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Legal Challenges in the Judicial Review of AI-Based Administrative Decisions: A Comparative Study of Iraq, the United States, and Switzerland

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ABSTRACT

The increasing use of artificial intelligence in public administration has created new challenges for judicial review by changing the processes through which administrative decisions are formed, documented, explained, and contested. This article examines the legal challenges associated with judicial review of AI-based administrative decisions through a comparative analysis of Iraq, the United States, and Switzerland. The study adopts a descriptive, analytical, and comparative legal approach and focuses on the continued application of traditional administrative-law principles in technologically mediated decision-making. It argues that the use of artificial intelligence does not alter the legal nature of an administrative decision or transfer public competence to a technological system. Nevertheless, AI may complicate judicial scrutiny by distributing relevant decision-making elements across datasets, automated classifications, model outputs, technical logs, private software systems, and human interactions with algorithmic recommendations. The analysis identifies algorithmic opacity, limited access to technical evidence, difficulties in reconstructing the decision-making process, trade-secret claims, inadequate reason-giving, automation bias, and ineffective human oversight as major obstacles to meaningful judicial review. The comparative analysis shows that the United States provides relatively developed administrative review mechanisms, while Switzerland combines administrative procedure with stronger data-protection and automated-decision safeguards. Iraq retains the general foundations of judicial review but requires a more integrated framework to ensure effective reviewability of AI-based administrative decisions. The article concludes that reform should focus on risk-based regulation, prior impact assessment, technical documentation, preservation of decision records, meaningful explanation, genuine human review, judicial access to necessary technical information, and appropriate interim and corrective remedies. These measures can preserve the effectiveness of judicial review while allowing public authorities to benefit from artificial intelligence without weakening legality, accountability, procedural fairness, or the rule of law.

Keywords: *Artificial Intelligence; Administrative Decisions; Judicial Review; Administrative Law; Transparency; Explainability; Human Oversight; Iraq; United States; Switzerland*

Introduction

The increasing incorporation of artificial intelligence into public administration has begun to transform the mechanisms through which administrative authorities gather information, assess individual circumstances, classify applicants, determine eligibility, evaluate risks, allocate public resources, and formulate decisions affecting rights

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and legal interests. Although the use of computational systems in public administration is not entirely new, contemporary AI-based systems differ from earlier forms of administrative automation because they may perform complex analytical tasks, identify patterns within large datasets, generate predictions, rank alternatives, and provide recommendations that substantially influence the exercise of administrative power. Coglianese and Lehr observe that machine-learning technologies make possible forms of administrative decision-making in which complex correlations can influence government action without being reducible to conventional rule-based programming (1). The expansion of such technologies does not, however, alter the fundamental legal proposition that administrative power remains subject to law. Public authorities cannot escape principles of legality, competence, procedural fairness, rationality, accountability, and judicial supervision merely because administrative choices are informed by technologically sophisticated systems. Cobbe accordingly emphasizes that automated public-sector decision-making must remain within the framework of administrative law and judicial review rather than being treated as a technologically exceptional domain beyond established legal controls (2). The central difficulty lies not in whether judicial review continues to apply but in how traditional standards of review can be made effective when the actual formation of an administrative decision depends partly upon data structures, algorithmic models, software configurations, technical classifications, and interactions between public officials and automated systems.

The legal significance of AI-assisted administration arises primarily from the changing location and form of the reasoning process behind public decisions. In a conventional administrative setting, the record available to an affected individual or reviewing court ordinarily consists of applications, documents, reports, correspondence, statements by officials, statutory provisions, and written reasons. When AI materially contributes to a decision, some of the most influential components may instead be located in databases, statistical models, system parameters, risk classifications, automated recommendations, technical logs, model versions, and interfaces through which officials interact with generated outputs. Engstrom and Ho explain that algorithmic systems challenge familiar accountability mechanisms because relevant administrative judgment can become distributed across technological design, agency deployment, data selection, and operational practices (3). The result is a potential divergence between the formal decision and the process that actually produced it. An administrative officer may remain the legal signatory, while the decisive judgment concerning entitlement, risk, priority, or compliance may have been substantially shaped by an automated recommendation. Such circumstances create difficult questions for judicial review because the legality of the final decision cannot necessarily be evaluated solely from its visible wording or the identity of the officer who formally issued it.

These developments are particularly important because legal attribution remains with the public authority even where AI plays a substantial role in decision formation. The use of intelligent systems cannot create administrative competence that the authority itself does not possess, nor can technological design become an independent legal source of public power. Braun Binder's analysis of machine-generated administrative orders demonstrates that automation raises questions about the relationship between technological production and the legal concept of an administrative decision, yet the existence of machine involvement does not itself displace the requirement that governmental action have an identifiable legal basis (4). In the Iraqi context, Rahim similarly stresses that artificial intelligence may transform the mechanisms and stages through which administrative decisions are developed without eliminating the legal elements traditionally required for their validity (5). Competence, form, procedure, factual basis, subject matter, and purpose therefore remain legally relevant. The challenge is that defects affecting these elements may no longer appear exclusively at the final decision stage. They may arise earlier in data

collection, model design, classification criteria, software configuration, or the way officials are instructed to rely upon automated recommendations.

The distinction between a genuinely automated decision and an AI-assisted decision is also legally significant, but it should not be approached as a purely technical classification. Public systems may occupy a spectrum ranging from tools that merely organize information to systems that generate predictions, determine priority, recommend specific outcomes, or effectively produce decisions that officials routinely approve. Obrecht explains in the Swiss context that an “automated individual decision” under data-protection law and an administrative decision under public law are conceptually related but not identical categories (6). The practical legal inquiry should therefore focus on the actual role of the system in the decision-making process. Oswald argues that administrative-law analysis must examine the extent to which algorithmic recommendations influence or structure discretionary judgment rather than relying on superficial labels such as “support,” “assistance,” or “advice” (7). If an official retains genuine authority and capacity to evaluate the evidence, disregard the automated result, and substitute an independently reasoned conclusion, AI may function as an evidentiary or analytical tool. Where officials routinely accept system outputs, lack the knowledge or authority to depart from them, or are organizationally pressured to follow algorithmic recommendations, the nominal existence of human participation may conceal effective automation.

Judicial review in this environment must therefore confront both familiar legal questions and new evidentiary problems. The first category concerns traditional legality: whether the authority acted within statutory competence, followed required procedures, considered relevant matters, excluded irrelevant considerations, accurately established facts, exercised discretion rather than unlawfully fettering it, pursued the proper statutory purpose, and supplied legally adequate reasons. The second category concerns the court’s ability to determine what actually happened within an AI-supported administrative process. This includes identifying the data relied upon, the version of a system in use at the relevant time, the variables that materially influenced the result, the extent of human intervention, the possibility of overriding an automated recommendation, and whether later system modifications have made the original decision difficult to reconstruct. Bloch-Wehba identifies access to algorithms and privately developed technological infrastructures as a major challenge for legal accountability, particularly when proprietary interests and trade-secret claims limit disclosure (8). A right to judicial review becomes substantially weakened if neither the claimant nor the court can gain meaningful access to the material needed to establish the grounds upon which the contested decision was produced.

Transparency therefore assumes a central but carefully defined role. Transparency cannot simply mean complete publication of source code or unlimited disclosure of technical information. Ananny and Crawford warn that transparency can become an inadequate accountability ideal when access to technical information does not produce meaningful understanding of institutional behavior or decision-making processes (9). For judicial review, the legally relevant question is whether the available information makes it possible to identify and contest the material considerations that influenced administrative action. This may require different forms of information for different actors. An affected person needs an understandable explanation of why the decision was made and which facts or classifications were decisive. A court may require access to a more detailed administrative and technical record. An independent expert may need to examine model performance, relevant data, operational logs, or testing documentation. Functional transparency is therefore more important than indiscriminate disclosure. Kaminski’s discussion of algorithmic accountability similarly illustrates that information rights should be connected to

mechanisms that permit explanation, challenge, and institutional responsibility rather than being treated as ends in themselves (10).

Closely related to transparency is the duty to give reasons. Reason-giving remains one of the principal mechanisms by which administrative legality becomes visible and contestable. Braun Binder and Obrecht explain that algorithmic systems create particular difficulties for administrative reason-giving because a technical account of model operation does not necessarily amount to a legal explanation for the decision in an individual case (11). A public authority cannot ordinarily discharge its duty to provide reasons simply by stating that an automated system assigned a particular score or recommendation. The administration must connect the material facts, relevant legal rules, and technological contribution in a manner that permits the person affected to understand why the legal conclusion followed. Technical explainability may support this obligation, but it cannot replace legal justification. The distinction is essential because a system may be technically interpretable while the administrative reliance placed upon it remains legally unjustified.

Human oversight creates another fundamental difficulty. The use of AI is often defended on the basis that an official remains “in the loop,” but formal human involvement does not necessarily establish meaningful administrative judgment. Alon-Barkat and Busuioc demonstrate that public officials may display automation bias by according excessive weight to algorithmic advice, while at other times engaging in selective adherence to automated recommendations (12). Kazim and Tomlinson connect such behavior directly to established principles of judicial review, including improper fettering of discretion and failure to consider relevant circumstances (13). Where law entrusts discretionary power to a designated administrative authority, that authority must genuinely exercise judgment. The presence of a signature or final confirmation screen cannot cure a process in which the legally competent official treats the algorithmic output as effectively binding.

The comparative perspective adopted in this article is especially useful because Iraq, the United States, and Switzerland illustrate different institutional approaches to the same general problem. Iraqi administrative law preserves the principle of judicial review and traditional grounds of administrative legality, but the emergence of AI exposes procedural and evidentiary gaps concerning technical records, data access, explanation, and institutional oversight. Muhammad’s examination of judicial control over electronic administrative decisions demonstrates that digitization complicates questions of jurisdiction and the identification of legally significant stages of administrative action (14). Abd likewise emphasizes the need for legal controls over administrative decisions involving artificial intelligence in Iraq (15). The United States offers a more developed administrative-law infrastructure for examining agency action, including review of arbitrary or capricious action, statutory authority, procedural compliance, and administrative records, but private technological contractors and highly complex systems create continuing barriers to meaningful scrutiny. Calo and Citron describe the broader legitimacy concerns created by the emergence of an automated administrative state, particularly where conventional accountability mechanisms fail to match technological forms of governmental power (16). Switzerland provides a useful model because general administrative procedure, data protection, procedural participation, reason-giving, and rights associated with certain automated individual decisions operate in a relatively integrated legal environment. Suter’s analysis of automated individual decisions under Swiss data-protection law illustrates the increasing importance of notification, human intervention, and procedural safeguards in technologically mediated decision-making (17).

The objective of this article is to identify the principal legal challenges confronting judicial review of AI-based administrative decisions and to assess how judicial protection can remain effective when administrative judgment

is partly embedded in technological systems. It examines the legal foundations applicable to AI-based decisions, the principal procedural and evidentiary obstacles to judicial review, the treatment of these problems in Iraq, the United States, and Switzerland, and the reforms that may strengthen Iraqi administrative law. The study adopts a descriptive, analytical, and comparative legal approach. Its central argument is that AI does not require abandonment of traditional administrative-law principles, but those principles must be operationalized in ways capable of reaching the technological processes that materially shape administrative decisions. Effective judicial review must therefore remain focused on legality while gaining access to the data, technical documentation, decision records, human interventions, and explanatory materials necessary to determine whether legality has actually been respected.

Legal Foundations of AI-Based Administrative Decisions

The legal analysis of AI-based administrative decisions should begin from the proposition that technological involvement changes the means through which administrative decisions are formed without necessarily changing their juridical nature. An administrative decision remains an exercise of public authority where it is attributable to a legally competent administrative body and produces legal consequences for an individual or defined group. The fact that data processing, predictive analytics, classification, or recommendation has been delegated to software does not transform the software into a public authority. Rahim explains that the impact of artificial intelligence on administrative decision-making may reach the stages of information processing, assessment, and selection, but the traditional legal requirements governing administrative action continue to apply (5). This distinction is fundamental for judicial review because a technological system cannot become a convenient intermediary through which the administration escapes responsibility. The authority that selects the system, defines its function, determines the context of deployment, adopts its output, and gives that output legal effect remains responsible for ensuring that the final administrative act complies with governing law.

Administrative competence is therefore one of the first legal foundations requiring careful attention. Competence is conferred by law upon specified institutions and officials, and technological procurement does not authorize the transfer of legally assigned public functions beyond the limits permitted by legislation. Muhammad's study of jurisdiction in electronic administrative decisions shows that digitization creates complications in identifying how competence is exercised, but it does not eliminate the need to attribute the decision to an authorized administrative organ (14). When AI merely performs clerical or analytical functions, the question of competence may be relatively straightforward. Greater difficulties arise when the system determines substantive classifications, applies normative criteria, ranks individuals, predicts risks, or generates outcomes that are rarely questioned by officials. In such cases, judicial review must determine whether technology remains subordinate to legally authorized administrative judgment or whether the administration has effectively transferred a decision-making function that legislation entrusted to human officials or designated institutions.

The principle of legality extends beyond formal competence to the legal basis for the use of the system itself. An administrative authority may possess general competence over a field such as taxation, public benefits, licensing, migration, employment, education, or public procurement, yet that does not automatically answer whether a specific form of automated decision-making is lawful. Braun Binder argues that machine-generated administrative orders remain dependent upon the legal framework governing the authority and the nature of the administrative function involved (4). The more substantially an automated process affects rights, obligations, access to public services, or

legal status, the stronger the argument that the legal basis should identify or at least clearly support the form and scope of automation being used. General statutory authority to administer a program should not be interpreted as unlimited authorization to replace individualized legal judgment with computational processes where the governing law requires consideration of individual circumstances or discretionary balancing.

This concern is especially important where AI systems convert broad statutory standards into operational variables. Administrative legislation frequently relies upon concepts such as reasonableness, necessity, public interest, proportionality, suitability, risk, hardship, credibility, or individual need. These concepts require interpretation and context. A technological system, however, must operate through defined inputs, classifications, thresholds, models, or training patterns. The translation of legal standards into technical parameters can therefore create a hidden normative layer within administrative decision-making. Coglianese and Lehr explain that machine learning differs from conventional administrative rulemaking because its predictive relationships may not correspond to easily articulated causal or legal rules (1). If an agency uses statistical correlations as substitutes for legally relevant criteria, a judicial question arises as to whether the system remains faithful to the statute's purpose and substantive requirements. The technical validity of a prediction does not itself establish the legal relevance of the factors producing it.

This relationship between technical criteria and legal purpose also affects the traditional doctrine of improper purpose. Administrative power must be exercised for the ends for which it was conferred. An AI system optimized for administrative efficiency, fraud detection, resource savings, enforcement rates, or predictive accuracy may generate decisions that serve institutional goals different from the objectives contemplated by legislation. Engstrom and Ho note that algorithmic accountability must examine not only isolated outputs but also the institutional choices made in designing, acquiring, testing, and deploying systems (3). If a benefits agency, for example, employs a model designed primarily to minimize expenditure rather than accurately apply statutory eligibility requirements, the defect may be embedded in the system's objective function rather than visible in the wording of any particular administrative decision. Judicial review must therefore remain capable of asking whether the technological process was designed and used consistently with the proper legal purpose.

The factual basis of administrative decisions is similarly transformed by AI. Traditional review of factual error generally concerns whether the administration relied on incorrect information, failed to investigate relevant circumstances, or reached conclusions unsupported by evidence. AI systems multiply the possible sources of factual distortion. Errors may arise from incomplete databases, inaccurate records, outdated information, inappropriate proxies, unrepresentative training data, incorrect classifications, model drift, or data-processing failures. Abd emphasizes that legal controls over AI-generated or AI-supported administrative decisions must address the reliability and legal appropriateness of the information underlying those decisions (15). The administration cannot avoid responsibility by asserting that the system processed the data automatically. If the factual foundation is legally relevant to an adverse decision, mechanisms must exist for the individual and the court to identify, challenge, and correct inaccurate data and erroneous classifications.

The duty to provide reasons constitutes another essential legal foundation because it links substantive legality with procedural accountability. Braun Binder and Obrecht demonstrate that algorithmic systems intensify the difficulty of reason-giving because the explanation generated for technical purposes may not answer the legal questions an affected person is entitled to understand (11). A model may indicate that a particular variable contributed strongly to a result, but the administration must still explain why that variable was legally relevant, how

it related to the statutory criteria, and why the resulting decision followed. Reason-giving is therefore not synonymous with technical explainability. A legally adequate statement of reasons should identify the material factual basis, the applicable legal standards, the role of any significant automated assessment, and the administrative evaluation connecting those elements.

Transparency and explainability should be understood in a similarly functional manner. Ananny and Crawford caution against assuming that visibility automatically produces accountability, because complex systems can remain difficult to understand even when substantial technical information is disclosed (9). Source-code disclosure may occasionally be necessary, but it will rarely be sufficient by itself. A reviewing court may need information about the data used in the individual case, the model version operating at the relevant time, the variables or classifications that materially contributed to the result, validation evidence, known limitations, and records of human intervention. Kaminski's work on algorithmic accountability demonstrates that meaningful governance requires disclosure to be connected to institutional procedures through which information can support contestation and review (10). The purpose of transparency in administrative law is therefore not technological openness as an abstract value but the preservation of legal intelligibility.

Confidentiality and proprietary rights complicate this requirement. Government agencies increasingly procure technological systems from private vendors that may claim trade-secret or intellectual-property protection over code, models, documentation, or testing methods. Bloch-Wehba argues that access to algorithms becomes especially problematic where privatization creates informational barriers between public decision-making and the individuals subject to it (8). A legitimate commercial interest in protecting proprietary information cannot be allowed to produce de facto immunity from judicial review. The relevant distinction is between public disclosure and protected legal access. Courts can employ confidentiality orders, restricted expert review, sealed evidence, or other procedures that preserve commercially sensitive information while still allowing the legality of government action to be tested. A public body should also ensure through procurement contracts that it retains sufficient access rights to comply with administrative-law duties and judicial orders.

Human oversight provides the bridge between technological assistance and legally accountable discretion. Oswald argues that algorithm-assisted decision-making should be evaluated through established principles governing discretionary power, particularly whether the legally entrusted decision-maker remains capable of considering the individual circumstances of the case (7). An administrative authority cannot lawfully fetter discretion by treating a predetermined policy, guideline, or external recommendation as binding where legislation requires genuine judgment. The same logic applies to AI. If a risk score, eligibility prediction, or automated ranking becomes effectively conclusive, the decision may be legally defective even though a human official technically approved it.

Automation bias makes this issue more complex. Alon-Barkat and Busuioc show that human decision-makers may defer excessively to algorithmic advice because machine outputs are perceived as objective, data-driven, or institutionally authoritative (12). Kazim and Tomlinson connect automation bias with judicial-review doctrines by showing how uncritical reliance on algorithmic recommendations can produce failure to consider relevant evidence or unlawful self-fettering (13). Meaningful human oversight therefore requires more than placing an employee at the final stage of a workflow. The official must possess sufficient information, training, authority, and practical opportunity to question the result. Organizational arrangements should not punish departure from automated recommendations or make review so burdensome that formal discretion becomes illusory.

Laux and Ruschemeier further demonstrate that legal requirements for human oversight must account for the practical difficulty of "de-biasing" human interaction with AI systems (18). Merely instructing officials to exercise independent judgment may be inadequate if the interface presents algorithmic results as authoritative, if explanation is unavailable, or if the official cannot realistically reconstruct the underlying assessment. Effective oversight therefore requires system design and institutional arrangements that enable rather than merely proclaim human control. This includes access to relevant underlying information, the possibility of overriding outputs, recording the reasons for following or departing from recommendations, and escalation procedures for uncertain or high-impact cases.

Procedural fairness is likewise affected. Citron's concept of technological due process emphasizes that automated government systems can undermine procedural protections when individuals cannot identify or correct the information and logic shaping adverse governmental decisions (19). Procedural fairness requires a meaningful opportunity to know the case to be answered, respond to relevant adverse material, and obtain review by a competent authority. If an AI-generated classification or score materially affects the administrative outcome but remains undisclosed, the individual may be unable to challenge the true basis of the decision. Notice of material AI involvement therefore becomes important in high-impact contexts because a person cannot effectively contest a process whose existence or significance is concealed.

Swiss developments illustrate how data-protection law can supplement administrative procedure in this respect. Obrecht explains that the category of automated individual decisions under Swiss data-protection law does not perfectly coincide with the category of administrative decisions, but the two regimes may interact when public-sector automation affects individuals (6). Suter describes the legal significance of identifying automated individual decisions and the safeguards associated with such processes, including the possibility of human review (17). These mechanisms are valuable because they address informational and procedural dimensions that traditional administrative-law doctrines may not expressly formulate in technological terms. Yet the broader lesson is not that data-protection law should replace administrative law. Rather, information rights, data accuracy, notification, and human intervention should operate alongside the legality, reason-giving, competence, and judicial-review requirements that govern public power.

Accountability must therefore extend across the lifecycle of an AI system. Busuioc argues that accountable artificial intelligence requires institutional arrangements capable of identifying responsibility rather than allowing algorithmic complexity to diffuse it (20). Decisions about procurement, design specifications, training data, validation, deployment, monitoring, updates, and retirement can all affect the legality of subsequent administrative decisions. Goodman and Trehu similarly emphasize the role of algorithmic auditing in the broader search for AI accountability (21). Auditing is not a substitute for judicial review, but it can produce documentation and evidence that make later judicial scrutiny possible. Pre-deployment assessment and continuing monitoring can identify systemic problems before they affect large numbers of individuals.

The central legal position is therefore one of continuity combined with adaptation. Traditional principles remain applicable because administrative power remains administrative power regardless of the technological instruments used. What changes is the evidentiary and institutional environment in which legality must be established. The legal foundations of AI-based administrative decision-making consequently require identifiable competence, sufficient statutory authorization, factual reliability, fidelity to statutory purpose, meaningful reason-giving, functionally useful transparency, genuine human control where discretion is required, and procedural opportunities to contest

significant automated influences. Without these conditions, judicial review risks becoming formal rather than effective, because the traditional grounds of challenge may remain theoretically available while the material necessary to prove them becomes technologically inaccessible.

Legal and Procedural Challenges of Judicial Review

The principal challenge confronting courts reviewing AI-based administrative decisions is not the disappearance of legal standards but the increasing difficulty of reconstructing the administrative process to which those standards must be applied. Judicial review traditionally begins from an identifiable decision, an administrative record, a known decision-maker, articulated reasons, and a body of factual material capable of examination. AI-supported decision-making can fragment these elements across technical and organizational systems. Cobbe observes that automated government requires administrative law to engage with the mechanisms through which machines participate in public decision-making rather than confining scrutiny to the final formal act (2). A claimant may receive a simple refusal, classification, sanction, or eligibility determination while the actual path to that result includes data obtained from several databases, automated transformations, model-generated classifications, risk scores, and an official interaction with an interface whose recommendations may or may not have been independently examined. The court's task is therefore to reconstruct the legally material chain of decision formation.

Opacity is the most visible aspect of this problem, but opacity itself has several dimensions. Technical opacity arises where complex computational models cannot easily be described in conventional causal terms. Institutional opacity arises when an authority cannot or will not disclose how a system is used. Contractual opacity occurs when private suppliers restrict access to models, documentation, or source code. Procedural opacity appears where the official record does not capture the role played by AI in reaching the decision. Ananny and Crawford show that opacity cannot be solved through a simplistic demand for transparency because even extensive disclosure may fail to reveal how power operates within a sociotechnical system (9). Consequently, courts should distinguish between disclosure that is merely voluminous and disclosure that is legally useful. Thousands of pages of technical specifications may be less valuable than a clear record identifying the relevant model version, input data, material factors, automated recommendation, confidence or risk classification, and subsequent human action.

Engstrom and Ho explain that effective algorithmic accountability in the administrative state depends upon the preservation of records capable of making technological decision processes reviewable (3). This requirement has major implications for judicial procedure. AI systems may be updated frequently, meaning that the system examined during litigation may not be identical to the one that produced the contested decision. Data may change, models may be retrained, variables may be reweighted, and software interfaces may be modified. Unless agencies preserve version-specific documentation and logs, later reconstruction may be impossible. The relevant question is not how the system operates today but how it operated when the administrative decision was made. A legally adequate administrative record in an AI context should therefore preserve information capable of connecting the challenged decision to the technological environment in which it was formed.

The burden of proof creates a related problem. Traditional judicial review often expects the claimant to identify the defect alleged in the administrative decision. Yet an individual cannot reasonably identify a defect hidden within inaccessible technical processes. A person may suspect that an incorrect database entry, discriminatory proxy, outdated model, inappropriate classification, or automated recommendation affected the outcome but lack the evidence necessary to particularize the claim. Bloch-Wehba's analysis of access to algorithms demonstrates that

informational asymmetry can prevent meaningful legal contestation when the administration or its contractor exclusively controls the relevant materials (8). This suggests that procedural rules should respond to situations in which the state possesses uniquely relevant evidence. Once a claimant raises a plausible challenge concerning material algorithmic influence, the administration may reasonably be expected to produce records showing how the decision was reached.

Trade secrecy represents one of the most difficult manifestations of evidentiary asymmetry. Public agencies often rely upon privately developed systems whose vendors contend that disclosure would reveal proprietary techniques or commercially valuable information. Commercial confidentiality deserves legal protection, but it cannot override the structural requirement that public power remain reviewable. Bloch-Wehba notes that privatized algorithmic systems can create barriers to access that would not exist if the government developed the relevant decision-making process internally (8). A government body should not be permitted to acquire technology under contractual terms that prevent it from explaining or defending the legality of its own decisions. Procurement arrangements should therefore preserve audit rights, access rights, documentation duties, and the capacity to disclose necessary material to courts and authorized experts under confidentiality protections.

Expert evidence becomes increasingly important when judicial review involves model behavior, data quality, statistical validation, or technical architecture. Courts are not expected to become software engineers or data scientists. Their role remains the interpretation and application of law. Kumar's analysis of judicial treatment of scientific and technical expertise emphasizes the continuing need for courts to engage competently with specialized evidence without transferring ultimate legal judgment to experts (22). In AI litigation, experts may explain how a system operates, whether the relevant data were correctly processed, whether the identified model version could produce the challenged result, whether validation methods were appropriate, or whether particular factors materially influenced an output. The court must then determine the legal consequences of those technical facts. Expertise assists judicial review; it does not replace it.

The boundary between legitimate administrative expertise and unlawful judicial deference is equally important. Complex systems may encourage judges to regard technological decisions as matters beyond conventional legal scrutiny. Such an approach would be dangerous because technical complexity is not itself a source of lawful authority. Busuioc argues that accountability failures arise when algorithmic systems are treated as autonomous or inherently objective rather than as institutional artifacts produced and deployed through human choices (20). Courts should therefore distinguish between technical judgments that law entrusts to administrative bodies and legal questions concerning competence, procedure, relevant considerations, reasons, statutory interpretation, and rights. Judicial review need not determine the optimal machine-learning model to examine whether the administration lawfully relied upon the model it selected.

Administrative discretion presents perhaps the most conceptually significant challenge. Many statutory schemes deliberately confer discretion because lawful decisions require contextual evaluation that cannot be fully predetermined. AI can support this process by organizing evidence or estimating relevant risks, but problems emerge when predictive outputs become substitutes for judgment. Oswald argues that the use of algorithmic tools should be assessed through doctrines governing discretion, including the prohibition against treating guidance as inflexible and the requirement to consider individual circumstances (7). A model trained to predict a general outcome may be statistically useful while remaining incapable of accounting for exceptional circumstances legally relevant

to a particular person. If the administration treats the prediction as determinative, the exercise of discretion may become unlawfully rigid.

Automation bias provides an evidentiary mechanism through which this defect may occur. Alon-Barkat and Busuioc show that officials may over-rely on automated recommendations because technological outputs appear objective or institutionally authoritative (12). Kazim and Tomlinson explain that automation bias can be translated into familiar grounds of judicial review, such as failure to consider relevant evidence or unlawful fettering of discretion (13). The difficulty for a court is proving the actual influence of the system. An official may testify that the ultimate decision remained human, yet operational records may reveal that deviations from algorithmic recommendations were extremely rare or procedurally discouraged. Effective review therefore requires evidence not merely of formal authority but of actual decision-making practice.

Laux and Ruschemeier underline that human oversight cannot simply be presumed effective because a human actor appears somewhere in the process (18). Oversight depends on the design of the system, the information available to officials, organizational incentives, time pressures, training, and the practical ability to depart from algorithmic recommendations. Judicial review should therefore consider whether officials could understand the system's output, whether contradictory evidence was available, whether departure was technically possible, and whether the decision record indicates individualized evaluation. These inquiries do not require courts to micromanage administration. They determine whether the statutory decision-maker actually exercised the power entrusted to it.

The adequacy of reasons is another recurring challenge. If the administration simply reproduces an automated score or classification, the individual may know the outcome without knowing the legal justification. Braun Binder and Obrecht argue that reason-giving in algorithmic administrative decisions must connect technological outputs to the legal and factual considerations relevant to the case (11). A statement such as "the system assessed the applicant as high risk" is not ordinarily sufficient if the designation forms the basis of an adverse administrative act. The affected person needs to know which material facts or factors supported that assessment and how the classification relates to the governing legal standard. Courts similarly require reasons that permit evaluation of whether relevant considerations were properly applied.

The question of remedies also becomes more complicated because AI systems can generate large numbers of decisions rapidly. Annulment of an individual act may provide relief to one claimant while leaving the underlying technical defect untouched. Engstrom and Ho emphasize that algorithmic accountability problems can be structural rather than confined to isolated decisions (3). If an unlawful variable, erroneous database, or defective model continues to operate, similar decisions may be produced repeatedly. Judicial remedies therefore need to be considered at both individual and systemic levels, subject to the powers granted to the reviewing court. An annulment remedy may need to be accompanied by reconsideration, correction of inaccurate data, renewed human assessment, or administrative action addressing the source of the defect.

Interim relief assumes heightened importance where automated decisions have immediate effects. An unlawful determination concerning access to public services, employment, licensing, benefits, or legal status may cause harm before final litigation is completed. Jankir's examination of suspension of administrative decisions in Iraq illustrates the importance of judicial power to prevent execution where serious legal grounds and potentially irreparable consequences are present (23). Al-Ani similarly discusses the relationship between annulment proceedings and continued execution of contested administrative decisions (24). In an AI context, the need for

interim protection may be amplified because the same system can generate repeated adverse effects at scale. Where a credible allegation concerns a serious system-wide defect, courts and supervisory authorities may need mechanisms capable of preventing continuation while legality is examined.

Remittal or reconsideration may often be preferable to judicial substitution. Courts ordinarily should not replace the administration in matters lawfully assigned to administrative judgment, particularly where extensive factual investigation or specialized expertise is required. Uhlmann's discussion of Swiss administrative procedure reflects the importance of remittal where further administrative fact-finding or decision-making is appropriate (25). In AI disputes, a court may annul a decision because the reasons were inadequate, the data unreliable, the human review insufficient, or the relevant process inaccessible, while directing the authority to reconsider the matter lawfully. Such remedies preserve institutional boundaries while ensuring that technological complexity does not defeat effective legal protection.

Technical auditing may complement these judicial functions. Goodman and Trehu examine algorithmic auditing as an accountability mechanism capable of evaluating systems beyond individual complaints (21). Audits can test data quality, performance, differential effects, documentation, and compliance with stated requirements. However, an audit cannot replace judicial review because it does not determine the legality of an individual administrative act or provide the same rights of participation and remedy. The principal value of auditing is preventive and evidentiary. It can reveal recurring problems and preserve information that enables courts to understand whether a particular decision arose from a broader systemic defect.

The legal and procedural challenges of judicial review therefore converge around one central requirement: reviewability must be designed into the administrative use of AI before litigation begins. Courts cannot reconstruct information that was never recorded, examine model versions that were not preserved, or assess human discretion when no record exists of the interaction between official and system. Administrative authorities must accordingly retain sufficient documentation of system purpose, deployment, relevant datasets, model versions, updates, decision outputs, and human interventions. Without such records, the formal availability of judicial review may become largely symbolic. Effective legal protection requires an administrative environment in which the technological contribution to public decisions remains traceable, explainable, contestable, and capable of being placed before an independent court.

Comparative Judicial Review and Prospects for Legal Reform

The comparative examination of Iraq, the United States, and Switzerland demonstrates that AI-based administrative decisions do not create an entirely separate field of public law, but they reveal significant differences in the institutional capacity of legal systems to make traditional judicial-review principles effective in a technological environment. Each system accepts, in different forms, that public authorities remain subject to legality and judicial supervision. The distinction lies in the procedural infrastructure surrounding review: the quality of administrative records, access to information, data-protection safeguards, technical documentation, human-review rights, expertise, and remedies. Comparison is therefore most useful when it identifies legal functions rather than mechanically transplanting individual foreign rules. Iraq's challenge is not to replace its administrative-law structure with an American or Swiss model, but to strengthen the conditions under which Iraqi courts can apply existing legality principles to decisions substantially shaped by AI.

In Iraq, the starting position is that technologically mediated administrative decisions remain attributable to public authorities and therefore remain subject to judicial review under the general principles governing administrative action. Muhammad's examination of jurisdiction in electronic administrative decisions confirms that the emergence of digital forms does not deprive courts of their supervisory role, although identifying the legally relevant decision-maker and stages of decision formation can become more difficult (14). Rahim similarly treats AI as affecting the formation and operation of administrative decisions rather than changing their fundamental legal character (5). This means that traditional defects concerning competence, form, procedure, factual basis, subject matter, and purpose remain potentially applicable. The difficulty is practical: existing doctrine was developed around administrative processes whose decisive elements could usually be identified through conventional files and human-generated documentation.

Iraqi legal scholarship increasingly recognizes the need for more specific safeguards. Abd argues for legal controls governing administrative decisions involving artificial intelligence, reflecting concern that general administrative principles alone may not provide sufficiently detailed procedures for technologically complex decision-making (15). Al-Rubaie and Khuraibit likewise address administrative oversight of AI within public utilities and point toward the need for a more integrated framework of supervision (26). The Iraqi deficiency should therefore not be described as absence of judicial review. The more accurate problem is the absence of a sufficiently developed technical and procedural infrastructure that enables courts to discover how an AI-influenced decision was actually formed.

This gap affects evidence in particular. If an Iraqi administrative body deploys an algorithmic system without preserving version histories, decision logs, data provenance, validation reports, and records of human intervention, a claimant may find it nearly impossible to prove that an unlawful factor influenced the decision. Courts may be able to review competence and formal procedure while lacking access to the technical foundations needed to assess factual error, relevant considerations, or improper fettering of discretion. Hamad's discussion of judicial review of electronic administrative decisions highlights the need for legislative harmonization with the requirements of digital justice (27). Digital justice in this context must include not only electronic access to courts but also legal access to the technological record necessary for meaningful adjudication.

The American model provides a different set of institutional advantages and difficulties. United States administrative law has long developed mechanisms for reviewing federal agency action on grounds including statutory excess, procedural unlawfulness, and arbitrary or capricious decision-making. In an AI context, these doctrines provide a conceptual basis for examining whether an agency considered relevant factors, relied upon evidence rationally, stayed within statutory authority, and adequately explained its action. Calo and Citron nevertheless argue that the automated administrative state creates a broader crisis of legitimacy when technological systems exercise significant practical influence without corresponding adaptations in accountability structures (16). The existence of sophisticated judicial-review doctrines therefore does not automatically solve algorithmic governance problems.

American experience is especially instructive concerning administrative records and private technology contractors. Engstrom and Ho explain that algorithmic accountability requires attention to the institutional architecture through which agencies design, procure, and operate automated systems (3). Judicial review is substantially strengthened when agencies preserve information showing how a technological system contributed to the contested action. Yet the use of proprietary technologies creates persistent barriers. Bloch-Wehba

demonstrates that trade secrecy and contractual restrictions may hinder access to algorithms even where those systems significantly affect governmental decision-making (8). This difficulty suggests an important lesson for Iraq: access rights should be incorporated into procurement and deployment arrangements before systems become operational. An administration should not purchase a technology that it cannot later explain to a court.

The American experience also demonstrates that technological accuracy cannot replace procedural fairness. Citron's analysis of technological due process shows how automated systems can create serious difficulties when individuals are unable to identify and correct erroneous governmental data or understand automated processes affecting them (19). In public administration, the right to challenge a decision becomes ineffective when the person cannot discover the informational basis for adverse treatment. This problem is relevant to Iraqi reform because it demonstrates that procedural safeguards should attach to high-impact technological uses even before judicial proceedings are initiated. Individuals should receive sufficient notice and explanation to decide whether a challenge is necessary.

The United States further illustrates the importance of institutional accountability beyond individual litigation. Coglianese and Lehr analyze the increasing role of machine learning in regulatory decision-making and the challenge of fitting such methods into established administrative structures (1). Busuioc emphasizes that accountability must identify responsible actors and institutional mechanisms rather than allowing complexity to diffuse responsibility across developers, officials, and systems (20). Goodman and Trehu show how algorithmic auditing can supplement conventional accountability by examining systems prospectively and periodically rather than waiting for unlawful consequences to emerge through litigation (21). These approaches indicate that judicial review should form one component of a larger lifecycle framework for public-sector AI.

Switzerland offers a particularly useful comparison because administrative procedure and data-protection rules provide overlapping safeguards. Braun Binder's analysis demonstrates that machine-generated administrative acts must still be understood through the requirements governing public authority and legal decision-making (4). Swiss administrative procedure preserves familiar protections such as legality, hearing rights, access to files, reason-giving, and judicial challenge. Uhlmann's treatment of Swiss administrative procedure emphasizes the continuing role of judicial scrutiny of legality, factual determination, and administrative discretion (25). These general safeguards are complemented by data-protection rules addressing certain automated individual decisions.

Obrecht cautions that an automated individual decision in data-protection law is not necessarily identical to an administrative decision in public law (6). Nevertheless, the coexistence of these legal frameworks is valuable because data-protection safeguards can address informational issues that administrative procedure alone may not explicitly regulate. Suter's analysis of automated individual decisions under Swiss law demonstrates the importance of identifying when automation reaches a legally significant threshold and what protections should follow (17). The requirement of notification and the possibility of obtaining human involvement in certain automated contexts are particularly relevant to high-impact public administration. They strengthen the individual's ability to understand that automation has occurred and to seek reconsideration.

Swiss experience also reinforces the importance of reason-giving. Braun Binder and Obrecht emphasize that the use of algorithmic systems does not diminish the duty of administrative authorities to provide legally meaningful reasons (11). A decision cannot be adequately justified merely by identifying the existence of an algorithmic recommendation. This insight should inform Iraqi reform because statutory duties concerning explanation can transform transparency from an abstract principle into an enforceable procedural guarantee. Individuals should be

informed of the material role played by AI, the main factual and legal basis of the outcome, and the mechanism for obtaining human reconsideration where appropriate.

The comparative analysis also reveals common problems that no system has entirely resolved. The first is automation bias. Kazim and Tomlinson show that judicial-review principles can address excessive administrative reliance on algorithmic recommendations (13), while Alon-Barkat and Busuioc demonstrate empirically and theoretically that human officials may either over-follow or selectively disregard AI advice (12). Human oversight therefore needs to be legally meaningful rather than merely formal. Laux and Ruschemeier further show that efforts to reduce automation bias raise complex questions about how oversight should actually operate (18). Neither the American nor Swiss experience supports a simplistic requirement that every automated output receive nominal human confirmation. Effective oversight depends upon authority, information, competence, and the practical ability to depart from machine recommendations.

A second common problem concerns explainability. Ananny and Crawford demonstrate that transparency cannot be equated with accountability because disclosure may fail to produce genuine understanding (9). Kaminski likewise shows that algorithmic accountability depends upon the institutional use of information rather than disclosure in isolation (10). This suggests that an Iraqi framework should avoid imposing broad but vague duties to make algorithms “transparent.” More precise duties should require documentation relevant to legal review: the system’s purpose, legal basis, categories of data used, decision role, material factors, significant limitations, model version, relevant logs, and human intervention. Different levels of access can then be established for affected individuals, supervisory authorities, independent experts, and courts.

A third common problem concerns technical expertise. Kumar emphasizes the importance of judicial engagement with scientific and technical evidence while preserving the judicial function of interpreting law (22). Iraqi courts should have access to neutral expertise in cases involving complex systems, but experts should not determine whether statutory competence existed, whether discretion was unlawfully fettered, or whether reasons were legally adequate. Those are judicial questions. Experts should assist courts in understanding system operation, data quality, testing methods, and technical causation.

The comparative materials suggest that Iraqi reform should begin with risk classification. Not every use of AI requires identical legal safeguards. A system that schedules appointments or organizes administrative documents raises fewer concerns than one determining eligibility for benefits, imposing sanctions, evaluating public employees, restricting licenses, or materially affecting legal status. Braun Binder, Spielkamp, and Egli examine legal and ethical issues associated with AI in public administration and support differentiated attention to the risks created by particular applications (28). A risk-based approach would allow stronger obligations to attach to systems capable of producing significant effects on rights or legal positions.

High-impact systems should be subject to prior impact assessment before deployment. Such assessment should identify the statutory basis for use, intended purpose, relevant categories of data, foreseeable effects on rights, risk of erroneous classifications, potential discriminatory consequences, alternatives to automation, capacity for human intervention, and procedures for challenge. Goodman and Trehu’s work on algorithmic auditing supports the value of structured assessment and continuing evaluation as tools of accountability (21). Prior review should not be treated as a one-time formality. Material changes to models, datasets, functions, or areas of deployment should trigger renewed assessment.

Documentation duties are equally necessary. Each materially influential system should have a technical and procedural record sufficient to reconstruct individual decisions. This should include the system version in use, relevant input data, major classifications or recommendations, significant updates, logs of operation, records of human intervention, and evidence of validation or testing. Engstrom and Ho emphasize that algorithmic accountability depends upon the existence of administrative records capable of supporting retrospective scrutiny (3). Documentation should be preserved for periods corresponding to the legal time in which administrative decisions may be challenged.

Procurement law and contractual practice must also be integrated into the framework. Bloch-Wehba's examination of proprietary algorithms shows that trade secrecy can obstruct public accountability when governments depend upon private vendors (8). Iraqi public bodies should therefore be prohibited from entering contracts that prevent lawful access by courts, supervisory authorities, or authorized experts. Intellectual-property interests may justify confidentiality but should not eliminate access. Contracts should require vendor cooperation with audits, preservation of documentation, explanation of system functionality, and disclosure sufficient for judicial scrutiny.

Affected individuals should have a right to notice when AI materially contributes to a high-impact administrative decision. Such notice should not consist merely of a generic statement that the authority uses modern technologies. It should inform the individual that an automated or algorithmic system materially influenced the particular decision. Suter's discussion of automated individual decisions illustrates the procedural significance of notification within data-protection law (17). Notice should be paired with an understandable explanation of the principal factors supporting the outcome and information concerning available procedures for objection, human reconsideration, and judicial challenge.

A right to meaningful human review should apply where automated processing materially determines a decision affecting significant rights or legal interests. Obrecht's distinction between automated decisions and administrative decisions underscores the need to identify the legal context carefully (6), but the functional principle remains valuable: an individual should be able to request examination by a competent person who possesses genuine authority to alter the result. That review should not simply reproduce the automated conclusion. The reviewer should examine disputed facts, relevant legal rules, individual circumstances, and the reliability of the technological output.

Judicial procedure itself should be adapted to technical evidence. Courts should possess express authority to order production of relevant logs, technical documentation, system records, and testing materials. Confidential information could be protected through procedural restrictions rather than withheld entirely. Courts should also be able to appoint neutral experts where necessary. Kumar's analysis supports a model in which technical expertise informs but does not replace judicial judgment (22). Such powers would allow Iraqi judges to apply traditional legality principles without being forced either to accept technical claims uncritically or to become technical specialists themselves.

Interim remedies deserve specific attention. Jankir's analysis of suspension of administrative decisions demonstrates the importance of temporary judicial protection within Iraqi administrative law (23). Where an AI-based process creates a credible risk of repeated serious illegality, suspension may need to apply not only to an individual decision but, where authorized by law, to continued reliance upon a specific defective process until the relevant issue is resolved. Al-Ani's examination of the effect of annulment proceedings on execution further illustrates why

effective judicial protection sometimes requires more than a final judgment delivered after harm has already occurred (24).

The most appropriate Iraqi model would therefore combine stable statutory rights with flexible technical regulation. Fundamental guarantees concerning legality, notification, reasons, human review, record preservation, access to evidence, and judicial oversight should be established by legislation because they directly protect individuals against public power. More detailed requirements concerning technical documentation, testing methodologies, audit standards, cybersecurity, and model monitoring can be developed through specialized regulations and periodically updated standards. Al-Rubaie and Khuraibit's work on administrative oversight reflects the need for a continuing supervisory framework rather than isolated judicial intervention (26). This division would preserve legal certainty while allowing regulation to adapt to technological change.

The comparative lesson is ultimately functional rather than institutional. Iraq need not reproduce American administrative procedure or Swiss data-protection law. It should identify the legal safeguards that make judicial review effective in those systems and adapt them to Iraqi constitutional and administrative structures. The most transferable principles are the preservation of reviewability, the creation of meaningful administrative records, access to relevant evidence, explanation of material algorithmic influence, genuine human oversight, technical expertise under judicial control, risk-based regulation, and remedies capable of addressing both individual and recurring illegality. These mechanisms would not create a separate law of algorithmic administration. They would enable established administrative-law principles to remain effective when the factual process of government decision-making becomes increasingly technological.

Conclusion

Artificial intelligence is changing the factual architecture of public administration, but it does not alter the fundamental legal proposition that administrative power must remain attributable to a legally competent public authority and subject to judicial control. An administrative decision does not cease to be administrative because data analysis, classification, prediction, recommendation, or even substantial portions of decision formation are carried out through an intelligent system. The legally decisive issues remain competence, legality, procedure, factual accuracy, reason-giving, proper purpose, lawful exercise of discretion, and the availability of effective remedies. What AI changes is the location at which defects may arise and the type of evidence required to identify them.

The principal challenge of AI-based administration is therefore not the disappearance of traditional grounds of judicial review but the possibility that those grounds become difficult to apply in practice. Administrative illegality may originate in data selection, inaccurate databases, inappropriate variables, system design, model updates, technical classifications, procurement arrangements, or patterns of excessive human reliance on automated recommendations. A court that examines only the final written decision may consequently miss the process that materially determined the outcome. Judicial review must remain directed toward legality while becoming capable of examining the technological and organizational stages that form part of the administrative decision-making process.

A central implication is that reviewability must be established before litigation occurs. Administrative authorities cannot expect courts to reconstruct decisions if the relevant technical information was never preserved. High-impact AI systems should therefore generate and retain sufficiently detailed records of the data used, system version, significant classifications, automated recommendations, relevant technical changes, and human interventions.

Documentation should be treated as part of lawful administration rather than as a secondary technical matter. A system that cannot produce an intelligible record of its legally significant operations is unsuitable for administrative uses in which individuals may need to challenge the resulting decisions.

Transparency must also be understood functionally. The objective is not to disclose every technical detail of an AI system to every person but to ensure that each participant in the accountability process receives the information necessary for the role they perform. Individuals need to understand the essential factual and legal basis of decisions affecting them. Administrative reviewers need sufficient information to reconsider disputed outcomes. Courts need access to the evidence necessary to test legality. Experts may require deeper technical material to assist courts in evaluating data, models, testing, or system behavior. Commercial confidentiality can be protected through procedural safeguards, but it cannot become a barrier that prevents judicial scrutiny of public power.

Reason-giving should remain a central obligation. An administration should not satisfy its legal responsibilities by stating that a system produced a score, ranking, or recommendation. The authority must explain why the relevant facts, legal criteria, and automated assessment justify the individual outcome. Technical explanation and legal justification perform different functions. The first clarifies how a system generated an output; the second explains why public authority lawfully relied upon that output. AI therefore increases rather than diminishes the importance of individualized administrative reasoning.

Human oversight must likewise be substantive rather than ceremonial. The mere presence of an official at the end of an automated process cannot establish lawful discretion if that official lacks the authority, information, competence, or practical opportunity to challenge the system. Where legislation requires discretionary judgment, responsibility must remain with the designated public authority. Officials should be capable of considering exceptional circumstances, correcting inaccurate information, questioning automated recommendations, and departing from them when law or evidence requires a different result. The legal standard should focus on real decision-making authority rather than formal human participation.

Judicial treatment of evidence is another area requiring development. Courts do not need to become technical institutions, but they must have procedural tools enabling them to understand technologically complex disputes. Judicial access to logs, model documentation, relevant data, validation information, and system records should be legally secured. Independent expertise should be available when needed, while questions of legality, statutory interpretation, competence, procedural fairness, and the limits of discretion remain for judges. This division preserves institutional roles while preventing technical complexity from becoming a form of practical immunity.

The comparative examination of Iraq, the United States, and Switzerland demonstrates that the effectiveness of judicial review depends less on whether general administrative-law principles formally exist than on whether the surrounding legal system provides the information and procedural mechanisms required to apply them. The United States illustrates the advantages of developed administrative review while also revealing the difficulties created by private technological suppliers, secrecy, and large-scale automation. Switzerland demonstrates the value of combining general administrative procedure with data-protection safeguards, notice, reason-giving, and human-review mechanisms. Iraq possesses the basic legal foundation for reviewing administrative decisions, but its emerging use of AI requires a more integrated framework addressing documentation, access, explanation, technical evidence, and meaningful human intervention.

The most appropriate direction for Iraqi law is therefore not the wholesale adoption of a foreign regulatory model. Reform should be structured around the functional requirements of effective judicial protection. Legislation should

distinguish between low-risk administrative uses of AI and systems capable of significantly affecting rights, obligations, public benefits, employment, licensing, sanctions, or legal status. High-impact systems should be subject to stronger requirements concerning legal authorization, prior assessment, documentation, testing, human oversight, explanation, and judicial access to information.

Prior impact assessment should become a central preventive mechanism. Before deploying a high-impact AI system, the responsible authority should identify the legal basis for its use, its intended purpose, categories of data, foreseeable errors, risks to individual rights, available alternatives, human-review arrangements, and procedures for correction and challenge. Significant modifications to a system should trigger renewed assessment. Such procedures would reduce dependence on litigation by identifying legal and technical problems before they produce large numbers of administrative decisions.

Procurement rules should ensure that public authorities retain control over the information necessary for legality and review. No administrative authority should be able to defend an unlawful lack of explanation on the ground that a private contractor owns the system. Contracts should preserve governmental and judicial access to necessary documentation, permit independent audit, require cooperation with legal proceedings, and prohibit contractual arrangements that make lawful review impossible. Proprietary information can remain confidential without being placed beyond the reach of competent courts.

Individuals affected by high-impact automated decision-making should receive clear notice when AI has materially influenced the outcome. They should also receive an understandable explanation identifying the significant factors supporting the decision and should have access to a procedure through which inaccurate information can be corrected and the result reconsidered by a competent human decision-maker. These safeguards are not obstacles to administrative efficiency. They are conditions under which technological efficiency remains compatible with lawful public administration.

Remedies should also reflect the capacity of AI systems to reproduce errors. Annulment of one unlawful decision may be insufficient when the underlying model, database, or procedural defect remains active. Depending upon the legal authority of the reviewing institution, effective protection may require reconsideration, correction of data, renewed human evaluation, suspension of execution, or measures addressing the continuing source of illegality. Judicial intervention should respect the proper sphere of administrative judgment while ensuring that unlawful technological processes are not permitted to continue merely because they operate at scale.

Ultimately, AI should be treated neither as an autonomous decision-maker nor as a legally neutral instrument. It is part of the institutional process through which public authority is exercised. Its design, data, deployment, and interaction with officials can influence the legality of administrative decisions as directly as conventional reports, internal policies, or human assessments. Administrative law must therefore remain technologically informed without becoming technologically determined. Courts should continue to ask familiar legal questions—who exercised power, under what authority, on what facts, according to what procedure, for what purpose, with what reasons, and within what limits—while insisting that the technological evidence necessary to answer those questions remains available.

The future legitimacy of AI-supported public administration will depend substantially on whether individuals retain the practical ability to understand, contest, and obtain independent review of decisions affecting them. Efficiency, consistency, and predictive capacity may justify the responsible use of artificial intelligence, but they cannot replace legality. Judicial review must remain capable of reaching the actual process by which administrative power is

exercised. A legal system that preserves that capacity can benefit from technological innovation without sacrificing accountability, procedural justice, or the rule of law.

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