

Paradigmatic Explanation of the Impact of Business Intelligence on Activity-Based Costing Systems with Emphasis on Cost Drivers under Conditions of Uncertainty: A Qualitative Approach

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1. Round 1

1.1. Reviewer 1

Reviewer:

In the paragraph stating that “BI provides a particularly important bridge between data infrastructure and managerial decision-making,” the theoretical mechanism connecting BI and ABC remains somewhat implicit. The authors should articulate a clearer conceptual chain explaining how BI capabilities influence ABC specifically through data integration, temporal frequency, visualization, predictive analysis, anomaly detection, and cost-driver monitoring. Doing so would establish a stronger theoretical foundation for the qualitative model and would also help distinguish BI-enabled ABC from related concepts such as ERP-supported ABC, AI-enhanced ABC, and conventional digital management accounting systems.

The manuscript states that “Theoretical saturation was reached after 13 semi-structured interviews,” but the procedure for establishing saturation needs greater methodological transparency. The authors should specify whether they assessed code

saturation, meaning saturation, theoretical saturation, or a combination of these, and should describe the decision rule used to conclude that no substantive new categories or relationships were emerging. Because the original research materials documented decreasing numbers of new codes and the absence of new categories in interviews 11–13, the manuscript would benefit from describing this process narratively or in a supplementary saturation audit rather than relying on the general statement that saturation was achieved.

In the Data Collection Tools subsection, the manuscript states that “the interview guide remained flexible throughout the research process and was progressively refined in response to concepts and relationships emerging from earlier interviews.” This is appropriate for grounded theory, but the manuscript should describe exactly how the guide evolved. For example, the authors should indicate which initial questions were retained, what types of probes were added after early interviews, and whether later interviews specifically investigated underdeveloped categories such as organizational governance, predictive capabilities, or resilience. Such documentation would provide evidence that theoretical sampling occurred at the level of concepts rather than merely continuing purposive recruitment.

Authors revised the manuscript and uploaded the new document.

1.2. Reviewer 2

Reviewer:

The Introduction contains several references drawn from domains outside accounting, particularly the paragraph beginning “The methodological problem of uncertainty is not unique to accounting,” which cites genetics, medicine, and environmental modelling. Although the broader methodological analogy is intellectually defensible, the relevance of these studies to the research problem should be made more explicit and considerably more concise. The authors should explain that these studies are invoked only to illustrate the general principle of explicitly modelling uncertainty, not as direct empirical support for BI or ABC. Otherwise, the literature review may appear conceptually diffuse and may weaken the disciplinary focus expected in a management accounting manuscript.

The final gap statement in the Introduction—“considerably less attention has been devoted to explaining, as an integrated organizational phenomenon, how BI shapes ABC specifically through the identification, monitoring, analysis, and management of cost drivers under conditions of uncertainty”—is central to the study but requires stronger substantiation. The authors should distinguish clearly among a theoretical gap, an empirical gap, a methodological gap, and a contextual gap. It would be useful to state whether prior studies have failed to integrate BI, ABC, cost drivers, and uncertainty in one model; whether qualitative grounded-theory evidence is lacking; whether large manufacturing organizations are underexplored; or whether all three deficiencies are present. A more explicit gap taxonomy would significantly strengthen the manuscript’s contribution claim.

In the Methods and Materials section, the sentence “This study employed a qualitative, exploratory research design based on the systematic grounded theory approach of Strauss and Corbin” is appropriate, but the justification for choosing systematic grounded theory over constructivist or classic grounded theory should be more rigorous. The current rationale emphasizes the availability of the causal conditions–context–intervening conditions–strategies–consequences structure, which risks implying that the paradigm model was predetermined. The authors should clarify how they prevented the Strauss–Corbin framework from forcing interview data into pre-existing categories and whether the paradigmatic categories emerged after open coding rather than being used as an a priori coding template.

The participant-selection paragraph reports that the sample included “academic and professional experts with substantial knowledge and experience in management accounting, Activity-Based Costing, Business Intelligence, management information systems, information technology, industrial management, and cost management.” This sampling frame is broad, and the authors should provide a more explicit rationale for combining academic experts and practitioners in the same theoretical sample. The revised manuscript should explain whether differences in professional standpoint were intentionally sought as maximum variation, how disciplinary heterogeneity contributed to theoretical development, and whether any

systematic differences in perspectives between academics, finance professionals, and IT/BI specialists were observed during analysis.

The Methods section states that participants were required to have “at least a master’s degree,” “a minimum of five years of professional...experience,” and substantive familiarity with relevant domains, whereas the demographic table shows professional experience ranging from 10 to 18 years. The manuscript should report the actual inclusion criteria and achieved sample characteristics consistently and explain whether all three criteria were mandatory or whether expertise in one area could compensate for another. This is particularly important in expert-based qualitative research because the credibility of the resulting theory depends heavily on the epistemic qualifications of the participants.

Authors revised the manuscript and uploaded the new document.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.