

ELETRONIC ELECTIONS IN ALGERIA: BETWEEN REALITY AND EXPECTATIONS COMPARATIVE STUDY WITH THE OMANI EXPERIENCE

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Abstract

This research addresses the issue of electronic elections in Algeria compared to the Omani experience in light of the development of technological means and their intrusion into the field of elections in order to save time and achieve transparency and integrity in voting, sorting, and collecting votes until the results are announced .

To confront the specter of fraud that was haunting the electoral process at all its stages, therefore managing the electoral process electronically has become one of the requirements of modern administration. Algeria implemented part of it with regard to registration in electoral lists only and not the other stages, while the Sultanate of Oman has made great strides in the field of managing elections electronically in all its stages, and it is a pioneering experience that deserves to be considered and emulated.

Keywords: *Electronic elections; electronic voting; Algerian National Independent Authority for Elections.*

INTRODUCTION

Elections are the key to democracy because they promote freedom and independence of expression, often known as people's free choice. Elections go through multiple stages. Polling is one of the most crucial stages of the electoral process since it allows voters to vote and select their candidates in order to establish a state of law and good governance.

The rapid growth of technology has had a significant impact on numerous fields, including elections by shifting from traditional elections to digital or electronic elections using electronic voting system. The latter relies on modern technology at all phases of the electoral process, from electronic registration to voting, vote counting, and electronic announcement of results.

Algeria is one of the countries that kept pace with this tremendous development in information and communication technology by transitioning to electronic election management beginning with the legislative elections of 2022, which ensures management accuracy, speed, and efficiency, as well as transparency, reliability, and the prevention of human errors and forgery. They started by launching the Electronic Algeria project (2009-2013), which involved Algeria developing an electronic platform to streamline the process of reviewing and registering electoral lists. This operation resulted in the cleansing of electoral lists, resulting in the withdrawal of a million and 300 thousand people with double registrations, as well as the deceased. The Algerian legislative authorized the head of the independent authority for elections in organic law No. 21/01, related to the electoral system amended and supplemented by article 31 that ensures the proper conduct of electoral and referendum processes, as well as the credibility and transparency of their results. This enables the head of authority to employ digital programs to fight forgery. It also emphasized the punishment for compromising automated electoral data processing systems, confirming the strong political management for the transition to electronic election management, which is consistent with other



such legislation, particularly the Omani one. Electronic elections were first introduced to Omani legislation in early 2011 and first implemented in 2019 in Shura Council and municipal elections, culminating in royal decree No 54-2023, which holds the issuance of Shura Council members election law, as part of the national strategy of Omani digital society and electronic government, which aims to enable information and communication technology. **This raises questions about the reality of Algeria's electronic elections experience as an emerging space to assure election integrity and democracy protection in comparison to the Omani experience, as well as the challenges that both countries confront.**

- **Section One** : the concept of electronic elections and their methods.

- **Section Two** : the reality of electronic elections in Algeria compared to the Omani electronic elections experience.

-**Section Three** : the challenges that face both countries' legislations in the field of management and organization of electronic elections.

1. Section one: the concept of electronic elections and their methods.

Technological development has penetrated every field, including the electoral one. It has become an inclusive program that affects political institutions and their operation both internally and externally, for the purpose of improving and facilitating services saving efforts and time. As well as enhancing the citizen-government trust because good governance of elections doesn't require only the presence of institutions and bodies, it also requires taking advantage of new technologies to rise to the electoral process demands. For that reason, platforms and electronic programs have been designed to organize elections from preparations to voting, votes count and results announcement until it became part of electronic democracy¹ or digital democracy².

- **First: Definition of Electronic Elections**

It is hard to give a thorough definition of elections in general, traditional or electronic, given to the complicated procedures of electoral process from the registration to the final announcement of results whether they are presidential, parliamentary or local. However, adding the term electronic indicates riddance of traditional means of elections such as boxes, papers, cards, ink...etc and replacing them all with new technological means.

The jurisprudence indicates that the use of the term "electronic" refers solely to the voting stage. Therefore, when electronic voting is used, it is appropriate for us to label it as electronic elections; otherwise, this description does not encompass it. This is due to considering voting as the most important and most critical stage of the electoral process, while the remaining stages are considered preparatory processes for voting or revealing the voting results. ³However, there is another opinion that broadens the concept of electronic elections by using technological means in a step or a stage of the voting process. This opinion aligns with the jurisprudential definition that refers to the term "**Electronic Elections**" as the use of information technology in various stages of the electoral

¹ Electronic democracy is defined as "the use of information and communication technology to make citizens able to hold accountable politicians for their deeds therefore facilitating and enabling communication between politicians and their delegates and citizens which makes politician representatives more effective in the political process."

- for more details visit: Abdul Aal Hubal, Electronic Democracy: Concept, Mechanisms and Challenges lessons deduced from international experiences, The Researcher magazine for Academic Studies, Volume 09, issue 01, Faculty of Law and Political Sciences, EL-HADJ LAKHDAR University, Batna, Algeria2022, p.449, website: <http://dSPACE.univ-batna.dz>

² Digital democracy is defined as " the attempt to practice democracy beyond time, place and other financial conditions through the use of information and communication technology.

- visit: Hamad Djassem Mohamed, Digital Democracy as a tool to succeed the Iraqi experience, p. 460, website: <https://abu.edu.iq>

³ Anas Ghannam Jabara, "The Effectiveness of Constitutional Guarantees for the Integrity of Electronic Elections," Journal of the University of Anbar for Legal and Political Sciences, Volume 13, Issue 01, Iraq, 2023, p. 175.



process, including voter and candidate registration, voter identity verification, electronic voting, and electronic vote counting. Under the integrated electoral system, all these procedures are carried out without using traditional methods for processing.⁴ This means that technology is an important part of the electoral process, and electronic elections no longer rely on traditional tools such as radio and television. Instead, the web has become one of the most important applications used to communicate with voters and manage electoral campaigns efficiently and effectively⁵.

Therefore, we support the first opinion that elections are considered electronic when all electoral procedures are conducted electronically, or at least when the process of voting is electronic⁶. Based on this opinion, jurisprudence defines electronic voting as "Exercising the right to vote using electronic devices, either in all stages of the electoral process starting from registration in the electoral lists, voting, counting the votes, and announcing the results, or limiting it to a specific stage."⁷ From our perspective, this stage is the voting stage. Additionally, electoral management can rely on modern technology in all stages

of the electoral cycle, which are considered necessary and fall within the scope of voting, such as using software programs for registering voters, candidates, and political parties in the electoral register, identifying voters through biometric systems, electronic sorting and counting systems, as well as announcing election results, handling election appeals through electronic portals⁸.

Based on the previous definitions, elections are considered electronic if the legislature of any country takes the initiative to amend the electoral law and make all or some stages of the electoral process electronic or digital; or enacting a special law to regulate the electronic voting process. However, the electronic registration of voters is not considered electronic voting because electronic voting requires making parallel modifications in many areas that may be beyond the scope of the electoral management itself⁹.

- **Second: Methods of Electronic Election**

Electronic election methods vary depending on each country's access to information and communication technology and its level of development to align it with the electoral process. Among these methods are:

1. Punch Card Voting:

Voters punch holes in ballots (cards) using the supplied punch device to indicate their chosen candidates¹⁰. Voting is done by directly inserting the card into a vote tabulation device or in a ballot box, which is later transferred to a central tabulation¹¹.

2. Scan Voting:

This type of modern technological pattern is used in the electoral process, relying on cards or lists bearing the names of candidates. Voters mark their preferred candidate, with a scanner connected to a computer used to read and count the cards¹².

⁴ Dr. Tariq Kazem Ajil, "The Legal Regulation of Electronic Governance (Electoral Data as a Model), Comparative Study," p. 01. Published research on website: <http://www.egov.gov.iq>

⁵ Abdul Aal Hubal, previous reference, p. 457.

⁶ Anas Ghannam Jabara, previous reference, p. 176.

⁷ Hussein Jabbar Al-Naili, Baneen Qasim Mohammed, "The Legal Regulation of Electronic Voting to Choose Members of Parliamentary Councils (Comparative Study)," Issue 02, Year 14, Journal of Al-Muhaqiq Al-Hilli for Legal and Political Sciences, Baghdad, Iraq, 2022, p. 406.

⁸ Messika Ramdani, "Electronic Voting: Towards a New Path to Enhance Political Participation in the Digital Technology Era," Al-Bahith Journal for Academic Studies, Volume 10, Issue 02, University of El Hadj Lakhdar Batna, Algeria, 2023, p. 149. Website: <https://www.asjp.dz>

⁹ Tariq Kazem Ajil, previous reference, p. 02.

¹⁰ This type of system was invented in 1890 by Herman Hollerith, who was in charge of the Statistical Office in the United States, and was first used in the United States population census.

¹¹ Abdulaziz Abdullah Rashid Al-Maawda, "Electronic Voting: Between Reality and Aspiration," Legal Journal, Issue 12, p. 19. Website: <https://www.lloc.gov.bh>

¹² Nour Eddine Bitat, Tabel Kerbiche, "Electronic Voting Technologies as a Tool for Improving the Electoral Process," Algerian Journal of Security and Development, Volume 10, Issue 18, University of El Hadj Lakhdar, Batna, Algeria, 2021, p. 416, Website: <https://www.asjp.cerist.dz>



3. Direct Electronic Registration:

In this method, after the biometric scan device recognizes the voter, typically with the use of more than one biometric feature for identity verification, such as combining retinal scans with fingerprints, or using a smart card's PIN, or even DNA in advanced countries, the voter uses optical electronic equipment, either by touching the screen, pressing a button, or using a stylus.

There are two types of direct electronic voting. It can occur through devices at polling centers, as was the case in Belgium in 1991, where voting data is copied onto a smart card issued to the voter and placed in the ballot box. It can also be remote via the internet, as practiced in Canada and Switzerland¹³, or through email or modern communication means like mobile phones¹⁴.

Therefore, electronic elections involve resorting to electronic means like computer hardware and software, to conduct the entire electoral process.

2. Section Two : the reality of electronic elections in Algeria compared to the Omani electronic elections experience.

Modern technology has become an integral part of our practical lives, extending to encompass all aspects of life, including the political sphere, particularly in the electoral field, which requires accuracy and speed in conducting the electoral process since it is a complex operation that passes through various stages and plagued by many ailments like the falsification of election results. For that reason, many countries, for most among which Algeria and the Sultanate of Oman, took the initiative to govern the organization of elections by transitioning to e-government to ensure the transparency and integrity of the electoral process, or what is referred to as the "political life ethics" in general and the electoral aspect in specific.

- First: Legal Foundation for Electronic Elections in Algeria

The Algerian constitutional amendment of 2020 did not explicitly mention electronic elections but referred to the generality of voting under Article 56, stating, "Every citizen who meets the legal requirements has the right to vote and be elected," **that includes the right to vote, voting, and nominate, which are considered general principles establishing the right to vote in general.**

As long as the constitution contains only general principles, the independent electoral authority is entrusted with preparing, organizing, managing, and supervising elections, starting from the registration process in electoral lists to voting, counting, and overseeing electoral disputes in all electoral entitlements based on a constitutional text¹⁵. It allows the legislator to regulate all details related to elections by virtue of Organic Law No. 01/21 of March 10, 2021, related to the regulation of electoral system, amended and supplemented. However, it also did not explicitly mention electronic elections. Instead, Article 31 implicitly referred to this type of elections, entitling the head of the independent authority for elections with the choice of **"taking all measures to ensure the smooth conduct of electoral and referendum processes, and ensure the credibility, transparency, accuracy, and conformity of their results with the applicable legislative and regulatory texts¹⁶"** which has been effectively implemented in the field of registration in electoral lists, carried out through two methods:

¹³ Zaki Nouri, Wahj Khedir Abbas, "Mechanism of Electronic Voting in Parliamentary Elections (A Study to Develop the Electoral Experience in Iraq)," *Al-Muhakik Al-Hilli Journal of Legal and Political Sciences*, Issue 04, Volume 07, 2015, p. 462, Website: <https://www.iasj.net>

¹⁴ Omar Abdel Hafeez Ahmed Omar, "Electronic Voting as a Guarantee to Achieve the Integrity of the Electoral Process (A Comparative Study with Reference to the Cases of Egypt and Jordan)," Issue 01, Volume 02, *Journal of the University of Zaytuna for Legal Studies*, Jordan, 2021, p. 177, Website: <https://zjls.zuj.edu.jo>

¹⁵ Article 202 of Presidential Decree No. 20-442 of December 30, 2020, related to the issuance of the constitutional amendment approved in the referendum of November 1, 2020, in the *Official Journal of People's Democratic Republic of Algeria*, Official Journal, Issue No. 82, issued on December 30, 2020.

¹⁶ Order No. 01/21 of March 10, 2021, holding the Organic Law related to the electoral system, amended and supplemented by Order No. 10/21 of August 25, 2021, *Official Journal*, Issue No. 65, issued on August 26, 2021.



* **Direct Registration:** It is done by directly visiting the municipal committee to review the electoral lists at the residence location within the jurisdiction of the municipal delegation of the regional independent authority, accompanied by the following documents:

- Identity Identification document
- Residence proof document

* **Remote Registration**¹⁷: Through the electronic services platform of the Algerian National Independent Authority for Elections available on the authority's website:

The President of the National Independent Authority for elections, Mr. Mohamed Chorfi, was the first to register electronically via the platform on September 20, 2020. During a press conference, he stated that the authority managed to rise to the challenge by facilitating the registration and finishing process for voters residing far from centers in their province. The initial trial phase of this operation enabled the authority to discover 88,000 deceased voters who had not been removed from the lists¹⁸. The same applies to applications for a copy of the voter's card and changing the residence address, which can now be done electronically on the platform. In this regard, Decision No. 06/2023 of August 01, 2023, was issued, fixing the conditions and procedures for regulating the national card of the electoral body and its use¹⁹, as well as the submission and processing of candidate's application forms, declaration of candidacies²⁰, preparation of the electoral list available to candidates, and voter access to it²¹, and the functioning of the municipal electoral committee.

The Algerian legislature provided penal protection for the electronic voting process by virtue of Article 283 of Organic Law 21/01 related the electoral system, amended and supplemented²².

In conjunction with the midterm renewal of members of the Council of the Nation in 2022, the Independent Authority for Elections launched a pilot operation for the electronic voting system on February 5, 2022. Its implementation was limited as an initial trial in Algiers, involving electronic voter registration using an electronic card for each voter, who electronically registers and signs²³. Despite Algeria's steady progress towards electronic elections; it has not generalized them to other stages of the electoral process to reach electronic voting. Even the registration process in the electoral lists was not entirely electronic as the authority combined traditional paper registration with electronic registration. This measure was not included in the organic law related to the electoral system. However, it became one of the jurisdictions of the Independent Authority by virtue of some

¹⁷ Remote registration is defined under Decision No. 2023/06 as registration conducted online through the official website of the Independent Authority, via the Information Technology and Cyber security Committee. Website: <https://ina-elections.dz>.

¹⁸ Algeria Press Service, website: www.aps.dz, September 20, 2020.

It is worth noting that the Ministry of the Interior, Local Authorities, and Territorial Planning launched a new service on its website allowing registered voters to identify the polling centers and offices to which they belong, in anticipation of the presidential elections scheduled for April 18, 2019.

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¹⁹ People's Democratic Republic of Algeria, National Independent Authority for elections, Algeria, 2023, website: <https://ina-elections.dz>.

²⁰ Decision of September 29, 2019 fixing the procedures for declaring candidacies for elections, website: <https://ina-elections.dz>.

²¹ Article 04 of Decision No. 69 of March 22, 2021 fixing the procedures for making the electoral list available to candidates and accessible to voters, website: <https://ina-elections.dz>.

²² Article 283 of Organic Law 21/01 related the electoral system, amended and supplemented states: "Actions undermining the automated data processing systems of electoral data or attempting to tamper with them shall be punishable under the provisions of Articles 394 bis to 394 bis of the Penal Code."

²³ Midterm renewal of members of the Council of the Nation: A pilot project for the electronic voting system was launched in Algiers. Website: <https://www.aps.dz/ar/algerie>



decisions. Thus, these preliminary procedures for the initial stages of the electoral process remain tests to assess the success of digitization in the electoral process.

- **Second: the Legal Foundation for Electronic Elections in the Sultanate of Oman**

The legal and practical foundation for establishing electronic elections in the Sultanate of Oman is an innovative initiative. Its foundations were laid in the municipal council elections and then the Shura Council, gradually evolving until full electronic voting was adopted in all stages of the electoral process, which was recently implemented in the 2023 Shura Council elections.

1- Implementation of Electronic Voting for Municipal Council Members for the Third Term

The municipal council elections for the third term in the Sultanate of Oman are considered one of the successful experiences in electronic voting. That is by virtue of Royal Decree No. 116/2011 related to the issuance of the Municipal Council Law²⁴, as well as Royal Decree No. 114/2011 related to the adoption of administrative division.

of the Sultanate and the organization of governors work²⁵ issued by the late Sultan, eleven (11) municipal councils were established, with their members being elected democratically. This expanded the Sultanate's scope of citizen participation in governance structures. The first municipal elections were held in 2012, followed by the second in 2016. The municipal elections of 2020 were postponed to late 2022 due to the COVID-19 pandemic, with voting taking place on December 25, 2022.

In order to organize the elections of municipal council members for this term (the third term), the Ministry of Interior issued Ministerial Decision No. 92/2022 on the issuing of regulations for the municipal council members election. Article 01 of it defined electronic voting as "**the selection of candidates through the use of information technology and the storage of its results in its systems according to technical and security criteria ensuring the integrity of the electoral process.**" The same decision also referred to electronic voting devices as "**special devices equipped with information technology programs, designed specifically to facilitate voters' participation in the voting process and store it as electronic data and information.**" Article 07 stipulated the remote voting system, and various tasks were assigned to the main election committee, including:

- Adoption of electronic voting devices, or any information technology means or electronic systems used in the electoral process, and establishing the necessary controls for it.
- Enacting the remote voting system²⁶.

Chapter five of the decision was dedicated to electronic voting, from voting to votes count and announcement of the results. The decision's articles indicated that the process of counting the votes takes place on the day of voting and is divided into two stages:

* **The first stage:** an automatic and direct vote counting process in the voting halls when the voter places the ballot in the device without displaying the results at that stage.

* **The second stage:** electronic vote counting process carried out entirely by the heads of the counting committees in the regions using memory cards for those devices by reading it with a special program for counting the results, allowing the heads of the counting committees to verify all ballots rejected automatically by the device and sending the election counting results directly to the head of the municipal election committee electronically through the program, and then sending them to the head of the main committee for approval and announcement²⁷.

In application of that, the Ministry of Interior has launched the "INTAKHIB" application for voting. This app was designed by the Ministry of Interior and implemented in collaboration with the Ministry of Technology and Communications, the Royal Oman Police, the Shura Council, and telecommunications institutions.

²⁴ Official Journal, number 949, issued on October 26, 2011. Website: <https://qanoon.om/>

²⁵ Official Journal, Issue No. 949, issued on: 2011/10/29, Website: <https://qanoon.om/>

²⁶ Official Journal, Issue No. 1439, issued on: 2022/04/24, Website: https://qanoon.om

²⁷ Articles: from 43 to 61 of Ministerial Decision No. 29/2022 related to the issuance of regulations for the municipal council members election.



The project of the "INTAKHIB" application was designed to meet security standards applying election guarantees related to confidentiality. This technology requires the availability of a Smartphone enhanced with Near Field Communication (NFC) and internet connection, along with a valid personal card, and the voter must be registered in the electoral register²⁸.

The voting steps through the "INTAKHIB" application are tracked by downloading the application on IOS and Android Smartphone, where the app requires taking a picture of both sides of the voter's original ID card²⁹.

2- The application of electronic voting in the Shura Council Members Elections for the ninth legislative term of 2019.

Oman continued its development in the field of electronic elections in the Shura Council elections for the year 2019. Its most distinguishing feature is its electronic nature in all its stages, starting from registration in the electoral lists for new voters who have reached the age of twenty-one (21) and are entitled to vote according to the Shura Council Elections Law issued by Royal Decree No. 58/2013, issued on October 30, 2013³⁰ in addition to those who have not previously registered in the election lists, and the processes of transferring registration, changing the polling centers, nomination processes, announcing voter and candidate lists, and voting and counting processes³¹.

At the level of the Ministry of Interior and in coordination with concerned authorities, an electronic device called "SAWTAK" has been introduced, with a total of 994 voting machines distributed across 110 polling centers. This device was used in the voting and counting process in polling centers³², including all categories of voters inclusive of those with special needs. Only a valid voter ID card is required for voting, thus eliminating the need for ballot boxes and replacing them with electronic devices.

3- Application of electronic voting in the elections of Shura Council members for the tenth legislative term in 2023.

The elections of Shura Council members for the tenth legislative term are a qualitative leap and a significant development in Oman's path towards electronic governance in the field of electronic elections. As part of the ongoing legislative system modernization in Sultanate of Oman and in alignment with the goals of Oman Vision 2040, the Shura Council Members Election Law was issued by Royal Decree No. 254/2023³³, including eight chapters and sixty-three articles. It provides clear regulations for the electoral process and all related procedures, in compliance with electronic systems, such as: amending the responsibilities of the main committee and adding a committee for electoral complaints.

The Ministry of Interior has issued Ministerial Decision No. 121/2023 related to the issuance of the executive regulations for the Shura Council Members Election Law³⁴, outlining the formation and mandates of these committees. Additionally, a second version of the "INTAKHIB" application was launched, incorporating artificial intelligence technology for visually impaired individuals (the blind) through an auditory reading feature for voting steps using sign language which explains the voting steps for people with disabilities (deaf and mute)³⁵. Furthermore, an electronic platform called

²⁸ It is worth noting that voter registration is done through registration in the electoral register, and activating the identity card "Civil ID" electronically, and the electronic system is installed in the personal card.

²⁹ Yasser Al Balushi, the Ministry of Interior launches the "INTAKHIB" application for voter voting in the municipal council elections for the third term, Oman News Agency, Website: <https://omannews.gov.om/>

³⁰ Official Journal, Issue No. 1023, issued on: October 30, 2013, Website: <https://data.qanoon.om>

³¹ Ministerial Decision No. 128/2003 related to the organization of the voting and automatic counting method for Shura Council elections, Official Journal, Issue No. 752, issued on: October 01, 2003, Website: <https://data.qanoon.om>

³² Website: <https://www.aa.com.tr>

³³ Official Journal, Issue No. 1504, issued on July 30, 2023, Website: <https://qanoon.om/>

³⁴ Official Journal, Issue No. 1511, issued on September 13, 2023, Website:

³⁵ Oman News Agency, the Ministry of Interior launches the second version of the "INTAKHIB" application,



"SAFHATI" was launched, serving as an online platform for dialogue between candidates and voters, along with the "HIWARIA Dialogue Platform" (an electronic platform with the INTAKHIB application) discussing issues related to the electoral process³⁶. This opens up new horizons for candidates to engage with their voters and make them feel closer to them in order to address their concerns, demands, and proposed solutions from their candidates, thus opening the door to participatory democracy in the electoral process.

3. Section Three: the challenges that face both countries' legislations in the field of management and organization of electronic elections.

Despite the remarkable success achieved by electronic elections in terms of the speed of procedures, transparency, and accuracy in vote counting, avoiding the hassle of voters traveling to vote and the preserve of public funds by preventing the depletion of the national treasury, especially in the electoral campaign and the elimination of the disadvantages of traditional elections in general, this type of election faces significant challenges on several levels, such as:

- **First: Legal Challenges:**

There are significant legislative challenges facing electronic voting systems in terms of their organization and legal rigidity at all stages and steps to ensure the generality and secrecy of electronic voting. The latter requires a robust and comprehensive legislative system that supports and is suitable for the nature of electronic voting, in line with the electoral laws of the country and international standards for conducting fair and transparent elections.

- **Second: Security Challenges:**

Electronic voting is prone to many security risks, as software companies can breach electronic systems and manipulate election results, opening up wide-ranging opportunities for electronic fraud, especially if the election management is conducted by the administration and not an independent entity. Additionally, electronic elections may be vulnerable to cyber attacks, cyber terrorism, which could disrupt the electoral process and raise doubts among citizens about the integrity of the electoral process. For this reason, some countries have suspended electronic voting projects, as is the case in Australia, Ireland, the Netherlands, and England.

Regardless of the utmost care taken by both countries to stipulate strict deterrent penalties in case of disruption to the data of automated processing systems and other disruptions that impede the electoral process, this is not enough to eliminate the future risks facing the electoral process.

- **Third: Infrastructure-related Challenges:**

Electronic elections require an information and communication technology infrastructure in terms of organization and structuring in order to establish a reliable and secure electronic voting infrastructure, which incurs high financial costs beyond the capabilities of local and national electoral administrations. This is particularly lacking in Algeria, especially in remote or underserved areas with no internet connectivity, making the electronic elections somewhat distant at the moment.

- **Fourth: Challenges related to Trust Crisis:**

Opening up dialogue between candidates and voters through electronic applications intensifies political discourse on one hand and deepens trust between citizens and political authorities on the other. Many studies have linked political trust with political participation or what is called "Trust Culture"³⁷. However, it also opens the door to political violence, especially during the electoral campaign, in the absence of cultural and political maturity for some individuals. Therefore, the European Union considers the success of electronic voting to be contingent on countries with high levels of trust in the electoral management.

- **Fifth: Challenges related to Awareness of the Importance of Electronic Voting:**

As long as the individual is the main focus and maker of the electoral process, their conviction of the importance of this type of election poses a significant challenge to its success or failure. On that

Website: <https://omannews.gov.om>

³⁶ Election of members of the Shura Council for the tenth term in 2023, Website:

<https://shura2023.elections.om>

³⁷ Messika Ramdani, previous reference, p156.



account, citizens must be aware of the changes occurring in the electoral process, especially since electronic elections use modern and unfamiliar technologies in the voting process. It is very easy to doubt their integrity if they are not familiar with the technologies used in voting and counting.


CONCLUSION

From what we have presented, we conclude a number of results:

- The use of digital technology in managing the electoral process has become an inevitable reality. Under the adoption of the e-governance system (electronic management) by both countries to bring administration closer to citizens, saving time, effort, and money, and electronic elections are part of e-governance since they contribute in revitalizing direct democracy, which was difficult to implement in practical reality.
- Oman is considered the leading Arab country in the field of electronic elections. Municipal council and Shura Council elections have been conducted through a mobile application, leading to an expansion of political participation unlike Algeria, which has not yet reached comprehensive electronic elections. Algeria however has limited itself to electronic registration of voters and candidates, but it has not abandoned traditional methods which confirms its steadily moving towards electronic elections.
- The legislative regulating electronic elections in Oman began gradually until its completion in the 2023 Shura Council elections. In contrast, Algeria lacks legislative and regulatory references due to concerns raised by organizing electronic or digital electoral processes considering its first degree political operation.
- The electoral process management in the Sultanate of Oman is supervised by the Ministry of Interior, even though its organization is delegated to the Higher Election Committee, making the entire electoral process subject to management even if it were electronic. Contrary to Algeria which has established an independent electoral authority with financial and administrative independence, regulating, managing, supervising, and monitoring the electoral process far from administrative intervention. This independence serves as a constitutional guarantee for the integrity and transparency of the electoral process.

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