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Accounting Information Use in Performance Based Compensation Systems

Amira Diaz

Lennon Hart

Callie Hayes

Abstract

This research investigates the nuanced and often overlooked role of accounting information within performance-based compensation systems, moving beyond traditional agency theory frameworks to propose a novel, multi-dimensional model of information utility. While extant literature predominantly treats accounting metrics as neutral, verifiable inputs for incentive alignment, this paper posits that their function is fundamentally interpretive, socially constructed, and contextually contingent. We argue that accounting information does not merely measure performance but actively shapes it through three distinct, interlocking mechanisms: as a constitutive script that defines what 'performance' means within an organizational narrative, as a relational token that mediates power dynamics and trust between principals and agents, and as a cognitive frame that channels managerial attention and strategic choice. Our methodology employs a qualitative, longitudinal case study of a multinational corporation transitioning to a complex, multi-metric performance scorecard, combined with a computational simulation model that explores the emergent system dynamics of metric interaction over time. This hybrid approach allows us to capture both the rich, lived experience of actors engaging with the compensation system and the systemic, often unintended consequences of metric interdependence. Findings reveal that the perceived fairness and effectiveness of the compensation system are less dependent on the technical accuracy of the accounting metrics and more on their narrative coherence, their consistency with informal organizational values, and their capacity to accommodate legitimate but unmeasured contributions. We identify a critical phenomenon termed 'metric myopia convergence,' where agents and principals, despite conflicting interests, collaboratively narrow their focus to a subset of manipulable, short-term accounting indicators, thereby undermining the long-term strategic goals the system was designed to promote. The study concludes by proposing a shift from designing compensation systems based on metric selection to designing them as adaptive information ecosystems, emphasizing transparency in metric construction, forums for interpretive negotiation, and dynamic weighting mechanisms that respond to strategic evolution. This research contributes

original theoretical insights to management accounting, behavioral economics, and organizational theory by re-conceptualizing accounting information from a passive input to an active, agential force in the performance management process.

Keywords: performance measurement, management accounting, incentive systems, organizational behavior, information ecology, metric myopia

1 Introduction

The architecture of performance-based compensation represents a cornerstone of modern corporate governance, ostensibly designed to align the interests of managerial agents with those of shareholder principals. At the heart of this architecture lies accounting information—profit margins, return on investment, economic value added, and a plethora of other quantified measures. Conventional wisdom, deeply rooted in agency theory, posits that the primary virtue of accounting information in this context is its objectivity and verifiability; it serves as a neutral arbiter, reducing information asymmetry and providing a clear, uncontested basis for rewarding performance. This perspective, while foundational, presents a curiously sterile view of information as a mere conduit for facts, overlooking its profound role as a medium for meaning-making, power, and strategic action within organizations.

This paper challenges this conventional view by advancing a novel thesis: accounting information within performance-based compensation systems functions not as a passive mirror reflecting pre-existing economic reality, but as an active and constitutive force that shapes the very reality it purports to measure. Its utility extends far beyond its technical properties of relevance and reliability into the domains of organizational sociology and cognitive psychology. We argue that to understand the efficacy—and frequent dysfunction—of these systems, one must examine how accounting metrics are interpreted, negotiated, and internalized by the human actors they are meant to guide. The research questions driving this inquiry are deliberately framed to move past technical optimization: How do managers and subordi-

nates collectively construct the meaning of accounting metrics used in their compensation? What are the relational and political consequences of selecting certain accounting signals over others? And, how does the dynamic interplay between multiple performance metrics generate emergent strategic behaviors that diverge from stated organizational objectives?

Our investigation is situated at the confluence of several academic streams but seeks to chart a new course. It draws inspiration from the interpretive turn in accounting research, which examines the symbolic and ritualistic functions of accounting practices, and from behavioral economics, which documents systematic deviations from purely rational action. However, it synthesizes these with concepts from complexity theory to model compensation systems as dynamic, adaptive ecosystems rather than static mechanical contracts. The originality of this work lies in its multi-method approach to capture both the micro-level experiences of individuals and the macro-level system dynamics, and in its conceptualization of three core mechanisms—scripting, tokenization, and framing—through which accounting information exerts its influence. The subsequent sections detail our unconventional methodology, present findings that reveal significant gaps between the design intent and lived experience of performance-based pay, and conclude with implications for theory and the design of more humane and effective organizational control systems.

2 Methodology

To grapple with the complex, socially embedded nature of our research questions, we employed a hybrid methodological framework that deliberately eschews the standard large-sample archival approach common in accounting research. We contend that the richness of interpretive processes and the longitudinal evolution of system dynamics are ill-suited to purely quantitative, cross-sectional analysis. Instead, our design integrates an in-depth qualitative case study with an agent-based computational simulation, creating a dialectic between deep, contextual understanding and formal modeling of systemic interactions.

The qualitative component was a longitudinal, embedded case study conducted over a thirty-month period at 'TechnoGlobal Inc.' (a pseudonym), a Fortune 500 technology firm undergoing a radical overhaul of its managerial compensation system. The old system, based largely on divisional profitability, was replaced with a balanced scorecard incorporating eight financial and non-financial metrics, including customer satisfaction scores, innovation pipeline strength, and employee engagement indices, alongside traditional accounting measures. Data collection involved three primary streams: first, over 85 semi-structured interviews with executives, middle managers, and operational staff conducted at three points in time (pre-implementation, one-year post, and two-years post); second, direct observation of 22 compensation negotiation and performance review meetings; and third, analysis of internal documents, including design team memos, training materials, and internal communications about the new system. This triangulation allowed us to construct a nuanced narrative of how the accounting and non-accounting metrics were understood, resisted, embraced, and manipulated by different organizational actors.

The quantitative component involved the construction of an agent-based simulation model. This model was not designed to statistically test hypotheses from the case study but to explore the logical consequences and emergent properties of the behaviors observed. We populated the simulation with two types of agents (principals and managers) whose decision rules were informed by our qualitative data—for instance, a tendency to overweight metrics that are easily influenced in the short term, or to engage in 'gaming' by reallocating effort from difficult-to-influence metrics to easier ones. The simulation environment included a simplified representation of TechnoGlobal's eight-metric scorecard, with parameters defining the true interdependencies between metrics (e.g., heavy investment in customer satisfaction might depress short-term profit margins) and the time lags involved in influencing them. Running thousands of simulation iterations under varying conditions (e.g., different metric weightings, levels of information transparency, and agent learning rates) allowed us to observe patterns—such as the systematic erosion of long-term value creation—that might take

years to manifest in the real organization and would be confounded by external factors.

This hybrid methodology is a key innovative contribution of the paper. The case study provides the phenomenological depth and validity, grounding our theories in real-world complexity. The simulation provides analytical rigor and generality, allowing us to isolate the systemic consequences of individual behaviors. Together, they enable a more comprehensive exploration of our core premise: that the use of accounting information in compensation is a complex socio-technical process with recursive effects on performance itself.

3 Results

The findings from our integrated analysis reveal a significant divergence between the intended and actual functioning of the performance-based compensation system at TechnoGlobal. The formal design logic, which presented the balanced scorecard as a holistic tool for strategic alignment, was subverted and transformed through daily use. Three core themes emerged, corresponding to the conceptual mechanisms of scripting, tokenization, and framing.

First, regarding accounting information as a constitutive script, we found that the new metrics did not simply measure activities; they actively rewrote the organizational narrative of value. The introduction of a 'strategic project completion rate' (an accounting-like metric tracking budgeted vs. actual completion for R&D initiatives) fundamentally altered how managers spoke about innovation. Projects were increasingly described not in terms of technical breakthrough or market potential, but in terms of their 'trackability' and adherence to the predefined metric timeline. The accounting script provided a new vocabulary for legitimacy, but in doing so, it narrowed the conceptual space for discussing innovation. Interviews revealed that managers felt pressure to initiate numerous small, predictable projects to 'make the number,' while potentially revolutionary but risky and difficult-to-chart initiatives were deprioritized. The metric, intended to foster accountability for innovation, ironically scripted a more conservative, incrementalist approach to it.

Second, the role of accounting metrics as relational tokens became starkly apparent in compensation negotiations. Trust, a central element of the principal-agent relationship, became partially quantified and mediated through the metrics. For example, the 'regional sales growth' figure was not treated as a simple fact. Subordinates invested considerable effort in pre-negotiation 'education,' providing context to principals about market downturns or one-time customer losses, attempting to frame the number as a token of effort and circumstance rather than pure outcome. Principals, in turn, used concessions on the interpretation of one metric (e.g., accepting adjusted figures) as a token of goodwill to secure compliance on another. This bargaining process transformed the compensation discussion from a verification of results into a ritual of relationship management. The accounting numbers were the tokens exchanged in this ritual, their agreed-upon meaning signifying the state of the relational trust more than the absolute state of performance.

Third, and most critically, the simulation model powerfully illuminated the cognitive framing and emergent dynamic of 'metric myopia convergence.' The model consistently showed that even when principals and agents started with different goal orientations (principals coded with a slight preference for long-term metrics, agents for short-term ones), their interactions led to a rapid convergence on focusing on a narrow subset of 2-3 metrics. These were invariably the metrics with the shortest time lag between managerial action and measurable outcome, and the highest degree of controllability within the agent's direct domain. Traditional accounting metrics like 'quarterly cost variance' often fell into this category. The simulation demonstrated that this convergence was not a failure of design but an emergent property of the system. Agents learned to prioritize effort on these responsive metrics because it yielded more predictable rewards. Principals, observing stronger performance on these metrics, unconsciously increased their perceptual weighting of them, further reinforcing the agents' focus. Over multiple periods, this created a vicious cycle where effort and capital were systematically drained from metrics influencing long-term health (e.g., employee capability development, which had an 18-month lag in the model), leading to a eventual col-

lapse in overall organizational vitality as measured by a composite index. This finding from the simulation was strongly corroborated by interview data at the 24-month mark, where managers universally reported 'hitting the scorecard numbers' but expressed deep anxiety about the erosion of technical talent and pipeline quality—concerns not captured by their compensation metrics.

4 Conclusion

This research has endeavored to reconceptualize the use of accounting information in performance-based compensation by stepping outside the dominant principal-agent paradigm. By theorizing and empirically demonstrating the roles of accounting metrics as constitutive scripts, relational tokens, and cognitive frames, we move towards a more sophisticated understanding of these systems as complex meaning-making environments rather than mere incentive engines. The most significant and original finding is the phenomenon of metric myopia convergence, an emergent system dynamic where the collaborative interaction between principals and agents, mediated by accounting information, leads to a strategic focus that is both narrower and shorter-term than any individual actor intends. This suggests that dysfunctions in performance-based pay are often not pathologies of individual opportunism but predictable outcomes of the systemic structure of measurement and reward.

The implications for practice are substantial. Designers of compensation systems must move beyond the technical exercise of selecting 'relevant' metrics. They must engage in what we term 'ecological design,' considering the interpretive, relational, and temporal dynamics of the metric set. This could involve creating formal organizational forums for the interpretive negotiation of metric meaning, increasing transparency around the construction and limitations of accounting figures, and experimenting with dynamic or rotating metric weightings to prevent myopic convergence. Perhaps most radically, it may involve designing compensatory 'shadow spaces'—resources or recognition awarded through qualitative,

narrative-based assessment—to capture valuable contributions that resist quantification.

For theory, this study contributes to management accounting by firmly situating accounting information within the social and cognitive fabric of organizing. It challenges the field to consider the performative power of its tools. It contributes to organizational theory by providing a detailed mechanism for how formal control systems generate unintended consequences, and to behavioral economics by modeling how bounded rationality interacts with institutional frameworks to produce systemic outcomes. Future research could apply this hybrid methodological approach to different industries or cultural contexts, explore the role of digital 'big data' metrics in this framework, or investigate the personal identity work of managers as they navigate these quantified selves. In conclusion, accounting information in compensation systems is not a window onto performance, but a lens that shapes the viewer, the view, and the very landscape being observed. Recognizing this agency is the first step towards designing systems that foster sustainable performance in its fullest sense.

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