

The Digitization of Real Estate Legal Services in Algeria

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Received: 23/06/2024

Accepted: 09/10/2024

Published: 03/12/2024

Abstract: The digitization of real estate legal services in Algeria is transforming access and efficiency for various users. For citizens, new digital services simplify and expedite property transactions, enhancing transparency and reducing bureaucratic delays. Contract notaries benefit from specialized online tools that streamline document preparation and registration. Additionally, Algeria is advancing agricultural digitization through the "Illumination Information Project" for the agricultural chamber, providing enhanced data sharing and sector insights. Another initiative, the digital platform linking farmers directly to consumers, aims to optimize product distribution by eliminating intermediaries. Furthermore, startups in the real estate sector are gaining momentum, fostering innovation and expanding technology-driven solutions within property management and development.

Keywords: Agricultural digitization, Digitization in Algeria, Real estate legal services, Technology-driven solutions.

Introduction

For the sake of providing more efficient public services with minimal effort and time, countries have sought to modernize their administrative systems through the use of electronic and automated methods, which have resulted in more straightforward procedures and superior outcomes across various sectors of society.

Like many other countries, Algeria has sharpened a great focus on the modernization of its administrations and regards it as a crucial a priority, particularly in the wake of the global pandemic caused by the SARS-CoV-2 virus. This stance highlighted the necessity for digitization and revealed Algeria's lag in this regard. It also led to a paramount shift in the way services are perceived, with a fundamental transformation in the performance of services to citizens due to the reliance on information and communication technology.

Furthermore, a series of measures were implemented. Most notably of which pertain for the initiation of extensive programs to restructure and modernize key service sectors (banking, health, education, legal, etc.) with the objective of enhancing their performance and supporting the country's economic and institutional growth.

Nevertheless, our investigation is confined to the domain of digitization in real estate services, which serves as a fundamental foundation in social and economic life. We identify initiatives that have been initiated in the form of projects and programs, which are primarily focused on the digitization of real estate.

These initiatives are administered and managed under the control and command of the General Directorate of National Property and real estate governorates, as well as the agriculture sector, which plays a pivotal role.

In the sphere of real estate and the source of attaining food security, Algeria has taken a notable step as concerns the development of emerging institutions that crystallize ideas to solve the problems of administrations. Besides, the endeavor of opting for technology for the sake of reinforcing the quality of services provided in order is deemed significant foster and get extended to keep pace with the technological development currently occurring.

In this vein, a number of institutions are engaged in the provision of real estate services or the management of projects currently in development. This is with a view to facilitating the citizen's experience and saving them effort and time. The citizen affronts a plethora of hurdles. In depth, the primary cause of which is the postponement in the fixation of digitization in Algeria. Notwithstanding the endeavors assigned and the technology in which Algeria lives, there are a number of shortcomings.

The subject of this study is of greatly scientific and practical importance and value. It is a relatively recent topic in Algerian public administrations and private institutions. Its importance is driven from the salience of technology and administrative digitization. Besides, it is prominent for the rapid growth of multiple spheres to get gains and fruitful insights from its usability and economic and social advantages. It also represents an attempt to materialize it realistically and face its challenges.

In addition, it offers promising future prospects for sustainable development, renewal, and economic revitalization in Algeria. Based on the aforementioned considerations, the following question arises:

What is the current state of digitization in the field of real estate legal services in Algeria?

To attain the intent of the study and attain affinity with the various realms of the subject, we opted for the descriptive and analytical methods to signal the spectrum of digitization in the legal sector in large part and real estate particularly. A recent trend to modernize the Algerian administration is an analytical approach, as it is one of the most appropriate research methods to analyze the topic in its theoretical and applied forms, thereby providing a clear depiction of digitization and its applicability for the Algerian rulings.

To answer the queries raised, our study has been divided into two distinct sections. In the initial section, we will address the digitization of real estate legal services. To do so, we will divide this research into two sections. The first section will examine the experience of the state in digitizing its real estate services. The second section will figure out the inauguration of depictions in the spectrum of real estate. In the second section, we dive into the digitization of the General Directorate of State Property and the agricultural field. We also probe the practical expertise of the state in digitizing its real estate services and some emerging institutions in the field of real estate, examining the relationship between project and reality.

Chapter one: The digitization of real estate legal services

The characteristics of technology have begun to emerge in the field of real estate activity, progressing towards the stage of digitization in tangible reality. This transition aims to achieve an effective and transparent administration, devoid of superfluous time,

effort, and financial expenditure, and free from inconvenience for citizens. This objective is to be accomplished by a competent administrative staff.

In light of the aforementioned considerations, it seems pertinent to shed light on the most significant changes and digital initiatives that have affected this strategic sector recently. These may be either those initiated by the state, in other words the state's experience in digitizing its real estate services, or those initiated by the private sector, in other words start-ups.

Section one: various experiences in the digitization of real estate services.

The Algerian state, like other countries, has kept pace with the launch of digitization and e-development, which gets to be a salient vehicle in the development of the real estate sector. This is bolstered by the inception of a plethora of programs and electronic platforms designed to achieve public benefit and enhance the quality of real estate public services, which will be explained in further detail below.

Sub-Section one; The launch of the Real Estate and State Property Information System (SIFD)

In line with the government's action strategy for the evolution of the General Directorate of National Property, the latter (The directive issued on October 4, 2022) opted for a directive for the generation of the "Système d'information foncier et dominal." This system's objective is to collect, process, and disseminate real estate information while ensuring tracking and traceability to promote transparency. This is attained by intersecting the strategies of all administrative embodiments functioning under the jurisdiction of the General Directorate of National Property, as well as providing access to the electronic database, Our Property (On January 22, 2022) Platform, which relates to public services addressed to the public, whether citizens or professionals, in order to organize the work of the Governorate of National Property.

First: Services for Citizens

Since January 2022, a digital platform designated as "Real Estate" has been accessible to facilitate access to information and administrative contracts for both citizens and economic operators in exchange for the electronic payment of service. dues and associated documents, the platform offers a range of services, including the retrieval of a land extractions of surveys as regards the target plan, the retrieval of a document excerpted from the status of the section (CC12), the copying of published contracts or mortgage agendas, or their deletion, and the retrieval of the extract of the real estate folder.

The previous cycle is promptly launched after the implementation of the electronic registration of the request, whereby the target documents are uploaded and the processing of the request embarks on in accordance with the salient procedures. In the event that the file is accepted, the applicant is informed via email on the same day of the date on which they may withdraw the requested information or documents. In the event of rejection, the applicant is informed via email on the same day, along with the reasons for rejection.

Second: Customized services for notaries

With concern to notaries, whether they are administrative authorities such as the State Property Directorate or public officers such as notaries and judicial bailiffs, they are able to get the information available in the national database, as well as the prompt withdrawal of the Pr4bis document with the permissiveness of electronic payment of rights, the electronic immersion of documents subject to real estate declaration with the possibility of electronic payment of the rights of the month and the conclusion of all services granted remotely (Instruction issued by the Ministry of Finance to the General Directorate of National Property, p. 2).

In this sphere, the pilot operations are maintained in collaboration with the General Directorate of the Public Treasury's 'State Accounting and Operational Management Service' have been successfully concluded to smoothen and ease the previous procedures. Besides, the pinpoint of the notary's account number at the Public Treasury was deemed to be delivered to all registered notaries in preparation for the completion of the clearance process remotely by transmitting funds from the notary's account at the Public Treasury, to the account of the regionally competent real estate governor. The latter was opened at the Public Treasury against a receipt delivered to the notary. To add, the editor must be informed of the outcome of the immersion, whether acceptance or rejection. In the sphere of rejection, an amount of 1000 DJ must be collected, as stipulated in Article 353-11 of the Registration Law.

Sub-Section Two: Launching an information system project for the Chamber of Agriculture.

On 4 February 2021, the National Chamber of Agriculture, operating under the supervision of the Ministry of Agriculture and Rural Development, started the applicability of an information system orchestrated as 'My Chamber'. This integrated system is advocated to streamline the digitization of the process of tracking agricultural crops across the country. The system will also easily smoothen the designation of dealers in the agricultural scope at the national level. To add, it leads to the structure of a digital file on harvest permits, administrative management, the reduction of bureaucracy, the facilitation of procedures and the verification of information.

It will additionally enable the monitoring and registration of agricultural crops in each plot for each agricultural season in real time, and the obtaining of statistics on the quantities harvested for each type of grain using modern and automatic techniques.

The primary objective of this system is to identify and register all investments and agricultural plots, along with all associated information, through the use of geographical mapping techniques. It is also designed to monitor and register agricultural crops in each plot for each agricultural season in real time, as well as to obtain statistics on the quantities harvested for each type of grain using modern and automatic methods. The system employs a variety of techniques to obtain accurate statistics regarding the connection of agricultural plots to electricity networks, irrigation sources and agricultural roads. It also provides the possibility of remote communication by providing the farmer with a secret number that is available in his professional card (farmer card) so that he can access the base.

On top of that, the system paves the way to the precision of the current requirements for raw materials and fundamental inputs in the agricultural arena. This action leads to the establishment of effective control of the support and subsidies provided to investors. The latter is based on the total area actually cultivated and declared on the geographical mapping system. Moreover, the system signals the technical process during the production cycle, with the intent of heightening yield and bolstering areas with high yield and future expansion. It also facilitates the preparation for the beginning of the ploughing season, based on data previously enrolled in the system. In brief, the system will streamline the generation of a structured agricultural map of agricultural production and crops in Algeria. This will be done with the objective of achieving self-sufficiency, enhancing food security, optimizing the control of resources and crops in accordance with the practices displayed in the so advanced countries, and raising the yield in the cereal sector, with the intention of then generalizing this to other agricultural fields (Instruction issued by the Ministry of Finance to the General Directorate of National Property, p. 2).

Sub-Section Three: The inauguration of a platform dedicated to pick up the areas of sale of agricultural products from producer to consumer

The Director General of Information Systems, Statistics and Forecasting at the Ministry of Agriculture, in line with the Director General of the National Professional Office for Vegetables and Meat (ONILEV), has inaugurated the FIRMA-DZ platform. This comprehensive resource encompasses 500 points of sale, accessible to any citizen, and provides detailed information on the types of agricultural products available at each location.

The site is designated "EL-FIRMA DZ" in order to facilitate access to notes and information with relevance to the areas of sale of agricultural products accounted by the Ministry of Agriculture and Rural Development across multiple provinces. This enables any citizen to ascertain the geographical location of the points of sale situated within their own city or province.

The website contains comprehensive information about a plethora of sales points that have been enumerated, involving the names of the producers and the types of products depicted (e.g., vegetables, fruits, red meat). It is continuously updated with additional information of interest to consumers.

In addition to the points of sale belonging to institutions and operators under the sector's mandate, other points of sale belonging to private parties, such as agricultural investments, have been included in the count. Furthermore, an electronic form has been developed to allow any operator or producer who meets the conditions specified by the site's administrators to register and join the site.

Section Two: Start-ups and the property sector

A start-up is a term used to identify newly established companies that originate from a creative entrepreneurial idea and have great potential for rapid growth and prosperity (Bouaka Kamelah, July 2022, p. 39).

In order to facilitate the establishment of start-ups, the Algerian legislator has sought to establish the legal, regulatory and legislative framework necessary for this purpose. This

has been achieved through the fulfillment of Executive Decree No. 356-20, which entails the structure of a headquarter for the promotion and management of support structures for start-ups and the definition of its tasks, organization and management (Executive Decree No. 356-20, dated 14 Rabi Al-Thani 1442, corresponding to 30 November 2020, establishing the Foundation for the Promotion and Management of Start-up Support Structures and defining its missions, organisation and functioning, Official Gaze). Furthermore, Executive Decree No. 254-20 has been enacted with the objective of establishing a national committee to grant the label 'start-up', 'innovative project' and 'business incubator' (Executive Decree No. 254-20).

Accordingly, the present study will identify **a number of nascent institutions in the real estate services** sector that have diversified in order to meet the needs of property owners, including those engaged in construction projects and those active in the real estate market:

First. NABET-TECH

NABET-TECH is a startup company that specializes in digital solutions aimed at improving agricultural productivity in Algeria. The company has developed an application that allows farmers and investors in the agricultural sector to benefit from remote agricultural guidance and obtain all relevant information and recommendations that help in immediate intervention to protect crops from the symptoms of harmful parasitic diseases. Such diseases can sometimes lead to the complete loss of plant productivity. The application also protects crops from any issues that limit productivity, such as some environmental factors.

Second. RAY-TECH

RAY-TECH is a system designed to conserve water during irrigation. The startup, which was established in 2016, has developed a technological solution that enables the conservation of water during the irrigation of a range of crops, both in indoor and outdoor settings.

The system is a smart water measurement and irrigation control system that is capable of saving up to sixty percent (60%) of water in comparison to traditional irrigation ways and strategies. When implementing it, it paves the way forcefully to the monitoring of the water level within the tank, the development of an optimal water control system at a low cost, the improvement of the endeavor and elaboration of farmers, the extension of their professional experience, and outscore raising the stance of productivity. Moreover, it allows the farmer to attain developed background of irrigation, especially in the regions of water conservation and the preservation of this insightful outcome.

The effectiveness of this model solution was evaluated through a successful experiment conducted in collaboration with the National Agency for Integrated Water Management (Agir) and the Mchamcha farm in the Blida region. The solution was monitored through a mobile application, which facilitated the delivery of liquid fertilizers to the plants, thereby demonstrating the potential for water savings.

Chapter Two: The digitization of real estate

The delineations of technology have commenced to stipulate in the field of real estate activity in the Algerian administration. In this context, digitization has become the only solution to achieve an effective and transparent administration in which there is no room for wasting time, effort, and money, and citizens do not suffer from bureaucracy and favoritism. The following section will address the most important legislative provisions on this subject.

Section One: The Involvement of digital strategies in terms of the interests of the General Directorate of National Property

Besides the step adopted at the level of the digitization of real estate files at the local and central streams, the General Directorate of National Property has prepared the groundwork and cleared the way towards facilitating digitization. This has been achieved by means of **uniting the survey and real estate conservation departments and digitizing the real estate conservation department**. The objective of this process is to improve public service and modernize the land survey and real estate conservation department. This is due to the unsatisfactory results in the field of management for citizens, in particular. It was resolved that the National Land Survey Agency should be dissolved in accordance with Articles 1 and 2 of Executive Decree No.251,21 (Executive Decree No. 251). This resolution involves the dissolution of the National Land Survey Agency and the transfer of its property, rights, duties, and employees to the Ministry of Finance. The previous cited resolution was endeavored with the objective of tabulating the issues previously recorded, as the survey and real estate conservation departments were merged into one department under the authority of the General Directorate of National Property. This merger was deemed necessary due to the complementary relationship between the two departments, whereby the preliminary preparatory work is complemented by fieldwork to reach the real estate book.

Subsequently, Executive Decree No. 252-21 (Executive Decree No. 21) was enacted, involving the pivotal administration of the Ministry of Finance. This was maintained with the intention of stipulating and terminating the structural organization of the Ministry of Finance in its entirety, as well as that of the General Directorate of National Property in particular.

Executive Decree No. 393-21 (393-21), which depicts the superficial center and powers of the Directorate General of National Property, is sought to provide an interpretation of Article 8 of Decree 21/252.

The executive decree's objective is to digitally maintain the activities of state property, land surveying, real estate conservation, and the inauguration of modern information and communication technologies as portion of the modernization of the National Property Directorate.

Article 8 of the decree (decree) stipulates that the State Directorate of Land Survey and Land Conservation is consistent of five departments: the Land Survey Department, the Land Conservation Department, the Land Survey and Land Conservation Disputes Department, the Public Means Department, and the Digitization and Communication Department, as well as the Archive. The functions of these departments will be thoroughly tackled in detail as the essence of the subject.

1. Duties of the Department of Digitization, Communication and Archives:

The Department is responsible for implementing programs related to the digitization of land surveying and cadastral activities, organizing public reception and information, and working to improve public service.

This department is organized into three offices: the Office of Guidance and Communication, the Office of Archives, and the Office of Digitization of Land Surveying and Cadastral Activities, which is the core of our study.

2. Functions of the Office for the Digitization of Land Surveying and Cadastral Activities

The Office for the Digitization of Land Surveying and Land Conservation Activities takes charge for the preparation, use and sharing of digital data attached to the activities of the Provincial Directorate of Land Surveying and Land Conservation, the application and exertion of the programs established by the Peaceful Authority in the area of digitization of land surveying and land conservation activities, the maintenance of the computer equipment allocated to the variegated structures of the Provincial Directorate and ensuring its optimal use.

As the first initiative in the real estate sector, the project of digitization of the Department of Surveying and Real Estate Preservation was inaugurated as a roadmap to move towards the digitization of the real estate sector as the department responsible for the management of real estate.

Within the framework of Decree No. 21-393 of October 18, 2021, depicting the organization and powers of the external departments of the General Directorate of National Property and the previously attached joint ministerial decision, the departments of real estate preservation have been stipulated and a department for the digitization of real estate preservation activities has been generated, PROJET M.A.C.F., whose function is to empower and foster the real estate preservation service. According to article 13 of the same decision (decree A. 1.-m.), this department has the task of preparing, using and exchanging digital data on the activities of the Real Estate Governorate, digitizing the archives and documents of the Real Estate Governorate, and implementing the programs set by the authority in the realm of digitizing land surveying and real estate preservation assignments.

As earlier stated, it is clear that the project of modernizing the activities of real estate preservation is regarded as the first pace of modern technology, which is indicative of the application of electronic management in the conduct of the multifaceted activities of the operations of the real estate governorates and the establishment of an information system and a public real estate documentation system by structuring a database based on the different documents of the real estate registry stored and maintained at the level of the real estate governorates and thus archiving the latter, as this ambitious project (Rabah Ben Mamer, March 2022, p. 1553) paves the way for what follows:

1- Automated search within the real estate registry information

The implementation of automated applications will streamline the search for different contracts and information recorded or digitized, thus lessening the time and cost affiliated with manual processes (Zahra Hafezi, 2008, p. 313).

2- Electronic Archiving of Land Registry Documents

The digitization of the archives of real estate governorates is regarded the third step of the initial phase of the modernization program for real estate preservation activities. This follows the first step of creating information databases related to the information of all holders of the second phase of the modernization program for real estate preservation activities involved the entry of approximately 10 million property cards into the databases, which were certified. The second step related to the inclusion of information on properties and their dependencies reached approximately 93% completion by the end of December 2022.

3- Digital monitoring of the filing process

The process of deposit is deemed the initial forefront of the real estate governorate, preceding the completion or rejection of the real estate month procedure. The latter is subject to regulatory texts that stipulate its substantive and procedural realm, as well as its time limits, which are of significant legal and financial implications. The automation of applications enables the digitization of the process of automatic contracts and documents, smoothening the monthly administration of real estate transactions.

The project applied to modernize real estate preservation activities has undergone several stages, as outlined in the program prepared by the General Directorate of National Property under Instruction No. 5452 (Direction général du domaine). This document delineates the fixed stages and steps necessary for implementing the project, which can be summarized as follows:

1- The initial phase of the project started in a given signaled date. The inaugural phase of the project was publicly proclaimed across the country's governorates on October 15, 2015 (activities.). This declaration followed a series of meetings held to elucidate the project's content and objectives, as well as to delineate the procedures for booking and monitoring the data associated with the documents published at the level of the real estate governorates and the lists of owners.

2- The second phase of the project started from the conclusion of the first phase. In line with the conclusion of the inaugural phase, which entailed the registration and incorporation of all pertinent data for the purpose of facilitating information requests pertaining to a range of housing options, the project proceeded to transition towards digitizing the realm of the land registry. This matter involved the digitization of all data pertaining to in rem rights and real estate designation, in anticipation of future requests that will be received in the future.

The Central Administration of National Property had set the end of June 2017 as the completion date for this essential step, but field work has proceeded at a pace other than that depicted in the project's program (The digitization of the administration will allow the facilitation of real estate properties and the delivery of the real estate book, 2023).

3- The third phase is as follows: This phase is tied to the digitization of all real estate cards, records, and contracts maintained at the level of the real estate governorate, with the objective of ensuring the security of all documents and archives held by the

aforementioned governorates. This is a fundamental responsibility of the National Property Directorate.

Section Two: Digitization of the Agricultural Sector

The agricultural sector is regarded as the most crucial sector that contributes to achieving economic, social, and environmental development. It is a major pillar of the local economy, especially through the leverage of natural resources, increasing the volume of agricultural exports, and reducing the deficit in the trade balance (Bousseda Saida, 2015, p. 61).

Algeria has known several agricultural regulations and laws aimed at the optimal exploitation of natural resources and adopted strategies to meet production requirements and increase productivity, perhaps the most important of which is modern farming or what is called the digitization of agriculture, so that Algeria has adopted several innovative solutions in recent years that have been successful, the most important of which are:

1. Smart Agriculture

It is a system based on advanced technology in the agricultural sector that employs sustainable and clean methods to rationalize the use of natural resources, particularly water. One of its most notable characteristics is its foundation in a system of information management and analysis through computerization and intelligent applications, enabling optimal production decisions at minimal costs while combating pests and viruses that threaten crops. On top of that, it involves soil and crop monitoring, and it is agglutinated with the accelerative progress in technology by outscoring renewable energy in irrigation and utilizing solar energy in pumping instead of oil motors (Bouabdli Yassine, Ziane Achour University in Guelfa, Algeria, Vol. 07, No. 01, p. 312).

Additionally, Algerian experts have developed applications that provide farmers and investors in the agricultural sector with straightforward instructions and recommendations related to irrigation. In this context, Algeria's efforts are determined on fostering agricultural innovation through the digitization of the sector's programs, the development of agriculture in rural areas, and the incorporation of the majority of agricultural lands with new digital technologies. The objective is to raise the contribution of agriculture to GDP under the new agricultural development plan for the period 2025-2035. In 2021, the contribution reached approximately 13%.

2. The utilization of digital solutions in the fight against plant diseases:

Artificial intelligence applications and programs have been developed to provide the necessary guidance and scientific solutions to combat weeds that cause significant damage, as they often serve as a habitat for harmful insects and diseases. Moreover, these complimentary applications permit the farmer to photograph detrimental plants or symptoms afflicting crops, which can then be uploaded immediately to receive an expedient diagnosis and recommended treatment methods.

4. Conclusion:

The digitization of real estate is the optimal solution to mitigate chaos and manipulation, eliminate all forms of looting, forgery, and real estate disputes, and prevent

their disruptive impact on economic and social projects. It also enhances real estate security. This is regarded as the salient intent behind the survey. To add, the real estate preservation sector's adoption of the project to modernize real estate preservation activities underscores the sector's salience to economic and social life. Furthermore, the unification of the survey and real estate preservation departments was the roadmap towards harnessing and smoothening digitization through the incorporation of all administrative documents and the consistency of work between the two departments and the employees working in them, all this allows providing real estate security and allowing the settlement of real estate.

In the context of emerging institutions, it was observed that there is a proliferation of institutions engaged in the domain of real estate, particularly in the area of agriculture. This has instilled a sense of optimism and intensified efforts to bolster these institutions, which are striving to keep pace with technological advancement and provide support to public institutions and citizens alike.

Nevertheless, the various manifestations of digitization that have been reviewed, along with all official speeches and laws pertaining to digitization in the field of real estate, indicate that its development is contingent upon numerous factors. The most significant of these is the issue of clearing residential and agricultural properties and settling their legal status, as well as the necessity for coordination between the various departments and bodies involved. Since 1990, the state has sought to address these challenges through its real estate policy, as evidenced by the recent enactment of various laws, decisions, and instructions. These measures aim to streamline procedures and facilitate settlements, particularly in depicting the core challenges affronted in the fulfilment of the general land survey and a comprehensive census of real estate properties, as well as the modernization process.

1. The e-Algeria project is primarily concerned with the modernization of public administration and the improvement of citizen interaction through the integration of information and communication technologies across all state institutions.
2. The implementation of e-administration has the potential to reduce the prevalence of bureaucratic processes and instances of administrative corruption.
3. The digitization of administrative processes pertaining to legal and real estate matters, as previously discussed, is still in its nascent stages. The current achievements can be seen as mere sub-applications, which can be attributed to the unique organizational challenges inherent to these sectors.
4. The current state of online services is inadequate due to the majority of real estate and legal sectors being still in the experimental and design phase.
5. The provisions of Law 15-03 on the modernization of justice haven't been effectively implemented though the emergency pinpointed the enactment of these reforms
6. The digitization of the tax system has the potential to enhance its efficiency and the quality of tax services, while also facilitating and simplifying procedures that could ultimately reduce costs.

7. The partial digitization of tax services in Algeria, evidenced by the implementation of electronic declarations and payments, has resulted in modest improvements in the quality of services.
8. The implementation of the portal for contracting reasons has the outcome of expanding the scope of competition, thereby facilitating the acquisition of numerous offers within a relatively short period of time.
9. The advent of the pandemic has compelled citizens to accept certain technological advancements, yet the capacity to utilize these tools remains contingent upon a combination of apprehension and confidence.
10. The government has endeavored to digitize the real estate sector through the establishment of online platforms that cater to the needs of both citizens and professionals, thereby streamlining certain administrative procedures.
11. Startups have undergone a digital transformation in real estate and agricultural activities.

In light of the aforementioned considerations, we put forth the following recommendations for the modernization of real estate services:

1. It is imperative that employees in public institutions and administrations undergo continuous qualification and training in the field of modern technology.
2. It is also necessary to promote the use of technology in order to overcome the resistance that it often provokes and to demonstrate its benefits at the level of enhancing the quality of the services granted.
3. The progress of legal legislation that organizes and protects the work of e-administration.
4. It is imperative that legal instruments be initiated to facilitate digitization across all sectors, particularly in the real estate domain, in order to ensure the security of real estate transactions.
5. The exertion of an electronic network that facilitates the collaboration of tax authorities and other government agencies, enabling the expeditious exchange of information.
6. The Algerian state should mandate the promotion of nascent institutions by ministries in accordance with the law (subscription), benefiting the institutions themselves, citizens, and the state all in all, while also reducing expenditure.
7. The full-fledged flow of progress as regards the political stability and the consolidation of legislation are pivotal to complete the cadastral survey process and achieve comprehensive digitization.

List of Sources and References

Scientific articles:

1. Bouaka Kamelah, "Start-ups in Algeria: Reality and Challenges," Algerian Journal of Business Law, Mohamed Boudiaf University of Messila, Volume III, Issue I, July 2022.
2. Rabah Ben Mamer, "Modernization of the Real Estate Portfolio Management," Journal of Legal and Social Sciences, Ziane Achour

University of Guelfa, Algeria, Volume VII, Issue I, March 2022.

3. Zahra Hafezi, "Automated Systems and Their Role in the Development of Archival Services: An Applied Study in the Constantine Municipal Archives," PhD thesis, Montouri University, Constantine, 2008.
4. Ammar Boudiaf, "Cadastral Survey and Its Legal Issues in Algeria," *Journal of Social Sciences and Humanities*, a specialized hexagonal journal issued by the University Center Cheikh Larbi Tebessi - Tebessa - Experimental Issue, April 2006.

Online resources

1. Digitization of the administration allows facilitating the management of real estate properties and the delivery of real estate books on the website: <https://www.aps.dz>, accessed on: 12/04/2023 at: 05:20 pm.
2. The official website of the National Chamber of Agriculture: <ghorfati.cnagri.dz>, accessed on April 2, 2023, at 10:09.

a) Legal texts

1. Law No. 1503, dated: 11 Rabi al-Thani, 1436, corresponding to 01 February 2015, on the modernization of justice, Official Gazette of the People's Democratic Republic of Algeria, No. 06, issued on Tuesday, 20 Rabi al-Thani, 1436, corresponding to 10 February 2015.
2. Executive Decree No. 251-21, dated 25 Shawwal 1442, corresponding to 6 June 2021, dissolving the National Land Survey Agency and transferring its assets, rights, duties and employees to the Ministry of Finance, Official Gazette of the People's Democratic Republic of Algeria, No. 47.
3. Executive Decree No. 252-21, dated 25 Shawwal 1442, corresponding to June 6, 2021, containing the organization of the central administration of the Ministry of Finance, Official Gazette of the People's Democratic Republic of Algeria, No. 47.
4. Executive Decree No. 393-21, dated 11 Rabi al-Awwal 1443, corresponding to October 18, 2021, defining the organization and powers of the external services of the General Directorate of National Property, Official Gazette of the Algerian Republic, No. 80.
5. An inter-ministerial decree dated 12 Dhul Hijjah 1443, corresponding to July 11, 2022, defining the powers and organization of the structures of the State Property Directorate and the Directorate of Land Survey and Land Conservation at the wilaya level, Official Gazette of the Algerian Republic, No. 59.
6. Ordinance No. 75-74, dated 8 Dhu al-Qa'dah 1395, corresponding to November 12, 1975, containing the preparation of the general land survey and the establishment of the land registry, amended and supplemented, Official Gazette of the Algerian Republic, No. 92, amended by Law No. 10-14 of October 30, 2014, containing the Finance Law of 2015, Official Gazette of the Algerian Republic, No. 78.
7. Inter-ministerial decree dated 12 Dhul Hijjah 1443, corresponding to July 11, 2022, defining the internal organization of the State Property Inspectorate and the real estate preservation in sections and the powers of each section, Official Gazette of the Republic of Algeria, No. 59.

8. Executive Decree No. 356-20, dated 14 Rabi Al-Thani 1442, corresponding to November 30, 2020, establishing the Foundation for the Promotion and Management of Startup Support Structures and defining its tasks, organization and functioning, Official Gazette of the Republic of Algeria, No. 73.
9. Executive Decree No. 254-20, dated 27 Muharram 1442, corresponding to September 15, 2020, establishing a national committee to grant the label “startup,” “innovative project” and “business incubator” and defining its tasks, composition and functioning, Official Gazette of the Algerian Republic, No. 55, amended and supplemented by Executive Decree No. 422-21, dated 28 Rabi Al Awwal 1443, corresponding to November 4, 2021, Official Gazette of the Algerian Republic, No. 84.
10. Law No. 15-08, dated 17 Rajab 1429, corresponding to July 20, 2008, defining the rules for the conformity and completion of buildings, Official Gazette of the Republic of Algeria, No. 44. Amended and supplemented.
11. Executive Decree No. 154-09, dated 7 Jumada I 1430, corresponding to May 2, 2009, defining the procedures for the implementation of the declaration of conformity of buildings, Official Gazette of the Algerian Republic, No. 27.
12. Executive Decree No. 156-09, dated 07 Jumada I 1430, corresponding to May 02, 2009, defining the conditions and qualifications for the appointment and operation of follow-up and investigation teams in the construction of subdivisions, housing groups and construction workshops, Official Gazette of the Republic of Algeria, No. 27.
13. Inter-ministerial Decree dated 5 Jumada I 1444, corresponding to November 29, 2022, specifying the conditions and deadlines for the conformity of reclaimed lands, Official Gazette of the Republic of Algeria, No. 02.
14. Inter-ministerial Directive (Ministry of Housing and Urbanism, Ministry of Interior and Local Authorities) No. 04 dated September 06, 2012, simplifying the procedures for the conformity and completion of buildings.
15. Memorandum of the General Directorate of National Property No. 9820 dated: 19/10/2015 on the modernization of real estate preservation activities.
16. The preliminary report of the Legal Affairs and Freedoms Committee of the National People's Assembly. Fall session. 2006, which came on the basis of the referral dated 23/09/2005 of the instruction issued on October 4, 2022, by the General Directorate of National Property, which includes the digitization of the interests of the General Directorate of National Property.

Reports:

1. The Raths of the Assembly accepted this draft law in accordance with Articles 19 and 20 of the Rules of Procedure of the National People's Assembly.
2. The statistical report of the National Land Survey Agency (Ministry of

Finance) for the last three months of 2006 up to 31.12.2006 is unpublished.