

6 - 8 March 2026

Vienna , Austria

Integrating Behavioural, Cultural, and Strategic Approaches to Safety Management in Ghanaian Construction SMEs

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Abstract

Construction safety performance in Ghana continues to pose significant challenges, particularly among small and medium-sized enterprises (SMEs), where accident rates remain disproportionately high despite existing regulatory frameworks and technical safety guidelines. Prior research demonstrates that safety failures in this context are rarely attributable to technical deficiencies alone, but instead emerge from the interaction of unsafe worker behaviour, weak organisational safety culture, and fragmented management control systems. Existing safety approaches, often compliance-driven, behaviour-focused in isolation, or culturally abstract, have delivered limited and unsustainable improvements, especially within resource-constrained SME environments.

This doctoral research develops and empirically validates an integrated Behaviour–Culture–Balanced Scorecard Safety Framework (BC–BSC–SF) tailored to the realities of Ghanaian construction SMEs. The framework strategically embeds Behaviour-Based Safety (BBS) and Workplace Culture Change (WCC) mechanisms within a Balanced Scorecard architecture to transform safety from a reactive compliance function into a measurable, governable, and strategically aligned organisational capability. By linking behavioural practices, cultural conditions, and performance indicators across learning and growth, internal processes, stakeholder outcomes, and financial sustainability, the framework aims to enhance usability, cost-effectiveness, and long-term safety performance.

The study adopts a pragmatic philosophical stance and employs a convergent mixed-methods design, integrating quantitative survey data from 150+ construction SMEs with qualitative insights from industry experts and regulators. Preliminary findings from Chapters 1–4 establish the conceptual and methodological foundations, while ongoing analysis in Chapter 5 validates the framework through empirical data, and Chapter 6 will synthesise conclusions and implications for theory, practice, and

policy. This presentation outlines the conceptual foundations of the BC–BSC–SF, the methodological approach for framework development and validation, key insights emerging from the data analysis, and the contributions to theory, practice, and policy. The research seeks to advance construction safety scholarship by demonstrating how integrated behavioural, cultural, and strategic performance management can address persistent safety failures in SMEs within Ghana and comparable developing-economy contexts.

Keywords: Construction Safety; Behaviour-Based Safety (BBS); Safety Culture; Balanced Scorecard; Construction Smes; Ghana; Safety Management Framework; Mixed-Methods Research; Framework Validation