### The Impact of the Application of E- government and Accounting Information Systems in Achieving the Objectives of Tax Systems - The Jordanian tax system as a case study

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#### Abstract :

This research aims to study the impact of the application of e-government and accounting information systems in achieving the goals of tax systems by measuring the impact of the number of automated electronic services in the tax systems in achieving the objectives of the tax systems (the Jordanian tax system as a case study) done by studying the total tax collections, total tax expenditures, degree of acceptance of tax returns and the degree of taxpayer satisfaction for the years from 2005- to 2020, the period after merging the income tax and sales tax departments into one department in Jordan.

The results of the study indicate that there is a statistically significant effect at the confidence level of 5% of the number of automated electronic services in the tax systems in achieving the objectives of the tax systems - the Jordanian tax system as a case study in all the variables under study.

The study recommended measuring the impact of the application of e-government and accounting information systems from other angles, such as: the number of employees in the professional departments, the number of taxpayers per year, the number of returns received, the results of combating tax evasion and their impact on achieving the goals of tax systems, the study also recommended that the tax department should automate all such transactions and convert all its services to fully electronic services, as this transformation achieves the objectives of the tax systems.

**Keywords :** E-government, Tax accounting information systems, Goals of tax systems and Tax e-services.

#### **Introduction :**

We have been living since the start of the third millennium in a digital world, an information revolution, and a rapid transition to electronic services in both public and private sectors.

This rapid transformation came as a natural result since the creation of Internet and the rapid use of it in commercial and personal purposes since the early nineties of the last century.

Information and communication technology has taken off rapidly in developed countries, and this has been reflected in government services, which have become known as e-government service.

The results of introducing the developments of the technology and communications sectors into government electronic services showed a decrease in the costs of providing services, an increase in the spread of services and saved time and effort. All these advantages encouraged developing countries to take advantage and apply this technology revolution in information and communication in their sectors and government services and accordingly the tax departments was the forefront of those sectors and government departments.

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At the same time, financial accounting and accounting information systems like other sciences were affected like other sciences in the development of information and communication technology.

This impact extended to accounting and financial measurement methods, assessment and audit methods, as well as disclosure methods, which necessitated the development and modification of international financial reporting standards, international accounting standards and international auditing standards, which required amendments to government laws that allow the use of computers, the Internet and electronic services, and in particular tax laws, regulations, and instructions.

Jordan is one of the developing countries that, since 2000, started moving towards automation of services and government departments, foremost of which are the Income Tax Department and the General Sales Tax Department (Value Added Tax), to work on increasing tax collections, reducing tax expenditures, increasing compliance, awareness, increasing satisfaction of service recipients, and converting manual tax services and procedures to electronic services and procedures.

#### 1. Literature Review

According to the OECD (2018), E-tax can generally be measured and evaluated within one of the following four stages: presence, interaction, transaction and integration.

Presence: This stage includes the one-way flow of information from the tax department towards the taxpayer, which provides stable information about the tax, including publications and information.

Interaction: This stage includes a two-way information flow between the tax department taxpayers, but this interaction does not modify tax accounting systems or taxpayer data.

Transactions: This stage includes the ability of taxpayers to exchange data with the tax department or provides the opportunity for the tax department to access taxpayers' data, including activities such as inquiries related to taxpayers' data, the ability of taxpayers to submit their tax returns, the tax accounting system calculating the tax due and the possibility of paying the tax due.

Integration: This stage includes the exchange of information between various institutions and government departments regarding taxpayers (individuals, companies, organizations, associations). For example, if a taxpayer makes a change to his basic data in a government agency or a government department records information about a taxpayer, that change or event must be shared across relevant government agencies.

By the end of 2021, the Jordanian experience in the Income and Sales Tax Department covered the three points: presence, interaction and transactions and work on integration is still going on Jordanian Government (2021).

Steps towards a more e-government services related to the tax system had accelerated after the Corona pandemic and its mandatory consequent of separation, remote work, and the reduction of the attendance of persons and tax commissioners to the maximum extent possible.

According to the United Nations E-Government Survey (2020) which is a report issued every two years by the United Nations. The report covers 193 member states of the United Nations and measures the level of development in e-government development through three main indicators: Online Service Index, Telecommunications Infrastructure Index and the Human Capital Index. According to the report, Jordan ranked (117) out of (193) countries as it fell (19) places from the previous ranking issued in 2018, and it ranked (10) in the Arab world out of (20) Arab countries included in the report declining two places in the 2018 report.



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Jordanian Government (2021) indicated that the main reason for the decline in this indicator is due to the decrease in the expected years of study from (13) to (10) years (according to OECD, 2018) and the decline in the overall rate of enrollment in education as a result of the increase in the population due to the reception of large numbers of refugees, whose enrollment rate in schools is generally lower, in addition to the lack of clear digital literacy programs. The Ministry indicated that the Youth, Technology and Work Program, which includes a major component, has been launched in partnership with the Ministry of Education. Students in government schools from the seventh grade to the twelfth grade will be taught digital skills according to curricula prepared for this purpose.

Telecommunication Regulatory Commission (2020), is working to launch 100 new e-government services during the current period and before the United Nations report during 2022. The number of e-government services provided by the government to citizens amounted to only 97 government e-services until the end of 2017, and increased to 165 services by the end of 2018, and rose to 295 services by the end of 2019, and then increased to 393 services by the end of 2020.

On the other hand, the World Bank (2020) ranked Jordan among the top 20 countries that showed a remarkable improvement in procedures and standards for ease of doing business during that year. The Bank said that Jordan achieved an improvement in the Doing Business report in the areas of obtaining credit, paying taxes and resolving insolvency.

(Romeney & Steinbart, 2021) indicated that the accounting information system consists of several special business cycles in each service sector industrial or commercial, and it system can be applied and approached in the tax sector by considering taxpayers as the customers we seek to obtain their satisfaction and continuity of their dealings with the system by facilitating and simplifying the procedures from the moment of registration, obtaining the tax number, opening the file, all the way to submitting and following up on tax returns, linking and auditing information with other government departments and paying taxes due or refunds (tax) paid or deducted in an amount greater than the actual entitlement), obtaining a clearance, inquiring about the current and previous tax periods electronically, and with the least possible time, effort and cost.

Taxpayer education is an important part of facilitating compliance with the registration, declaration, and payment procedures. Actual and potential taxpayers need easy access to user-friendly, comprehensive and up-to-date information on: laws, regulations, and procedures (e.g. put on government websites, made available through taxpayer education seminars, wide distribution of guidance/brochures, and other arrangements to educate taxpayers) (Harb, 2020).

Summary study of Respati (2020) concluded that in an environment in which governments in developing countries face many challenges with limited resources, the adoption of e-government in tax administration provides a potential benefit in increasing financial collections. The study of Tansey (2019) clarified the gains of tax systems from adopting electronic services within the e-government by increasing the collection of tax revenues, increasing efficiency, transparency and governance through tax and information systems.

For all these advantages and benefits, most countries have tended to adopt new information and communication technologies to increase the efficiency of internal processes in tax systems, administrative and accounting systems in order to provide better and more integrated services to citizens and companies (taxpayers), and to invite citizens and stakeholders to participate in planning decisions and improve communications (Misuraca & Viscusi, 2011).

It can be concluded from the foregoing that the e-government in tax systems aims to improve the delivery and efficiency of tax services in the administrative and accounting sectors ,to improve government interactions with the business and industry sectors through access to information, make the tax administration more efficient, more committed, more transparent and more governance as possible to increase the number of taxpayers and thus increase tax collections, reduce tax evasion, reduce the cost of tax collection, increase service recipient satisfaction and improve the administrative and accounting tax system service by processing them electronically leading to accept and audit tax returns electronically (Jodeh, 2015a).

Increasing tax collection rates constitutes a major task for all countries and their tax systems. In Jordan, the first strategic objective of the Income and Sales Tax Department is to supply the treasury with revenues. This requires, in the long run, the establishment of fair methods of tax assessment and auditing, training and qualification of tax officials, reforming the administrative and accounting tax systems to become more progressive, giving more Interest in modernizing and developing information technology, departments, employing data capabilities to answer important questions regarding tax compliance, which increases the possibility of estimating and electronically verifying statements submitted by taxpayers and acceptance in case they match the information vouchers at the department and with electronic linking with other relevant government departments (Jodeh, 2015b).

These experiences helped the tax departments to understand how to simplify and facilitate tax procedures, especially in communicating with taxpayers in order to have an effective impact on the behavior of taxpayers, and then on the results that are important to them. This also intersects with another strategic objective of the Income and Sales Tax Department in Jordan, which is to raise the level of Tax awareness and voluntary compliance among taxpayers reflecting positively on the degree of customer satisfaction on the Income and Sales Tax Department (ISTD, 2021).

According to ISTD (2020) and in order to strengthen the information system of the taxpayer network and in application of the e-government, the Income and Sales Tax Department has been electronically linked with the following bodies: Ministry of Justice, Ministry of Industry and Trade, Companies Control Department, Social Security Corporation, Land and Survey Department, Drivers and Vehicles Licensing Department, Civil Status and Passports Department, Securities Commission, Jordan Customs Department, Private Hospitals, Free Zones Company, Greater Amman Municipality, Investment Authority, and the work is underway now to link with securities depository centers and other institutions and departments.

Also, to achieve the goals that the tax system seeks to achieve, the Directorate of the Tax Training Institute was established at the beginning of 2020 and was provided with a number of employees with practical and scientific experiences to help achieve the department's strategic goals.

One of the most prominent electronic services and tax accounting information currently available to taxpayers (ISTD, 2021):

1- The ability to update and modify his personal information directly so he can and through the website to update his residence address, work address, postal address, employers, change marital status and other information when needed, he can also obtain a statement of the estimated, appealed, and objectionable tax years, the amount due, paid and installment balances, and many other tax information of interest to him.

2- Submitting income tax returns for employees, individuals and ordinary & joint stock companies.



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3- Submitting sales tax returns and calculating the tax due.

4- Delivering information vouchers (employee information/deductions/ information), electronic payment of tax dues without the need for a review.

5- The possibility of obtaining the payment voucher electronically.

6- Obtaining a clearance, verifying clearance, tax number certificate, downloading attachments after submitting the declaration, obtaining a tax number for the first time, issuing a password for the first time, reissuing the password, deductions, the golden list, objection request, settlements and reconciliation, incentives Industrial activities, installment request, return request, request to amend a declaration (income and sales), request to activate a tax number, request for inquiry and complaint.

7- Adopting the Flow Work system in the flow of operations to simplify the procedures, as there is clear evidence of the employees' participation in the evaluation and simplification of procedures.

8- Creating a responding center to respond to the questions and inquiries of the service recipients through a website and an email

9- Completing the financial reform project (Point Bearing) to improve the performance of the department in submitting tax returns, paying the tax due through the single window and the electronic audit sample selection system.

10- The development of income tax return procedures so that the check is cashed on due date for all.

11- Increasing tax awareness by continuing updating procedural manuals, service manuals and guides and issuing new manuals such as the audit procedures manual.

#### 2. The importance of study:

The importance of this study lies in determining the impact of the application of e-government and tax accounting information systems represented in the number of automated electronic services used in achieving the objectives of tax systems and showing the impact of this on the Jordanian tax system as a case study by focusing on indicators: tax collections, tax expenditures, acceptance of tax returns as submitted by taxpayers and the satisfaction of tax service recipients for the period from 2005 to 2020.

#### **3.** Objectives of the study:

This study aims to determine the impact of the application of e-government and tax accounting information systems in achieving the objectives of tax systems and to show its impact on the Jordanian tax system as a case study to achieve the following objective:

1 - Determining the impact of the application of e-government and tax accounting information systems on the total tax collections.

2- Determining the impact of the application of e-government and tax accounting information systems on the total tax expenditures.

3 -Determining the impact of the application of e-government and tax accounting information systems on the degree of acceptance of tax returns.

4- Determining the impact of the application of e-government and tax accounting information systems on the degree of taxpayer satisfaction.

#### 4. The study Problem:

The problem of the study is to determine and know the impact of the application of e-government and tax accounting information systems in achieving the goals of tax systems, and to show its impact on

the Jordanian tax system as a case study by focusing on indicators: tax collections, tax expenditures, acceptance of tax returns as presented of taxpayers and the satisfaction of tax service recipients during the time period after merging the income tax departments and the general sales tax department into one department on 8/16/2004.

#### 5. Study questions:

This study will answer the following main question:

What is the role of the application of e-government and tax accounting information systems in achieving the objectives of tax systems? Four sub-questions will arise:

- What is the role of the application of e-government and tax accounting information systems in the total tax collections?
- What is the role of the application of e-government and tax accounting information systems in the total tax expenditures?
- What is the role of the application of e-government and tax accounting information systems in the degree of acceptance of tax returns?
- What is the role of the application of e-government and tax accounting information systems in the degree of taxpayer satisfaction?

#### 6. Study limitations:

The researcher faced a number of limitations and obstacles while conducting the research, including:

1-The lack of complete and accurate information for many variables covering all the years under study from 2005-2020, including, for example: the degree of job satisfaction, the number of employees in technical and e-government departments, the number of taxpayers, the number of tax returns received r, tax evasion collections, the number of tax return received for each year, tax evasion collections for each year.

2- Until the first and second of 2020 we have no information for the year ended 2021, so it was not included in the research years.

3- Inconsistency in numbers and statistics at times, the inconsistency of one report to another, or inconsistency of same report for different years

For all of the above, the study was limited to one independent variable and four subsidiary variables, which is the outcome of what was reached as complete data covering the years of study.

#### 7. Study hypotheses:

#### 7.1 Main premise:

HO: There is no statistically significant effect at the level of significance ( $a \le 0.05$ ) for the application of e-government and tax accounting information systems in achieving the objectives of tax systems.

#### 7.2 Sub-hypotheses:

The following Sub-hypotheses are derived from it:

H0.1: There is no statistically significant effect at the level of significance (a  $\leq 0.05$ ) for the application of e-government and tax accounting information systems in the total tax collections.

H0.2: There is no statistically significant effect at the level of significance (a  $\leq 0.05$ ) for the application of e-government and tax accounting information systems in the total tax expenditures.



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H0.3: There is no statistically significant effect at the level of significance ( $a \le 0.05$ ) for the application of electronic government and tax accounting information systems in the degree of acceptance of tax returns.

H0.4: There is no statistically significant effect at the level of significance ( $a \le 0.05$ ) for the application of electronic government and tax accounting information systems in the degree of taxpayer satisfaction.

#### 8. Study Variables:

The study consists of five variables:

- Number of automated e-services in tax systems.
- Total tax collections.
- Total tax expenditures.
- Degree of acceptance of tax returns.
- Degree of taxpayer Satisfaction.

#### 9. Research method:

The quantitative financial data published in the reports of the Income and Sales Tax Department, the General Budget Department, the Ministry of Finance and the General Budget Law have been relied upon.

Quantitative financial data give numerical information on which statistical tests can be applied, as the numerical data and information were relied on in the published official annual reports only, and qualitative data related to behavior, opinions, patterns and other types of information were not taken into account for most of the previous studies focused on them through questionnaires, personal interviews and personal observations. The omission or failure to give quantitative data its great role in explaining the impact of the application of e-government and accounting information systems in achieving the objectives of tax systems and showing its impact on the Jordanian tax system as a case study. This study includes the methods used to analyze the quantitative data of the Jordanian tax system as a case study in three steps:

#### 9.1. Identification and selection of the sample:

The study focuses on the impact of the application of e-government and accounting information systems in achieving the goals of tax systems and showing its impact on the Jordanian tax system as a case study. Therefore, the focus was on the total tax collections for income tax and sales tax, the total expenses of the Income and Sales Tax Department, the degree of acceptance of tax returns as presented by taxpayers and the degree of satisfaction of tax service recipients.

Statistics, numbers and percentages for the periods that followed the merger of the Income Tax Department with Sales Tax Department in one department on 16/8/2004, and accordingly the periods included in the study from 2005 to 2020 (ISTD (2005 -2021) and MOF (2005-2021)), as shown in Table No. 1 below, as the total tax collections, the total tax expenditures are in Jordanian dinars (J. D.), and the exchange rate of the US dollar to J.D. is fixed at a rate of \$1 = J.D. 0.709.

researcher from the annual reports of the Ministry of Finance						
Study years	Total Tax Collections	Total Tax Expenditure	Degree of acceptance of tax returns	Degree of taxpayer satisfaction	Number of e- services	
2005	1,307,129,093	8,890,938	27.0%	65%	5	
2006	1,630,530,576	9,651,618	27.0%	65%	9	
2007	1,959,324,474	10,093,333	27.0%	65%	14	
2008	2,300,778,360	12,298,330	28.0%	65%	16	
2009	2,463,065,848	14,446,890	28.6%	65%	18	
2010	2,622,386,618	14,534,275	63.0%	67%	21	
2011	2,700,611,396	15,943,064	63.0%	67%	25	
2012	2,963,065,567	19,153,012	64.0%	65%	25	
2013	3,214,815,777	21,263,388	64.0%	65%	25	
2014	3,577,748,211	21,054,606	69.0%	70%	35	
2015	3,638,635,012	21,350,680	71.0%	71%	35	
2016	3,828,616,842	21,790,000	83.0%	70%	38	
2017	3,931,457,037	24,365,651	85.0%	80%	40	
2018	4,149,585,664	23,961,179	86.0%	84%	51	
2019	4,322,616,880	25,138,620	88.2%	83%	77	
2020	4,637,379,953	27,128,221	88.5%	84%	82	

 Table No. 1: Annual statistics of study variables from 2005 to 2020, compiled by the researcher from the annual reports of the Ministry of Finance

#### 9.2. Data collection:

Quantitative preliminary data was collected from the reality published annual financial reports of the Income and Sales Tax Department, the General Budget Department, the Ministry of Finance and the General Budget Law for the years 2005-2020, where the primary data that represents and expresses the dependent and independent variables were collected according to the study. The quantitative primary data collected represents the independent variables related to the application of electronic government and accounting information systems, which were quantitatively expressed in this study through: the number of automated electronic services in the tax systems, as for the quantitative primary data collected, they represent the dependent variables related to achieving the objectives of the tax systems, which were quantitatively expressed in this study through: total tax collections, total tax expenditures, degree of acceptance of tax returns, degree of taxpayer satisfaction.

#### 9.3. Data analysis:

To verify the existence of a statistically significant and significant relationship to the impact of the application of electronic government and tax accounting information systems in achieving the goals of tax systems, all quantitative data for the independent variable in the study and its impact on the dependent variable in the study were analyzed, it was measured through four variables:

the use of Multiple Linear Analysis Regression and t-test at a confidence level of 5%, as well as taking the R-squared value in explaining the effect of all independent variables on the dependent variable, where this analysis represents an appropriate interpretation for administrators and researchers (Studenmund, 2016). Where there is a statistically significant effect of the influence of the dependent variable on the independent variable if the coefficient sign is positive and of significant value at a confidence level of 5% and that the value of (t) is greater than (2).

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#### **10. Analysis and results:**

**10.1.** Testing Study Hypotheses:

### H0.1: There is no statistically significant effect at the level of significance ( $a \le 0.05$ ) for the application of e-government and tax accounting information systems in the total tax collections.

By looking at table No. 2 listed below notice that: the independent variable the number of automated electronic services has a strong relationship and a significant and statistically significant effect on the dependent variable the total tax collections under study at a confidence level of 5%, knowing that the t-test value is 2.701747, and the statistical significance value is 0.0181, and that the value of the coefficient is positive, which is 0.029482, while the value of the R-squared is 0.774341, and this means that the independent variable explains more than 77% of the changes in the dependent variable total tax collections, which is a rather high percentage.

Independent variable	Coefficient	Std. Error	t-Statistic	Prob.
	0.029482	0.010912	2.701747	0.0181
R-squared	0.774341			

Table No. 2	: The effect	of the independe	ent variable on the	total tax collections
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# H0.2: There is no statistically significant effect at the level of significance ( $a \le 0.05$ ) for the application of e-government and tax accounting information systems in the total tax expenditures.

We notice from table No. 3 listed below that: the independent variable number of automated electronic services has a strong relationship and a significant and statistically significant effect on the dependent variable the total tax expenditures under study at a confidence level of 5%, knowing that the t-test value is 2.198648, and the statistical significance value is 0.0466 And the value of the coefficient is positive, which is 0.021940, while the value of the R-squared is 0.700466, and this means that the independent variable explains more than 70% of the changes in the dependent variable the total tax expenditures, which is a rather high percentage

	Coefficient	Std. Error	t-Statistic	Prob.
Independent variable	0.021940	0.009979	2.198648	0.0466
R-squared	0.700466			

Table No. 3: The effect of the independent variable on the total tax expenditures

## H0.3: There is no statistically significant effect at the level of significance ( $a \le 0.05$ ) for the application of electronic government and tax accounting information systems in the degree of acceptance of tax returns.

We notice from table No. 4 listed below that : the independent variable, the number of automated electronic services, has a strong relationship and a significant and statistically significant effect on the dependent variable, the degree of acceptance of the tax returns under study at a confidence level of 5%, knowing that the t-test value is 2.941020, and the statistical significance value is 0.0115, and the value of the coefficient is positive, which is 0.034536, and the value of the R-squared is 0.632455, and this means that the independent variable explains more than 63% of the changes in the dependent variable, the degree of tax returns.

	Coefficient	Std. Error	t-Statistic	Prob.
Independent variable	0.034536	0.011743	2.941020	0.0115
R-squared	0.632455			

Table No. 4: The effect of	the independent	variable on the deg	gree of acceptance	of tax returns
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## H0.4 There is no statistically significant effect at the level of significance ( $a \le 0.05$ ) for the application of e-government and tax accounting information systems in the degree of taxpayer satisfaction.

We notice from table No. 5 listed below that: the independent variable, the number of automated electronic services, has a strong relationship and a significant and statistically significant effect on the dependent variable, the degree of satisfaction of taxpayers under study at a confidence level of 5%, knowing that the t-test value is 2.110957, and the statistical significance value is 0.0497, and the value of the coefficient is positive, which is 0.003804, and the value of the R-squared is 0.815651, and this means that the independent variable explains more than 81% of the changes in the dependent variable, the degree of taxpayer satisfaction, which is a rather high percentage.

Table No. 5: The effect of the independent variable on the degree of taxpayer satisfaction

	Coefficient	Std. Error	t-Statistic	Prob.
Independent variable	0.003804	0.001802	2.110957	0.0497
R-squared	0.815651			

## HO: There is no statistically significant effect at the level of significance ( $a \le 0.05$ ) for the application of e-government and tax accounting information systems in achieving the objectives of tax systems.

As is clear above by testing the four sub-hypotheses, there is an effect of the independent variable, the application of electronic government and tax accounting information systems on the dependent variable, achieving the objectives of tax systems, and we see that there is a strong and statistical significance relationship between the independent variable, the number of automated electronic services on the four sub-dependent variables: Total tax collections, Total tax expenditures, Degree of acceptance of tax returns and the Degree of satisfaction of taxpayers.

Accordingly, the null hypothesis is rejected and the alternative hypothesis is accepted, which is: There is a statistically significant effect of the application of e-government and tax accounting information systems in achieving the objectives of tax systems.

#### 11. Conclusions:

The results of the study are limited to analyzing the data and testing the hypotheses of the study as follows:

1-There is a statistically significant effect (the first sub-hypothesis) that the effect of the independent variable the number of automated electronic services has a strong relationship and a significant statistically significant effect on the dependent variable total tax collections at a confidence level of 5%, knowing that the t-test value is 2.701747 and the statistical significance value 0.0181, and the coefficient value is positive 0.029482.



2- Rejection of the first null hypothesis and acceptance of the alternative hypothesis, which is: There is a statistically significant effect of the application of e-government and tax accounting information systems on the total tax collections.

3-There is a statistically significant effect (the second sub-hypothesis) the effect of the independent variable the number of automated electronic services has a strong relationship and a significant and statistically significant effect on the dependent variable the total tax expenditures under study at a confidence level of 5%, knowing that the t-test value is 2.198648, and the significant value is 0.0466, and the value of the coefficient is positive at 0.021940.

4- Rejection of the second null hypothesis and acceptance of the alternative hypothesis, which is: There is a statistically significant effect of the application of e-government and tax accounting information systems in the total tax expenditures.

5- The presence of a statistically significant effect (the third sub-hypothesis) the effect of the independent variable the number of automated electronic services has a strong relationship and a significant and statistically significant effect on the dependent variable the degree of acceptance of the tax returns under study at a confidence level of 5%, knowing that the t-test value is by 2.941020, the significant value is 0.0115, and the coefficient is positive at 0.034536.

6- Rejection of the third null hypothesis and acceptance of the alternative hypothesis: There is a statistically significant effect of the application of e-government and tax accounting information systems on the degree of acceptance of tax returns.

7- There is a statistically significant effect (the fourth sub-hypothesis) the effect of the independent variable the number of automated electronic services has a strong relationship and a significant and statistically significant effect on the dependent variable the degree of satisfaction of taxpayers under study at a confidence level of 5%, knowing that the t-test value is by 2.110957, the significant value is 0.0497, and the value of the coefficient is positive at 0.003804.

8- Rejection of the fourth null hypothesis and acceptance of the alternative hypothesis, which is: There is a statistically significant effect of the application of e-government and tax accounting information systems in the degree of taxpayer satisfaction.

9- There is an effect of the independent variable, the application of electronic government and tax accounting information systems on the dependent variable, the achievement of the objectives of the tax systems, and we see that there is a strong and the statistical significance value relationship between the independent variable, the number of automated electronic services on the four sub-dependent variables combined: total tax collections, total tax expenditures, degree of acceptance of tax returns, the degree of taxpayer satisfaction.

#### 12. <u>Recommendations:</u>

Researcher recommends the following:

1- There is an impact of the application of e-government and tax accounting information systems in achieving the objectives of tax systems through the number of automated electronic services on the dependent variables combined:

Total tax collections, total tax expenditures, degree of acceptance of tax returns, degree of taxpayer satisfaction, and we recommend studying the impact from other angles if it is possible to collect the data required for dependent variables such as: degree of job satisfaction for each year, number of employees in technical departments and the e-government for each year, number of tax payers per year, number of tax returns received per year, tax evasion collections per year.

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2- The researcher recommends adding more services to the list of automated electronic services to access all services electronically, and the need to develop plans and a timetable for this to document the services entered electronically for easy access by researchers to measurable and processed data annually.

3-The necessity for the Income and Sales Tax Department to document well for all data, documentation of annual results, Information and work and make it easy for access by researchers.

4- The study impact of the application of e-government and accounting information systems in the business sectors and other services.

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