

The Impact of Digital Transformation in Tax Administration on Public Service Quality and Tax Collection Efficiency: An Analytical Study at the Batna Tax Center - Algeria(2025–2021)

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Abstract:

This study aims to assess the impact of digital transformation within the tax administration on enhancing public service quality and improving tax collection efficiency, taking the Batna Tax Center (CDI Batna) as a case study during the period from 2021 to 2025. Employing a descriptive-analytical methodology, the paper examines and compares operational performance and tax collection indicators prior to and following the implementation of the "Jibaya'tic" information system and its associated digital platforms. The study concluded with several key findings, most notably that adoption of digitalization triggered a qualitative leap in public service quality by streamlining tax procedures, eliminating paper-based transactions, and significantly reducing processing times for issuing various tax documents and certificates. Consequently, this drove higher taxpayer engagement and strengthened trust in remote digital services. Furthermore, the analysis demonstrates a direct positive impact of the "Jibaya'tic" platform on tax collection efficiency and yield, reflected in the substantial growth of total tax revenues and major tax categories through improved taxpayer tracking and reduced opportunities for tax evasion. Based on these findings, the study recommends continuously supporting and upgrading tax digital systems, strengthening technological infrastructure, expanding paperless processes, and securing electronic platforms to ensure operational continuity and foster voluntary tax compliance.

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Keywords: Digital Transformation, Tax Administration, "Jibaya'tic" System, Public Service Quality, Tax Collection Efficiency, Batna Tax Center.

Introduction

The Algerian tax administration is undergoing a strategic transformation toward comprehensive digitization aimed at modernizing its financial structures and overcoming the dysfunctions resulting from traditional management methods, which have long suffered from bureaucracy and delayed processing of files. In this context, the Algerian Ministry of Finance adopted the unified tax information system "Jibaya'tic", supported by a package of electronic platforms directed at taxpayers, to restructure the relationship between the tax administration and the public on the basis of efficiency and transparency.

This digital transformation is based on achieving two fundamental dimensions: the first lies in improving the quality of the public tax service by simplifying procedures and reducing the costs and timeframes of services, while the second consists of raising the efficiency of tax collection, expanding the tax base, and curbing evasion. The importance of this study emerges in providing a field analytical evaluation of the extent to which these objectives are embodied in modern tax centers, taking the Tax Center of Batna Province (CDI Batna) as a research model. Batna Province is considered one of the most important provinces and economic and commercial hubs in eastern Algeria, as its tax center represents a reference organizational environment for monitoring the path of field transition from the traditional management system (SGF) to the full digital management system via the "Jibaya'tic" platform. Based on this, the main research problem of the study is defined in the following main question:

How does the digital transformation of the tax administration contribute to improving the quality of public service and raising the efficiency of tax collection at the Tax Center of Batna Province - Algeria during the period (2021–2025)? The following sub-questions stem from this main question:

1. What are the conceptual frameworks and organizational dimensions of the digital tax services adopted in Algeria?
2. How does digital transformation (Jibaya'tic system) reflect on the quality of public service and the reduction of timeframes for issuing tax documents at the Batna Tax Center?
3. What is the extent of the impact of applying the digital system on the volume and profitability of tax collection for various types of taxes at the center during the period (2021–2025)?

In order to answer these questions, the following hypotheses were formulated:

- **First Hypothesis:** The application of the "Jibaya'tic" system at the Tax Center of Batna Province contributes to improving the quality of public service by shortening the timeframes of transactions and facilitating the acquisition of tax documents.
- **Second Hypothesis:** There is a statistically significant positive effect between the adoption of digital management and the increase in the yield and profitability of tax collection for various types of taxes at the center.

To achieve the objectives of the study and test the validity of the hypotheses, the researcher relied on the descriptive-analytical method; where the descriptive aspect was relied upon to present the concepts and theoretical frameworks related to the digitization of the tax administration and its modern systems, such as the "Jibaya'tic" system and the SAP system. Meanwhile, the comparative analytical aspect was relied upon to study and analyze the field data and statistics issued by the Tax Center of Batna Province (CDI Batna) during the period extending from 2021 to 2025. This processing was manifested in comparing two main phases: the traditional paper management phase (2021–2022) via the (SGF) system, and the digital management phase (2023–2025) via the "Jibaya'tic" system, in order to measure

the impact of this transformation on improving the quality of public service (by reducing the time required to issue documents and the growing demand for digital services) and raising the efficiency and profitability of tax collection for various types of taxes and duties.

First: Presentation of the Batna Tax Center (CDI Batna)

The Tax Center of Batna was officially put into service on January 2, 2021. From an administrative standpoint, it is under the authority of the Tax Directorate of Batna Province (DIW) and is classified among First-Class centers, managing a portfolio of approximately 14,000 tax files.

- **Legal Framework:** The Batna Tax Center was established in implementation of Executive Decree No. 02-303, as amended and supplemented by Executive Decrees No. 05-494 and No. 06-327. These regulatory texts enabled the setup of new tax structures, namely: the Directorate of Large Enterprises (DGE), Tax Centers (CDI), and Proximity Tax Centers (CPI), within the framework of modernizing the tax administration.
Each tax center exercises a specific territorial jurisdiction determined by the regulatory texts in force, covering all municipalities within its geographical scope. In this capacity, it handles the monitoring of the tax status of taxpayers operating within this region, particularly those subject to the real tax regime.
- **Scope of Interventions of the Tax Center (CDI) and Taxes Under Its Supervision:** The Tax Center is responsible for processing tax files and managing the tax affairs of natural and legal persons subject to the real regime whose annual turnover currently exceeds 800 million Algerian Dinars, in addition to categories meeting specific criteria related to the legal status of the enterprise, the tax option chosen, or the nature of the activity practiced. Based on this jurisdiction, the taxes and duties supervised by the tax center are:
 - Personal Income Tax (IRG)
 - Corporate Income Tax (IBS)
 - Value Added Tax (TVA)
 - Apprenticeship and Training Tax
- **Organizational Structure of the Batna Tax Center:** Pursuant to Article 88 of the Interministerial Order dated February 21, 2009 (corresponding to 25 Safar 1430), which specifies the organization and powers of the external services of the tax administration, the Tax Center (CDI) comprises three (03) main departments, one (01) tax collector's office (Receveur), and two (02) offices attached directly to the Head of the Center.

Second: Conceptual Foundations of Tax Administration Digitization and Adopted Systems

1. Basic Concepts of Digitization and Tax Administration:

- **Digitization (La numérisation):** A technical process through which physical data or contents, such as documents and papers, are converted into digital formats suitable for electronic processing. It also includes converting analog signals into digital signals that can be stored and utilized by information systems.²
- **Paperless / Dematerialization (Dématérialisation):** A concept aimed at creating documents directly in digital format, circulating them, and processing them electronically. It also aims to rethink all aspects of document flow processing operations, such as: actors, roles, procedures, tools, reception channels, and distribution channels.³
- **Concept of Tax Administration Digitization:** There is no specific single definition for the digitization of tax administration, as there are many definitions. Some have defined it as "the use of information and communication technology by the tax administration when performing its

²Cacaly, S., et al. (2001). Dictionnaire encyclopédique de l'information et de la documentation. Amsterdam: Nathan, p. 431.

³Mikalef, P., & Parmiggiani, E. (2022). An Introduction to Digital Transformation. In Digital Transformation in Norwegian Enterprises.

assigned tasks and responsibilities, out of a desire to simplify procedures for taxpayers on the one hand and improve tax administration services on the other hand."⁴

Digitization of the tax administration means transitioning from using traditional paper methods to digital methods based on electronic communication devices. This ensures high speed and accuracy in executing transactions, allowing the achievement of two basic goals: reaching an efficient and effective tax administration, and raising the level of tax compliance for taxpayers while improving service quality. The tax administration has undertaken fundamental reforms to move toward electronic management and keep pace with global practices. These measures included generalizing intranet and internet connectivity to enhance internal coordination and accelerate information sharing. It also established an official website for tax services and publications, alongside using social media pages for direct interaction with taxpayers. Finally, it adopted an electronic window allowing taxpayers to request a Tax Identification Number (NIF) and receive it within just 48 hours.⁵

2. Digital Systems and Public Tax Service:

- **Introduction to the Tax Administration Information System (SAP):** SAP is a German computer software company headquartered in Walldorf, Germany. SAP is an Enterprise Resource Planning (ERP) system used by most of the world's largest enterprises. The objective of an ERP system is to manage all enterprise operations from a single unified platform⁶. The SAP information system was implemented in the tax administration, adapted to administrative requirements, and structured to establish a new working method through the system while taking into account the primary activities of the departments.
- **Creation of the Business Partner (BP) Number:** The taxpayer is directed to the management department responsible for issuing the "Business Partner" (BP) number, which is registered in the unified tax information system at the national level (SAP). This department also creates the taxpayer's tax obligations, particularly regarding Value Added Tax (TVA), Personal Income Tax (IRG), Corporate Income Tax (IBS), among others.⁷
- **Definition of Public Service:** Public service is defined as the bond connecting the government administration and citizens to meet their desires and satisfy their public needs. According to French administrative law, it is a technical service generally provided through a public institution to respond to those needs, with those managing it committed to the principles of equality, continuity, and adaptability to achieve the public interest.⁸

3. Working Method, Core Activities, and Auxiliary Applications of the SAP System at the Tax Center:⁹

- **Comparison Between the Traditional Working Environment and the Modern System (SAP):** The implementation of SAP brought a radical shift; creation of accounting entries transformed from 100% manual preparation requiring significant effort and risk of human error, to 100% automatic creation requiring no effort and reducing control work. It also enabled automatic execution of operations (such as tax reductions and debt clearance) instead of processing

⁴Guennas, A. Z. Y. (2021). Electronic Tax Declarations and Their Impact on Increasing Tax Yield in Light of Tax Administration Modernization. *El-Makrizi Journal for Economic Studies*, ShahidHammalLakhdar University of El-Oued, Algeria, Vol. 05, No. 02, p. 18.

⁵Ouchan, A. (2017). Tax Reforms as a Tool for Modernizing and Developing Taxation with Reference to the Case of Algeria. *Academic Journal for Social and Human Studies*, Department of Economic and Legal Sciences, No. 17, pp. 67–74.

⁶Monk, E., & Wagner, B. (2012). *Concepts in Enterprise Resource Planning* (4th ed.). Cengage Learning.

⁷Yala, Y. (2025). Computerized Accounting in Algeria Put to the Test of Tax Audits: An Evaluative Study of Practical Challenges and Adaptation Imperatives. *Revue des Études Financières, Comptables et Fiscales (ASJP)*, Vol. 12, No. 2, pp. 241–258.

⁸El-Chiker, A., Driouche, N. H., & Mesrati, K. (2022). The Role of Digitization in Improving Service Quality in Public Administration: A Sample Study of Citizens Benefiting from Biometric Service Operations in the Municipality of Ahmer El Aine. *Journal of Economic Growth and Entrepreneurship*, Vol. 5, No. 2, pp. 94–109.

⁹Tax Center of Batna Province. (2025). *Procedures and Core Activities Guide for the SAP Information System and Auxiliary Applications* (Unpublished internal administrative reports and documents). Provincial Directorate of Taxes of Batna Province, Algeria.

them outside the system, preventing data duplication while allowing export to Excel and full implementation of the accrual principle.

- **Advantages of the System in Taxpayer Monitoring and Collection:** The system grants full control over the taxpayer's reporting status, with high accuracy in detecting non-compliant taxpayers and automatically calculating tax base and collection penalties.
- **Filing Declarations:** It allows filing declarations in person at the center's counter or electronically remotely. The system automatically records and accountably generates actual amounts, calculates penalties, issues payment notices, and automatically carries forward surpluses to subsequent periods.
- **Payment and Cash Management:** It executes all treasury operations (cash, check, CCP) from a single point, with real-time automatic accounting entry and allocation, immediate issuance of payment receipts (Quittance), and automatic determination of each tax's share.
E-Payment via Digital Platforms: Electronic payment constitutes an extension of SAP system services and the "Jibaya'tic" platform, allowing taxpayers to settle their tax liabilities and duties remotely without the physical need to travel to the tax center counter. This is conducted using bank cards or Algerian Post's Edahabia card through secured payment platforms, with real-time issuance of payment notices and accounting receipts (Quittance), updating the taxpayer's status in the information system immediately upon funds transfer.
- **Tax Assessment Roll (Rôle Individuel):** It relies on a workflow engine to pass accounting entries and automatic validation upon the Head of Center's approval, with the ability to recalculate, send notifications, and conduct follow-up procedures (Dunning).
- **Complementary Core Functions:** These include processing payment postponements and cancellations, settling and writing off uncollectible debts, processing overpayments, tax refunds, check processing, and tax distribution.
- **Auxiliary Software Applications at the Batna Tax Center:** The SAP system is supported by a package of auxiliary applications, including: the File Tracking Application (archive and database for NIF and BP), the Existence Certificate and Turnover (C20) Tracking Application to accelerate certificate preparation, the Financial Statements Tracking Application to verify taxpayer status, the Secret Code Tracking Application to prepare and print passwords for the "Jibaya'tic" platform, and the Cross-Checking Cards Application (Recoupment) for exchanging and processing tax cards with the Directorate.

Third: The Role of Digitization in Improving Public Service Quality in Tax Administration

Digitization represents a strategic choice for modernizing the tax administration and developing its public services by simplifying procedures and enhancing transparency. It also contributes to accelerating transactions and delivering services remotely, bringing the administration closer to taxpayers, saving time and effort, and fostering mutual trust.

- **Electronic Tax Services:** In order to provide high-quality tax services that align with developments in other sectors that have moved toward digital transformation, the tax administration, in turn, relied on information and communication technology to deliver its various services:

Table No. (01): E-Tax Services and Digital Platforms Provided by the Algerian Tax Administration

No	Service	Description
01	JIBAYA'TIC	Online declaration and payment (Central Tax Information System).
02	Moussahama'tic	Remote declaration and payment portal for taxpayers.
03	Tabioucom	Electronic payment platform for fiscal stamp duties.

04	Qassimatouka	Remote car vignette acquisition platform (digitization of car sticker purchasing).
05	TaxNumbering	Electronic service for obtaining or verifying taxpayers' tax numbers.
06	Tax Identification Number (NIF) Verification	Digital verification tool to confirm the validity of the Tax Identification Number.
07	Algerian Business Creation Portal	Service directed at investors and project owners to facilitate online company creation.
08	Newsletter Subscription	To receive tax updates and news from the Directorate.
09	TaxLegislation	Digital library for tax laws and instructions.
10	Tax Documents	Downloading official forms and documents related to declarations and transactions.

Source: General Directorate of Taxes (DGI). (2025). *E-Tax Services Portal and Digital Platforms*. Ministry of Finance, Algeria. Retrieved from <https://www.mfdgi.gov.dz>

- **The Impact of Digitization on Improving Service Quality and Reducing Timeframes:** Digitization represents a fundamental pillar for simplifying tax procedures, directly contributing to saving time, reducing effort, and raising the quality of services provided to taxpayers.

I. Reduction of Timeframes for Obtaining Tax Documents: Speed of service delivery and the reduction of administrative time constitute one of the most critical indicators of administrative performance quality under digital transformation. As an embodiment of this, the "Jibaya'tic" platform and the adopted electronic services at the Tax Center of Batna Province contributed to a qualitative leap that led to a tangible reduction in the time periods required to issue various tax documents and certificates compared to previous traditional methods, as illustrated in the following table:

Table No. (02): Comparison of Timeframes for Obtaining Tax Documents Before and After Digitization at the Tax Center of Batna Province

Document	Before Digitization	After Digitization
C20 Document	One week	24 hours
Tax Identification Number (NIF)	15 days or more	Instantly upon website registration
Tax Assessment Roll (ROLE)	Waiting in line at the tax collection office	Notification via Jibaya'tic

Source: Prepared by the researcher based on field data from the Tax Center of Batna Province and the digital services of the "Jibaya'tic" platform.

It is clear from the previous data the direct impact of applying digital platforms in reducing timeframes:

- Annual Declaration C20: The issuance period decreased from one week before digitization to only 24 hours after digitization.
- Tax Identification Number (NIF): Its issuance period decreased from 15 days or more to instantly upon direct registration on the website.
- Tax Assessment Roll (ROLE): It transformed from physical waiting in line at the tax collection office to exclusive electronic notification via the "Jibaya'tic" platform.

This reduction in timeframes is attributed to the transition toward digital management through:

- Speed and Effectiveness: Shortening processing time, eliminating queues, and removing the need for physical visits.
- Centralized Connectivity: Instant document generation thanks to direct connection with central databases.

- Service Availability: Providing tax documents electronically around the clock for taxpayers.

II. Growth in the Volume of Electronically Issued Documents (Development of Demand for Digital Services 2023–2025): The increasing demand for digital platforms reflects the extent of taxpayers' responsiveness to digital transformation, as the period between 2023 and 2025 witnessed a remarkable increase in the volume of electronically issued tax documents, as illustrated in the following table:

Table No. (03): Development of the Volume of Electronically Issued Tax Documents at the Tax Center of Batna Province (2023–2025)

Document	2023 (Before Full Digitization)	2024 (Use of Digitization)	2025 (Use of Digitization)
C20 Document	1695	2248	4305
Tax Identification Number (NIF)	687	788	1071
Tax Assessment Roll (ROLE)	1772	4039	7540

Source: Prepared by the researcher based on field data from the Tax Center of Batna Province and the digital services of the "Jibaya'tic" platform.

The following points become clear from the previous data:

- The number of issued C20 documents rose from 1695 (in 2023 – before full digitization) to 2248 (in 2024), reaching 4305 documents in 2025 (a growth rate exceeding 154%).
- NIF issuances increased from 687 (in 2023) to 1,071 (in 2025).
- ROLE issuances increased from 1772 (in 2023) to 7540 (in 2025) (an increase exceeding 325%).

This steady rise in the volume of electronic documents is attributed to:

- Increased Digital Trust: Taxpayers' conviction regarding the flexibility and ease of electronic services compared to physical attendance.
- Expansion of the User Base: The platform's capacity to accommodate larger numbers of taxpayers thanks to system stability.
- Efficiency of Dematerialized Transactions: The administration's trend toward adopting digital options for issuing and serving documents.

Fourth: Reality of Tax Administration Digitization and Its Impact on Tax Collection (Case Study of the Tax Center of Batna Province)

Digitization of the tax administration is a strategic choice for modernizing financial performance, aiming to simplify procedures and facilitate remote transactions, which directly reflects on raising tax collection efficiency and expanding the tax base. This study seeks to shed light on the reality of applying these digital mechanisms and their field impact on the quality of collection, taking the Tax Center of Batna Province as a case study.

- **Analysis of Tax Collection Yield for the Year 2023 under the Initial Implementation of the Jibaya'tic System at CDI Batna:** The year 2023 represents a pivotal stage in the modernization path of the Algerian tax administration, as it witnessed the beginning of the implementation of the "Jibaya'tic" system as a digital tool aimed at improving tax management quality and enhancing tax collection effectiveness. Analyzing the data of this year carries special importance, considering it represents the transition point from the traditional system to the digital system, allowing an initial evaluation of the extent of digitization's impact on collection yield.

Table No. (04): Distribution and Analysis of Tax Collection Yield Before and During the Implementation of the "Jibaya'tic" System at CDI Batna (2023)

2023		Before Digitization (Jan to May)	During Digitization	Total Amounts Collected for 2023	Collection Difference
	IRG	340.390.610	1.152.583.553	1.492.974.163	812.192.943
	IBS	168.450.392	477.250.787	645.701.179	308.800.394
	DT	24.899.394	45.406.772	70.306.166	20.507.378
	TVA	921.588.821	1.248.284.121	2.169.872.942	326.695.299
	TAP	372.716.305	645.989.730	1.018.706.035	273.273.424
	IFU	5.926.256	9.067.065	14.993.322	3.140.809
	AUTRE	3.792.668	131.362.496	135.155.164	127.569.828
	TOTAL	1.837.764.447	3.709.944.526	5.547.708.973	1.872.180.078

Source: Prepared by the researcher based on the financial statements and field statistics of the Tax Center (CDI) of Batna Province for the year 2023.

The table displays the distribution of tax collection for the year 2023 across various types of taxes.

I. In Terms of Total Collection: We notice that:

- The total amounts collected for the year 2023 reached approximately 5547708973 DZD.
- While the amounts collected during digitization reached approximately 3709944526 DZD.
- Resulting in a difference estimated at 1872180078 DZD.

II. Analysis by Tax Type:

- TVA (Value Added Tax): Recorded the highest contribution to collection, where established rights reached more than 2.16 billion DZD, reflecting its importance in the tax system.
- IRG (Personal Income Tax): Is considered one of the primary resources, contributing approximately 1.49 billion DZD of established rights.
- IBS (Corporate Income Tax): Also recorded a significant contribution, reflecting the activity of economic enterprises.
- TAP (Professional Activity Tax): Despite recording a significant value during this year, it will undergo a subsequent decline due to its gradual abolition.
- Remaining Taxes (DT, IFU, AUTRE): Their contribution remains relatively lower, yet they contribute to diversifying tax resources.

III. Conclusion: It can be said that the year 2023, despite being the year of initial implementation of digitization through the "Jibaya'tic" system, was not merely a transitional phase, but actually witnessed the first signs of improvement in tax collection. A clear difference is observed between the period extending from January to May (before digitization) and the period following the introduction of the digital system, where the latter recorded a noticeable rise in collected amounts. This indicates that adopting digitization contributed directly to enhancing collection effectiveness by improving management procedures, facilitating declaration and payment operations, and consequently narrowing the gap between tax liabilities and collected amounts.

- **Development of Tax Collection by Tax Type under Digitization (2021–2025) at CDI Batna:** Analyzing the development of tax collection is considered one of the most important indicators reflecting the effectiveness of the tax administration, especially under digital transformation. This table aims to highlight the development of various tax revenues before and after the introduction of the Jibaya'tic system.

Table No. (05): Development of Tax Revenues by Tax Type Before and After the Implementation of the "Jibaya'tic" System at CDI Batna (2021–2025)

	SGF Tax Management System 2021	SGF Tax Management System 2022	Jibaya'tic 2024	Jibaya'tic 2025

	IRG	700.619.897	485.846.742	2.433.883.433	3.426.304.856
	IBS	606.972.927	575.251.711	1.149.398.173	2.328.043.048
	DT	48.178.537	52.762.899	191.592.318	221.987.829
	TVA	2.035.369.531	2.080.632.704	4.352.036.025	5.181.812.349
	TAP	1.155.641.144	905.213.073	335.904.503	107.913.254
	IFU	5.595.840	12.109.323	26.760.191	23.418.236
	AUTRE	94.903.506	56.500.776	121.102.842	125.110.200
	TOTAL	4.647.281.386	4.168.317.231	8.610.677.485	11.414.589.772

Source: Prepared by the researcher based on the annual reports and financial statements of the Tax Center (CDI) of Batna Province for the period (2021–2025).

The table shows a remarkable development in total tax collection, rising from approximately 4.64 billion DZD in 2021 to more than 11.41 billion DZD in 2025, which reflects a significant improvement in tax collection yield. We also observe a continuous increase in most types of taxes, indicating an expansion of the tax base and improved tax compliance, such as:

- IRG (Personal Income Tax)
- IBS (Corporate Income Tax)
- TVA (Value Added Tax)

In contrast, a decrease in TAP revenues is observed, which is attributable not to collection weakness, but rather to the abolition of this tax in recent years, explaining its natural decline. Furthermore, the clear rise in revenues starting from the year 2023 coincides with the introduction of the Jibaya'tic system, reflecting the impact of digitization in:

- Facilitating declaration and payment processes
- Improving the monitoring of tax payers
- Reducing tax evasion

The period before 2023 relied on a traditional system with a lower collection level, whereas the period following the introduction of the Jibaya'tic system (2023–2025) witnessed a clear rise in tax collection and an improvement in the performance of the tax administration. Accordingly, it can be concluded that:

Digitization, represented by the "Jibaya'tic" system, effectively contributed to improving tax collection despite structural changes such as the abolition of certain taxes (TAP), confirming the existence of a positive relationship between digital transformation and tax administration profitability.

Conclusion

The digital transformation of Algeria's tax administration represents a strategic choice for modernizing the financial sector and improving the quality of public service, as well as raising tax collection efficiency and expanding the tax base. This field and analytical study at the Tax Center of Batna Province (CDI Batna) during the period (2021–2025) made it possible to track and compare financial and service performance between the traditional paper-based management phase (SGF) and the comprehensive digital management phase represented by the "Jibaya'tic" system and its accompanying electronic services.

I. Study Findings: Based on the processing of data and field statistics issued by the Tax Center of Batna Province, the study concluded with the following findings:

- **Qualitative Leap in Public Service Quality:** Adopting digital platforms led to eliminating paper transactions and tangibly reducing service timeframes, contributing to improved service quality, increased taxpayer engagement, and reinforced trust in the administration.
- **Growing Demand for Electronic Documents:** Data showed a progressive increase in the volume of tax documents and certificates issued via the digital system during the period (2023–2025), reflecting taxpayers' responsiveness and rapid adaptation to the digital mode.
- **Increased Efficiency and Yield of Tax Collection:** The Tax Center of Batna Province recorded a qualitative leap in total collected tax revenues following the implementation of the "Jibaya'tic" system compared to the traditional management phase (SGF), where most structural taxes (such as Value Added Tax TVA, Personal Income Tax IRG, and Corporate Income Tax IBS) experienced clear growth.
- **Improved Monitoring and Reduction of Tax Evasion:** Centralized connectivity and digital management contributed to tightening control over taxpayers and facilitating declaration and payment operations, leading to narrowing the gap between liabilities and actual collection.

II. Hypothesis Testing: Based on the field results reached, the empirical analysis demonstrated the following:

- **Testing the First Hypothesis:** The validity of the first hypothesis was confirmed; data proved that applying the "Jibaya'tic" system and its accompanying digital services at the Batna Tax Center directly contributed to improving public service quality by simplifying procedures, reducing administrative time, and facilitating remote acquisition of tax documents.
- **Testing the Second Hypothesis:** The validity of the second hypothesis was confirmed; financial indicators showed a significant positive effect between the transition to the digital management system and the increase in the volume and yield of tax collection for various tax types at the center, reflecting the role of digitization in raising collection efficiency.

III. Recommendations:

- **Developing Technological Infrastructure:** Enhancing the capacity of servers and networks dedicated to the "Jibaya'tic" system to prevent technical disruptions and ensure continuous service.
- **Expanding and Securing Dematerialized Transactions:** Generalizing electronic payment mechanisms and activating electronic signatures and seals for tax documents to entirely eliminate physical travel for taxpayers.
- **Upgrading Human Resources and Taxpayers:** Organizing training sessions for tax administration employees and intensifying awareness campaigns for taxpayers to encourage their use of digital platforms and increase voluntary tax compliance.
- **Enhancing Interoperability:** Connecting the "Jibaya'tic" system electronically and directly with other institutions and sectors (Customs, Banks, Commercial Register) to support transparency and tax oversight.

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