



The Effect of Digitizing the Tax Administration on Both the Tax Collection Process and Taxpayers' Commitment: Empirical Evidence from the Tax Administration in Bechar - Algeria

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Abstract :

The research aims to examine the relationship between the digitization and the performance of the tax administration on the one hand, and improving the tax commitment of the taxpayer on the other hand. The study adopts a questionnaire methodology at the level of the tax administration of the state of Bechar. Through the analysis of data by SPSS software version 22, the study concluded The use of digitization in tax collection procedures is faster than the traditional method, and contributes to reducing expenses, raising revenues, reducing opportunities for practicing financial corruption. In addition to this, the study confirms that the digitizing process contributes in ensuring that taxpayers respect the applicable laws. However, the use of electronic declaration and payment methods did not reach the acceptable level of taxpayers' satisfaction due to their lack of awareness; this is added to the fact that the electronic payment and the tax collection procedures so far are still characterized by complexity and inaccuracy, due to the lack of necessary competencies in the administration under study.

Key Words:, Digitizing, Taxpayer, tax liability tax collection, Bechar

JEL Classification : H21, H26, H3,

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Introduction :

Modern technological techniques have played a prominent role in developing administrative performance and reducing costs, and this is by shifting from traditional management to electronic management that includes the electronic public facility. Algeria has sought in this aspect a remarkable endeavor to develop its public administration and improve both the public service and utility to ensure citizen satisfaction with the quality of the services provided. In light of the new endeavors seeking to develop public administrations and improve the services provided to ensure the improvement of the public utility, the Algerian government has developed a number of the reforms represented by the implementation of the electronic management system, which has become imperative in the administrative work.

Considering that the tax administration is a prominent concern, the Algerian government has embarked on a large-scale modernization workshop aimed at restructuring its interests and the legislation regulating it, simplifying its procedures



and improving its performance, in addition to facilitating tax transactions with the citizen, including improving the tax relationship between the tax administration and the taxpayer.

The Research Issue: The problems that the collection administration in Algeria suffers from is the large number of papers in the taxpayer's file, with the multiplicity of administrative transactions and correspondence as well as the slowness of operations. Accordingly, the authorities responsible for the financial sector tended to subject this body to digitization due to the sensitivity that characterizes this interest, as it is considered as a financial tributary towards the public treasury.

Through the foregoing, the study research issue is represented in the following question: **Is there an effect of digitizing the tax administration on the tax collection and taxpayers' commitment in the tax administration of Bechar?**

This research issue paves the way for asking the following sub-questions:

- What is the reality of digitizing the tax administration in Algeria?
- Did the application of digitization in the tax administration in Bechar contribute to improving tax collection and tax compliance for taxpayers?

The Study Hypotheses: In an attempt to answer the question, we put forward the following hypotheses:

- There is a statistically significant effect at the significance level of (0.05) of the tax digitization administration on tax collection in the tax administration of Bechar.
- There is a statistically significant effect at the significance level of (0.05) of the digitization of the tax administration on the taxpayers' commitment in Bechar.

The Study objectives: The study seeks to achieve the following objectives:

- Standing on the digitization project of the tax administration in Algeria.
- Identifying the level of digitization of the tax administration in the state of Bechar.
- Attempting to highlight the role of digitization in activating tax administration and improving the tax commitment of the taxpayers.
- Identifying the most important challenges that hinder reaching the desired goals of digitizing the tax administration.

I. The Theoretical Literature of the study:

1. The Definition of The Tax Administration digitization Process:

The digitization of the tax administration is defined as the use of technology or electronic device to calculate and pay taxes, and record the database of taxpayers in order to promote an effective tax system.

It is also defined as a set of legal and administrative rules that regulate various taxes and fees electronically, which are built for the benefit of the state and local communities, and are considered as the necessary means to achieve the economic and social policy of the state.

The digitization of the tax administration includes the concept of electronic payment and collection of taxes. This process permits the taxpayer to perform his financial obligations towards the tax authority with special forms kept on the website of the General Authority for Taxes, specifically those related to the collection department.



As a result, the taxpayer can pay his due taxes through the electronic communication process.

In addition to this, this process can be mediated by the exchange network, banks and financial institutions that have become active in recent times and are working to encourage dealing through instant debit and credit cards and dealing through the Internet in the process of transferring financial dues according to certain conditions and controls.

In sum, we can define the digitization of tax administration as the deployment of computer systems and networks in the process of imposing and paying taxes. It comprises also the involvement of the computer technologies application in the process of assessing, collecting, and administering taxes. E-taxation is an extension of the growing concept of e-governance and e-commerce, which involves the exchange of data through information and communication technology systems between taxpayers and tax authorities.

2. The Objectives of Digitizing the Tax Administration: The digitization process serves the following objectives

- The desire to achieve the principle of transparency by reducing the scope of corruption and nepotism and strengthening citizen confidence in the administration in particular and the tax system in general. (Bodali Mohamed, Bushanab Musa, 2016, p. 272)

- Avoid the uncontrolled accumulation of debts of some taxpayers and the assets' checking.

- Ensure that all taxpayers pay real taxes and this leads to reducing the risks of tax evasion.

- Control over the effective collection of commitments and fulfillment in a timely manner. This will lead to increased revenues and boost the economic growth.

- Increasing the levels of efficiency in the collection of indirect taxes through the simultaneous collection of value-added tax for companies at every stage of production and direct distribution, as it is considered one of the challenges of indirect taxes. This fact contributes in increasing tax revenue and reaching compliance. (C.S. Amaefule, 2012)

- A necessary means to define and expand the tax base through the transition to electronic systems for declaration, tax compliance, collection, electronic invoicing, and bridging income leakage to obtain the maximum tax.

- Improving taxpayer services leading to increases in data availability and advances in analytics

3. Modernizing the Tax Administration in Algeria

The stages of modernizing the tax administration are:

3.1 The Use of Information and Communication Technology in the Tax System:

This is achieved through the electronic declaration and payment system project through the launch of the electronic portal "JIPAYTECH" for remote tax declaration and payment for taxpayers under the jurisdiction of the Directorate of Large Institutions (Article 23 of the Supplementary Finance Law of 2008). This system offers several advantages to taxpayers as it enables the follow-up of all transactions



that took place between the taxpayer and the tax administration. One of the main advantages of this system is that it contains an automatic program for calculating tax rates and fees because it reduces the risks in calculating rates and rights. In addition to this, the registration in the electronic declaration is implicitly renewed every year, unless one of the parties cancels it. (Boalem Welhi, Othman Hadi, 2019, p. 12)

3.2 Launching a Tax Information System Project: the tax administration is a public administration. Its reliance on information technology falls within the framework of the electronic governance program, to reach the provision of services in an easy and smooth manner for the benefit of citizens 24 hours a day, all days of the week, through electronic means and modern technological tools, with cost reduction, improved performance and speed of completion. In this regard, the Algerian authorities have launched the e-Algeria program project during 2008-2013, which its objectives are: (Belarbi Abdelkader, et al., March 13-14, 2012).

- Developing the electronic infrastructure to enable citizens to benefit from information and communication technology equipment and networks.
- Developing the human competencies and providing resources.
- Preparing the legislative and regulatory framework.

3.3 The Creation of The Tax Protector: for the new taxpayers to establish easily their institutions, the tax administration creates a so-called The Tax Protector charged with performing this task at the level of all new tax departments.

3.4 Establishment of a Call Center: In addition to the green number, there is a project to establish a call center at the national level in order to take care of all inquiries of a tax nature requested by citizens.

3.5 Developing the Communication Methods: This is achieved through carrying out media campaigns via visual and audio media in order to inform taxpayers of tax developments, especially those related to their tax obligations as well as develop a communication strategy for the General Directorate of Taxes for the benefit of all new departments.

3.6 Improving the Digital Relationship with Taxpayers: this is revealed by

- The presence of the tax administration on social sites: Twitter, Facebook, Google.
- Encouraging the media campaigns.
- Creating a forum for discussion between the tax administration and citizens through the website of the General Directorate of Taxes.

3.7 Strengthening the Technical Efficiency of the Website: This is done by

- Redesigning the home page and adding new sections to it.
- Compatibility of the site security standards with those known internationally

4. The Model of Digitizing the Tax Administration in Algeria:

The Algerian legislator has taken many steps to digitize tax procedures in order to reach the application of digitalization in Algeria. These procedures are as follow

4.1. The Creation of a Website for the Tax Administration:

The Information and communication technology and the introduction of automated information technology allowed the creation of a website for the tax administration that allows providing all tax information to taxpayers, including tax laws, financial laws and various tax information. (DGI, 2016)



4.2. The Simplification of the Procedures for Creating a Tax File:

In order to simplify the procedures related to tax documents for taxpayers, the General Directorate of Taxes has indicated how to create tax files, as well as the delivery of tax documents.

4.3. Digitizing the Numbering Procedures:

It is now possible for the taxpayer to obtain the tax identification number electronically via the Internet, so he is satisfied with entering his data on the website designated for this purpose to obtain his tax identification number. (mfdgi, 2020)

4.4. Establishing the Rules for Tax Examination:

After the legislator previously limited that the process of control and examination in accounting takes place in paper books, the Algerian legislator stipulated that the accounting of the taxpayer can be examined, whatever the form of its holding, whether according to the traditional paper system or to the automated information system (DGI, 2014)

4.5. Creating a system for Tax Documents and Declarations in Distance (JIPAYTECH):

Within the framework of the digitization of the tax service, the General Directorate of Taxes has developed a system for electronic distance declaration (Tele-declaration), by introducing the remote declaration system (JIBAYATIC). Adopting the technology of online declaration and electronic payment for taxpayers subject to the Directorate of Large Enterprises (DGE), who are foreign institutions and companies operating in the field of hydrocarbons or whose turnover exceeds a certain ceiling, is a first step. For them, the remote (the distant) declaration system is a mandatory system starting from January 2018. They must adhere to it and they can pay all taxes and fees via electronic payment (Article 58 of the Finance Law, 2018). The remote declaration system is an optional system for the taxpayers affiliated with the tax centers. The registration file for the remote declaration system consists of the following documents:

- * The registration application form is to be downloaded from the website of the Tax Directorate.
- * General terms book.
- * Bank identity statement (RIB).

II. The Empirical Literature Review

1. A study by (Matthieu Bellon, Era Dabla-Norris, and al, June 2022, pp. 1-28):

The paper examines the impact of switching from paper to electronic invoicing on firm tax compliance and performance using quasi-experimental variation in the rollout of VAT e-invoicing in Peru. The study finds that e-invoicing increases reported firm sales, purchases and VAT liabilities by over 5 percent in the first year after adoption. The impact is concentrated among small firms and sectors with higher rates of noncompliance, suggesting that e-invoicing enhances compliance by lowering compliance costs and strengthening deterrence. However, the research also concludes that existing stocks of VAT credits were used to offset the reform's



positive effects on VAT collection, suggesting that digital tools such as e-invoicing would need to be complemented by other reforms to improve revenue mobilization.

2. A Study by (Mouri Somaya, 2022, pages 97-113): This study aimed to address the issue of electronic collection and its importance in improving, modernizing and activating tax authorities on the one hand, and to identify the various difficulties and obstacles that stand in the way of its implementation on the other hand. This is dealt especially in light of the trend towards establishing the features of the digital economy in Algeria. In order to address the research issue, the study used the questionnaire tool to determine the extent of the application of electronic collection and the obstacles that prevent its activation by distributing 100 questionnaires to various academics and professionals.

3. A Study by (Qannas Ali, Zain Younis, 2021, pages 215-235): This study aimed to show the extent to which tax declarations electronically contribute to improving and increasing tax revenue, in light of Algeria continuing to apply the modernization of tax administration in its aspect related to digitization. The study presents the most important concepts related to electronic tax declarations. It defines also the electronic tax system project and its impact on tax collection. The research adopts a questionnaire based on a set of opinions and aspirations through the study of the status of taxpayers affiliated to the Directorate of Large Institutions. The study concluded that the electronic tax declarations have a positive role in improving the process of Tax collection despite all the obstacles and difficulties.

4. A Study by (Bouziane Faisal, Mohieddin Mahmoud Omar, 2021, pages 292-306): This study aimed to identify the role of the reform and modernization program of tax administration in improving the quality of services provided to taxpayers and improving the tax relationship between the two parties. The study adopted the analytical approach of by analyzing the various measures taken in the field of modernizing the tax administration in Algeria, and then analyzing its impact on the relationship with taxpayers. The study concluded that the measures to modernize the tax administration and improve the services provided to taxpayers did not include all taxpayers, as they are mostly limited to taxpayers belonging to the Directorate major institutions. In addition to this, the modernizing of the tax administration leads to reducing the suffering of the taxpayers, improving the service provided, and strengthening the relationship between the tax administration and the taxpayer.

5. A Study by (Mohamed Lariba, Farouk Sahnoun, 2021, pages 509-528): This study aimed to address the role of modernity in activating the performance of tax administration and improving the tax sense commitment of taxpayers. The study concluded that the tax administration faces great difficulty in collecting the tax debt, especially the large amounts. In addition to that and despite the great efforts made to upgrade the tax sense, the commitment remains weak among the taxpayers. The study also concluded that the tax administration is unable to ensure the comprehensive tax control, which is still far from achieving transparency.



III. The Empirical Study:

1. The Study methodology: In order to prove or refute the hypotheses, we used the questionnaire tool to determine the extent of the application of digitization in the tax directorate of the state of Bechar, and its impact on the tax collection and tax commitment of the taxpayer. The number of questionnaires distributed 100 questionnaires to various workers and professionals in the directorate under study. Then analysis of data by SPSS software version 22.

The following table shows the number of distributed questionnaires that were conducted at the level of the bodies under study.

Table 1: Statistics of the Questionnaire.

Statement	Percentage	Number
Number of questionnaires distributed	% 100	110
The number of questionnaires received	% 80	89
The number of canceled questionnaires	35%	39
The number of valid questionnaires	65%	71

Source: prepared by the researchers based on the analysis of the questionnaires

Table 2: Number and percentage of questionnaires distributed and retrieved for the bodies under study

Name of the Employer Entity	The number of valid questionnaires	The number of questionnaires received	Number of questionnaires distributed
State Directorate of Taxes	21	28	34
Taxes Center	31	41	44
Taxes Inspectorate	19	20	32
Total	71	89	110
Percentage	71%	89%	% 100

Source: prepared by the researchers based on the analysis of the questionnaires

The questionnaire is prepared on the basis of a five-point Likert scale, which has five answers, so that we can determine the respondents' opinions about the topics covered in the questionnaire, as shown in the following table:

Table 3: Five-point Likert scale

Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Grade	1	2	3	4	5

Source: (Mahfouz Jouda, 2008, page 50)

Through this table, we try to deduce the direction of each sample for each question of the study, depending on the weighted arithmetic mean of the Likert scale, where



we calculated the length of the category, which is calculated by the following formula:

Weighted Arithmetic Mean = (Upper Limit of the Alternative - Lower Limit of the Alternative) / Number of Levels

The upper limit of the alternative is: 5 for answering strongly agree and the lower limit for the alternative is: 1 for answering strongly disagreeing. Therefore, the length of the study category is: $(5-1)/5 = 0.80$

Table 4: Criteria for Determining the Trend

Trend	Weighted Arithmetic Mean
Strongly Disagree	1-1.79
Disagree	1.80-2.59
Neutral	2.60-3.39
Agree	3.40-4.19
Strongly Agree	4.20-5

Source: (Walid Abdel-Rahman, Khaled Al-Farra, 2009, page 26)

In order to measure the validity and reliability of the questionnaire, we relied on Cronbach's alpha coefficient to measure the internal consistency of the axes' statements.

The stability coefficient takes values ranging between zero and the correct one. If there is no stability in the data, the value of the coefficient is equal to zero, and on the contrary, if there is complete stability, the value of the coefficient is equal to the correct one, and the closer the values of the stability coefficient are to one, the higher the stability. The closer it is to zero, the stability is low. An increase in the value of the Cronbach's alpha coefficient means an increase in the credibility and stability of the data, which reflects the results of the sample on the study population. The validity coefficient can also be calculated by computing the square root of the stability coefficient. The following table between the reliability coefficient and the validity of each axis of the questionnaire:

Table 5 : Stability and validity coefficient for each axis. (Crumbach's alpha coefficient).

Axes	Reliability Coefficient	Alpha Cronbach	Number of Phrases
The First Axis	0.927	0.860	8
The Second Axis	0.840	0.706	9
The Third Axis	0.897	0.806	10
Total	0.841	0.708	27

Source: prepared by the researchers based on Spss output.



Through the table that shows the results of the Cronbach stability coefficient test and the reliability coefficient. It is clear to us that the questionnaire statements in the three axes are characterized by high stability according to this coefficient, which exceeds 0.6, i.e. 60%, it is close to the correct one, and the total percentage achieved is 70.8%, meaning that it is acceptable, and this is a sum. 27 phrases.

2. Discussion of the Results:

2.1. Discussing the phrases of the first axis: moving towards the digitization of the tax administration.

The following table shows the results reached on the questions of the trend towards digitization of the tax administration, which consist of eight (8) statements related to the reality of the trend towards digitization in the directorate under study.

Table6: Statistical Indicators (the Arithmetic Mean and Standard Deviation) of the Axis of Orientation towards Digitization in the Tax Directorate.

Nbr	Statement	Arithmetic mean	Standard deviation	General trend
1	In your administration, there is continuous development and modernization of work methods	4.00	1.140	Agree
2	In your administration, the organizational structures are flexible in order to suit the tasks and responsibilities of the electronic administration	4.00	1.025	Agree
3	In your administration, the organizational structures are flexible in order to suit the tasks and responsibilities of the electronic administration	4.00	0.940	Agree
4	The employees in your organization possess the competence that qualifies them to deal with advanced electronic systems and programs.	3.00	1.152	Neutral
5	administration, they care about the human resources responsible for providing electronic administration services and developing their capabilities and skills to audit work procedure	3.00	1.089	Neutral
6	The Tax Administration provides sufficient and appropriate training programs for employees when implementing an electronic program	4.00	1.255	Agree



7	Enrolling tax administration employees in training courses to develop their capabilities in electronic collection.	4.00	1.249	Agree
8	Your department has a sufficient number of computers and modern software to work and rely on e-mail and fax in the communication process	3.00	1.307	Neutral
	The Mean of the trend towards digitization of tax administration	3.625	1.144	Agree

Source: prepared by the researchers based on Spss output.

Table No. (6) Shows the frequencies and the arithmetic mean for each of the phrases of the first axis. In addition to the standard deviation for each of them with the trend of the sample, and the relative importance, as the result in the last result of the general arithmetic mean of the first axis is 3.625 with a standard deviation of 1.144. While the trend of the sample for this axis it is accepted, which is located in the fourth range (3.40 to 4.19) according to the accepted weight.

Table (6) shows that the respondents appreciate the tax administration's endeavor to digitize the tax sector, by simplifying procedures, developing and constantly updating work methods, and spreading awareness of the concept and advantages of digitization by bringing the administration closer to the citizen and explaining its role in improving performance and providing a sufficient number of computers and modern software. In addition to the human resources, by offering training courses to develop and develop their capabilities and skills in electronic collection and auditing work procedures.

2.2. - Discussing the Phrases of the Second Axis: Digitization and Tax Collection Axis

The following table shows the results reached on the questions of digitization and tax collection, which consist of nine (9) statements. These are related to the most important effects of digitization on tax collection in the administration under study

Table 7 : Statistical Indicators (the Arithmetic Mean and Standard Deviation)

for the Digitization and Tax Collection Axis

Nbr	Statement	Mean	S.D	General trend
1	Digitization reduces pressure and administrative burdens in the collection process	3.00	1.261	Neutral
2	The traditional tax collection procedures are considered unfair to taxpayers due to their long duration, so an electronic system must be used	4.00	1.247	Agree
3	The application of the electronic tax system gives great comfort in applying correct and sound decisions by the tax administration	4.00	1.105	Agree



4	Tax collection procedures electronically are faster than the traditional method	4.00	1.199	Agree
5	The digitization of the tax administration contributes to improving the quality of service provided	4.00	0.838	Agree
6	Digitization gives greater transparency and an optimal fight against bribery and corruption for tax agents	4.00	0.999	Agree
7	The use of the Internet in tax collection reduces expenses and increases revenues, unlike the traditional method	5.00	1.035	Strongly Agree
8	The tax authority's use of the electronic payment and collection system does not lead to an increase in the efficiency of the tax authority's work and a reduction of time, effort and money	2.00	0.898	Disagree
9	The tax authority's use of an electronic payment and collection system leads to: enhancing trust between taxpayers and the tax administration and reducing opportunities for financial corruption	4.00	0.848	Agree
	The Mean of the digitization and tax collection axis	3.778	1.047	Agree

Source: prepared by the researchers based on Spss output

Table No. (7) shows the frequencies and the arithmetic average for each of the phrases of the second axis of digitization and tax collection, where the result of the general arithmetic mean for the second axis was 3.778 with a standard deviation of 1.047, while the sample trend for this axis is accepted according to the accepted weight.

Through Table No. (7), we see that the respondents agree that the use of the Internet in tax collection procedures is faster than the traditional method, reduces expenses and increases revenues. In addition to enhancing confidence between taxpayers and the tax administration and reducing the chances of practicing financial corruption by setting up a networked mail-type system Electronic and the Internet and the introduction of the Internet in tax and collection interests

2.3. Discussing the Phrases of the Third Axis: Digitization and Taxpayer Commitment

The following table shows the results reached on the questions of the axis of digitization and the tax liability of the taxpayer, which are ten (10) statements related to the most important effects of digitization on the tax commitment of the taxpayer to the administration under study.



Table 8: Statistical Indicators (Arithmetic Mean and Standard Deviation) for the Digitization and Taxpayer Commitment Axis

Nbr	Statement	Mean	S.D	General trend
1	Non-compliance with tax is one of the most important problems faced by the tax authorities	4.00	1.131	Agree
2	The digitization of the tax administration leads to attracting and attracting taxpayers	4.00	1.265	Agree
3	The electronic tax declaration is a new mechanism that attracts the taxpayer to pay various taxes and fees	4.00	1.119	Agree
4	There is an acceptable level of taxpayers' satisfaction with traditional methods and procedures	4.00	1.309	Agree
5	There is an acceptable level of satisfaction on the part of taxpayers with regard to electronic declaration and collection methods	3.00	1.218	Neutral
6	Digitization contributes to spreading tax awareness and tax culture in order to reduce the phenomenon of tax evasion and improve the level of tax compliance among taxpayers	4.00	1.169	Agree
7	Digitization is a mechanism for combating deviant tax behaviors such as tax evasion and fraud	4.00	1.193	Agree
8	The electronic statement maintains the privacy of information and eliminates the problem of losing paper statements	4.00	1.217	Agree
9	The taxpayer can access the "Your Collection" website and comply with tax declarations 24/24 hours a day, seven days a week	4.00	1.259	Agree
10	There is a weakness in the use of electronic declaration and payment methods due to the lack of awareness among taxpayers	4.00	1.117	Agree
	The Mean of the digitization axis and tax commitment of the taxpayer	3.900	1.199	Agree

Source: prepared by the researchers based on Spss output

Table (8) shows the frequencies and the arithmetic mean for each of the phrases of the third axis in addition to the standard deviation with the sample trend for it, and the relative importance. The result of the general arithmetic mean for the third axis is 3.900 with a standard deviation of 1.199. The axis is accepted, which falls in the fourth range (3.40 to 4.19) according to the accepted weight

The respondents unanimously agreed that tax non-compliance is one of the most important problems faced by the tax authorities, and that digitization is one of the mechanisms for combating deviant tax behaviors such as tax evasion and fraud, including improving tax compliance. The use of electronic declaration and payment methods due to the lack of awareness among taxpayers, in addition to the fact that



electronic tax payment and collection procedures so far are still characterized by complexity and inaccuracy, due to the lack of necessary competencies in management

3. Testing the validity of the hypotheses

Table 9 : The Impact of the Trend towards Digitization of Tax Administration on Tax Collection and Tax Compliance

Digitization of tax administration					Study Variables
Sig	R ²	R	Reliability CoefficientB	Regression Coefficient	
0.063	0.498	0.654	1.345	0.324	TaxCollection
0.069	0.432	0.539	2.324	0.425	TaxCommitment

Source: prepared by the researchers based on Spss output

3.1. The First Hypothesis:

H1: There is a statistically significant effect at the level of significance (0.05) of the digitization of the tax administration on tax collection in the tax administration of the state of Bechar

Through the table, we notice that the correlation coefficient is $r=0.654$, which is equivalent to 65.4%, and from this result, it can be said that the correlation is strong between the digitization of tax administration and tax collection. As for the coefficient of determination, R^2 , it reached 0.498, which is equivalent to 49.8%. The tax administration affects, by 49.8%, the tax collection.

Since $\text{sig} = 0.063$ is greater than alpha 5%, we accept hypothesis H1, meaning that there is a significant effect of digitization of the tax administration on tax collection in the tax administration of the state of Bechar

3.2. The Second Hypothesis:

H1: There is a statistically significant effect at the level of significance (0.05) of the digitization of the tax administration on the tax commitment of those charged with tax administration in the state of Bechar

Through the table, we notice that the correlation coefficient is $r = 0.539$, which is equivalent to 53.9%, and from this result, it can be said that the correlation is somewhat strong between the digitization of the tax administration and the tax commitment of taxpayers. As for the coefficient of determination, R^2 , it amounted to 0.432, which is equivalent to 43.2%, and consequently, it can be said that the digitization of the tax administration affects, by 43.2%, the tax commitment of taxpayers.

And since $\text{sig} = 0.069$ is greater than alpha 5%, we accept hypothesis H1, meaning that there is a significant effect of digitizing the tax administration on the tax commitment of those charged with tax administration in the state of Bechar

**Conclusion:**

The digitization of tax administration is the transformation of tax operations from traditional methods to modern electronic operations, as the government aims behind the digitization of taxpayers to expand the tax base and reduce fraud, tax evasion and financial corruption that will harm the maximization of treasury revenues and this is in the interest of tax administration.

The Study results: Through this research, we reached a set of the following results

- The use of digitization in tax collection procedures is faster than the traditional method, and reduces expenses and increases revenues.
- The digitization of the tax administration enhances trust between taxpayers and the tax administration, and reduces the chances of practicing financial corruption
- The non-compliance with tax is considered one of the most important problems faced by the tax authorities in the tax administration of the state of Bechar,
- the digitization of tax administration of the state of Bechar is one of the mechanism for combating deviant tax behaviors such as tax evasion and fraud, including improving tax compliance of taxpayers.
- There is an acceptable level of satisfaction on the part of the taxpayers in the state of Bechar about the traditional methods and procedures of payment, despite its bureaucratic nature and taking a long time
- The failure to reach the acceptable level of taxpayers' satisfaction in the use of electronic declaration and payment methods due to the lack of awareness among taxpayers, in addition to the fact that electronic payment and tax collection procedures so far are still characterized by complexity and inaccuracy, due to the lack of necessary competencies in the administration under study.

The Study Suggestions:

- The need to pay attention and develop work mechanisms to implement digitization and modernize the tax administration, and to stand on the most important challenges that stand in front of tax digitization and the requirements for activating it in the tax administration of the state of Bashar.
- Supporting the appropriate infrastructure for electronic management applications, by providing all the technical capabilities necessary to support the use of electronic management applications in all administrative work of tax authorities.
- Providing an advanced system in the tax directorates for the Internet and designing special websites for the concerned state and regional directorates for linking the branches of the administration to each other.



Bibliographic References:

- Article 58 of the Finance Law. (2018). Official Gazette. Algeria: Issue 78 of December 28, 2017, p. 27
- Belarabi Abdelkader, (March 13-14, 2012). Challenges of transition to electronic governance in Algeria. The Fifth International Forum on the Virtual Economy and its Reflection on International Economics. University Center Khemis Miliana, Algeria.
- Boualem Wellahi, Othman Hadi. (2019). The Impact of the Use of Information Technology on the Effectiveness of Tax Management Case Study of a Group of Institutions. *Journal of Research in Finance and Accounting*, 4(2), 197-215
- Bouazza Abdelkader, Hmeimesh Narges. (2017). Towards Solving e-commerce Collection Problems within the Framework of International Efforts. *Journal of Economics and Business Administration*, 1(2), 116
- Boudali Mohamed, Bushanab Moussa. (2016). Digitization of Administration as a Method to Improve Public Service - Tax Administration as a Model. *Journal of Taxation Studies*, 8(02), 272
- Bouziane Faisal, Muhyiddin Mahmoud Omar. (2021). Modernizing the Tax Administration in Algeria and its Role in Improving Relations with Taxpayers. *Criterion Journal*, 12(1), 292-306
- C.S. Amaefule .(2012) .The efficacy of E-taxation as a strategic tool for national economic development ., *National Journal of banking and finance*.113 ,(3)7 ‘
- DGI .(2016) .,la modernisation de l’administration fiscale.,alger: la lettre de la DGI N°71.
- DGI .(2014) .Communiqué Général relative aux principales dispositions de la loi de finance 2014. ,alger: Direction Générale des impôts, Ministère des finances.
- Khallasi Reda (2014). *Tax Theory*, Huma For Printing and Publishing, Algeria
- M. Arya .(2012) .E-Taxation : state&perspective in Nigeria , issues and challenges .*T.L.J.N*.162 ,(1)
- Mahfoud Jawda (2008). *Basic statistical analysis using SPSS*. (Vol. 1st ed.). Dar Wael for publication and distribution
- Matthieu Bellon, Era Dabla-Norris, and al) .June 2022 .(Digitalization to improve tax compliance: Evidence from VAT e-Invoicing in Peru .*Journal of Public Economics*.28-1 ,(1)210 ‘
- mfdgi .(2020 ,02 03) .*mfdgi* .IMMATRICULATION FISCALE EN LIGNE: <https://nifenligne.mfdgi.gov.dz>
- Mohamed Lariba, Farouk Sahnoun. (2021). The role of modernization in activating the performance of tax administration and improving tax compliance among taxpayers. *Journal of Economic Studies*, 15(3), 509-528.
- Mouri Soumya. (2022). Requirements for activating electronic taxation to promote the digitization of the Algerian economy: an analytical statistical approach. *Economic Notebooks*, 13(1), 97-113



- Qanas Ali, Zain Younes. (2021). Electronic tax declarations and their impact on increasing tax revenue in light of the modernization of tax administration (case study: taxpayers affiliated with the jurisdiction of the Directorate of Large Institutions). *Al-Maqrizi Journal of Economic Studies*, 5 (2), 215-235
- Walid Abdel-Rahman, Khaled Al-Farra. (2009). Analyze the questionnaire data using the SPSS statistical software. Jordan: Department of Programs and Foreign Affairs

Appendix:

Appendix 1: Level of Approval for the Digitization and Tax Collection Axis

Statement	S.Disagree	Disagree	Neutral	Agree	S. Agree	
1	4	12	5	37	13	Frequency
	%5.6	%16.9	%7	52.1%	%18.3	Percentage
2	5	6	12	41	7	Frequency
	%7	%8.5	%16.9	%57.7	%9.9	Percentage
3	0	10	10	36	15	Frequency
	%0	%14.1	%14.4	%50.7	%21.1	Percentage
4	4	18	16	23	10	Frequency
	%5.6	25.4%	%22.5	%32.4	%14.1	Percentage
5	6	18	21	21	5	Frequency
	8.5%	25.4%	29.6%	29.6%	7%	Percentage
6	7	14	9	29	12	Frequency
	9.9%	19.7%	12.7%	40.8%	16.9%	Percentage
7	7	16	6	32	10	Frequency
	9.9%	22.5%	8.5%	45.1%	14.1%	Percentage
8	11	15	11	25	9	Frequency
	15.5%	21.1%	15.5%	35.2%	12.7%	Percentage

Source: prepared by the researchers based on Spss output



Appendix 2: Level of Approval for the Digitization and Tax Collection

Statement	S.Disagree	Disagree	Neutral	Agree	S. Agree	
1	6	21	12	20	12	Frequency
	8.5%	29.6%	16.9%	29.6%	8.5%	Percentage
2	4	13	5	27	22	Frequency
	5.16%	18.3%	7%	38%	31%	Percentage
3	5	15	14	31	6	Frequency
	7%	21.1%	19.7%	43.7%	8.5%	Percentage
4	2	11	8	19	31	Frequency
	2.8%	15.5%	11.3%	26.8%	43.7%	Percentage
5	1	2	5	29	34	Frequency
	1.4%	2.8%	7%	40.8%	47.9%	Percentage
6	2	3	10	25	31	Frequency
	2.8%	4.2%	14.1%	35.2%	43.7%	Percentage
7	2	3	10	17	39	Frequency
	2.8%	4.2%	14.1%	23.9%	54.9%	Percentage
8	13	37	14	6	1	Frequency
	18.3%	52.1%	19.7%	8.5%	1.4%	Percentage
9	2	0	6	31	32	Frequency
	2.8%	0%	8.5%	43.7%	45.1%	Percentage

Source: prepared by the researchers based on Spss output



Appendix 3: Level of Approval for the Digitization and Taxpayer Commitment Axis

Statement	S.Disagree	Disagree	Neutral	Agree	S. Agree	
1	5	2	12	27	25	Frequency
	7%	2.8%	16.9%	38%	35.2%	Percentage
2	5	7	6	20	33	Frequency
	7%	9.9%	8.5%	28.2%	46.5%	Percentage
3	3	13	11	31	13	Frequency
	4.2%	18.3%	15.5%	43.7%	18.3%	Percentage
4	10	15	9	27	10	Frequency
	14.1%	21.1%	12.7%	38%	14.1%	Percentage
5	6	15	16	22	12	Frequency
	8.5%	21.1%	22.5%	31%	16.9%	Percentage
6	2	17	8	28	16	Frequency
	2.8%	23.9%	11.3%	39.4%	22.5%	Percentage
7	6	8	5	36	16	Frequency
	8.5%	11.3%	7%	50.7%	22.5%	Percentage
8	4	14	13	23	17	Frequency
	5.6%	19.7%	18.3%	32.4%	23.9%	Percentage
9	4	11	9	21	26	Frequency
	5.6%	15.5%	12.7%	29.6%	36.6%	Percentage
10	3	7	11	27	23	Frequency
	5.6%	15.5%	12.7%	29.6%	36.6%	Percentage

Source: prepared by the researchers based on Spss output