
Article

The Dissolution of Human-Exclusive Authority: A Weber-Heidegger Framework for AI-enabled Organisational Governance

Malak Attia^{1*}, Redwan Siddiqui²

¹ School of Business, Conestoga College, Kitchener, Ontario, Canada

² Lazaridis School of Business & Economics, Wilfrid Laurier University, Waterloo, Ontario, Canada

*Correspondence: mattia@conestogac.on.ca

Abstract

Artificial intelligence (AI) is increasingly used to support organisational decisions about hiring, work allocation, performance, and resource distribution. Most management research treats AI as a tool that helps leaders make decisions. This paper asks a broader question: how might AI change the basis on which organisational authority is exercised and recognised as legitimate? The paper combines Max Weber's account of legitimate authority with Martin Heidegger's concept of *Gestell*, or Enframing. Weber explains why people accept authority: because it is grounded in tradition, personal leadership, or formal rules and offices. Heidegger helps explain how AI can turn these sources of authority into data that can be measured, ranked, predicted, and optimised. The paper argues that AI does not simply replace human leaders. Instead, it can redistribute authority among managers, employees, algorithms, data infrastructures, and organisational procedures. The analysis shows how AI may reshape traditional authority by treating custom and precedent as historical data; charismatic authority by measuring engagement, influence, and communication; and legal-rational authority by embedding rules and discretion in scores, rankings, and automated workflows. It also develops a Human-centred governance framework built around accountability, transparency, contestability, meaningful human oversight, legitimacy, and institutional design. The paper contributes a Weber-Heidegger framework for studying AI-enabled authority and offers practical guidance for ensuring that AI-supported decisions remain accountable, open to challenge, and connected to human judgment and organisational purpose.

Keywords: artificial intelligence; organisational authority; algorithmic governance; Weber; Heidegger; human-centred governance; leadership; legitimacy.

1. Introduction: The Crisis of Leadership in the Age of AI

Artificial intelligence (AI) has moved from the periphery of organisational life to the centre of many managerial and operational processes. Organisations increasingly use AI to support decisions concerning hiring, employee evaluation, resource allocation, scheduling, risk assessment, communication, and strategic planning (Brynjolfsson & McAfee, 2014; Schulte & Kanbach, 2026). What initially appeared as a set of tools designed to improve efficiency and augment managerial decision-making is now



Copyright: © 2026 by the authors. Published by INSS Press. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>). Publisher's Note: INSS Press remains neutral with regard to jurisdictional claims in published maps and institutional affiliation.

becoming deeply embedded in the processes through which organisations coordinate work, allocate resources, and exercise control (Kellogg et al., 2020; Zhang et al., 2025). As AI systems assume a greater role in organisational decision-making, a fundamental question emerges: are these technologies merely supporting established forms of authority, or are they beginning to alter the foundations upon which organisational authority itself is exercised and regarded as legitimate?

Much of the existing literature views AI primarily as a mechanism for enhancing managerial judgment and organisational performance. Research has examined how AI can support analysis, improve decision quality, facilitate coordination, and augment human expertise (Wilson & Daugherty, 2018; Hao et al., 2024). Parallel streams of work on algorithmic management and AI governance have focused on issues such as automation, surveillance, accountability, transparency, human oversight, and the ethical risks associated with algorithmic decision-making (Kellogg et al., 2020; Laux, 2024; Patnaik et al., 2026). These contributions have advanced understanding of how organisations can deploy AI effectively and responsibly. However, they generally take the basis of authority for granted. Authority is often assumed to reside in leaders, managers, professional experts, or formal organisational structures, while AI is treated as a tool through which that authority is exercised.

Recent developments challenge this assumption. In many organisational settings, decisions increasingly emerge from interactions among managers, algorithms, datasets, workflow systems, and digital platforms. Performance scores may become more influential than supervisor judgments. Hiring recommendations generated through AI-supported systems may shape employment outcomes before a manager reviews a candidate. Platform workers may experience software-driven direction and control more directly than traditional managerial supervision (Kellogg et al., 2020; Rosenblat & Stark, 2016). Although formal authority often remains vested in human actors and institutions, practical influence may become distributed across technical and organisational systems. The issue is therefore not simply whether AI affects decisions, but whether it changes the reasons people regard those decisions as rightful and legitimate.

This concern directs attention to the concept of authority itself. For Max Weber (1978), authority is not merely the capacity to influence behaviour; it is the recognised and accepted right to exercise power. Weber identified three ideal types of legitimate authority: traditional authority, grounded in custom and continuity; charismatic authority, grounded in personal influence and follower recognition; and legal-rational authority, grounded in formal rules, offices, and bureaucratic procedures. These forms remain foundational to contemporary understandings of leadership, management, and organisational legitimacy (Bass, 1985; Burns, 1978; Selznick, 1957). Yet Weber developed his framework in a period when authority was assumed to be exercised primarily through human actors and institutions. The rise of AI raises the question of whether these foundations remain unchanged when decision-making becomes increasingly mediated by computational systems.

To address this question, this paper engages Martin Heidegger's (1977) concept of *Gestell* (Enframing). Heidegger argued that modern technology is not merely an instrument but a mode of revealing that encourages people to view the world as something that can be measured, ordered, predicted, and optimised. Contemporary AI systems operationalise this orientation through data collection, classification, scoring, prediction, recommendation, and automation. Through these practices, organisational relationships, judgments, traditions, and decision processes may increasingly appear as data available for calculation and optimisation. AI therefore has significance beyond its technical capabilities. It may reshape the conditions under which authority is recognised, exercised, justified, and contested.

This paper asks: How can AI-enabled organisational arrangements reconfigure the foundations and operation of legitimate authority? Rather than viewing AI solely as a tool of managerial augmentation

or technological control, the paper develops a Weber-Heidegger framework that examines how authority may become redistributed across managers, employees, algorithms, data infrastructures, automated workflows, and governance institutions. The central argument is that AI may weaken the long-standing assumption that legitimate authority must be grounded exclusively in identifiable human actors while simultaneously creating new challenges concerning accountability, transparency, contestability, and organisational legitimacy.

The paper makes four contributions. First, it reframes AI as a potential reconfiguration of authority rather than merely a mechanism for improving managerial decision-making. Second, it develops a theoretical synthesis between Weber's theory of legitimate authority and Heidegger's philosophy of technology. Third, it identifies the organisational mechanisms through which authority may become datafied, quantified, modelled, embedded in workflows, and reinforced through feedback processes. Finally, it advances a human-centred governance framework designed to ensure that AI-enabled authority remains accountable, transparent, contestable, and subject to meaningful human oversight. In doing so, the paper shifts attention from the question of whether AI will replace leaders to the more fundamental question of how organisations can preserve legitimacy when authority increasingly operates through intelligent technological systems.

2. Literature Review

2.1 Weberian Authority and Leadership

Max Weber's (1978) typology of legitimate authority provides the foundation for this paper's analysis of leadership and organisational legitimacy. Traditional authority rests on the legitimacy of inherited custom and established status. Charismatic authority rests on recognition of a leader's exceptional personal qualities. Legal-rational authority rests on formal rules, offices, and bureaucratic procedures. Although Weber presented these forms as ideal types, they identify the principal social bases through which authority is recognised as legitimate in modern organisations.

Leadership scholarship generally treats authority as grounded in human actors, relationships, and formal offices, whether it emphasises hierarchy, managerial coordination, inspiration, or ethical purpose (Barnard, 1938; Bass, 1985; Burns, 1978; Fayol, 1949; Greenleaf, 1977; Selznick, 1957; Taylor, 1911). This anthropocentric assumption provides the baseline for examining how AI-enabled systems may redistribute authority.

2.2 AI, Generative AI, and Human-AI Decision-making

Recent research increasingly treats AI not only as a technical tool but also as a participant in organisational decision processes. Generative AI can assist with information search, summarisation, option generation, communication, analysis, and implementation. Recent reviews describe generative AI as performing active and collaborative roles across multiple stages of organisational decision-making, including intelligence, design, choice, implementation, and feedback (Schulte and Kanbach, 2026).

Research on generative AI in management and human-resource contexts also shows that these systems may change organisational work, skill requirements, workforce practices, and strategic HRM decisions. Rather than simply replacing routine tasks, generative AI may reshape how organisations distribute expertise, coordinate work, develop employees, and make people-related decisions (Chowdhury et al., 2024).

Research on human-AI collaboration further emphasises that the effects of AI depend on how decision rights, expertise, and responsibility are distributed between people and systems. Research shows that

generative AI can contribute to collaborative organisational decision-making while also creating risks of over-reliance, bias, and reduced contextual judgment (Hao et al., 2024). These findings suggest that the organisational significance of AI lies not only in technical performance but also in how people interpret, rely on, and challenge AI-supported outputs.

In management and leadership research, AI is often understood as a tool that supports prediction, coordination, and decision-making while managers retain responsibility for strategic direction, ethical judgment, creativity, and stakeholder relationships. This augmentation perspective remains important, but it can understate the extent to which AI systems influence what information is treated as relevant, what alternatives are presented, and which recommendations become actionable in organisational workflows. Generative AI intensifies this issue because it can participate in communication, analysis, and option generation rather than merely produce numerical scores.

The central question is therefore not whether AI replaces leaders. It is how organisational design determines whether AI remains advisory, becomes part of a hybrid decision process, or acquires practical authority by shaping which reasons, options, and judgments decision-makers treat as credible. This question motivates the Weber-Heidegger framework developed below.

2.3 Algorithmic Management, Governance, and Accountability

Research on algorithmic management shows that digital systems can allocate work, monitor performance, structure incentives, rank workers, calculate compensation, and trigger disciplinary action. These systems can shift managerial control from visible supervisors toward platforms, metrics, and automated workflows. Recent research on algorithmic management further shows that AI is reshaping work and employment relationships through new forms of coordination, control, opacity, and reduced human involvement in consequential workplace decisions (Zhang et al., 2025).

Research on algorithmic authority and algocracy examines how decision-making can become embedded in computational systems. This literature highlights the risk that people may be subject to decisions whose reasoning is difficult to inspect and whose responsibility is distributed across developers, vendors, managers, and organisations. The result can be an accountability gap: an outcome is consequential, but no clearly identifiable actor can fully explain, justify, or remedy it.

Recent responsible-AI and human-oversight research shows that governance arrangements shape whether AI systems are trusted and constrained. Human oversight is not meaningful merely because a person appears in the decision process. Effective oversight requires clear authority, sufficient information, time to intervene, and institutional support for questioning or overriding the system (Laux, 2024).

Research on AI-enabled HRM also suggests that transparency, perceived fairness, and meaningful human involvement can shape employee trust and autonomy (Patnaik et al., 2026).

These developments show that governance involves more than technical compliance. Transparency, accountability, contestability, and human oversight determine whether affected individuals can understand how AI influenced a decision, correct relevant information, challenge outcomes, and obtain remedy. However, this literature generally focuses on how organisations should govern AI risks. It does not fully explain how the use of AI may change the social grounds on which authority is recognised as legitimate.

2.4 Identification of Research Gaps: From AI Control to Legitimate Authority

Research on AI and leadership commonly treats AI as a managerial tool, an augmentative technology, or a challenge for leader adaptation. This work explains how AI can support prediction, coordination, and decision-making while managers retain responsibility for strategic direction, ethical judgment, and stakeholder relationships. Research on algorithmic management extends this account by showing how digital systems allocate work, monitor performance, set incentives, rank workers, and impose discipline. Research on algocracy and algorithmic authority further examines how decision-making may become embedded in computational systems, creating opacity, distributed responsibility, and accountability gaps. AI-governance research identifies safeguards for managing these risks, including transparency, auditing, meaningful human oversight, contestability, and appeal.

Together, these literatures explain important operational consequences of AI. They show how AI can support managerial judgment, organize work, automate decisions, distribute control, and create governance risks. However, they generally treat the basis of legitimate authority as given. Authority is often assumed to reside in a manager, formal office, organization, or technical system. The central question then becomes whether AI assists, constrains, replaces, or governs the exercise of that authority.

This paper addresses a different question: **How does AI change the social and institutional basis on which authority is regarded as legitimate?** This question cannot be answered only by showing that an algorithm allocates work, produces a recommendation, or shapes behaviour. It requires examining whether the reasons people accept an organisational decision change when custom, personal influence, professional judgment, and office-based discretion are converted into data and embedded in computational processes.

For example, algorithmic-management research may show that a platform allocates work through ratings, location data, and performance scores. The Weber-Heidegger framework asks an additional question: do workers and managers come to experience the score, rather than a supervisor's judgment or formal office, as the practical source of authority? The issue is not merely that an algorithm exercises control. It is whether computational consistency, predictive performance, or perceived objectivity become grounds on which the resulting decision is treated as rightful.

2.5 Conceptual Foundations: Weber, Heidegger, and AI-Enabled Authority

This paper is grounded in two complementary traditions. Weber's sociology explains the social bases through which organisational authority is recognised as legitimate: traditional authority rests on custom and continuity, charismatic authority on personal influence and follower recognition, and legal-rational authority on formal rules, offices, and procedures (Weber, 1978). Heidegger's critique of technology explains how modern technological systems can reshape what appears rational, valuable, and actionable in organisational life. In this article, *Gestell* refers to a technological way of seeing in which people, practices, and decisions appear primarily as resources that can be measured, predicted, and optimised.

AI is important in this context because it operationalizes this calculative orientation through data collection, classification, scoring, prediction, automated recommendation, and workflow management. These capacities do not automatically eliminate human leadership or Weberian authority. Rather, when AI systems are embedded in organisational decision processes, they can alter the conditions under which tradition, charisma, and office-based judgment are exercised, recognised, and contested. The paper therefore examines AI not simply as a tool for leader adaptation, but as a socio-technical mechanism that can redistribute authority and reshape its claims to legitimacy.

Research on algorithmic management and AI governance shows that digital systems can allocate work,

monitor performance, shape behaviour, and raise concerns about opacity, accountability, bias, contestability, and human oversight (Kellogg et al., 2020; Pasquale, 2015; Rosenblat & Stark, 2016; Yeung, 2017; Zarsky, 2016).

This paper argues that AI may erode the exclusive human basis of conventional leadership and legitimate authority. By “dissolution,” the paper does not mean that authority, leadership, or human agency disappears. It refers to the weakening of the assumption that legitimate organisational authority must reside primarily in identifiable human persons, relationships, or formal offices. Authority may persist, but its practical exercise and perceived legitimacy may become distributed across managers, employees, algorithms, data infrastructures, workflow rules, and governance arrangements.

In this framework, dissolution names the erosion of authority’s exclusive anthropocentric grounding. Redistribution describes the shifting allocation of practical influence among human and technical actors.

Displacement occurs when an AI-supported process replaces a particular human judgment or office-based function. Hybridisation occurs when people and AI systems jointly contribute to an authority process. Reconfiguration is the broader term for any change in the source, location, exercise, or legitimacy of authority. The paper therefore examines a conditional and partial dissolution of human-exclusive authority, not the disappearance of authority itself.

These dynamics can be mapped against Weber’s (1978) three pure types of legitimate authority: traditional authority, rooted in enduring customs; charismatic authority, derived from extraordinary personal qualities; and legal-rational authority, based on institutional rules and offices. These constructs have proven durable, underpinning everything from transformational leadership to bureaucratic management (Bass, 1985; Mintzberg, 2009). Under organisational conditions, algorithmic systems may bypass traditional hierarchies, datafy aspects of charismatic appeal, and automate bureaucratic functions. The issue is not that Weberian authority inevitably disappears, but that its human-centric logic and claims to legitimacy may be reconfigured as authority becomes distributed across people, models, data infrastructures, and governance arrangements (Kellogg, Valentine, & Christin, 2020; Zuboff, 2019).

Accordingly, this paper asks: **How can AI-enabled organisational arrangements reconfigure the foundations and operation of legitimate authority?**

To answer this question, it engages Heidegger’s (1977) critique of modern technology as *Gestell* (Enframing). This lens treats AI not simply as a passive tool, but as a mode of revealing that can frame the world (including human beings) as calculable and optimizable resources (*Bestand*). By synthesizing Weber’s sociology with Heidegger’s ontology, the analysis examines AI’s impact as a contingent reorganization of authority, legitimacy, and accountability rather than as technological replacement alone.

Beyond leadership, these dynamics carry consequences for governance in AI-enabled intelligent systems. As authority becomes embedded within algorithms, data infrastructures, and automated processes, legitimacy, accountability, and human agency become central organisational questions. The challenge is not merely how leaders adapt to AI, but how organisations preserve human-centric governance when authority is increasingly translated into computational logic.

This paper contributes a Weber-Heidegger framework for examining how AI-enabled systems may reconfigure legitimate authority and develops a Human-centred governance framework for ensuring that such authority remains accountable, transparent, contestable, and subject to meaningful human oversight.

2.6 Connection to Current Study: Distinctive Contribution of the Weber-Heidegger Framework

Existing research explains how AI can support, control, automate, or govern organisational decisions. The Weber-Heidegger framework explains how AI can change the grounds on which those decisions are accepted as legitimate. It therefore distinguishes operational influence over a decision from the social and institutional basis on which a decision is treated as rightful.

2.7 Logical Flow and Clarity

The framework offers three forms of explanatory leverage. First, Weber identifies the legitimacy claim that is being reconfigured. Rather than treating authority as a generic property of leaders, organisations, or technologies, the framework distinguishes authority grounded in tradition, charismatic recognition, and legal-rational rules and offices. This distinction matters because AI may affect each source differently. AI may turn institutional precedent into historical data, transform aspects of leadership influence into engagement metrics, or embed formal rules and administrative discretion in scores, rankings, and automated workflows.

Second, Heidegger identifies the mechanism through which AI transforms these legitimacy claims. *Gestell* directs attention to a process in which qualitative social relations, judgments, and institutional practices come to appear primarily as inputs for measurement, comparison, prediction, and optimisation. This is more than the observation that AI uses data. It explains how the organisational meaning of custom, charisma, and office-based judgment may change when they are represented as comparable and actionable inputs in a computational system.

Third, the synthesis identifies a distinctive outcome: a shift in the locus and basis of legitimacy. Formal authority may remain assigned to managers or institutions, but practical legitimacy may increasingly attach to a score, ranking, prediction, or automated procedure. This helps explain why AI systems can have authority-like effects even when they lack formal legal authority and human agency. The framework identifies conditions under which computational consistency, predictive performance, and perceived neutrality may supplement, displace, or conflict with traditional, charismatic, and legal-rational grounds of legitimacy.

The framework also changes how AI governance is understood. Governance is not only a collection of safeguards applied after a system is deployed. It is part of the institutional process through which AI-enabled authority is authorised, limited, justified, and contested. Accountability, transparency, contestability, and meaningful human oversight therefore matter not only because they reduce technical risk, but also because they preserve the conditions under which organisational authority can remain legitimate.

The Weber-Heidegger synthesis thus extends existing research by explaining the relationship between the datafication of organisational life, the reconfiguration of Weberian legitimacy claims, and the conditions under which computational outputs acquire practical authority. Table 1 summarizes how the Weber-Heidegger framework differs from adjacent research on AI augmentation, algorithmic management, algorithmic authority, and AI governance.

3. Methodology

3.1 Research Concepts and Approach

This paper uses four concepts in a specific and bounded sense: authority, dissolution, *Gestell*, and *Bestand*. The concepts are integrated into an analytical model for examining how AI-enabled systems

may reconfigure organisational legitimacy. They should not be read as metaphors for any form of technological change.

Throughout the analysis, these concepts serve as analytical categories with defined organisational referents: authority refers to recognised decision rights; dissolution refers to the erosion of authority's exclusive human grounding; *Gestell* refers to the framing of organisational activity as measurable and optimisable; and *Bestand* refers to the treatment of people, practices, and judgments as operational resources within AI-enabled systems.

Authority refers to the socially recognised right to make, direct, or justify organisational decisions. Following Weber (1978), authority is legitimate when those subject to it regard its exercise as rightful. The paper distinguishes three bases of legitimacy: traditional authority, grounded in custom and continuity; charismatic authority, grounded in personal influence and follower recognition; and legal-rational authority, grounded in formal rules, offices, and procedures.

Dissolution of authority does not mean that authority, leadership, or human agency disappears. It refers to the erosion of authority's exclusive anthropocentric basis: the assumption that legitimate organisational judgment, coordination, and decision-making must reside principally in identifiable human persons, relationships, and formal offices. Dissolution occurs when that assumption is weakened because data, models, automated workflows, and technical infrastructures become accepted as practical sources of direction or justification. The concept therefore concerns the loss of human exclusivity in the grounding of authority, not the elimination of authority itself.

The framework distinguishes dissolution from following four related outcomes.

Redistribution refers to a shift in practical influence among managers, employees, algorithms, data infrastructures, and governance bodies.

Displacement refers to the replacement of a specific human task, judgment, or office-based function by an AI-supported process.

Hybridisation refers to arrangements in which human and algorithmic actors jointly exercise authority.

Reconfiguration is the broadest term and refers to any change in the source, location, exercise, or legitimacy of authority. AI can produce redistribution, displacement, or hybridisation without producing dissolution. Dissolution occurs only when these changes weaken the assumption that legitimate authority must be exclusively human in origin and exercise.

Gestell, or Enframing, refers to Heidegger's account of modern technology as a mode of revealing. It frames entities as available for ordering, calculation, prediction, and optimisation. In this paper, *Gestell* is used as an analytical mechanism: it explains how AI systems can make organisational practices, persons, relationships, and institutional rules intelligible as data that can be classified, ranked, modelled, and acted upon.

Bestand, or standing reserve, refers to the result of this framing. An entity becomes *Bestand* when it is primarily treated according to its availability and utility within a system of optimisation. In AI-enabled organisations, employee performance, candidate histories, communication patterns, customer behaviour, institutional precedent, and managerial judgment may be represented as data resources for prediction and decision-making. The concept does not claim that these entities have no other meaning; it identifies the organisational tendency to privilege their measurable and operational value. Table 2 the Weber-Heidegger framework is therefore structured as a four-step analytical model:

This model makes the relationship between Weber and Heidegger systematic. Weber identifies the social basis from which authority derives legitimacy. Heidegger explains the technological process through which that basis can be framed as available for calculation and optimisation. AI operationalizes this process by converting qualitative features of organisational life into datafied inputs for classification, prediction, and decision-making. The framework then examines whether the resulting authority arrangement remains legitimate, accountable, and contestable under human-centred governance conditions.

The framework differs from existing accounts of AI-enabled control because it does not assume that a system becomes authoritative merely by influencing a decision. It examines how a system may acquire practical authority when organisational actors treat its scores, classifications, predictions, or recommendations as valid reasons for action. The analytical task is therefore to identify the original Weberian basis of legitimacy, trace how *Gestell* makes that basis available for calculation, and assess whether the resulting arrangement changes who or what is regarded as entitled to direct, justify, or contest organisational decisions.

3.2 Mechanisms of Authority Datafication and Reconfiguration

The transformation of authority into optimizable data patterns does not occur automatically when an organization adopts AI. It occurs through a sequence of organisational and technical mechanisms that convert qualitative sources of legitimacy into measurable inputs, model outputs, and decision processes. This paper identifies five linked mechanisms: datafication, quantification, modelling, workflow embedding, and feedback-based reinforcement.

First, datafication converts organisational activity into digital traces. For traditional authority, this may involve transforming precedent, custom, tenure, institutional memory, or past decisions into digital records and historical datasets. For charismatic authority, it may involve recording communication patterns, follower engagement, sentiment, influence, or behavioural responses. For legal-rational authority, it may involve translating formal rules, administrative judgments, performance evaluations, eligibility criteria, and procedural decisions into structured data.

Second, quantification turns these digital traces into comparable metrics. Historical precedent becomes a frequency, risk, or compliance indicator; charisma becomes engagement, sentiment, or influence scores; and office-based judgment becomes performance measures, risk ratings, or decision thresholds. Quantification does not capture the whole meaning of authority, but it makes selected features visible and actionable within an optimisation system.

Third, modelling uses these metrics to generate classifications, rankings, predictions, or recommendations. AI systems may rank job candidates, predict worker performance, identify customers as high-risk, calculate likely compliance, or recommend resource allocations. At this stage, authority is no longer exercised solely through custom, embodied influence, or office-based discretion. It is partly mediated through model outputs that present selected patterns as actionable knowledge.

Fourth, workflow embedding incorporates these outputs into organisational processes. Rankings may guide hiring shortlists; performance scores may trigger manager interventions; risk predictions may shape inspections, service eligibility, or policing priorities; and automated recommendations may structure scheduling, compensation, promotion, or disciplinary decisions. Datafied authority becomes operational when it is connected to decision rights, escalation rules, automated actions, and managerial routines.

Fifth, feedback-based reinforcement stabilises the new authority arrangement. When organisations treat model outputs as accurate, efficient, or objective, those outputs can influence subsequent decisions and generate new data that confirm or reinforce the system's assumptions. A hiring system may learn from prior selections, a performance-management system may update scores from subsequent activity, and a predictive system may reproduce the patterns created by its own deployment. This feedback mechanism can make algorithmic authority appear increasingly legitimate, even where the initial data or optimisation objective reflects institutional bias or a narrow definition of performance.

Together, these mechanisms explain how *Gestell* is operationalisation in AI-enabled organisations. *Gestell* frames custom, charisma, judgment, and relationships as available for calculation; datafication and quantification make selected aspects measurable; modelling produces classifications and predictions; workflow embedding connects those outputs to organisational decisions; and feedback can reinforce reliance on the system. These mechanisms do not have uniform effects. Depending on system design, organisational procedures, and governance safeguards, they may reinforce, weaken, redistribute, or transform existing forms of authority. Table 3 summarises these mechanisms.

3.3 Theoretical Propositions on Authority Reconfiguration

The five mechanisms described above do not produce a single, inevitable effect on authority. Their effects depend on how AI systems are designed, embedded in organisational workflows, interpreted by organisational actors, and governed. AI may reinforce an existing form of authority when it supports its established basis of legitimacy. It may weaken that authority when it displaces the social relationships, institutional procedures, or shared meanings on which legitimacy depends. It may redistribute authority when formal decision rights remain unchanged but practical influence shifts toward data, models, and automated workflows.

The following propositions specify the conditions under which AI-enabled systems are expected to reinforce, weaken, or transform traditional, charismatic, and legal-rational authority. The propositions are conditional: their predicted effects are moderated by the boundary conditions, including AI autonomy, human discretion, decision consequentiality, workflow embeddedness, contestability, professional norms, institutional safeguards, and regulatory context.

Proposition 1: Legal-rational authority is reinforced when AI-supported decisions remain authorised by formal rules, documented procedures, accountable officeholders, and meaningful opportunities for review and appeal. AI can strengthen legal-rational authority when it improves the consistent application of authorised rules and makes decision processes more traceable. In these conditions, model outputs function as decision support within a recognizable institutional process. A designated officeholder remains responsible for the decision, affected persons can understand and challenge the role of the system, and organisational procedures define when a recommendation may be accepted, overridden, or escalated. The system may therefore support procedural consistency without becoming an independent source of legitimacy.

Proposition 2: Legal-rational authority is weakened or redistributed when AI outputs become practically decisive without transparent authorization, accountable human review, or meaningful opportunities for contestation. Legal-rational authority depends on the legitimacy of rules, offices, and procedures. It is weakened when an algorithmic score, ranking, or recommendation determines an outcome in practice while the responsible officeholder cannot explain, question, or override it. Under these conditions, authority shifts from visible institutional procedures toward the combined operation of data, model design, workflow rules, and vendor or developer choices. Formal responsibility may remain with the organization, but practical authority becomes embedded in the system.

Proposition 3: The quantification of charismatic influence amplifies charismatic authority when data-driven communication supports, rather than substitutes for, authentic leader-follower recognition. Engagement metrics, sentiment analysis, and communication testing can help leaders understand audience response and adapt messages to different groups. Charismatic authority may be reinforced when these tools support a leader's existing capacity to build trust, articulate collective purpose, and sustain meaningful relationships with followers. In this case, AI augments rather than replaces the relational and affective basis of charisma.

Proposition 4: The quantification of charismatic influence weakens charismatic authority when optimisation displaces trust, embodiment, shared experience, and follower recognition with engineered engagement. Charismatic authority depends on followers' recognition of exceptional personal qualities and a meaningful relationship with a leader. It may be weakened when organisations treat engagement metrics, communication styles, and emotional responses as substitutes for this recognition. When messages are continually optimised for attention, compliance, or behavioural response, followers may experience leadership as calculated rather than authentic. Under these conditions, practical influence may shift toward the system that optimizes communication rather than the leader whose qualities previously grounded charisma.

Proposition 5: Datafication reinforces traditional authority when AI systems preserve precedent as an interpretable institutional resource rather than treating it as a fixed performance variable. Traditional authority may be preserved when AI systems document institutional memory, make relevant precedent accessible, and support decisionmakers in interpreting past practice considering present circumstances. In this case, historical data serve as a resource for continuity, professional judgment, and organisational identity. Human actors remain able to explain why a tradition matters and to distinguish meaningful precedent from outdated practice.

Proposition 6: Datafication weakens or displaces traditional authority when AI systems reduce custom and precedent to variables that can be overridden solely by efficiency, risk, or performance optimisation. Traditional authority depends on continuity, inherited meaning, and shared recognition of established practice. It is weakened when an AI system treats custom only as historical data whose value is determined by predictive performance or operational efficiency. In these conditions, precedent no longer functions as a source of legitimacy. Instead, it becomes one input among many in an optimisation process, and authority may shift toward the criteria and objectives encoded in the system.

Proposition 7: Feedback-based reinforcement increases the practical authority of AI outputs when organisations repeatedly treat those outputs as accurate, neutral, and efficient without systematically examining error, bias, or excluded forms of judgment. Feedback loops can stabilize algorithmic authority by producing data that appear to confirm the system's prior recommendations. When organisations repeatedly act on model outputs, those actions shape the data used to evaluate or retrain the model. The system may then appear increasingly valid because it is assessed against an environment partly created by its own decisions. This process can increase reliance on algorithmic outputs and reduce the visibility of alternative judgments, even when the system's original objectives or data reflect narrow or contested values.

Proposition 8: Human-centred governance moderates the authority effects of AI by preserving the capacity of accountable actors to interpret, challenge, override, and revise AI-supported decisions. AI does not determine authority reconfiguration on its own. Accountability, transparency, contestability, meaningful human oversight, stakeholder participation, and independent audit influence whether AI reinforces existing authority, redistributes it, or undermines its legitimacy. These safeguards are especially consequential under conditions of high AI autonomy, high decision consequentiality, strong workflow embeddedness, limited human discretion, and weak external regulation. Table 4 shows the

conditional propositions under which AI-enabled systems are expected to reinforce, weaken, or transform traditional, charismatic, and legal-rational authority.

3.4 Boundary Conditions of AI-Enabled Authority Reconfiguration

The Weber-Heidegger framework does not claim that every use of data, prediction, or optimisation substantially reconfigures authority. AI-enabled authority reconfiguration occurs when a system changes not only how information is processed, but also who or what organisational actors treat as a valid source of direction, justification, or decision. The degree of reconfiguration therefore varies across systems and settings.

Substantial dissolution is not indicated by datafication alone. It is most likely when AI outputs become practically decisive, are treated as valid reasons for action, and reduce the effective role of identifiable human officeholders in authorizing, interpreting, or contesting decisions. Where human officeholders retain meaningful discretion and accountable institutional control, AI may support or hybridize authority without dissolving its human-exclusive basis.

Three outcomes are possible.

First, AI may support existing authority. This occurs when the system provides information or recommendations while accountable human officeholders retain informed discretion and can interpret, question, or reject the output.

Second, AI may redistribute authority. This occurs when formal authority remains with a manager or institution, but practical influence shifts toward data, models, workflow rules, and technical infrastructures.

Third, AI may substantially transform authority. This occurs when algorithmic outputs become decisive in practice and are treated as primary reasons for action, while the human actors formally responsible for the decision have limited ability to understand, challenge, or override them.

The following boundary conditions determine which outcome is most likely to happen:

Degree of AI autonomy. Authority reconfiguration is more likely when an AI system automatically executes a decision, triggers a consequential action, or determines the range of available choices. It is more limited when the system only provides optional information that a decision-maker can disregard without cost or penalty.

Meaningful human discretion. Authority remains primarily human when decision-makers have the time, competence, information, and institutional support to question or override AI outputs. Reconfiguration is more likely when human review is merely nominal, when reviewers cannot access relevant information, or when productivity pressures make deviation from the system difficult.

Decision consequentiality. Authority effects are more significant when AI influences high-consequence decisions, such as hiring, dismissal, promotion, discipline, eligibility for public services, resource allocation, credit, health care, or policing. Low consequence uses, such as routine scheduling suggestions, may involve datafication without substantially changing organisational legitimacy.

Workflow embeddedness and organisational centralization. Reconfiguration is more likely when AI outputs are embedded in mandatory workflows, central dashboards, standardised decision rules, or enterprise-wide platforms. In decentralised organisations, where managers and professionals retain local

discretion and diverse sources of knowledge, the authority effects of a system may be more limited or variable.

Explainability and contestability. Opaque outputs that cannot be understood, challenged, corrected, or appealed are more likely to acquire authority-like force. In contrast, accessible explanations, documented criteria, error-correction procedures, and independent appeals can prevent scores or predictions from becoming unquestioned decision rules.

Professional norms and domain expertise. Strong professional norms can limit algorithmic authority when practitioners retain recognised standards of judgment that cannot be reduced to system metrics. In domains where professional expertise is weak, fragmented, or subordinated to performance targets, AI outputs may more readily become the dominant basis for practical decision-making.

Override, accountability, and institutional safeguards. Authority reconfiguration is constrained when organisations assign responsibility to identifiable officeholders, document decisions, require human authorization for consequential actions, audit system performance, and provide meaningful remedy for affected persons. It is more likely when accountability is dispersed across developers, vendors, managers, and data providers, making it unclear who can authorize, revise, or correct an AI-supported decision.

Regulatory and institutional context. Legal requirements, sector-specific regulation, labour protections, professional licensing, public-law duties, union representation, and civil-society scrutiny can constrain AI-enabled authority. Systems deployed in highly regulated or publicly accountable settings may remain more closely tied to formal legal-rational authority. Systems deployed in weakly regulated, highly centralised, or commercially pressured settings may more readily shift practical authority toward computational outputs.

These conditions also limit the scope of *Gestell* in this framework. The presence of measurement, prediction, or optimisation does not itself demonstrate that authority has been transformed. *Gestell* becomes consequential for authority when datafication and optimisation are connected to decision rights, workflow rules, and organisational acceptance in ways that alter the practical basis on which decisions are justified and followed. The framework therefore distinguishes routine AI assistance from authority reconfiguration by examining autonomy, discretion, consequentiality, embeddedness, contestability, professional norms, institutional safeguards, and regulatory context. Table 5 shows the boundary conditions in which AI would support, redistribute or transform authority

3.4.1 Gestell as a Mode of Revealing

For Heidegger (1977), technology is not merely a collection of instruments. It is a mode of revealing: a way through which the world comes to appear as intelligible and actionable. Modern technology is characterized by *Gestell*, commonly translated as Enframing. *Gestell* challenges the world to appear as *Bestand*, or standing reserve: something available for ordering, measurement, extraction, prediction, and use.

AI can be understood as a powerful contemporary expression of *Gestell*. It translates elements of organisational life (including performance, behaviour, communication, relationships, and institutional practices) into data that can be classified, compared, ranked, and acted upon. AI does not mechanically determine organisational outcomes. Its effects depend on the objectives, data practices, institutional safeguards, legal requirements, and governance arrangements that shape its deployment. Nevertheless, AI can intensify the tendency to treat organisational life as a field of optimisation.

3.4.2 Calculative and Contemplative Thinking

Heidegger (1966) distinguishes calculative thinking from contemplative thinking. Calculative thinking asks how a goal can be achieved efficiently; it plans, measures, compares, and optimizes. Contemplative thinking asks why a goal should be pursued, what it means, and whether it is ethically justified.

In AI-enabled organisations, calculative reasoning may receive increasing authority when algorithmic outputs are treated as objective, efficient, or predictive. This may marginalize forms of judgment rooted in practical wisdom, ethical deliberation, lived experience, and contextual interpretation. The concern is not that calculative thinking is inherently illegitimate, but that it can become the dominant criterion of organisational rationality unless governance structures preserve meaningful space for human judgment, contestation, and ethical reflection.

3.4.3 From Gestell to Weberian Authority

Weber and Heidegger perform distinct but complementary analytical roles, and their integration produces a claim that neither perspective makes on its own. Weber explains why authority is regarded as legitimate: it is grounded in tradition, charismatic recognition, or legal-rational rules and offices. Heidegger explains how modern technological systems can transform the way those social foundations appear in organisational life. Through *Gestell*, custom, personal influence, and office-based judgment can appear primarily as data that can be measured, compared, predicted, and optimised. AI operationalizes this framing through data collection, scoring, classification, recommendations, and workflow management. The synthesis therefore explains not only that AI may control or coordinate organisational activity, but also how computational outputs can become practical bases for legitimate authority.

For **traditional authority**, *Gestell* reframes custom, precedent, and institutional memory as historical data. AI systems can then use those data to assess risk, identify patterns, or compare prior practice against performance criteria. The potential change is that tradition becomes not only a source of continuity, but also an input that can be evaluated and overridden through optimisation.

For **charismatic authority**, *Gestell* reframes personal influence, follower response, and communication as measurable indicators. Engagement data, sentiment analysis, behavioural metrics, and message testing can turn elements of personal appeal into objects of calculation. The potential change is that charisma may be partly mediated or engineered through data-driven communication without eliminating the importance of trust, embodiment, and collective meaning.

For **legal-rational authority**, *Gestell* reframes rules, office-based discretion, and administrative judgment as processes that can be formalized and automated. AI systems can embed decision criteria in rankings, risk scores, eligibility assessments, and workflow triggers. The potential change is that practical authority may shift from the visible officeholder toward the combined operation of organisational policy, data, models, and technical infrastructure, while formal legal responsibility remains with human institutions.

The result may be a shift in the locus of legitimacy. Authority may become partly associated with computational performance, predictive accuracy, procedural consistency, and the perceived neutrality of automated systems. This shift remains contingent. Organisational design, legal oversight, professional norms, appeal mechanisms, and human review can limit, redirect, or challenge the authority assigned to algorithmic systems.

4. Results & Discussion

4.1 Applying the Weber-Heidegger Analytical Model

The applications illustrate the propositions and boundary conditions developed in Sections 3.3 and 3.4. They distinguish systems that provide advisory support from systems that become practically decisive because their outputs are embedded in consequential workflows, difficult to challenge, and weakly constrained by human review or institutional safeguards. The cases show that the same AI capability can reinforce or weaken authority depending on whether it remains embedded in accountable procedures, preserves meaningful human judgment, and allows affected persons to understand and contest decisions. Table 6 summarises how the Weber-Heidegger framework applies to the three forms of Weberian authority by identifying each authority type's basis of legitimacy, the operation of *Gestell*, and the potential AI-enabled reconfiguration. Table 6 would clarify Weber-Heidegger Model of Authority Reconfiguration

4.1.1 Traditional Authority: From Custom to Datafied Precedent

Traditional authority derives legitimacy from custom, inherited status, and continuity with the past. AI-enabled optimisation can reconfigure this form when traditions, precedents, and institutional memories are evaluated primarily through efficiency, risk, and performance criteria.

Through *Gestell*, tradition is treated as available information: data about prior practice, a potential predictor of future outcomes, or a legacy constraint to be managed. Long-standing succession practices, professional customs, or organisational rituals may be questioned when predictive systems identify them as inefficient or inconsistent with measurable objectives.

Yet tradition need not simply disappear. It can remain a source of organisational identity, institutional memory, professional obligation, cultural meaning, and ownership legitimacy. The relevant governance question is whether organisations recognize those forms of value alongside computational assessments or treat optimisation as the sole criterion of rationality.

4.1.2 Charismatic Authority: From Personal Appeal to Calculated Influence

Charismatic authority rests on recognition of a leader's extraordinary qualities and followers' affective commitment to that leader (Weber, 1978). AI-enabled systems can reconfigure this form of authority by translating communication, affect, rhetoric, and influence into measurable indicators. Sentiment analysis, engagement metrics, A/B testing, and behavioural analytics can make aspects of personal appeal visible and actionable as data.

Through *Gestell*, charisma becomes available for calculation and optimisation. Leaders or organisations may test messages, rhetorical styles, emotional displays, and communication formats to maximize engagement, compliance, or performance. The result may be forms of calculated influence or "calculated authenticity" (Marwick, 2013).

This does not mean that charisma disappears. Trust, embodied presence, shared experience, symbolic leadership, and collective meaning-making cannot be fully reduced to performance indicators. Nevertheless, the conditions of charismatic legitimacy may change when followers increasingly encounter leadership through mediated, measured, and optimised communication.

4.1.3 Legal-Rational Authority: From Office to Algorithmic Governance

Legal-rational authority is based on the legitimacy of formal rules and the right of officeholders to issue decisions within defined procedures (Weber, 1978). AI-enabled systems may automate or reorganize activities traditionally associated with bureaucratic authority, including task allocation, performance evaluation, eligibility determination, resource allocation, and risk assessment.

Through *Gestell*, administrative judgment may be reframed as a process that can be standardised, formalized, and optimised. Human officeholders may become exception managers, reviewers, or implementers of system outputs. This does not eliminate legal-rational authority, because human organisations still establish objectives, authorize systems, define policies, and remain legally accountable. However, it can redistribute authority across models, data, developers, managers, and oversight bodies.

The governance risk is that legitimacy becomes attached to perceived computational efficiency or accuracy without adequate transparency, contestability, or appeal rights. The relevant question is therefore not whether algorithms replace offices completely, but whether organisations preserve legal accountability, procedural fairness, and meaningful human review when authority is exercised through AI-enabled systems.

The preceding analysis identifies a common pattern across the three forms of authority: AI-enabled systems can translate a qualitative source of legitimacy into data that can be classified, predicted, ranked, and incorporated into organisational workflows. The following illustrative applications show how this process may operate in concrete decision settings.

4.2 Illustrative Applications of AI-Enabled Authority

The following applications are illustrative theoretical cases rather than representative empirical case studies. They were selected to demonstrate how the Weber-Heidegger framework applies to the three Weberian bases of legitimate authority and to a cross-cutting setting in which multiple authority forms intersect. Each case identifies: (1) the primary source of legitimacy; (2) the mechanism through which AI datafies, quantifies, models, or embeds that source in organisational workflows; (3) the expected effect on authority; and (4) the governance and boundary conditions that shape whether authority is reinforced, redistributed, or weakened.

The applications do not assume that every AI system produces the same outcome. Instead, they show how the same technical capabilities can have different implications depending on whether AI supports existing human judgment, becomes embedded in mandatory workflows, or becomes treated as a primary reason for organisational action. The first three cases correspond respectively to traditional, charismatic, and legal-rational authority. The fourth case illustrates how platform-based algorithmic management can combine these mechanisms in a practical work setting.

4.2.1 AI-Supported Institutional Memory and Succession

AI systems can store, retrieve, classify, and compare large bodies of organisational records, including prior decisions, succession histories, professional precedents, policy interpretations, and institutional knowledge. This application illustrates traditional authority, which derives legitimacy from continuity, inherited practice, and institutional memory. AI can reinforce traditional authority when it makes relevant precedent easier for decision-makers to access and interpret while preserving the role of experienced actors in explaining why a past practice remains meaningful.

Through *Gestell*, however, precedent and institutional memory can also become data that are ranked, predicted, and evaluated according to performance, risk, or efficiency. When an AI system treats prior practice only as a variable to be optimised, tradition may lose its status as an independent source of legitimacy. Authority may then shift from continuity and shared institutional meaning toward the system's encoded performance criteria. This case therefore illustrates Propositions 5 and 6: datafication can preserve tradition when it supports contextual interpretation, but it can displace tradition when optimisation becomes the sole basis for evaluating precedent.

The relevant boundary conditions are whether decision-makers can interpret and depart from system outputs, whether institutional knowledge is treated as more than historical data, and whether professional or organisational norms protect continuity as a source of value. Governance should therefore require documented rationales when AI-supported recommendations depart from established precedent, meaningful review by knowledgeable officeholders, and procedures for preserving institutional memory that cannot be fully captured in data.

4.2.2 AI-Mediated Leadership Communication

AI-enabled communication systems can analyse employee sentiment, tailor messages to audience segments, test alternative wording, recommend communication strategies, and predict engagement. This application illustrates charismatic authority, which depends on followers' recognition of a leader's exceptional qualities, trust, affective commitment, and capacity to articulate shared purpose. AI can reinforce charismatic authority when it helps leaders understand how followers respond to messages while leaving trust, embodied presence, and collective meaning at the centre of the relationship.

Through *Gestell*, communication, affect, and follower response become measurable variables that can be optimised for attention, compliance, or engagement. The concern is not that all data-informed communication destroys charisma. Rather, charismatic authority may be transformed when engagement metrics and optimisation systems substitute for genuine leader-follower recognition. In that circumstance, practical influence may reside increasingly in the technical system that designs and tests messages rather than in the leader's personally recognised qualities. This case therefore illustrates Propositions 3 and 4.

The relevant boundary conditions include whether AI supports or replaces direct leader-follower interaction, whether communication remains intelligible and authentic to followers, and whether organisations use engagement metrics as supplementary evidence rather than as the sole measure of leadership effectiveness. Governance should require appropriate disclosure of material AI mediation, safeguards against manipulative targeting, and human judgment about organisational purpose rather than reliance only on optimised engagement.

4.2.3 AI-Supported Hiring Systems

AI-supported hiring systems may screen résumés, rank candidates, assess recorded interviews, or predict job performance (O'Neil, 2016; Pasquale, 2015; Zarsky, 2016). This application illustrates legal-rational authority, which rests on formal rules, offices, and procedures. AI can reinforce legal-rational authority when it supports documented and reviewable selection procedures, applies authorised criteria consistently, and remains subject to responsible human decision-making.

However, hiring authority may be redistributed when candidate scores and rankings become practically decisive without meaningful human review, explanation, or appeal. In that circumstance, the system's model, training data, decision thresholds, and workflow rules shape selection more strongly than the hiring manager's office-based discretion. The legitimacy of the decision may then become associated with claims of consistency, predictive accuracy, or bias reduction rather than with a manager's professional judgment. This case illustrates Proposition 1 when the system supports accountable procedures and Proposition 2 when model outputs become practically decisive.

Through *Gestell*, candidate histories, communication styles, credentials, and interview responses become data for classification and optimisation. Substantial authority reconfiguration is most likely when the system is embedded in mandatory shortlisting or selection workflows and hiring managers cannot meaningfully question or override its recommendations. Human-centred governance therefore

requires notice that AI is used, documented criteria, review of adverse outcomes, meaningful override authority, and accessible mechanisms through which candidates can correct relevant information or challenge a decision.

4.2.4 Platform-Based Algorithmic Management

Platform-based algorithmic management provides a cross-cutting application that illustrates how AI can combine datafication, workflow embedding, and feedback-based reinforcement to redistribute practical supervisory authority. Ride-hailing, food-delivery, and related platforms may use algorithms to allocate work, calculate compensation, set performance thresholds, direct worker behaviour, and impose sanctions through ratings or automated account restrictions (Kellogg et al., 2020; Rosenblat & Stark, 2016). Authority is not necessarily removed from human organisations, but it may shift from a visible supervisor toward a combination of software rules, performance metrics, platform policies, and data-driven feedback loops.

This case primarily concerns legal-rational and supervisory authority because rules, criteria, and sanctions are embedded in platform processes. However, it also shows how other authority mechanisms can intersect. Platform rules may reproduce inherited supervisory practices, while ratings and feedback shape forms of influence, compliance, and worker dependence. Through *Gestell*, worker activity becomes a continuously measurable resource: location, availability, acceptance rates, customer ratings, delivery speed, and other behavioural indicators become inputs for optimisation.

The authority effects are strongest when work allocation and sanctions are automated, workers have limited ability to understand or contest system outputs, and regulatory or collective protections are weak. By contrast, authority remains more accountable when platforms disclose allocation and evaluation criteria, provide accessible procedures to challenge ratings and deactivation, assign responsibility to identifiable organisational actors, and allow independent review of system-generated decisions. Table 7 summarises the illustrative applications by identifying the primary Weberian authority form, the AI-enabled mechanism, the expected effect on authority, and the boundary conditions that shape that effect. Table 7 would Illustrate Applications of the Weber-Heidegger Framework.

4.3 Governance Implications for AI-Enabled Systems

The Human-centred governance framework follows directly from the Weber-Heidegger analysis of authority reconfiguration. The framework does not treat accountability, transparency, contestability, oversight, and institutional design as generic responsible-AI principles. It treats them as institutional responses to specific ways in which AI can alter the basis, location, and exercise of legitimate authority. When AI systems convert organisational practices and judgments into data, metrics, scores, and predictions, they can change what counts as a reason for action. When those outputs are embedded in workflows, they can shift practical decision rights away from identifiable human officeholders. When feedback loops repeatedly validate system outputs, they can make algorithmic authority appear increasingly natural, objective, or legitimate.

Governance is therefore required not only to reduce technical risk, but also to preserve the conditions of legitimate authority. It must keep AI-supported decisions connected to accountable institutions, interpretable reasons, meaningful opportunities for challenge, and authorised human judgment. Table 8 maps the mechanisms of authority reconfiguration to their associated theoretical risks, governance responses, and purposes for preserving legitimate authority. Table 8 spots from Authority Reconfiguration to Human-centred Governance.

4.3.1 Accountability and Responsibility

Workflow embedding redistributes practical decision rights when AI outputs trigger or structure consequential action; accountability is therefore needed to identify the human institution responsible for authorizing, reviewing, and remedying those actions.

In Weberian legal-rational authority, accountability is linked to the office: a designated officeholder has defined responsibilities and can be required to justify a decision. AI-enabled systems can complicate this arrangement by distributing decisions across developers, vendors, data providers, managers, deployers, and users. When an automated hiring, scheduling, eligibility, or performance-management system causes harm, responsibility can become difficult to allocate across this chain.

Organisations should therefore establish an explicit accountability map for every consequential AI system. The map should identify the executive accountable for deployment, the operational owner responsible for day-to-day use, the technical owner responsible for model performance and documentation, the authority responsible for approving changes, and the person or office responsible for responding to affected individuals. Accountability cannot be delegated to the system itself. Algorithmic outputs may inform action, but a legally and ethically accountable human institution must remain responsible for authorizing, reviewing, and remedying decisions.

4.3.2 Transparency, Explanation, and Contestability

Datafication, quantification, and modelling can make organisational judgments appear as neutral scores or predictions; transparency and contestability are therefore required to keep the reasons for AI-supported decisions interpretable and open to challenge.

Transparency should not be understood as merely publishing technical information about a model. In organisational settings, meaningful transparency requires that affected persons can understand when AI is used, what role it plays in a decision, what information it relies upon, what criteria or objectives guide it, and what consequences may follow from its output. This is especially important where AI affects employment, access to services, performance evaluation, discipline, promotion, scheduling, or resource allocation.

Human-centred governance also requires contestability. Individuals affected by a high-impact AI-supported decision should have access to a timely explanation, a meaningful opportunity to correct relevant information, and an appeal process that is independent from the automated decision pathway. Explanation without an opportunity for review does not provide genuine accountability. Contestability restores an element of procedural legitimacy by ensuring that people are treated not only as data sources but also as participants withstanding to question institutional decisions.

4.3.3 Meaningful Human Oversight

Meaningful human oversight responds to the risk that AI outputs become practically decisive even when formal responsibility remains with a human officeholder. Human oversight is meaningful only when the human reviewer has the authority, competence, time, information, and institutional support necessary to question or override an algorithmic recommendation. A nominal human approval step does not satisfy this requirement if reviewers are expected to follow the system by default, lack access to underlying evidence, or face productivity pressures that discourage careful review.

Organisations should distinguish between three functions of oversight. **Pre-deployment oversight** assesses whether a system's purpose, data, risk profile, and optimisation objectives are acceptable before deployment. **Operational oversight** monitors system performance, bias, error patterns, and unexpected effects during use. **Post-decision oversight** provides review, remedy, and learning after a contested or

harmful outcome. These functions should not be concentrated entirely within the technical team that develops or deploys the system.

4.3.4 Legitimacy and Institutional Design

Institutional design is required because feedback reinforcement can make AI outputs appear legitimate through repeated use, while authority itself becomes distributed across organisational and technical actors.

AI-enabled authority is legitimate not simply because a model is accurate, efficient, or technically sophisticated. Legitimacy depends on whether the system operates within an authorised institutional mandate, follows fair procedures, respects affected persons, allows contestation, and remains subject to accountable governance. Computational performance can support legitimacy, but it cannot replace legal, ethical, and relational sources of legitimacy. Institutional design should therefore distribute governance responsibilities across complementary roles.

Senior leadership should establish organisational purpose, risk appetite, and non-negotiable ethical commitments. System designers should translate these commitments into system requirements, data practices, and safeguards. Independent ethics, risk, compliance, or audit functions should evaluate whether systems operate consistently with law, policy, and organisational values. Frontline managers and affected stakeholders should provide contextual knowledge about how systems operate in practice and where harms or distortions arise.

The governance architecture should also include clear escalation procedures, documentation requirements, periodic independent audits, monitoring thresholds, incident-response processes, and criteria for suspending or withdrawing a system. These arrangements prevent authority from becoming silently embedded in technical infrastructure without corresponding mechanisms for institutional review.

4.4 The Status of Post-Leadership Roles

The redistribution of authority across data, models, workflows, and institutions also redistributes the governance functions needed to preserve legitimacy.

The system designer, ethical interrogator, and meaning-maker are not proposed as fixed new leadership titles or as new pure types of authority equivalent to Weber's traditional, charismatic, or legal-rational authority. They are best understood as normative governance functions: organisational capacities required to govern AI-enabled decision-making in ways that preserve accountability, ethical judgment, and legitimacy. In practice, these functions may be performed by existing managers, board committees, human-resources leaders, legal and compliance teams, data scientists, ethics officers, worker representatives, or interdisciplinary governance bodies. Their institutional form will vary according to organisational size, sector, risk profile, and legal environment.

These functions emerge because authority is increasingly distributed across human actors, data infrastructures, models, and automated workflows. They respond to the fragmentation of functions that, under conventional leadership arrangements, could be concentrated in a human officeholder. The system designer addresses how values and purposes are translated into technical systems. The ethical interrogator addresses whether the system's objectives, data practices, outcomes, and effects remain ethically and legally defensible. The meaning-maker addresses whether AI-supported decisions remain intelligible, socially legitimate, and connected to organisational purpose.

Their relationship to Weberian authority is therefore reconstructive rather than substitutive. They do not replace traditional, charismatic, or legal-rational authority; instead, they preserve and redistribute

elements of those forms under AI-enabled organisational conditions. The system designer extends legal-rational authority by specifying rules, decision rights, controls, and procedures within technical infrastructures. The ethical interrogator reinforces legal-rational accountability while drawing on the moral and critical judgment that cannot be delegated to automated systems. The meaning-maker sustains aspects of charismatic and traditional authority by cultivating trust, institutional identity, collective interpretation, and value continuity.

The functions are analytical and normative categories, not prescriptions for three new executive positions; an organization may distribute them across multiple people and institutions, depending on its size, sector, risk profile, and governance structure. Table 9 summarises the three post-leadership governance functions, their potential organisational locations, and their relationship to Weberian authority. Table 9 is about Post-Leadership Roles as Normative Governance Functions.

The three functions should not be concentrated without oversight in a single technical office. A system designer may prioritize technical feasibility or performance; an ethical interrogator may emphasize rights, fairness, and long-term harms; and a meaning-maker may focus on trust, interpretation, and cohesion. Their productive tension is a governance safeguard. It ensures that efficiency, accountability, and organisational purpose remain in dialogue rather than allowing any one value to become the sole basis of authority.

4.5 A Human-centred Governance Framework

The governance principles in Table 10 consolidate the responses identified in Table 8. Their purpose is not to create a second, independent governance framework. Rather, they summarize the institutional capacities required to address the authority effects of datafication, quantification, modelling, workflow embedding, feedback reinforcement, and distributed responsibility. Table 10 consolidates the human-centred governance principles, the questions they address, and the organisational mechanisms through which they can be implemented. Table 10 consolidates the human-centred governance principles, the questions they address, and the organisational mechanisms through which they can be implemented. Human-centred governance is therefore not a residual safeguard added after automation. It is the institutional condition through which AI-enabled authority can remain legitimate. The purpose is not to prohibit calculation or optimisation, but to ensure that these capabilities remain answerable to human judgment, ethical responsibility, procedural fairness, and organisational purpose.

4.6 Tables

Table 1. Distinctive Explanatory Contribution of the Weber-Heidegger Framework

Theoretical approach	Primary question	Explains well	Leaves underexplained	Weber-Heidegger addition
AI augmentation and leadership	How can AI assist leaders and managerial decisions?	Human-AI collaboration, leader adaptation, managerial skills, decision support	Whether AI changes the grounds on which decisions are accepted as legitimate	Shows how legitimacy may shift among leaders, data, models, workflows, and institutions
Algorithmic management and digital control	How do algorithms allocate, monitor, and control work?	Task allocation, surveillance, incentives, ratings, discipline, and labour control	Which legitimacy claim is displaced, reinforced, or transformed when algorithmic control is	Distinguishes traditional, charismatic, and legal-rational authority and

Theoretical approach	Primary question	Explains well	Leaves underexplained	Weber-Heidegger addition
			accepted	examines how each is reconfigured
Algocracy and algorithmic authority	How does authority become embedded in computational systems?	Automation, opacity, distributed responsibility, and accountability gaps	How computational outputs gain social recognition as rightful organisational authority	Explains when scores, rankings, and predictions become practical sources of legitimacy
AI governance	How should organisations manage AI risks?	Fairness, transparency, auditing, accountability, oversight, contestability	Why governance is constitutive of legitimacy rather than merely a compliance or risk-management function	Treats governance as the process that authorizes, limits, justifies, and contests AI-enabled authority
Weber-Heidegger framework	How does AI change the social basis and practical exercise of legitimate authority?	Legitimacy claims, datafication, authority redistribution, legitimacy shifts, and governance conditions		Links the source of authority, the mechanism of datafication, the shift in legitimacy, and governance requirements

Table 2. Weber-Heidegger Analytical Model of Authority Reconfiguration

Analytical step	Weberian dimension	Heideggerian dimension	AI-enabled organisational process
1. Identify the authority claim	Tradition, charisma, or legal-rational office	—	Determine whether legitimacy is grounded in custom, personal influence, or formal procedure
2. Datafy the authority basis	Authority's social source becomes observable and measurable	<i>Gestell</i> frames it as calculable	Convert precedent, influence, judgment, or performance into data, metrics, scores, or models
3. Reconfigure the authority process	The exercise of authority shifts across people and systems	<i>Bestand</i> privileges operational availability and utility	Embed datafied authority in rankings, workflows, recommendations, predictive models, or automated decisions
4. Assess legitimacy and governance	Authority remains legitimate only if socially and institutionally justified	Calculative optimisation must remain contestable	Evaluate accountability, transparency, human oversight, appeal rights, and institutional authorization

Table 3. Mechanisms Through Which Authority Becomes Datafied and Actionable

Mechanism	Organisational process	Traditional authority	Charismatic authority	Legal-rational authority
Datafication	Conversion of activity, judgment, and relationships into digital records	Precedent, tenure, custom, and institutional memory become historical data	Communication, engagement, affect, and follower responses become digital traces	Rules, decisions, evaluations, and administrative actions become structured records
Quantification	Conversion of records into comparable metrics	Tradition becomes a compliance, risk, or performance indicator	Charisma becomes sentiment, engagement, or influence scores	Judgment becomes performance measures, risk ratings, or decision thresholds
Modelling	Generation of rankings, classifications, predictions, or recommendations	Historical practice becomes predictive input	Influence becomes optimizable communication or behavioural prediction	Rules and discretion become model-supported recommendations
Workflow embedding	Connection of outputs to organisational decisions	Data-informed precedent guides policy or succession decisions	Engagement outputs guide communication and mobilization strategies	Scores and predictions guide hiring, scheduling, allocation, promotion, or discipline
Feedback reinforcement	Use of outcomes to validate or update the system	Prior practices are reproduced as evidence of their predictive value	Optimised communication is reinforced through behavioural response data	Past decisions become training data for future recommendations

Table 4. Conditional Propositions on AI-Enabled Authority Reconfiguration

Proposition	Authority form	AI-enabled condition	Expected authority effect
P1	Legal-rational	Authorised rules, clear procedures, accountable officeholders, explanation, review, and appeal	Reinforces legal-rational authority
P2	Legal-rational	Opaque or practically decisive outputs without responsible review, override, or contestation	Weakens or redistributes legal-rational authority
P3	Charismatic	Data-informed communication supports authentic trust, leader-follower	Reinforces charismatic authority

		recognition, and shared purpose	
P4	Charismatic	Optimisation substitutes engineered engagement for trust, embodiment, and shared meaning	Weakens or transforms charismatic authority
P5	Traditional	AI documents and supports the contextual interpretation of precedent and institutional memory	Reinforces traditional authority
P6	Traditional	AI reduces custom and precedent to efficiency, risk, or performance variables	Weakens or displaces traditional authority
P7	Cross-cutting	Feedback loops validate outputs without systematic examination of bias, error, or excluded judgment	Strengthens practical algorithmic authority
P8	Cross-cutting	Accountability, transparency, contestability, human review, and independent audit are present	Moderates authority reconfiguration and preserves legitimacy

Table 5. Boundary Conditions of AI-Enabled Authority Reconfiguration

Boundary condition	AI primarily supports existing authority when	AI is more likely to redistribute or transform authority when
AI autonomy	The system provides optional advice or information	The system automatically executes decisions or restricts available choices
Human discretion	Decision-makers can understand, question, and override outputs	Review is nominal, constrained, or practically unable to depart from the system
Decision consequentiality	The decision is routine or low consequence	The decision effects employment, discipline, services, resources, health, credit, or policing
Workflow embeddedness	Outputs are advisory and not tied to mandatory action	Outputs are embedded in mandatory workflows, dashboards, triggers, or decision rules
Organisational centralization	Local managers or professionals retain discretion	Centralised platforms standardize decisions across the organization
Explainability and contestability	Criteria are documented; errors can be corrected; decisions can be appealed	Outputs are opaque, difficult to challenge, or treated as final
Professional norms	Strong professional judgment remains institutionally protected	Expertise is weak, fragmented, or subordinated to system metrics
Override and accountability	Named officeholders authorize, review, and remedy decisions	Responsibility is dispersed and no actor can effectively intervene
Regulatory and institutional context	Strong legal duties, professional regulation, labour protections, and public oversight apply	Regulation, oversight, and collective representation are weak or absent

Table 6. Weber-Heidegger Model of Authority Reconfiguration

Weberian authority type	Weberian basis of legitimacy	How <i>Gestell</i> operates	AI-enabled reconfiguration
Traditional authority	Custom, inheritance, institutional memory, continuity, and inherited status	Frames tradition as information that can be evaluated through efficiency, risk, predictive value, and organisational performance	Customs may be translated into legacy data, compliance rules, or organisational constraints. Tradition may be marginalized, but it can persist through culture, ownership, professional norms, and institutional memory
Charismatic authority	Personal exceptionalism, follower devotion, trust, rhetoric, and affect	Frames charisma as measurable influence that can be monitored, modelled, and optimised	Leadership appeal may be translated into engagement, sentiment, communication, and behavioural metrics. Charisma may become partly engineered without disappearing as an embodied and relational phenomenon
Legal-rational authority	Formal rules, office, procedure, delegated discretion, and bureaucratic accountability	Frames office-based judgment as a process that can be standardised, automated, and optimised	Rules and discretion may be embedded in algorithms and workflows. Legitimacy may become partly attached to consistency, predictive accuracy, procedural performance, and computational efficiency

Table 7. Illustrative Applications of the Weber-Heidegger Framework

Illustrative application	Primary Weberian authority form	AI-enabled mechanism	Expected authority effect	Key boundary conditions
AI-supported institutional memory and succession	Traditional authority	Datafication and modelling of precedent, custom, succession histories, and institutional knowledge	Reinforces tradition when it supports contextual interpretation; displaces tradition when precedent becomes only an optimisation variable	Human interpretation of precedent, professional norms, ability to depart from system outputs, institutional protection of continuity
AI-mediated leadership communication	Charismatic authority	Quantification of engagement, sentiment, influence, and message response; optimisation of communication	Amplifies charisma when it supports authentic recognition; transforms or weakens it when engineered engagement substitutes for trust and shared meaning	Direct leader-follower interaction, transparency, authenticity, use of metrics as supplementary rather than decisive evidence

Illustrative application	Primary Weberian authority form	AI-enabled mechanism	Expected authority effect	Key boundary conditions
AI-supported hiring systems	Legal-rational authority	Scoring, ranking, prediction, and workflow embedding of selection criteria	Reinforces legal-rational authority through documented and reviewable procedures; redistributes it when scores become practically decisive	Human review, override authority, explanation, appeal, degree of workflow automation
Platform-based algorithmic management	Cross-cutting: legal-rational and supervisory authority	Continuous datafication, algorithmic allocation, performance scoring, automated sanctions, and feedback reinforcement	Redistributes practical supervisory authority toward platforms, metrics, and workflows	AI autonomy, worker contestability, accountability, collective representation, and regulatory protection

Table 8. From Authority Reconfiguration to Human-centred Governance

Authority-reconfiguration mechanism	Theoretical risk	Governance response	Purpose for legitimate authority
Datafication	Persons, practices, precedent, and judgments are reduced to incomplete, inaccurate, or decontextualized data	Data documentation, data-quality review, correction rights, contextual review, and professional input	Ensures that decision-relevant representations remain open to interpretation and correction
Quantification	Qualitative values are converted into metrics that may privilege what is easily measured	Metric validation, impact assessment, documentation of objectives, and review of excluded values	Prevents metrics from becoming unquestioned substitutes for organisational judgment
Modelling	Scores, rankings, and predictions appear objective or authoritative despite assumptions and uncertainty	Explanation, model documentation, independent validation, bias testing, and contestability	Enables affected persons and accountable actors to evaluate and challenge model-based reasons
Workflow embedding	AI outputs become tied to approvals, allocations, sanctions, or decisions, shifting practical decision rights	Accountability maps, designated decision owners, override authority, escalation procedures, and decision logs	Keeps consequential decisions connected to identifiable and answerable human institutions
Feedback	Repeated use of model	Ongoing monitoring,	Prevents self-reinforcing

Authority-reconfiguration mechanism	Theoretical risk	Governance response	Purpose for legitimate authority
reinforcement	outputs produces self-confirming data and reinforces perceived algorithmic legitimacy	independent audit, periodic reassessment, outcome review, and suspension criteria	outputs from acquiring legitimacy without continuing institutional scrutiny
Cross-cutting authority redistribution	Authority becomes dispersed among managers, developers, vendors, systems, and governance bodies	Institutional design, role allocation, stakeholder participation, legal compliance, and appeal mechanisms	Clarifies who can authorize, justify, revise, and remedy AI-supported decisions

Table 9. Post-Leadership Roles as Normative Governance Functions

Governance function	Conceptual status	Possible organisational location	Relation to Weberian authority
System designer	Normative governance function concerned with translating values into system requirements	Product team, data science team, Office of the Chief Information Officer, AI governance board	Extends legal-rational authority by embedding rules, procedures, and decision rights in AI systems
Ethical interrogator	Normative governance function concerned with scrutiny, challenge, and accountability	Ethics office, risk and compliance unit, internal audit, independent review board, worker representative body	Reinforces legal-rational accountability and provides critical judgment where automated systems cannot bear moral responsibility
Meaning-maker	Normative governance function concerned with purpose, trust, interpretation, and institutional legitimacy	Senior leadership, communications, human resources, culture team, frontline management, stakeholder forum	Sustains charismatic and traditional dimensions through trust, shared meaning, institutional memory and value continuity

Table 10. Human-centred governance Framework for AI-Enabled Authority

Governance principle	Core question	Organisational mechanism
Accountability	Who is responsible for an AI-supported decision and its consequences?	Named executive owner, operational owner, technical owner, and appeal authority
Transparency	Can affected persons understand when and how AI influenced a decision?	Notice, documentation, explanation procedures, and accessible communication
Contestability	Can a person challenge a decision, correct information, and obtain a remedy?	Independent review, appeal rights, correction mechanisms, and escalation paths
Human oversight	Can authorised people meaningfully question or	Pre-deployment review, operational monitoring, override authority, and post-decision review

Governance principle	Core question	Organisational mechanism
	override the system?	
Legitimacy	Is the system authorised, fair, and consistent with institutional values?	Legal mandate, ethical review, stakeholder participation, and procedural safeguards
Institutional design	How is governance embedded across the organization?	Cross-functional governance board, audit, risk management, incident response, and periodic reassessment

5. Conclusion

5.1 Toward Human-Centred Governance

5.1.1 Core Argument

This paper argues that AI may dissolve the exclusive human grounding of organisational authority without eliminating authority itself. Weber's typology identifies the social bases on which authority is accepted as legitimate (tradition, charismatic recognition, and legal-rational office) while Heidegger's concept of *Gestell* explains how AI can make these bases available for measurement, prediction, ranking, and optimisation. AI may therefore redistribute practical influence across human actors, algorithms, data infrastructures, workflows, and governance arrangements.

5.1.2 Propositions and Boundary Conditions

The framework does not treat datafication as an automatic loss of human authority. Its propositions and boundary conditions specify when AI supports existing authority, when it redistributes practical decision rights, and when computational outputs become sufficiently decisive to weaken authority's human-exclusive basis. The governance implication is that accountability, transparency, contestability, meaningful human oversight, and institutional design are needed to keep AI-supported decisions connected to authorised institutions, interpretable reasons, and opportunities for challenge.

5.1.3 Illustrative applications

The illustrative applications show that authority reconfiguration is not confined to a single organisational setting. AI-supported institutional memory and succession demonstrate how datafication may preserve or displace traditional authority. AI-mediated leadership communication shows how the quantification of engagement may amplify or weaken charismatic authority. AI-supported hiring illustrates how scoring and workflow embedding can reinforce or redistribute legal-rational authority. Platform-based algorithmic management demonstrates how datafication, automated allocation, and feedback can redistribute practical supervisory authority. Across these cases, the central issue is not whether AI removes human responsibility, but whether organisational arrangements make computational outputs practically decisive without preserving accountable human judgment, contestability, and institutional oversight.

5.1.4 Governance Derivation

Human-centred governance follows from this authority-reconfiguration process. Datafication requires documentation, contextual review, and correction rights because it can reduce people, practices, and institutional knowledge to incomplete representations. Quantification and modelling require validation,

explanation, and contestability because scores and predictions can appear more objective or authoritative than they are. Workflow embedding requires clear accountability and override arrangements because it can shift practical decision rights away from visible officeholders. Feedback reinforcement requires monitoring, independent audit, and periodic reassessment because repeated use can create self-confirming evidence and apparent algorithmic legitimacy.

5.1.5 Governance Functions

The system designer, ethical interrogator, and meaning-maker should therefore be understood as governance functions rather than as new leadership styles or new Weberian authority types. System designers translate organisational values into system objectives, data practices, safeguards, and escalation rules. Ethical interrogators scrutinise fairness, harm, accountability, and unintended consequences. Meaning-makers sustain organisational purpose, trust, and collective understanding when data-driven systems risk reducing people and relationships to measurable outputs. Together, these functions help ensure that calculation remains accountable to ethical responsibility and human judgment.

5.2 Contributions

This paper makes four contributions to research on management, leadership, and AI governance.

First, it reframes AI as a possible reconfiguration of authority rather than only a tool for leader adaptation. Existing research often examines how managers can use AI, how AI augments human judgment, or how algorithmic systems control work. This paper instead asks how AI may change the basis on which organisational decisions are regarded as legitimate. It shows that authority may shift from being located primarily in human leaders and formal offices toward arrangements that combine managers, data, algorithms, workflows, and governance institutions.

Second, it develops the Weber-Heidegger analytical framework. Weber's three forms of legitimate authority (traditional, charismatic, and legal-rational) identify the social sources through which authority is accepted. Heidegger's concept of *Gestell* explains how AI can make those sources available as data for measurement, ranking, prediction, and optimisation. The framework therefore explains both what authority is based on and how AI may reshape its operation. It also identifies five mechanisms through which this reconfiguration can occur: datafication, quantification, modelling, workflow embedding, and feedback reinforcement. Unlike theories that explain AI as a tool of managerial control or a source of governance risk, this framework explains how computational outputs may become accepted as reasons for action and thereby acquire practical authority within an organisation.

Third, the paper develops a human-centred governance framework for AI-enabled authority. It argues that technical accuracy and efficiency alone cannot make AI-supported decisions legitimate. Organisations also need assigned accountability, understandable explanations, meaningful opportunities to contest decisions, human reviewers with genuine override authority, and institutional safeguards such as audits, documentation, escalation procedures, and independent review. This contribution connects AI governance directly to the organisational conditions under which authority remains legitimate. It therefore treats governance not as a compliance response to technical risk, but as the institutional process through which AI-enabled authority is authorised, limited, justified, and contested.

Fourth, the paper develops conditional propositions and boundary conditions that make the framework empirically testable. The propositions specify when datafication, quantification, workflow embedding, and feedback-based reinforcement are likely to strengthen, weaken, redistribute, or transform traditional, charismatic, and legal-rational authority. The boundary conditions identify how

AI autonomy, human discretion, decision consequentiality, workflow embeddedness, professional norms, institutional safeguards, and regulatory context shape these effects.

Together, these contributions shift the discussion from whether AI replaces leaders to how organisations can govern the redistribution of authority while preserving human judgment, responsibility, procedural fairness, and organisational purpose.

5.3 Limitations

This study is conceptual and does not empirically test the Weber-Heidegger framework, its propositions, or its boundary conditions. The paper therefore does not claim that AI produces the same authority effects across organisations, sectors, or legal jurisdictions. Whether AI reinforces, redistributes, hybridises, or weakens authority depends on system design, data practices, the decision involved, organisational structure, professional norms, regulatory requirements, and the availability of meaningful oversight and appeal. The illustrative applications are intended to clarify the framework, not to provide representative empirical evidence.

A second limitation concerns the integration of Weber and Heidegger. Weber's sociology of legitimate authority and Heidegger's philosophy of technology were developed for different analytical purposes. Weber provides concepts for analysing the social grounds on which authority is accepted as legitimate, whereas Heidegger examines the historical and ontological conditions through which modern technology frames entities as available for calculation and use. The framework treats these traditions as complementary analytical resources, but it does not claim that they form a fully unified theory or that one can be reduced to the other. The proposed integration is therefore interpretive and theory-building; future research should assess whether it produces useful explanations beyond the cases and concepts developed here.

Third, the paper uses *Gestell* and *Bestand* selectively as organisational analytical concepts. It does not claim to provide a comprehensive interpretation of Heidegger's philosophy of technology or to translate his concepts directly into measurable organisational variables. In this article, *Gestell* identifies the tendency for AI-enabled systems to frame people, practices, judgments, and institutional knowledge as data available for measurement, prediction, ranking, and optimisation. This operationalisation is useful for analysing organisational AI, but it necessarily narrows the broader philosophical meaning and historical scope of Heidegger's work.

Fourth, Weber's categories of traditional, charismatic, and legal-rational authority are ideal types rather than exhaustive descriptions of authority in all institutional and cultural settings. Their meaning and relative importance may vary across national contexts, sectors, professions, organisational forms, ownership structures, and cultural traditions. For example, professional authority, collective representation, Indigenous governance, religious authority, family ownership, and informal networks may not fit neatly within the three categories or may combine them in distinctive ways. Future research should therefore examine whether the framework requires additional authority categories or different interpretations in particular institutional contexts.

Finally, AI systems vary considerably in capability, autonomy, opacity, adaptability, and organisational role. A low-autonomy system that provides optional information may have very different authority effects from a system that automatically allocates work, screens candidates, recommends disciplinary action, or constrains the choices available to decision-makers. Similarly, generative AI, predictive models, rule-based systems, and automated workflows may reconfigure authority through different mechanisms. The framework identifies AI autonomy, human discretion, decision consequentiality, workflow embeddedness, contestability, professional norms, institutional safeguards, and regulatory

context as boundary conditions, but it does not specify the relative weight or interaction of these conditions. Empirical research is needed to identify which combinations most strongly predict authority reconfiguration.

5.4 Future Research

Future research can test, refine, and extend the Weber-Heidegger framework in several ways.

First, qualitative case studies should examine authority in practice. Researchers could study AI-supported hiring, platform work, organisational communication, institutional-memory systems, performance management, public administration, health care, higher education, and financial services. These studies should examine how managers, workers, system designers, and affected individuals understand who makes decisions, what information they consider authoritative, and whether they view AI-supported decisions as legitimate.

Second, researchers should trace the five mechanisms identified in this paper. Process-tracing studies could follow a decision from the original data source through quantification, modelling, workflow embedding, and final human or automated action. For example, a study of an AI hiring system could examine how candidate data become scores, how scores shape shortlists, who can override a recommendation, and whether candidates can correct errors or appeal an outcome.

Third, comparative research should assess variation across organisational and institutional settings. AI may reconfigure authority differently in private firms, public agencies, professional organisations, and platform companies. Comparative studies could examine how sector, organisational size, national regulation, union representation, professional norms, and cultural expectations shape the relationship between AI, authority, and legitimacy.

Fourth, longitudinal research should investigate whether repeated reliance on AI changes organisational relationships over time. Relevant outcomes include employee trust, managerial discretion, perceptions of procedural fairness, willingness to challenge decisions, professional identity, and confidence in organisational leadership. Such research could show whether AI-supported authority becomes accepted because it is substantively legitimate or simply because it becomes difficult to question.

Fifth, governance research should evaluate which safeguards work in practice. Researchers should test whether accountability maps, independent audits, explanation procedures, appeal rights, stakeholder participation, documented override powers, and AI-governance boards improve fairness, transparency, trust, and decision quality. This work is necessary to determine which institutional arrangements allow AI-enabled authority to remain accountable, contestable, and human-centred.

Future research should also examine the conceptual and institutional limits of the framework. Comparative studies could assess whether Weberian authority categories operate differently across cultural settings, professions, organisational forms, and regulatory systems.

Research should examine how different AI configurations (including generative AI, predictive models, rule-based decision systems, and highly automated workflows) interact with human discretion and institutional safeguards. Such research can identify whether the framework's mechanisms and propositions travel across settings or require modification to account for other sources of authority and different technological forms.

5.5 Final Governance Recommendations

The challenge of AI is therefore not simply to develop more technologically capable leaders. It is to design organisational and governance arrangements in which algorithmic capabilities remain answerable to human purposes, ethical responsibility, procedural fairness, contestability, and legitimate institutional authority. A sustainable future for intelligent systems depends not merely on advancing algorithmic performance, but on ensuring that technological efficiency remains embedded within human-centred governance.

Funding

This research received no external funding.

References

1. Barnard, C. I. (1938). *The Functions of the Executive*. Harvard University Press.
2. Bass, B. M. (1985). *Leadership and Performance Beyond Expectations*. Free Press.
3. Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W. W. Norton & Company.
4. Burns, J. M. (1978). *Leadership*. Harper & Row.
5. Chowdhury, S., Budhwar, P., & Wood, G. (2024). Generative artificial intelligence in business: Towards a strategic human resource management framework. *British Journal of Management*, 35(4), 1680-1691. <https://doi.org/10.1111/1467-8551.12824>
6. Danaher, J. (2016). The threat of algocracy: Reality, resistance and accommodation. *Philosophy & Technology*, 29(3), 245-268.
7. Fayol, H. (1949). *General and Industrial Management* (C. Storrs, Trans.). Pitman Publishing. (Original work published 1916)
8. Feenberg, A. (1991). *Critical theory of technology*. Oxford University Press.
9. Feenberg, A. (2002). *Transforming technology: A critical theory revisited* (2nd ed.). Oxford University Press.
10. Greenleaf, R. K. (1977). *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness*. Paulist Press.
11. Hao, X., Demir, E., & Eysers, D. (2024). Exploring collaborative decision-making: A quasi-experimental study of human and generative AI interaction. *Technology in Society*, 78, Article 102662. <https://doi.org/10.1016/j.techsoc.2024.102662>
12. Heidegger, M. (1966). *Discourse on Thinking* (J. M. Anderson & E. H. Freund, Trans.). Harper & Row.
13. Heidegger, M. (1977). *The Question Concerning Technology and Other Essays* (W. Lovitt, Trans.). Harper & Row. (Original work published 1954)
14. Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at work: The new contested terrain of control. *Academy of Management Annals*, 14(1), 366-410.
15. Laux, J. (2024). Institutionalized distrust and human oversight of artificial intelligence: Towards a democratic design of AI governance under the European Union AI Act. *AI & Society*, 39(6), 2853-2866. <https://doi.org/10.1007/s00146-023-01777-z>
16. Marwick, A. E. (2013). *Status Update: Celebrity, Publicity, and Branding in the Social Media Age*. Yale University Press.
17. Mintzberg, H. (2009). *Managing*. Berrett-Koehler Publishers.
18. O'Neil, C. (2016). *Weapons of math destruction: How big data increases inequality and threatens democracy*. Crown.
19. Pasquale, F. (2015). *The Black Box Society: The Secret Algorithms That Control Money and Information*. Harvard University Press.

20. Patnaik, T., Gnankob, R. I., & Nanda, N. S. (2026). Governing algorithms, empowering people: How ethical AI oversight shapes trust, technostress, and employee autonomy in AI-enabled HRM. *Frontiers in Artificial Intelligence*, 9, Article 1911545. <https://doi.org/10.3389/frai.2026.1911545>
21. Rosenblat, A., & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study of Uber's drivers. *International Journal of Communication*, 10, 3758-3784.
22. Schulte, N., & Kanbach, D. K. (2026). Rethinking organisational decision-making: The emerging roles and tasks of generative artificial intelligence. *Management Review Quarterly*. Advance online publication. <https://doi.org/10.1007/s11301-026-00611-2>
23. Schwab, K. (2016). *The Fourth Industrial Revolution*. World Economic Forum.
24. Selznick, P. (1957). *Leadership in Administration: A Sociological Interpretation*. Harper & Row.
25. Taylor, F. W. (1911). *The Principles of Scientific Management*. Harper & Brothers.
26. Weber, M. (1978). *Economy and society: An outline of interpretive sociology* (G. Roth & C. Wittich, Eds.). University of California Press. (Original work published 1922)
27. Wilson, H. J., & Daugherty, P. R. (2018). Collaborative intelligence: Humans and AI are joining forces. *Harvard Business Review*, 96(4), 114-123.
28. Winner, L. (1980). Do artifacts have politics? *Daedalus*, 109(1), 121-136.
29. Yeung, K. (2017). Hypernudge: Big data as a mode of regulation by design. *Information, Communication & Society*, 20(1), 118-136.
30. Zarsky, T. (2016). The trouble with algorithmic decisions: An analytic road map to examine efficiency and fairness in automated and opaque decision making. *Science, Technology, & Human Values*, 41(1), 118-132.
31. Zhang, M. M., Cooke, F. L., Ahlstrom, D., & McNeil, N. (2025). The rise of algorithmic management and implications for work and organisations. *New Technology, Work and Employment*, 40(3), 659-671. <https://doi.org/10.1111/ntwe.12343>
32. Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.