African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Vers un cadre juridique et réglementaire en faveur de la gouvernance de l'intelligence artificielle au Maroc

Towards a Legal and Regulatory Framework in Favor of AI Governance in Morocco.

Auteur 1 : Btissam EL GUENNOURI.
Auteur 2 : Jamal GUEDDOURI.

Btissam EL GUENNOURI, (0009-0004-5519-0179, PhD en Droit) université Moulay Ismail / Faculté des sciences juridiques, économiques et sociales -Maroc des Sciences Juridiques, Économiques et Sociales – Maroc

Jamal GUEDDOURI, (0009-0002-8852-4759, Professor en droit) Université Sidi Mohammed Ben Abdellah / Faculté des sciences juridiques, économiques et sociales -Maroc des Sciences Juridiques, Économiques et Sociales – Maroc E-

Déclaration de divulgation : L'auteur n'a pas connaissance de quelconque financement qui pourrait affecter l'objectivité de cette étude.

Conflit d'intérêts : L'auteur ne signale aucun conflit d'intérêts.

Pour citer cet article : EL GUENNOURI .B & GUEDDOURI .J (2026) « Vers un cadre juridique et réglementaire en faveur de la gouvernance de l'intelligence artificielle au Maroc », African Scientific Journal « Volume 03, Num 35 » pp: 2103 – 2124.

DOI : 10.5281/zenodo.20040769

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Résumé :

Personne ne peut nier que « la conscience humaine » évolue vers « une conscience artificielle », son adoption nécessite des investissements considérables dans divers domaines, ainsi qu'une gouvernance adaptée pour répondre aux préoccupations éthiques et réglementaires. Les responsables doivent ainsi définir avec soin les priorités nationales que L'IA est appelée à servir, À l'instar d'autres nations, le Maroc s'est inscrit également dans cette dynamique à travers l'exploitation des nouvelles technologies numériques pour une croissance économique et financière soutenue, en passant de « la Stratégie Nationale de transformation digitale 2020-2025 » à la vision « digital Morocco 2030», illustre cette ambition : de faire du Royaume un hub numérique accélérant son développement social et économique, cette vision marocaine en matière d'IA repose sur deux objectifs principaux : exploiter le potentiel de l'IA pour accompagner la numérisation des services publics et privés, et renforcer l'écosystème national de l'IA afin de contribuer au développement de l'économie numérique. Certains auteurs estiment même que le Maroc pourrait devenir un leader régional dans ce domaine (Bari, 2025). Actuellement, l'IA offre des opportunités uniques au pays, en améliorant la qualité, l'efficacité et la performance des services dans les secteurs public et privé. Toutefois, il convient de souligner que le Maroc ne dispose pas encore d'un cadre réglementaire spécifique dédié à l'intelligence artificielle.

Mots clés :

L'intelligence artificielle, la régulation de l'intelligence artificielle, les défis de l'intelligence artificielle.

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Abstract :

Nobody can say we are not changing human consciousness into artificial consciousness today.

The adoption of AI requires investments in different areas, as well as governance, to address ethical concerns and regulations. Hence, decision-makers should carefully consider the national priorities to be addressed by AI; similar to all countries, Morocco has also shifted to this dynamic through the instigation of new digital technologies to uphold economic and financial growth, shifting from "National Digital Transformation Strategy 2020-2025 (Digital Development Agency, 2020)" to the vision of "Digital Morocco 2030 (Ministry of Administrative Reform and Public Policy, 2024)", this strategy aims to: " Make Morocco a Digital Hub to accelerate the Kingdom's social and economic development, "Morocco has a clear and ambitious vision in artificial intelligence, this vision has two goals, the first is harness the potential of AI to support the digitization of private and public services and the second supports and strengthen the AI ecosystem and contribute to the development of the digital economy, adding that Morocco could become a leader of AI (bari, 2025).

Currently, AI presents unique opportunities for Morocco; AI has proven to improve service delivery, efficiency, and effectiveness both in the public and private sectors. However, Morocco has not yet established a specific regulatory framework for AI.

Keywords :

artificial intelligence, the regulation of artificial intelligence, the challenges of IA

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Introduction

Artificial Intelligence (AI) is a technology that integrates human-designed systems with cognitive abilities such as reasoning, learning, and problem-solving; in other words, AI is "a man-made object with thinking power." Intelligence is intangible which may be described as "the ability of a system to calculate, reason, perceive relationships and analogies, learn from experience, store and retrieve information from memory, solve problems, comprehend complex ideas, use natural language fluently, classify, generalize, and adapt new situations (Sharma & Garg , 2022).

This AI has become a primary driving force for industrial transformation globally. While AI holds transformative potential worldwide, countries, including Morocco, are exploring ways to integrate it into their future development strategies with the developments of AI, it is believed that AI can efficiently and intelligently manage many tasks. It includes the concept and development of computing systems capable of performing the given tasks, e.g., decision-making, speech recognition, visual perception, and translation of languages using the algorithms. These algorithms may be used for data processing, computation, automated reasoning, and predictions, as well as reducing wastage to streamline supplies and maintain the optimum (Sharma & Garg , 2022). As critically important, AI will surge over the following years, and some countries are expected to grow more than others.

The world is on the cusp of a digital revolution, and it comes with opportunities and challenges. The international debate on the adoption and use of Artificial Intelligence (AI) has gained significant momentum in recent years and has intensified as countries seek to harness digital technologies to respond to socio-economic challenges. AI technologies can help promote inclusive economic growth, bring significant benefits to society, and empower individuals.

As a result of several studies carried out:

1. Price Waterhouse Coopers: AI has the potential to generate as much as $15.7 trillion for the global economy by 2030.

2. Goldman Sachs estimated a growth of 7% of the global GDP, or just under 7 trillion dollars, in 2023.

3. McKinsey & Company: Non-generative AI could add between $11 trillion and $17.7 trillion; generative AI, an additional $2.6 trillion to $4.4 trillion.

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

4. According to a European Parliament think tank study, AI could increase labor productivity by 11% to 37% by 2030 (Economic, Social and Environmental Council of Morocco., 2024).

AI has great potential to increase innovation and productivity and solve some of society's most pressing problems. However, such widespread use of AI presents a plethora of ethical, legal, and social issues, with data protection, intellectual property rights, and consequences for employment being some of the key concerns. So, it has become important to create a strong regulatory system to ensure that.

AI is influencing international society and imposing new challenges on international actors (states, international organizations, NGOs, and transnational corporations) (Roumate, 2024). IA as a new weapon offers new opportunities for states, and those who master AI could potentially hold considerable power.

In late 2022, the release of ChatGPT set off a global scramble to govern artificial intelligence. The Biden administration set up the U.S. AI Safety Institute, an office tasked with developing protocols to identify risks posed by AI. Canada, Japan, Singapore, South Korea, the United Kingdom, and the European Union created similar oversight bodies. Global leaders gathered to discuss AI in Bletchley Park, the English country estate where Allied code breakers worked in secret during World War II. The next 15 months brought follow-on conferences in Seoul and Paris. In the face of a technology promising to disrupt work, warfare, and what it means to be human, the stage was set for a political response. Even the leaders of the commercial AI labs called for coordinated AI governance (Sebastian & Elbaum , 2026).

For a long time, discussions on AI regulation and the impacts of AI systems on fundamental rights were primarily confined to data and privacy issues (LEWKOWICZ & SARF, 2024), similar to all countries, Morocco has also shifted to this dynamic through the instigation of new digital technologies to uphold economic and financial growth, shifting from "National Digital Transformation Strategy 2020-2025" to the vision of "Digital Morocco 2030." This direction demonstrates Morocco's intent to embrace the Fourth Industrial Revolution “Industry 4.0”. In the meantime, it is also seen as a factor to utilize digital technology to boost the socio-economic development in the country and to keep in pace with new trends in the globe; new trends include Artificial Intelligence (AI), the Internet of Things (IoT), and 5G, but it has not yet established a specific regulatory framework for AI.

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Morocco does not have favorable standings in the international rankings of the artificial intelligence sector: The Global AI Index Tortoise 2024 ranks Morocco 79th out of 83 members, while " for the African ranking, it is 9th" (Barlaman Today, 2024).

For the government, the AI Readiness Index 2024, Oxford Insights, ranks Morocco 101th out of 188 members while "For the African ranking, it is 13th (Oxford Insights., 2024).

According to Open Data Watch, Morocco ranks 35th (UNESCO, 2024)out of 195 countries in the Open Data Index. By signing the International Open Data Charter, the country is demonstrating its strong commitment to an open data policy and data security (Elmehdi & Haounani, 2024).

Artificial Intelligence offers many opportunities for Morocco; whilst the arrival of Strong AI may scare many, the potential of new technologies to fulfill basic physical work and intellectual pre-programmed tasks now seems limitless. Man has always feared evolution and being replaced. The truth is that man will not become obsolete soon, as he will be needed to parameter and overwatch AI. As we are already aware of the bright and dark side of AI, we should be able to learn during the next few years where we remain in control how to take advantage of our greatest and scariest invention. In the long run, it is difficult to deny that machines might replace man as they are already much smarter and more enduring than the ordinary mortal. Regulations must be implemented to ensure a good transition of robotic and AI technologies in our workplaces. These must protect both human workers and new sentient beings from inequalities, salary differences, and mass unemployment (Rébé, 2021).

Many issues in AI are still being discussed, and as such, it is important for Morocco to be part of the dialogue at the international level.

Each country adopts a distinct approach to the regulation of artificial intelligence; there are three main international legal frameworks concerning AI:

A-In China, there are indeed essential regulations regarding deepfakes and generative AI:

1. Provisions on DeepFakes: Effective from January 10, 2023
2. Interim Measures on Generative AI: Adopted on May 15, 2024 (Cyberspace Administration of China, 2023)

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

China has been one of the first countries to regulate artificial intelligence within a long term, comprehensive development plan for this technology (Pernot-Leplay, The regulation of AI in China, Europe, and the US, 2025), At the same time, it is a is undergoing a rapid development of its data privacy framework. While the legal literature on personal data protection and privacy (Pernot-Leplay, 2020)

B- In the United States, these are two Executive Orders:

1-Executive Order 14110 (Executive Office of the President of the United States, 2025): It was signed by President Joe Biden on October 30, 2023, and it delves into the safe, secure, and trustworthy development of AI On January 20, 2025; however, on January 20, 2025, Donald Trump rescinded this Executive Order, signed by Joe Biden on October 30, 2023.

2-Executive Order 14141 (Executive Office of the President of the United States, 2025): President Biden signed this executive order on January 14, 2025, to strengthen AI infrastructure in U.S. data centers and energy infrastructure.

C-In the European Union, the European Parliament and the Council adopted artificial intelligence regulation on 13 June 2024

The objective of this regulation is to improve how the internal market operates by creating a consistent legal framework, especially for the development, marketing, deployment, and use artificial intelligence systems (which we'll call "AI"systems) across the union. This initiative is designed to uphold the values of the union, encourage the adoption of human-centered and trustworthy AI, and ensure a high level of protection for health, safety, and fundamental rights as outlined in the Charter of Fundamental Rights of the European Union (referred to as the "charter"). This includes key principles like democracy, the rule of law, and environmental protection. Moreover, it aims to mitigate the negative impacts of AI systems within the union and foster innovation (European Parliament & Council of the European Union., 2024).

No one can deny that the global AI landscape is being shaped right now. Morocco can absolutely benefit from adopting IA legislation, but how can international regulation of AI be established, given the diversity of legal systems and national approaches, while also addressing the ethical, economic, and social challenges posed by this emerging technology?

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Research Methodology

This research consists of presenting and analyzing a wide rang of reports and laws regulate IA in Morocco, which incorporates international recommendations. Such as from UNESCO and the OCDE, to contextualize the country's legislative framework and identify potential synergies with global regulations.

This study has two main objectives:

1- to present the challenges associated with artificial intelligence

2- to outline all the regulatory initiatives proposed by the Moroccan state

1: The challenges of AI: Between opportunities for progress and potential risks

AI is more of a broad category of technologies, with many different types of innovations. at means progress is likely to be a complex and ever-changing wave rather than a straight-line trip.

According to Elsevier's 2025 Researcher of the Future report, artificial intelligence is transforming research (Horowitz & Lauren Kahn, 2025).

AI is reshaping the research landscape, with growing adoption and optimism about its potential, alongside concerns about preparedness and governance.

AI adoption in research has surged: 58% have used AI tools for work, up from 37% in 2024. Most often they use AI to find and summarize the latest research (61%) and perform literature reviews (51%).

Researchers are largely positive about AI's potential to boost efficiency, with 58% saying it already saves them time today and 69% expecting AI to save them time in the next two to three years.

Researchers are largely positive about AI's potential to boost efficiency, with 58% saying it already saves them time today and 69% expecting AI to save them time in the next two to three years.

However, many feel underprepared: 45% feel undertrained in AI, and only 32% agree governance of AI at their institution is good.

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Researchers point to a number of factors to increase their confidence in using AI including transparency: when AI automatically cites references (59%) and recency: when the AI's training data includes the most up-to-date scholarly literature (55%). (Elsevier, 2025)

The use of artificial intelligence in the healthcare sector has witnessed a qualitative leap since the COVID-19 pandemic. Although leading countries had begun investing in it years earlier, many nations resorted to technological tools as part of their response and management policies during the pandemic (House of Representatives of Morocco., 2022).

From Paige to molecular imaging by moving from visualization to prediction, artificial intelligence (AI) is revolutionizing medicine. instruments such as Paige.Clinical efficiency, diagnosis accuracy, and care precision are improved by AI, DermaSensor, and TytoCare. AI makes it possible to analyze vast amounts of health data in the Big Data era, helping professionals with their everyday tasks in robotics, medical imaging, electronic records, and personalized medicine.

The range of AI's influence-upon the ways individuals function and socialize, their education, governance, and daily interactions promotes far more profound considerations than only questions of regulation (United Nations General Assembly, 2023).

the underpinnings of intelligent machines go back to the 1940s with the groundbreaking work of Alan Turing. From then on, it was the epoch when the first computers were developed, and the idea of "intelligent machines" went ahead. The expression "artificial intelligence" occurred at a scientific symposium at Dartmouth in the United States in 1956. One would be correct in thinking that AI has progressed since then, if only because of developments in algorithms and computer power.

The future of AI is a challenging debate. Some theories suggest that AI will converge to singularity, meaning that our technological creations will exceed the computing power of human brains (VAZIRGIANNIS, 2020).

AI represents a technological revolution taking place within the frontiers of any aspect, be it economic, social, cultural, or environmental. AI is given to be a promising possibility for innovation, increased productivity, and solving social issues, but it also poses grave threats. Correspondingly, the massive adoption of AI raises ethical, legal, and social questions that can include but are not entirely limited to data protection, intellectual property rights, and effects on employment (Economic, Social and Environmental Council of Morocco., 2024).

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

With the rapid advances in large language models (LLMs) equipped with billions or even trillions of parameters, a new era for generative AI has dawned. These models can produce texts, photorealistic images, and even video sequences. Tools like DALL-E and Midjourney illustrate this evolution by automatically generating images from textual descriptions. However, these original creations raise new questions regarding intellectual property.

To comprehend the technological nuances concerning AI in detail, it is most pertinent to mention these three prime essentials on which AI runs: a strong hardware foundation, algorithms that perform impressively, and a lot of high-quality data (Economic, Social and Environmental Council of Morocco., 2024).

Concerning labor market impacts, AI is progressing quickly in various domains and automating tasks that previously were only performed by humans. Two frameworks have emerged concerning these transformations: one sees a continuation of hybrid human-AI performance, which follows industrial and scientific revolutions in history, and the second and more radical view predicts that humans will be replaced entirely with AI (Economic, Social and Environmental Council of Morocco., 2024).

Artificial intelligence presents fresh challenges to data protection that must be managed with policy and well-designed solutions to achieve equilibrium. AI (its subsets include generative artificial intelligence (AI), machine learning (ML), and deep learning (DL)) produces ideas and products faster than we can comprehend. In fact, the AI solutions market is on track to reach 733.7$ billion by 2027, with an annual average growth rate of greater than 42%; these solutions depend on data, which they consume and analyze to generate the intelligence needed for AI-based systems. This data is often personal and behavioral and can even include very sensitive information, such as health and biometric data, which entails privacy and ethics risks. This raises issues around the protection of personal information for the future (JALDI, 2022).

In addition to the overall challenges, countries face specific issues. For example, some countries need to develop proper infrastructure to support a substantial expansion in the use and development of AI. Power grid stability, higher levels of rural electrification, and developed ICT infrastructure can all contribute to faster AI-based growth (Smart Africa, 2021).

In addition, UNESCO has been instrumental in crafting ethical guidelines and standards for using AI technologies. In November 2021, all 193 member states adopted UNESCO (UNESCO, 2022); moreover, many countries, such as China, India, and the United Arab

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Emirates, have integrated ethical considerations into their AI regulations. In Europe, most countries comply with the 'EU AI Act,' which now constitutes an essential legal framework for regulating AI within the European Union.

The last decade of behavioral ethics has demonstrated that ethical decisions by humans are often biased, unconsciously, by malignant criteria (KIM, 2020); however, to maximize the benefits of AI, ethical, legal, and governance frameworks must be put in place that are both appropriate and just.

Furthermore, Control and access to the data. Data are like fuel to the AI engine. Currently, the vast amounts of data produced by user behavior and interactions are mainly owned by private entities that capitalize on the knowledge extracted from these data. This enables them to develop their competencies and products further in AI. Therefore, it becomes essential that data are available to the research community and the governments for policy and decision-making. A key political question of our era is, "How do you regulate data ownership (VAZIRGIANNIS, 2020)?

Responses to AI challenges vary between countries but share common grounds concerning regulation, innovation, and ethics. By investing in skills development, ethical frameworks, and industry innovation, countries strive to maximize AI potential while minimizing its biggest risk. The rapid trajectory of this technology hence requires vigilance and constant adaptability in governance frameworks anchored by international cooperation to sustain responsible and advantageous utilization of it (Economic, Social and Environmental Council of Morocco., 2024).

2-Regulatory initiatives for AI: How effective are they?

While Morocco has not yet established a concrete regulatory framework for these new technologies, it has nevertheless built the foundations for a global digital ecosystem that will influence the development and use of these technologies. In addition to the Constitution, Morocco has ratified several international conventions on civil rights, personal data protection, and combating cybercrime. Interestingly enough, Morocco is taking steps towards implementing UNESCO's recommendations on the ethical use of AI (CESE (Economic, Social, and Environmental Council), 2024), making it the first African and Arab country to commit to this, besides the UN resolution for safe and trusted AI and sustainable development. However,

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

national and international commitments struggle because, in their absence, these commitments can't turn into actions in practice without a clear governance and regulatory function.

As we have already mentioned, there are three legal frameworks regarding AI at the international level: China, the European Union, and the United States.

International institutions, like the United Nations and the OECD, offer international frameworks that can be adapted to the local situation based on certain basic principles.

The OECD has published its Principles on Artificial Intelligence, a set of guidelines aimed at promoting innovative, trustworthy, and human rights-respecting use of AI in accordance with democratic values.

By May 2023, governments reported over 1000 policy initiatives across more than 70 jurisdictions in the OECD.AI national policy database that follow the OECD AI Principles (OECD (Organisation for Economic Co-operation and Development), 2024).

For its part, The Secretary-General of the United Nations has established such an advisory committee at a high level to reflect on the matters concerning Artificial Intelligence (United Nations, 2023).

While they do not carry legal weight, guidelines often serve as a foundation for developing laws and regulations. This approach allows governments to enhance their understanding of the pertinent issues before establishing formal governance frameworks.

Many nations have set up advisory committees and regulatory bodies to promote the advancement of artificial intelligence, all while safeguarding its ethical implementation and safe application.

In 2024, the U.S. established a federal council to ensure accountability for AI disruption regarding national or economic security, public health, and safety. It brings together academics, politicians, and leading companies in the sector like OpenAI, Microsoft, and Google for one common purpose: to ensure that the use of AI remains framed through a lens of "safety and responsibility," such a guide through the deployment of ethical and secure practice.

In 2017, France began a mission under the leadership of mathematician Cédric Villani to guide the development of artificial intelligence. The primary purpose of such a mission was to "give meaning" to AI by creating sufficiently rigorous guidelines for its national development. This

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

work contributed to setting up a national strategy involving the ethical, economic, and social dimensions that would orient AI toward France's high technological development and innovation priorities.

In 2017, the United Arab Emirates approved the Dubai Minister of Artificial Intelligence. The ministry's core purpose is to help make the United Arab Emirates a global leader in the field by encouraging innovation and research. This initiative aims to place the United Arab Emirates on the global map of AI, both in industrial and technological fields.

In 2020, Saudi Arabia launched a national strategy for data and AI (NSDAI), on the basis of which it sees itself among the leaders by 2030. This is the stage set to spearhead this undertaking, the Saudi Data and Artificial Intelligence Authority (SDAIA). This body is mandated with the governance and coordination of all activities relating to AI, covering skills development, innovation, and regulation and ensuring this key sector develops strategically and coherently (Economic, Social and Environmental Council of Morocco., 2024).

In March 2024, Morocco was a principal co-sponsor, alongside the United States, of the UN resolution on artificial intelligence (AI). This resolution encourages countries to contribute to the development of principles, as well as regulatory and governance frameworks, to govern AI systems.

Morocco has laws governing the security of Moroccan cyberspace, including legislation on cybercrime (penal code), cybersecurity, trusted services for electronic transactions, and the protection of personal data.

The legislation of cybercrime:

1- Law N° 07-03 (Kingdom of Morocco, 2003), supplementing the Criminal Code on offenses related to automated data processing systems

2- The Budapest Convention (Ratified by Morocco in June 2018) (Council of Europe, 2018)

3- United Nations Cybercrime Convention (Adopted on December 24, 2024) (United Nations Office on Drugs and Crime (UNODC), 2024).

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Law of cybersecurity:

1-Law No. 05-20 (Kingdom of Morocco, 2020) on cybersecurity and its implementing decree establish security measures and procedures for the resilience of information systems in Morocco.

The implementing decree (Kingdom of Morocco, 2020) details the provisions specific to entities and Critical Infrastructure with sensitive information systems, as well as those relating to operators (public telecommunications network operators, Internet service providers, cybersecurity service providers, digital service providers, and Internet platform publishers). Finally, it sets the qualification criteria for audit and cybersecurity service providers.

Law of trust services

1- Law No. 53-05 on the Electronic Exchange of Legal Data (Kingdom of Morocco, 2007)

2-Law No. 43-20 (Kingdom of Morocco, 2021) concerning trust services for electronic transactions in Morocco aims to establish the applicable framework for trust services, cryptology methods, and the operations carried out by trust service providers.

Recent cybersecurity incidents against Moroccan institutions underline the necessity of strengthening these regulations to protect digital transactions from potential breaches.

April 8, 2025, a cyberattack against the CNSS compromised the data of nearly two million affiliates (CybelAngel, 2025); on April 12, 2025, the CNSS officially responded to this cyberattack by releasing a statement acknowledging a data breach and announcing security reinforcement measures to mitigate the impact (National Social Security Fund (CNSS), 2025). The break into the Ministry of Employment and Economic Inclusion, leaking salary declarations and employee lists, also shows the shortcomings in protecting digital infrastructure (Morocco World News., 2025).

The (Distributed Denial of Service) DDoS assault on the Ministry of Agriculture and National Education by a hacker group only highlights the vulnerability of public service against cyber threats (CyberMaterial, 2025).

Attacks such as DDoS are a threat to network security because they aim to flood target networks with malicious traffic, rendering them unusable (Aldhyani & Alkahtani, 2023).

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Given the growing challenges associated with the digital space, Morocco seeks to develop the security and resilience of its national cyberspace. Public action focuses on preserving fundamental national interests, maintaining the continuity of essential services, and preventing damage to sensitive data and information systems (General Directorate of Information Systems Security., 2024)

The protection of personal data:

1-Law No. 09-08 (Kingdom of Morocco, 2009) in Morocco is related to protecting personal data. It aims to ensure adequate protection for individuals against data misuse that could infringe on their privacy.

2-Convention 108 (Council of Europe, 1981), also known as the Convention for the Protection of Individuals about Automatic Processing of Personal Data (Ratified by Morocco in July 2019).

However, the problem is that the aforementioned texts do not take into account the risks associated with automated decisions and data manipulation by AI systems.

At the governmental level, Morocco has:

1. The Head of Government chaired the National Commission for Digital Development in Morocco (Decree No. 2.23.951) (Government of the Kingdom of Morocco, 2023).
2. The Strategic Committee for Cybersecurity in Morocco was established by Law No. 05-20 on July 25, 2020. (General Directorate of Information Systems Security., 2025)
3. The National Commission for the Protection of Personal Data (CNDP)
4. The National Telecommunications Regulatory Agency (ANRT) (law n°24-96) (General Directorate of Information Systems Security, 2025)
5. The Digital Development Agency (ADD)
6. The General Directorate of Information Systems Security (decree n°2-82-673) (Kingdom of Morocco, 2011)
7. The General Directorate for National Security (decree n°2.23.405) (Government of the Kingdom of Morocco, 2023)

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

By scrutinizing existing laws and governmental institutions, it becomes imperative to highlight the multitude of regulations and specialized institutions in Morocco. However, presently, there seems to be no particular framework regulating IA. The following significant questions arise:

Framework Status: Do we establish a specific framework law for IA, or do we amend existing laws using applicable variants concerning the impact of IA?

Authority Specialization: Should Morocco consider establishing an authority or agency to oversee the growth and implementation of IA technologies?

Indeed, Morocco continues its work in this area, and a proposed law was submitted to the Chamber of Advisors on April 17, 2024. This proposal aims to establish an agency under the supervision of the Head of Government. Its role is to steer the national strategy on AI, ensure its implementation, and update it according to technological advancements (Government of the Kingdom of Morocco, 2025).

The General Directorate of Information Systems Security organized the African Cybersecurity Forum 2025 in partnership with Smart Africa; under the theme "Artificial Intelligence and Trusted Cloud: A Pillar for Strengthening Cybersecurity," the forum gathered over 700 participants, including ministers, senior government officials, international experts, and private sector leaders. These participants discussed strategic issues related to digital transformation and securing African cyberspace.

During this forum, decision-makers discussed the upcoming creation of the African AI Council. This future African AI Council will provide a platform enabling nations to achieve the continent's ambition to leverage AI to transform its economies, industries, and societies.

No one can deny, there are a significant ethical and regulatory challenges, the fast development of IA has overwhelmed the established regulatory structures and generated uncertainties and potential obstacle risks (Rane, 2024).

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Conclusion

In conclusion, preparing a legal framework for AI is now becoming crucial. As with any technology that can potentially be misused for criminal purposes, we must adopt practices to prevent and sanction harmful or unlawful applications of this still unfamiliar, the real challenge for Morocco is not the regulation of artificial intelligence, but the strategic investment in digital infrastructure, particularly data centers. Without these local computing capacities, the country will remain dependent on foreign powers to access cutting-edge technologies. Investing in data centers, powered by the renewable energies that Morocco has in abundance, is the key to ensuring its digital sovereignty and fully participating in the AI revolution.

At the global level, the future of artificial intelligence will be shaped by the United States and China. The two countries employ 70 percent of the world's top machine learning researchers, command 90 percent of global computing power, and attract the vast majority of AI investment—more than twice the combined total of every other state (Winter-Levy & Anton Leicht, The AI divide: How U.S.-Chinese competition could leave most countries behind. Foreign Affairs, 2025), Yet they are not converging on the same path to AI leadership, nor are they competing across a single dimension. Instead, their rivalry is fragmenting across multiple domains: the development of advanced large language and multimodal models; control over computing infrastructure such as data centers and cutting-edge chips; influence over global technological standards; and the integration of AI into physical systems including robots, factories, vehicles, and military platforms. Having an edge in one area does not automatically translate into dominance in the others (KAHL, 2026).

In past technological revolutions, powers that were not at the frontier could gradually adopt new capabilities and catch up. But the AI revolution will be different, locking many countries into a strategic trap that could consign much of the world to technological vassalage. Against this backdrop, Morocco must act decisively: investing in its own infrastructure is the only way to secure sovereignty and avoid dependence in the age of artificial intelligence.

Integration of AI promises to enhance intelligence processing, accelerate data-driven decision-making, optimize logistics and resource allocation, enable sophisticated autonomous systems, and possibly even lead to the development of a "wonder weapon"—such as a cyberweapon that could cripple an adversary's critical infrastructure and command and control or, used defensively, make a country invulnerable to cyberattacks (KAHL & MITRE, 2025)

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

BIBLIOGRAPHIE

Aldhyani, T. H., & Alkahtani, H. (2023). Cyber security for detecting distributed denial of service at-tacks in Agriculture 4.0: Deep learning model. 6. doi:https://doi.org/10.3390/math11010233

bari, A. (2025). Morocco could become a leader in AI. 84. (T. E. Life, Intervieweur) The Economic Life. Récupéré sur https://www.lavieeco.com

Barlaman Today. (2024, 09 21). Consulté le 2025, sur https://barlamantoday.com/2024/09/21/morocco-lags-behind-in-global-ai-race-ranks-79th-in-2024-index/

CESE (Economic, Social, and Environmental Council). (2024, june 27). Récupéré sur https://www.cese.ma/en/docs/quels-usages-et-quelles-perspectives-de-developpement-de-lintelligence-artificielle-au-maroc/#:~:text=On%20an%20international%20scale%2C%20Morocco,on%20AI%20for%20sustainable%20development.

Council of Europe. (1981). *Convention 108.* Récupéré sur https://rm.coe.int/1680078b37

Council of Europe. (2018, june 29). Récupéré sur Council of Europe: https://www.coe.int/fr/web/deputy-secretary-general/-/morocco-joins-the-budapest-convention-on-cybercrime-and-its-protocol-on-xenophobia-and-racism

CybelAngel. (2025, april 10). *CybelAngel*. Récupéré sur CybelAngel. (2025, April 10). Our investigation of the CNSS data leak [Flash Report]. CybelAngel

CyberMaterial. (2025). Récupéré sur CyberMaterial: https://cybermaterial.com/hackers-leak-data-from-moroccan-agencies/

Cyberspace Administration of China. (2023). Récupéré sur http://www.cac.gov.cn/2023-07/13/c_1690898327029107.htm

Digital Development Agency. (2020). *General Guidelines Note for Digital Development in Morocco by 2025.* Digital Development Agency. . Récupéré sur https://www.add.gov.ma/storage/pdf/Avril_NOG_ADD_fr_SITE_VF.pdf

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Economic, Social and Environmental Council of Morocco. (2024). *What uses and perspectives for the development of artificial intelligence in Morocco.* Opinion. Récupéré sur https://www.cese.ma/media/2024/11/AVAS78VFP1.pdf

Elmehdi, A., & Haounani, A. (2024, 06). Artificial Intelligence in Morocco: Between Ethics and Regulation. *2*(3), 1239.

Elsevier. (2025). *Researcher of the Future: Confidence in Research – Elsevier*. Consulté le 02 05, 2026, sur https://www.elsevier.com/en-gb/insights/confidence-in-research/researcher-of-the-future?utm_source=copilot.com

European Parliament & Council of the European Union. (2024, March 13). AI Act of the European Union. 1. Récupéré sur AI ACT Parlement européen.pdf

Executive Office of the President of the United States. (2025, January 13). Executive Order 14140 . Récupéré sur https://www.federalregister.gov/documents/2025/01/13/2025-00622/taking-additional-steps-with-respect-to-the-situation-in-the-western-balkans

Executive Office of the President of the United States. (2025, January 17). Executive Order 14141. Récupéré sur https://www.federalregister.gov/documents/2025/01/17/2025-01395/advancing-united-states-leadership-in-artificial-intelligence-infrastructure

General Directorate of Information Systems Security. (2025). Récupéré sur General Directorate of Information Systems Security: https://www.dgssi.gov.ma/sites/default/files/legislative/brochure/2023-07/loi%2024-96.pdf

General Directorate of Information Systems Security. (2024). *National Cybersecurity Strategy 2030.* Récupéré sur https://www.dgssi.gov.ma/fr/publications/strategie-nationale-de-cybersecurite

General Directorate of Information Systems Security. (2025). *General Directorate of Information Systems Security.* Récupéré sur https://www.dgssi.gov.ma/fr/publications/strategie-nationale-de-cybersecurite

Government of the Kingdom of Morocco. (2023, november 09). Récupéré sur Government of the Kingdom of Morocco: https://www.cg.gov.ma/fr/node/11528

Government of the Kingdom of Morocco. (2023, May 24). *Government of the Kingdom of Morocco*. Récupéré sur https://www.cg.gov.ma/en/node/11230

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Government of the Kingdom of Morocco. (2025, april 24). *Morocco News*. Récupéré sur Morocco News: https://actu-maroc.com/vers-une-regulation-de-lintelligence-artificielle-au-maroc-avec-le-projet-de-la-creation-dune-agence-nationale/

Horowitz, M. C., & Lauren Kahn. (2025, 9 25). *Foreign Affairs.* Récupéré sur The Cost of the AGI Delusion: By Chasing Superintelligence, America Is Falling Behind in the Real AI Race: https://www.foreignaffairs.com/united-states/cost-agi-delusion (foreignaffairs.com in Bing)

House of Representatives of Morocco. (2022, 07 5). *Temporary Thematic Working Group Report on Artificial Intelligence: Prospects and Impacts.* House of Representatives of Morocco. House of Representatives of Morocco. doi:https://www.chambredesrepresentants.ma

https://www.govinfo.gov/content/pkg/FR-2025-01-17/pdf/2025-01395.pdf. (s.d.).

JALDI, A. S. (2022). Artificial Intelligence in Morocco: Between Regulatory Framework and Economic Strategy. (59/22), 12.

KAHL, C. H. (2026, 01 12). Récupéré sur The Myth of the AI Race: Neither America nor China Can Achieve True Tech Dominance: https://www.foreignaffairs.com/united-states/myth-ai-race (foreignaffairs.com in Bing

KAHL, C. H., & MITRE, J. (2025, 07 9). Récupéré sur The real AI race: America needs more than innovation to compete with China. Foreign Affairs: https://www.foreignaffairs.com/united-states/china-real-artificial-intelligence-race-innovation (foreignaffairs.com in Bing)

KIM, T. W. (2020, october 24). The Ethics of Artificial Intelligence: Why We Need To Go Back To GOFAI (Good-Old-Fashioned AI). (05), 1. Récupéré sur ers/mix/Desktop/intelligence%20artificielle/ÉTHIQUE%20ET%20INTELLIGENCE%20ARTIFICIELLE%20-%20The%20Ethics%20of%20Artificial%20Intelligence%20.%20-%20Why%20We%20Need%20To%20Go%20Back%20To%20GOFAI%20(Good-Old-Fashioned%20AI)%20-%20Etude%20par%20Tae%20WAN%20

Kingdom of Morocco. (2003). Récupéré sur (General Directorate of Information Systems Security): https://www.dgssi.gov.ma/index.php/en/loi-07-03-completant-le-code-penal-en-ce-qui-concerne-les-infractions-relatives-aux

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Kingdom of Morocco. (2007). Récupéré sur https://www.dgssi.gov.ma/fr/loi-53-05-relative-lechange-electronique-de-donnees-juridiques

Kingdom of Morocco. (2009). Récupéré sur https://www.dgssi.gov.ma/en/loi-09-08-relative-la-protection-des-personnes-physiques-legard-du-traitement-des

Kingdom of Morocco. (2011). Récupéré sur https://www.dgssi.gov.ma/index.php/en/decret-ndeg2-11-509-du-22-chaoual-1432-21-septembre-2011-completant-le-decret-ndeg

Kingdom of Morocco. (2020, july 14). Récupéré sur https://www.dgssi.gov.ma/fr/loi-ndeg-0520-relative-la-cybersecurite

Kingdom of Morocco. (2020, july 6). Récupéré sur https://www.dgssi.gov.ma/fr/loi-ndeg-0520-relative-la-cybersecurite

Kingdom of Morocco. (2021). Récupéré sur MOROCCO: Presentation Note - Law 43-20 (English PDF)

LEWKOWICZ, G., & SARF, R. (2024, March). Taking technical standardization of fundamental rights seriously for trustworthy artificial intelligence. (25), 1.

Ministry of Administrative Reform and Public Policy. (2024). *Institutional Brochure.* Ministry of Administrative Reform and Public Policy. Rabat : Ministry of Digital Transition and Administrative Reform. Récupéré sur https://www.mmsp.gov.ma/sites/default/files/2024-09/PlaquetteInstitutionnel_18092024_Ang.pdf

Morocco World News. (2025, APRIL 9). Récupéré sur Morocco World News.: https://www.moroccoworldnews.com/2025/04/189655/algerian-hackers-target-moroccan-employment-ministrys-database/

National Social Security Fund (CNSS). (2025, April 12). Récupéré sur National Social Security Fund (CNSS): https://www.cnss.ma/fr/node/73145625

OECD (Organisation for Economic Co-operation and Development). (2024, MAY 3). Récupéré sur OECD (Organisation for Economic Co-operation and Development): https://www.oecd.org/en/topics/ai-principles.html

Oxford Insights. (2024). *AI Readiness Index*. Récupéré sur Oxford Insights: https://oxfordinsights.com/ai-readiness/ai-readiness-index/

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

Pernot-Leplay, E. (2020, May). China's Approach on Data Priv oach on Data Privacy Law: A Thir acy Law: A Third Way Between the y Between the. Récupéré sur China’s Approach on Data Privacy Law: A Third Way Between the U.S. and the E.U.? (PDF)

Pernot-Leplay, E. (2025). The regulation of AI in China, Europe, and the US. Récupéré sur https://pernot-leplay.com/fr/reglementation-ia-chine-europe-us/

Rane, N. L. (2024). *Artificial intelligence and industry in Society 5.0.* Deep Science Publishing. doi:https://doi.org/10.70593/978-81-981271-1-2

Rébé, N. (2021). *Artificial intelligence: Robot law, policy and ethics* (Vol. 102). Brill/Nijhoff. doi:10.1163/9789004458109.

Roumate, F. (2024). *Artificial intelligence and the new world order: New wars and new balance of power.* Marrakech, Morocco: Springer Nature. doi:doi.org/10.1007/978-3-031-50312-2.

Sebastian, M., & Elbaum , s. (2026, 02 13). Consulté le 02 22, 2026, sur Foreign Affairs – The AI Trilemma: How to Regulate a Revolutionary Technology: https://www.foreignaffairs.com/

Sharma, L., & Garg , P. (2022). *Artificial intelligence: Technologies, applications, and challenges.* Chapman & Hall/CRC Press. doi:10.1201/9781003140351

Smart Africa. (2021). Artificial Intelligence for Africa. 22. Récupéré sur file:///C:/Users/mix/Desktop/intelligence%20artificielle/70029-eng_ai-for-africa-blueprint-min.pdf

UNESCO. (2022). *Recommendation on the Ethics of Artificial Intelligence.* the UNESCO Digital Library. Récupéré sur file:///C:/Users/mix/Desktop/intelligence%20artificielle/Rapport%20UNESCO%20sur%20l'IA.pdf

UNESCO. (2024). *Artificial Intelligence Readiness Assessment Report for Morocco.* paris FRANCE: UNESCO.

United Nations. (2023, october 26). *United Nations*. Récupéré sur https://www.un.org/digital-emerging-technologies/ai-advisory-body

United Nations General Assembly. (2023). *UN Resolution on AI.* Récupéré sur Résolution ONU sur IA.pdf

African Scientific Journal
ISSN : 2658-9311
Vol : 03, Num 35 Avril 2026

United Nations Office on Drugs and Crime (UNODC). (2024, december 24). Récupéré sur United Nations Office on Drugs and Crime (UNODC): https://www.unodc.org/unodc/en/cybercrime/convention/home.html

VAZIRGIANNIS, M. (2020). Artificial Intelligence: Challenges for the future. (3), 34. Récupéré sur https://www.cairn.info/revue-enjeux-numeriques-2020-2-page-32.htm (cairn.info in Bing)

Winter-Levy, S., & Anton Leicht. (2025, 02 october). Récupéré sur The AI divide: How U.S.-Chinese competition could leave most countries behind. Foreign Affairs: https://www.foreignaffairs.com/