TOBNA journal for Academic scientific studies ISSN 2661-7633 / EISSN 2716-8883
Year:2026 Vol : 09 No : 01 Page : 933 - 949

THE ROLE OF ARTIFICIAL INTELLIGENCE IN ENHANCING ADMINISTRATIVE WORK

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Send Article Date: 2026-01-01 Date of acceptance of the article 2026-02-07

Abstract:

The administration has resorted to applying artificial intelligence technologies at the level of administrative activity and its means, on the grounds that these applications lead to the improvement of administrative work and contribute to enhancing administrative performance. This has given rise to the algorithmic administrative public service, which has worked to embody the principles of equality and the regular and continuous functioning of public services. It has also led to the emergence of smart regulation, whereby preventive administrative regulation has been established, contributing to the anticipation of future crises and disasters, as well as the emergence of cybersecurity. In addition, the algorithmic administrative decision and the smart administrative contract have appeared, both of which operate automatically whenever their specific conditions are met.

key words: Artificial Intelligence and Administrative Work; Smart Administrative Regulation; Algorithmic Administrative Decision; Smart Administrative Contract.

Introduction:

The technological revolution has changed every part of human life in a big way because it has made a lot of progress in many areas. As a result, governments have increasingly embraced technology across all aspects of their operations. One of the most immediate and beneficial impacts for citizens is the use of technology to enhance government services improving both their quality and speed, which aligns closely with what citizens expect and need.

The use of technology in government work, especially through what is known as "e-government," is a change from traditional management to modern management. For example, citizens can now get birth certificates online. This change mainly affects the way that administrative work is done, which is the way that services are provided to the public.

Perhaps the most profound development lies in the intervention of technology in the very core of administrative work, through its assumption of decision-making without recourse to the administrative official, due to the shortcomings of traditional administrative work in terms of decision-making and forecasting in both of its aspects. The first aspect relates to administrative activity concerning the performance of the public service through management, while the second concerns administrative regulation in all its manifestations, including security, public health, and public order. The contemporary manifestations of administrative regulation are reflected in preventive action aimed at averting crises and disasters, and states have even moved toward the implementation of cybersecurity in order to protect electronic databases.

The second dimension is about the legal frameworks that support administrative work, such as contracts and decisions made by administrative bodies. Using AI in government work is

a big step forward in governance because it helps governments deal with the problems that people face every day and in the global context.

This leads to the following research question:

How have artificial intelligence applications contributed to the development of administrative intelligence?

This topic is addressed in the following two sections:

- Section One: Artificial Intelligence and the Motivations for Its Application in Management
- Section Two: Manifestations of the Application of Artificial Intelligence Technologies in Administrative Work

THE FIRST TOPIC: ARTIFICIAL INTELLIGENCE AND THE MOTIVATIONS FOR ITS APPLICATION IN MANAGEMENT

Scholars and experts from many fields, including management, have been very interested in the term "artificial intelligence." A lot of people are interested in AI because it has unique benefits that can make administrative work better in terms of both performance and efficiency.

FIRST REQUIREMENT: THE CONCEPT OF ARTIFICIAL INTELLIGENCE

Scholars and lawyers have tried to define artificial intelligence because they see it as one of the most important technological advances that affects all areas, including the administrative sector. Because of its unique qualities, it has changed the way people do things and how systems work.

Firstly: Definition and Characteristics of Artificial Intelligence:

John McCarthy, who helped start the field and is a member of the International Amnesty Organization, was one of the first people to give a clear and precise definition of artificial intelligence. He said it was a branch of engineering that deals with making smart machines, like computer programs that act like people.[1]

The World Intellectual Property Organization (WIPO) also defines artificial intelligence as a branch of computer science that focuses on making and improving machines, systems, and software that work and act like people.

Clancey and Broadbent also said that artificial intelligence is the creation of automated computer systems that have intelligence traits similar to those of humans.[2]

The European Commission says that artificial intelligence is software systems that are updated using one or more technologies based on logic and knowledge. These systems are made to produce results that are in line with goals set by people.[3]

"Intelligence" and "artificial" are the two parts that make up the word "artificial intelligence." Webster's dictionary says that intelligence is the ability to see and understand what's going on and how things are changing. To put it another way, intelligence is based on three main things: understanding, perception, and knowledge.

The word "artificial" comes from the verb "to make" and means anything that is made or created by people, which means changing its natural state.

From this point of view, artificial intelligence is a group of technologies that people have given smart abilities to, either in computers or machines, so that they can handle new or unexpected situations.[4]

So, artificial intelligence is a way of simulating how humans think and act by using knowledge from many different areas. This lets a computer or machine work through software that mimics how people think and act in order to solve certain problems.[5]

TOBNA journal for Academic scientific studies ISSN 2661-7633 / EISSN 2716-8883
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Secondly: Types and Characteristics of Artificial Intelligence:

There are different kinds of artificial intelligence, and the way you look at it can change what kind it is. There are two main ways to understand this: the first looks at what artificial intelligence is and how it works inside, and the second looks at how it works and what it does.

1- Artificial intelligence relies on self-interaction:

Artificial intelligence needs to be able to interact with itself by combining programs that mimic how humans think. These programs involve asking questions and giving answers in a slow, step-by-step way, with interactive and systematic responses.[6]

Accordingly, artificial intelligence can be categorized into three types:

- – Simple AI: This is the most basic type of AI. This type is set up to do certain things in a certain environment and only works in that environment. IBM's "DIBLEW" robot is an example of this. It beat Garry Kasparov, the chess champion, in a famous match.[7]
- General Artificial Intelligence: This term refers to programming computers to do tasks that people do, including things like thinking, reacting, and planning in a smart way.[8] In other words, this kind of AI acts, works, and programs like a person. One example is research that focuses on making artificial neural networks that can mimic the body's complex structure.[9]
- Superintelligent Artificial Intelligence: This model is still in the testing phase and aims to fully mimic human behavior. There are two main approaches to achieving this. The first approach tries to understand how people's thoughts influence social interactions, which could potentially make people less capable of participating effectively in social situations. The second approach, called the "theory of mind," enables AI systems to represent their own internal states and to perceive and respond to the emotions and perspectives of others.[10]

2- Artificial Intelligence by Function:

This type of artificial intelligence stores information from its surroundings over time, and AI processes and functions are the external signs of this memory. There are four types:[11]

- Reactive Machines: This is the most basic type of AI. It can't learn from what it has done in the past or change itself. It is termed “reactive” because it responds to inputs without reference to previous interactions, producing outputs based solely on the current experience.
- Short-Term Memory: This kind of memory keeps information for a short time. The self-driving car is an example. It is programmed to keep track of things like speed, distance traveled, and other important information.
- Theory of Mind: This type of AI can talk to people, understand how they feel, and communicate clearly with them.
- Self-awareness: This kind of AI is a type of future prediction, in which AI researchers hope that systems will have self-awareness and emotions that are similar to those of humans.

SECOND REQUIREMENT: MOTIVATIONS FOR IMPLEMENTING ARTIFICIAL INTELLIGENCE IN ADMINISTRATIVE WORK

Recent technological advances at home and abroad have had a big effect on administrative work. People's needs have made it more and more important for public institutions to improve the quality of their administrative services by using technology to deliver public services. There are two main reasons for these motivations. The first is that administrative institutions

need to improve their performance, and the second is that computer systems are always changing.

Firstly: The Need for Administrative Institutions to Enhance Their Performance

The goal of using technology in public administrations is to provide better services. However, this push is not only due to technological progress; it is also because the administration needs to improve its operations, ideas, and methods in order to provide better administrative services.[12] In the end, citizens want administrative services that are both high-quality and delivered in a shorter amount of time.

In response, governments have had to use technology, especially software programs that are meant to speed up administrative tasks. These technical tools work like powerful engines that make it easier for the government to provide services to the public and make decisions. As a result, this is good for both the administration that provides the service and the state as a whole.[13] By streamlining and automating administrative tasks, electronic programs help lower the costs of running the government and reduce the number of direct interactions between the government and citizens. Because of this, governments are moving away from what is usually called "administrative bureaucracy."[14]

As the modern state becomes more open to letting the private sector handle some public affairs, like running and overseeing some public services, it has become clear that advanced administrative methods are needed to provide highly developed public services. This change has caused a big gap, with a lot of people unhappy with the public sector. As a result, the state has decided to use technology to improve all of its administrative bodies. The main goals of this technological integration are to stop wasting money, fix weaknesses that make corruption easier, and meet the growing need for administrative services as the population grows.[15]

Also, using technology in administrative work speeds up service delivery and lowers costs,[16] whether through electronic service windows or other digital services. This builds trust between the government and its citizens. There are signs of this trust, which comes from using technology in government, in many areas.

For instance, the justice sector has added more electronic services, which has helped to modernize the courts. One of these measures is remote video hearings, which have sped up court processes in a reasonable amount of time and kept witnesses safe during the COVID-19 pandemic to protect public health.[17] Other new ideas are digital issuance and correction of official documents and electronic authentication.

Civil status records have been digitized at the local government level with the creation of a national digital civil registry. This replaces old paper records. This system lets people get civil status documents online whenever they want, which cuts down on red tape and makes things easier for citizens.[18]

To protect public funds, the Algerian government has set up an electronic portal for public procurement. This portal is meant to electronically share and publish all information related to public contracts. This initiative makes the process more efficient for both the administration and the parties involved in the contract. This increases transparency and guarantees equal access to public services.[19]

Secondly: The Evolution of Technological Systems' Performance and Their Applications

The computer was a groundbreaking invention that shocked the world at first. But this amazement didn't last long because technology was moving so quickly. There have been many generations of computers, the most recent being the portable laptop, which can store millions of pieces of information.[20]

TOBNA journal for Academic scientific studies ISSN 2661-7633 / EISSN 2716-8883
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This change in computer systems had a huge effect on many electronic applications that were not possible before. For example, distance learning is now a real thing. Prestigious universities around the world can now teach students through electronic platforms or offer their courses online. This has changed the way teachers teach in a big way.[21]

This progress in technology also affected the administrative side, which tried to take advantage of these new tools by incorporating administrative tasks like laws, regulations, and transactions into certain software programs. These programs let people interact with each other through a set of commands, which makes administration more efficient. Because of this, programmed electronic administrative machines have taken over many of the administrative tasks that people used to do. A lot of researchers think that the number of machines will soon outnumber the number of administrative workers because of this change.[22]

Electronic communications have made administrative work even bigger by making it easier, faster, and cheaper to get information from all over the world.[23] This is a big change from the past, when getting information was expensive and took a long time.

The growth of electronic communications has turned the world into a "global village." It has made it much easier to do business, market, and advertise by breaking down barriers of space and time, speeding up the flow of information, and making it more accurate. This has brought about a new reality in which details can be controlled everywhere and accessed instantly with the push of a button.[24]

Globalization, also known as the "global village" phenomenon, has changed how people think and created a culture that supports international specialization based on the same standards for goods and services around the world. This has led to the rise of the "global citizen" and, as a result, a closed management mindset.[25] This change has pushed management to use new global administrative models that focus on improving services and developing people.

Using technology in administration has made it much easier to get things done on time, which used to be a big problem. Administrative tasks have sped up a lot thanks to the use of technology.

THE SECOND TOPIC: MANIFESTATIONS OF ARTIFICIAL INTELLIGENCE APPLICATIONS IN ADMINISTRATIVE WORK

Because the government exists to meet the needs of the people and works directly with them to provide the best services possible, administrative bodies have started using artificial intelligence in all of their processes more and more.

FIRST REQUIREMENT: THE USE OF ARTIFICIAL INTELLIGENCE SOFTWARE IN ADMINISTRATIVE ACTIVITIES

Because of the unique benefits they offer, administrators have started using artificial intelligence applications in their jobs. These applications have made administration more accessible to citizens.

Firstly: The Application of Artificial Intelligence in Public Service Activity

The French Council of State came up with the idea of public service, especially in the "Blanco Case." A public service is something that public authorities do, either directly or indirectly, with the goal of helping the public. Public law rules apply to all parts of public service.[26]

To make public services better, governments have started using technology in their work. For example, they now use artificial intelligence software in public services to better meet the needs of citizens. This is a shift from traditional management methods to more modern ones.

Electronic public service is any government agency that does its job and serves the public good using electronic means.[27] It is also defined as any government body that does business with the public without using paper and communicates through email, phone, or private websites, so the citizen does not have to be there in person.[28]

Artificial intelligence in electronic public services makes it possible for them to run all the time without having to set start and end times. This makes sure that electronic public services are always available and aren't affected by strikes or employees quitting.[29]

Artificial intelligence applications are also implemented at the level of the public service in several fields, such as monitoring employee attendance through hand or facial biometrics, among others, as well as confidential electronic documents that can only be accessed by the sender and the recipient[30].

The application of artificial intelligence has also led to accelerating the automation of public administrative services through the performance of administrative tasks using methods based on electronic systems that work to simplify procedures. This is usually achieved through the use of chatbots that enable citizens to obtain immediate and rapid responses, thereby contributing to the achievement of service quality[31].

Moreover, artificial intelligence applications in the field of public service seek to enhance the satisfaction of public service users by enabling the administrative human staff to focus on the quality of public service, while leaving routine tasks to automated systems. This, in turn, achieves faster execution at a lower cost[32]. The application of artificial intelligence also improves the relationship between citizens and the administration through the analysis of data related to citizens' behavior, leading to greater administrative openness[33]. An example of this is the experience implemented by the city of Barcelona, where an information infrastructure was established to analyze citizens' interactions with the municipality's digital platforms[34].

Also, using AI in the management of electronic public services makes it less likely that unexpected events will happen that could get in the way of people interacting with the government. This means that people can access services whenever they want.[35]

The application of artificial intelligence technologies—particularly machine learning—has constituted a qualitative leap in public administrations by enabling them to anticipate future demand through data analysis, thereby allowing for immediate responses based on predictive models. An example of this application can be found in British hospitals, where systems have been implemented to predict the risk of patient mortality, which assists in making timely medical decisions[36].

AI is also very important in the public service sector because it makes the constitutional principle of equality among people before public services a reality. This principle says that everyone should have the same access to public services.

But there is a big problem because AI applications are not used the same way in all public administrations. The International Telecommunication Union calls this difference the "digital divide," which is the gap between people who can and can't access or use information through different communication technologies like mobile phones, computers, and the internet. This digital divide can happen between developed and developing countries, between countries in the same area, or even within a single country, like between rural and urban areas or between people of different ages, genders, incomes, or ethnicities.[37]

The "Electronic Algeria 2013" project is one of the ways that Algeria has tried to close this digital gap. Because the public service sector is supposed to meet the needs of citizens, which change and grow as society does, it is now necessary to use artificial intelligence software in

public services to meet these needs. So, administrative changes have been made to change how public services work, even if those services are run directly by the central government or indirectly through concession contracts, public institutions, mixed-economy businesses, or public sector organizations. Also, the state can give private law organizations that are responsible for state functions the job of providing public services, as long as these organizations promise to improve the quality and efficiency of public service delivery.[38]

Secondly: The Application of Artificial Intelligence Software in Administrative Regulation:

The goal of administrative regulation is to protect the public in the state. Most laws don't clearly explain this idea, so legal scholars have mostly focused on outlining its goals. According to the French lawyer Maurice Hauriou, administrative regulation is any action that is meant to keep the peace in the state.[39]

Administrative regulation is when the government takes actions to control people's behavior in order to keep the peace. This is done by making rules or decisions that limit people's behavior in order to protect the public good.[40] Professor Ammar Aouabdi says that public order is keeping public safety, health, peace, and morality by getting rid of all the risks that could interfere with the state's ability to do its job.

As the administration moves toward developing its methods in a manner consistent with the modernization of the public order, which embodies the supreme values and principles of the state, the concept of public order has expanded to include the virtual electronic environment. This has been achieved through smart administrative regulation, which represents an advanced stage in attaining a heightened preventive level in confronting threats to public order. Smart administrative regulation has been defined as a set of preventive smart administrative decisions imposed by the smart public administration through artificial intelligence tools, within the limits permitted by law, in order to regulate individuals' activities and restrict their freedoms within the virtual environment in a rapid manner, thereby protecting both traditional and virtual public order[41]. Smart administrative regulation is considered an individual technical activity used by the administration to preserve public order. It is also a preventive activity based on forecasts enabled by artificial intelligence tools through data and information that assess risks before they occur, which leads to the protection of public order and prevents the commission or spread of crime. Moreover, smart administrative regulation is subject to the principle of legality[42].

Because the government is always trying to update its methods to keep up with changes in public order, which represents the state's highest values and principles, public order has now grown to include the virtual electronic world. The goal of this extension is to improve cybersecurity, which means keeping networks, software, systems, and devices safe from unauthorized access, alteration, or exploitation, as well as the services they provide.[43]

Cybersecurity is a set of processes and technologies that work together to keep software, apps, devices, data, and electronic networks safe. It includes both the physical safety of software, apps, and devices, and the intangible safety of keeping activities and information safe from theft, disruption, or unauthorized access, as well as making sure that devices, software, and networks are used correctly.[44]

So, cybersecurity is a part of public order that involves protecting and securing private and financial information related to information and communication technologies. It also tries to limit the damage caused by security breaches and get things back to normal as soon as possible.[45]

TOBNA journal for Academic scientific studies ISSN 2661-7633 / EISSN 2716-8883
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SECOND REQUIREMENT: THE APPLICATION OF ARTIFICIAL INTELLIGENCE SOFTWARE IN THE LEGAL Means of Administrative Activity

The administration has increasingly adopted artificial intelligence applications in the legal aspects of administrative activity, particularly by integrating these technologies into administrative decision-making and the conclusion of administrative contracts.

Firstly: The Role of Artificial Intelligence Software in Administrative Decision-Making

An administrative decision is an action taken by one administrative body with the goal of creating new legal statuses or changing or revoking existing ones.[46]

Modern administrative systems, like office service systems, have come about because administration wants to meet the needs of society by using the most up-to-date technology. These systems are a collection of different information and electronic communication technologies that work together to gather, store, and process information between people and government agencies. They are very important for making administrative decisions.[47]

The administration has also resorted to using artificial intelligence tools in the field of administrative decision-making through algorithms. This type of decision is self-issued and self-executing. It has been defined as a decision produced through an algorithmic processing system adopted by the administration to achieve a specific purpose[48]. It has also been defined by the National Commission on Information and Liberties as a decision issued in respect of a person through the use of algorithms that are processed automatically and applied to that person's personal data without any human intervention[49].

The algorithmic decision aims to achieve effectiveness in administrative work, as well as quality, speed, and efficiency[50]. The administrative decision under consideration relies on algorithms, which constitute a set of instructions programmed in mathematical language and implemented to solve problems or obtain results.

As part of their efforts to modernize management methods and save time and effort, administrations have started using electronic administrative decisions. This method has been used, for instance, in the process of promoting employees.

Different fields, like hiring new employees, have used electronic administrative decisions. For example, candidates are chosen based on algorithmic evaluations that match job requirements, which makes it possible to hire more qualified people.

Additionally, governments use algorithmic decision-making to keep an eye on the career paths of their employees and to manage the funding of public spending. Notably, the Dutch Tax Administration is known for being one of the most advanced organizations in using AI to fight tax evasion in both the public and private sectors.

Regulatory protections apply to algorithmic administrative decisions, and transparency is the most important of these. People should be able to see how the algorithm works so that they can challenge decisions if they need to. Also, the administration is responsible for any harm that comes from using artificial intelligence algorithms.

- Transparency: Transparency in algorithmic administrative decisions means that people know and understand all the rules and principles that go into making those decisions. But the average person can't fully access this level of openness.[51] Legal scholars often see algorithmic decision-making processes as a "black box," which is why some comparative legal frameworks have given people the right to know all the relevant information about algorithmic administrative decisions that affect them.[52]
- Responsibility: The administration must make sure that administrative decisions are made using the best possible artificial intelligence algorithms. This includes making sure

that these applications are safe and that employees can use them well. The administration is also responsible for any harm that comes from its actions.[53]

The French Constitutional Council has affirmed, in its position on the use of artificial intelligence software, through its ruling on the constitutionality of the law that grants the administration the power to take automated individual decisions in accordance with the criteria and foundations set by the regulatory authority. The provision established clear legal safeguards that leave no room for doubt. Among the most important of these safeguards is limiting challenges to algorithmic processing by enabling individuals to access the computational bases underlying the making and execution of the decision. The Constitutional Council also required that both administrative and judicial appeals be made available. In addition, it obliged software developers to regulate the mechanisms specific to algorithmic processing that require precise oversight, as well as control over their course and development, with the necessity of providing simplified and direct explanations to the individual concerned by the decision taken through these technical means[54].

Despite the French legislator authorizing the administration to issue individual decisions through artificial intelligence software, Article 71 of the European Regulation on the Protection of Information prohibits the adoption of any decisions that produce legal effects for the individual based solely on the automated processing of personal data, such as those related to employment processed by artificial intelligence software, particularly data concerning the individual's health or economic situation, or even their behavior[55].

Secondly: Applications of Artificial Intelligence Software in Administrative Contracts:

As technology has advanced around the world, especially in the field of artificial intelligence, governments have started to use these technologies more and more in all of their work, including administrative contracts. This change has made the way contracts are carried out go from old-fashioned ways to new ones, like using artificial intelligence algorithms, which are often called "smart contracts."

Nick Szabo, an American computer scientist, came up with the term "smart contract" and said it was a computerized transaction protocol.[56] In another article, Szabo called smart contracts a set of digitally encoded promises that include the rules that the parties to a contract must follow to keep their promises.[57]

So, smart contracts are deals between two or more people that are carried out by a program based on algorithms that hold all the information about the parties and spell out how the contract should be carried out. Sending reports to auditors to check that the activities are real is how any clause is fulfilled.[58]

Smart contracts have become more common since 2013 thanks to protocols that are specifically designed to make, improve, and deploy smart contracts that meet the needs of society.[59]

Also, smart contracts are self-executing agreements that are a new type of technology in the field of contract law. They are made and managed using blockchain technology, which lets agreed-upon terms be carried out automatically without any direct human involvement.[60]

These contracts use blockchain's open and unchangeable ledger to keep track of all important information.[61] This builds trust between the parties, cuts costs, and speeds up the completion of transactions. Smart contracts are also unchangeable; once the conditions are met, they are carried out automatically and cannot be changed or canceled. This stops people from changing or backing out of contract terms, which makes sure that everything is clear and honest, and builds trust among all parties. Smart contracts are digital by nature because their

"intelligence" is limited to the electronic world. To make it easier to use, the agreements, which were first written in plain language, are now written in a programming language that works with blockchain technology.[62]

The smart administrative contract is defined as a contract concluded through a software technology operating within a blockchain platform. It includes a set of conditions and rules that are predetermined in accordance with the applicable laws and procedures, such that the contract is concluded once these conditions are met without the intervention of any human element. It is thus self-executing, which leads to transparency, ensures security in transactions, ensures compliance with the law, and achieves the public interest[63].

The constituent elements of the administrative contract consist of the contracting parties, referred to as the signatories, which include all those who enter into the agreement, whether natural or legal persons, in addition to the auditor, through whom verification is carried out to ensure that the smart contract has been newly encoded in conformity with the contract in its traditional form and in a manner that specifically reflects the will of the parties. The auditor is also capable of ensuring control over the risks arising from the smart contract[64].

The smart administrative contract also consists of the smart agent, which intervenes in the process of concluding smart contracts through two stages. The first is the pre-contractual stage, during which the smart agent assists the administration in preparing the procedures of administrative contracts. The second stage is the conclusion of public procurement contracts[65]. In addition, there is the protocol element, which consists of conditions programmed using a set of mathematical and computational symbols that monitor the mechanism of self-execution and automate the implementation of the contract after verifying the fulfillment of the preconditions, thereby enabling the parties to review and sign them[66]. Another element of the smart contract is the oracle, which is a platform that provides externally sourced information to the smart contract through application programming interfaces (APIs), for example[67]. Accordingly, the problem of information originating outside the network is resolved, such information is authenticated, and the contract is thus executed immediately[68].

In 2002, France issued Decree No. 2002/692, which governs the signing of public procurement contracts electronically. This is an example of how states can use AI-based tools to manage contracts. Article 2 of this decree says that the legal entity in charge of the contract must post the announcement of the procurement contract on its official website. Also, Article 36 of the European Directive on the Coordination of Procedures for Public Works, Services, and Supplies says that these kinds of announcements must also be published in the Official Journal of the European Union.[69]

Conclusion:

Modern states have no choice but to use technology in public administration. In particular, applications of artificial intelligence have been very important in moving forward administrative tasks and the systems that go along with them. These applications have made the most important parts of administrative work better.

For example, AI has not only helped management staff but has also shown that it can predict things. This has led to real results that helped improve the public administration's image and build more trust among citizens.

Also, using AI technologies in public service organizations has strengthened basic ideas like fairness, order, and consistency. AI systems have also helped shape administrative regulation, especially with the rise of preventive administrative control, which tries to stop crises

and disasters before they happen. Also, cybersecurity measures have become essential for protecting the government's databases and keeping order in the state.

Administration has also used AI programs more and more in different parts of its work. This has led to the creation of algorithmic administrative decisions and smart contracts, which only work when the right conditions are met.

This change has greatly improved the speed, accuracy, efficiency, fairness, and openness of government work, which has made citizens feel more connected to the state.

But a look at how things really are shows that the use of artificial intelligence in administrative work is still limited, even though administrative law has the potential to change and grow.

This limitation is mostly because there are gaps in the law that make it hard for these systems to work with the laws that are already in place. Also, connecting smart administrative contracts to global platforms through administrative delegation is very risky because it goes against public order and the basic principles of the state. Also, the government is open to cyberattacks, especially since many AI systems are made by companies from other countries.

Accordingly, the following recommendations are proposed:

- Establishing national frameworks dedicated to developing specialized artificial intelligence programs.
- Updating national legislation to accommodate and regulate AI-specific applications.
- Leveraging foreign expertise in the implementation of artificial intelligence within administrative contexts.
- Enhancing the country’s infrastructure by ensuring comprehensive internet access across all urban areas, thereby reducing the digital divide.
- Prioritizing the implementation of robust cybersecurity measures, particularly aimed at safeguarding public order within the state.

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