RECONCILING ADMINISTRATIVE EFFICIENCY WITH PROCEDURAL SAGEFUARDS IN THE ADM SYSTEM

Dr. Eltayeib Hussein Mahmoud Sharaf Addin
Associate Professor
Northern Border University
College of Business Administration
Department of Law
P.O. Box 1321, Postal Code 91431
Arar; Kingdom of Saudi Arabia
e.sharafaddin@nbu.edu.sa
ORCID: 0009-0005-1599-3775

Abstract: *The use of automated systems for making administrative decisions has recently increased to improve efficiency and speed in completing tasks. However, ensuring that administrative effectiveness aligns with procedural safeguards when using an Automated Decision-Making (ADM) system is crucial to maintaining adequate performance and ensuring that ADM use remains safe for individuals. Using a descriptive methodology, the article collected and analysed data on striking a reconcile between administrative efficiency and procedural protections in the ADM system to present a precise and straightforward overview of current literature. Sources for data included books, reports, conferences, conventions, and internet resources. The article revealed several key mechanisms that help reconcile administrative efficiency with procedural safeguards in the use of ADM for administrative tasks. These include compliance with the law, ensuring fairness, exercising rights freely, pursuing justice, adding human oversight, avoiding decisions made solely by automated systems, ensuring transparency, explainability, and interpretability of ADM-based decisions, and maintaining accountability. The analysis suggested that future investigations should examine how core elements of administrative decisions, such as jurisdiction, form, and purpose, are influenced by ADM, and should also evaluate the principles of reason-giving and nondelegation of power.*

Key words: *Reconciling; Administrative Efficiency; Procedural Safeguards; Automated Decision-Making; Artificial Intelligence*

1. INTRODUCTION

Artificial intelligence is increasingly integrated into everyday life. From healthcare to transportation, it is moving from research phases to real-world use. In 2023, the FDA approved 223 medical devices that use artificial intelligence, a significant increase from just 6 in 2015. Self-driving cars are no longer just experimental; for example, Waymo, one of the largest operators in the United States, offers more than 150,000 autonomous trips weekly, while Baidu's affordable Apollo Go robotaxi operates in various cities across China (Maslej et al., 2025). AI involves automating tasks related to human thinking, such as decision-making, problem-solving, and learning (Russell and Norvig, 2010).

Administrative decisions are a vital part of management activities that have been automated using AI, which assesses inputs and other variables essential for informed decision-making under challenging conditions, allowing policymakers to make decisions more quickly and consistently (Nešpor, 2024). Automated Decision-Making (ADM) refers

to the use of digital technologies to automate decision-making processes that humans would typically handle.[1]

Integrating AI systems into administrative workflows could lead to major changes in administrative procedures by transforming current customs, organisational structures, and procedural methods in administrative law (Parycek et al., 2023). Additionally, administrative law decisions could benefit from the use of ADM. Automated systems can manage various types of decisions in accordance with fair standards, thereby improving administrative outcomes by enabling efficient decision-making in a short time, increasing overall system efficiency by reducing lead times and resource requirements for mass decision-making.[2] Furthermore, the use of algorithmic systems to automate decision-making is increasingly prevalent in the public sector, a necessary element in the growth of the digital welfare state, which promises better efficiency and fairness in the provision of public services (Kaun, 2023). Likewise, algorithmic automation significantly cuts transaction costs, streamlines processes, and supports informed decision-making in complex situations. Tools such as comparators, rating systems, ranking systems, and recommendation systems are essential for comparing and ranking products. Algorithms facilitate cost-effective and efficient flagging, filtering, content moderation, and removal.

Managing complexity, virality, and uncertainty in today's world requires algorithms in modern societies.[3] Automated systems can be used in many ways within administrative decision-making. They can suggest options to decision-makers, including decision support systems that provide comments about the decision-maker, relevant laws, case law, and policy references throughout the process, and offer summaries or preliminary assessments. Internal decision-makers can also automate parts of the fact-finding process, which could influence later choices, such as using data from additional sources, including data matching or data uploaded directly by individuals or entities.[4] Roehl and Hansen (2024) note that while ADM is crucial for digital government reforms aimed at making administration more efficient and streamlined, it also raises concerns about traditional public administration values (Roehl and Hansen, 2024).

However, ADM faces challenges that could impact individuals' safety. The Commonwealth Ombudsman (2025) states it is inappropriate when automating an administrative task would: violate legal requirements of legality, fairness, and reasonableness under administrative law; lack transparency; breach laws protecting data security, privacy, or other rights (including human rights, rights, and responsibilities); jeopardise decision-making accuracy; and significantly undermine public trust in government management.[5] Allars (2024) indicates that using ADM inherently involves

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[1] European Law Institute (2023). EU Consumer Law and Automated Decision-Making (ADM): Is EU Consumer Law Ready for ADM?. Available at: https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Interim_Report_on_EU_Consumer_Law_and_Automated_Decision-Making.pdf (accessed on 25.10.2025).

[2] Law Council of Australia (2025). Use of Automated Decision-Making by Government: Consultation Paper, 24 January 2025. Available at: https://lawcouncil.au/publicassets/be8251b1-d4dd-ef11-94af-005056be13b5/4643%20-%20S%20-%20Use%20of%20automated%20decision-making%20by%20government.pdf (accessed on 12.10.2025); and Rizk and Lingren (2024).

[3] European Law Institute (2022). Guiding Principles for Automated Decision-Making in the EU. Available at: https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Innovation_Paper_on_Guiding_Principles_for_ADM_in_the_EU.pdf (accessed on 24.10.2025).

[4] Commonwealth Ombudsman (2025). Automated Decision-making – Better Practice Guide, March 2025. Available at: https://www.ombudsman.gov.au/__data/assets/pdf_file/0025/317437/Automated-Decision-Making-Better-Practice-Guide-March-2025.pdf (accessed on 28.10.2025).

[5] *Ibid.*

risks and a higher chance of violating administrative law criteria (Allars, 2024). Hubková (2024) notes that several issues, challenges, and obstacles are associated with the use of ADM tools. Hubková (2024) stated that, legally, there is a risk of diminishing or diluting public officials' responsibility (Hubková, 2024). Mokander et al. (2021) noted that ADMS runs the risk of producing unjust outcomes, violating individual privacy, and undermining human autonomy. Hence, to help institutions create and run ADMS ethically, new governance systems are needed so that society can fully benefit from the economic and social advantages of automation (Mokander et al., 2021).

Alfred et al. (2019) highlight some significant challenges, notably the difficulty most individuals face in fully understanding the processes and mechanisms involved. When these processes affect outcomes, decisions are made automatically. The core assumption behind ADM regulation is that a computer will make the decision, which could threaten a person's dignity and autonomy. The earliest rules governing automated decision-making were based on the idea that such systems would produce subpar results, especially when compared to human judgments. ADM systems may lack transparency, as individuals are often unaware that one has been used. Consequently, they cannot exercise their data subject rights under data protection law or seek alternative services that do not use ADM. Even if individuals are aware that ADM has been employed, they may not fully understand how it works. This presents significant challenges, particularly for correlation-based ADM systems, which are more complicated to explain and understand than causality-based systems. Many see actors using ADM as a threat to justice. Depending on how the phrase is defined, an ADM system might be considered unjust if it intentionally incorporates protected characteristics, such as race, age, or gender, or their proxies. Alternatively, ADM systems could be viewed as unfair if they produce unequal predictive performance, including false-positive and false-negative rates, across various groups, especially those protected by law.

Thus, two facing considerations exist: the right of the administration to gain efficiency, velocity, and consistency in the work via ADM, and the right of individuals to procedural safeguards, which provided by primarily compliance with the law, ensuring fairness, exercising rights freely and pursuing justice, human oversight, avoidance of decisions made solely by automated system, transparency, explainability and interpretability, and accountability, that lead to justice in administrative law simultaneously.

Although Automated Decision-Making and Artificial Intelligence are connected, they are not synonymous. AI is a broad scientific field encompassing techniques allowing machines to simulate specific human abilities, such as learning, reasoning, and problem-solving. ADM, however, is the utilitarian application of these or any other digital devices to make or assist decisions that would be made via human judgment otherwise. In these cases, ADM can be grounded in AI methods such as machine learning and natural language processing. However, it can also be implemented using more straightforward programming rules or decision trees that follow static legal or procedural rules. Therefore, any AI-based decision-making system is indeed ADM, but not every ADM process necessarily must be AI. This is an important difference in public administration, as it affects both the character of oversight required and the level of legal protection that must be applied to automated devices.

This research aims to provide a systematic and critical review of existing legal solutions that seek to reconcile administrative efficiency with procedural protections in Automated Decision-Making (ADM) systems. By bringing together and analysing scattered international and European literature, it seeks to delineate the primary mechanisms by which efficiency and procedural fairness can be reconciled in automated

administrative environments. As the issue remains scientifically under-researched, particularly in Central and Eastern Europe, the article helps fill this gap by systematising current knowledge, delineating conceptual boundaries, and suggesting a coherent framework for subsequent empirical and comparative research.

While this paper is not a venture to provide fresh empirical evidence, it is new in that it consolidates disparate positions on how procedural protection and administrative efficiency might go together in a computer-aided decision-making framework. By synthesising and organising the extant literature within a framework that reconciles them, the article reveals a clear point of departure for further in-depth investigations. Each of the mechanisms discussed, i.e., legality, equity, human oversight, or openness, could be developed into an independent line of inquiry.

The paper first helps individuals understand their legal rights regarding automated administrative decisions, whether issued or contested. Second, it provides policymakers with insights into enacting and enforcing laws and regulations related to the ADM system. Third, it emphasises the need for repeatability in ADM studies to establish trust in the system and credibility, thereby influencing discussions. Fourth, it assesses the reach and constraints of ADM in human endeavours.

The remainder of this paper is organised as follows: Section 2 focuses on methodology, and Section 3 details how to reconcile procedural protections with efficiency. Section 4 offers results and discussion. Finally, Section 5 concludes the article.

2. METHODOLOGY

This paper adopts a doctrinal legal research approach. Rather than providing empirical data, the analysis relies on a systematic study of primary and secondary legal sources to determine how to align administrative effectiveness and procedural protection in the context of automated decision-making. Primary materials include constitutional rules, administrative legislation, EU regulations such as the General Data Protection Regulation and the AI Act, and judgments or ombudsman decisions on ADM. Secondary materials include academic writing, policy briefs, and reports from international institutions. These were examined to identify shared legal principles, interpretative approaches, and areas of tension between automation and administrative legality. The article thus goes beyond the description of these materials: it comparatively examines how different legal systems approach efficiency and safeguards. It integrates these lessons into a productive analytical framework that can inform both scholarship and practice.

3. RECONCILING EFFICIENCY WITH PROCEDURAL SAFEGUARDS MECHANISMS

Several mechanisms are employed to reconcile administrative effectiveness with procedural safeguards when the ADM system is operational. Previous research has shown that applying ADM technologies in sensitive areas, such as the legal justice system, may have unfavourable societal effects, including widespread discrimination (Szafran and Bach, 2024). The European Union has a prominent set of legal tools for personal data protection, namely, the General Data Protection Regulation (GDPR) and the EU Data Protection Directive (DPD). The mechanisms that reconcile management efficiency with procedural safeguards can be summarised as follows:

3.1 Compliance with the Law

The principle of law compliance, also known as the principle of lawfulness, is a fundamental legal rule that must be followed across all areas of law enforcement, including administrative functions. Automation should be designed with consideration for laws, rules, and principles of justice and ethics (Wihlborg et al., 2016). It supports the rule of law, establishes the country's legal framework and institutions, and boosts legitimacy. Compliance with the law involves the procedures and processes within a specific program that ensure adherence to laws and government standards (Idowu et al., 2013). Regarding ADM, an operator who chooses to use ADM for a particular purpose must ensure that its design and operation comply with the rules applicable to a similar manual decision-making system.

Should machine technology be employed to carry out a task under a particular law, its operation must comply with all the enforceable constitutional rules, not merely those arising from data protection legislation. Administrative authorities need to follow, alongside the ordinary law requirements, such as legality, proportionality, due process, and reason-giving, constitutional rules stemming from national constitutional traditions and the EU Charter of Fundamental Rights. In common-law regimes, they are sometimes called "common law obligations" of fairness, reasonableness, and accountability. However, their opposites appear in civil-law regimes as an integral part of good administration. Where ADM systems process personal data, the General Data Protection Regulation (GDPR) and related legislation provide the primary protection. However, ADM may also operate on non-personal data (e.g., environmental, statistical, or operational data). In such cases, legality is achieved through sector-specific regulations, ethical standards, and the overall requirements of the EU Artificial Intelligence Act, which impose transparency, human oversight, and accountability requirements, even where no personal data is involved. There is a broad legal framework that enables efficient government automation and compliance with human rights.

Relevant considerations will often include privacy rules, freedom of information laws, and anti-discrimination legislation.[6] The doctrine of legal compliance serves two primary roles. First, it acts as a restriction or negative factor in determining when ADM use is permitted, how much it can be used, and whether additional protections or policies are necessary. In some cases, an ADM should be limited or prohibited if it cannot be fully developed or operated in accordance with current laws.[7]

In addition, the constitutional rule of legality requires that all administrative acts, including those supported by automated decision-making, have a specific and unambiguous legal basis. The basis for this is the general rule of law principle that ensures public authorities operate only with the authority vested in them by law. From a practical perspective, in the ADM sense, it means that computerised tools cannot replace human decision-making unless authorised by primary legislation or secondary legal documents that define their scope and bounds, as well as the guarantees and warnings. In the absence of such legal justification, the ADM system application would be unlawful and could violate constitutional safeguards against arbitrary administrative action and

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[6] NSW Ombudsman (2021). The new machinery of government: Using machine technology in administrative decision-making, A special report under section 31 of the Ombudsman Act 1974. Available at: https://cmsassets.ombo.nsw.gov.au/assets/Reports/The-new-machinery-of-government-special-report_Front-section.pdf (accessed on 24.10.2025).
[7] European Law Institute (2022). Guiding Principles for Automated Decision-Making in the EU. Available at: https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Innovation_Paper_on_Guiding_Principles_for_ADM_in_the_EU.pdf (accessed on 24.10.2025).

due process. Hence, legality in ADM is not merely a matter of agreeing to comply with norms prescribed by statute, but also of upholding the constitutional order that founds administrative power on legality and responsibility.

3.2 Ensuring Fairness

Algorithmic decision-making is becoming increasingly important in individuals' daily lives. Because these autonomous systems could cause significant harm to individuals and communities, concerns about justice have become front and center (Starke et al., 2022). Commonly used as they are, ADM systems often emerge without involving the public or those affected, thereby presenting problems related to inherent biases that could perpetuate systemic inequities (Decker et al., 2024). Hence, all processes involved in decision-making should ensure fairness and transparency. In this context, fairness has two components: the procedure must be fair to the individual involved, and it should also, to some extent, be fair in substance (McCabe, 2020). Fair procedures require decision-makers to be impartial and to give the affected individual a fair opportunity to be heard. Introducing mechanical technology can introduce a specific type of bias called algorithmic bias, which refers to the idea that the results produced by an algorithm should not lead to discriminatory, prejudiced, or unequal consequences. This bias occurs when a machine consistently produces unjust or biased results against certain groups of people. Algorithmic bias can still lead to illegal decisions if they are based on irrelevant factors or violate anti-discrimination laws. It may also lead to other forms of mismanagement, as it results in or promotes unfair or improperly discriminatory actions.[8] The dangers might come from bias in data or in algorithms guiding automated decisions, as well as from the human inclination to rely on automated results. This portion shows that emerging forms of bias pose challenges concerning evidence and are unlikely to fall under the definition of bias relevant to either partially or entirely automated decisions. Regrettably, this distance reduces the likelihood of a successful judicial review in the ADM field (Huggins, 2021). In data analysis, ADM technology typically relies on programming that categorises individuals into distinct groups based on shared traits, which then influence membership decisions within those groups. Article 21 of the EU Charter of Fundamental Rights (CFR) states standards that, in theory, should prevent discrimination between groups. These criteria include 'sex, race, colour, ethnic or social origin, genetic characteristics, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation.' Unless the law permits such use, ADM must be designed to exclude these factors as defining features, respect core rights, and ensure that restrictions are appropriate (Hofmann and Pflücke, 2024).

3.3 Exercising Rights Freely and Pursuing Justice

The situations involving the exercise of rights and the pursuit of justice without limitations fall into two categories: first, when a person can only claim a right through an automated process; second, when a person cannot claim a right or seek justice solely because ADM has made a decision. In the first category, the method for exercising a right, such as correcting personal data, withdrawing consent, notifying an insurer of

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[8] NSW Ombudsman (2021). The new machinery of government: Using machine technology in administrative decision-making, A special report under section 31 of the Ombudsman Act 1974. Available at: https://cmsassets.ombo.nsw.gov.au/assets/Reports/The-new-machinery-of-government-special-report_Front-section.pdf (accessed on 24.10.2025); and Starke et al. (2022).

circumstances that could reduce risk and improve insurance terms, or submitting a complaint, is entirely automated during the initial phase. Hence, the individual's dependence on the automated system's correctness, acceptability, and user-friendliness is total. Still, this reliance could be unfamiliar. As a result, someone's ability to exercise their rights may be inhibited or discouraged. The automated procedure may present an insurmountable barrier that stops someone from exercising their rights. The person is nearly deprived of these rights if they have no alternative means to utilise them. In such cases, the operator must provide a human-based option. Regarding the second category, the affected individual has been impacted by an ADM decision and wants to challenge it. If an automated decision could cause irreversible harm or irreparable consequences, such as data loss or permanent loss of digital content, a process for appealing the decision before it takes effect should be available. Otherwise, the individual would have no recourse other than seeking compensation.[9]

3.4 Human Oversight

Due to the potential risks to ADM, this procedure should involve human intervention in tasks, the expression of one's viewpoint, and a challenge to decisions to ensure that devices never make final decisions affecting people's rights without human oversight. The European Data Protection Board (EDPB) stated that ADM for individuals, including profiling or not, should not result in unjustified consequences for individuals' rights; for example, there should be precise requirements for transparency and fairness, increased obligations for accountability, defined legal grounds for data processing, rights for individuals to contest profiling and, if specific criteria are met, the need to conduct a data protection impact assessment.[10] Human oversight refers to the involvement of humans in an algorithmic work process. It can be achieved through various means, such as supervision at different stages and levels of intensity. These forms of human oversight are sometimes referred to by different names, depending on when and how humans intervene (Fink, 2025). Standards require agencies to conduct a comprehensive, independent algorithmic review by an authorised expert before ADM deployment and/or at specified intervals afterward, and to obtain thorough legal verification to ensure the system complies with relevant laws.[11] Additionally, those responsible for human oversight must fully understand the strengths and weaknesses of the high-risk artificial intelligence system. They need to be able to monitor their operations effectively to quickly detect anomalies, malfunctions, or unexpected behaviours. Moreover, they should be trained to resist any potential automation bias (Hofmann and Pflücke, 2024).

3.5 Avoidance of Decisions Made Solely by an Automated System

This mechanism of reconciliation is outlined in Article 22 of the GDPR, which states that individuals have the right not to be subject to a decision made solely through automated processing (including profiling) that has legal effects for them or similarly

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[9] European Law Institute (2022). Guiding Principles for Automated Decision-Making in the EU. Available at: https://www.europeanlawinstitute.eu/fileadmin/user_upload/p_eli/Publications/ELI_Innovation_Paper_on_Guiding_Principles_for_ADM_in_the_EU.pdf (accessed on 24.10.2025).
[10] European Data Protection Board (2017). Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679. Available at: https://ec.europa.eu/newsroom/article29/items/612053/en (accessed on 29.10.2025).
[11] NSW Ombudsman (2023). „Safe and Responsible AI in Australia" discussion paper. Available at: https://consult.industry.gov.au/supporting-responsible-ai/submission/view/357 (accessed on 29.10.2025).

significantly affects them. This right does not apply if the choice is critical to entering into or carrying out a contract between the individual and the data controller; is allowed by Union or Member State law relevant to the controller, which also defines adequate procedures to protect the rights, liberties, and legitimate interests of the data subject; or is based on the expressed consent of the data subject.[12] Certainly, ensuring the ADM system does not control individuals' decisions solely safeguards their human rights and fosters dignity.

3.6 Transparency

One of the most well-known aspects of the rule of law is that the government must be transparent and follow the rules and decisions it makes (Zalnieriute et al., 2019). Non-transparent systems are more likely to produce unfair outcomes, as it is challenging to assess and adjust their fairness, which is especially concerning for those subject to human decisions (Schoeffer, 2022). As Burrell (2026) noted, opacity appears in three forms: deliberate corporate or state secrecy, technical illiteracy, and opacity arising from the nature of machine learning algorithms and the scale required for their effective use (Burrell, 2016). Finck (2019) added that there are two leading causes of transparency issues in ADM systems. First, the ambiguity of these systems can hide various intentional and unintentional biases and manipulations. Second, the public's ability to challenge the outcomes of these systems is limited by their lack of transparency. Security is another primary concern; as ADM systems are used more frequently, the risk of malicious exploitation increases, including attempts to alter or harm them. Examples include injection or alteration attacks on training datasets or unauthorised extraction of the model (Finck, 2019).

Effective oversight requires clear explanations of when and how ADM systems are used. When a public authority explains a decision to someone affected, these reasons must be meaningful. A complete explanation should include, among other things, that automation was used, the level of automation, the data processed by the ADM system, the date and version of the technology, and a simple explanation of how the technology works. Additionally, the statement should include standard information in decision notices, such as how to challenge or review the decision and who is responsible.[13] As a comparison, the Canada Directive on Automated Decision-Making requires transparency measures, including providing advance notice before decisions, offering justifications afterward, granting access to relevant information, and recording decisions.[14] While transparency about the use of ADM may serve the interests of the administration, it may hurt individuals. Therefore, it is crucial to reconcile effective management with individuals' procedural safeguards.

The European Union AI Act, adopted in 2024, further reinforces these commitments by imposing specific requirements on transparency, explanation, and accountability for the application of high-risk AI systems, such as those used in administrative decision-making. Under Articles 13–15 of the Act, public authorities must take steps to ensure that automated systems are operated so that affected persons can

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[12] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)

[13] NSW Ombudsman (2023). „Safe and Responsible AI in Australia" discussion paper. Available at: https://consult.industry.gov.au/supporting-responsible-ai/submission/view/357 (accessed on 29.10.2025).

[14] Directive on Automated Decision-Making (2019). Available at: https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32592 (accessed on 12.10.2025).

understand how and why a decision was taken and receive intelligible information on how human control was applied. These comprise record-keeping and reporting requirements on system capabilities and restrictions. These provisions harmonise with traditional administrative law principles (legality, equity, and reasonableness) by shielding efficiency achieved through automation from compromising procedural protections. Hence, the AI Act is a modern legal framework that puts into practice the balancing exercise between innovation in administration and the protection of individual rights.

3.7 Explainability and Interpretability

The algorithms on which the AI-based ADM system relies are complex—understanding how AI systems work is challenging due to their complexity and, in some cases, complete opacity. These so-called black box models can be too complicated for even experienced users to understand.[15] As a result, combining administrative effectiveness with procedural safeguards in the ADM system requires explainability and interpretability, enabling both technical and nontechnical individuals to understand the decisions taken. Explainability refers to how easily a model can explain the logic behind its forecasts or decisions. It involves clearly and understandably explaining how the model transforms inputs into outputs. Interpretability refers to the level of understanding someone has about the reasoning behind an artificial intelligence system's decision (Ailyn, 2024). The reasons for some form of interpretability in AI systems include providing users with confidence in the system, preventing discrimination, satisfying regulatory standards or policy requirements, improving system design, assessing risk, robustness, and vulnerabilities, understanding and validating system results, and encouraging personal independence, empowers individuals to challenge decisions, and fostering a sense of agency in how they are treated.[16] To make artificial intelligence algorithms more understandable and interpretable, a range of techniques and approaches can be used. This entails model simplification, the use of visualisation techniques, feature analysis, and the creation of textual descriptions (Frasca et al., 2024).

3.8 Accountability

The development of current directorial governance requires processes that ensure state institutions remain accountable and responsive to meet the needs of the public they serve (Zhyvko et al., 2025). Administrative accountability calls for government officials to justify their actions and decisions. It comprises being held to account for the results of one's actions. Fundamentally, accountability guarantees that public officials abide by rules and laws while upholding moral principles (Public Administration Institute, n.d.). Regarding ADM, information about its creation and application is essential for assessing the legality of decisions, ensuring the proper functioning of the system, and guiding individuals who wish to protect themselves against unjust or unpredictable intrusions into their lives. It represents a connection between an actor compelled to give an account, a forum that receives it, and the accountability between them. The account's features, as well as any resulting consequences, are also taken into consideration. Accountability has five types: legal responsibility to judicial bodies; political accountability

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[15] The Royal Society (2019). Explainable AI: the basics: Policy Briefing, November 2019. Available at: https://ec.europa.eu/futurium/en/system/files/ged/ai-and-interpretability-policy-briefing_creative_commons.pdf (accessed on 30.10.2025).
[16] *Ibid.*

to elected representatives and similar entities; administrative accountability to auditors and regulatory agencies; professional responsibility to internal and external colleagues; and social responsibility to community members and the public (Cobbe et al., 2021). The issue of who is accountable for ADM forms is significant. According to Finnish law, official accountability is personally held by each public official engaged with ADM. However, it has been argued that public organisations should assume responsibility for administrative decisions independently, rather than shifting accountability to individual public officials (Hirvonen, 2024). It appears that accountability for ADM use varies across legal systems. The distinction may appear to stem from the distinction between personal fault, where the fault is attributed to the public official and the public official bears compensation from their fund, and service faults, where the fault is attributed to the facility concerned, which is held liable for providing compensation. However, there are several issues regarding the accountability of algorithms in areas affecting the public sphere. Among the methods are better governance, greater transparency, and outcome monitoring (Shah, 2018). The principle of accountability helps preserve stakeholders' rights, regardless of who bears it.

3.9 The Framework for Reconciling Administrative Efficiency with Procedural Safeguards

The reconciliation of administrative efficiency and procedural safeguards in the use of ADM rests on the idea that, while automation enhances efficiency and consistency in administrative tasks by enabling decisions to be made quickly and effectively, it must be supported by procedural safeguards to protect human rights. The reconciliation process required the administration to act in accordance with established principles, without violating legal rules and principles that safeguard personal rights and freedoms. The reconciliation occurs when specific key mechanisms are satisfied, including compliance with the law, ensuring fairness, exercising rights freely and pursuing justice, providing human oversight, avoiding decisions made solely by automated systems, maintaining transparency in algorithmic decision-making processes, applying principles of explainability and interpretability when automated decisions are made, and upholding accountability standards.

Compliance with the law requires competent administration to adhere to enforceable constitutional and regulatory standards. For example, when ADM processes involve sensitive information, such as racial or ethnic background, political views, religious or philosophical beliefs, trade union membership, or data related to genetics, biometrics, health, or sexual orientation, they must be grounded in legal frameworks, uphold fundamental data protection rights, and incorporate appropriate and measures to safeguard the essential rights and interests of the individual whose data is being processed. Moreover, such processing should be necessary for significant public interest reasons and must be proportional to the intended outcome (William, 2021). About the law's compliance with the human rights safeguards, the Hague District Court of the Netherlands stated that: "*The court has decided that the legislation does not strike a fair balance, as required under the ECHR, which would warrant a sufficiently justified violation of private life.*"[17]

Concerning fairness, decisions made by algorithms should not result in unfair, biased, or unequal outcomes (Starke, 2022). Providing models can increase perceived fairness. Personalised reasoning frameworks tend to positively influence perceptions of

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[17] District Court of The Hague. (2020). NJCM et al. v. The Netherlands (SyRI – System Risk Indication), ECLI:NL: RBDHA:2020:1878. Available at: https://www.escr-net.org/wp-content/uploads/2020/09/ecli_nl_rbdha_2020_1878.pdf (accessed on 29.10.2025).

fairness in automated decisions compared to human decisions, and well-crafted justifications can enhance the acceptance of automated governance (Henning and Langenbach, 2025). Furthermore, avoiding the collection of specific protected characteristics, such as race, gender, or age, for ADM can help eliminate discrimination, a form of inequality (Iwan, 2021). Regarding the exercise of rights and the pursuit of justice, the effectiveness of administrative and procedural safeguards in ADM depends on individuals' ability to assert their rights through automated processes that are legally certified, and to seek justice when affected by ADM. Both mechanisms represent the exercise of human rights, which are the right to access information and the right to seek justice before the competent courts of the state. Human oversight necessitates that decision-makers evaluate ADM system outputs, particularly in specific areas of decision-making (Sales, 2024). This requires at least one human operator to actively supervise ADM operations, evaluate the decisions, and intervene, when necessary, by correcting or validating automated outputs before a final decision is made. (Bernardo and Hernández, 2025) .

Reconciliation of administrative efficiency and procedural safeguards can be achieved by avoiding decisions made solely by automated systems, as the Court of Justice for the European Union (CJEU) ruled: "if a decision is based solely on automated processing and that decision significantly affects the individual, then the individual has the right to obtain an explanation of the decision." (Jaworski et al., 2025). Regarding transparency, the CJEU stated that individuals are entitled to comprehensible information about the rationale behind automated decision-making processes, including the significant parameters and their impact on the evaluation. The data controller must go beyond providing merely a complex mathematical formula or vague information; it must ensure that the data subject can understand how the automated decision-making mechanism operates in a specific case (Barbera and D'Ottavio, 2025). *Vis-à-vis* explainability and interpretability mechanisms, concerns how readily a model can clarify the reasoning behind its predictions or choices, and the degree of comprehension an individual has regarding the rationale behind the decisions made by an artificial intelligence system. To ensure accountability, the provider of an ADM system must clarify and justify their actions and establish mechanisms for mitigation and oversight to address and rectify issues (Aysolmaz et al., 2023).

4. RESULTS AND DISCUSSION

The article revealed that reconciling administrative efficiency with procedural safeguards in ADM's use for administrative duties can be achieved through several key mechanisms, including adherence to the law, ensuring fairness, exercising rights freely and pursuing justice, incorporating human oversight, avoiding decisions made solely by automated systems, ensuring transparency, explainability and interpretability to make the ADM- based decisions understandable, and maintaining accountability. The reconciliation between administrative efficiency and procedural safeguards in the ADM's framework usage is crucial. It ensures that ADM decisions comply with enforceable legal rules, which enhances the rule of law, prevents unfair and discriminatory decisions, protects human rights, verifies the legality and appropriateness of decisions through human intervention, respecting the dignity of the human being so that they are not merely the subject of an automated decision, providing openness and clearness in machine-based administrative decisions, clarifying the automated administrative decision-making processes, and confirms that no one escapes accountability, whether the fault is

attributed to the concerned public official or the institution, which is in the interest of both individuals and the administration.

The main result of the article aligns with the existing literature. Veale et al. (2018) noted that there is an increasing call for greater emphasis on fairness and accountability in public decisions driven by algorithms, such as those related to taxation, justice, and child protection (Veale et al., 2018). Suksi (2020) noted that legal systems exist under which individuals responsible for or involved in software within public authorities may also be held accountable and liable for automated decision-making decisions (Suksi, 2020). Ng et al. (2020) reported that the Australian Department of Social Services' recent use of an automated debt collection system has generated controversy, underscoring how government decision-making automation raises key legal issues, such as transparency, procedural justice, and the ability to review decisions. (Ng et al., 2020) The Future of Privacy Forum (2022) indicates that, in ADM cases, the concepts of fairness and lawfulness are approached differently.[18] Green (2022) emphasised that a vital component of global efforts to regulate government algorithms is the requirement for human oversight of algorithmic decisions. Despite the widespread movement toward human oversight (Green, 2022), Malgieri (2019) pointed out that an intriguing safeguard is the ability to challenge automated decisions (Malgieri, 2019). Ailyn (2024) explained that when using complex models, such as neural networks, explainability is crucial because understanding individual predictions can be vital for informed decision-making. Conversely, in high-stakes scenarios such as legal rulings or medical diagnostics, where the model must be entirely transparent and easy to interpret, clarity is preferred (Ailyn, 2024). Similarly, Zou and Zhang (2022) demonstrated that the often-hidden inner workings of machine learning algorithms can leave individuals vulnerable if they lack the right to an explanation. Therefore, the right to an explanation of such decisions has become a significant legal concern (Zou and Zhang, 2022).

The paper's results emphasise the importance of governance mechanisms that reconcile administrative efficiency with procedural safeguards.

While this article offers valuable insights into reconciling administrative efficiency and procedural safeguards, some limitations should be noted. The paper did not cover specific ADM mechanisms, such as making systems inclusive and accessible to diverse populations, involving stakeholders in the design and development of ADM policies, providing fair and accessible methods to correct errors, and applying the principle of proportionality to match protective measures with the level of impact from automated decisions.

5. CONCLUSION

The article examined the reconciliation between administrative efficiency and procedural safeguards when the ADM system is employed. The results showed that various essential mechanisms for reconciling administrative efficiency with procedural safeguards in ADM are utilised for administrative tasks. The paper is a general framework for future research to investigate the reconciliation between administrative efficiency and primary mechanisms, such as compliance with law, human oversight, fairness, avoidance of decisions made solely by an automated system, transparency, and accountability, as independent topics. Additionally, it suggests that

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[18] Future of Privacy Forum. (2022). Automated decision-making under the GDPR: Practical cases from courts and data protection authorities (Report). Available at: https://fpf.org/wp-content/uploads/2022/05/FPF-ADM-Report-R2-singles.pdf (accessed on 24.10.2025).

future research should evaluate how ADM affects jurisdiction, form, and purpose, providing reasons as fundamental aspects of administrative decisions.

The results of this paper demonstrate that procedural protection and efficacy are not contradictory values but complementary aspects of legitimate administration. An administrative automaton is only feasible for optimising quality and consistency if it is based on a transparent, accountable framework. The reconciliation model presented demonstrates that incorporating procedural assurances into the structure and operation of ADM systems ensures that administrations achieve performance improvements without compromising legality and fairness. Thus, the rule of law is a precondition of technological success rather than an external straitjacket.

These results have significant implications for policymakers and researchers. Public governments must move beyond compliance checklists and adopt proactive governance models that integrate human intervention, documentation, and transparency across all stages of ADM implementation. Future research would examine the actual use of such safeguards across EU and non-EU Member States to identify the impact of institutional design on accountability outcomes. Strengthening this empirical and comparative approach will be essential to ensuring that ADM delivers both administrative effectiveness and citizens' fundamental rights in the future.

Effectively, this work serves as a starting point for the future. Rather than creating new empirical evidence, it explains and synthesises existing knowledge to assist in structuring subsequent research into how public administrations can responsibly and effectively utilise automated decision-making.

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