



Стопански
факултет

Социално- икономически анализи

Книга 1/2025 (27)

DOI: 10.54664/PVBM1232

Sakhri Abdelwaheb*

E-GOVERNMENT IN ALGERIA: A PILLAR OF ENABLING SERVICES FOR CITIZENS IN THE DIGITAL AGE

Abstract: The research paper aimed to evaluate the E-Government industry in Algeria, through the project it carried out in 2008, and to analyze various relevant international indicators obtained from approved official reports. The study also sought to know the impact of Algeria's digital initiatives on improving the quality of life for citizens and increasing their electronic participation. The study confirmed that Algeria has made and continues to make a number of efforts to enable e-government for the benefit of citizens, but the reality shows otherwise, and that it still suffers from a digital gap, which it must bridge through effective initiatives in light of the challenges facing the digital age.

Keywords: E-Government; Algeria, Services, Citizens, Digital Age.

Introduction

Approximately twenty years ago, information and public services were not available at their best as a result of technological advancements. Many governments were forced to rethink their internal and external policies, which resulted in a firm conviction of the necessity of transitioning to electronic systems to achieve comprehensive development. They also transformed their administrative processes to replace traditional services with more reliable ones.

The term E-Government has become increasingly popular and widespread among countries and many governments have focused on making it a primary goal, as a rapidly evolving global trend. Developed countries began implementing e-government programs in the 1990s, followed by developing countries in order to benefit from the advantages of e-government and remain competitive in the globalized world of the twenty-first century.

According to the United Nations and the American Society for Public Administration, e-government has been referred to as an industry in which the Internet is used to provide government information and services to citizens, businesses, quasi-governments, and public service functionaries also involves many information and communication technology tools and media. E-government is linked to smart governance, in order to embody the smart city project, by focusing on achieving administrative efficiency in performance and service provision¹. These e-government services include *Government to Government*

* **Sakhri Abdelwaheb** – PhD at the Faculty of Economic, Commercial and Management Sciences at the Badji Mokhtar University in Annaba, Algeria, e-mail: abdelwaheb.sakhri@uni

¹ **Maktub, M.A. et al.** Citizen acceptance and use of the Jakarta Kini (JAKI) e-government: Extended unified model for electronic government adoption. *Heliyon Journal*, 11, 2025, p. 2.

(G2G), *Government to Business (G2B)*, *Government to Employee (G2E)*, and *Government to Citizens (G2C)*.

The Algerian government, like other emerging economies, has recognized the critical importance of implementing e-government. It has authorized qualitative reforms to enhance non-oil sectors, such as the integration of information and communications technology (ICT) and digital initiatives to avoid potential crises.

Algeria was chosen as the focus of the current study for several reasons, including the fact that it is the largest country in Africa and encompasses most of the geographic and demographic characteristics of any developing country, ranging from densely populated cities and robust ICT infrastructure to a near desert. The research paper also aims to evaluate Algeria's E-Government project 2008-2013, identifying successes and failures, particularly since most developing countries have failed to adopt e-government.

1. A comprehensive overview of E-Government in Algeria

Algeria is among the African countries that pioneered the adoption of national policies to improve access to information and communication technologies and make them available to everyone. It is now undertaking many initiatives in what is known as the digital age. One of the most prominent outcomes is the e-government project it has implemented (we will try to address its most important details in the following paragraphs). It is worth noting that the e-government project in Algeria was supposed to start operating in 2006, but some obstacles delayed its launch².

1.1. Presentation of the Algerian E-government project 2008-2013

Since the early 2000s, Algeria has implemented numerous plans, strategies, and initiatives, allocating a corresponding budget and huge financial investments as part of so-called electronic reforms. However, indicators of the information society and knowledge economy revealed that in 2008, Algeria was still lagging behind the rapid developments taking place in the digital domain worldwide. This necessitated the urgent adoption of a national initiative aimed at bridging the digital divide and improving public services. In the same context, Algeria launched a project in 2008 called the *"E-Algeria Initiative 2013"*, the e-Committee was created under the supervision of the Prime Minister, and the strategy for transforming Algeria into a digital country was defined. Its provisions were based on a coherent and robust action plan aimed at improving the performance of the national economy, businesses, and administration; improving education, scientific research, and innovation; creating industrial hubs for ICT; and increasing the country's attractiveness and improving the lives of citizens by encouraging the dissemination and use of ICT.

The strategy plan is based on *13 Main Axes*, for each main axis, an inventory was prepared, followed by the identification of the main and specific objectives to be achieved over the next five years, as well as a list of actions to implement them.³

² Ait Oukaci, A., Saadaoui, K. The e-government development index (egdi) as a tool for evaluating e-government policy in Algeria (2008-2022). *World Politics*, 07 (02), 2023, pp. 1107.

³ E-Commission, E-Algeria 2013. *Democratic and Popular Republic of Algeria*, 2008, pp. 7-11.

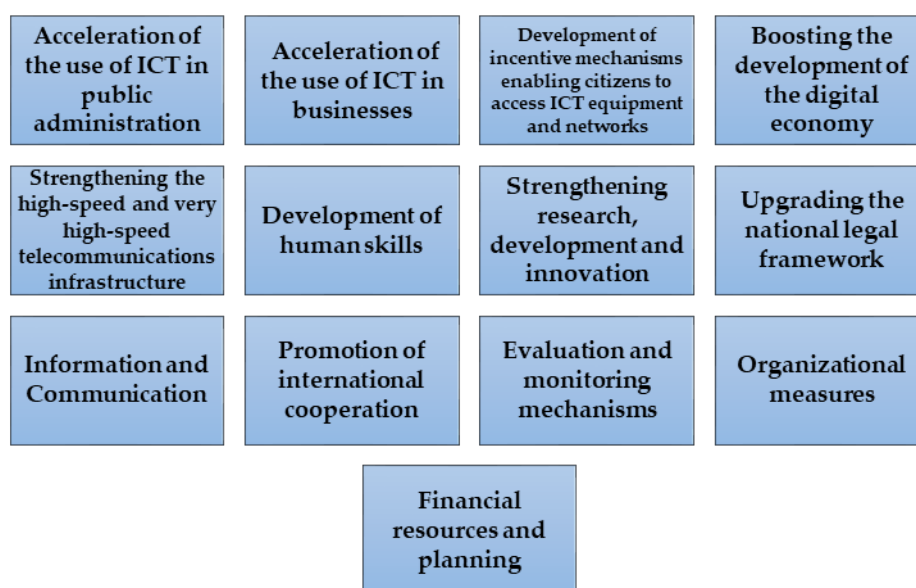


Figure 1. Axes of the E-government strategy in Algeria

1.2. Legislative Framework for E-Government in Algeria

In an effort by the Algerian government to provide the basic requirements for e-government, it has established a set of laws and legislation to be in line with international practices, and requirements of the knowledge society, and to create an atmosphere conducive to the establishment of e-government in Algeria:

- **Law No. 09-04 of August 5, 2009**, which includes *special rules for the prevention and combating of crimes related to information and communication technologies*, The meaning of this law includes the information system, information data, service providers, data related to electronic traffic, and electronic communications⁴.

- **Law No. 15-04 of February 1, 2015**, setting out *the general rules relating to E-signatures* (Data in electronic form attached to other electronic data used as a means of documentation), and *E-certification* (a document in electronic form that proves the link between the electronic signature verification data and the signatory)⁵.

- **Law No. 17-11 about the Finance Act 2018 of December 27, 2017**, has revealed *the electronic payment methods*, that must be provided to users to enable them to pay their bills and purchases using credit cards⁶.

- **Law No. 04-18 of May 10, 2018**, setting out *the general rules relating to post and electronic communications*, this law aims primarily to ensure the provision of comprehensive, quality services under appropriate and transparent conditions. It also sets out the conditions for users to use postal and electronic communications and attempts to improve them while defining the institutional framework for the independent regulatory authority⁷.

⁴ **Law no. 09-04**, dated 5 August 2009. Including special rules for the prevention and combating of crimes related to information and communication technologies. *Algerian Official Gazette*, no. 47, article 2. p. 5.

⁵ **Law no. 15-04**, dated 01 February 2015. Including electronic certification and electronic signature methods. *Algerian Official Gazette*, no. 06, article 1-2, p. 7.

⁶ **Law no. 17-11**, dated 27 December 2017. Including electronic payment methods. *Algerian Official Gazette*, no. 76, pp. 46–47.

⁷ **Law no. 04-18**, dated 10 May 2018. Including the general rules relating to post and electronic communications. *Algerian Official Gazette*, no. 27, article 1, pp. 4–5.

• **Law No. 05-18 of May 10, 2018**, regarding *electronic commerce*, this law defines the general rules related to electronic commerce of goods and services⁸.

• **Executive Decree No. 19-89 of 5 March 2019**, determining *the procedures for keeping records of electronic commercial transactions, and sending them to the National Center for the Commercial Register*⁹.

• **Presidential Decree No. 20-05 of January 20, 2020**, relating to *the establishment of a national information systems security system*¹⁰.

• **Presidential Decree No. 23-314 of September 10, 2023**, establishing a *High Authority for Digitization and defining its missions, organization, and operation*¹¹.

• **Presidential Decree No. 18-260 of October 15, 2018**, ratifying a *cooperation protocol between Algeria and Hungary in the field of ICT*¹².

• **Presidential Decree No. 16-330 of December 14, 2016**, ratifying a *cooperation protocol between Algeria and Bulgaria in the field of ICT*¹³, In addition to *other International Agreements with Niger (2017), Mauritania (2016), and Tunisia (2010)*¹⁴.

1.3. Agencies and Organizations Supporting E-Government in Algeria

The Algerian state has sought to facilitate the implementation of e-government initiatives through a network of government agencies, the most important of which are:

• **Ministry of Post, Telecommunications:** It formulates policies and regulations related to information technology, to enable the integration of digitalization into public operations and services.

• **Ministry of Finance:** it played an active role in developing online payment systems and digitizing financial operations within the government.

• **Ministry of Interior, Local Authorities, and Urban Planning:** It is responsible for implementing e-government initiatives through electronic services for the benefit of citizens at the local level and aims to achieve efficiency and transparency in local government activities¹⁵.

• **Ministry of Justice:** As part of its ongoing program to reform and modernize the justice sector, utilizing information and communication technologies to the best advantage, the Ministry of Justice has implemented digital services; this aims to rationalize expenditures by eliminating paperwork, while also achieving efficiency, effectiveness, and transparency in the management and administration of human resources¹⁶.

⁸ **Law no. 15-18**, dated 10 May 2018. Including electronic commerce. *Algerian Official Gazette*, no. 28, article 2, p. 5.

⁹ **Executive Decree no. 19-89**, dated 5 March 2019. Including the procedures for keeping records of electronic commercial transactions, and sending them to the National Center for the Commercial Register. *Algerian Official Gazette*, no. 17, p. 16.

¹⁰ **Presidential Decree No. 20-05** dated 20 January 2020. Including to the establishment of a national information systems security system. *Algerian Official Gazette*, no. 04, p. 5.

¹¹ **Presidential Decree No. 23-314**, dated 6 September 2023. Including establishing a High Authority for Digitization and defining its missions, organization and operation. *Algerian Official Gazette*, no. 59, p. 9.

¹² **Presidential Decree no. 18-260**, dated 15 October 2018. Including a cooperation protocol between Algeria and Hungary in the field of ICT. *Algerian Official Gazette*, no. 63, p. 4.

¹³ **Presidential Decree no. 18-260**, dated 14 December 2016. Including a cooperation protocol between Algeria and Bulgaria in the field of ICT. *Algerian Official Gazette*, no. 75, 2016, p. 3.

¹⁴ **Ministry of Post and Telecommunications.** International treaties and agreements, [Accessed: 31 March 2025]. Available at: <https://www.mpt.gov.dz>.

¹⁵ **Bouguetaya, S., Mezouri, E.** E-governance in the public sector in Algeria: Challenges and progress. *Journal of Contemporary Issues in Business and Government*, 30 (01), 2024, pp. 252–272

¹⁶ **Ministry of Justice.** Electronic services. [Accessed: 31 March 2025]. Available at: <https://www.mjustice.dz>.

• **Ministry of Labor, Employment, and Social Security:** The Ministry has relied on digitization and information and communication technology to enhance citizens' easy access to services and information in the labor, employment, and social security sectors¹⁷.

• **The National Agency for the Promotion and Development of Technological Parks:** is working on the validation, implementation, and generalization of the tools, mechanisms, and skills necessary for the development of a national ecosystem, conducive to the expansion of the ICT and digital industry, serving various sectors of the Algerian economy¹⁸.

•

2. Evaluation of E-Government General Situation in Algeria

This assessment attempts to assess Algeria's readiness and determine the extent to which it has established the components and requirements of e-government.

2.1. Analysis of E-Government Indicators

The Network Readiness Index (NRI) provides a comprehensive assessment of 133 economies, evaluating each country's ability to leverage information and technology, and is a compass for governments toward digital transformation. In the latest 2024 rankings, the United States, Singapore, and Finland maintained their top three positions, respectively, compared to 2023 statistics. According to the ranking of the ten best-performing countries according to this index, it is clear that the advanced economies in Europe, the Americas, and Asia-Pacific continue to outperform, with the Arab and African regions performing modestly¹⁹.

Algeria's ranking of 100 in the World Economic Forum's Networked Readiness Index for 2024 is its best in 15 years, despite the dominance of the United Arab Emirates, Saudi Arabia, and Qatar in the Arab world, and Mauritania, Seychelles, and South Africa on the continent but must focus on improving both trust and inclusion in the governance axis, quality of life and sustainable development in the impact axis, which are important reasons for adopting e-government.

	Rank (Out of 133)	Score
Network Readiness Index	100	39.24
Pillar/sub-pillar	Rank	Score
A. Technology pillar	85	36.32
1st sub-pillar: Access	80	59.62
2nd sub-pillar: Content	81	21.29
3rd sub-pillar: Future Technologies	94	28.06
B. People pillar	71	40.24
1st sub-pillar: Individuals	47	52.14
2nd sub-pillar: Businesses	42	41.42
3rd sub-pillar: Governments	99	27.16
C. Governance pillar	109	41.07
1st sub-pillar: Trust	119	18.72
2nd sub-pillar: Regulation	98	58.06
3rd sub-pillar: Inclusion	101	46.41
D. Impact pillar	119	39.34
1st sub-pillar: Economy	75	30.70
2nd sub-pillar: Quality of Life	117	40.14
3rd sub-pillar: SDG Contribution	121	47.18

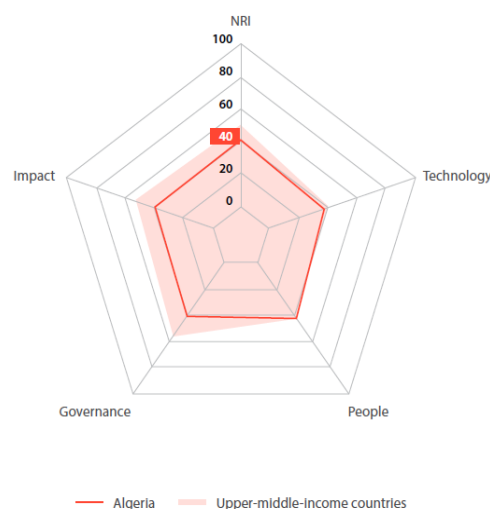


Figure 2. Algeria Ranking by Network Readiness Index 2024

The E-Government Development Index (EGDI) was created by the United Nations Department of Economic and Social Affairs (UN DESA). It allows 193 member states of the European Union to

¹⁷ **Ministry of Labor, Employment, and Social Security.** Services via internet. [Accessed: 31 March 2025]. Available at: <https://www.mtess.gov.dz>.

¹⁸ **ANPT.** [Accessed: 31 March 2025]. Available at: <https://www.anpt.dz>.

¹⁹ **Dutta, S., Lanvin, B.** Building a digital tomorrow: Public-private partnerships for digital readiness (nri 2024), Portulans Institute, p. 39.

compare their performance in the field of e-government²⁰. The EGDI measures the ability of national administrations to use information and communications technology (ICT) to deliver public services. It primarily assesses the prevalence of the Internet in countries, local websites, and the extent to which countries implement e-government policies and strategies in specific service sectors²¹.

In 2014, Algeria ranked 136th on the EGD index, and in 2016, it achieved a significant decline, ranking 150th. However, it improved during the period

2018–2022, recording a value of 0.5956 in 2024. It is worth noting that Algeria was unable to bridge the electronic gap with the leading countries in Africa and the world, and the index value was lower than the global average and slightly better than the African average.

Table 1. Development of EGDI in Algeria, Africa Region, and the world 2014–2024

	2014	2016	2018	2020	2022	2024
Algeria	0.3106	0.2999	0.4227	0.5173	0.5611	0.5956
Ranking	136	150	130	120	112	116
African Average	0.2661	0.2882	0.3423	0.3914	0.4054	0.4247
Africa's leading	Tunis	Mauritius	Mauritius	Mauritius	South Africa	South Africa
	0.5390	0.6231	0.6678	0.7196	0.7357	0.86
World Average	0.4712	0.4922	0.5491	0.5988	0.6102	0.6382
World's leading	Republic of Korea	United Kingdom	Denmark	Denmark	Denmark	Denmark
	0.9462	0.9193	0.9150	0.9758	0.9717	0.9847

Source: United Nations Department of Economic and Social Affairs. E-government Survey 2014–2024, New York: USA.

Mathematically, the EGDI is a weighted average of three normalized scores on the three most important dimensions of e-government, namely the quality of online services (**Online Service Index, OSI**), development status of telecommunication infrastructure (**Telecommunication Infrastructure Index, TII**) and inherent human capital (**Human Capital Index, HCI**).

$$EGDI = 1/3 (OSI \text{ normalized} + TII \text{ normalized} + HCI \text{ normalized})$$

OSI: This index aims to measure the use of ICT by the state for the delivery of public services. It consists of services provision (45%), technology (5%), the institutional framework supporting e-government development (10%), content provision (5%), and e-participation (35%).

TII: It measures the country's technological infrastructure and includes four components that contribute to its calculation: Mobile cellular telephone subscriptions per 100 inhabitants, Percentage of Individuals using the Internet, Fixed (wired) broadband subscriptions per 100 inhabitants, and Active mobile broadband subscriptions per 100 inhabitants.

HCI: It is calculated using four components: adult literacy rate, gross enrollment ratio of citizens, expected years of schooling in a country, and average years of schooling²².

²⁰ **Tadjeddine, B.** E-government in Algeria. Algerian Group of Digital Activists, p. 6.

²¹ **Soudani, A.** Assessing the reality of e-government in Algeria: Towards an Effective Algerian E-Government Strategy a case study of Algeria Post Company. *Journal of Contemporary Economic Studies*, 07 (01), 2022, p. 738.

²² **Siddiqui, U.A, Mehmood, W.** E-government in Pakistan – Implementation and challenges. *I. J. Education and Management Engineering*, 6, 2021, p. 14.

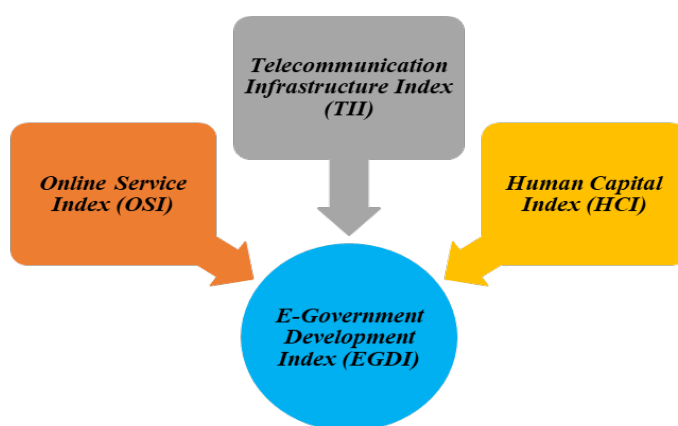


Figure 3. EGDI Dimension

Table 2 shows that Algeria suffered from significant backwardness in terms of e-services from 2014 to 2016. However, it improved its index value starting in 2018, recording a value of 0.3320 by 2024. But it remains far behind the values of leading countries in Africa and the world as a whole:

Table 2. Situation of Online Service Index 2014–2024

	2014	2016	2018	2020	2022	2024
<i>Algeria</i>	0.0787	0.0652	0.2153	0.2765	0.3743	0.3320
<i>African Average</i>	0.2011	0.2567	0.3633	0.3704	0.3670	0.3862
<i>Africa's leading</i>	Morocco	Tunisia	South Africa	South Africa	South Africa	South Africa
	0.6929	0.7174	0.8333	0.7471	0.7484	0.8872
<i>World Average</i>	0.3919	0.4623	0.5691	0.5620	0.5554	0.5754
<i>World's leading</i>	France	UK	Denmark	Republic of Korea	Estonia	Republic of Korea
	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Source: United Nations Department of Economic and Social Affairs. E-government Survey 2014–2024, New York: USA.

As for the Telecommunications Infrastructure Development Index things are completely different. We see that Algeria is reaping the benefits of its 2008 project, and also through the implementation of a number of legislative regulations in order to benefit from information and communication technology networks. The value recorded in 2024 is better than the African and global average. Moreover, Algeria has reduced the electronic gap according to this index with leading countries.

Table 3. Situation of Telecommunication Infrastructure Index 2014–2024

	2014	2016	2018	2020	2022	2024
<i>Algeria</i>	0.1989	0.1934	0.3889	0.5787	0.6133	0.8129
<i>African Average</i>	0.1478	0.1724	0.2034	0.3165	0.3548	0.4534

<i>Africa's leading</i>	Seychelles	Seychelles	Mauritius	Seychelles	Seychelles	Mauritius
	0.4721	0.4624	0.5435	0.6925	0.8198	0.9159
<i>World Average</i>	0.3650	0.3711	0.4155	0.5464	0.5751	0.6896
<i>World's leading</i>	Monaco	Monaco	Monaco	Liechtenstein	Liechtenstein	UAE
	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Source: United Nations Department of Economic and Social Affairs. E-government Survey 2014–2024, New York: USA.

In the last ten years, it has been noted that the Algerian government has begun to rely on increasing the element of electronic culture among citizens, within the framework of integrating the individual into the international knowledge community. This was clearly demonstrated by the stability of the human capital index during the period 2014–2024, and its superiority over the African and global average (in some periods):

Table 4. Situation of Human Capital Index 2014–2024

	2014	2016	2018	2020	2022	2024
<i>Algeria</i>	0.6543	0.6412	0.6640	0.6966	0.6956	0.6418
<i>African Average</i>	0.4492	0.4355	0.4602	0.4874	0.4945	0.4346
<i>Africa's leading</i>	Libya	Libya	Mauritius	Mauritius	Seychelles	South Africa
	0.7821	0.7588	0.7308	0.7911	0.7758	0.8026
<i>World Average</i>	0.6566	0.6433	0.4155	0.6880	0.7001	0.6494
<i>World's leading</i>	New Zealand	Australia	Australia	Australia	Australia	Australia
	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Source: United Nations Department of Economic and Social Affairs. E-government Survey 2014–2024, New York: USA.

2.2. The impact of adopting e-government on citizens' Quality of life

E-government, through its principles, works to design policies and implement services in a way that achieves the well-being of citizens. It also provides opportunities for their activities while providing a service environment that specifically meets their needs. Algeria is among the countries that have focused on ensuring transparency and privacy approaches in citizens' use of their information. It is clear that Algeria, through the e-government project of 2008–2013 and its legislative extensions through laws, has demonstrated a clear desire for citizens to participate in various digital policies and to remove concerns about digital services. Leadership and competence are also required to ensure that citizens, whether patients, students, or others have access to public services, particularly technological and digital infrastructure. The most important aspect that Algeria has focused on is information security, which is a cornerstone of achieving the goal of e-government²³.

In the same context, and in order to study the management of the relationship between the government and the citizens, the *Electronic Participation Index (EPI)* will be used. This index evaluates the e-participation facilities employed by the government compared to all other countries and seeks to provide an accurate picture of how different countries use e-tools to enhance interaction between citizens and government, as well as among citizens. According to the latest statistics on this indicator, Algeria

²³ **Organisation for Economic Co-operation and development (OECD)**, the impact of digital government on citizen well-being, Paris: France, 2019, pp. 36–37.

achieved weak results, especially in 2024, when it scored 0.0548, ranking 187th out of 194 countries. This indicates the government’s failure to involve citizens in administrative and governmental decision-making.

Table 5. Evaluation of Electronic Participation Index 2014-2024

	2014	2016	2018	2020	2022	2024
<i>Algeria</i>	0.0720	0.1186	0.2022	0.1548	0.2273	0.0548
<i>Ranking</i>	172	167	165	183	148	187
<i>African Average</i>	0.2190	0.2599	0.3566	0.3613	0.2595	0.3001
<i>World Average</i>	0.3947	0.4625	0.5654	0.5677	0.4450	0.4919

Source: United Nations Department of Economic and Social Affairs. E-government Survey 2014–2024, New York: USA.

The Digital Quality of Life Index (DQL) will also be used, the calculation of which includes five main pillars: *Internet affordability, Internet quality, e-infrastructure, e-security, and e-government*. Algeria had the lowest ranking in the Digital Quality of Life (DQL) Index out of 121 countries, with a score of 0.3324. Algeria did not meet all the DQL criteria. This low ranking is due to slow and inexpensive mobile and broadband internet speeds and weak cyber security. The statistics are clear in Table 6.

Table 6. Comparing Algeria with some countries by DQL index 2024

<i>Countries</i>	<i>DQL value</i>	<i>Ranking</i>
<i>Germany</i>	0.7790	1
<i>United Kindgom</i>	0.6933	9
<i>Saudi Arabia</i>	0.5750	40
<i>United Arab Emirates</i>	0.5584	43
<i>Thailand</i>	0.5142	51
<i>Indonesia</i>	0.4751	59
<i>South Africa</i>	0.4761	66
<i>Tunisia</i>	0.4042	82
<i>Algeria</i>	0.3324	96
<i>Yemen</i>	0.1494	121

Source: Surfshark, Digital Quality of Live Index 2024. Accessed: 03 April 2024, Available at: <https://surfshark.com>

2.3. Necessary measures to improve E-Government in Algeria

Despite the efforts made by the Algerian government to consolidate the project of E-government, some shortcomings are still apparent and must be addressed for all citizens to have access to digital services, increase their financial inclusion, and digital awareness and education, through:

- The Algerian government needs to embrace the benefits of information and communications technology (ICT), as a tool to improve its public services. This is achieved by creating an enabling environment for effective governance, and subsequently by continuing to invest in the development of e-public services providing citizens with access to them.

- Providing opportunities for participation in e-governance is a top priority for the Algerian government. To achieve this, a realistic political vision and action plan must be developed that fully recognizes the strengths, and weaknesses of public sector capabilities.

- To leverage the potential of e-government, the state must organize regular workshops for stakeholders on its sustainability in Algeria. The goal is to raise awareness of e-government among government officials²⁴.

- To achieve universal internet access, Algeria must include in its upcoming and urgent projects the need to expand internet use and improve networks.

- Upgrade old telephone lines and adopt new, advanced telecommunications systems and networks characterized by speed, efficiency, and high responsiveness. Maintain a balance between internet service prices, and income levels, making these costs affordable and accessible to the majority of citizens. Furthermore, establish public internet access points based on broadband technology.

- It is necessary to reduce the role of the public sector and expand the scope of liberalizing these services from monopoly, with the aim of creating a competitive environment and a market based on equal opportunities. This will provide an incentive encouragement for the development, and expansion of telecommunication networks, increase penetration rates, reduce service costs, and improve quality and standards.

- Efforts must be made to establish a local industry for the production of information technology equipment and software enter into partnerships with international companies to establish factories specialized in telecommunications equipment and accessories, and cooperate regionally and internationally to build the capacities, and personnel necessary to develop this industry.

- Scientific and technological knowledge today represents 80% of the developed world's economies, while the remaining 20% represents capital, labor, and natural resources. Therefore, working to improve access to information and communication technology in Algeria will enhance the creative and cognitive capabilities of employees in Algerian institutions, and bring about positive changes in the work environment and production methods²⁵.

Conclusion

By presenting the topic of e-government, it was noted that Algeria is among the developing countries that have adopted e-government in an effort to improve the quality of services and reduce costs and time. The clear changes and successive developments in the reform program for government ministries and sectors were the best evidence of the e-government project in Algeria from 2008 to 2013, the study reached the most important results:

- The electronic project in Algeria is a promising project, as all possibilities of various forms have been harnessed to make it a success. The government has also strengthened the project initiative with a set of legislative laws. However, according to experts, it has not achieved the expected goals.

- According to the indicators of network readiness, e-government, and its dimensions, Algeria did not achieve the expected outcomes, as it recorded weak to medium values, with the exception of the Telecommunications infrastructure indicator as the most important sector that the government is currently focusing on is the ICT sector.

- Based on indicators of e-participation and digital quality of life, it has been shown that Algeria suffers from a lack of digital practices in managing the relationship with citizens, which negatively impacts the effective and successful implementation of e-government.

In conclusion, the widespread adoption of e-government in Algeria hinges on overcoming the obstacles and challenges it faces. Accelerating the establishment of a safe and stimulating digital environment and developing regulatory and legislative frameworks will increase digital awareness and education among citizens. Furthermore, leveraging foreign expertise in the fields of communications, information, and digitization will help bridge the digital divide and accelerate the transition to a knowledge society.

²⁴ **Maouche, S., Guermide, B.** Implementing an E-Government in Algeria: Prospects and Constraints, a Comparative Survey Based Study. *Algerian Review of Legal and Political Sciences*, 58 (05), 2021, p. 17.

²⁵ **Bramgui, R., Trifa, M.** Strategies for Implementing Administrative Digitization in Algeria: Models and Obstacles. *Economic Researcher Review*, 12 (02), 2024, p. 267.

REFERENCES

- Ait Oukaci, A., Saadaoui, K.** The e-government development index (egdi) as a tool for evaluating e-government policy in Algeria (2008-2022). *World Politics*, 07 (02), 2023, pp. 1100–1115.
- ANPT.** [Accessed: 31 March 2025]. Available at: <https://www.anpt.dz>.
- Bouguetaya, S., Mezouri, E.** E-governance in the public sector in Algeria: Challenges and progress. *Journal of Contemporary Issues in Business and Government*, 30 (01), 2024, pp. 252–272.
- Bramgui, R., Trifa, M.** Strategies for implementing administrative digitization in Algeria: Models and obstacles. *Economic Researcher Review*, 12 (02), 2024, pp. 258–272.
- Dutta, S., Lanvin, B.** Building a digital tomorrow: Public-private partnerships for digital readiness (nri 2024), Portulans Institute.
- E-Commission, E-Algeria 2013.** *Democratic and Popular Republic of Algeria*, 2008, pp. 7-11.
- Executive Decree no. 19-89**, dated 5 March 2019. Including the procedures for keeping records of electronic commercial transactions, and sending them to the National Center for the Commercial Register. *Algerian Official Gazette*, no. 17.
- Law no. 09-04**, dated 5 August 2009. Including special rules for the prevention and combating of crimes related to information and communication technologies. *Algerian Official Gazette*, no. 47, article 2.
- Law no. 15-04**, dated 01 February 2015. Including electronic certification and electronic signature methods. *Algerian Official Gazette*, no. 06, article 1-2.
- Law no. 17-11**, dated 27 December 2017. Including electronic payment methods. *Algerian Official Gazette*, no. 76.
- Law no. 04-18**, dated 10 May 2018. Including the general rules relating to post and electronic communications. *Algerian Official Gazette*, no. 27, article 1.
- Law no. 15-18**, dated 10 May 2018. Including electronic commerce. *Algerian Official Gazette*, no. 28, article 2.
- Maktub, M.A. et al.** Citizen acceptance and use of the Jakarta Kini (jaki) e-government: Extended unified model for electronic government adoption. *Heliyon Journal*, 11 (2025), 2025, pp. 1–15.
- Maouche, S., Guermeide, B.** Implementing an E-Government in Algeria: Prospects and Constraints, a Comparative Survey Based Study. *Algerian Review of Legal and Political Sciences*, 58 (05), 2021, pp. 1-21.
- Ministry of Justice.** Electronic services. [Accessed: 31 March 2025]. Available at: <https://www.mjustice.dz>.
- Ministry of Labor, Employment, and Social Security.** Services via the Internet. [Accessed: 31 March 2025]. Available at: <https://www.mtess.gov.dz>.
- Ministry of Post and Telecommunications.** International treaties and agreements, [Accessed: 31 March 2025]. Available at: <https://www.mpt.gov.dz>.
- Organization for Economic Co-operation and Development (OECD)**, the impact of digital government on citizen well-being, Paris: France, 2019.
- Presidential Decree no. 18-260**, dated 14 December 2016. Including a cooperation protocol between Algeria and Bulgaria in the field of ICT. *Algerian Official Gazette*, no. 75, 2016.
- Presidential Decree no. 18-260**, dated 15 October 2018. Including a cooperation protocol between Algeria and Hungary in the field of ICT. *Algerian Official Gazette*, no. 63.
- Presidential Decree No. 20-05** dated 20 January 2020. Including the establishment of a national information systems security system. *Algerian Official Gazette*, no. 04.
- Presidential Decree no. 23-314**, dated 6 September 2023. Including establishing a High Authority for Digitization and defining its missions, organization, and operation. *Algerian Official Gazette*, no. 59.
- Siddiqui, U.A., Mehmood, W.** E-government in Pakistan – Implementation and challenges. *I. J. Education and Management Engineering*, 6, 2021, pp. 10–19.
- Soudani, A.** Assessing the reality of e-government in Algeria: Towards an effective Algerian e-government strategy. A case study of Algeria Post Company. *Journal of Contemporary Economic Studies*, 07 (01), 2022, pp. 731–754.
- Tadjeddine, B.** E-government in Algeria. Algerian Group of Digital Activists.