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# Digital Leadership and Employee Well-being: Reconciling Productivity Analytics with Humanistic Management Values

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## Abstract

Digital workplaces generate continuous behavioural data — keystrokes, meeting metadata, response latencies, task telemetry — and a growing industry converts this exhaust into productivity analytics for managers. The same period has seen organisations publicly commit to employee well-being as a strategic priority. These two movements are on a collision course: analytics regimes optimised for measurable output can erode autonomy, trust, and psychological safety, the very foundations on which sustainable performance and well-being rest. This paper examines the tension conceptually and asks what digital leadership means when leaders hold unprecedented visibility into employee behaviour. Drawing on job demands–resources theory, self-determination theory, and the emerging literature on algorithmic management, we identify four mechanisms through which productivity analytics can damage well-being — surveillance strain, metric displacement, autonomy erosion, and datafied distrust — and four corresponding reconciliation practices: purpose-bound measurement, transparency and co-governance of metrics, aggregation over individualisation, and leader interpretation duty. We integrate these into a Humanistic Analytics Framework that positions analytics as a resource for collective work redesign rather than an instrument of individual monitoring, and derive implications for leadership development, HR policy, and works-council negotiation. The paper contributes to digital leadership scholarship by specifying the value commitments that distinguish leading with data from managing by surveillance.

**Keywords:** digital leadership; productivity analytics; employee well-being; algorithmic management; humanistic management; workplace surveillance; job demands–resources; self-determination theory.

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## Introduction

Two narratives dominate contemporary management discourse, and they are rarely placed in the same sentence. The first celebrates the data-rich workplace: collaboration platforms, project tools, and monitoring software now render work observable at a resolution earlier managers could not imagine, promising evidence-based decisions about productivity, staffing, and process. The second elevates employee well-being from welfare afterthought to strategic priority, citing burnout, attrition, and the competitive value of engaged, healthy workforces. Each narrative has its own conferences, vendors, and executive sponsors. The uncomfortable truth is that the instruments of the first narrative frequently undermine the goals of the second: monitoring intensifies strain, crude metrics distort effort, and pervasive measurement corrodes the trust that well-being initiatives try to build.

This paper treats the collision as a leadership problem rather than a tooling problem. Analytics platforms do not decide what to measure, who sees the data, or what happens to the person behind a red dashboard cell; leaders do. We therefore ask: through what mechanisms do productivity analytics threaten employee well-being, and what leadership practices can capture the informational value of analytics while honouring humanistic management values — dignity, autonomy, and the treatment of employees as ends rather than instruments? Our contribution is a mechanism-level analysis (Section 3), a reconciliation framework mapping

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each harm mechanism to a countervailing practice (Section 4, Table 1), and implications for how digital leadership should be developed and governed (Section 5).

# Background

## Digital Leadership Beyond Tool Fluency

Early e-leadership research framed the digital leader's challenge as mediated influence: exercising direction, motivation, and cohesion through technology rather than presence. The current wave of workplace datafication adds a second dimension: the digital leader is now also a data controller, deciding how behavioural visibility is used. Tool fluency — knowing what platforms can measure — is thus a minor part of digital leadership; the defining competence is judgment about what should be measured and what measurement does to people. This reframing connects digital leadership to humanistic management, which insists that organisational practices be evaluated not only by efficiency but by their effect on human dignity and flourishing.

## Well-being Through the JD-R and SDT Lenses

The job demands–resources (JD-R) model explains well-being outcomes as the balance between demands (workload, pressure, ambiguity) and resources (autonomy, support, feedback). Analytics can act on both sides of the ledger: well-designed feedback is a resource, while felt surveillance is a demand. Self-determination theory (SDT) sharpens the picture: sustainable motivation depends on satisfying needs for autonomy, competence, and relatedness. Monitoring regimes threaten all three — autonomy by controlling behaviour, competence by reducing rich work to thin metrics, and relatedness by repositioning the manager from coach to auditor. These theories predict what field reports of algorithmic management increasingly describe: measurement systems intended to raise output can depress the psychological conditions of output.

## Algorithmic Management and Its Drift Upstream

Algorithmic management research initially studied platform work — ride-hailing and delivery — where apps assign, monitor, rate, and sanction. Its concepts are drifting upstream into salaried knowledge work through activity scores, meeting analytics, and AI-generated performance summaries. The professional context changes the flavour but not the logic: opaque metrics, asymmetric visibility, and automated judgment. What the platform literature adds to management theory is a warning about legitimacy: workers who cannot see, question, or correct the data that judges them come to treat the entire system, and the leaders who wield it, as adversarial.

# Four Mechanisms of Harm

We synthesise the literatures above into four mechanisms through which productivity analytics can degrade well-being. Surveillance strain: awareness of continuous observation is itself a job demand, producing vigilance, impression-management labour (performative activity, status-light management), and reduced recovery; the effort of appearing productive is subtracted from being productive. Metric displacement: rewarded measures displace unmeasured value — mentoring, maintenance, deliberation — narrowing work to what the dashboard sees, which employees experience as the devaluation of their real contribution. Autonomy erosion: fine-grained visibility invites fine-grained intervention; when leaders can see everything, the temptation to direct everything grows, converting professionals into supervised executors and stripping the discretion that SDT identifies as a core need. Datafied distrust: unilateral, opaque measurement communicates institutional suspicion; employees reciprocate with defensive behaviour, gaming, and withdrawal of the extra-role effort that trust otherwise elicits. The four mechanisms compound: strain reduces performance, which the dashboard registers, which intensifies monitoring.

# The Humanistic Analytics Framework

Reconciliation does not require abandoning analytics; it requires re-purposing them. Table 1 maps each harm mechanism to a reconciliation practice, its operating principle, and illustrative leadership behaviours. The framework's organising idea is a shift of the analytic object: from the individual as a unit of evaluation to the work system as a unit of redesign.

## From Evaluation to Redesign

The aggregation principle deserves emphasis because it inverts the default deployment of workplace analytics. Individual-level scoring answers the question "who is underperforming?" — a question that presumes the system is fine and the person is the variable. Team- and workflow-level analysis answers "where does our system waste human effort?" — surfacing meeting overload, interruption patterns, after-hours creep, and coordination failure. The second question generates well-being and productivity gains simultaneously, because the pathologies it finds (fragmented time, unclear priorities) are both performance drags and burnout drivers. Leaders who make redesign the declared purpose of analytics also change how measurement feels: observed as a contributor to system diagnosis, not audited as a suspect.

## The Interpretation Duty

The final row of Table 1 assigns leaders a duty that automation quietly erodes: owning inference. A dashboard reports that an engineer's activity fell 30 per cent; only interpretation can distinguish disengagement from deep work on a hard problem, caregiving strain, or mismeasurement. Humanistic

**Table 1:** The Humanistic Analytics Framework: harm mechanisms and reconciliation practices

| *Harm Mechanism* | *Reconciliation Practice* | *Operating Principle* | *Illustrative Leadership Behaviours* |
|---|---|---|---|
| Surveillance strain | Purpose-bound measurement | Collect only what serves a declared, legitimate purpose; sunset data when the purpose ends | Publish a measurement register; refuse vendor features without a purpose case; delete legacy telemetry |
| Metric displacement | Plural and provisional metrics | Treat every metric as a partial proxy; pair output measures with contribution narratives | Discuss what the dashboard cannot see in reviews; rotate metrics; reward unmeasured citizenship explicitly |
| Autonomy erosion | Aggregation over individualisation | Analyse teams and workflows, not persons; individual data visible to the individual first | Use analytics to remove systemic friction (meeting load, tool sprawl) rather than to rank people |
| Datafied distrust | Transparency and co-governance | Employees know what is measured, why, and can contest it; metric changes are negotiated | Joint analytics committee; contestation channel with response duty; third-party audits of vendor claims |
| Cross-cutting | Leader interpretation duty | Data never speaks for itself; the leader owns the inference and its consequences | Verify before acting on anomalies; contextualise dips (care duties, invisible work); document decision rationale |

digital leadership treats every analytic signal as a hypothesis requiring human verification, and treats acting on unverified signals as a leadership failure, not a data error. Embedding this duty in performance-management policy — for example, requiring that no adverse action rest on telemetry alone — converts a value commitment into an enforceable norm.

## Implications

For leadership development, the framework implies that analytics literacy programmes must pair technical training with normative training: proxy fallibility, base-rate reasoning, and the psychology of monitoring belong in the same curriculum as dashboard navigation. For HR policy, it implies codifying purpose limitation, employee data access, and the telemetry-alone prohibition, which also positions organisations well against tightening employee-data regulation in many jurisdictions. For employee representation, the framework supplies a negotiable agenda: works councils and staff associations can bargain over the measurement register, aggregation thresholds, and co-governance structures rather than confronting analytics with blanket opposition. For vendors, it suggests a market opportunity in privacy-preserving, team-level analytic products whose architecture makes individual surveillance impossible rather than merely discouraged. Finally, for scholarship, the framework yields testable propositions: organisations practising co-governed, aggregated analytics should exhibit higher trust and lower strain than those practising individualised monitoring at comparable analytic intensity — a comparison that future empirical work, ideally multi-site and longitudinal, should operationalise.

## Conclusion

Productivity analytics and employee well-being are not intrinsically opposed; unexamined analytics and well-being are. This paper located the conflict in four mechanisms — surveillance strain, metric displacement, autonomy erosion, and datafied distrust — and argued that each can be countered by a specific leadership practice: purpose-bound measurement, plural metrics, aggregation over individualisation, co-governance, and an inalienable interpretation duty. The resulting Humanistic Analytics Framework redefines digital leadership: not mastery of visibility, but restraint and judgment in its use. Organisations will not choose between data and dignity by proclamation; they will choose through hundreds of small design and policy decisions about what is measured, who sees it, and what follows from it. The framework offered here is a map for making those decisions deliberately — and a standard against which employees, boards, and researchers can hold digital leaders to account.

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