Enforcement Reimagined: Adaptive Approaches to Occupational Safety and Health Regulations in Malaysia

Syazwan Syah Zulkifly

Management and Leadership Case Study Centre, Universiti Utara Malaysia (UUM), Sintok, Kedah, Malaysia

Nor Halim Hasan*

Department of Occupational Safety & Health Negeri Sembilan, Seremban, Malaysia

Mohamad Xazaquan Mansor Ali

Centre for Research in Development, Social and Environment (SEEDS), Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia (UKM), Bangi, Selangor, Malaysia

Mohd Rafee Baharudin

Faculty of Medicine and Health Sciences, Universiti Putra Malaysia (UPM), Serdang, Selangor, Malaysia

Abstract:

Malaysia's occupational safety and health (OSH) regulatory framework has undergone significant reform over the past three decades, notably with the enactment of the Occupational Safety and Health Act 1994 and its recent amendment in 2022. Despite these legislative milestones, enforcement outcomes remain inconsistent, particularly in high-risk and informal sectors. This conceptual paper examines the structural and behavioural limitations of Malaysia's predominantly deterrence-based enforcement model and argues for a paradigm shift toward an adaptive, risk-informed regulatory strategy. Grounded in deterrence theory, responsive regulation, and institutional capacity frameworks, this study proposes an Adaptive Enforcement Model (AEM) that integrates risk prioritization, digital surveillance, and stakeholder engagement into a multi-tiered enforcement continuum. The model is developed through a narrative review of peer-reviewed literature (2017–2025) and contextualized to Malaysia's evolving industrial landscape. Empirical insights from recent Malaysian studies further validate the need for targeted inspections, digital HIRARC tools, and behaviourally informed compliance mechanisms. The AEM aligns with national policy goals under the Occupational Safety and Health Master Plan 2021–2025 and reflects international frameworks such as the ILO Convention C187 and the Decent Work Agenda. It offers a scalable enforcement strategy that balances credible deterrence with consultative and capacity-building approaches. The paper concludes by outlining policy and institutional reforms necessary to operationalize adaptive enforcement and calls for future empirical validation of the model's effectiveness.

Keywords:

Occupational Safety and Health (OSH), Regulatory Enforcement, Adaptive Enforcement Model, Malaysia, Deterrence, Responsive Regulation, Digital Inspection, Risk Governance.