



## **The impact of electronic management on the financial performance of Algerian municipality- Studying a sample of Bouira municipalities using simple linear regression-**

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### **Abstract.**

The research paper tried to highlight the impact of electronic management on the financial performance of the municipalities, where we studied a sample of the municipalities of Bouira state using the simple linear regression model, which we treated using statistical methods using the statistical program SPSS, depending on the descriptive analytical approach in addressing the problem of the study. This research paper found a significant linear relationship between electronic management and the financial performance of municipalities.

**Keywords:** Electronic municipality, administration, financial performance, public money.

**Résumé.**

Cet article de recherche tente de mettre en évidence l'impact de la gestion électronique sur la performance financière des communes. À cet effet, nous avons étudié un échantillon de communes de la wilaya de Bouira en appliquant un modèle de régression linéaire simple, traité par le biais de méthodes statistiques à l'aide du logiciel SPSS. La problématique de l'étude a été abordée selon une approche analytique descriptive. Les résultats de cette recherche ont révélé l'existence d'une relation linéaire significative entre la gestion électronique et la performance financière des communes.

**Mots-clés :** Commune électronique, administration, performance financière, deniers publics



## **.Introduction**

The municipality is the closest form of administration to the citizen, representing a fundamental base of the social and economic fabric of any country. It embodies the role of a mediator between the state and the citizen and plays a pivotal role in meeting citizens' needs by providing various free services. As a result, the municipality is burdened with a set of expenditures, which it seeks to reduce in light of limited financial resources. At the same time, the state aims to enhance the services it provides to citizens and bring public administration closer to them by modernizing the public administration. This necessitates the introduction of significant modifications to the goals and management tools within public administration.

Thanks to substantial scientific and technological changes, modern media and communication tools have been introduced into all public administrations. This has significantly contributed to the transition from traditional administration to electronic administration, which has led to an improvement in public administration performance and enhanced public services provided to citizens.

This transition from traditional to electronic administration may impact the financial performance of municipalities. It can help reduce paper-based spending on one hand, and on the other, information technology can be used in accounting records and the introduction of electronic payment methods for the immediate collection of municipal revenues. Additionally, statistical programs can be employed to study the financial situation of municipalities and assess

their financial performance, allowing for predictions of financial failure risks that municipalities may face, ultimately contributing to improving their financial performance.

**Study problem:**

The key query of this investigation can be expressed as follows: Is there an impact of the use of electronic administration on the financial performance of municipalities in Algeria?

**Sub-questions:**

The following sub-questions fall under this problem:

- In what ways is electronic administration used in municipalities?
- What are the obstacles to implementing electronic administration in municipalities?
- What do we mean by the financial performance of municipalities, and how is it measured?

**Study Hypothesis:**

This research is based on the following primary assumptions:

There is a statistically significant effect of the use of electronic administration on the fiscal performance of municipalities.

The following sub-hypotheses fall under this main hypothesis:

- Electronic administration improves the quality of services provided by the municipality to citizens.
- Electronic administration contributes to improving the financial performance of municipalities.
- Several factors affect the financial performance of municipalities.



### **Study Importance:**

The importance of this study stems from its attempt to answer the posed problem, which aims to clarify the impact of using electronic administration on the financial performance of municipalities. It also seeks to highlight the added value that municipalities gain from transitioning to electronic administration. The significance of this study is particularly evident through its expected benefits, including the following:

- Highlighting the development within the municipality and the transition from a traditional to an electronic municipality.
- Demonstrating the impact of electronic administration on the financial performance of Algerian municipalities.

### **Study Objectives:**

- Identifying the concept of the electronic municipality in Algeria and its uses.
- Understanding the obstacles to implementing electronic administration in municipalities.
- Understanding the financial performance of municipalities.
- Determining the impact of electronic administration on the financial performance of municipalities.

### **Study Methodology:**

We adopted the descriptive-analytical method to describe the phenomenon and analyze the study data by distributing a questionnaire to a group of municipal employees. The analysis was conducted using statistical methods via the statistical program SPSS.

## **Study Structure:**

In order to address the posed problem, the investigation was partitioned into three primary sections. The first segment addresses electronic administration within the municipality, the second section covers the financial performance of municipalities, and the final section involves the analysis of a sample of municipal employees using the statistical data analysis program SPSS.

### **1. Electronic Management in the Municipality**

The electronic municipality has established itself as a necessity rather than an option. This has prompted those responsible for municipal reform and administrative development programs to prioritize it at the top of these programs and plans. The effectiveness and positive role of electronic systems in addressing traditional administrative problems have been well demonstrated.

#### **1.1. The Electronic Municipality in Algeria**

The electronic municipality is an advanced and new form of administration through which performance levels are raised, and the work environment is improved to facilitate all services and operations provided by the municipality to citizens. It allows citizens to complete all governmental transactions and even issue official documents via electronic means, such as the internet and smartphones, with speed and high efficiency (Bahloul, 2017, p. 36).

The electronic municipality, as part of electronic administration and governance programs, represents one of the most effective solutions to address the challenges facing traditional municipal administrations. It is the optimal



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solution to eliminate administrative corruption and prevent its spread and deepening. Additionally, the requirements of administrative reform, in light of the increasing use of information and communication technologies, impose the obligation of transparency and clarity in its work methods. This enables the genuine dissemination of information about its operations to citizens and monitoring bodies, not just responding to their requests and providing services (Bahloul, 2018, p. 259).

The stages of the electronic municipality in Algeria began through modern administrative services, represented by remote services that free citizens from interacting with any bureaucratic behavior and eliminate direct human intervention in the delivery of public services. This is achieved by adopting remote electronic signatures for administrative documents (Al-Khalidi, 2007, p. 20).

Additionally, it will be possible to obtain some documents online, such as the electronic birth certificate. This aims to reduce waiting times, save time, protect the national economy from waste and evasion, and provide citizens with a new, advanced, and high-quality public service, away from bureaucratic complexities.

This improves the municipality's management system and its interaction with its environment, representing one of the most important milestones of modernization, in addition to achieving the state's economic development.

## **1.2. The Electronic Counter for Biometric Documents**

In its efforts to modernize administration by gradually transitioning from traditional to automated and modern management, the Ministry of Interior and Local Communities

has worked to introduce modern technologies in the areas of management and organization. This is to ensure the continuous provision of public services, restore its value, and introduce new, modern methods. In this context, the Ministry of Interior introduced what is known as the "electronic counter for biometric documents" (passport, national identification card, biometric driving license).

To benefit from the biometric passport service, a citizen must first register to create a personal profile on the website, then follow various steps to obtain the document by filling out a personal data form, receiving an appointment, and selecting a location to collect the document. Additionally, the citizen can upload a digital photo if the initial one does not meet the required standards and specifications, along with the ability to track the status of the biometric passport request online (Hadid & Kribet, 2017, p. 130).

The biometric national identification card is also a fully secured document with a more flexible design, in line with the latest global technology. It especially contains an electronic chip and a digital photo, enabling citizens to quickly complete various daily procedures due to its diverse uses in interconnecting with other sectors.

### **1.3. Reasons for the Shift to the Electronic Municipality in Algeria**

In response to the daily social needs of citizens, the traditional administration in the municipality has been replaced by a more advanced modern administration. The new administration employs contemporary administrative techniques to provide public services efficiently and economically, in line with the current requirements. These necessities compel the concerned parties to develop the



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municipality by encouraging the adoption of technology, as it has become an indispensable element in public administration, representing a factor of success and a means of maximizing future opportunities.

The shift to the electronic municipality is not a luxury but a necessity imposed by global changes. The concept of integration, participation, and the utilization of information has become a determinant of the success of Algerian municipalities. Scientific and technological advancements, along with the continuous demand to improve the quality of outputs and ensure the integrity of operations, have all driven the development towards a modern electronic municipality. The reasons for this shift to the electronic municipality in Algeria can be summarized as follows:

- Complex procedures and operations, which increase the cost of operations;
- Immediate decisions and recommendations that can cause imbalance in implementation;
- The necessity of unifying data at the municipal level;
- Difficulty in assessing performance metrics, particularly in measuring the financial performance of municipalities;
- The need to provide accessible data for municipal employees;
- The shift towards utilizing technological advancements and relying on information for decision-making;
- The imperative of ensuring continuous communication among municipal employees.

Since 1988, Algeria has increasingly focused on implementing an electronic management system at the

municipal level, as evidenced by the continuous efforts of the state to establish the foundations of this new system. This includes the most recent project presented on March 22, 2020, by the Minister of Small Enterprises, Startups, and the Knowledge Economy, which emphasizes the necessity of digitizing public administration under the slogan "Digital Transformation Initiative." This initiative is specifically proposed for municipalities for several reasons, including:

- Digitization of all administrative transactions in the municipality;
- The generalization of databases based on the national identification number;
- Upgrading the internet network to link the Ministry of Interior, local communities, and municipalities;
- Enabling citizens to benefit from various electronic municipal services.

#### **1.4. Some Applications of Electronic Management in Municipalities**

Thanks to the use of electronic management applications in municipalities, the government has initiated several measures (Jabbour, 2017, p. 22):

- Removal of the special birth certificate from the file required for obtaining the national identification card, replacing it with the standard birth certificate No. 12;
- Reducing the processing time for obtaining the gray card to one day in regular cases, and to 21 days for the sale of vehicles between provinces, with the digitization of gray card documents;



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- Removal of the Algerian nationality certificate from the file required for renewing the national identification card and passport;
- Simplification of the driving license renewal file to two photographs, a medical certificate, a tax stamp, and the old driving license (Hamma & Bouali, 2022, p. 27);
- Issuance of biometric national identification cards, biometric passports, and biometric driving licenses.

The modernization of municipal administration has economic dimensions, as the substantial funds previously allocated for purchasing paper can now be directed toward other areas of development needed by citizens. Electronic administration and its widespread adoption in municipalities has become an unavoidable necessity. It will have a positive impact on citizens' lives and the path of social and economic development in the country, especially in light of the rapid and enormous technological advancements the world is witnessing. This approach is essential for creating the conditions needed to build a strong Algerian administration.

The ultimate goal of modernizing and digitizing municipalities is to establish electronic administration, while also facilitating citizens' access to their documents in a short period. On the other hand, users and citizens must be capable of using modern technologies to ensure the success of the electronic municipality project.

## **2. The Nature of Municipal Financial Performance**

Like other organizations, municipalities need to understand their financial performance and financial status.

Therefore, this section is dedicated to discussing the financial performance of municipalities. Financial performance is not limited to profit-making institutions; even non-profit and government institutions need to assess their financial situation.

### **2.1. The Concept of Municipal Financial Performance**

Robust financial performance can be defined as the ability of municipalities to meet their financial obligations and satisfy their citizens with service commitments both in the present and the near future (Mghayra, 2019, p. 11). Financial diagnosis has become a necessity to avoid financial distress and situations leading to bankruptcy, as this diagnosis signals the financial health of the municipality and helps adopt an appropriate financial strategy based on the current financial situation and the desired goals. The financial diagnosis process relies on several tools, the most important of which are financial ratios: structural budget ratios, profitability ratios, and turnover ratios. However, these ratios are primarily designed for profit-making institutions and are not suitable for diagnosing the financial situation of municipalities. Therefore, municipalities must develop financial ratios specific to their nature that allow for a genuine evaluation of their financial status. Many countries have been assisting municipalities in maintaining financial indicators, presented as ratios that reflect the true state of their finances (Dubi, 2016, p. 77).

Evaluating the financial performance of municipalities involves measuring their affairs related to the aggregation, dissemination, apportionment, use, monitoring, and management of resources. This entails the creation of a robust system of checks and balances that improves adequate



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supervision and accountability to guarantee that the government adequately meets its fiscal obligations (Lfta & Al-Nafi'i, 2016, p. 37).

Financial performance refers to the financial outcomes achieved by the municipality through its investment operations. The primary purpose of performance evaluation is to compare the goals set by the municipality with the objectives established by the municipality.

## **2.2. Factors Affecting Municipal Financial Performance**

Municipalities face several challenges and difficulties in their operations that may hinder their ability to perform their functions. This prompts administrators to investigate the sources of these problems, analyze them, and make the correct decisions. The key factors affecting the financial performance of municipalities include:

### ***2.2.1 Internal Factors Affecting Municipal Financial Performance***

These are factors that impact municipal performance, which municipalities can control and manage to maximize returns and reduce costs. Among them, the most crucial ones are:

- Cost management;
- Monitoring the effective utilization of funds that are readily accessible;
- Control over the expense of procuring capital (royalties, taxes, fees, rental of properties).

### ***2.2.2. External Factors Affecting Municipal Financial Performance***

Municipalities face several external changes that influence their financial performance, which they cannot control. However, they can anticipate the future outcomes of these changes and attempt to create plans to address and mitigate their effect. The aforementioned elements include:

- Scientific and technical advancements that influence service quality;
- Legislation and regulations applied to municipalities by the state;
- The financial and economic policies of the state (Abdul, 2017, pp. 193-194).

### **2.3. The Effectiveness of Financial Performance in the Municipality**

The effectiveness of financial performance in municipalities is achieved by mobilizing and using available financial resources, through measuring expected or anticipated results against predetermined standards. This process helps identify what can be mobilized and measured, and then assess the extent to which objectives have been achieved at the lowest possible cost. It also helps determine the effectiveness of financial performance by establishing the comparative significance of the outcomes and the resources used. This facilitates for an evaluation of the efficiency and effectiveness of the municipality's use of public funds, the success of increasing its own revenues, controlling expenditures to meet its obligations, and the effectiveness of local capital investments in generating revenues and covering expenses through current or investment projects. Furthermore, it assesses whether the municipality has



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effectively managed and organized its records, allowing for easy access at any time with minimal effort. All of this is conducted under internal supervision and oversight to achieve the best level of effective financial performance (Mghayra, 2019, p. 18).

### 3. Practical Aspect

To measure the relationship and impact, we used a closed-ended questionnaire on a sample of employees from the municipalities of Bouira province, based on a five-point Likert scale. The questionnaire had two main axes: one focused on the municipality and electronic management, and the other on electronic management and improving financial performance.

#### 3.1. Sample Distribution

The sample is distributed according to gender, age, and educational level:

**Table (01): Distribution of sample members by gender**

Gender	Frequency	Percentage
Males	21	58.30%
Females	15	41.70%
Total	36	100%

**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

The data presented in the table indicates that males have the highest frequency in the total sample, with 21 males representing 58.3%, while the number of females is 15, representing 41.7%. This can be explained by the fact that

most employees in prominent positions within the municipality are male, as well as the majority of candidates for municipal popular councils being men.

**Table (02): Distribution of sample members by age**

Age Range	Frequency	Percentage
25 to 34 years	17	47.20%
35 to 44 years	11	30.60%
45 years and above	8	22.20%
Total	36	100%

**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

The data recorded in the table shows that most of the sample members fall within the [25-34] age group, with a total of 17 individuals, representing 47.2%. The group of individuals aged between [35-44] consists of 11 individuals, accounting for 30.6%, and lastly, the group aged over 45 includes 08 individuals, representing 22.2%. From this, we observe that the majority of employees are young and middle-aged. The municipality strives to employ younger individuals, benefiting from youthful expertise while retaining its veteran employees.



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**Table (03): Distribution of sample members by educational level**

Educational Level	Frequency	Percentage
Senior Technician	8	22.20%
Bachelor's	11	30.60%
Master's	15	41.70%
PhD	1	2.80%
Magister	1	2.80%
Total	36	100%

**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

From the table, we observe that the majority of employees hold university-level degrees. Those with a master's degree represent 41.7%, with a total of 15 employees. Bachelor's degree holders make up 30.6%, totaling 11 individuals, while those with a senior technician degree represent 22.2%, or 08 employees. Individuals with higher degrees are a very small percentage, with PhD holders making up 2.8%, representing only one person, and those with a magister degree also accounting for 2.8%, or one person.

**Table (04): Distribution of sample members by job title**

Job Title	Frequency	Percentage
Administration and Finance	18	50.00%
Public Contracts	13	36.10%
Secretary-General	4	11.10%
Mayor	1	2.80%
Total	36	100%

**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

The table shows that the number of employees in the administration and finance department is 18, representing 50%, while the employees in the public contracts department are 13, representing 36.1%. The number of secretary-generals who responded to the questionnaire is 04, representing 11.1%, with a single response from a mayor, accounting for 2.8%.

**Table (05): Distribution of sample members by professional experience**

Professional Experience	Frequency	Percentage
Less than 5 years	15	41.70%
6 to 12 years	9	25.00%
13 to 19 years	5	13.90%
20 years and above	7	19.40%
Total	36	100%

**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

The table indicates that the majority of employees have less than 5 years of experience, representing 41.7%, or 15 employees. The second group, with experience ranging from 6 to 12 years, consists of 9 employees, accounting for 25%. The third group, with 13 to 19 years of experience, includes 5 employees, representing 13.9%, the lowest percentage. The last group, with 20 years or more of experience, consists of 7 employees, accounting for 19.4%. We observe that most of the sample members are young with limited experience but hold university degrees. The new policy of local communities aims



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to rejuvenate the sector by leveraging their energy and expertise in modern technology and digitalization.

**Table (06): Validity and Reliability Test**

Sample Size	Number of Statements	Cronbach's Alpha Value (Reliability Coefficient)
36	17	0.938

**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

It is evident that the Cronbach's Alpha reliability coefficient equals 93.8%, which indicates that the study tool demonstrates strong reliability and good validity.

**Table (07): Summary of the Models**

Type	Correlation Coefficient R	Coefficient of Determination	Adjusted Coefficient of Determination	Standard Error of the Estimate
1	0,788 <sup>a</sup>	0,621	0,61	540805

**Source:** Prepared by the researchers, based on the output of SPSS V.23.

- Dependent variable (constant): Municipality and e-administration.
- Independent variable: E-administration and improvement of financial performance.

This table represents a set of correlation coefficients, the coefficient of determination (R-squared), and the adjusted R-squared, through which we can verify the explanatory power of the model.

### 3.2. Linearity of the model

The correlation between the independent and dependent variables is tested across various possible regression models to identify the nature of the relationship between them, as well as the possibility of applying simple linear regression to the study variables. By examining the study variables, we found that simple linear regression achieves a correlation coefficient of 0.788 and a coefficient of determination of 62.1%. This suggests a linear relationship between e-administration and the financial performance of the municipality.

**Table (09): ANOVA test for simple linear regression analysis**

Source of Variance	Sum of Squares	D. F	Mean Squares	Correlation Coefficient (R)	C. D (R <sup>2</sup> )	F-Value	Significance Level
Regression	1,628,604	1	1,628,604				
Error	994,396	34	29,247	0.788	0.621	55,685	0.000b
Total	2,623,000	35					

D. F = Degrees of Freedom; Coefficient of Determination = C. D

**Source:** Prepared by the researchers, based on the output of SPSS V.23.

It represents the analysis of variance, which measures the overall significance of the model.

From the table, it is evident that the F-value equals 55.685, which is statistically significant at a level of 0.01. This is because the p-value indicated by Sig equals 0.000, which is less than 0.01. Therefore, the regression model is significant,



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meaning that at least one of the regression coefficients differs from zero.

**Table (10): Coefficients**

Coefficients	B	Beta	t-value	Significance	Regression Equation
Constant	18.78	//	5.837	0	
Municipality and e-administration	0.882	0.79	7.462	0	$Y = 18.78 + 0.882x$

**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

According to the table, it is evident that the value of the regression constant  $\alpha$  is 18.783, and the value of the regression coefficient is 0.882, which is statistically significant. It is also shown that the coefficient of determination for the municipality and electronic management explains 62.1% of the financial performance of municipalities, while the residual % is accounted for by other variables. Furthermore, the significance level of the Fisher test is 0.000, which is less than 0.05, indicating the model's suitability for testing. The importance level of the t-test is 0.000, which is also less than 0.05, making it statistically significant, and the regression is meaningful. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted, which states that there is a statistically significant effect of electronic management on the financial performance of municipalities at a significance level of  $\alpha \leq 0.05$ .

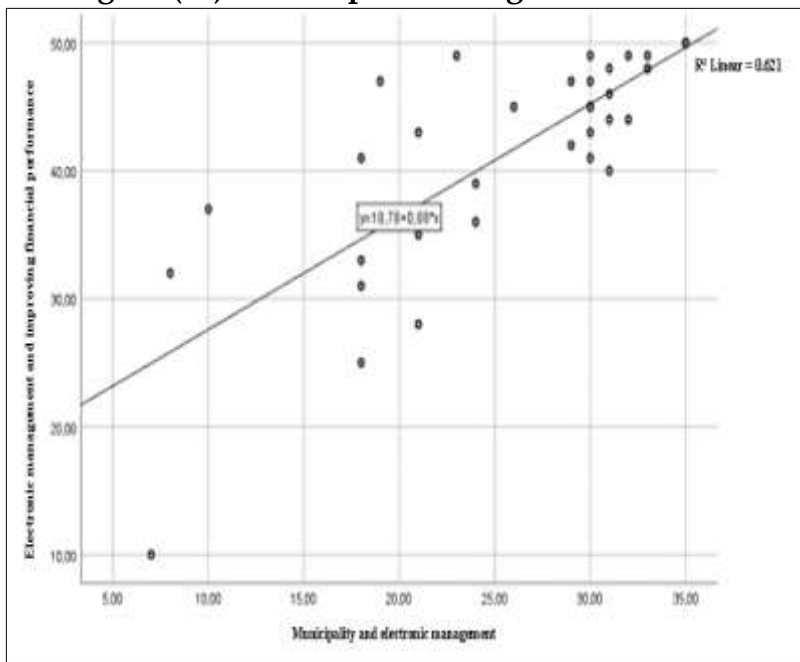
### 3.3 Regression Equation

From the previous tables, we conclude that the regression equation for the study is:  
 $Y = 18.78 + 0.882x$

Since the two variables of the study are the financial performance of municipalities and the use of electronic management, the equation for the financial performance of municipalities is:

Financial performance of municipalities =  $18.783 + 0.882$  (use of electronic management)

**Figure (01): Scatter plot and regression models**



**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.



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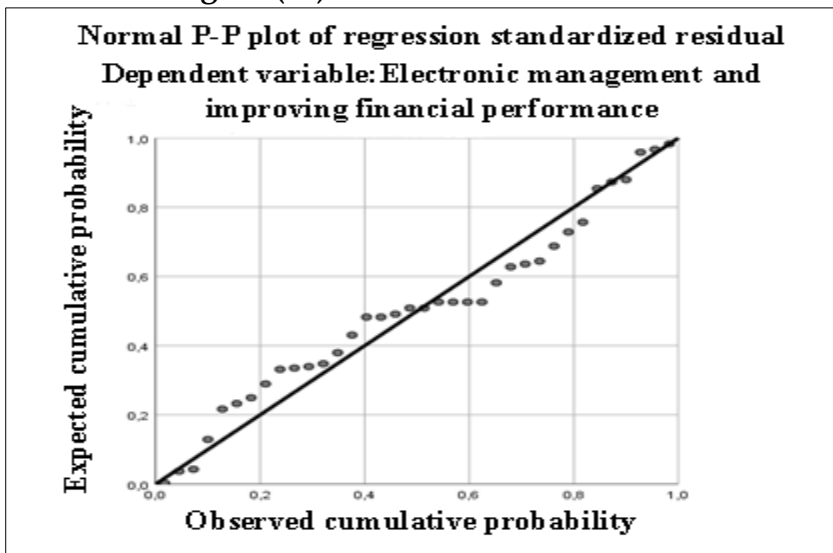
**Sub-null hypothesis:** There is no statistically substantial impact of each of the measurements of electronic management on the financial performance of the municipality at a significance level of  $\alpha \leq 0.05$ .

**Sub-alternative null hypothesis:** A statistically significant impact exists of each of the dimensions of electronic management on the financial performance of the municipality at a significance level of  $\alpha \leq 0.05$ .

### 3.4. Residual distribution (Residual table)

The following figure shows that the residuals cluster along the line, indicating that they follow a normal distribution, which is one of the conditions for linear regression analysis.

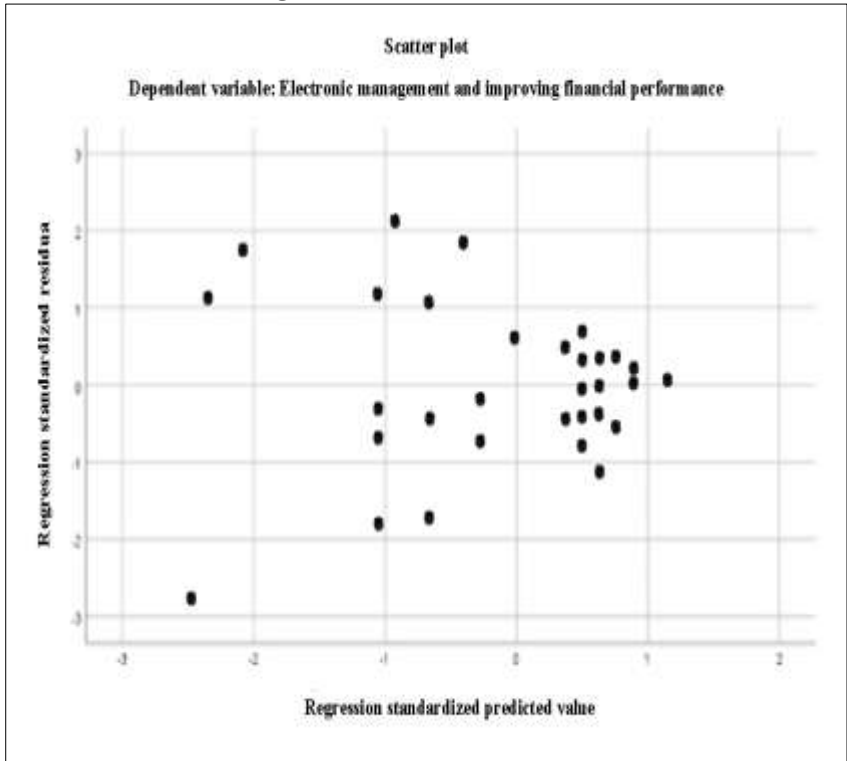
**Figure (02): Residual distribution**



**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

We observe that all the points are very close to the line, indicating that the residuals are normally distributed, which is a condition for applying regression.

**Figure (03): Scatter plot**



**Source:** Prepared by the researchers, based on the outputs of the SPSS V.23 program.

Through the scatter plot, we observe that the correlation is linear, positive, and strong.



## Conclusion

Through this study, we were able to address the hypotheses and arrived at several findings and recommendations, which we will outline as follows:

### **Main Hypothesis Testing:**

The main hypothesis is valid; the financial performance of municipalities is statistically significantly influenced by the use of e-management.

### **Sub-Hypothesis Testing:**

- The first hypothesis is valid: e-management improves the quality of services provided by the municipality to citizens, as confirmed by the study.
- The second hypothesis is valid: e-management contributes to improving the financial performance of municipalities.
- The third hypothesis is valid: there are several other variables that affect the financial performance of municipalities, in addition to e-management.

### **Study Findings:**

The study reached several conclusions, summarized as follows:

- There is a positive correlation between e-management in the municipality and the financial performance of the municipalities in Bouira.
- There exists a statistically significant impact of e-management on the financial performance of municipalities.

- E-management affects and contributes to the improvement of the financial performance of municipalities.
- The study found that e-management reduces administrative corruption and regionalism, which positively impacts the financial performance of municipalities.

### **Recommendations:**

Through the study, we arrived at several recommendations, outlined as follows:

- The more the municipality moves towards e-management, the more it contributes to improving its financial performance. Therefore, the Ministry of Interior and Local Authorities should accelerate the full digitization of municipalities.
- The need to implement electronic payment in municipalities, which ensures the collection of municipal revenues and reduces the cost of revenue collection, contributing to the improvement of financial performance.
- Continue modernizing other municipal departments, such as civil status, and connect them to one another to facilitate the work of municipal employees, especially the departments responsible for preparing municipal budgets. Additionally, introduce accounting programs that provide accurate information on the municipality's financial situation.



## References and sources.

- 1) Abdul, H. A. (2017). A proposed framework for applying zero-based budgeting to improve financial performance: An analytical study of the views of a sample from Al-Muthanna province departments. *Al-Muthanna Journal for Administrative and Economic Sciences*, 07(01). Iraq.
- 2) Al-Khalidi, M. M. (2007). *Electronic technology*. Amman, Jordan: Dar Kunooz Al-Ma'arifa for Publishing and Distribution.
- 3) Bahloul, S. (2017). Application of electronic administration at the local community level between modernization of public services and fighting administrative bureaucracy. *Al-Mufakkir Journal*(16).
- 4) Bahloul, S. (2018). The role of electronic administration in enhancing the performance of municipalities. *Doctoral dissertation in Legal Sciences*. Batna, Algeria: Faculty of Law and Political Science, University of Batna-1.
- 5) Dubi, A. (2016). The importance of developing a financial strategy for municipalities to address budget deficits: Perspectives and outlooks for the Algerian case. *Al-Mehwar Journal*. Algeria.
- 6) Hadid, N., & Kribet, H. (2017). Public services in light of the application of electronic administration: An evaluative study of electronic services on the website of the Ministry of Interior and Local Communities. *Al-Mu'assasa Journal*(06).
- 7) Hama, A., & Bouali, A. (2022). The role of electronic administration in improving the performance of Algerian regional communities. *Ma'aref Journal for Legal and*

- Economic Sciences, 03(01)*. Barika, Algeria: University Center Si El Haouas.
- 8) Jabbour, A. S. (2017). Electronic administration and its role in enhancing the performance of local communities in the context of e-government implementation in Algeria. *Al-Maqar Journal for Economic Studies(01)*. Tindouf, Algeria: University Center of Tindouf.
  - 9) Lfta, A. S., & Al-Nafi'i, R. K. (2016). Evaluation of the financial performance of the municipalities of Babil and Karbala: A comparative applied study. *Journal of Economic and Administrative Sciences, 22(89)*. Iraq.
  - 10) Mghayra, A. I. (2019). The effectiveness of financial performance of local administration units in Jordan: An analytical field study of the municipalities of Irbid province. *Master's thesis*. Irbid, Jordan: Faculty of Economics and Administrative Sciences, Yarmouk University.