνητικές μεταβλητές. Ωστόσο, μόνο η γενική

στάση προς τη χρήση έχει κρίσιμο ρόλο, καθώς είναι η μόνη που διατηρεί τη σημασία της ανεξαρτητών των άλλων παραμέτρων. Τρίτον, παρέχονται αποδείξεις ότι οι άνδρες και οι νεότεροι φορολογούμενοι, καθώς και εκείνοι με ανώτερη εκπαίδευση, έχουν πιο θετική στάση προς τις ψηφιακές εφαρμογές της ΑΑΔΕ. Τέταρτον, από όλα τα χαρακτηριστικά που εξετάστηκαν, το πόσο συχνά χρησιμοποιεί ήδη ένας φορολογούμενος ψηφιακές εφαρμογές φαίνεται να είναι καθοριστικός παράγοντας της πρόθεσης χρήσης. Όλα τα παραπάνω συμπεράσματα είναι πολύ χρήσιμα για την Ελληνική Φορολογική Αρχή και μπορούν να βοηθήσουν σε μεγάλο βαθμό στην πρόοδό της και στον ψηφιακό μετασχηματισμό της, ενώ ταυτόχρονα υποστηρίζουν τα φορολογικά έσοδα.

Λέξεις – Κλειδιά

Κανάλια μάρκετινγκ, Ψηφιακή Εφαρμογή, Μοντέλο αποδοχής τεχνολογίας, Φορολογική συμμόρφωση, Ανεξάρτητη Αρχή Δημοσίων Εσόδων

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Chapter 1: Introduction

1.1 Introduction

Since 2020, Independent Authority of Public Revenues (IARP or AADE) has been undergoing some major changes referring to its communication with the Greek citizens and tax payers. More specifically, in 2020 the Independent Authority of Public Revenues had to respond fast in the new situation that the pandemic brought, as the citizens could not visit the regional offices to complete their tax obligations and make their requests. AADE is the authority which is in charge of collecting revenues and is considered to be the main financing source of the state, so as the government took measurements to fight COVID19, the digital transformation of AADE and its services became mandatory. In just three months since the beginning of the pandemic AADE created the website “myaade.gr” and through the platform “myaitimata”, civilians can communicate with every sector of the tax services. This technological advancement diminished the long queues in the physical branches of the authority across the country. AADE also created “myaade app” through which every civilian can have quick access in their tax profile, ask for authorizations from the tax authority and save them in a digital wallet. Moreover, AADE has created apps that civilians can check the receipts they receive or even state complaints for businesses that violate tax legislation. The scope of this dissertation is to present and analyze these marketing tools that are developed by AADE.

1.2 Importance of the topic

The topic is considered to be significant as the tax administration is responsible for the collection of the public revenues. Moreover, the tax administration has numerous transactions with civilians and companies every day, therefore it has a central role the country’s economic activity. So, it is crucial to examine the tools the Greek tax administration uses in order to promote its vision and mission.

More thoroughly, examining the marketing tools used by the Greek Tax Authority is significant, because these tools can be used to improve public understanding of tax laws, policies, and

deadlines. The examination of these tools can contribute to the assessment of how effectively the tax authority educates and informs citizens and companies on their obligations, the benefits of tax compliance, and the consequences of non-compliance. Effective communication can contribute to the improvement of trust between the tax authority and taxpayers. The study of the marketing tools used can reveal how the Greek Tax Authority attempts to improve transparency in its operations, making the tax system more accessible and understandable for the public. The enhancement of trust can influence taxpayers' behavior, encouraging timely payments, reducing evasion or improving voluntary compliance. Therefore, the use of AADE apps may help evaluate taxpayer behavior changes and revenue increases.

The Greek Tax Authority uses digital marketing channels (such as social media, apps, websites, and email campaigns) as part of its digital transformation reform so the study of AADE apps' use can give a deeper insight into the modernization of public administration and tax authority. Their use is considered to be useful for the evaluation of the implementation efficiency of the tax policies by the Greek Tax Authority.

Finally, communication tools can be part of the tax authority crisis management strategy. During times of economic difficulty or crisis (such as financial crises or the recent COVID-19 pandemic), the tax authority's marketing tools have become critical in communicating changes in tax laws, new regulations, or assistance programs. Therefore the evaluation of these tools can contribute to understanding how the Greek tax authority manages such sensitive issues with the public, but also how engaged and responsive the Greek Tax Authority is with taxpayers, and whether it is adapting to the evolving needs and expectations of citizens.

In summary, the examination of the marketing tools developed by AADE helps gauge the efficiency and effectiveness of its communication efforts, which ultimately can contribute to better governance, higher tax compliance and improved quality of the services delivered to the taxpayers in Greece.

1.3 Aim of the topic

The aim of the thesis is to examine the adoption of AADE marketing tools and more specifically, its mobile applications, using the Technology Acceptance Model. In order to achieve its aim, the thesis presents and analyzes the marketing tools that are developed by the

Greek Tax Authority (AADE), it explains concepts such as tax compliance, it presents the functions of the tax authority and the digital transformation plan of AADE. Referring to research methodology, there was a quantitative approach, with questionnaires.

Chapter 2: Literature review

2.1 The notions of tax, tax evasion and tax compliance

In order to cover the needs and obligations of public services and organizations, commonly known as public spending, each state needs resources, which are called public revenues. Public revenues come mainly from various forms of taxation imposed by the state on citizens and businesses, but also from other sources (Tatsos, 2012). Taxation is the payment of taxes through an agreement between taxpayers and the state. Taxpayers commit to paying taxes and the state provides public goods and security that would otherwise not be available (Rutkauskas, 2016). Taxes are divided into various categories depending on their function, the object they concern, the categories of taxpayers they burden, the economic impact they have, the revenue they will generate, the method of management and so forth (Tatsos, 2012).

The theoretical model of Allingham and Sandmo (1972), who adapted Becker's model of criminal behavior to the economics of tax evasion, explains that violating tax laws is a game of chance in which the taxpayer wins money by paying less tax, thus maximizing his expected utility. However, if tax fraud is detected and he suffers the consequences of the law, he will have to pay the difference in tax between the actual income and the declared income, plus the fine. This particular model examines the costs and benefits of tax evasion. It should be mentioned in this model that people are influenced by the possible legal sanctions, otherwise there is no other potential cost than the illegal nature of tax evasion that matters, nor is there an inherent willingness to fulfill tax obligations, such as a sense of tax morality. This model is also known in the international literature as a deterrence model of tax evasion. A central conclusion of Allingham and Sandmo (1972) was that tax honesty increases with higher probability of inspection and more severe fines (Alm et al., 2012).

The phenomena of tax evasion and tax avoidance constitute a significant problem for the proper functioning of the state. In addition to ensuring the smooth collection of the foreseen fiscal revenues, finding a solution to these issues is a prerequisite for well-regulated and democratic

societies, the existence of the rule of law and the establishment of concepts of justice. These shadow dimensions of the economy have long been issues of particular concern both in Greece and globally, respectively, while many have placed them among the most important causes of the recent fiscal crisis that severely hit the Greek economy and economic recession that followed. Finding solutions to these problems requires identifying the factors that enhance tax compliance. According to Chiumya (2006), the term tax evasion refers to illegal practices that are followed in order to avoid paying the corresponding tax. Examples of such practices are concealing taxable income, profits and activities, misrepresenting the sources and amount of income, or overstating exemptions, credits and deductions.

Tax evasion and compliance are interrelated concepts. The size of the former is a criterion for measuring the latter, however, a broad understanding of the reasons that lead citizens to tax evasion can lead to a better understanding of the reasons why they avoid compliance. Confusion between the concepts of tax evasion, tax avoidance and the shadow economy is a frequent phenomenon (Vasardani, 2011).

The term tax compliance examines the way in which taxpayers react to the imposition of taxes, that is, to what extent they voluntarily pay the taxes imposed on them. According to the US Internal Revenue Service (IRS, 2020), taxpayers are compliant when: a) they file their tax returns on time, b) the income they earn is accurately reflected in these tax returns, and c) the payment of the corresponding taxes they earn is made on time and of their own free will. If any of the above obligations are not fulfilled, then taxpayers are considered to be non-compliant. This is therefore a concept that is directly linked to tax evasion, as tax non-compliance increases the levels of tax evasion in a country.

So, tax compliance refers to the adherence by individuals, businesses, and other entities to the tax laws imposed by the government. It involves the proper reporting, payment, and filing of taxes in accordance with the legal requirements. The two main components of tax compliance are submitted on time and that all necessary forms and documentation are properly provided. Furthermore, payment compliance refers to paying the correct amount of taxes owed by the due date, without evasion or underpayment. Tax compliance is critical for maintaining the financial health of a country and the welfare of its citizens, as taxes are a primary source of public revenues. It ensures fairness within the system, as individuals and entities are required

to contribute their fair share toward public goods and services. Non-compliance can result in penalties, interest charges, and legal consequences.

Tax compliance is divided into two types of compliance, voluntary and enforced. Voluntary compliance is due to trust in the state apparatus and its institutions, while enforced compliance prevails when taxpayers feel that the authorities have excessive power. The main concern of tax authorities is to set tax rates at a level that ensures the financing of public spending. This can be achieved either by strengthening trust by strengthening voluntary compliance, or by imposing power by strengthening enforced compliance. The above relationship is dynamic and does not imply a one-way path. Excessive power (which involves many tax audits and strict sanctions) can erode trust in tax authorities (Muehlbacher & Kirchler, 2010). Kastlunger et al. (2013) differentiate power into legitimate and coercive power indicate a negative relationship between trust and coercive power. According to Rapanos and Kaplanoglou (2014), authority is considered legitimate only in conditions of high trust, while it is considered coercive in conditions of low trust. Therefore, it can be assumed that above a certain point, authority becomes coercive, thus reducing trust and tax compliance. Tax compliance is affected by the power that tax authorities have and by the degree of trust that citizens have in them. The interaction and dynamics of these two parameters determine whether there is voluntary or forced tax compliance. Power is considered to be high if audits are frequent and effective and if the fines imposed are strict. Trust in tax authorities is mainly influenced by psychological factors, such as knowledge and attitudes, personal and social values, and perceived fairness and equity.

The main factors influencing tax compliance can include (Fischer, 1992; Barbuta – Misu, 2011): Taxpayer awareness and education (Chau & Leung, 2009), tax knowledge (McKerchar, 2001; Kirchler et al. 2006; Pambudi, 2015; Fauziati et al., 2016), tax consciousness (Torgler & Schneider, 2009; Kirchgässner, 2010), fair and clear tax laws (Richardson, 2006), incentives such as rewards (Feld & Frey, 2007), active monitoring and auditing by tax authorities (Allingham & Sandmo, 1972; Cuccia, 1994), compliance costs (Slemrod, 1992; Le Baube, 1992), trust in government (Chan et al., 2000; Daude, et al. 2013), opportunities for non-compliance (Houston & Tran, 2001), attitudes and perceptions for fairness of the tax system (Chan et al., 2000; Riahi-Belkaoui, 2004; Le Baube, 1992), influence by the environment (Chan et al., 2000; Le Baube, 1992) and demographic factors (Murphy, 2004; 2008). Tax authorities often take steps to improve tax compliance through initiatives like simplifying the

tax code, increasing enforcement measures, and offering tax incentives for voluntary compliance.

2.2 The functions of a tax administration

Referring to the principles of tax planning and collection, there are certain fundamental general principles that should be observed when planning and collecting taxes, most of which reflect either basic choices of the Rule of Law or elementary economic concepts. The most important of these are the following (Finokaliotis, 2014):

- The rule of universality of the tax, in the sense that it applies to all citizens, without exception, with the sole objective criterion being their tax-paying capacity.
- Proportionality, which refers to the exemption of small incomes, since the expected benefit from them is disproportionate in relation to the cost of certification and collection, as well as the intended result.
- The rule of tax productivity, where a tax is considered productive when high rates are avoided, which increase the tendency for tax evasion, and it is collected immediately, without bureaucratic and procedurally burdensome procedures.
- The existence of a safe, understandable and simple tax environment is a basic prerequisite not only for the smooth operation of the tax mechanism, but also for the general economic activity of the country. Tax stability and clarity prevent disputes and act as a deterrent to corruption, while it is a necessary condition for private and public investments.
- Calculation and collection of the tax at the time of production of its source of origin, regardless of whether it is a direct or indirect tax.
- Rule of avoidance of over-taxation, a classic form of which is double taxation. The phenomenon of double taxation is observed in cross-border transactions or transactions involving more than one legal system (such as, in the country of permanent residence and in another country).

Overall, the general principles governing the exercise of tax authority are the following (Finokaliotis, 2005):

- The principle of legality of tax. No tax is imposed or collected without a formal law, which determines the subject of taxation and the income, the type of property, the expenses and transactions or their categories to which the tax refers.
- The principle of certainty of tax. According to this principle, the time and manner of payment, as well as the amount payable must be clear and certain for the taxpayer and for any other person.
- The principle of good administration and the protection of taxpayer confidence against changes in the interpretation of the tax administration, which requires creating a climate of trust between taxpayer and tax authority.
- The principle of non-retroactivity of tax regulations. In a state governed by the rule of law, citizens should know in advance the consequences of the act they intend to undertake and trust that their lawful conduct will have the consequences foreseen by the relevant law, on the basis of which they had made their decision.
- The principle of tax justice. Greek citizens contribute indiscriminately to public burdens according to their means. This principle presupposes the satisfaction of the principle of universality of the tax and the principle of tax equality. The latter imposes the same treatment of tax subjects under similar economic conditions (also called, horizontal tax equality) and the dissimilar treatment of those under dissimilar circumstances (also called, vertical tax equality). This prohibits the legislator from establishing arbitrary tax discrimination in favor of or against a portion of citizens. Modern practice sets as an indicator for determining the tax-paying capacity of citizens firstly income, secondly property and thirdly expenditure.

In addition to the tax principles mentioned above, the individual rights of citizens, as enshrined in the Constitution, place restrictions on taxation.

Apart from the general principles a tax administration has to adhere to, OECD and the EU set general directions on the powers of tax administrations. The general direction for tax

administrations, within the European Union¹ and the OECD (2022), is to move from risk analysis for selecting cases for tax audit, to a holistic approach to managing risks arising from taxpayer non-compliance, which allows the tax administration to operate more effectively in a dynamic environment full of risks. This direction is based on: (a) The search for methods that influence tax behavior (such as, a cause-and-effect analysis as a basic method in decision-making, through a feedback mechanism), (b) The search for collaborations in the field of business, science and intermediaries (accounting, law firms and so forth) in order to create such an environment that allows for the minimization of errors. (c) Transparency (which increases the added value of tax administration actions) and (d) The evolution of knowledge of the tax base, which is based on the existence of evidence.

The power of the tax authorities, which is defined based on the theory of the "bases of social power" (Raven, 1993; Pierro et al., 2012), is differentiated into coercive power and legitimate power (Raven et al., 1998). These two attributes of power are considered as independent properties that can be used alone or in combination with each other.

Coercive power represents the power of punishment and the power of reward. Thus, it becomes either a negative or a positive incentive for taxpayer behavior. Examples of punishment are fines or negative disclosures through tax return transparency (Slemrod & Gillitzer, 2014) or blacklisting (Perez-Truglia & Troiano, 2015). Examples of rewards are wellness vouchers for timely payment (Koessler et al., 2016) or the promise of preferential treatment (Simone et al., 2013). Both the punishments mentioned above and the rewards are likely to erode intrinsic motivation (Deci, 1971) and are considered a form of coercion (Raven et al., 1998).

Legitimate authority is defined as the perception that authorities operate on a legitimate basis, expertise and provision of information, and a positive reputation (Raven et al., 1998). The various subcategories of legitimate authority relate to transparency and impartiality (Wenzel, 2002), legal regulation (Murphy, 2005), taxpayer voice and participation (Pommerehne & Weck-Hannemann, 1996), provision of relevant information (Alm et al., 2010), and support services (Gangl et al., 2013).

While coercive power can have negative side effects, encouraging legitimate authority seems to have a positive impact on a large set of indicators such as trust, climate, incentives and

¹ European Commission, "Tax administration". Available at: https://taxation-customs.ec.europa.eu/taxation/tax-transparency-cooperation/administrative-co-operation-and-mutual-assistance/tax-administration_en

compliance. Thus, tax authorities' measures aimed at increasing their professionalism and expertise, in order to provide clear and transparent information on tax procedures, enhance their positive reputation as a service provider and, as a result, increase trust and cooperation with citizens. Tax authorities should also consider ways to increase taxpayers' indirect trust. Such measures (e.g. building a long-term relationship between a dedicated tax official and the taxpayer) have a significant positive impact on compliance (Gangl et al., 2020).

Based on the above, the functions of a tax administration are crucial for ensuring that taxes are collected efficiently and that taxpayers comply with tax laws. These functions include:

- The registration of tax payers, but also the estimation of the correct tax liabilities based on income, property, or other taxable factors.
- The collection of taxes from individuals and companies, in a timely and accurate manner, by setting up systems for the payment of taxes, ensuring compliance with payment deadlines.
- Enforcement and compliance, by auditing tax returns, investigating suspected tax evasion, and applying penalties for non-compliance.
- Provision of taxpayer services, such as guidance on tax regulations, helping with tax filing, offering online services, and resolving disputes.
- Tax law and policy implementation . The tax administration implements tax laws , but it also advises policymakers on tax reform, by providing feedback on the effectiveness of current tax laws and suggesting areas for improvement.
- The tax authority has to provide Dispute Resolution options, such as appeals, mediation, or litigation to resolve conflicts regarding tax assessments.
- Public Awareness and Education of the public about tax laws, compliance requirements, and the importance of paying taxes for the functioning of government services.
- International Cooperation with other tax authorities worldwide for information exchange, particularly in the fight against tax evasion and avoidance, and in dealing with cross-border tax issues.

2.3 The Independent Authority of Public Revenues

The tax authority in Greece is the Independent Authority for Public Revenue (IAPR or Ανεξάρτητη Αρχή Δημοσίων Εσόδων - AADE in Greek). IAPR is responsible for the administration of tax collection, customs duties, and enforcing fiscal compliance within the country. Its mission is “to determine, certify and collect tax, customs and other public revenues that fall within its scope of competence”². The Greek Tax Authority has the following responsibilities³:

- The monitoring the progress of the certification and collection of public revenues and the implementation of the applicable legislation.
- The adoption and implementation of the necessary measures for the effective and efficient operation of its tax, customs and other services, the implementation of the provisions of tax and customs legislation and the improvement of the collectability of public revenues.
- The issuance of regulatory decisions, circulars, directives and other administrative documents, related to its areas of competence and expertise or concern issues of organization of services and management of its resources.
- The adoption and implementation of the necessary measures to protect public health, the environment and the interests of consumers, as well as to contribute to the healthy functioning of the market, to enhance the competitiveness and innovation of the chemical industry and to provide relevant scientific support to judicial, police and other state authorities and services.
- The strategic and operational planning of its actions, target setting and performance indicators setting.
- The preparation of operational plans for tax, customs and other controls within its competence and the assessment of control requests submitted by other bodies.
- The identification of tax evasion, smuggling, tax fraud, illegal trade and the underground economy.
- The identification of phenomena of corruption in tax, customs and other services.
- The supervision and coordination of the tax, customs and other audit services.

² AADE, «Αποστολή και αρμοδιότητες». Available at: <https://www.aade.gr/aade/apostoli-armodiotites>

³ AADE, «Αποστολή και αρμοδιότητες». Available at: <https://www.aade.gr/aade/apostoli-armodiotites>

- The proposal of legislative provisions and measures to strengthen tax and customs compliance.
- The formulation of a simple opinion on draft laws within its scope of competence.
- The cooperation with other bodies and authorities in the context of the exercise of the above responsibilities.
- The preparation and execution of its budget.
- The preparation and execution of a procurement program.
- The preparation of contracts for the Authority's projects.
- The supervision of the bodies operating in the Authority.
- The development, updating, maintenance, operation and use of the information systems application software or its procurement.
- The provision and support of electronic services to citizens, businesses and public sector bodies, with transparency and justice.
- The definition of its technological strategy.

In sum, the Greek Tax Authority is a key governmental agency responsible for overseeing the administration of taxes, customs, and other public revenues in the country, which is operating independently from the government, ensuring that its decisions are not influenced by political pressures. Its functions, are categorized, as follows:

- Tax Administration functions, include the collection of all types of taxes (such as income tax, VAT, corporate tax) and the monitoring and ensuring of compliance with tax laws, processes tax returns, and conducts audits.
- Customs functions include the administration of customs procedures and regulations, including monitoring imports, exports, and transit of goods, but also ensuring compliance with international trade rules and EU regulations and Directives.
- Anti-Fraud and Compliance Enforcement functions include detecting and preventing tax fraud and evasion, by implementing audits, investigations, and analysis of financial records to ensure tax compliance. It also enforces penalties for non-compliance.
- Issuance of Tax Guidance and Decisions related to the application of tax laws to ensure clarity and uniformity across the country.

- Provision of taxpayer services includes assistance in tax filing, payment systems, and resolving disputes related to taxes, while AADE also provides digital services like online tax filing and electronic payment systems.
- International Cooperation functions refer to the collaboration with international tax authorities and organizations.

As a conclusion, the main goal of the AADE is to improve the efficiency of tax collection, reduce the shadow economy, enhance fiscal transparency, and contribute to the overall financial stability of Greece. Its establishment was part of Greece's broader efforts to modernize its public sector as part of its obligations the country undertook during the financial crisis.

2.4 The digital transformation of the Tax administration in Greece

The digital transformation of the tax administration in Greece has been a significant development, which aimed at modernizing the public sector and improving the efficiency, transparency, and fairness of the tax system. Some of the most critical changes introduced in the Greek Tax Authority are the following:

- Introduction of Taxisnet (and after that MyAADE app), which is an online platform that was developed to streamline the submission of tax returns and pay. With the use of MyAADE app, individuals and businesses can track their tax liabilities, request certificates, and make payments. So, My AADE app is the main contact point of the Greek Tax Authority with the taxpayers, offering a wide range of digital tax payer services.
- E-invoicing and Digital Tax Reporting (Timologio and MyData applications) are considered to be an important part of the digitalization efforts to reduce tax evasion and improve compliance. Companies are required to issue electronic invoices, which are submitted directly to AADE.
- Currently, AADE is planning the use of Big Data and Artificial Intelligence (AI) into its processes, so as to analyze large amounts of taxpayer data to detect inconsistencies and tax evasion, fraud and so forth.
- Tax Audits have also undergone significant digital transformation with the use of data analytics and automation in Case selection and audit processes. The new risk analysis

system allows for more targeted and efficient audits, ensuring a fairer approach to identifying tax non-compliance while also reducing audit time and costs.

- Recognizing that digital transformation can pose serious challenges for some taxpayers, AADE has invested in providing educational materials and online tutorials to help citizens and businesses navigate the new systems. These educational materials are available at AADE official web page, but also on social media platforms (especially YouTube⁴).

In the future, the digital transformation of tax administration in Greece is expected to continue evolving, with future initiatives likely to include the broader use of artificial intelligence for predictive analytics, an expansion of e-invoicing, and the integration of new technologies such as blockchain to combat tax evasion. Overall, Greece's digital transformation of its tax administration aims at resulting in more efficient and transparent systems, fostering greater compliance and reducing the administrative burden.

2.5 The communication tools used by the Greek tax administration

The Greek Tax Authority (Independent Authority for Public Revenue – IAPR or AADE) uses various marketing channels to promote its vision and mission, aiming to enhance tax compliance, educate the public and improve service efficiency. These tools include the following:

Official Website

AADE website⁵ is a central platform for providing information to taxpayers, including updates on tax laws, services, forms, and guidelines for tax compliance. Moreover, in the official website, AADE publishes in the New section⁶, the accomplishments of the tax and customs' officials, in order to show the taxpayers the results of the operations of the Greek tax Authority. More specifically, the official website of AADE includes the following sections⁷:

⁴ YouTube, “ΑΑΔΕ Ανεξάρτητη Αρχή Δημοσίων Εσόδων”, επίσημο κανάλι. Available at: <https://www.youtube.com/@AA-wi8kc>

⁵ ΑΑΔΕ, επίσημη ιστοσελίδα. Διαθέσιμο στο: <https://www.aade.gr/>

⁶ ΑΑΔΕ, «Ανακοινώσεις». Διαθέσιμο στο: <https://www.aade.gr/anakoinoseis>

⁷ ΑΑΔΕ, επίσημη ιστοσελίδα. Διαθέσιμο στο: <https://www.aade.gr/>

- Legislation, relating to tax and customs, money laundering and other related issues.
- Announcements. This section includes news, media releases, campaigns, presentations, workshops and so forth.
- Services – information section provides the forms that taxpayers should complete for their requests, Frequent questions, useful guides, information for procurements, data safety, functionalities of the AADE information systems and so forth.
- Planning and Reports sections includes the Annual Plans, Strategic plans, goals setting of AADE, statistics on its operations and results, research and relevant studies and so forth.
- Customs section
- State chemistry section
- International co-operation section
- Taxpayers living abroad section
- Organization section, which includes the mission and vision of the organization, its functions, its management bodies, its organizational structure, information on its human resources, and training and education academy issues.

More recently, AADE developed a new tax portal (MyAADE⁸) to provide its digital services to the taxpayers. The new portal, which is also available for mobile appliances (MyAADE app) offers online all services provided to citizens and businesses. Using the portal's renewed digital environment, the taxpayers can easily:

- Access all of AADE's digital applications, quickly finding the service they are interested in.
- Manage their contact information and / or change their company information.
- Get informed about their debts, payments and refunds in their Account and pay or settle their debts online.
- Obtain a TIN number and key number.
- Submit their requests digitally to the competent AADE service.
- Make digital appointments with an employee of the competent AADE service.

⁸ MyAADE, Ψηφιακή πύλη. Διαθέσιμο στο: <https://www1.aade.gr/aadeapps3/myaade/#!/arxiki>

In the tax portal MyAADE, taxpayers can access AADE's most useful tax applications, such as:

- Tax declarations for the income of citizens and companies
- Tax declarations for property (ENFIA)
- TIN declarations
- Complains submitted by taxpayers
- My Data platform
- Timologio application
- MyΘέμματα
- MyAADE Live, which is a customer service center where taxpayers can issue a TIN and a key number, conducting virtual meetings with AADE staff
- My Property
- My Car

Social Media pages

The Greek Tax Authority (AADE) uses social media platforms like **LinkedIn**, **X**, and **YouTube** to reach a broader audience, including both individuals and companies. These channels are used for: Announcing tax updates, deadlines and new legislation and taxpayer obligations, sharing educational content about AADE's new applications and addressing frequently asked questions and guiding citizens on how to resolve issues that interest them. Furthermore, the citizens can watch the announcements made by the Head of AADE, press releases and so forth.

More specifically, AADE maintains accounts in the following social media platforms:

- X.com⁹. In X social media platform, AADE has become a member in December 2023 and it already has 907 followers.
- YouTube.com¹⁰. In YouTube social media platform, AADE has its official channel since March 2017 and it has 16,6 thousand registered members.
- LinkedIn.com¹¹. In LinkedIn social media platform, AADE has 2951 followers.

⁹ X.com, "AADE - IAPR". Available at: https://x.com/AADE_IAPR?mx=2

¹⁰ YouTube.com, "AADE Ανεξάρτητη Αρχή Δημοσίων Εσόδων". Available at: <https://www.youtube.com/channel/UCozQD4V6cgUVx5BWBguDNig>

¹¹ LinkedIn.com, "AADE - IAPR". Available at: <https://www.linkedin.com/company/aade-iapr/>

Emails

Regular emails are sent to registered taxpayers with updates on tax regulations, upcoming deadlines and new services. These emails help the public remain informed and remind them of their responsibilities towards the tax authorities.

Press Releases and Media Appearances

AADE issues press releases to announce important tax reforms, initiatives or enforcement measures. The Head of AADE also makes appearances in the media (television, radio, newspapers) to raise awareness about tax-related matters and inform the public about the advancements in the Greek tax authority.

Public Events and Conferences

AADE in conferences, webinars and public events where they explain new tax policies, reforms and how taxpayers can meet their obligations. Such events and workshops mostly took place during the development of MyData platform, so as for the companies and accountants to learn to comply the new obligations posed.

MyDATA Platform is the digital platform for receiving data transmitted to A.A.D.E., which is accessible through the A.A.D.E. website and includes all income and expense transactions of entities that maintain Accounting Records, in accordance with Greek Accounting Standards and which reflects the accounting and tax results of the entities¹².

Mobile Applications

The most recent communication tool used by AADE is the development of mobile appliances applications and more specifically MyAADE App and Apodeixi App. The IAPR provides mobile apps that allow taxpayers to track their tax status, make payments and receive notifications. These apps help make the communication with the Greek Tax Authority more accessible and efficient.

More specifically, myAADEapp is the official digital application of the Independent Authority of Public Revenue (AADE) for mobile devices, which enables citizens and businesses to be

¹² AADE, “Ηλεκτρονικά βιβλία ΑΑΔΕ – Α. 1138/2020”. Available at: https://www.aade.gr/sites/default/files/2021-04/FAQs_myDATA_a1138_2020.pdf

informed about their account and to make payments via card or IRIS with immediate credit of their debt. Furthermore, through the application, the user can change the IBAN of his bank account for the payment of tax refunds and have access to his appointments, the requests he has sent to AADE as well as the messages he has received. Finally, in the myWallet section, the taxpayer can download and store useful documents such as certificates and statements¹³.

Appodixi App¹⁴ is the official application of AADE, which gives citizens the ability to check the receipts they receive for each transaction they make. They can test whether each receipt that has been issued with a QR code is transmitted to the tax authority. If citizens find non-transmission or discrepancies in the details of the receipt, they can inform AADE - anonymously or with a name - for further verification.

In sum, by utilizing a multi-channel approach, AADE aims to increase transparency, ensure compliance and foster a culture of responsible tax payment among its citizens, in order for the taxpayers to increase their trust towards the Tax Administration and enhance their tax compliance.

2.6 The factors affecting the intent to use tax applications

In today's increasingly digital and online world, the use of tax applications has become a crucial element for taxpayers to manage their financial obligations effectively. With the rapid evolution of technology, tax applications, such as e-filing and online tax platforms, have streamlined the tax process, enabling taxpayers to file taxes efficiently, track their returns, and receive timely notifications. However, the decision to adopt such applications depends on various factors that influence the taxpayers' intention to use them.

Probably the most prominent category of factors influencing taxpayers' intent to use tax applications is the ease of use and usefulness of the application. In the context of the

¹³ AADE, "My AADE App". Available at: <https://www.aade.gr/myaadeapp>

¹⁴ AADE, "Apodeixi". Available at: <https://www.aade.gr/appodixi>

Technology Acceptance Model (TAM), perceived usefulness, perceived ease of use and perceived convenience are critical determinants in the decision of taxpayers to adopt tax applications. For instance, if a tax application is perceived to be complicated, if it is thought to require extensive technical knowledge, or to have a difficulty for the user interface, taxpayers are less likely to engage with its use. Conversely, applications that are user-friendly and responsive are more likely to attract users to engage with them. Another barrier for the potential users is the fear of privacy and security of their data. Numerous researchers have examined technological advancements of tax administrations and their adoption by the users, using TAM (Ozgen & Turan, 2007; Cakmak et al., 2011; Gupta et al., 2015; Mellouli et al., 2016; Sondakh, 2017; Soneka & Phiri, 2019; Wulandari et al., 2023).

In addition, psychological factors, including trust and perceived ease of use, also play a significant role in shaping taxpayers' intent to use tax applications. Trust is especially important when taxpayers are unsure about the security of their personal information or the accuracy of the tax application in filing their taxes. If taxpayers perceive a tax application as trustworthy, they are more likely to adopt it. For example, Mellouli et al. (2016) confirmed that trust affects the intention to use on-line tax filing system, with trust being the most important factor of acceptance. Moreover, individuals' perceptions about the complexity of tax filing can impact their willingness to use an application. Some taxpayers may find tax filing overwhelming or confusing. For these individuals, a well-designed application that simplifies the process can serve as a powerful motivator. The mental effort required to use the application, as well as the confidence that the application will assist in accurate filing, contributes significantly to whether individuals are motivated to use it. Technology Acceptance Model adequately covers psychological factors as well, as it includes perceived ease of use, perceived usefulness, and attitude towards using as independent variables to predict taxpayers' behavioral intentions to adopt tax applications. It should be noted, however, that psychological factors that affect the adoption of tax applications also affect tax compliance, such as trust (Chan et al., 2000; Daude, et al. 2013), taxpayer awareness and education (Chau & Leung, 2009), tax knowledge (McKerchar, 2001; Kirchler et al. 2006; Pambudi, 2015; Fauziati et al., 2016) attitudes and perceptions of the tax system (Chan et al., 2000; Riahi-Belkaoui, 2004; Le Baube, 1992) and so forth. This is a rational relationship, as the adoption is considered to be a way of succeeding tax compliance.

Socio-economic characteristics such as income, education, age and occupation play a key role in determining a taxpayer's intent to adopt tax applications. Research shows that individuals with higher levels of education are more likely to use digital tax applications. This is due to their greater familiarity with technology, as well as a better understanding of the benefits of such platforms. Conversely, older individuals or those with lower educational levels may be more reluctant to engage with digital tax tools. Income level also correlates with tax application adoption. Higher-income earners who are more likely to have access to advanced technology and resources may be more willing to adopt tax applications. In contrast, lower-income individuals might find digital platforms less accessible, especially if they lack the necessary devices or access to the internet. Previous studies have considered demographic variables to affect the adoption of online tax platforms (McLeod et al., 2009; Mellouli et al., 2016), but these variables have also been found to affect tax compliance (Chau & Leung, 2009; Murphy, 2004; 2008).

2.7 Previous research on Technology acceptance in tax administrations

There have been numerous researchers who investigated technological changes in tax administrations, using the Technology Acceptance Model. More specifically, Ozgen and Turan (2007) examined e-tax filing and e-tax payment in Turkey. They found that the perceived usefulness and perceived ease of use constructs of TAM positively and significantly determine behavioral intention of e-declaration system use by accountants.

Cakmak et al. (2011) examined the acceptance of Tax Office Automation System in Turkey, using TAM. Their results revealed that perceived usefulness, perceived ease and attitudes explain a large proportion of behavior intentions of tax officials.

Gupta et al. (2015) studied the influence of perceived ease of use, perceived usefulness, and user satisfaction on taxpayers' behavioral intentions to adopt electronic tax filing services in an emerging economy, using the Technology Acceptance Model. They found that the model has adequate predictive and explanatory quality.

Mellouli et al. (2016) examined the acceptance of online tax filing in Tunisia. Their results confirm the hypothesis that links trust, technical and individual determinants to the intention to use the on-line tax filing system, with trust being the most important factor of acceptance.

Sondakh (2017) used TAM to predict taxpayers' behavior in using e-tax returns in Indonesia. He concluded that the perceived ease of use has a significant positive effect on the perceived usefulness and attitudes towards the use of e-tax service system. The perceived usefulness is having positive and significant effect on the attitudes towards the use of e-tax service system, while attitude towards e-tax service system is having positive and significant effect on the behavioral intention to use it.

Soneka and Phiri (2019) examined the adoption of the e-tax system to file returns and pay taxes online in Zambia. They concluded that the e-tax system is useful, easy to use and secure, so the majority of the taxpayers are filing their returns and paying taxes online.

Wulandari et al. (2023) found that the Technology acceptance model positively and significantly affects tax compliance in Indonesia and more specifically e-billing, e-filing and e-registration..

However, McLeod et al. (2009) investigated the individual intention to use tax preparation software. They found that the technology acceptance model may not be equally applicable to “professionals” and “novices.”

Chapter 3: Research methodology

3.1 The research hypotheses

As mentioned in Chapter 1, the aim of the present study is the examination of the adoption of AADE marketing tools and more specifically, its mobile applications, using the Technology Acceptance Model (TAM). According to this specific model, the latent variables of perceived convenience, perceived ease-of-use, perceived usefulness and perceived general attitude directly affect the intention to use a technology. In this case, the investigation focuses on the intention to use the digital applications of AADE. Moreover, due to the fact that AADE is the national tax authority of Greece, the parameter of tax compliance was decided to be incorporated, too.

As previously mentioned, the most prominent category of factors influencing taxpayers' intention to use tax applications is the ease of use and usefulness of the application. The present research investigates the technological factors affecting the adoption of the tax applications developed by the Greek Independent Authority of Public Revenue, using the Technology Acceptance Model. TAM generally supports that the effects of perceived convenience, perceived ease-of-use, perceived usefulness and attitude towards using on intention to use a technology are positive (Chang et al., 2012; Sun & Mei, 2020; Teo et al., 2018). These positive effects are also confirmed by surveys that consider the acceptance of new technologies that refer to tax system as indicated in section 2.7 (Ozgen & Turan, 2007; Cakmak et al., 2011; Mellouli et al., 2016; Sondakh, 2017; Soneka & Phiri, 2019; Wulandari et al., 2023; Gupta et al., 2015). According to the above papers, the present study formulates and examines the following research hypotheses:

H_1 : The perceived convenience of digital tools of AADE increases the taxpayers' intention to use them.

H_2 : The perceived ease-of-use of digital tools of AADE increases the taxpayers' intention to use them.

H₃: The perceived usefulness of digital tools of AADE increases the taxpayers' intention to use them.

H₄: The attitude towards using digital tools of AADE increases the taxpayers' intention to use them.

However, another factor that has not been found in previous research as an independent variable, when examining the adoption of tax applications is tax compliance. The reason is that the adoption of tax application is a way for taxpayers to be tax compliant, so tax compliance is used as a dependent variable. In the present study, regarding tax compliance, payment compliance, voluntary and enforced tax compliance are considered. Previous researchers have claimed that acceptance of digital tools increase the tax compliance of the tax payers (Rakhmawati & Rusydi, 2020; Night & Bananuka, 2020; Taking & Chang, 2021). Respectively, numerous papers provide evidence that attitudes and perceptions positively influence tax compliance (Chan et al., 2000). No previous research using tax compliance as an independent variable has been found, a fact that reveals a gap in the tax literature.

In the present research, tax compliance is considered to be an independent variable for the prediction of the intention to use tax applications. The reasoning behind this novelty is the fact that the adoption of tax administration applications, which are designed to help individuals and businesses fulfill their tax obligations, is influenced by levels of tax compliance. More specifically, we have assumed that tax compliance increases the adoption of these applications in the following ways: First of all, as taxpayers become more compliant with their obligations, they develop a higher level of trust in the tax system. When they see that the government uses digital tools to process taxes efficiently and transparently, they are more likely to adopt these tools. These applications offer clear records, audit trails and faster processing times, which foster confidence and increase the perception of fairness. Moreover, when tax administrations reduce the risk of tax evasion through technology and increased monitoring, compliant taxpayers perceive the tax system to be fairer.

Referring to the simplification of the tax filing process, tax compliance often involves complex procedures, such as filling out tax forms, understanding deductions and making payments. Tax administration applications simplify these tasks by automating the filing process, reducing human error and making tax payments more efficient. So, compliant taxpayers see that these

applications can make their lives easier, so they are more likely to adopt them to meet their tax obligations.

Compliant taxpayers are also expected to be benefited by the minimized risk of penalties. Compliance requires that taxes are filed and paid on time. Tax administration applications often have built-in reminder systems to alert taxpayers about upcoming deadlines, penalties for late payment and possible audits. The awareness that using these apps can help avoid mistakes and late penalties makes taxpayers more likely to adopt them. This can be considered to be an important motive for compliant taxpayers to adopt these applications to avoid mistakes.

Finally, compliant taxpayers are expected to benefit from cost and time savings, by the adoption of tax applications. For example, traditional tax filing may require hiring accountants or tax professionals, which can be costly. Tax administration applications lower this cost by automating much of the process. In addition, tax applications reduce the time spent on administrative tasks, such as filing taxes. The fact that tax administration applications provide a direct line of communication between taxpayers and tax authorities, making it easier for taxpayers to ask questions, resolve issues, or get assistance is expected to be a significant motive for compliant taxpayers to adoption tax applications.

Retrospectively, here we wonder whether the tax compliance can affect the use of AADE's digital tools. Hence, the following hypotheses are stated:

H₅: Payment compliance increases the taxpayers' intention to use AADE's digital tools.

H₆: Voluntary tax compliance increases the taxpayers' intention to use AADE's digital tools.

H₇: Enforced tax compliance increases the taxpayers' intention to use AADE's digital tools.

Finally, demographic factors are always considered to influence various attitudes and perceptions, both regarding tax compliance or not and regarding technology acceptance (Chau & Leung, 2009). Hence, they are included in the present study in the form of the following hypothesis:

H₈: The taxpayers' demographic characteristics affect their intention to use AADE's digital tools.

The research design that presents all the above research hypotheses appear in Diagram 1.

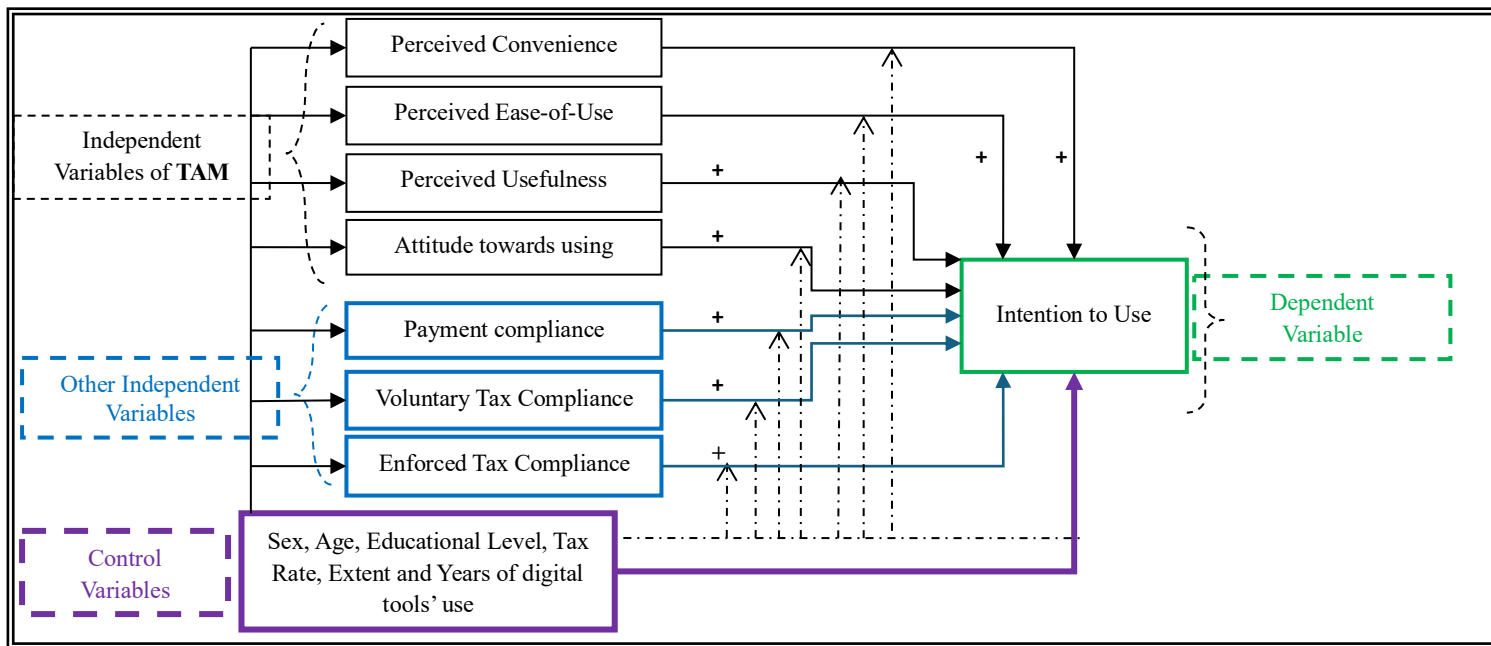


Diagram 1. Research Design

3.2 The research sample and population – Collection of data

In the light of the above research hypotheses, taxpayers constitute the population of the present study. The sample's size was determined to be more than 100 taxpayers. The goal for this was twofold; this size can, first, make Central Marginal Theorem valid and, secondly, can deteriorate the statistical error below 10%. The sampling procedure was evolved in the following way. The researcher uploaded the questionnaire to Google Forms and sent an invitation to all her familiars as long as they are taxpayers. The questionnaire was accompanied by a letter that welcomed any forward of the questionnaire. The questionnaire was held open for answers for one month. In this way, 107 answers were achieved. As a result, the convenience sampling method was applied. This specific method is very popular due to its easiness and low budget. However, it has been accused of generating biased and subjective samples. These two severe disadvantages are restricted when large samples are concentrated, which is the case of the present study (Jager et al., 2017).

3.3 Questionnaire design

As already mentioned, the research tool of the present study is the Technology Acceptance Model Questionnaire of Davis (1989). The TAM questionnaire is the most frequently used in cases where the acceptance of technology is investigated (Chuttur, 2009). According to many studies (Shin, 2007; Yoon & Kim, 2007), this specific model can efficiently explain and predict the behavior and the intention of people to use a new technology application. This is the reason why the present study incorporates it. In the following lines, a brief but comprehensive description of this tool is provided.

The TAM questionnaire consists of eighteen questions that are loaded in the following dimensions:

- ✓ *Perceived Convenience*: It refers to the extent to which an individual believes that a given technology reduces the investment he has to make in terms of time and effort. It consists of four questions.
- ✓ *Perceived Ease-of-Use*: It refers to the degree to which a person believes that no particular physical or mental effort is required to use the technology. Five questions are included in this section.
- ✓ *Perceived Usefulness*: It refers to the extent that an individual believes that using a particular technology will enhance her performance. It consists of four questions.
- ✓ *Attitudes towards Using*: It refers to the degree that an individual considers a technology a good or a pleasant idea. It consists of two questions.
- ✓ *Intention of Use*: It refers to the willingness of a person to use a specific technology soon. It consists of four questions.

Many studies have extended the TAM research tool in order to internalize factors that they considered to be necessary to explain and predict the technology acceptance (Ong & Lai, 2006; Roca & Gagné, 2008). In the same context, the present study incorporates tax compliance by including the scales of Kirchler and Wahl (2010). Particularly, these three scales express the payment compliance, the voluntary tax compliance, and the enforced tax compliance and consist of three, five and four questions respectively.

All above questions are formed in a 7-point Likert scale, where 1 and 7 correspond to total disagreement and total agreement respectively. Moreover, there are six more questions in the

demographic characteristics section of the questionnaire. The four of them (sex, age, educational level and tax rate) are in form of multiple-choice questions, one of them (extent of using AADE applications) is a 7-point Likert scale question and one (years of using AADE applications) is an open question. The whole questionnaire appears in the Appendices.

Finally, all necessary actions were taken to ensure the validity and the reliability of the research tool. The translation from / to English to / from Greek were made by teachers of Greek and English literature, while a pilot survey of 10 persons was conducted. All this actions, as well as the permanent presence of the researcher, ensure that the research tool is valid which means that it is free of systematic error. Regarding random errors, which means regarding reliability, Table 1 presents the Cronbach's Alpha coefficients for each section of the questionnaire, as well as of the total questionnaire. These values indicate adequate levels of reliability.

Table 1. Research Tool's Reliability – Cronbach's Alpha

Questionnaire's Dimension	Cronbach's Alpha	No of Questions
Perceived Convenience	0.9640	4
Perceived Ease of Use	0.9741	5
Perceived Usefulness	0.9696	4
Attitude towards using	0.8537	2
Payment Compliance	0.7163	3
Voluntary Tax Compliance	0.9159	5
Enforced Tax Compliance	0.9431	4
Intention of Use	0.9692	3
Total Questionnaire	0.9640	30

3.4 The selected methodology

The variables of this study are qualitative and quantitative. The qualitative variables result from the questions on the demographics characteristics of the sample (sex, age, education, and tax rate), while the quantitative ones from the extraction of the dimensions of the questionnaire plus the last two question of part A (extent of using AADE applications, years of using AADE applications). Specifically, for each dimension / section of the questionnaire, a variable was extracted as the average of the responses of each participant to the questions included in this section. Thus, eight quantitative variables were created (perceived convenience, perceived ease of use, perceived usefulness, attitude towards using, tax compliance, voluntary tax compliance, enforced tax compliance and intention to use) that have a range of values from 1 to 7 based on the Likert scale on which the questions of the questionnaire were formulated. It is worth noting

that the high values of the Cronbach's Alpha index per section of questions ensure that these variables consistently measure each dimension.

The statistical methods used for the statistical analysis of the data were selected depending on the type of variables involved and the intended purpose (Kouremenos, 2008). Particularly, the methods applied are (a) frequency tables and computation of statistical measures of central position and variability, (b) t-tests for equation of means, (c) analysis of variance, (d) correlation analysis, and (e) regression analysis accompanied by the appropriate diagnostic tests.

Frequency tables and the statistical measures of central position and variability concern the general description of the variables (Kouremenos, 2008). Frequency tables were used for the description of qualitative variables, while statistical measures of central position and variability were used to describe all quantitative variables. The statistical measures of the arithmetic mean and the standard deviation were selected as the most representative of the distribution of the variables (Kouremenos, 2008).

T-test is a statistical method that is used to investigate the effects of a dichotomous qualitative variable on a quantitative variable (Tsantas et al., 1999). Specifically, the basic statistical hypothesis (H_0) of the equality of the means of a quantitative variable in the two groups formed by a qualitative variable is tested against the alternative statistical hypothesis (H_1) of inequality. Acceptance of the basic hypothesis is indicated when p-value of the test is greater than or equal to the significance level. In case of rejection of the basic hypothesis, the possible differences are outlined by the means in the two groups.

The method of Analysis of Variance, also known as ANOVA, is similar to t-tests, but it is used to investigate the effects of a qualitative variable on a quantitative variable of more than two levels (Tsantas et al., 1999). Specifically, the basic statistical hypothesis (H_0) of the equality of the means of a quantitative variable in the k groups formed by a qualitative variable is tested against the alternative statistical hypothesis (H_1) of inequality between at least two group means. Acceptance of the basic hypothesis is indicated when p-value of the test is greater than or equal to the significance level. In case of rejection of the basic hypothesis, the possible differences are generally outlined by the values of the means in each of k groups.

Correlation analysis is used to investigate the relationship between two quantitative variables. Specifically, the Pearson correlation coefficient analysis was computed. This coefficient takes values from -1 to +1 for perfect negative and perfect positive correlation respectively. The estimation of the coefficient value is always accompanied by a t-test for its statistical significance. The basic statistical hypothesis (H_0) supports the nullity (not statistical significance) of the coefficient, while the alternative statistical hypothesis (H^1) the non-nullity (statistical significance). Acceptance of the basic hypothesis is provided when the p-value of the test is greater than or equal to the significance level. In case of rejection of the basic hypothesis, the type and intensity of the correlation are concluded from the coefficient estimate (Tsantas et al., 1999; Spiegel & Stephens, 2017).

Finally, regression analysis is implemented to investigate the simultaneous effect of the characteristics of the sample and the seven dimensions of the questionnaire on the intention to use AADE digital applications. To this end, the variables of the characteristics of the sample were transformed into dummy variables, which are set equal to 1 if the condition they express is satisfied, otherwise equal to 0. The beta coefficients of the independent variables are estimated. They express ceteris paribus the partial effect of the independent variable on the dependent variable. However, the reliability of the estimates requires the analysis is accompanied by a series of tests, the so-called diagnostic tests. These are t-tests for the statistical significance of each coefficient separately, F-test for the statistical significance of the overall regression, Durbin-Watson test for the first-degree residual autocorrelation, and multicollinearity test using the Variance Inflation Factor (VIF). These are briefly and comprehensively described below (Spiegel & Stephens, 2017).

T-test examines the statistical significance of each coefficient separately. Particularly, the basic statistical hypothesis (H_0) of the nullity (not statistical significance) of each coefficient is tested against the alternative statistical hypothesis (H_1) of non-nullity (statistical significance). Acceptance of the basic hypothesis is indicated when the p-value is greater than or equal to the significance level. If the null hypothesis is rejected, the type of effect is inferred from the value of the coefficient (Spiegel & Stephens, 2017).

F test, also known as ANOVA, examines the statistical significance of the overall regression and its coefficient of determination, mostly known as R square. The null statistical hypothesis (H_0) of the zero-interpreting power of the regression ($R^2=0$) is examined against the alternative

hypothesis (H_1) of its non-zero power of interpretation ($R^2 \neq 0$). Acceptance of the null hypothesis is indicated when p-value of the test is greater than or equal to the significance level. If the null hypothesis is rejected, the level of power is inferred from the value of the coefficient of determination. It is worth mentioning that the coefficient of determination shows the percentage of the variability of the dependent variable that is explained by the estimated model (Spiegel & Stephens, 2017).

The Durbin – Watson residual autocorrelation test examines the basic statistical hypothesis (H_0) of the absence of first-order autocorrelation for the residuals against the alternative statistical hypothesis (H_1) of its existence. Acceptance of the basic hypothesis, which is also a necessary condition for the reliability of the estimates, is indicated when the value of the Durbin-Watson statistic ranges around 2.0 (Spiegel & Stephens, 2017).

The multicollinearity test using the VIF (Variance Inflation Factor) coefficient investigates the basic statistical hypothesis (H_0) of the absence of multicollinearity against the alternative statistical hypothesis (H_1) of the existence of multicollinearity. Acceptance of the basic hypothesis, which is also a necessary condition for the reliability of the estimates, is indicated when the value of the VIF statistic is less than 10 (Spiegel & Stephens, 2017).

All the above statistical methods were conducted using the statistical program SPSS (Statistical Package for Social Sciences), while the significance level of the research was set at 5%.

Chapter 4: Data Analysis and Findings

4.1 Sample Description

Table 2 describes the sample regarding its demographic and other characteristics that were included in part A of the questionnaire. According to it, most of the respondents are female. Particularly, 64 (59.8%) participants are female, while 43 (40.2%) are male. Almost the absolute majority of the sample are 40 to 49 years old. Specifically, 53 (49.5%) respondents are 40 to 49 years old, 23 (21.5%) are from 30 to 39 and from 50 to 59 years old, 6 (5.6%) are from 18 to 29 years old and only 2 (1.9%) are over 60 years old. Regarding educational level, most respondents have masters (51; 47.7%) followed by the ones that have graduated University (44; 41.1%) and then the ones that have graduated just high school (7; 6.5%). Finally, there are 5 (4.7%) respondents that acquire a PhD. Looking at the tax rate, 103 (96.3%) participants are taxed using the personal income tax rate and 4 (3.7%) the corporate income tax rate. Finally, the participants state that they use the AADE application in a moderately intense way ($\bar{x}=3.35$, $s=1.36$) for the last around 6.85 ($s=5.23$) years, on average.

Table 2. Sample Description regarding its characteristics (N=107)

		N	%	Mean	Standard Deviation
Sex	Male	43	40.2%		
	Female	64	59.8%		
Age	18-29 years old	6	5.6%		
	30-39 years old	23	21.5%		
	40-49 years old	53	49.5%		
	50-59 years old	23	21.5%		
	> 60 years old	2	1.9%		
Educational Level	High School	7	6.5%		
	University	44	41.1%		
	Master	51	47.7%		
	PhD	5	4.7%		
My income are taxed by:	Personal Income Tax rate	103	96.3%		
	Corporate Income Tax rate	4	3.7%		
Extent to which you use any AADE application				3.34	1.36
Years you have been using any AADE application				6.85	5.23

4.2 Sample Responses – The Variables

The descriptive statistics of the variables formed by the questions of the research tool appear in the present section. It is reminded that all questions are structured on a 7-point Likert scale indicating absolute disagreement and absolute agreement when the value is 1 and 7 respectively. In the same way, a value around 3.5 probably indicates an indifferent attitude.

Table 3 presents the descriptive statistics of the variables that concern perceived convenience. Mean values of all variables range from 4.56 to 4.89 indicating a moderately high level of agreement. In a descending order of agreement, the questions are ranked in the following way: convenience to interact at any time ($\bar{x}=4.89$, $s=1.77$), convenience to interact at any place ($\bar{x}=4.83$, $s=1.75$), general convenient regarding interaction ($\bar{x}=4.66$, $s=1.81$) and level of convenience that leads to participant's engagement ($\bar{x}=4.56$, $s=1.73$). In general, the *perceived convenience* dimension appears to have a mean value of 4.74 and a standard deviation of 1.67. The mean value corresponds to a moderately high level of agreement that the AADE's applications are rather convenient.

Table 3. Descriptive Statistics of Sample Responses regarding Perceived Convenience

Perceived Convenience	N	Minimum	Maximum	Mean	Std. Deviation
I can interact with AADE at any time through its digital applications.	107	1.00	7.00	4.89	1.77
I can interact with AADE at any place through its digital applications.	107	1.00	7.00	4.83	1.75
AADE's digital applications are convenient for me to engage in my interaction with it.	107	1.00	7.00	4.56	1.73
I feel that AADE's digital applications are convenient to interact with AADE.	107	1.00	7.00	4.66	1.81
Perceived Convenience (Total Dimension)	107	1.00	7.00	4.74	1.67

The descriptive statistics of the variables included in the perceived Ease of Use sections of the questionnaire appear in Table 4. The minimum value is equal to 4.71 and the maximum value is equal to 5.09. The overall *Ease of Use* dimension is equal to 4.94 on average with a standard deviation of 1.69. These values indicate a quite high level of agreement regarding the ease that the participants perceive to get from AADE's applications. Analytically, the questions of ease are ranked in descending order of agreement as follows: ease to become more skillful ($\bar{x}=5.09$,

$s=1.79$), flexibility ($\bar{x}=5.03$, $s=1.70$) and general ease ($\bar{x}=5.03$, $s=1.76$), easy to use ($\bar{x}=4.85$, $s=1.83$) and clearness and understandability ($\bar{x}=4.71$, $s=1.78$) of AADE's digital applications.

Table 4. Descriptive Statistics of Sample Responses regarding Perceived Ease of Use

Perceived Ease of Use	N	Minimum	Maximum	Mean	Std. Deviation
I would find it easy to use a digital application of AADE to interact with it.	107	1.00	7.00	4.85	1.83
My interaction with AADE through its digital application is clear and understandable.	107	1.00	7.00	4.71	1.78
I believe that a digital application of the AADE provides its user with significant flexibility.	107	1.00	7.00	5.03	1.70
It is easy for me to become skillful at using a digital application of AADE.	107	1.00	7.00	5.09	1.79
In general, I find it easy to use a digital application of the AADE.	107	1.00	7.00	5.03	1.76
Perceived Ease of Use (Total Dimension)	107	1.00	7.00	4.94	1.69

Table 5 presents the descriptive statistics of the variables that concern perceived usefulness. Mean values of all variables range from 4.86 to 5.01 indicating a quite high level of agreement. In a descending order of agreement, the questions are ranked in the following way: easier interaction ($\bar{x}=5.08$, $s=1.83$), quicker interaction ($\bar{x}=5.01$, $s=1.89$), effective interaction ($\bar{x}=4.88$, $s=1.76$) and better communication ($\bar{x}=4.86$, $s=1.79$). In general, the *perceived usefulness* dimension appears to have a mean value of 4.96 and a standard deviation of 1.74. The mean value corresponds to a quite high level of agreement that the AADE's applications are rather usefull.

Table 5. Descriptive Statistics of Sample Responses regarding Perceived Usefulness

Perceived Usefulness	N	Minimum	Maximum	Mean	Std. Deviation
Using digital applications enables me to interact more quickly with AADE.	107	1.00	7.00	5.01	1.89
Using digital applications improves the performance of my communication with AADE.	107	1.00	7.00	4.86	1.79
Using digital applications enhances the effectiveness of my interaction with AADE.	107	1.00	7.00	4.88	1.76
Using digital applications can make my interaction with AADE easier.	107	1.00	7.00	5.08	1.83
Perceived Usefulness (Total Dimension)	107	1.00	7.00	4.96	1.74

The descriptive statistics of the variables included in the Attitude towards Using section of the questionnaire appear in Table 6. The minimum value is equal to 4.83 and the maximum value is equal to 5.71. The overall *Attitude towards Using* dimension is equal to 5.27 on average with a standard deviation of 1.46. These values indicate a high level of agreement regarding the participants' attitude towards using AADE's applications. Analytically, the higher level of agreement receives that using digital applications to interact with AADE is a good idea ($\bar{x}=5.71, s=1.55$) followed by the opinion that it is a pleasant idea ($\bar{x}=4.83, s=1.57$).

Table 6. Descriptive Statistics of Sample Responses regarding Attitude towards using

Attitude towards using	N	Minimum	Maximum	Mean	Std. Deviation
Using digital applications to interact with AADE is a good idea.	107	2.00	7.00	5.71	1.55
Using digital applications to interact with AADE is a pleasant idea.	107	1.00	7.00	4.83	1.57
Attitude towards using (Total Dimension)	107	1.50	7.00	5.27	1.46

Table 7 presents the descriptive statistics of the variables that concern payment compliance. Mean values of all variables range from 2.81 to 5.70 indicating a moderate level of agreement. In a descending order of agreement, the participants comply: on time ($\bar{x}=5.70, s=1.74$), before they pay any other bills ($\bar{x}=4.73, s=1.81$), and on their due date after the receipt of relevant notice ($\bar{x}=2.81, s=2.07$). In general, the *payment compliance* dimension appears to have a mean value of 4.41 and a standard deviation of 1.41. The mean value corresponds to a moderately high level of payment compliance for the taxpayers.

Table 7. Descriptive Statistics of Sample Responses regarding Payment Compliance

Payment Compliance	N	Minimum	Maximum	Mean	Std. Deviation
I pay my taxes before I pay any other bills.	107	1.00	7.00	4.73	1.81
I pay my taxes on time.	107	1.00	7.00	5.70	1.74
I pay taxes on their due date and as long as I have received a relevant notice.	107	1.00	7.00	2.81	2.07
Payment Compliance (Total Dimension)	107	1.00	7.00	4.41	1.41

The descriptive statistics of the variables included in the Voluntary Tax Compliance section of the questionnaire appear in Table 8. The minimum value is equal to 4.15 and the maximum value is equal to 5.44. The overall *Voluntary Tax Compliance* dimension is equal to 4.77 on average with a standard deviation of 1.64. These values indicate a quite high level of voluntary

compliance for the sample. Analytically, the reasons of compliance are ranked in descending order of agreement as follows: it's the natural thing ($\bar{x}=5.44$, $s=1.79$), duty ($\bar{x}=5.40$, $s=1.73$), a contribution to everyone's good ($\bar{x}=4.53$, $s=1.91$), support to the state and citizens ($\bar{x}=4.31$, $s=1.98$) and obvious ($\bar{x}=4.15$, $s=2.03$).

Table 8. Descriptive Statistics of Sample Responses regarding Voluntary Tax Compliance

Voluntary Tax Compliance: When I pay my taxes as required by the regulations, I do so...	N	Minimum	Maximum	Mean	Std. Deviation
Because for me it's obvious that this is what you do.	107	1.00	7.00	4.15	2.03
To support the state and other citizens.	107	1.00	7.00	4.31	1.98
Because I like to contribute to everyone's good.	107	1.00	7.00	4.53	1.91
Because for me it's the natural thing to do.	107	1.00	7.00	5.44	1.79
Because I regard it as my duty as citizen.	107	1.00	7.00	5.40	1.73
Voluntary Tax Compliance (Total Dimension)	107	1.20	7.00	4.77	1.64

Respectively, the descriptive statistics of the variables regarding Enforced Tax Compliance appear in Table 9. The minimum value is equal to 3.54 and the maximum value is equal to 4.31. The overall *Enforced Tax Compliance* dimension is equal to 3.79 on average with a standard deviation of 1.79. These values indicate a moderate level of enforced compliance for the sample. Analytically, the reasons of compliance are ranked in descending order of agreement as follows: severity of the punishments ($\bar{x}=4.31$, $s=2.05$), certainty of audit otherwise ($\bar{x}=3.65$, $s=1.94$), large number of tax audits ($\bar{x}=3.64$, $s=1.88$), and high frequency of audits ($\bar{x}=3.54$, $s=1.85$).

Table 9. Descriptive Statistics of Sample Responses regarding Enforced Tax Compliance

Enforced Tax Compliance: When I pay my taxes as required by the regulations, I do so...	N	Minimum	Maximum	Mean	Std. Deviation
Because a great many tax audits are carried out.	107	1.00	7.00	3.64	1.88
Because AADE often carries out audits.	107	1.00	7.00	3.54	1.85
Because I know that I will be audited, otherwise.	107	1.00	7.00	3.65	1.94
Because the punishments for tax evasion are very severe.	107	1.00	7.00	4.31	2.05
Enforced Tax Compliance (Total Dimension)	107	1.00	7.00	3.79	1.79

Finally, Table 10 presents the descriptive statistics of the variables that concern Intention to Use. Mean values of all variables range from 4.14 to 4.44 indicating a moderately high level of agreement. In a descending order of agreement, the questions are ranked in the following way: sample on average will start using ($\bar{x}=4.44$, $s=1.97$), predicts that will start using ($\bar{x}=4.21$,

$s=2.05$), and plans to use ($\bar{x}=4.66$, $s=1.81$) AADE's digital applications. In general, the *Intention to Use* dimension appears to have a mean value of 4.26 and a standard deviation of 1.95. The mean value corresponds to a moderately high level of agreement that the respondents are going to use AADE's applications.

Table 10. Descriptive Statistics of Sample Responses regarding Intention to Use

Intention To Use	N	Minimum	Maximum	Mean	Std. Deviation
In next weeks, I would like to start using AADE's digital applications.	107	1.00	7.00	4.44	1.97
In next weeks, I predict that I will start using AADE's digital applications.	107	1.00	7.00	4.21	2.05
In next weeks, I plan to use AADE's digital applications.	107	1.00	7.00	4.14	2.00
Intention of Use (Total Dimension)	107	1.00	7.00	4.26	1.95

4.3 Effect of Quantitative Variables on Research Variables

The effect of quantitative characteristics of the sample on all research variables (perceived convenience, perceived ease of use, perceived usefulness, attitude towards using, payment compliance, voluntary tax compliance, enforced tax compliance, and intention to use) is investigated in the present section. This effect is examined using t-tests for the dichotomous characteristics (sex and tax rate) and F-test for the quantitative characteristics with more than two levels (age and education).

Table 11 presents the results of *t*-tests for the equality of research variables between male and female participants. Statistically significant differences are found in case of perceived convenience ($t=2.39$, $p<0.05$), perceived ease of use ($t=2.93$, $p<0.05$), perceived usefulness ($t=2.57$, $p<0.05$), attitude towards using ($t=2.21$, $p<0.05$) and payment compliance ($t=2.65$, $p<0.05$). In general, male participants compared to female participants consider AADE's digital applications more convenient ($\bar{x}=5.20$, $s=1.97$ vs $\bar{x}=4.43$, $s=1.70$), easier to be used ($\bar{x}=5.48$, $s=1.42$ vs $\bar{x}=4.58$, $s=1.76$), more useful ($\bar{x}=5.45$, $s=1.43$ vs $\bar{x}=4.63$, $s=1.86$), more as better / pleasant idea ($\bar{x}=5.63$, $s=1.23$ vs $\bar{x}=5.03$, $s=1.55$) and are more payment compliant ($\bar{x}=4.84$, $s=1.38$) than women are ($\bar{x}=4.13$, $s=1.37$).

Table 11. Effect of Sex (using t-test) on Research Variables

Sex		N	Mean	Std. Deviation	t	p-value
Perceived Convenience	Male	43	5.20	1.54	2.39*	0.02
	Female	64	4.43	1.70		
Perceived Ease of Use	Male	43	5.48	1.42	2.93*	0.00
	Female	64	4.58	1.76		
Perceived Usefulness	Male	43	5.45	1.43	2.57*	0.01
	Female	64	4.63	1.86		
Attitude towards using	Male	43	5.63	1.23	2.21*	0.03
	Female	64	5.03	1.55		
Payment Compliance	Male	43	4.84	1.38	2.65*	0.01
	Female	64	4.13	1.37		
Voluntary Tax Compliance	Male	43	5.01	1.58	1.26	0.21
	Female	64	4.60	1.66		
Enforced Tax Compliance	Male	43	3.60	1.81	-0.86	0.39
	Female	64	3.91	1.77		
Intention of Use	Male	43	4.34	2.01	0.33	0.74
	Female	64	4.21	1.92		

* $p < 0.05$

Table 12 presents the results of *t*-tests for the equality of research variables between the participants that are taxed with personal tax rate and the ones taxed with the corporate tax rate. No statistically significant differences are found in this case.

Table 12. Effect of Tax Rate (using t-test) on Research Variables

My income is taxed using:		N	Mean	Std. Deviation	t	p-value
Perceived Convenience	Personal Tax Rate	103	4.74	1.66	0.21	0.83
	Corporate Tax Rate	4	4.56	2.44		
Perceived Ease of Use	Personal Tax Rate	103	4.95	1.65	0.22	0.84
	Corporate Tax Rate	4	4.65	2.72		
Perceived Usefulness	Personal Tax Rate	103	4.97	1.71	0.29	0.79
	Corporate Tax Rate	4	4.56	2.82		
Attitude towards using	Personal Tax Rate	103	5.26	1.44	-0.32	0.75
	Corporate Tax Rate	4	5.50	2.12		
Payment Compliance	Personal Tax Rate	103	4.39	1.38	-0.72	0.47
	Corporate Tax Rate	4	4.92	2.28		
Voluntary Tax Compliance	Personal Tax Rate	103	4.78	1.63	0.39	0.70
	Corporate Tax Rate	4	4.45	2.16		
Enforced Tax Compliance	Personal Tax Rate	103	3.77	1.74	-0.30	0.78
	Corporate Tax Rate	4	4.25	3.18		
Intention of Use	Personal Tax Rate	103	4.24	1.93	-0.77	0.44
	Corporate Tax Rate	4	5.00	2.45		

* $p < 0.05$

Table 13 presents the results of *F*-tests for the equality of research variables between the ageing groups. Only one statistically significant difference is found in the case of enforced tax compliance ($F=3.26$, $p<0.05$). In general, it seems that the levels of enforced tax compliance are reduced as the age increases. This means that the younger a participant is, the more she should be enforced to comply with the tax law context.

Table 13. Effect of Age (using F-test) on Research Variables

Age		N	Mean	Std. Deviation	F	p-value
Perceived Convenience	18-29 years old	6	4.13	1.95	0.25	0.91
	30-39 years old	23	4.66	1.71		
	40-49 years old	53	4.81	1.44		
	50-59 years old	23	4.82	2.05		
	> 60 years old	2	4.50	3.18		
Perceived Ease of Use	18-29 years old	6	4.83	1.64	0.16	0.96
	30-39 years old	23	4.93	1.78		
	40-49 years old	53	5.03	1.56		
	50-59 years old	23	4.83	1.90		
	> 60 years old	2	4.20	3.11		
Perceived Usefulness	18-29 years old	6	4.71	1.55	0.17	0.95
	30-39 years old	23	5.02	1.99		
	40-49 years old	53	5.04	1.53		
	50-59 years old	23	4.84	1.99		
	> 60 years old	2	4.25	3.18		
Attitude towards using	18-29 years old	6	5.00	1.05	0.39	0.82
	30-39 years old	23	5.37	1.62		
	40-49 years old	53	5.39	1.28		
	50-59 years old	23	5.02	1.74		
	> 60 years old	2	4.75	2.47		
Payment Compliance	18-29 years old	6	4.89	0.86	0.35	0.84
	30-39 years old	23	4.35	1.34		
	40-49 years old	53	4.48	1.27		
	50-59 years old	23	4.26	1.86		
	> 60 years old	2	3.83	2.59		
Voluntary Tax Compliance	18-29 years old	6	5.23	1.04	0.62	0.65
	30-39 years old	23	5.07	1.56		
	40-49 years old	53	4.75	1.54		
	50-59 years old	23	4.40	1.94		
	> 60 years old	2	4.40	3.39		
Enforced Tax Compliance	18-29 years old	6	4.00	2.39	3.26*	0.01
	30-39 years old	23	4.74	1.62		
	40-49 years old	53	3.67	1.66		
	50-59 years old	23	3.23	1.78		
	> 60 years old	2	1.63	0.53		

Intention of Use	18-29 years old	6	3.39	1.64	2.23	0.07
	30-39 years old	23	4.22	2.03		
	40-49 years old	53	4.67	1.79		
	50-59 years old	23	3.86	2.10		
	> 60 years old	2	1.50	0.71		

* $p < 0.05$

Table 14 presents the results of F -tests for the equality of research variables between the educational groups. Statistically significant differences are found in the case of perceived convenience ($F=2.83$, $p<0.05$), perceived ease of use ($F=3.69$, $p<0.05$), attitude towards using ($F=3.54$, $p<0.05$), payment compliance ($F=5.41$, $p<0.05$) and voluntary tax compliance ($F=4.30$, $p<0.05$). As observed by the means, it seems that, generally, the higher the educational level is, the more the participants consider the AADE's digital applications as convenient, easy to use and a good/pleasant idea, the more they comply their payments with the tax law context and the more voluntarily they are tax compliant.

Table 14. Effect of Education (using F -test) on Research Variables

Education		N	Mean	Std. Deviation	F	p-value
Perceived Convenience	High School	7	3.21	1.76	2.83*	0.04
	University	44	4.63	1.67		
	Master	51	4.96	1.59		
	PhD	5	5.55	1.59		
Perceived Ease of Use	High School	7	3.06	1.88	3.69*	0.01
	University	44	4.90	1.58		
	Master	51	5.20	1.63		
	PhD	5	5.40	1.58		
Perceived Usefulness	High School	7	3.39	2.21	2.10	0.11
	University	44	5.03	1.62		
	Master	51	5.09	1.74		
	PhD	5	5.15	1.49		
Attitude towards using	High School	7	3.79	1.70	3.54*	0.02
	University	44	5.14	1.43		
	Master	51	5.57	1.36		
	PhD	5	5.50	1.17		
Payment Compliance	High School	7	2.62	1.15	5.41*	0.00
	University	44	4.35	1.35		
	Master	51	4.63	1.38		
	PhD	5	5.27	0.64		
Voluntary Tax Compliance	High School	7	3.09	1.66	4.30*	0.01
	University	44	4.56	1.67		
	Master	51	5.08	1.51		
	PhD	5	5.76	0.68		
High School		7	3.11	1.86	0.86	0.46

Education		N	Mean	Std. Deviation	F	p-value
Enforced Tax Compliance	University	44	3.65	1.71	2.22*	0.09
	Master	51	4.04	1.84		
	PhD	5	3.35	1.92		
Intention of Use	High School	7	2.86	1.57		
	University	44	4.12	1.94		
	Master	51	4.65	1.88		
	PhD	5	3.60	2.41		

* $p < 0.05$

According to the results of the present section and regarding the aims of the present study, intention to use seem to be affected only by educational level.

4.4 Effect of Quantitative Variables on Research Variables

Table 15 presents the correlation coefficient matrix among the quantitative variables of the present study. It is reminded that the correlation coefficients are accompanied by a t -test for the coefficient's statistical significance. Its results here are denoted by the asterisk.

According to Table 15, there are statistically significant and positive correlations among all research variables of the present study ([C] Perceived Convenience, [D] Perceived Ease of Use, [E] Perceived Usefulness, [F] Attitude towards using, [H] Payment Compliance, [I] Voluntary Tax Compliance, [J] Enforced Tax Compliance, [K] Intention of Use). These correlations vary from weak intensity, such as in case of the correlation between Perceived Convenience and Enforced Tax Compliance ($r=0.20$, $p<0.05$), to very strong intensity, such as in case of the correlation between Perceived Convenience and Perceived Ease of Use ($r=0.88$, $p<0.05$).

Regarding sample's characteristics, extent of using AADE's digital applications are statistically significantly weakly and positively correlated with Perceived Convenience ($r=0.33$, $p<0.05$) Perceived Ease of Use ($r=0.33$, $p<0.05$), Perceived Usefulness ($r=0.28$, $p<0.05$), Attitude towards using ($r=0.21$, $p<0.05$), Payment Compliance ($r=0.21$, $p<0.05$) and Intention of Use ($r=0.29$, $p<0.05$), while years of using AADE's digital applications are statistically significantly weakly and negatively correlated with Enforced Tax Compliance ($r=-0.21$, $p<0.05$).

Table 15. Correlation (Pearson) Matrix of Research Variables

	[A]	[B]	[C]	[D]	[E]	[F]	[H]	[I]	[J]	[K]
[A]	1.00	0.38*	0.33*	0.33*	0.28*	0.21*	0.21*	0.01	-0.03	0.29*
[B]		1.00	0.10	0.09	0.11	0.13	0.15	-0.08	-0.21*	0.06
[C]			1.00	0.88*	0.82*	0.76*	0.54*	0.54*	0.20*	0.48*
[D]				1.00	0.88*	0.82*	0.55*	0.53*	0.25*	0.48*
[E]					1.00	0.83*	0.59*	0.52*	0.31*	0.46*
[F]						1.00	0.60*	0.64*	0.32*	0.57*
[H]							1.00	0.55*	0.45*	0.44*
[I]								1.00	0.32*	0.42*
[J]									1.00	0.33*
[K]										1.00

* $p < 0.05$, ** $p < 0.01$

Note. [A] Extent to which you use any AADE application, [B] Years you have been using any AADE application, [C] Perceived Convenience, [D] Perceived Ease of Use, [E] Perceived Usefulness, [F] Attitude towards using, [H] Payment Compliance, [I] Voluntary Tax Compliance, [J] Enforced Tax Compliance, [K] Intention of Use

Regarding the aims of the present study, the intention to use variable is statistically significantly moderately and positively correlated with Perceived Convenience ($r=0.48$, $p<0.05$), Perceived Ease of Use ($r=0.48$, $p<0.05$), Perceived Usefulness ($r=0.46$, $p<0.05$), Attitude towards using ($r=0.57$, $p<0.05$), Payment Compliance ($r=0.44$, $p<0.05$), Voluntary Tax Compliance ($r=0.42$, $p<0.05$), Enforced Tax Compliance ($r=0.42$, $p<0.05$) and Intention of Use ($r=0.33$, $p<0.05$), as well as with extent of using and AADE digital applications ($r=0.29$, $p<0.05$).

4.5 Investigating the Determinant Factors of Intent to Use

Tables 18 and 19 show the estimated regressions to predict intention to use AADE's digital applications. Particularly, eight regression models are estimated. All have as dependent variable the Intention to Use dimension and as independent variables the variables of characteristics of part A of questionnaire. Moreover, each one of the first seven models (model 1 to model 7) has one more different independent variable which is one of the seven research variables. The eighth model has simultaneously all the independent variables of the previous seven models.

According to Table 16, model 1 that incorporates perceived convenience as an independent variable is a statistically significant regression ($F=4.18$, $p<0.05$) that explains 26% of the total

variability of intention to use. The only statistically significant partial effect is the one of perceived convenience ($b=0.48$, $t=4.31$, $p<0.05$). The coefficient indicates that the intention to use dimension increases by 0.48 if the perceived convenience increases by one unit. Finally, no evidence of autocorrelations ($DW=1.83$) and multicollinearity ($VIFs<10$) appear.

Model 2 uses perceived ease of use as an independent variable. Perceived ease of use seems to influence in a statistically significant and positive way the intent to use dimension ($b=0.48$, $t=4.23$, $p<0.05$). Particularly, a unitary increase of perceived ease of use is anticipated to increase intention to use by 0.48. The regression is statistically significant as a whole ($F=4.09$, $p<0.05$), explains 26% of total dependent's variable variance, is free of first order errors' autocorrelation ($DW=1.78$) and of multicollinearity ($VIFs<10$).

Table 16. Regression Analysis - Dependent Variable: Intention to Use (part 1)

	Model 1				Model 2				Model 3				Model 4			
	B	t	p-value	VIF	B	t	p-value	VIF	B	t	p-value	VIF	B	t	p-value	VIF
Constant	-0.33	-0.27	0.79		-0.67	-0.53	0.60		-0.63	-0.49	0.62		-1.82	-1.49	0.14	
Sex: Female	0.39	1.08	0.28	1.19	0.46	1.26	0.21	1.21	0.39	1.07	0.29	1.19	0.46	1.37	0.17	1.19
Age: 30-39	0.22	0.28	0.78	4.17	0.48	0.59	0.55	4.16	0.37	0.46	0.65	4.16	0.25	0.34	0.73	4.17
Age: 40-49	0.62	0.81	0.42	5.69	0.93	1.20	0.23	5.70	0.85	1.09	0.28	5.69	0.73	1.02	0.31	5.68
Age: 50-59	-0.25	-0.30	0.77	4.53	0.15	0.18	0.86	4.52	0.12	0.14	0.89	4.52	0.14	0.18	0.86	4.52
Age: >60	-2.49	-1.57	0.12	1.77	-2.06	-1.29	0.20	1.78	-2.16	-1.35	0.18	1.78	-2.17	-1.47	0.14	1.77
Education: University	0.44	0.59	0.56	5.12	0.28	0.37	0.71	5.27	0.50	0.66	0.51	5.10	0.30	0.43	0.67	5.08
Education: Master	0.55	0.73	0.47	5.35	0.40	0.53	0.60	5.51	0.74	0.99	0.33	5.21	0.27	0.39	0.70	5.35
Education: Phd	0.07	0.07	0.95	1.95	0.17	0.16	0.88	1.93	0.56	0.53	0.59	1.86	0.14	0.14	0.89	1.87
Tax rate	0.84	0.95	0.35	1.08	1.00	1.12	0.27	1.09	0.97	1.08	0.28	1.09	0.73	0.89	0.38	1.08
Extent of using AADE application	0.27	1.89	0.06	1.40	0.25	1.76	0.08	1.43	0.31*	2.19	0.03	1.35	0.33*	2.59	0.01	1.29
Years of using AADE application	0.01	0.32	0.75	1.45	0.01	0.27	0.79	1.45	0.00	0.11	0.91	1.45	-0.01	-0.29	0.77	1.46
Perceived Convenience	0.48*	4.31	0.00	1.32												
Perceived Ease of Use					0.48*	4.23	0.00	1.40								
Perceived Usefulness									0.43*	4.07	0.00	1.25				
Attitude towards using													0.69*	5.97	0.00	1.24
Payment Compliance																
Voluntary Tax Compliance																
Enforced Tax Compliance																
Other Parameters:																
R-Squared		0.35				0.34				0.34				0.43		
R-Squared adjusted		0.26				0.26				0.25				0.36		
ANOVA: F (p-value)		4,18* (0,00)				4,09* (0,00)				3,95* (0.00)				5,98* (0.00)		
Durbin Watson		1.83				1.78				1.82				1.77		

* p < 0.05

Table 17. Regression Analysis - Dependent Variable: Intention to Use (part 2)

	Model 5				Model 6				Model 7				Model 8			
	B	t	p-value	VIF	B	t	p-value	VIF	B	t	p-value	VIF	B	t	p-value	VIF
Constant	-0.89	-0.68	0.50		-1.31	-1.02	0.31		-0.51	-0.38	0.70		-2.42	-1.93	0.06	
Sex: Female	0.38	1.03	0.30	1.19	0.34	0.96	0.34	1.17	0.11	0.29	0.77	1.15	0.44	1.27	0.21	1.25
Age: 30-39	0.74	0.90	0.37	4.21	0.47	0.60	0.55	4.16	0.16	0.19	0.85	4.20	0.16	0.21	0.83	4.49
Age: 40-49	1.13	1.43	0.15	5.77	1.00	1.31	0.19	5.71	0.85	1.06	0.29	5.69	0.78	1.06	0.29	6.05
Age: 50-59	0.42	0.49	0.62	4.59	0.26	0.31	0.75	4.54	0.18	0.21	0.84	4.53	0.17	0.22	0.83	4.83
Age: >60	-1.71	-1.05	0.30	1.81	-2.43	-1.55	0.12	1.77	-2.06	-1.25	0.21	1.79	-2.03	-1.36	0.18	1.84
Education: University	0.31	0.41	0.68	5.30	0.56	0.77	0.44	5.01	1.19	1.60	0.11	4.83	0.29	0.39	0.70	5.75
Education: Master	0.42	0.54	0.59	5.59	0.55	0.75	0.46	5.30	1.37	1.86	0.07	4.91	0.13	0.18	0.86	6.19
Education: Phd	-0.08	-0.07	0.94	2.02	0.24	0.23	0.82	1.90	1.43	1.35	0.18	1.79	-0.12	-0.11	0.91	2.25
Tax rate	0.65	0.72	0.47	1.08	0.96	1.10	0.28	1.09	0.50	0.54	0.59	1.08	0.60	0.72	0.47	1.13
Extent of using AADE application	0.35*	2.54	0.01	1.31	0.43*	3.28	0.00	1.25	0.43*	3.13	0.00	1.25	0.34*	2.46	0.02	1.53
Years of using AADE application	-0.01	-0.32	0.75	1.48	0.02	0.48	0.63	1.45	0.03	0.71	0.48	1.47	0.00	0.06	0.96	1.66
Perceived Convenience													0.17	0.82	0.41	5.28
Perceived Ease of Use													-0.06	-0.25	0.80	7.97
Perceived Usefulness													-0.21	-1.02	0.31	5.90
Attitude towards using													0.61*	2.70	0.01	4.83
Payment Compliance	0.53*	3.90	0.00	1.37									0.08	0.45	0.66	2.59
Voluntary Tax Compliance					0.49*	4.60	0.00	1.17					0.13	1.00	0.32	2.09
Enforced Tax Compliance									0.34*	3.37	0.00	1.16	0.15	1.40	0.16	1.71
Other Parameters:																
R-Squared		0.33				0.36				0.30				0.47		
R-Squared adjusted		0.24				0.28				0.21				0.37		
ANOVA: F (p-value)		3.80* (0.00)				4.44* (0.00)				3.39* (0.00)				4.40* (0.00)		
Durbin Watson		1.97				1.72				1.78				1.77		

* p < 0.05

Based on results of Table 16, model 3 that incorporates perceived usefulness as an independent variable is a statistically significant regression ($F=3.95, p<0.05$) that explains 25% of the total variability of intention to use. There are two statistically significant partial effects. The first is the one of perceived usefulness ($b=0.43, t=4.07, p<0.05$). The coefficient indicates that the intention to use dimension increases by 0.43 if the perceived usefulness increases by one unit. The second is the one of extent of using AADE's digital applications ($b=0.31, t=2.19, p<0.05$). The coefficient indicates that the intention to use dimension increases by 0.31 if the extent of using increases by one unit. Finally, no evidence of autocorrelations ($DW=1.82$) and multicollinearity ($VIFs<10$) appear.

Finally Model 4 uses Attitude towards Using as an independent variable. Attitude towards Using seems to influence in a statistically significant and positive way the intention to use dimension ($b=0.69, t=5.97, p<0.05$). Particularly, a unitary increase of attitude towards using is anticipated to increase intention to use by 0.69. Moreover, the extent of using AADE's digital applications also seems to influence in a statistically significant and positive way the intention to use dimension ($b=0.33, t=2.59, p<0.05$). Particularly, a unitary increase of this variable is anticipated to increase intention to use by 0.33. The regression is statistically significant as a whole ($F=5.98, p<0.05$), explains 36% of total dependent's variable variance, is free of first order errors' autocorrelation ($DW=1.77$) and of multicollinearity ($VIFs<10$).

According to Table 17, model 5 that incorporates payment compliance as an independent variable is a statistically significant regression ($F=3.80, p<0.05$) that explains 24% of the total variability of intention to use. The only two statistically significant partial effects is the one of payment compliance ($b=0.53, t=3.90, p<0.05$) and of extent of using ($b=0.35, t=2.54, p<0.05$). The coefficients indicate that the intention to use dimension increases by 0.53 and 0.35 if the payment compliance and extent of using increase by one unit respectively. Finally, no evidence of autocorrelations ($DW=1.97$) and multicollinearity ($VIFs<10$) appear.

Model 6 uses voluntary tax compliance as an independent variable. Voluntary tax compliance seems to influence in a statistically significant and positive way the intention to use dimension ($b=0.49, t=4.60, p<0.05$) as well as the extent of using AADE's digital application variable ($b=0.43, t=3.28, p<0.05$). Particularly, a unitary increase of perceived ease of use and of extend of using applications are anticipated to increase intention to use by 0.49 and 0.43 respectively. The regression is statistically significant as a whole ($F=4.44, p<0.05$), explains 28% of total

dependent's variable variance, is free of first order errors' autocorrelation ($DW=1.72$) and of multicollinearity ($VIFs<10$).

Based on results of Table 17, model 7 that incorporates enforced tax compliance as an independent variable is a statistically significant regression ($F=3.39, p<0.05$) that explains 21% of the total variability of intention to use. There are two statistically significant partial effects. The first is the one of enforced tax compliance ($b=0.34, t=3.37, p<0.05$). The coefficient indicates that the intention to use dimension increases by 0.34 if the enforced tax compliance increases by one unit. The second is the one of extent of using AADE's digital applications ($b=0.43, t=3.13, p<0.05$). The coefficient indicates that the intention to use dimension increases by 0.43 if the extent of using increases by one unit. Finally, no evidence of autocorrelations ($DW=1.78$) and multicollinearity ($VIFs<10$) appear.

Finally, Model 8 incorporates all research variables, but only two of them seem to retain their statistically significant partial effect. Particularly, Attitude towards Using seems to influence in a statistically significant and positive way the intention to use dimension ($b=0.61, t=2.70, p<0.05$). Particularly, a unitary increase of attitude towards using is anticipated to increase intention to use by 0.61. Moreover, the extent of using AADE's digital applications also seems to influence in a statistically significant and positive way the intention to use dimension ($b=0.34, t=2.46, p<0.05$). Particularly, a unitary increase of this variable is anticipated to increase intention to use by 0.34. The regression is statistically significant as a whole ($F=4.40, p<0.05$), explains 37% of total dependent's variable variance, is free of first order errors' autocorrelation ($DW=1.77$) and of multicollinearity ($VIFs<10$).

In general, the most suitable regression model to predict the intention to use AADE's digital applications is Model 8, since it provides the higher adjusted coefficient of determination. The second best is Model 4, that incorporates only the Attitude towards Using dimension.

4.6 Discussion

As stated above, the aim of the present study is whether the Greek taxpayers are interested in adopting and using AADE marketing tools, and more specifically, its digital mobile applications. To this aim, eight following research hypotheses were formed and the appropriate

statistical analysis was applied. The results with respect to each hypothesis are discussed in the present section.

H₁: The perceived convenience of digital tools of AADE increases the taxpayers' intention to use them.

In general, the respondents evaluate the digital applications of AADE as moderately convenient. However, male participants, participants of higher educational levels and the ones that already use AADE's digital applications to greater extent attribute higher level of convenience to them compared to female participants, participants of lower educational levels are the ones that hardly use them. On a univariate basis, perceived convenience positively affects the intention of taxpayers to use AADE's digital no matter whether the participants' characteristics are considered or not. However, when all research variables are incorporated, perceived convenience lose its significance.

H₂: The perceived ease-of-use of digital tools of AADE increases the taxpayers' intention to use them.

Ease of use of AADE's digital applications is evaluated as high, according to the sample's responses. Particularly, male participants, participants of higher education and the ones that have already use extendedly the AADE's digital applications think of them as easier compared to female participants, participants of lower educational levels and the ones that state a lower level of use. Regarding this dimension's effect, it seems that it positively influences the intention to use when it is regarded alone, even if the impacts of participants' characteristics are incorporated. On the other hand, when perceived ease of use is incorporated with the other research variables together, it does not retain its positive effect.

H₃: The perceived usefulness of digital tools of AADE increases the taxpayers' intention to use them.

Generally, the sample evaluates the digital applications of AADE as useful. Male participants and the ones that already use AADE's digital applications to greater extent are differentiated compared to female participants and the ones that hardly use them attributing higher level of usefulness. On a univariate basis, perceived usefulness positively affects the intention to use AADE's digital no matter whether the participants' characteristics are considered or not. However, when all research variables are incorporated, perceived usefulness' impact vanishes.

H₄: The attitude towards using digital tools of AADE increases the taxpayers' intention to use them.

Attitude towards using AADE's digital applications is evaluated as really high, according to the sample's responses. Once more, the three characteristics that differentiate the level of this dimension is sex, education, and extent of use. Specifically, male participants, participants of higher education and the ones that have already use extendedly the AADE's digital applications think of them as better or a more pleasant idea compared to female participants, participants of lower educational levels and the ones that state a lower level of use. Regarding this dimension's effect, it seems that it positively influences the intention to use when it is regarded alone, even if the impacts of participants' characteristics are incorporated. Moreover, when attitude towards using is incorporated with the other research variables together, it retains its positive effect substituting the rest research variables in terms of interpreting power.

H₅: Payment compliance increases the taxpayers' intention to use AADE's digital tools.

Payment compliance level is about moderate. Most participants seem to pay their tax obligations on time and before other bills. This dimension seems to be even higher for the ones that are of higher educational groups and the ones that use already extendedly the AADE's digital applications compared to the participants of lower educational groups and the ones that do not use extendedly the AADE's digital applications. Regarding the one-to-one relationship between tax compliance and intention to use, a positive one is observed even if the participants' characteristics are taken into account. Incorporating, however, all research variables, the payment compliance stops determining the level of intention to use.

H₆: Voluntary tax compliance increases the taxpayers' intention to use AADE's digital tools.

Generally, voluntary tax compliance, according to descriptive statistics, is of quite high level in the sample. However, higher educated participants seem to comply more voluntarily with the tax law context compared to the lower educated participants. The impact of this specific dimension is positive when it is considered alone or with the other sample's characteristics, but it extinguishes when the other research variables are incorporated.

H₇: Enforced tax compliance increases the taxpayers' intention to use AADE's digital tools.

Enforced tax compliance is evaluated as moderate, according to the sample's responses. Particularly, younger participants and participants use AADE's digital applications for longer periods comply with the tax laws by enforcement more than the older ones and the ones that use AADE's digital applications for shorter periods. Regarding this dimension's effect, it seems that it positively influences the intention to use when it is regarded alone, even if the impacts of participants' characteristics are incorporated. On the other hand, when enforced tax compliance is incorporated with the other research variables together, it does not retain its positive effect.

H₈: The taxpayers' demographic characteristics affect their intention to use AADE's digital tools.

According to the above results, the tax rate coefficient provided no statistically significant effect, while male participants, participants with higher education levels, younger participants and the ones that use AADE's digital application with higher extent or for longer periods seem to express more positive views. Regarding intention to use dimension, which is in moderately high levels, statistically significant effects are posed only by the education level and extent of using the applications. However, it should be mentioned, that the extent of using AADE's digital applications retains its significantly positive effect in most of the cases that other research variables are incorporated.

To sum up, regarding TAM variables and according to the above results, the present study seems to provide evidence in favor of the argument that the effects of perceived convenience, perceived ease-of-use, perceived usefulness, and attitude towards using on intention to use a technology are positive (Chang et al., 2012; Sun & Mei, 2020; Teo et al., 2018). As a result, the present study stands by the side of previous research that claimed that these positive effects are present even when they refer and are applied in tax system context (Ozgen & Turan, 2007; Cakmak et al., 2011; Mellouli et al., 2016; Sondakh, 2017; Soneka & Phiri, 2019; Wulandari et al., 2023; Gupta et al., 2015). On the other hand, regarding tax compliance, payment compliance, voluntary and enforced tax compliance, these factors seem to influence in a positive way the intention to use digital applications. As a result the present study also confirms that there is a positive relationship between acceptance of digital tools and the tax compliance of the tax payers. There have not been previous research findings for this relationship, using tax compliance as an independent variable and acceptance of digital tools as the dependent

variable, as there is a gap in the tax literature. However, there have been previous researchers confirming the opposite direction between the two variables (Rakhmawati & Rusydi, 2020; Night & Bananuka, 2020; Taking & Chang, 2021; Chan et al., 2000). Finally, demographic factors are always considered to influence various attitudes and perceptions, both regarding tax compliance or not and regarding technology acceptance (Chau & Leung, 2009). The present study provides evidence supporting this opinion.

Chapter 5: Conclusions

5.1 Main conclusions of the study

AADE uses a multi-level communication strategy, using website, mobile applications, emails, press releases, social media and many more, in order to increase awareness of the public of the advancements made by the Greek Tax Authority, provide more information (Pambudi, 2015), make more understandable the complex tax legal system (McKerchar, 2001; Kirchler et al., 2006; Kirchler et al., 2008), increase transparency and accountability (Kirchler et al., 2008), perceptions of tax justice (Richardson, 2006; Barbuta – Misu, 2011) and so forth, but also to show that these advancements and digital transformation increase the possibility of being audited if an entity evades its taxes (Allingham & Sandmo, 1972; Cuccia, 1994; Alm et al., 2012). They seem to be more willing to cooperate after realizing that the tax authority provides the useful information and guidance.

By utilizing a multi-channel approach, AADE aims to increase transparency, ensure compliance, and foster a culture of responsible tax payment among its citizens, in order for the taxpayers to increase their trust towards the Tax Administration and enhance their tax compliance. In today's increasingly digital and online world, the use of tax applications has become a crucial element for taxpayers to manage their financial obligations effectively. With the rapid evolution of technology, tax applications, such as e-filing and online tax platforms, have streamlined the tax process, enabling taxpayers to file taxes efficiently, track their returns, and receive timely notifications. However, the decision to adopt such applications depends on various factors that influence the taxpayers' intention to use them. This study aimed at investigating the factors that can boost the adoption of new technological tools and, particularly, the digital application of AADE.

Intention to use digital applications of AADE seem to be affected in a similar way that all other technologies are. Particularly, intention to use is enhanced by the level of convenience, ease of use, usefulness and general attitude that the taxpayers perceive from their use. However, when all of this are taken into account simultaneously, only the question whether the applications are a good or a pleasant idea seem to retain its impact. Moreover, the extent of using the existing digital applications also seems to determine the intention to use. Hence, it is indicated that the

more familiar a taxpayer is with the present digital applications, the more likely it is that they continue to use or start to use the new ones. Moreover, the intention to use seems to be positively affected by payment compliance, voluntary tax compliance and enforced tax compliance. Finally, the male taxpayers, the younger participants, and the ones with higher education appear to be more positive towards AADE's digital applications no matter what dimension is examined.

To sum up, intention of use can mainly be improved by promoting the fact that AADE's digital applications are a good / pleasant idea. This can be even more achieved by highlighting the convenience, the ease of use and the usefulness that they provide. Finally, if a taxpayer uses digital applications seems to be engaged to use of the new ones, too. So, the intent of taxpayers to use tax applications is influenced by a variety of factors, including technological ease of use, psychological trust, socio-economic characteristics. The tax administration must take these factors into account to create applications that are accessible, secure, and user-friendly. By addressing these factors, governments can increase the adoption of digital tax platforms, making tax filing a smoother and more efficient process for taxpayers worldwide. Furthermore, tax compliance and the adoption of tax administration applications are closely interlinked. As taxpayers comply with tax regulations and experience the benefits of automation, efficiency, and fairness, they are more likely to adopt and consistently use these applications.

5.2 Recommendations

The results of the research could be appropriately utilized by tax policy makers, with the aim of promoting the adoption of tax applications, especially for honest and tax compliant taxpayers. Also, the findings can constitute a tool for tax officials in order to better understand and properly manage taxpayers, whose psychology and tax guidance is a catalytic factor in their tax compliance. In order to achieve a greater degree of adoption, policy makers and AADE need to highlight the benefits of the adoption for the taxpayers, taking into consideration the factors found to be positively related to the intention to use. More specifically, the intention of taxpayers to use tax applications is found to be influenced by a variety of factors, including technological factors (such as ease of use, convenience), psychological factors (such as trust,

perceived convenience) and socio-economic characteristics (such as age, education level, income and so forth).

Special attention should be paid to compliant taxpayers, as the findings of the study concluded to a positive relation between tax compliance and intention to adopt tax applications. This means that compliant taxpayers are more likely to use these applications. For these users, AADE should highlight the benefits tax applications offer. Compliant tax payers will build a relation of trust and communication with the tax authority, they will avoid mistakes, gain confidence, they will avoid errors in tax filling, their tax payments will be more efficient, their obligations will be more easily met, their taxes will be paid on time, so their risk of penalties will be reduced and they will have significant time and cost savings.

5.3 Weaknesses of the study and Propositions for future research

The basic limitation is the relatively small sample size regarding to the total population as well as its sampling method. This may result in a biased and not representative sample leading to unreliable conclusions. This is a significant reason why future researchers should examine the same topic in order to confirm the conclusion drawn by the present research. After all, the ways to promote the intention to use of AADE's digital applications may be crucial to tax revenues support and increase. Second, the present study provided also evidence that use of AADE's digital application can increase the tax and payment compliance. This is an interesting relationship that should be investigated in the future.

In addition, it would be interesting to carry out a future study that would also use a qualitative approach, through interviews with taxpayers, tax officials and so forth, as many aspects of tax compliance are not easily covered through quantitative surveys.

References

- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of public economics*, 1(3-4), 323-338.
- Alm, J., Cherry, T., Jones, M., & McKee, M. (2010). Taxpayer information assistance services and tax compliance behavior. *Journal of economic psychology*, 31(4), 577-586.
- Alm, J., Kirchler, E., Muehlbacher, S., Gangl, K., Hofmann, E., Kogler, C., & Pollai, M. (2012). Rethinking the research paradigms for analysing tax compliance behaviour. In *CESifo forum* (Vol. 13, No. 2, pp. 33-40). München: ifo Institut-Leibniz-Institut für Wirtschaftsforschung an der Universität München.
- Barbuta-Misu N., (2011). A Review of Factors for Tax Compliance. *Annals of "Dunarea de Jos" University of Galati Fascicle I. Economics and Applied Informatics*, 17(1), 69-76.
- Cakmak, A. F., Benk, S., & Budak, T. (2011). The acceptance of tax office automation system (VEDOP) by employees: factorial validation of Turkish adapted Technology Acceptance Model (TAM). *International Journal of Economics and Finance*, 3(6), 107-116.
- Chan, C. W., Troutman, C. S., & O'Bryan, D. (2000). An expanded model of taxpayer compliance: Empirical evidence from the United States and Hong Kong. *Journal of international accounting, auditing and taxation*, 9(2), 83-103.
- Chang, C. C., Yan, C. F., & Tseng, J. S. (2012). Perceived convenience in an extended technology acceptance model: Mobile technology and English learning for college students. *Australasian Journal of Educational Technology*, 28(5).
- Chau, K. G., & Leung, P. (2009). A critical review of Fischer tax compliance model: A research synthesis. *Journal of accounting and taxation*, 1(2), 34-40.
- Chiumya, C. (2006). Counteracting tax evasion in Malawi: An analysis of the methods and a quest for improvement. MPRA Paper No. 9892.
- Chuttur, M. Y. (2009). Overview of the technology acceptance model: Origins, developments and future directions. *Working Papers on Information Systems*, 9(37), 9-37.

- Cuccia, A. D. (1994). The economics of tax compliance: What do we know and where do we go?. *Journal of accounting literature*, 13, 81.
- Daude, C., Gutierrez, H., & Melguizo, A. (2013). What drives tax morale? A focus on emerging economies. *Review of Public Economics*, 207(4), 9-40.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of personality and Social Psychology*, 18(1), 105.
- Fauziati, P., Minovia, A. F., Muslim, R. Y., & Nasrah, R. (2020). The impact of tax knowledge on tax compliance case study in Kota Padang, Indonesia. *Journal of Advanced Research in Business and Management Studies*, 2(1), 22-30.
- Feld, L. P., & Frey, B. S. (2002). Trust breeds trust: How taxpayers are treated. *Economics of governance*, 3, 87-99.
- Feld, L. P., & Frey, B. S. (2007). Tax compliance as the result of a psychological tax contract: The role of incentives and responsive regulation. *Law & Policy*, 29(1), 102-120.
- Fischer, C. M., Wartick, M., & Mark, M. M. (1992). Detection probability and taxpayer compliance: A review of the literature. *Journal of accounting literature*, 11, 1.
- Gangl, K., & Torgler, B. (2020). How to achieve tax compliance by the wealthy: A review of the literature and agenda for policy. *Social Issues and Policy Review*, 14(1), 108-151.
- Gupta, G., Zaidi, S. K., Udo, G., & Bagchi, K. (2015). The influence of theory of planned behavior, technology acceptance model, and information system success model on the acceptance of electronic tax filing system in an emerging economy. *The International Journal of Digital Accounting Research*, 15, 155-185.
- IRS, (2020). Talkpoints for managers. Federal Employee tax compliance responsibilities. Publication 4852. Available at: <https://www.irs.gov/pub/irs-pdf/p4852.pdf>

- Kastlunger, B., Lozza, E., Kirchler, E., & Schabmann, A. (2013). Powerful authorities and trusting citizens: The Slippery Slope Framework and tax compliance in Italy. *Journal of Economic psychology*, 34, 36-45.
- Kirchgässner, G. (2011). Tax morale, tax evasion and the shadow economy. In *Handbook on the shadow economy*. Edward Elgar Publishing.
- Kirchler, E. (2007). *The economic psychology of tax behaviour*. Cambridge University Press.
- Kirchler, E., & Wahl, I. (2010). Tax compliance inventory TAX-I: Designing an inventory for surveys of tax compliance. *Journal of Economic Psychology*, 31(3), 331-346.
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary tax compliance: The “slippery slope” framework. *Journal of Economic psychology*, 29(2), 210-225.
- Kirchler, E., Niemiowski, A., & Wearing, A. (2006). Shared subjective views, intent to cooperate and tax compliance: Similarities between Australian taxpayers and tax officers. *Journal of economic psychology*, 27(4), 502-517.
- Koessler, A. K., Torgler, B., Feld, L. P., & Frey, B. S. (2016). Commitment to pay taxes: A field experiment on the importance of promise. *Tax and Transfer Policy Institute-Working Paper*, 10.
- Kouremenos, A., (2008). Marketing II: Market Survey (C'), Patras: Hellenic Open University.
- LeBaube, R. A. (1992). Assisting Taxpayers in Meeting Their Obligations Under the Law. In *Improving Tax Administration in Developing Countries*. International Monetary Fund.
- Linkedin.com, “AAΔE - IAPR”. Available at: <https://www.linkedin.com/company/aade-iapr/>
- McKerchar, M. (2001). Why do taxpayers comply-past lessons and future directions in developing a model of compliance behaviour. *Austl. Tax F.*, 16, 99.
- McLeod, A., Pippin, S., & Catania, V. (2009). Using technology acceptance theory to model individual differences in tax software use. *Proceedings of the Fifteenth Americas Conference on Information Systems*, San Francisco, California August 6th-9th 2009

- Mellouli, M., Bentahar, O., & Bidan, M. (2016). Trust and e-government acceptance: The case of Tunisian on-line tax filing. *Electronic Journal of Information Systems Evaluation*, 19(3), pp197-212.
- Muehlbacher, S., & Kirchler, E. (2010). Tax compliance by trust and power of authorities. *International Economic Journal*, 24(4), 607-610.
- Murphy, K. (2004). Aggressive tax planning: Differentiating those playing the game from those who don't. *Journal of Economic Psychology*, 25(3), 307-329.
- Murphy, K. (2005). Regulating more effectively: The relationship between procedural justice, legitimacy, and tax non-compliance. *Journal of law and Society*, 32(4), 562-589.
- Murphy, K. (2008). Enforcing tax compliance: to punish or persuade?. *Economic analysis and policy*, 38(1), 113-135.
- OECD, (2022). *Tax administration 2022. Comparative information on OECD and other advanced and emerging economies*. Paris: OECD.
- Ong, C. S., & Lai, J. Y. (2006). Gender differences in perceptions and relationships among dominants of e-learning acceptance. *Computers in human behavior*, 22(5), 816-829.
- Ozgen, F., & Turan, A. H. (2007, September). Usage and adoption of online tax filing and payment system in tax management: an empirical assessment with technology acceptance (TAM) model in Turkey. In *9th International Scientific Conference, Management Horizons: Visions and Challenges*, Vytautas Magnus University, Kaunas.
- Pambudi, P., Restianto, Y., & Hayu WK, W. (2015). Determinants of Local Taxpayers Compliance in Paying Restaurant Taxes (Studies in Cilacap City). *Determinants of Local Taxpayers Compliance in Paying Restaurant Taxes (Studies in Cilacap City)*(February 4, 2015).
- Perez-Truglia, R., & Troiano, U. (2015). *Shaming tax delinquents: Theory and evidence from a field experiment in the United States*. National Bureau of Economic Research.
- Pierro, A., Kruglanski, A. W., & Raven, B. H. (2012). Motivational underpinnings of social influence in work settings: Bases of social power and the need for cognitive closure. *European Journal of Social Psychology*, 42(1), 41-52.

- Pommerehne, W. W., & Weck-Hannemann, H. (1996). Tax rates, tax administration and income tax evasion in Switzerland. *Public choice*, 88(1), 161-170.
- Raven, B. H. (1993). The bases of power: Origins and recent developments. *Journal of social issues*, 49(4), 227-251.
- Raven, B. H., Schwarzwald, J., & Koslowsky, M. (1998). Conceptualizing and measuring a power/interaction model of interpersonal influence 1. *Journal of applied social psychology*, 28(4), 307-332.
- Riahi-Belkaoui, A. (2004). Relationship between tax compliance internationally and selected determinants of tax morale. *Journal of international accounting, auditing and taxation*, 13(2), 135-143.
- Richardson, G. (2006). Determinants of tax evasion: A cross-country investigation. *Journal of international Accounting, Auditing and taxation*, 15(2), 150-169.
- Richardson, G. (2006). The impact of tax fairness dimensions on tax compliance behavior in an Asian jurisdiction: The case of Hong Kong. *Int'l Tax J.*, 32, 29.
- Roca, J. C., & Gagné, M. (2008). Understanding e-learning continuance intention in the workplace: A self-determination theory perspective. *Computers in human behavior*, 24(4), 1585-1604.
- Rutkauskas, V. (2016). Factors behind weak tax morale: the case of European Union countries. *Ekonomika*, 95(3), 7-27.
- Shin, D. H. (2007). User acceptance of mobile Internet: Implication for convergence technologies. *Interacting with computers*, 19(4), 472-483.
- Slemrod, J. (1992). Taxation and inequality: a time-exposure perspective. *Tax policy and the economy*, 6, 105-127.
- Slemrod, J., & Gillitzer, C. (2014). Insights from a Tax-systems Perspective. *CESifo Economic Studies*, 60(1), 1-31.
- Sondakh, J. J. (2017). Behavioral intention to use e-tax service system: An application of technology acceptance model. *European Research Studies Journal*, 20 (2a), 48-64.

- Soneka, P. N., & Phiri, J. (2019). A model for improving e-tax systems adoption in rural Zambia based on the TAM model. *Open Journal of Business and Management*, 7(2), 908-918.
- Spiegel, M.R., & Stephens, L.J. (2017). *Statistics*, 5th Edition, Thessaloniki: Publications TZIOLA.
- Sun, P. P., & Mei, B. (2020). Modeling preservice Chinese-as-a-second/foreign-language teachers' adoption of educational technology: a technology acceptance perspective. *Computer Assisted Language Learning*, 1-24.
- Teo, T. (2012). Examining the intention to use technology among pre-service teachers: An integration of the technology acceptance model and theory of planned behavior. *Interactive Learning Environments*, 20(1), 3-18.
- Torgler, B., & Schneider, F. (2009). The impact of tax morale and institutional quality on the shadow economy. *Journal of Economic Psychology*, 30(2), 228-245.
- Tsantas, N., Moysiades, C., Bagiatis, N., & Chatzipantelis, T. (1999). *Data Analysis using Statistical Package*, Thessaloniki: Publications ZHTH.
- Wenzel, M. (2002). Tax compliance and the psychology of justice: Mapping the field. *Taxing democracy*, 41-70.
- Wulandari, D. S., & Dasman, S. (2023). Taxpayer compliance: The role of taxation digitalization system and technology acceptance model (TAM) with internet understanding as a mediating variable. *East Asian Journal of Multidisciplinary Research*, 2(6), 2385-2396.
- Yoon, C., & Kim, S. (2007). Convenience and TAM in a ubiquitous computing environment: The case of wireless LAN. *Electronic Commerce Research and Applications*, 6(1), 102-112.
- Βασαρδάνη, Μ., (2011). Φοροδιαφυγή στην Ελλάδα: Μια γενική επισκόπηση. *Τράπεζα της Ελλάδας, Οικονομικό Δελτίο*, 35, 15-26.
- Ευρωπαϊκή επιτροπή, (2015). *Φορολογία*. Λουξεμβούργο: Υπηρεσία Εκδόσεων της Ευρωπαϊκής Ένωσης.
- Ράπανος Β., & Καπλάνογλου Γ., (2014). Φορολογία και Οικονομική Ανάπτυξη: Η Περίπτωση της Ελλάδας. Στον συλλογικό τόμο: της Ένωσης Ελληνικών Τραπεζών *Ανταγωνιστικότητα για Ανάπτυξη: Προτάσεις Πολιτικής*, 609-637.

Τάτσος Ν., (2012). Θεωρία Των Φόρων Και Φορολογική Πολιτική. Αθήνα: Εκδόσεις Κρητική.

Φινοκαλιώτης, Κ. (2014). Φορολογικό Δίκαιο. Αθήνα-Θεσσαλονίκη: Εκδόσεις Σάκκουλα.

Φινοκαλιώτης, Κ.Δ. (2005). *Φορολογικό Δίκαιο: Ουσιαστικό Μέρος, Φορολογική Διαδικασία, Φορολογική Δικονομία*. Αθήνα-Θεσσαλονίκη: Εκδόσεις Σάκκουλα.

Electronic sources

AADE, “Apodeixi”. Available at: <https://www.aade.gr/appodixi>

AADE, “My AADE App”. Available at: <https://www.aade.gr/myaadeapp>

AADE, “Ηλεκτρονικά βιβλία AADE – Α. 1138/2020”. Available at: https://www.aade.gr/sites/default/files/2021-04/FAQs_myDATA_a1138_2020.pdf

AADE, «Αποστολή και αρμοδιότητες». Available at: <https://www.aade.gr/aade/apostoli-armodiotites>

European Commission, “Tax administration”. Available at: https://taxation-customs.ec.europa.eu/taxation/tax-transparency-cooperation/administrative-co-operation-and-mutual-assistance/tax-administration_en

MyAADE, Ψηφιακή πύλη. Διαθέσιμο στο: <https://www1.aade.gr/aadeapps3/myaade/#!/arxiki>

X.com, “AADE - IAPR”. Available at: https://x.com/AADE_IAPR?mx=2

YouTube, “AADE Ανεξάρτητη Αρχή Δημοσίων Εσόδων”, επίσημο κανάλι. Available at: <https://www.youtube.com/@AA-wi8kc>

YouTube, “AADE Ανεξάρτητη Αρχή Δημοσίων Εσόδων”, επίσημο κανάλι. Available at: <https://www.youtube.com/@AA-wi8kc>

AADE, «Ανακοινώσεις». Διαθέσιμο στο: <https://www.aade.gr/anakoinoseis>

AADE, επίσημη ιστοσελίδα. Διαθέσιμο στο: <https://www.aade.gr/>

Appendix I: English Version of Questionnaire

Questionnaire

This questionnaire is a research tool carried out in the context of a thesis entitled “The marketing tools used by the Independent Authority of Public Revenue (AADE) to promote its vision and mission.” This specific survey aims to examine taxpayers’ attitudes towards the use of digital applications introduced by the Independent Authority of Public Revenue (AADE) and their intention to use them. The results of the survey will not be used for commercial purposes. The questionnaire consists of closed-ended questions and takes only a few minutes to complete. Your participation is anonymous and voluntary.

Demographics

1. Sex:

Male

Female

2. Age:

18-29

30-39

40-49

50-59

>60

3. Educational Level:

High School

University

Master

PhD

Other

4. My income is taxed with:

The tax rate that corresponds to me based on the Personal Income Tax scale

The tax rate that corresponds to me based on the Corporate Income Tax scale

5. Determine the extent to which you use any AADE application.

1 [Not at all]	2	3	4	5	6	7 [Constantly]

6. How long (in years) have you been using any AADE application? Please fill in approximately in years: _____

Perceived Convenience

Please indicate how much you agree with the following statements, from 1 (strongly disagree) to 7 (strongly agree).

	1	2	3	4	5	6	7
7. I can interact with AADE at any time through its digital applications.							
8. I can interact with AADE at any place through its digital applications.							
9. AADE's digital applications are convenient for me to engage in my interaction with it.							
10. I feel that AADE's digital applications are convenient to interact with AADE.							

Perceived Ease of Use

Please indicate how much you agree with the following statements, from 1 (strongly disagree) to 7 (strongly agree).

	1	2	3	4	5	6	7
11. I would find it easy to use a digital application of AADE to interact with it.							
12. My interaction with AADE through its digital application is clear and understandable.							
13. I believe that a digital application of the AADE provides its user with significant flexibility.							
14. It is easy for me to become skillful at using a digital application of AADE.							
15. In general, I find it easy to use a digital application of the AADE.							

Perceived Usefulness

Please indicate how much you agree with the following statements, from 1 (strongly disagree) to 7 (strongly agree).

	1	2	3	4	5	6	7
16. Using digital applications enables me to interact more quickly with AADE.							
17. Using digital applications improves the performance of my communication with AADE.							

18. Using digital applications enhances the effectiveness of my interaction with AADE.							
19. Using digital applications can make my interaction with AADE easier.							

Attitude towards using

Please indicate how much you agree with the following statements, from 1 (strongly disagree) to 7 (strongly agree).

	1	2	3	4	5	6	7
20. Using digital applications to interact with AADE is a good idea.							
21. Using digital applications to interact with AADE is a pleasant idea.							

Tax Compliance

Please indicate how much you agree with the following statements, from 1 (strongly disagree) to 7 (strongly agree).

	1	2	3	4	5	6	7
22. I pay my taxes before I pay any other bills.							
23. I pay my taxes on time.							
24. I pay taxes on their due date and as long as I have received a relevant notice.							

Voluntary Tax Compliance

Please indicate how much you agree with the following statements, from 1 (strongly disagree) to 7 (strongly agree).

<i>When I pay my taxes as required by the regulations, I do so...:</i>	1	2	3	4	5	6	7
25. Because for me it's obvious that this is what you do.							
26. To support the state and other citizens.							
27. Because I like to contribute to everyone's good.							
28. Because for me it's the natural thing to do.							
29. Because I regard it as my duty as citizen.							

Enforced Tax Compliance

Please indicate how much you agree with the following statements, from 1 (strongly disagree) to 7 (strongly agree).

<i>When I pay my taxes as required by the regulations, I do so...:</i>	1	2	3	4	5	6	7
30. Because a great many tax audits are carried out.							
31. Because AADE often carries out audits.							

32. Because I know that I will be audited, otherwise.							
33. Because the punishments for tax evasion are very severe.							

Intention of Use

Please indicate how much you agree with the following statements, from 1 (strongly disagree) to 7 (strongly agree).

	1	2	3	4	5	6	7
34. In next weeks, I would like to start using AADE's digital applications.							
35. In next weeks, I predict that I will start using AADE's digital applications.							
36. In next weeks, I plan to use AADE's digital applications.							

Thank you!

Appendix II: Greek Version of Questionnaire

Ερωτηματολόγιο έρευνας

Το παρόν ερωτηματολόγιο αποτελεί εργαλείο έρευνας που διενεργείται στα πλαίσια εκπόνησης διπλωματικής εργασίας με τίτλο «Τα εργαλεία μάρκετινγκ που χρησιμοποιεί η ΑΑΔΕ για να προωθήσει το όραμα και την αποστολή της.». Η συγκεκριμένη έρευνα έχει στόχο να εξετάσει τις στάσεις των φορολογούμενων στη χρήση των ψηφιακών εφαρμογών που εισάγει η Ανεξάρτητης Αρχής Δημοσίων Εσόδων (Α.Α.Δ.Ε.) και την πρόθεσή τους να το χρησιμοποιήσουν. Τα αποτελέσματα της έρευνας δεν θα χρησιμοποιηθούν για εμπορικούς σκοπούς. Το ερωτηματολόγιο αποτελείται από ερωτήσεις κλειστού τύπου και η συμπλήρωση του διαρκεί μόνο λίγα λεπτά. Η συμμετοχή σας είναι ανώνυμη και εθελοντική.

Δημογραφικά στοιχεία

1. Φύλο:

Ανδρας

Γυναίκα

2. Ηλικία:

18-29

30-39

40-49

50-59

>60

3. Μορφωτικό επίπεδο:

Απολυτήριο Γυμνασίου / Λυκείου

Τίτλος ΑΕΙ / ΤΕΙ

Μεταπτυχιακός τίτλος

Διδακτορικός τίτλος

Άλλο

4. Τα εισοδήματά σας φορολογούνται με χρήση:

Του φορολογικού συντελεστή που μου αντιστοιχεί βάσει της κλίμακας Φορολογίας Εισοδήματος Φυσικών Προσώπων (ΦΕΦΠ)

Του φορολογικού συντελεστή που μου αντιστοιχεί βάσει της κλίμακας Φορολογίας Εισοδήματος Νομικών Προσώπων (ΦΕΝΠ)

5. Προσδιορίστε τον βαθμό στον οποίο χρησιμοποιείτε κάποια εφαρμογή της ΑΑΔΕ;

1 [Καθόλου]	2	3	4	5	6	7 [Συνεχώς]

6. Πόσο καιρό (σε έτη) χρησιμοποιείτε κάποια εφαρμογή της ΑΑΔΕ; Παρακαλώ συμπληρώστε κατά προσέγγιση σε έτη: _____

Αντιληπτή άνεση

Σημειώστε κατά πόσο συμφωνείτε με τις παρακάτω προτάσεις, από 1 (διαφωνώ απόλυτα) έως 7 (συμφωνώ απόλυτα).

	1	2	3	4	5	6	7
7. Μπορώ να διαδράσω με την ΑΑΔΕ οποιαδήποτε στιγμή μέσω των ψηφιακών εφαρμογών της.							
8. Μπορώ να διαδράσω με την ΑΑΔΕ οποιαδήποτε μέσω των ψηφιακών εφαρμογών της.							
9. Οι ψηφιακές εφαρμογές της ΑΑΔΕ μου παρέχουν την άνεση να δεσμευτώ περισσότερο με τη διάδρασή μου μαζί της.							
10. Αισθάνομαι ότι οι ψηφιακές εφαρμογές της ΑΑΔΕ μου παρέχει την άνεση να διαδράσω με την ΑΑΔΕ.							

Αντιληπτή ευκολία χρήσης

Σημειώστε κατά πόσο συμφωνείτε με τις παρακάτω προτάσεις, από 1 (διαφωνώ απόλυτα) έως 7 (συμφωνώ απόλυτα).

	1	2	3	4	5	6	7
11. Θεωρώ εύκολο να χρησιμοποιήσω μια ψηφιακή εφαρμογή της ΑΑΔΕ για τη διάδρασή μου μαζί της.							
12. Η διάδρασή μου με την ΑΑΔΕ με μια ψηφιακή εφαρμογή της είναι απλή και κατανοητή.							
13. Θεωρώ ότι μια ψηφιακή εφαρμογή της ΑΑΔΕ παρέχει στο χρήστη της σημαντική ευελιξία.							
14. Είναι εύκολο για μένα να αποκτήσω δεξιότητες στην χρήση μιας ψηφιακής εφαρμογής της ΑΑΔΕ.							
15. Γενικά, θεωρώ εύκολη τη χρήση μιας ψηφιακής εφαρμογής της ΑΑΔΕ.							

Αντιληπτή χρησιμότητα

Σημειώστε κατά πόσο συμφωνείτε με τις παρακάτω προτάσεις, από 1 (διαφωνώ απόλυτα) έως 7 (συμφωνώ απόλυτα).

	1	2	3	4	5	6	7
16. Η χρήση των ψηφιακών εφαρμογών μου επιτρέπει να διαδράσω πιο γρήγορα με την ΑΑΔΕ.							
17. Η χρήση των ψηφιακών εφαρμογών μου επιτρέπει να διαδράσω την επίδοση της επικοινωνίας μου με την ΑΑΔΕ.							
18. Η χρήση των ψηφιακών εφαρμογών μου επιτρέπει να βελτιώσω την αποτελεσματικότητα της διάδρασής μου με την ΑΑΔΕ.							
19. Η χρήση των ψηφιακών εφαρμογών μπορεί να καταστήσει πιο εύκολη τη διάδρασή μου με την ΑΑΔΕ.							

Στάση απέναντι στη χρήση ψηφιακών εφαρμογών της ΑΑΔΕ

Σημειώστε κατά πόσο συμφωνείτε με τις παρακάτω προτάσεις, από 1 (διαφωνώ απόλυτα) έως 7 (συμφωνώ απόλυτα).

	1	2	3	4	5	6	7
20. Η διάδραση με την ΑΑΔΕ με τη χρήση των ψηφιακών εφαρμογών της ΑΑΔΕ είναι μια καλή ιδέα.							
21. Η διάδραση με την ΑΑΔΕ με τη χρήση των ψηφιακών εφαρμογών της ΑΑΔΕ είναι ευχάριστη.							

Συμμόρφωση Πληρωμής Φορολογικών Υποχρεώσεων

Σημειώστε κατά πόσο συμφωνείτε με τις παρακάτω προτάσεις, από 1 (διαφωνώ απόλυτα) έως 7 (συμφωνώ απόλυτα).

	1	2	3	4	5	6	7
22. Πληρώνω τους φόρους μου πριν πληρώσω οποιονδήποτε άλλο λογαριασμό.							
23. Πληρώνω τους φόρους μου εγκαίρως.							
24. Πληρώνω τους φόρους κατά την ημερομηνία λήξης τους και εφόσον έχω λάβει σχετική ειδοποίηση.							

Εθελοντική Φορολογική Συμμόρφωση

Σημειώστε κατά πόσο συμφωνείτε με τις παρακάτω προτάσεις, από 1 (διαφωνώ απόλυτα) έως 7 (συμφωνώ απόλυτα).

Όταν πληρώνω τους φόρους μου κατά τον τρόπο που απαιτείται από την κείμενη νομοθεσία, το κάνω:	1	2	3	4	5	6	7
25. Γιατί για εμένα, είναι προφανώς ότι αυτό κάνουν όλοι.							
26. Για να στηρίξω το κράτος και τους άλλους πολίτες.							
27. Γιατί μου αρέσει να συνεισφέρω στο καλό όλη της κοινωνίας.							
28. Γιατί για εμένα, αυτό είναι το φυσιολογικό.							

29. Γιατί θεωρώ πως είναι καθήκον μου ως πολίτης.							
---	--	--	--	--	--	--	--

Επιβαλλόμενη Φορολογική Συμμόρφωση

Σημειώστε κατά πόσο συμφωνείτε με τις παρακάτω προτάσεις, από 1 (διαφωνώ απόλυτα) έως 7 (συμφωνώ απόλυτα).

Όταν πληρώνω τους φόρους μου κατά τον τρόπο που απαιτείται από την κείμενη νομοθεσία, το κάνω:	1	2	3	4	5	6	7
30. Γιατί υλοποιούνται πάρα πολλοί φορολογικοί έλεγχοι.							
31. Γιατί η ΑΑΔΕ προχωρά πολύ συχνά σε διενέργεια ελέγχων.							
32. Γιατί ξέρω ότι θα ελεγχθώ διαφορετικά.							
33. Γιατί η τιμωρία / πρόστιμο της φορολογικής αποφυγής είναι πολύ υψηλό.							

Πρόθεση για χρήση ψηφιακών εφαρμογών της ΑΑΔΕ

Σημειώστε κατά πόσο συμφωνείτε με τις παρακάτω προτάσεις, από 1 (διαφωνώ απόλυτα) έως 7 (συμφωνώ απόλυτα).

	1	2	3	4	5	6	7
34. Τις επόμενες εβδομάδες, θα ήθελα να ξεκινήσω να χρησιμοποιώ τις ψηφιακές εφαρμογές της ΑΑΔΕ.							
35. Τις επόμενες εβδομάδες, προβλέπω ότι θα ξεκινήσω να χρησιμοποιώ τις ψηφιακές εφαρμογές της ΑΑΔΕ.							
36. Τις επόμενες εβδομάδες, σχεδιάζω να ξεκινήσω να χρησιμοποιώ τις ψηφιακές εφαρμογές της ΑΑΔΕ.							

Σας ευχαριστούμε πολύ!