

ARTIFICIAL INTELLIGENCE IN PUBLIC ADMINISTRATION: comparative lessons for Contemporary Public Governance

ADMINISTRAÇÃO PÚBLICA E INTELIGÊNCIA ARTIFICIAL: lições comparadas para a Governança Pública Contemporânea

ADMINISTRACIÓN PÚBLICA E INTELIGENCIA ARTIFICIAL: lecciones comparadas para la Gobernanza Pública Contemporánea

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ABSTRACT

This research investigates the sociotechnical transition driven by the incorporation of algorithmic systems into the State and its impacts on decision-making capacity, policymaking, public service delivery, and governmental oversight. The study, of paramount importance given the risk that technological efficiency might supplant constitutional guarantees and perpetuate historical asymmetries through biased automation, seeks to reconcile innovation with technological due process. Employing a qualitative methodology with a theoretical-comparative and analytical-deductive approach, the research integrates a literature review, the examination of global (OECD, UNESCO) and national regulatory frameworks, and the scrutiny of empirical international cases (such as the success of the Estonian model and the failures of Robodebt in Australia and SyRI in the Netherlands) alongside Brazilian experiences (ALICE at the CGU and ChatTCU). It concludes that technological precision must not be conflated with administrative justice, and that the adoption of Artificial Intelligence requires an augmented State action grounded in transparency, algorithmic accountability, and the continuous evaluation of its impacts (ex ante). Innovation in the public sector, structured within a cooperative federalism, does not reside in the substitution of public officials or in the unrestricted delegation of authority to black boxes, but rather in the

construction of a robust governance infrastructure that preserves the centrality of human judgment, thereby protecting fundamental rights against automated exclusion.

KEYWORDS: Public Administration; Artificial Intelligence; Algorithmic Governance; Technological Due Process; Fundamental Rights; Accountability.

Introduction

The incorporation of Artificial Intelligence (AI) into Public Administration has transcended the realm of technological promises to consolidate itself as one of the most complex and transformative institutional phenomena of the contemporary State. Far from being merely an instrument for automating routine tasks, AI currently acts as a cognitive infrastructure capable of reconfiguring public policy formulation, governmental oversight, and public service delivery. The present research is dedicated to examining this socio-technical transition, investigating how the adoption of algorithmic systems affects the State's decision-making structure and, consequently, its capacity to respond effectively and legitimately to societal demands.

The relevance of this research lies in the urgent need to reconcile accelerated technological advancement with the protection of democratic and constitutional guarantees. In a scenario where the principle of efficiency frequently overshadows the need for reasoned justification, the unrestricted delegation of administrative authority to automated systems carries the imminent risk of converting historical asymmetries into algorithmic exclusion. Understanding AI not merely as an engine of productivity, but as an institutional vector capable of either facilitating the realization of fundamental rights or exacerbating systemic injustices, constitutes the central challenge of Administrative Law and public governance in the 21st century.

To address this complexity, the investigation adopts a qualitative methodology with a theoretical-comparative foundation and an analytical-deductive approach. This research articulates a specialized literature review, a critical analysis of global and national normative guidelines — such as the recommendations of the OECD and UNESCO, alongside Brazilian governmental frameworks (EBIA and GuIA) — and the empirical scrutiny of concrete cases regarding the implementation of AI systems. Based on the careful observation of these documented experiences, the aim is to extract institutional regularities that allow for the formulation of secure algorithmic governance parameters, applicable to the structural and federative reality of the Brazilian State.

The argumentative trajectory unfolds across three central analytical axes. The first focuses on the structural intersection between artificial intelligence, state capacity, and

the materialization of fundamental rights. At this stage, it is demonstrated that technology holds the potential to exponentially expand data perception and processing by the Public Administration, enabling more expedient and targeted social service delivery. However, it is argued that this predictive expansion demands an "augmented" — and never substituted — state intervention, wherein human oversight and technological due process remain the elementary ethical and legal filters against the reproduction of discriminatory biases.

The second axis is dedicated to examining international experiences, demonstrating that the effectiveness of AI in the public sector is intimately subordinated to the State's digital maturity and pre-existing governance frameworks. By analyzing promising cases such as Estonia's interoperability infrastructure, the administrative copilot *Albert* in France, and *OpenEval* in Finland, the text proves that innovation only produces genuine public value when embedded in an institutional arrangement designed to expand the public servant's cognition, while keeping their decision-making accountability intact and traceable.

Conversely, this same axis explores the costs of technological determinism by dissecting institutional failures, such as the childcare benefits scandal (*Toeslagenaffaire*) and the SyRI system in the Netherlands, as well as the disastrous Robodebt program in Australia. These episodes serve as a stark warning: automation devoid of transparency and mechanisms of contestability inverts the burden of proof against vulnerable citizens. The lesson extracted from these failures is unequivocal, proving that computational precision is not to be confused with administrative justice, and that the public purpose never legitimizes opaque and unreviewable means.

The third axis transposes these premises to the complex reality of Brazilian federalism, marked by profound asymmetries in fiscal¹, human, and technological

¹ The regional distribution of Brazilian public revenues highlights one of the main structural asymmetries of fiscal federalism. Data from the National Treasury regarding 2024 show that the capacity to generate proprietary revenues remains heavily concentrated in the most economically developed regions: the Southeast presented the lowest degree of dependence on Union transfers, with a dependency index of 0.15, and approximately 85% of the revenue realized in the region came from its own tax collection. In contrast, the Northeast presented an index of 0.54, such that only 56% of its realized revenue originated from its own collection, compared to a national average of 72% (Banco do Nordeste, 2025). This asymmetry also appears in the structure of state tax collection: according to Siconfi data compiled from the accounts of federative entities, in 2025 the four states of the Southeast recorded approximately BRL 389.3 billion in tax revenues, equivalent to around 63.1% of their state revenues, while transfers represented 14.2%; as a whole, the states in this region — São Paulo, Minas Gerais, Rio de Janeiro, and Espírito Santo — concentrated a significant portion of subnational tax capacity (National Treasury, 2026). These

capacity. The analysis emphasizes that algorithmic innovation in Brazil cannot engender modernization asymmetries favoring the more affluent federative entities, lest it violate substantive equality in the delivery of public services. In this sense, it advocates for the consolidation of an algorithmic cooperative federalism, fostered by structuring initiatives such as the GOV.BR Network, capable of sharing solutions, training, and compliance standards among the Union, States, and Municipalities.

Still within the national panorama, the text critically evaluates concrete applications, contrasting the successful governance of the ALICE tool at the CGU (Office of the Comptroller General) and ChatTCU — which establish clear limits to machine authority — with the operational tensions observed in the automated benefit concessions by the INSS (National Social Security Institute). In light of these empirical findings, the argument regarding the imperative need to adopt preventive (*ex ante*) Algorithmic Impact Assessments (AIA) is consolidated, ensuring that technological implementation adequately responds to the principles of proportionality and substantive adequacy before causing harm to the administered citizens.

In summary, the conclusions point to a necessary legal requalification of the "Smart State" concept. The research conclusively demonstrates that the degree of intelligence of the contemporary Public Administration is not measured by the quantity of decisions entirely outsourced to algorithms, but rather by its institutional capacity to govern them. The supreme value of artificial intelligence lies, therefore, in its aptitude to free the public agent from procedural bureaucracy, allowing human rationality to

data must, however, be interpreted with caution: higher tax collection does not necessarily mean greater fiscal availability, just as lower proprietary collection does not mean a smaller share of effectively available public revenue. This is because Brazilian federalism utilizes constitutional and legal transfers — especially FPE, FPM, Fundeb, and other transfers — precisely to reduce territorial inequalities. The National Treasury itself recognizes that the apportionment of federal revenues constitutes a mechanism designed to "mitigate regional inequalities" (National Treasury, 2026). The consequence is particularly relevant for the analysis of state capacity: Brazilian regions do not start from the same fiscal baseline to finance public policies, infrastructure, personnel, digital transformation, and the incorporation of artificial intelligence. Thus, when discussing the construction of a Smart State, it is not enough to ask how much each entity collects; it is necessary to examine how much it can effectively mobilize, how much it receives through transfers, what its administrative and technological capacity is, and what portion of its revenue remains available for investments. Fiscal inequality, therefore, also translates into an inequality of state capacity: governments that are territorially more dependent on transfers tend to face greater restrictions in financing digital infrastructure, specialized teams, data, cybersecurity, and artificial intelligence systems. This makes cooperative federalism not merely an option for administrative coordination, but a prerequisite to prevent technological transformation from deepening already existing regional inequalities.

concentrate on what the machine is incapable of emulating: equitable judgment, deliberative empathy, and the non-negotiable protection of human dignity.

Artificial Intelligence, state capacity, and the realization of fundamental rights in Public Administration

Artificial Intelligence (AI) can be understood, in a contemporary sense, as a machine-based system capable of, given specific objectives and the data it receives, inferring how to produce outputs — such as predictions, content, recommendations, or decisions — that can influence physical or virtual environments. This definition, adopted and updated by the Organization for Economic Co-operation and Development (OECD, 2024), is uniquely suited to Public Administration because it highlights that AI is not limited to text generation or routine task automation: it can participate in processes of classification, prediction, recommendation, and decision support.

This distinction is fundamental because it allows the technology to be understood as an information processing and production infrastructure capable of expanding the cognitive capacity of public institutions. In administrative terms, this means that large volumes of data can be analyzed at a speed and scale superior to the ordinary possibilities of exclusively human processing, making it possible to identify patterns, anticipate demands, organize information, and support decisions. AI, therefore, should not be confused with a new form of autonomous state intelligence, but rather understood as a technological instrument that can *augment the State's capacity to know, decide, execute, and evaluate its own policies*.

This expansion of state capacity acquires special relevance when related to the realization of fundamental rights. The 1988 Citizen Constitution does not conceive fundamental rights merely as negative limits on State action; it also imposes positive duties on the public authorities regarding the promotion of equality, the provision of public services, and the realization of social rights.

The 1988 Citizen Constitution, in its Article 5, guarantees, among others, the rights to life, liberty, equality, security, and property, while Article 6 recognizes social rights such as education, health, food, work, housing, transportation, and assistance to the destitute. In this context, AI can function as an instrument to strengthen the administrative capacity required for the realization of these rights. Systems capable of integrating databases, identifying repressed demands, forecasting needs, and supporting resource allocation can assist the State in transforming constitutionally

recognized rights into more rapid, targeted, and effective administrative deliverables. The technology, however, neither creates the Law nor replaces the State's obligation: its role is to expand the means by which the Public Administration can fulfill duties that already stem from the constitutional order.

The relationship between AI and fundamental rights becomes even more evident in the field of public policies. Rights such as health, education, social assistance, and food security depend, to a large extent, on the State's capacity to identify needs, establish priorities, and distribute scarce resources. Artificial intelligence can contribute to this process by analyzing large datasets and producing useful information for the formulation, execution, and evaluation of policies.

The OECD observes that AI can already support governments in functions such as "policy design, decision-making and service delivery" (OECD, 2025). From a constitutional perspective, this potential holds special significance: the greater the administrative capacity to identify territorial inequalities, queues, service deficits, social risks, or emerging demands, the greater the capacity to direct public resources toward situations where state protection is most needed.

AI can thus contribute to reducing the distance between the formal recognition of a right and its effective enjoyment, provided that the data used is appropriate, the models are evaluated, and the decisions remain subject to applicable legal guarantees.

In the realm of substantive equality, this possibility warrants special attention. Public Administration frequently needs to identify individuals or groups in situations of vulnerability to direct social protection, health, education, or assistance policies. Algorithmic analysis can assist in identifying patterns of inequality that would remain hidden within extensive and fragmented databases, thereby expanding the state's capacity to pinpoint needs, anticipate risks, and direct scarce resources.

However, a paradoxical relationship exists here: the same technology capable of revealing inequalities can reproduce or deepen them if fed by biased or incomplete data. This is not a merely hypothetical concern. The United Nations Educational, Scientific and Cultural Organization (UNESCO) warns that AI systems can incorporate "biases that can embed and exacerbate, potentially resulting in discrimination, inequality" (UNESCO, 2022, p. 5). This warning is highly relevant to Public Administration because the data used by algorithms do not constitute neutral records of reality: they are produced by institutions in historical contexts marked by social, economic, and territorial inequalities.

Thus, a model developed from historical patterns may interpret as an indicator of risk what, in reality, is a consequence of a pre-existing inequality. The danger lies, therefore, in transforming past social inequalities into ostensibly objective criteria for future decisions, conferring upon the algorithmic result an appearance of neutrality that the underlying data lacks.

Therefore, the use of AI in promoting substantive equality requires not only the technical quality of the models but also a critical evaluation of the data, identification of biases, monitoring of outcomes, and the effective possibility of human review, ensuring that the technology does not convert historical inequality into automated inequality².

UNESCO (2022), in addressing the ethics of artificial intelligence, highlights that systems can reproduce and amplify biases and, for this reason, establishes as a foundation that AI must respect human rights and human dignity. Within the Brazilian framework, the Federal Government's Framework for the Self-Assessment of Ethical Impact in AI establishes human rights, dignity, equity, transparency, explainability, and auditability as fundamental principles.

The consequence is decisive: using AI to realize fundamental rights requires not only the technical capacity to identify who needs state intervention but also the institutional capacity to verify whether the criteria utilized by the system are just, legitimate, auditable, and non-discriminatory.

The realization of fundamental rights through AI requires, therefore, a conception of Public Administration that is *augmented*, and not substituted, by technology. The public agent remains responsible for administrative and legal interpretation, for weighing concrete circumstances, for considering the human consequences of the decision, and for observing the principles governing administrative activity. The very

² The materialization of discriminatory risk in automated decision-making finds one of its most emblematic empirical examples in the COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) system, adopted by jurisdictions within the United States criminal justice system. Conceived under the promise of technical neutrality to estimate defendants' risk of recidivism, the algorithm proved, in practice, to be a sophisticated vector of structural racism. Independent investigations demonstrated that the tool produced false positives in an asymmetrically biased manner, classifying Black individuals as "high risk" at nearly twice the rate of white individuals with equivalent or even more severe criminal histories. The ethical and legal collapse of the system stemmed from the uncritical absorption of data forged by decades of selective policing, incorporating socioeconomic and geographic variables that, although designed to be supposedly race-blind, operated as infallible proxies (indirect indicators) for skin color. This episode irrefutably evidences the danger of transferring state authority to computational "black boxes": without rigorous technological due process, artificial intelligence does not eliminate human prejudice; it merely codes, scales, and legitimizes it under the guise of mathematical exactitude, transforming historical exclusion into an algorithmic destiny.

governance architecture developed by the Brazilian Federal Government recognizes this necessity.

The interaction between artificial intelligence (AI) and public agents can produce a substantive transformation in the realization of citizens' essential rights when technology ceases to be understood as a simple automation tool and becomes integrated into a decision-making structure guided by fundamental rights. In this model, AI assumes the functions of processing, cross-referencing, and interpreting large volumes of data, identifying patterns, anticipating demands, and supporting the prioritization of public policies, while the public agent retains the competence to interpret the context, weigh concrete circumstances, correct inadequate results, and assume responsibility for the administrative decision.

This complementarity is relevant in areas such as health, education, social assistance, food security, and access to justice, where the Administration must identify needs before they convert into rights violations. The OECD (2025) explicitly identifies, among governmental uses of AI, the automation and personalization of services, decision support, and the improvement of state responsiveness, but emphasizes that biased results, technical failures, inadequate data protection, and the exclusion of certain groups can compromise both policy effectiveness and citizen trust. In the Brazilian context, this interaction must remain subordinated to the constitutional principles governing Public Administration — legality, impersonality, morality, publicity, and efficiency — and, above all, to the ultimate goal of concretely realizing the rights guaranteed by the Constitution.

Real change, therefore, will not occur simply because the State will employ more sophisticated systems, but rather when the predictive capacity of AI and the deliberative capacity of the public agent are organized to reduce the distance between the formally recognized right and the guarantee effectively enjoyed by the citizen. For this to happen, the public agent must possess a minimal understanding of the system's functioning, limitations, data, and potential biases, and must not transform the algorithmic recommendation into a kind of automatic decision or unquestionable authority.

UNESCO establishes that human oversight is indispensable and that legal and ethical responsibility for the lifecycle of AI systems must remain attributable to responsible persons or entities; it further recommends impact assessments, auditability, traceability, explainability, and continuous monitoring, especially when the technology is employed in public services sensitive to human rights.

In Brazil, this conception is beginning to gain institutional traction: the Digital Government framework already establishes specific competencies for civil servants working with AI, including responsibility, transparency, and bias mitigation, while official guidelines seek to make it discernible to the citizen when a public service utilizes artificial intelligence. Thus, the appropriate interaction can be synthesized in an institutional formula: AI expands the capacity to perceive, predict, and process; the public agent interprets, decides, justifies, and responds; and the citizen remains the ultimate purpose of state action.

It is in this combination — technology with human discernment, data with rights, efficiency with responsibility, and innovation with democratic control — that artificial intelligence can cease to be merely a tool for administrative modernization and effectively become an instrument for the realization of essential rights.

The GuIA establishes a lifecycle ranging from the prospection to the decommissioning of an AI solution and incorporates responsibilities, compliance checks, ethical impact assessments, indicators, and auditing mechanisms. The RACI Matrix, in turn, seeks to clarify “who is responsible” for the different decisions and activities related to the system, including during its operation and in the face of possible errors.

Innovation, from this perspective, does not consist in transferring administrative responsibility to the algorithm³, but in building an institutional structure in which technology expands human capacity without dissolving the legal, political, and

³ An algorithm can be understood, in a technical sense, as a structured sequence of instructions, rules, or operations designed to transform certain inputs into an output or result; in computational systems, these instructions can process data, identify patterns, classify information, make predictions, or support decisions. In Public Administration, algorithms assume relevance because they allow large volumes of governmental data to be transformed into operational procedures and decision-making instruments, being employed, for example, in identifying inconsistencies and signs of fraud, classifying demands, prioritizing public services, conducting oversight, managing resources, and supporting the formulation and evaluation of public policies. The OECD emphasizes that artificial intelligence can expand productivity, service responsiveness, and governmental decision-making capacity, but warns that biased data, lack of transparency, and overreliance on systems can produce harmful decisions and compromise public trust. In Brazil, this concern is already translating into institutional instruments: the Federal Government has established an ethical impact assessment framework, transparency and auditability guidelines, and a RACI Matrix to define responsibilities across the AI system lifecycle, including the identification of who develops, approves, monitors, and is accountable for potential errors. Thus, when incorporated into Public Administration, the algorithm should not be treated merely as a neutral technological tool, but as a mechanism capable of influencing the distribution of state benefits, costs, opportunities, and priorities; therefore, its use must be subordinated to legality, transparency, data protection, equity, auditability, and human accountability. The Brazilian Artificial Intelligence Strategy itself adopts transparency and explainability, security, and accountability among its principles.

administrative responsibility of those who employ it. It is precisely in this combination of computational capacity and human responsibility that artificial intelligence's highest potential for Public Administration resides.

The incorporation of artificial intelligence (AI) into Public Administration represents a phase of deepening the State's digital transformation, insofar as it transcends the simple computerization of procedures to achieve more sophisticated forms of processing, prediction, classification, and decision support. The OECD (2025) identifies three major areas of opportunity for governmental AI deployment: productivity, responsiveness, and accountability, emphasizing that technology can simultaneously contribute to more efficient internal operations, public services better tailored to social needs, and the strengthening of accountability mechanisms.

From this perspective, AI should not be understood merely as an automation instrument, but as a resource capable of expanding public management's capacity to produce information, interpret large volumes of data, and respond more swiftly and precisely to collective demands. The challenge, therefore, consists in integrating technological innovation with the public purpose, preserving the legal, democratic, and institutional principles that legitimize state action.

One of the most immediate effects of AI on Public Administration lies in the possibility of rationalizing repetitive activities, reducing processing costs, and accelerating administrative workflows. Intelligent systems can assist in document classification, demand triage, information extraction, drafting responses, pattern recognition, and automating tasks that traditionally consume a significant portion of civil servants' time.

The OECD observes that "57% of the use cases" analyzed in its research are related to the automation, simplification, or personalization of government processes and services, constituting the most frequent objective among the examined applications (OECD, 2025). In the Brazilian context, Toledo and Mendonça (2023) found evidence of a growing perception among civil servants regarding the efficiency and agility gains provided by AI, although they note that their research has generalization limitations due to sample size. Efficiency, therefore, should not be reduced to expenditure cuts: it also involves the capacity to reallocate human resources from mechanical tasks to activities of greater complexity, judgment, and social interaction.

AI's deepest contribution to Public Administration may lie less in the substitution of human labor and more in the *expansion of the State's cognitive capacity*. Governments

daily produce and process enormous quantities of information originating from administrative databases, financial systems, social registries, health services, education, security, and infrastructure. AI makes it possible to identify correlations, patterns, and trends that could hardly be perceived through exclusively human processing. The OECD (2025) emphasizes that AI can support governments in “policy design, decision-making and service delivery.”

This perspective is fundamentally relevant because it shifts the debate from the technology itself to institutional capacity: a Public Administration equipped with intelligent tools can become more adept at diagnosing problems, anticipating demands, and allocating resources, provided it has capable personnel, reliable data, adequate infrastructure, technical competencies, and governance mechanisms.

AI can also contribute to making public services more accessible, personalized, and responsive. In turn, chatbots, virtual assistants, recommendation systems, and natural language processing tools can facilitate citizen access to public information, guide the completion of forms, and reduce bureaucratic hurdles. International experience examined by the OECD (2025) demonstrates that governments already utilize AI to respond to citizen inquiries, assist in document completion, and personalize certain services. The organization further highlights that technology can improve the State's capacity to respond to the specific needs of individuals and communities.

In Brazil, this perspective finds correspondence in the Unified Artificial Intelligence Guide for the Public Sector (GulA), which establishes a structured cycle for the development and monitoring of AI projects, requiring the Public Administration to preemptively identify the problem to be solved, assess its impacts, and establish monitoring indicators. Thus, technological innovation only produces effective public value when it translates into a concrete improvement in the citizen's experience.

Another field of relevance consists in employing AI as an instrument for *administrative decision support*. The capacity to analyze large volumes of data can assist managers in identifying trends, forecasting demand, allocating resources, and evaluating public policy alternatives. This does not mean, however, that administrative decisions should be entirely transferred to automated systems. The most appropriate role for technology, especially in high-impact decisions, is to provide qualified information to augment the public agent's analytical capacity.

This distinction is relevant because administrative decisions involve values, context, rights, and consequences that cannot be reduced exclusively to statistical

relationships. The OECD (2023) itself recognizes that the benefits of AI depend on institutional conditions that enable its trustworthy use, highlighting the need for governance, data, digital infrastructure, skills, investment, procurement, and partnerships as enabling elements. In this way, AI can strengthen administrative decision-making without eliminating human responsibility for its content and effects.

The predictive capacity of AI opens a relevant dimension for Public Administration: the transition from predominantly reactive action to a more *preventive and anticipatory* performance. AI models can identify patterns associated with certain occurrences and help the State anticipate demands, risks, and needs. The OECD (2024) records governmental applications related, for example, to natural disaster forecasting and the acceleration of the state's response to emergencies. In administrative terms, this capacity can alter the very logic of public policy formulation and execution: instead of waiting for a given problem to materialize to then mobilize resources, the government can use historical data and updated information to identify signs of deterioration and act preemptively.

The institutional advantage lies, therefore, in the possibility of reducing the interval between the identification of a risk and the adoption of the public response. Nevertheless, algorithmic predictions must be treated as probabilistic support tools, not as absolute certainties, requiring validation, supervision, and permanent evaluation.

The application of artificial intelligence can also strengthen mechanisms for integrity, oversight, and the prevention of irregularities. The automated analysis of massive databases allows for the identification of atypical patterns, suspicious relationships, and behaviors that might go unnoticed in conventional control processes. The OECD itself includes the fight against corruption and the promotion of integrity among the governmental functions in which AI is being applied, highlighting its potential to expand the capacity for identifying risks and irregularities.

In this field, AI can act as an intelligent triage mechanism, directing the attention of control bodies toward situations with a higher probability of irregularity. This allows for a more rational use of public oversight resources, especially in contexts characterized by an enormous volume of documents and limited human analytical capacity. However, the algorithmic identification of a suspicious pattern is not equivalent to the proof of an irregularity, which is why the technology must function as an investigative and prioritization tool, rather than a substitute for administrative due process.

The use of AI can further strengthen evidence-based public policymaking, aligning governmental planning with contemporary data processing capacities. Traditional planning frequently relies on fragmented information, produced at different times and analyzed by different administrative structures. Intelligent systems can integrate large datasets and assist in identifying trends, correlations, and potential impacts of specific governmental choices.

The OECD (2024) emphasizes that AI can contribute to making policy design more effective and to improving governmental decision-making. In Brazil, the GuIA expressly establishes the need to verify, prior to adopting a solution, whether there is a relevant problem that can be effectively solved using AI, in addition to requiring impact assessments, data availability, and the definition of indicators. This approach is important because it prevents the Public Administration from making the mistake of acquiring technology simply because it exists, thereby inverting the proper logic: first, the public problem; then, the technology capable of addressing it.

The improvement in public management provided by AI cannot be evaluated exclusively by gains in speed or cost reduction. A technologically efficient solution may produce institutionally inadequate results if it uses biased data, is opaque, generates discrimination, or precludes accountability for outcomes. The OECD (2024) warns that inadequate data can produce harmful decisions, while the lack of transparency can weaken accountability and public trust. For this reason, the advancement of AI in Public Administration must be accompanied by governance structures capable of establishing responsibilities, assessing impacts, and monitoring results.

The Brazilian GuIA represents an important evolution in this regard by organizing the development of solutions into seven stages, from prospection to decommissioning, including compliance checks, ethical impact assessments, LGPD adherence, indicators, and audit documentation. Public efficiency, therefore, does not consist simply in *doing more with less*, but in producing *better public outcomes with control, legitimacy, and accountability*.

In summary, artificial intelligence can represent one of the most relevant contemporary opportunities for modernizing Public Administration, provided its adoption is guided by concrete public problems and subjected to adequate governance mechanisms. International evidence demonstrates that technology is already being used to automate processes, improve services, support decisions, anticipate events, and

strengthen integrity mechanisms, while the Brazilian experience is beginning to structure its own methodologies for institutional incorporation.

Finally, the OECD synthesizes this transformation by stating that AI can “improve productivity, responsiveness and accountability” in government (OECD, 2024). In Brazil, the Gula seeks precisely to transform this technological potential into a structured administrative process, covering everything from problem identification to the evaluation and potential discontinuation of the solution. Thus, the primary gain of AI may not lie in replacing the civil servant, but in the possibility of building a *more informed, preventive, responsive, and efficient State* — one capable of concentrating human labor on that which requires judgment, responsibility, and an understanding of social needs.

Artificial Intelligence in Public Administration: International Experiences, Results, Failures, and Lessons for Building a Smart and Responsible State

The incorporation of artificial intelligence (AI) into Public Administration is no longer a prospective hypothesis, having assumed the status of an expanding institutional phenomenon. The Organization for Economic Co-operation and Development (OECD), upon examining 200 use cases of AI across 11 government functions, identified a higher concentration of applications in public services, justice, and civic participation, whereas uses related to public policy evaluation, tax administration, and civil service reform remain relatively less frequent.

The distribution is not random: areas involving greater data availability, highly structured processes, and fewer regulatory restrictions tend to present more favorable conditions for experimentation. The OECD itself notes that AI can contribute to “automated, streamlined and tailored processes and services” (OECD, 2025, p. 8), but emphasizes that its governmental use involves specific risks, particularly when algorithmic outcomes begin to influence decisions that affect citizens' rights and opportunities.

The first conclusion emerging from international experience is, therefore, that *technology does not equate to state capacity*. The mere acquisition of AI models, platforms, or systems does not, in and of itself, produce administrative modernization. The OECD identifies seven interdependent elements as foundations for the trustworthy use of AI: governance, data, digital infrastructure, skills, investment, public procurement, and partnerships. The central problem does not consist simply in making the

Administration use AI, but in building the institutional conditions that allow it to be used safely, efficiently, and with legal legitimacy. In other words, the relevant question shifts from the existence of the algorithm to the quality of the institutional environment in which it operates.

The Estonian experience constitutes one of the most consistent examples of this relationship between digital infrastructure, governance, and artificial intelligence. According to the OECD (2026), over 130 AI-related projects have been tested in the Estonian public sector since 2019, while approximately 60 public authorities have already implemented AI solutions to enhance the efficiency and accessibility of services. Prominent among these projects is *Bürokratt*, described as an interoperable ecosystem of chatbots aimed at proactive, user-centric service delivery. The solution can answer questions, “assist in filling out forms and, upon consent, retrieve personal data or initiate certain administrative procedures” (OECD, 2026, p. 113).

The most relevant aspect of the Estonian experience, however, lies not in the chatbot itself, but in the infrastructure that makes it possible. AI was introduced into a State that had already developed digital identity, interoperability, e-services, and data-sharing mechanisms. The technology, therefore, encountered an administrative structure previously prepared to receive it. The experience demonstrates a critical relationship of institutional causality: AI does not, on its own, create digital maturity; it leverages existing digital maturity.

In this sense, when data remains fragmented, systems do not communicate, and institutional competencies are insufficient, the introduction of AI tends to produce technological islands; when there is integrated infrastructure, the same technology can achieve scale and produce systemic effects.

This conclusion brings us to the first major international lesson: *artificial intelligence must be preceded by governance, not the other way around*. The Estonian experience combines experimentation, shared infrastructure, skill-building, and institutional coordination. The OECD (2026) even notes the creation of an AI advisory board linked to the Prime Minister and investments in open-source language and artificial intelligence components, allowing public and private actors to utilize a common infrastructure. Technological policy thus begins to function as state capacity policy. It is not just about acquiring solutions, but about building an environment where different agencies can experiment, evaluate, share, and refine applications without multiplying costs and risks.

France, in turn, offers a second relevant experience, particularly through its combination of generative AI, digital transformation, and human oversight. The development of *Albert*, a state-led generative AI initiative, sought to provide public agents with a tool capable of supporting responses to citizen demands and other administrative tasks. The French experience is significant because it situates AI in the realm of assisting public work, rather than unconditionally transferring administrative authority to a machine.

The public agent remains responsible for evaluating the generated content and ensuring the response is appropriate to the specific case. The model thus aligns with a conception of AI as an administrative *copilot*, in which technology augments the agent's cognitive capacity without eliminating their functional responsibility.

This arrangement proves indispensable for consolidating a true *technological due process*, ensuring that the modernization of state management does not culminate in algorithmic exclusion or unreviewable automated decisions. By reserving the final word for human judgment, the Public Administration safeguards transparency and prevents the unrestricted delegation of authority to "black-box" systems, thereby mitigating the systemic risks of biased outcomes and service delivery failures.

The non-negotiable requirement for oversight finds its basis in the very need for the controllability of administrative acts, given that "the algorithms used in artificial intelligence tools are obscure to the majority of the population (...) which makes them, in a way, unassailable" (Nunes & Marques, 2018, p. 8, our translation). Thus, the public agent is established as the elemental ethical and legal filter, ensuring that the use of generative AI operates strictly under the guidelines of reasoned justification, impartiality, and accountability.

This structure holds legal importance because it prevents efficiency from being conflated with complete automation. Administrative decisions involve facts, norms, principles, individual circumstances, and consequences that cannot always be adequately reduced to statistical patterns. AI can locate information, compare documents, summarize statements, suggest responses, and identify patterns; however, the greater the legal consequence of the decision, the greater the public agent's capacity must be to question the outcome produced by the system. The OECD itself warns that the inappropriate use of data can produce adverse decisions and that a lack of transparency can "erode accountability" (OECD, 2025, p. 9).

The French experience thus enables the formulation of a fundamental distinction for contemporary Administrative Law: *automating tasks should not necessarily mean automating decisions*. The former operation can reduce costs, time, and bureaucracy without necessarily displacing public responsibility; the latter can substantially alter the relationship between the State and the citizen, especially when the algorithmic outcome determines access to benefits, the imposition of burdens, or the exercise of rights. The greater the impact of the decision, the greater the requirement for explainability, oversight, review, and the possibility of contestation.

For its part, Finland offers another significant experience through *OpenEval*, an AI-assisted tool developed within the Ministry for Foreign Affairs to improve access to and use of knowledge produced by development cooperation policy evaluations. The instrument seeks to reduce the cost of locating and utilizing evidence dispersed across numerous reports. The official 2025 report itself notes that the tool “improves access to and use of evaluation knowledge” (Finland, 2026, p. 3).

The importance of this case lies precisely in its apparent simplicity. *OpenEval* does not intend to replace the public policymaker; it seeks to improve the quality of information available for their decision-making. AI functions, in this context, as *an institutional memory infrastructure*. The knowledge accumulated by the Finnish State is no longer dispersed in hard-to-consult documents, but is more easily retrieved and cross-referenced. This represents a relatively lower-risk and high-potential-utility application because the technology primarily acts upon the information that precedes the decision, rather than upon the decision-making authority itself.

This distinction allows for the formulation of a second rule of institutional design: *the greater the legal and social consequence of a decision, the greater the preference should be for systems that expand human cognitive capacity rather than those that eliminate human participation*. AI used to locate evidence, summarize documents, or detect patterns can substantially expand administrative capacity without necessarily turning the citizen into the object of an automated decision. The question, therefore, is not about being for or against automation, but about establishing a proportional relationship between automation, risk, and responsibility.

The United Kingdom provides additional empirical evidence regarding the potential gains of AI in administrative work. Between September and December 2024, the Government Digital Service conducted an experiment involving approximately 20,000 civil servants from 12 government organizations using Microsoft 365 Copilot.

Participants reported an average time saving of 26 minutes per day, as well as a reduction in time spent on routine tasks. Over 70% reported a reduction in the time spent searching for information and performing mundane tasks, although the study itself notes methodological limitations, including the absence of a formal control group.

The British result must, therefore, be interpreted with caution. It provides relevant evidence of perceived productivity gains but does not authorize the conclusion that AI automatically produces an equivalent improvement in the quality of public policies. Saving time only generates public value when the freed-up time is converted into relevant activities: analysis, citizen service, oversight, planning, innovation, or qualified interaction. The experience demonstrates that the key metric is not just how much work AI can perform, but *what the State does with the capacity freed up by the technology*.

Canada introduces a complementary dimension: the institutionalization of AI governance. In 2025, the central government launched its first Artificial Intelligence Strategy for the public service and subsequently published its first federal registry of AI use cases. The registry makes it possible to identify where and how AI systems are deployed in the government, constituting a mechanism for institutional transparency. The initiative is significant because it transforms the question "does the State use AI?" into a verifiable inquiry: *where, for what purpose, with what data, and under what governance mechanisms is AI being used?*

This open mapping is the cornerstone of algorithmic accountability⁴, as it recognizes that civic scrutiny of automated tools requires the immediate overcoming of technological secrecy; after all, "if we want to understand how our society is being run, we need to know what algorithms are doing" (Pasquale, 2015, p. 8, our translation). The

⁴ Algorithmic accountability is established as one of the central pillars of contemporary technological governance, moving beyond the mere requirement of technical transparency (simple access to the source code) to institute a regime of legal, ethical, and administrative responsibility over automated systems. This concept imposes on policymakers and operators the duty to explain, justify, and assume the impacts of computational decisions on citizens' lives, preventing the blame for failures and biases from being shifted to the supposed unpredictability of the machine. It is about ensuring that the delegation of tasks to artificial intelligence does not dissipate institutional responsibility into an opaque web of suppliers, developers, and unfathomable mathematical models. As the specialized literature warns, "algorithmic accountability is about the assignment of responsibility for how an algorithm is created and its impact on society; if harm occurs, there must be a mechanism for redress" (Diakopoulos, 2016, p. 56, our translation). For Public Administration, incorporating this principle means that technological innovation must be inexorably linked to continuous auditability and the existence of effective channels of contestation, ensuring that the State — regardless of the complexity of the system it adopts — remains the inescapable and ultimate subject before the law and the protection of fundamental rights.

requirement for transparency regarding the life cycle of systems removes technology from the realm of opaque experimentalism and subjects it to democratic review, ensuring citizens the right to audit the invisible matrix of state decision-making power.

The Canadian model also demonstrates that governance must not be conceived as a step subsequent to innovation. Canada's immigration-focused Public Administration, for instance, aligns legal, technological, privacy, public policy, and operational experts, alongside executive oversight mechanisms and algorithmic impact assessments. Management itself recognizes the need for the continuous evaluation and review of automated solutions. This architecture bridges technology and institutional responsibility, preventing the algorithm from being treated as an element external to Administrative Law.

Positive experiences, however, do not warrant a triumphalist narrative. *The same technology capable of expanding administrative capacity can also amplify errors, discrimination, and inequalities.* The Dutch case known as the *Toeslagenaffaire* has become paradigmatic. Between 2005 and 2019, approximately 26,000 families were falsely accused of fraud in obtaining childcare benefits, in a context marked by inadequate data and a biased algorithm that disproportionately targeted families with dual nationality or migrant backgrounds. The OECD classifies the episode as an example of ethical risk resulting in real harm, highlighting that many families "were forced to repay undue amounts, suffering severe financial and social consequences" (OECD, 2025, p. 75).

The relevance of the Dutch case lies in demonstrating that the problem cannot be reduced to the existence of a "bad algorithm." There was a combination of inadequate data, problematic classification criteria, institutional choices, and a lack of mechanisms capable of halting the propagation of the error. The OECD (2025) notes that operational risks were present in 93% of the cases analyzed and ethical risks appeared in 56%, emphasizing that "algorithmic errors can assume concrete consequences when systems are employed in complex social contexts" (OECD, 2025, p. 75).

The case establishes an essential distinction: *computational accuracy does not equate to administrative justice.* A system may correctly classify a vast number of cases and still produce unjust outcomes for certain individuals or groups. Public Administration does not deal merely with statistical averages; it also grapples with singularities, exceptions, and human situations that may vanish when reduced to variables. The danger

arises when probabilistic classification begins to acquire, in administrative practice, the appearance of legal truth.

When the pursuit of automation becomes detached from the analysis of the concrete case, a dangerous flank is opened for technological exclusion and the mass reproduction of algorithmic biases. Citizens cannot be reduced to mere processable data, lest the Administration endorse systemic injustices and directly violate the guarantees of technological due process. It is crucial to demystify the aura of technical neutrality surrounding automated systems, recognizing that their parameters reflect the choices and values of those who program them; after all, “the mathematical models that undergird Big Data collection are opinions transformed into mathematics” (Antunes & Maia, 2018, p. 193, our translation). Allowing public management to convert probabilistic calculation into an unquestionable decision means eviscerating the duty to provide reasoned justifications for administrative acts, thus depriving individuals of their right to an assessment that respects the complexity of their material reality.

The *SyRI* episode, also in the Netherlands, adds another dimension to the discussion. The system utilized the automated cross-referencing and analysis of government data to identify potential fraud risks. Although it was not a generative AI system, the case is relevant to algorithmic governance because it demonstrates that the legitimacy of the objective pursued by the State does not automatically legitimize the technological means employed.

In 2020, through decision number ECLI:NL:RBDHA:2020:865, the District Court of The Hague concluded that the legislation authorizing *SyRI* violated Article 8 of the European Convention on Human Rights, which pertains to the protection of private life. The legal lesson is unequivocal: a legitimate public purpose does not eliminate the need for proportionality, transparency, and the protection of fundamental rights, since the Administration cannot subject citizens to opaque and unchallengeable algorithmic analyses.

This transparency is what materializes technological due process, since “the more socially important a decision is, the more an AI system must be capable of providing detailed, accurate, and understandable explanations” (Alves & Andrade, 2021, p. 369, our translation), ensuring that the state's pursuit of efficiency never silences democratic control and the strict legal reasoning of administrative acts.

Specifically, Australia offers another warning through *Robodebt*. It is important to preserve conceptual precision: *Robodebt* was not a generative AI system, but an

automated decision-making and debt recovery system based on data matching and a flawed calculation methodology. Its relevance to the contemporary debate stems precisely from the demonstration that many risks currently associated with AI were already present in earlier forms of administrative automation.

The Australian Royal Commission identified 470,000 incorrect debt notices and pointed out the inadequacy of safeguards and human verification. The report recommended, among other measures, that automated decisions have “a clear path” for review by those affected and that rules and algorithms be made available for independent scrutiny (Australia, 2023, Recommendation 17.1).

Robodebt thus demonstrates that *automation without contestability is institutionally dangerous*. When thousands of decisions are produced automatically, a methodological error ceases to be an isolated incident and becomes a systemic phenomenon. It is even more egregious when the burden of proving the error is shifted to the citizen, forcing them to prove that the State itself is mistaken. In this scenario, the informational asymmetry between the Administration and the administered morphs into a power asymmetry. Technology, instead of reducing bureaucracy, may merely displace it onto the citizen.

The materialization of this asymmetry is starkly revealed when examining the technical failure of the Australian system, which relied on a mathematical extrapolation divorced from the material reality of the beneficiaries. The program cross-referenced fortnightly income data reported to social welfare with consolidated annual records from the tax authority, calculating a simple average that completely ignored the fluctuations, intermittencies, and vulnerabilities inherent to precarious work. When the annual average did not perfectly align with the fortnightly declaration, the system automatically and instantaneously presumed irregularity.

The result of this methodological error was significant, as “the scheme was denounced due to allegations of false or incorrectly calculated debt notices (about 470,000 improperly issued debts to be paid)” (Escola Nacional de Administração Pública, 2022, p. 21, our translation). The inversion of the burden of proof, combined with the absolute presumption of veracity conferred upon the machine, makes it blatantly clear that the imperative of revenue-collection efficiency must not militate against fundamental rights. This scenario reinforces the urgency of a strict technological due process, ensuring that the deployment of automated solutions incorporates rigorous audits and real safeguards against systemic exclusion.

In another example, the United Kingdom presented, during the COVID-19 pandemic, another relevant case with the statistical system used to standardize school grades following the cancellation of exams. Although not an AI system in the contemporary sense, it involved a high-impact algorithmic decision. The model sought to ensure national comparability, but the results generated a strong social backlash. Ofqual itself recognized that the grades produced “did not command public confidence” (OFQUAL, 2020). The episode demonstrates that a statistically consistent model can be institutionally inadequate when applied to exceptional circumstances.

The British experience with school grades thus highlights an often-neglected issue: a model can be mathematically sophisticated and, simultaneously, unsuited to the social context in which it is applied. Statistical models depend on assumptions about data and the stability of observed relationships. When a structural rupture occurs — such as that caused by the pandemic — historical patterns may lose their explanatory power. The problem is not necessarily in the algorithm, but in the relationship between the model and reality. For Public Administration, this means that the evaluation of algorithmic systems must go beyond technical accuracy and consider context, distributive effects, exceptions, contestability, and legal consequences.

Comparing these experiences allows for the identification of an institutional regularity. Estonia, France, Finland, the United Kingdom, and Canada show more promising results when AI is embedded in environments characterized by digital infrastructure, defined objectives, competencies, evaluation, transparency, and oversight. In the Dutch and Australian cases, conversely, automation became problematic when inadequate data, flawed criteria, or the absence of safeguards allowed errors to be produced and reproduced on a massive scale. The OECD synthesizes this dilemma by stating that AI can enhance productivity and services, but that biased data, insufficient transparency, and an “over-reliance on AI” can propagate errors and undermine citizen trust (OECD, 2025, p. 9).

From this comparison emerges an important conclusion for Brazilian Public Administration: *the determining factor is not the sophistication of the algorithm, but the quality of the governance that surrounds it*. Public governance means defining purpose, authorized data, responsibilities, risk levels, oversight mechanisms, interruption criteria, auditing, transparency, rights protection, and effective avenues for review.

Technology then becomes part of an institutional chain in which every relevant outcome can be questioned and corrected. The goal is not to build a management

incapable of making mistakes — that would be unrealistic — but a Public Administration capable of detecting, interrupting, correcting, and learning from technological errors.

The main international lesson is, therefore, that AI should be incorporated into Public Administration as the *cognitive infrastructure of the State*, and not merely as an instrument to replace human labor. The machine can process large volumes of information, recognize patterns, retrieve evidence, forecast certain events, and assist in executing tasks; the public agent must preserve the capacity to contextualize, weigh, decide, justify, and respond. This relationship of complementarity allows for the harnessing of computational capacity without dissolving administrative responsibility.

International experience also demonstrates that the concept of a *smart state* needs to be legally qualified. A smart state is not one that automates the greatest possible number of decisions, but one that uses technology to increase its capacity to realize rights, provide services, prevent harm, allocate resources, and respond to social needs without reducing the citizen to a dataset. State intelligence resides, therefore, less in the quantity of algorithms deployed than in the institutional capacity to choose where to automate, where to assist, and where to fully preserve human decision-making.

Based on these experiences, one can formulate a matrix of responsibility applicable to Brazilian Public Administration: *the greater the potential impact of the decision on fundamental rights, the higher the level of human oversight, transparency, explainability, auditability, and contestability must be*. For low-risk internal tasks, automation can be broad; for public policy formulation support, there must be methodological and institutional validation; for individualized decisions affecting benefits, sanctions, access to services, or the exercise of rights, qualified human intervention and the effective possibility of review become central elements of legitimacy.

The most profound conclusion drawn from comparative experience is that AI can extraordinarily expand the State's capacity, but it can also extraordinarily expand its capacity to err. The difference between these two possibilities lies not only in the technology: it lies in governance. A truly smart Public Administration is one capable of transforming data into knowledge, knowledge into decisions, and decisions into public value, without allowing the algorithm to become an autonomous and unchallengeable authority. In short, the smart state is not the one with the most algorithms; it is the one with the greatest institutional capacity to govern them for the benefit of the citizen.

Artificial Intelligence in the Brazilian Public Administration: federalism, state capacity, successful and unsuccessful experiences, and the challenges of building a smart State

The incorporation of artificial intelligence (AI) into the Brazilian Public Administration cannot be examined as an exclusively technological phenomenon, as its expansion occurs within a federative structure marked by profound differences in administrative, fiscal, informational, and technological capacity. The Citizen Constitution of 1988 distributed competencies among the Union, States, Federal District, and Municipalities, but it did not uniformly distribute the resources necessary to exercise them. The algorithmic transformation of the State reproduces, therefore, an already existing asymmetry: certain agencies have specialized teams, structured databases, computational infrastructure, and technological contracting capacity, while others still face elementary difficulties with digitalization and interoperability.

The National Digital Government Strategy itself recognizes this need for coordination by establishing that state policy must "articulate and direct" the digital transformation strategies of the different federative entities (Brazil, 2024). The Brazilian problem, consequently, does not consist merely in incorporating AI, but in building sufficient state capacity to use it in an unequal manner only when the needs are unequal, but never unequally regarding the protection of fundamental rights.

Specialized literature helps in understanding the dimension of this transformation. Authors Wirtz, Weyerer, and Geyer identify AI as a technology capable of contributing to recurrent problems in the public sector, such as large volumes of processes, administrative burdens, delays in service provision, and difficulties in information processing (Wirtz *et al.*, 2019, p. 596).

The decisive point, however, is that technology does not possess autonomous administrative value. Zuiderwijk, Chen, and Salem, in a systematic review of the literature on AI in public governance, demonstrate that its effects simultaneously reach organizational, political, social, ethical, and institutional dimensions (Zuiderwijk *et al.*, 2021). AI must, therefore, be understood as a sociotechnical technology: its outcome stems not only from the computational model, but from the interaction between data, institutional design, civil servants, administrative objectives, legal rules, and the affected citizens.

This perspective is important for Brazil because it avoids a recurrent conceptual error: considering all forms of administrative automation as AI. Contemporary debate

itself demonstrates that there are rule-based systems, deterministic algorithms, data mining, statistical models, machine learning, and generative artificial intelligence. Monteiro observes that there is no universally fixed boundary between algorithm and AI, but identifies AI systems as a comprehensive category of computational models capable of performing complex tasks of analysis, prediction, classification, and recommendation (Monteiro, 2025, pp. 179-216).

The distinction is not merely terminological. It is indispensable to prevent automation experiences from being artificially presented as "AI" and, at the same time, to recognize that many of the risks currently associated with artificial intelligence — opacity, discrimination, scaled decision-making, and difficulty of contestation — were already present in prior automated systems.

The case of the Office of the Comptroller General (Controladoria-Geral da União - CGU) constitutes one of the most significant Brazilian experiences in the use of AI for oversight activities. The ALICE solution (Analyzer of Bids, Contracts, and Edicts) performs automated analysis of procurement processes, employing cross-referencing of databases, text processing, and artificial intelligence models to classify certain types of contracting and direct audit trails. The CGU Practical Manual, published in December 2025, reports that the tool applies more than 30 audit trails and cross-references information with over 40 databases within the Comptroller's ecosystem (CGU, 2025, p. 5). The sophistication of this experience lies not simply in computational capacity, but in the integration between technology and institutional process: the machine identifies patterns, the auditor evaluates the context, and the institution decides whether the situation demands oversight action.

The architecture of ALICE is prominent because the CGU itself establishes explicit limits to the algorithm's authority. The manual states categorically: "Alice identifies signals, not evidence" (CGU, 2025, p. 12). The phrase, although brief, possesses extraordinary legal-administrative importance. It establishes a boundary between algorithmic inference and administrative evidence. A model can identify a statistically unusual combination of variables; this does not mean it has demonstrated the occurrence of an irregularity. The conclusion depends on human investigation, documentary analysis, and an institutionally adequate adversarial process. The manual reinforces that the tool "does not replace the human work of analysis, judgment, and decision-making" (CGU, 2025, p. 12).

This structure represents one of the most promising ways of using AI in the public sector: the machine does not receive decision-making competence; it receives the function of expanding the Administration's perceptive capacity. Instead of requiring auditors to manually examine thousands of processes to discover which ones deserve attention, the system processes large volumes of information and organizes risk signals. The institutional gain does not lie, therefore, in replacing the auditor, but in transforming the relationship between data quantity and human analytical capacity.

The CGU reports that, in 2024, ALICE examined more than 161,000 processes and that preventive actions guided by its alerts generated BRL 1.25 billion in financial benefits. These figures must be interpreted as the results of oversight actions guided by the tool, and not as savings automatically produced by the algorithm. This distinction is methodologically indispensable.

The CGU's own documentation offers another decisive lesson: the absence of an alert does not equate to the absence of risk. The manual notes that ALICE does not cover all possible situations in a procurement process and that the absence of an automatic flag does not eliminate the need for human analysis (CGU, 2025, pp. 11-12). This characteristic allows for the formulation of a general principle of algorithmic governance: an AI system must be interpreted within its domain of validity, and never outside of it. Excessive administrative reliance transforms a support tool into an informal authority. When this happens, the organization can commit a more dangerous error than the one produced by the algorithm itself: it can attribute to the computational output a certainty that the system never claimed to possess.

The ALICE case also demonstrates that the quality of public AI depends on the quality of data infrastructure. The tool relies on procurement databases, administrative records, fiscal information, sanction data, and digital documents. The manual itself recognizes that inconsistencies, delays, or gaps in external databases directly affect its detection capacity (CGU, 2025, p. 12). The well-known formula "garbage in, garbage out" assumes, in this context, a legal-administrative dimension: inadequate data does not merely produce technically poor results; it can produce unjust administrative decisions. The greater the legal consequence associated with the result, the higher the demand must be regarding the origin, quality, updating, representativeness, and traceability of the data.

The Federal Court of Accounts (Tribunal de Contas da União - TCU) offers a second essential experience to understand Brazilian state capacity. A survey conducted

by the Court on the Federal Public Administration found that only 28% of the surveyed organizations used some AI solution, while the main obstacle identified was the low number of civil servants with specialized knowledge in the area (TCU, 2022, p. 1). The same survey pointed out that 38% of the organizations were at maturity level zero and 33.5% at the initial level, marked by discussions that were still speculative. The conclusion is especially important: the bottleneck of public AI is not exclusively technological; it is also human, organizational, and managerial.

This diagnosis alters the very meaning of state capacity. Traditionally, state capacity involves financial resources, professional bureaucracy, institutional coordination, information production, and the capacity to implement public policies. AI adds a new dimension: the capacity to govern computational systems that participate in the production of administrative decisions. This requires professionals capable of understanding data, models, metrics, limitations, security, data protection, and discrimination risks, but it also requires managers capable of formulating problems adequately. An Administration that does not know which problem it intends to solve may use AI to automate its own inefficiency. Technological sophistication, in this case, merely accelerates a poorly designed administrative process.

The Artificial Intelligence Strategy of the Ministry of Management and Innovation in Public Services (E-IA/MGI 2025–2027) explicitly recognizes this institutional dimension. The document establishes as an objective to "guide the construction of the necessary institutional capacity" for the responsible, safe, efficient, and ethical adoption of AI (Brazil, 2025, p. 10). The choice of the expression "institutional capacity" is significant because it shifts the center of technological policy from software to the organization. The strategy is not limited to the acquisition of tools: it foresees data governance, interoperability, training, AI development, data protection, infrastructure, and evaluation mechanisms.

The E-IA/MGI also establishes principles that align Brazilian policy with international best practices. Among them are human rights, dignity, and equity; transparency, explainability, and auditability; security; privacy; human oversight; accountability; and the generation of public value (Brazil, 2025, p. 13). The provision for effective human oversight and accountability deserves to be highlighted because it prevents an interpretation according to which technology could absorb the public agent's responsibility. The strategy states that participatory development must maintain "always an adequate human supervision" (Brazil, 2025, p. 14). This formulation

approaches the concept of algorithmic accountability defended by Busuioc, according to which the adoption of AI systems by "public bodies creates new demands for explanation, oversight, and accountability" (Busuioc, 2021, p. 836).

The ChatTCU case demonstrates the transition from an experimental use to an institutional infrastructure of generative AI. In May 2026, the Court presented version 7.0 of the platform, incorporating advanced models, specialized agents, and integration with corporate systems. According to the TCU, the platform had already accumulated more than 4.3 million messages since 2023 and over 45 integrations ready or under development. The relevance of this experience lies not only in the numbers, but in the transformation of AI into a component of the organizational infrastructure. When a tool comes to be used at scale, especially technological ones, issues such as access control, data protection, interaction logging, outcome evaluation, security, and the definition of responsibilities cease to be peripheral concerns and become part of institutional governance itself.

The TCU, therefore, occupies a unique position: it uses AI to expand its oversight activity and, simultaneously, needs to develop the capacity to control the use of AI by other agencies. This dual function modifies the very nature of external control. It will not be enough to verify merely the formal result of a given administrative act when the decision-making process has been influenced by an algorithmic model. Depending on the case, it will be necessary to examine the data used, the system's objectives, classification criteria, performance tests, logs, oversight mechanisms, and the possibilities for review. Algorithmic auditing, from this perspective, does not replace traditional legal control; it adds a new layer of intelligibility to it.

The materialization of this new frontier of external control could be forcefully observed in the TCU's actions regarding the automated granting system of the Emergency Aid (Auxílio Emergencial), operated by Dataprev during the COVID-19 pandemic. To verify the legality and soundness of the transfers, the Court of Accounts could not limit itself to checking the financial receipts — the formal result of the act. It was imperative to conduct an algorithmic audit on the cross-referencing "meshes" of the program (TCU, 2020). The auditors had to examine the machine's decision-making architecture, the selected databases, and the system's classification criteria, finding that the computational model used outdated records (such as income data from previous years).

This methodological choice in the code generated severe distortions: the algorithm unfairly excluded workers who had recently lost their jobs (false negatives), while instantaneously granting the benefit to deceased individuals, military personnel, and people with incompatible assets (false positives).

This real and documented episode proves the premise that auditing the State in the digital age means, inseparably, auditing the computational logic that guides it; after all, a flaw in the data selection or in the algorithm's criteria converts, in milliseconds, into massive damage to the public treasury and a direct offense to social rights.

In yet another relevant case, the contrast with the INSS automatic benefit granting system is especially instructive. In an audit released in June 2026, the TCU concluded that the expected results of the system, such as a reduction in the queue and in analysis time, had not been fully achieved; it also identified difficulties in expanding the goal of 50% automatic grants and pointed out that the insured lacked adequate opportunity to correct documents that could increase the benefit amount. The situation must be conceptually treated with caution: it involves administrative automation, and not necessarily AI in a strict sense. However, for that exact reason, it is valuable. It demonstrates that the problems of automated decision-making do not depend on the existence of generative models or deep learning.

The social security experience reveals a fundamental tension between efficiency and effectiveness. The Administration can process an application more quickly and still inadequately materialize the substantive right. If the citizen cannot correct a document, understand the reason for the result, or demonstrate an exceptional circumstance, the reduction in processing time can coexist with a reduction in the quality of the decision. The effective indicator of success, therefore, should not be merely the number of processes automatically concluded, but the proportion of correct, reviewable, and materially adequate decisions. Technology must serve the purpose of the public service; it cannot transform the operational indicator into an autonomous end.

This conclusion finds support in the literature on algorithmic impact assessment. Monteiro argues that impact assessments must allow for the identification of risks, costs, benefits, and socioeconomic consequences prior to the implementation of systems that may affect fundamental rights (Monteiro, 2025, p. 179). More than a purely technical evaluation, the author advocates for an analysis capable of considering the social and institutional context. The assessment should ask not only whether the system works, but whether it should be used in that context, for that purpose, and on that group of people.

This shift in questioning is decisive for the Public Administration because it prevents technical efficiency from being used as sufficient justification for an inadequate public policy.

Algorithmic impact assessment also introduces a preventive dimension that still needs to be further developed in Brazil. Monteiro observes that this instrument must function as a mechanism of *ex ante* accountability, that is, before the damage occurs. The assessment must answer questions about the system's operation, responsibilities, and consequences, allowing decisions to be documented and assigning responsibility for impacts (Monteiro, 2025, p. 201). In her words, the assessment must make it possible "to document an initiative, evaluate the impacts it may cause, and assign responsibility for these impacts" (Monteiro, 2025, pp. 179-216). The idea is especially relevant for high-impact public systems: waiting for the harm to only then audit the algorithm is a delayed form of governance.

Federalism adds complexity to this problem. The GOV.BR Network was conceived as a collaborative network among the Union, States, Federal District, and Municipalities, aimed at cooperation, exchange, and the creation of digital government initiatives. By May 2026, more than 2,700 municipalities were already participating in the network. The figure is important because it demonstrates that federative technological cooperation is no longer an abstract hypothesis. There is an institutional infrastructure capable of sharing solutions and knowledge. The question that arises now is whether this architecture will be able to evolve from digitalization to shared public intelligence, including common standards of algorithmic governance.

The experience of Paraná demonstrates how this cooperation can also occur at the level of capacities. The State initiated a specific journey to train municipal civil servants in the strategic and ethical use of AI, with the initial participation of civil servants from over 20 municipalities and a program that extended into 2026. In May 2026, another training session gathered more than 600 participants and addressed, among other points, inconsistent answers, loss of criteria, and the need to verify the responses produced by the systems. The important aspect of this experience is not the number of people trained, but the nature of the content: AI literacy includes learning to distrust the machine. Knowing how to use a tool without knowing how to identify its errors is an incomplete competency.

In the Municipality of Palmas, the use of AI in the preparatory phase of public procurement constitutes a necessary experience for federalism because it reproduces, on

a municipal scale, the logic of utilizing technology prior to the conclusion of the procedure. In February 2026, the Municipality announced a pilot project to apply AI to the preparatory phase of contracting, covering areas such as social assistance, education, health, and infrastructure.

In June, civil servants were trained to use Licito Guru, an AI-based solution designed for procurement planning. However, an academically responsible analysis should not transform a recent implementation into a proven case of success. The correct approach is to classify it as a promising experience, whose efficacy will need to be demonstrated by indicators of documentary quality, time, competitiveness, error reduction, economy, and effectiveness.

The distinction between a promising experience and a demonstrably successful experience is fundamental for scientific research on AI. The Brazilian Public Administration still has few longitudinal studies capable of demonstrating causality between the adoption of a specific technology and the improvement of public outcomes. The TCU itself found problems in linking the problems, actions, and results of AI solutions (TCU, 2022). This means that the mere fact that an institution possesses AI does not demonstrate effective innovation. A tool can generate thousands of alerts without reducing irregularities, process thousands of documents without increasing the quality of decisions, or save time without improving the service provided to the citizen. Technology is a means; the result is the public value produced.

The Bahian experience with facial recognition presents the problem in an even more sensitive dimension. The Government of Bahia reported, in May 2026, that the technology had contributed to the capture of 5,310 fugitives from justice since its implementation, with usage in over 80 Bahian municipalities. This outcome represents a relevant operational indicator, but it does not, by itself, resolve the legal and institutional evaluation of the policy. Facial recognition involves rights to privacy, data protection, liberty, equality, and due process. A technology can be operationally effective and, simultaneously, present significant legal risks. Therefore, operational efficacy and constitutional legitimacy must be evaluated as distinct dimensions.

It is precisely at this point that algorithmic impact assessment acquires importance. Monteiro warns that the risks of AI systems cannot be evaluated exclusively by technical criteria, because they are sociotechnical systems embedded in concrete institutional and social environments (Monteiro, 2025, p. 179). The relevant question is not merely what the accuracy rate of facial recognition is, but how its false positives are

distributed, which groups are most affected, how the alerts are validated, what the mechanisms for contestation are, and what consequences arise from a mistaken identification. The mathematical precision of a system does not automatically equate to the fairness of its application.

This issue makes it possible to formulate a central distinction for Brazilian federalism: the algorithm may be national, state, or municipal; the affected rights remain those of the citizens. A tool developed by the Union can be used by States and Municipalities; a state system can reach citizens of dozens of cities; a municipal solution can produce effects on socially vulnerable groups. Algorithmic governance, therefore, cannot be conceived solely within the administrative boundaries of the agency that acquired the technology. It needs to consider the federative chain of data, suppliers, infrastructure, decisions, and impacts.

The very structure of the GOV.BR Network offers an opportunity to address this problem. In March 2026, the Ministry of Management and Innovation signed an agreement with the Ciga Consortium, involving 354 municipalities, with the objective of expanding digital transformation through cooperation between the federal network and a municipal consortium structure. The experience indicates a strong institutional possibility: using consortiums and federative networks to share not only software but rare competencies. Instead of each Municipality individually contracting specialists in data, security, AI, and data protection, shared structures can reduce costs and expand collective technical capacity.

Thus, a federative paradox emerges. Decentralization can be a source of innovation because it allows different governments to experiment with solutions adapted to their problems; at the same time, it can produce technological fragmentation, duplication of investments, and distinct standards of rights protection. The answer does not seem to lie in the absolute centralization of AI, nor in the unrestricted technological autonomy of the entities. The most consistent path is algorithmic cooperative federalism, in which the Union, States, and Municipalities preserve their competencies, but share infrastructure, minimum standards, training, interoperability, auditing mechanisms, and experiences.

Based on the Brazilian experiences, three main architectures for AI usage can be identified. The first is AI for expanding state capacity, represented by ALICE and by oversight support tools, in which technology processes large volumes of information and directs human attention. The second is AI for transforming service provision, in which

technology modifies the relationship between the Administration and the citizen, as occurs with language, customer service, and urban management tools. The third is high-impact AI or automation, found in social benefits, inspection, public safety, and other areas where the algorithmic outcome can directly affect fundamental rights. This classification makes it possible to establish a proportional principle: the greater the potential impact on rights, the greater the intensity of the required governance must be.

The literature on algorithmic accountability reinforces this conclusion. The author Busuioc demonstrates that the use of AI by public bodies introduces specific accountability problems because decision-making processes can become distributed among developers, managers, users, systems, and suppliers (2021, p. 825). Administrative responsibility cannot, however, dissolve in this chain. The State remains obligated to explain, justify, and answer for its decisions. The question "who programmed the algorithm?" is insufficient. In Public Administration, it is also necessary to ask: who decided to use it, who authorized its purpose, who supervised its operation, who assessed its risks, and who must compensate the citizen if the system causes harm?

This problem is important when the State contracts systems developed by private companies. The public contract cannot fully transfer to the supplier the knowledge necessary to control the system. If the Public Administration is unable to minimally understand how the system operates, which data it uses, what limitations it has, and how its performance is monitored, its capacity for accountability becomes compromised. The contracting of AI must, therefore, incorporate requirements for documentation, testing, security, auditing, logging, access to evidence, and the possibility of review. Governance must begin prior to contracting, and not only after the system is already producing decisions.

Algorithmic impact assessment offers exactly a bridge between contracting, governance, and fundamental rights. Monteiro contends that these mechanisms must consider information, risk assessment, balancing costs and benefits, public participation, and accountability (Monteiro, 2025, p. 216). The value of this methodology lies in transforming the technological question — "does the system work?" — into a public policy question — "is the system adequate, necessary, proportional, and legitimate to solve this problem?". This difference is essential because many public problems are not information problems that an algorithm can solve; they are political, distributive, budgetary, or institutional problems that require human decisions.

Brazil is still in the process of building its general framework for AI governance. Bill No. 2338/2023 was approved by the Senate and forwarded to the Chamber of Deputies in March 2025, remaining under legislative process in 2026. The existence of this debate demonstrates that the legal institutionalization of AI is still in formation. For the Public Administration, this circumstance heightens the importance of already existing principles in Administrative Law, the Constitution, data protection, and public control.

The absence of a definitive general framework does not mean an absence of legal duties. On the contrary, it means that technological adoption must be carried out within the already prevailing norms and principles, especially legality, impersonality, publicity, efficiency, motivation, data protection, and respect for fundamental rights.

The most promising element of the Brazilian experience is precisely the emergence of a governance architecture that begins to surpass the logic of isolated innovation. The CGU developed a continuous auditing tool with express limits on algorithmic authority; the TCU uses AI at scale and develops competencies to audit it; the MGI formulated a strategy based on governance, data, human oversight, and accountability; States are beginning to train Municipalities; and the GOV.BR Network is creating mechanisms for federative cooperation. These movements are still fragmented, but they already reveal the formation of an institutional infrastructure that can sustain a new generation of Public Administration driven by data and computational intelligence.

The Brazilian fragility, however, remains the distance between technological capacity and evaluation capacity. It is relatively easy to acquire a tool, implement a chatbot, or contract a model. It is harder to establish indicators capable of demonstrating that the technology has effectively improved public policy. The Public Administration needs to know how much time was saved, how many errors were reduced, which groups were benefited or harmed, what costs were avoided, what the false positive rate was, how many decisions were reviewed, and how many rights were effectively materialized. Without these metrics, innovation runs the risk of transforming into a mere institutional narrative.

This issue allows for the establishment of a useful criterion to evaluate AI-based public policies: success should not be measured by the quantity of decisions the machine can produce, but by the amount of additional public value the State manages to produce without unduly increasing the risk of rights violations. A tool that processes one million documents but produces incorrect decisions may be inferior to another that processes one hundred thousand with high precision and effective review mechanisms. In the same

manner, a technology that saves public resources but unjustifiably reduces the citizen's access to their rights does not constitute a successful administrative innovation.

The Brazilian experience allows, therefore, for the formulation of a more precise argumentation than the simple defense of the "digitalization of the State": artificial intelligence must be understood as a new layer of state capacity, whose value depends on the quality of the institutional governance that surrounds it. The machine can expand perception, memory, speed, analytical capacity, and prediction; it cannot, by itself, confer legitimacy upon a decision. The Public Administration remains responsible for defining objectives, establishing priorities, interpreting contexts, balancing rights, correcting errors, and answering to society.

In this sense, the great transformation produced by AI might not be the replacement of the public agent, but the transformation of their function. The individual progressively ceases to be a mere executor of routines and begins to act as a supervisor, interpreter, validator, and person responsible for sociotechnical systems. The administrative competency of the future will not only be knowing how to apply the norm, but knowing how to evaluate when and how a technology can assist its application. The training of public agents will need to combine legal, administrative, and political knowledge with literacy in data, AI, security, data protection, and risk assessment.

The smart State, therefore, will not be the one that automates the largest number of decisions. It will be the one that manages to automate what is repetitive, expand what is cognitive, preserve what is deliberative, and protect what is legally inalienable. ALICE is valuable because it directs the auditor's attention without replacing their judgment; ChatTCU is relevant because it expands the civil servant's cognitive capacity; the MGI's strategy is important because it transforms AI into an institutional capacity policy; and federat.

The conclusion for Brazilian federalism is, therefore, particularly strong and uneven: decentralization can cease to be merely an obstacle to technological transformation and become a source of distributed public intelligence. The Union can offer infrastructure, standards, and scale; the States can act as regional platforms for training and innovation; the Municipalities can experiment with solutions directly related to the territorial needs of the population. However, this architecture will only be legitimate if there are common standards of governance, security, transparency, auditability, data protection, and accountability.

The challenge is not, therefore, to determine how much artificial intelligence the Brazilian State manages to incorporate. The correct question is another: how much additional state capacity Brazil can produce per unit of technology, while preserving human dignity, administrative responsibility, and the citizen's ability to understand, contest, and correct the decisions that affect them. This shift in questioning moves the debate from technological fascination to institutional rationality. And it is precisely in this shift that the difference lies between a State that simply uses artificial intelligence and a State that truly becomes smarter, more preventive, more efficient, more responsible, and more capable of materializing fundamental rights.

Final Considerations

The research dedicated itself to examining the growing integration of Artificial Intelligence (AI) within the heart of Public Administration, a phenomenon that has redefined the boundaries of contemporary state action. The relevance of the theme proved to be unquestionable, given that the transition to an algorithmic management model laid bare the latent tension between the imperative of maximum operational efficiency and the non-negotiable need to protect citizens' fundamental rights.

To unveil this complexity, the study adopted a qualitative methodology of an analytical-deductive and comparative nature. The investigative path was structured through a deep literature review, the analysis of international regulations and guidelines — notably those formulated by the OECD and UNESCO — combined with the meticulous scrutiny of empirical experiences and official documents, enabling the extraction of concrete evidence regarding the behavior of institutions in the face of technological innovation.

In the first stage of the research, it was demonstrated that artificial intelligence, from a legal-administrative perspective, has consolidated itself as a sociotechnical processing infrastructure rather than an autonomous substitute entity. It was found that technology functioned as a vector for expanding the State's cognitive capacity, enabling the processing of massive volumes of data to diagnose social needs, predict risks, and direct public policies with unprecedented precision and scale.

However, the analysis showed that the same predictive capacity designed to materialize constitutional guarantees carried the immanent risk of deepening asymmetries. It became patent that, when operating on historically biased databases, mathematical models possessed the potential to convert past inequalities into automated exclusion, requiring the Public Administration to apply a rigorous ethical filter

capable of neutralizing the guise of technocratic infallibility frequently granted to machines.

Upon entering international experiences, the investigation attested that governments' digital maturity has never resulted from the simple isolated acquisition of software, but rather from the prior structuring of governance instances. Success stories, such as Estonia's interoperability ecosystem, the Albert assistant in France, and the OpenEval platform in Finland, proved that technology reached its peak of public value when designed under the logic of a copilot, expanding the civil servant's discernment without subtracting their functional responsibility.

In diametrical contrast, the examination of emblematic institutional failures operated as a rigid empirical warning regarding the limits of decision-making delegation. Dramatic episodes such as the *Toeslagenaffaire* in the Netherlands and the disastrous Robodebt program in Australia conclusively proved that automation devoid of explainability and effective avenues of contestation culminated in the illicit transfer of the burden of proof to the vulnerable citizen, transmuting management tools into instruments of state oppression.

When analyzing the Brazilian reality, the research diagnosed that the algorithmic revolution encountered a federalism profoundly marked by fiscal, informational, and structural heterogeneities. It was observed that the absence of coordinated action threatened to generate islands of technological excellence to the detriment of under-equipped subnational entities, revealing the urgency of consolidating an algorithmic cooperative federalism, spearheaded by initiatives such as the GOV.BR Network, focused on sharing infrastructures, regulations, and human capacities.

The evaluation of the domestic panorama also revealed expressive contrasts in AI implementation strategies. Successful institutional architectures, such as the ALICE tool at the Office of the Comptroller General and ChatTCU, confirmed that the demarcation of clear limits — arrangements in which the machine suggests signals and the human holds the monopoly on evidence and judgment — ensured due technological process; whereas the bottlenecks of automated concessions in the INSS showed that mere procedural celerity, when unaccompanied by reviewability and material effectiveness, generated direct injuries to the insured parties.

From these findings, the research concluded that the systemic consolidation of prior control mechanisms, primarily embodied in the Algorithmic Impact Assessment (AIA), is imperative. It was proven that efficient technological governance necessarily

operates *ex ante*, demanding from the public manager not only the verification of the model's mathematical accuracy, but a rigorous questioning regarding the real necessity, proportionality, and political legitimacy of employing the tool in light of the scrutinized social context.

Another foundational conclusion of this research referred to the inexorable reconfiguration of human labor in the public sector. It was found that the digital transition did not eliminate the need for the State's presence, but transmuted the essence of administrative function: the civil servant progressively ceased to be a mere executor of repetitive tasks to ascend to the position of critical auditor, validator, and supervisor of complex systems, which has come to require unprecedented levels of data literacy, information security, and understanding of the legal guidelines applied to AI.

Finally, the reflection closed with the inescapable realization that the concept of a Smart State demanded a radical conceptual requalification. The research ratified that state intelligence has never been measured by the unreflecting accumulation of algorithms or by the number of decisions outsourced to computers, but rather by the remarkable institutional capacity to govern them, keeping technology strictly as support, in order to ensure that the sense of justice, the balancing of values, and the unyielding protection of the citizen's dignity remain, always and in the final instance, under the safeguard of human discernment.

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RESUMO

Esta pesquisa investiga a transição sociotécnica impulsionada pela incorporação de sistemas algorítmicos no Estado e seus impactos na capacidade de tomada de decisão, formulação de políticas, prestação de serviços e controle governamental. A pesquisa, de suma importância diante do risco de a eficiência tecnológica suplantando as garantias constitucionais e perpetuar assimetrias históricas via automação enviesada, busca conciliar a inovação com o devido processo tecnológico. Utilizando uma metodologia qualitativa, de base teórico-comparativa e analítico-dedutiva, a pesquisa articula a revisão da literatura, o exame de normativas globais (OCDE, UNESCO) e nacionais, além do escrutínio de casos empíricos internacionais (como o sucesso do modelo da Estônia e os fracassos do Robodebt na Austrália e SyRI nos Países Baixos) e experiências brasileiras (ALICE na CGU e ChatTCU). Conclui-se que a precisão tecnológica não se confunde com a justiça administrativa e que a adoção da Inteligência Artificial exige uma atuação estatal aumentada, fundamentada na transparência, na *accountability* algorítmica e na avaliação contínua de seus impactos (*ex ante*). A inovação no setor público, estruturada em um federalismo cooperativo, não reside na substituição do agente público ou na delegação irrestrita a caixas-pretas, mas na construção de uma robusta infraestrutura de governança que preserve a centralidade do julgamento humano, protegendo assim os direitos fundamentais contra a exclusão automatizada.

PALAVRAS-CHAVE: Administração Pública; Inteligência Artificial; Governança Algorítmica; Devido Processo Tecnológico; Direitos Fundamentais; *Accountability*.

RESUMEN

Esta investigación analiza la transición sociotécnica impulsada por la incorporación de sistemas algorítmicos en el Estado y sus repercusiones en la capacidad de toma de decisiones, la formulación de políticas, la prestación de servicios y el control gubernamental. La investigación, de suma importancia ante el riesgo de que la eficiencia tecnológica supere las garantías constitucionales y perpetúe las asimetrías históricas a través de una automatización sesgada, busca conciliar la innovación con el debido proceso tecnológico. Mediante una metodología cualitativa, de base teórico-comparativa y analítico-deductiva, la investigación combina la revisión de la literatura, el análisis de normativas globales (OCDE, UNESCO) y nacionales, además del escrutinio de casos empíricos internacionales (como el éxito del modelo de Estonia y los fracasos de Robodebt en Australia y SyRI en los Países Bajos) y experiencias brasileñas (ALICE en la CGU y ChatTCU). Se concluye que la precisión tecnológica no debe confundirse con la justicia administrativa y que la adopción de la Inteligencia Artificial exige una mayor intervención estatal, basada en la transparencia, la rendición de cuentas algorítmica y la evaluación continua de sus impactos (*ex ante*). La innovación en el sector público, estructurada en torno a un federalismo cooperativo, no reside en la sustitución del funcionario público ni en la delegación ilimitada en cajas negras, sino en la construcción de una infraestructura de gobernanza sólida que preserve la centralidad del juicio humano, protegiendo así los derechos fundamentales frente a la exclusión automatizada.

PALABRAS CLAVE: Administración pública; Inteligencia artificial; Gobernanza algorítmica; Duro proceso tecnológico; Derechos fundamentales; *Accountability*.