



Institutionalising Occupational Health and Safety in Nigeria's Federal Civil Service: Leveraging the Performance Management System as a Governance Mechanism

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Abstract: Occupational health and safety (OHS) in public administration is frequently addressed through general welfare obligations, isolated training, or incident response rather than through the routine systems by which work is planned, monitored, assessed, and improved. Nigeria created Occupational Safety Officer and Executive Occupational Safety Officer cadres in the Federal Public Service in 2022 while introducing a modern Performance Management System (PMS) to replace the Annual Performance Evaluation Report. This critical policy review examines whether the PMS can serve as a governance mechanism for institutionalising OHS across federal ministries, departments, and agencies. The review synthesises official PMS policy and guidance, the circular establishing the safety cadres, Nigerian OHS legislation and policy, international labour and management-system standards, and peer-reviewed literature on safety climate, safety leadership, implementation, and public-sector performance. The analysis identifies a central implementation gap: the safety cadres establish specialist posts, but the available policy architecture does not yet translate OHS responsibilities into explicit cross-cutting key result areas, competency expectations, leading indicators, review obligations, or proportionate improvement processes. A four-pillar framework is proposed, comprising performance integration, competency development, monitoring and learning, and digitally enabled accountability. Basic First Aid and emergency preparedness are retained as a feasible pilot application, but not treated as a substitute for comprehensive OHS management. The paper advances three testable conceptual propositions concerning perceived safety value, bureaucratic feasibility, and compliance accountability. It concludes that PMS alignment could help convert OHS from a peripheral welfare activity into a measurable governance responsibility, provided implementation is legally reviewed, procedurally fair, adequately resourced, participatory, and empirically evaluated. The framework is therefore an agenda-setting policy proposition rather than evidence of proven intervention effectiveness.

Keywords: Nigeria, occupational health and safety, federal civil service, performance management system, public administration, safety governance, competency framework, implementation gap.

I. INTRODUCTION

Occupational injuries and work-related disease remain a major global development and governance concern. The International Labour Organization (ILO) treats a safe and healthy working environment as a fundamental principle and right at work, while Convention No. 155 and Convention No. 187 emphasise coherent national policy, preventive systems, worker participation, and continuous improvement [1]-[3]. The World Health Organization similarly frames healthy workplaces as organisational systems requiring coordinated action on physical conditions, psychosocial risks, personal health resources, and community engagement [4]. These principles apply to public services as well as industrial workplaces. Civil servants may face ergonomic strain, slips and falls, fire and electrical hazards, occupational stress, workplace violence, infectious disease exposure, fieldwork risks, and emergency-response deficiencies. The administrative character of public employment does not remove occupational risk; it changes its profile and may make harm less visible when reporting and surveillance are weak.

Nigeria has statutory and policy instruments relevant to worker protection, including the Factories Act, the Employees' Compensation Act, the National Policy on Occupational Safety and Health, and Public Service Rules [5]-[8]. Yet formal provisions do not automatically become organisational routines. Research on occupational safety management repeatedly distinguishes the existence of policies and systems from the quality of implementation [9]-[13]. Management commitment, supervisory practice, employee participation, learning, and reliable information are central mechanisms through which formal arrangements affect behaviour and outcomes [14]-[20]. A governance approach must therefore ask not only whether rules exist, but whether responsibilities are assigned, resources provided, performance monitored, feedback acted upon, and workers enabled to raise concerns without retaliation.

Two Nigerian public-service reforms create a timely opportunity to address this implementation gap. In 2022, the Office of the Head of the Civil Service of the Federation (OHCSF) issued a policy and guidelines for a modern PMS designed to replace the Annual Performance Evaluation Report (APER) and align individual performance with organisational and government priorities [21], [22]. The same reform period saw approval of Occupational Safety Officer and Executive Occupational Safety Officer cadres within the Federal Public Service [23]. The reforms are institutionally complementary: the cadre creates a specialist professional pathway, whereas the PMS offers mechanisms for planning, competency assessment, monitoring, feedback, improvement, and organisational accountability. Their complementarity, however, is potential rather than automatic.

The central problem is that the establishment of safety posts does not itself define how OHS responsibilities are embedded in the performance contracts of safety officers, managers, supervisors, human-resource units, facility managers, or ordinary employees. If OHS remains outside key result areas, competency frameworks, regular review conversations, management dashboards, and improvement plans, the cadre may become administratively visible but operationally marginal. Conversely, an excessively punitive or poorly designed integration could promote under-reporting, superficial compliance, and procedural injustice. Effective reform therefore requires a balanced model in which accountability is combined with capability, participation, proportionality, and learning.

This paper examines how the Nigerian PMS could be used as a governance mechanism to institutionalise OHS within the Federal Civil Service. It addresses three questions: (1) what implementation gaps may constrain operationalisation of the Occupational Safety Officer Cadre; (2) which PMS mechanisms could support the integration of OHS into routine public administration; and (3) what safeguards, indicators, and staged reforms are necessary for credible implementation? The paper contributes a policy-focused framework, and distinguishes evidence-supported principles from context-specific proposals.

II. LITERATURE REVIEW

A. From Formal Compliance to Institutionalised OHS

Institutionalisation occurs when a practice is embedded in formal roles, routines, resource decisions, norms, and accountability arrangements. In OHS, this requires more than the presence of legislation or a policy manual. ISO 45001 adopts a plan-do-check-act logic in which leadership, worker consultation, risk-based planning, competence, operational control, performance evaluation, and improvement are interdependent [9]. The ILO-OSH guidelines similarly treat policy, organising, planning, evaluation, and improvement as components of a management system [10]. Systematic reviews find that OHS management interventions can be beneficial, but the evidence is heterogeneous and dependent on implementation quality and context [11], [12]. Accordingly, this paper treats PMS integration as a potentially enabling governance architecture, not as a stand-alone intervention proven to reduce injury or illness.

A compliance-only approach tends to emphasise completed forms, attendance records, and absence of reported incidents. Such measures are administratively convenient but may conceal weak learning, poor hazard control, or suppressed reporting. Reason's organisational accident model demonstrates how latent conditions and management decisions shape failure pathways [13]. Rasmussen shows that actors migrate toward performance boundaries under economic and workload pressures, making safety a dynamic control problem rather than a static checklist [24]. Resilience engineering extends this perspective by emphasising anticipation, monitoring, response, and learning [25], [26]. These traditions support a shift from counting activity to assessing whether controls, competencies, and feedback processes are working.

B. Safety Climate, Leadership, and Employee Participation

Safety climate concerns shared perceptions about the priority given to safety in organisational policies, procedures, and practices. Zohar's foundational work established climate as a measurable organisational phenomenon [14]. Subsequent studies linked safety climate and organisational climate to safety knowledge, motivation, compliance, and participation [15]-[18]. Meta-analytic and review evidence indicates that safety climate is consistently associated with safety behaviour and some safety outcomes, although measurement approaches and causal interpretations vary [17]-[19]. Recent work also emphasises the role of responsible or safety-specific leadership in strengthening safety consciousness and performance [20].

For public administration, the practical implication is that inserting OHS into a performance form is insufficient if employees perceive that managers value speed, hierarchy, or physical attendance more than safe work. PMS design must therefore reinforce enacted priorities. Managers should be evaluated not simply on whether safety activities occurred, but on whether risks were discussed, worker concerns were addressed, corrective actions were closed, and learning was shared. Employee participation is equally important. ILO instruments, ISO 45001, and the healthy-workplace model all emphasise consultation and involvement [1]-[4], [9], [10]. Without participation, indicators may become targets imposed on workers rather than tools used with them.

C. Leading Indicators and Performance Measurement

Lagging indicators such as injuries, compensation claims, and lost time describe harm after it occurs and may be unstable in low-frequency settings. Leading indicators seek to capture the conditions and activities that precede outcomes, including leadership engagement, risk assessment quality, training competence, hazard reporting, corrective-action closure, emergency preparedness, and worker participation [27]-[30]. OECD guidance on safety performance indicators recommends combining outcome and activity measures and linking them to accident prevention, preparedness, and response [27]. Hopkins cautions that indicator programmes become distorted when measures are detached from causal models or converted into simplistic targets [28]. Hale argues that safety management should focus on the quality of barriers and organisational processes rather than bureaucratic volume [29].

This literature is directly relevant to PMS integration. A credible public-service OHS scorecard should avoid rewarding low incident counts without examining reporting quality, exposure, and control effectiveness. It should use a limited set of indicators that can be verified, interpreted, and acted upon. Measures should be disaggregated where appropriate, accompanied by narrative review, and protected against gaming. The balanced scorecard tradition shows how organisations can translate strategy into linked objectives and measures [31], while public-management research warns that performance regimes can produce tunnel vision, gaming, and ritualistic compliance when targets are poorly designed [32]-[35]. OHS indicators must therefore be used for learning and decision support as well as accountability.

D. Performance Management in the Public Sector

Public-sector performance management differs from private-sector appraisal because objectives are multiple, political, legally constrained, and often difficult to measure. Performance information may improve focus and learning, but it can also generate symbolic reporting and dysfunctional responses [32]-[36]. Moynihan emphasises that learning forums and organisational routines determine whether performance data influence decisions [34]. Behn argues that measurement systems should begin with a clear managerial purpose because no single measure serves evaluation, control, budgeting, motivation, promotion, learning, and improvement equally well [35]. Van Dooren, Bouckaert, and Halligan similarly treat performance management as a governance cycle involving measurement, incorporation, and use [36]. These insights argue for caution in connecting safety indicators directly to salary or promotion. Where employees lack resources, authority, training, or opportunity to meet a target, automatic penalties may be unfair and counterproductive. A procedurally credible system should distinguish unwilling non-compliance from inability caused by organisational constraints; provide notice, support, and review; and reserve disciplinary consequences for established misconduct under applicable rules. The immediate purpose of OHS-PMS integration should be role clarity, risk visibility, competency development, and corrective action. Any connection to career decisions requires legal review, labour consultation, due process, and validation of the indicators used.

E. Nigerian OHS Implementation Context

Nigeria's OHS landscape combines sector-specific legislation, compensation arrangements, labour administration, and national policy [5]-[8]. Available Nigerian studies frequently report enforcement limitations, resource constraints, uneven professional capacity, and gaps between formal rules and operational practice [37]-[41]. Evidence from construction, petroleum, health, and educational settings should not be transferred uncritically to the civil service, but it illustrates recurring implementation challenges: low management commitment, inadequate training, weak reporting, fragmented responsibilities, and limited inspection or follow-up. A recent study of public universities in Rivers State reported implementation barriers associated with equipment, work pressure, sanitation resources, and enforcement [41].

Another study by Ekpo et al. drew on implementation-gap analysis from Nigeria's upstream petroleum sector [40]. That transfer can be analytically useful because both settings involve formal procedures, hierarchical authority, budget constraints, and specialist roles. Nevertheless, the risk profiles and organisational missions differ substantially. This revised paper therefore uses petroleum-sector evidence only as a source of sensitising concepts, not as direct proof about federal offices. The need for civil-service-specific empirical work remains a central limitation and future research priority.

F. Research Gap

Existing evidence remains limited regarding how the 2022 Nigerian PMS architecture can be aligned with the Occupational Safety Officer Cadre to make OHS a routine, measurable, and learnable governance responsibility. The gap is primarily contextual and practical, but it also has conceptual elements. Contextually, little peer-reviewed research examines OHS governance in Nigeria's federal administrative workplaces. Practically, the available policy instruments do not yet provide a detailed crosswalk linking safety roles to key result areas, competencies, indicators, review cycles, and improvement processes. Conceptually, the interaction among perceived value, administrative feasibility, and accountability has not been tested in this setting. This paper addresses these gaps by developing a cautious, staged governance framework and propositions for empirical validation.

III. POLICY AND INSTITUTIONAL CONTEXT

A. The Transition from APER to PMS

The OHCSF PMS Policy describes the reform as part of efforts to address weaknesses in APER and establish a systematic process of planning work, setting targets, providing ongoing support, tracking performance, developing capacity, and motivating productivity [21]. The accompanying Guidelines specify roles, timelines, target setting, performance planning, monitoring, appraisal, competency assessment, and improvement processes [22]. In governance terms, PMS creates recurring decision points at which OHS responsibilities could be negotiated, monitored, and improved. It also provides a means of cascading organisational priorities from ministry level to departments and individuals.

The relevant opportunity is not simply to add another item to an appraisal form. It is to connect OHS objectives at four levels: whole-of-government expectations, MDA strategic objectives, departmental operational plans, and individual performance agreements. This vertical alignment should be complemented by horizontal coordination among safety, human resources, administration, facilities, medical services, information technology, planning, and employee representatives. Fragmented ownership is a recognised obstacle to prevention because hazards and controls frequently cross departmental boundaries.

B. The Occupational Safety Officer Cadre

The circular establishing the Occupational Safety Officer and Executive Occupational Safety Officer cadres creates a graded professional structure within the Federal Public Service [23]. This is a significant institutional development because professionalisation can strengthen role identity, career progression, technical competence, and organisational access. However, establishment approval alone does not specify the operational mandate, authority, reporting relationships, performance measures, or minimum resources required in each MDA. Those details must be developed through schemes of service, job descriptions, competency standards, and organisational procedures.

The cadre should not be positioned as the sole owner of safety. Contemporary OHS governance assigns primary responsibility to organisational leadership and line management, supported by competent advisers and worker participation [9], [10]. Safety officers can coordinate risk-management systems, provide technical advice, monitor performance, support investigations, maintain records, and facilitate learning. Managers remain accountable for risks arising from work under their control, while all employees have defined responsibilities to follow controls and report concerns. PMS integration should reinforce this distributed accountability rather than isolate safety within a specialist unit.

IV. METHODOLOGY

A. Review Design

The study is a critical, non-systematic policy review. This design was selected because the research question concerns the interpretation and alignment of policy instruments rather than estimation of an intervention effect. The review does not claim the comprehensiveness of a systematic review and does not include meta-analysis. It combines document analysis with a structured narrative synthesis of relevant OHS and public-management literature.

B. Information Sources and Search Approach

The source base comprised: (1) official Nigerian documents governing the PMS, public-service employment, OHS policy, compensation, and the creation of the safety cadres; (2) international standards and guidance from the ILO, WHO, ISO, and OECD; and (3) peer-reviewed literature on OHS management systems, safety climate, leadership, leading indicators, institutional implementation, and public-sector performance management. Searches were conducted using combinations of terms relating to occupational health and safety, public sector, civil service, Nigeria, performance management, safety governance, safety climate, leading indicators, competency, and implementation. Priority was given to authoritative policy sources, recognised theoretical and methodological literature, systematic reviews, and recent studies published from 2020 onward, while seminal works were retained where necessary.

C. Eligibility and Appraisal

Sources were included when they directly informed one of four analytical domains: governance principles, performance-management mechanisms, OHS implementation conditions, or the Nigerian institutional context. Commercial commentary and untraceable sources were excluded. Because the purpose was conceptual and policy analysis, heterogeneous source types were not combined into a single quality score. Instead, claims were classified by evidential basis: authoritative requirement or guidance; peer-reviewed empirical or review evidence; Nigerian contextual evidence; or policy inference. Recommendations relying mainly on inference are identified as proposals requiring piloting and evaluation.

D. Analytical Procedure

Analysis proceeded in four stages. First, the PMS Policy and Guidelines were examined for mechanisms relating to planning, competencies, monitoring, appraisal, improvement, incentives, digitalisation, and institutional responsibility. Second, the safety-cadre circular and wider OHS instruments were examined to identify role and implementation gaps. Third, the peer-reviewed literature was used to establish design principles and foreseeable risks, including target gaming, under-reporting, inadequate participation, and overreliance on lagging indicators. Fourth, the findings were synthesised into a four-pillar governance framework and responsibility matrix. This procedure is replicable at the level of the stated categories, but coding was not independently duplicated. That limitation should be addressed in a future systematic policy analysis.

V. CONCEPTUAL FRAMEWORK

The institutionalisation of occupational health and safety (OHS) within the Federal Civil Service is conceptualised in this study as a governance process influenced by the interaction of policy structures, organisational systems, employee perceptions, and accountability mechanisms. The framework integrates concepts from the Technology Acceptance Model (TAM), Diffusion of Innovations (DOI) Theory, and public-sector performance management literature to explain how occupational health and safety responsibilities can become embedded within routine administrative practices.

The Technology Acceptance Model suggests that behavioural acceptance is influenced by perceived usefulness and perceived ease of implementation. Within the context of this study, these constructs are

adapted as **Perceived Safety Value (PSV)** and **Perceived Bureaucratic Feasibility (PBF)**. Perceived Safety Value refers to the extent to which civil servants believe that OHS initiatives contribute to employee well-being, organisational effectiveness, and service delivery. Perceived Bureaucratic Feasibility refers to the extent to which employees and managers consider OHS requirements practical, achievable, and compatible with established administrative procedures.

Diffusion of Innovations Theory provides additional explanatory value by emphasising that institutional reforms are more likely to be adopted when they are perceived as advantageous, compatible with existing systems, observable, triable, and not excessively complex. The integration of OHS requirements into the Performance Management System (PMS) can therefore be expected to gain greater acceptance when employees perceive clear organisational benefits and when implementation requirements are aligned with existing administrative processes.

A central construct in the framework is **Compliance Accountability (CA)**, defined as the extent to which occupational health and safety responsibilities are explicitly incorporated into performance expectations, monitored through formal review mechanisms, and supported by proportionate organisational responses. Compliance Accountability encompasses both developmental and corrective elements, including coaching, competency development, resource provision, performance feedback, corrective actions, and, where appropriate, formal administrative consequences. The construct is therefore broader than traditional deterrence-based approaches and is consistent with contemporary safety governance principles that emphasise learning, participation, and continuous improvement.

The framework as shown in fig.1 proposes that policy mandates and leadership commitment create an enabling environment for OHS institutionalisation. These drivers operate through PMS integration mechanisms, including Key Result Areas (KRAs), Key Performance Indicators (KPIs), competency assessment processes, performance reviews, improvement plans, digital performance records, and feedback systems. These mechanisms influence intermediate organisational conditions, particularly perceived safety value, perceived bureaucratic feasibility, leadership commitment, employee trust, and workforce participation. In turn, these conditions contribute to the institutionalisation of OHS through enhanced role clarity, competency development, reporting quality, organisational learning, and continuous improvement.

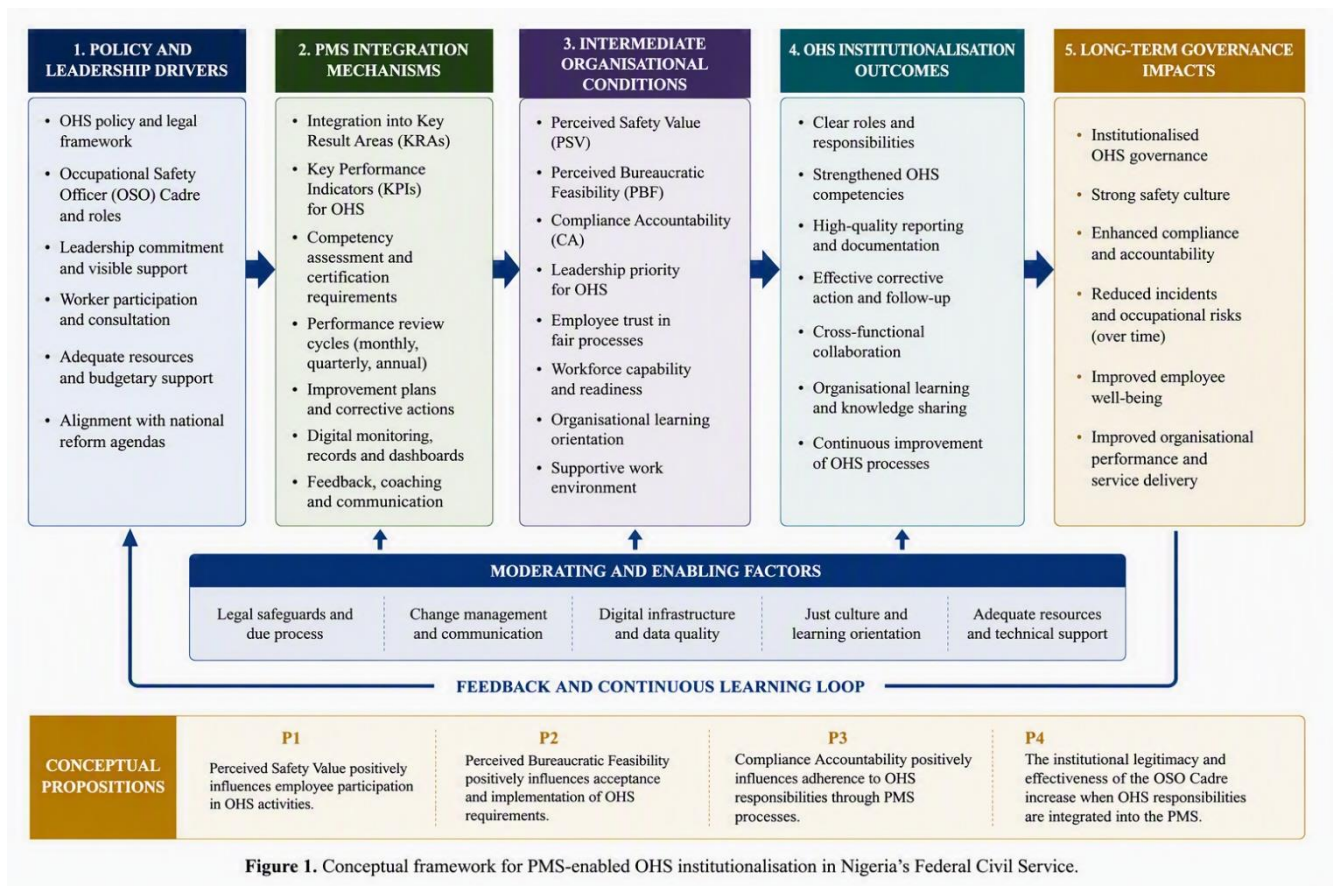


Figure 1. Conceptual framework for PMS-enabled OHS institutionalisation in Nigeria's Federal Civil Service.

The framework does not assume a direct causal relationship between PMS integration and improved safety outcomes. Instead, it proposes a sequence of governance processes through which OHS may become embedded within organisational practice. Any relationship between the proposed framework and safety performance outcomes should be established through future empirical investigation.

Conceptual Propositions

Proposition 1: Perceived Safety Value positively influences employee participation in occupational health and safety activities.

Proposition 2: Perceived Bureaucratic Feasibility positively influences acceptance and implementation of OHS-related performance requirements.

Proposition 3: Compliance Accountability strengthens the institutionalisation of occupational health and safety by linking OHS responsibilities to formal performance management processes.

Proposition 4: The institutional legitimacy and effectiveness of the Occupational Safety Officer Cadre increase when occupational health and safety responsibilities are formally integrated into the Performance Management System.

VI. FINDINGS: IMPLEMENTATION GAPS AND PMS OPPORTUNITIES

A. Gap 1: Structural Establishment Without Operational Specification

The cadre circular establishes posts but does not, within the document reviewed, provide a complete operational model for every MDA [23]. This creates uncertainty about minimum staffing, technical authority, interfaces with administration and medical units, access to leadership, and the evidence on which officers will be appraised. PMS can help close this gap only after schemes of service and job descriptions translate broad functions into role-specific deliverables. Safety officers should be assessed on the quality of risk-management support and organisational learning, not solely on absence of incidents.

B. Gap 2: OHS Is Not Explicitly Cascaded as a Cross-Cutting Result

PMS enables institutional priorities to cascade into departmental and individual commitments [21], [22]. However, OHS may remain invisible if it is not recognised as a cross-cutting governance requirement. A service-wide OHS objective should be expressed broadly enough to apply across different risk contexts, while each MDA should derive risk-based indicators suited to its activities. A federal secretariat, laboratory, works department, hospital, border service, and field inspectorate should not be measured with identical hazard indicators.

C. Gap 3: Competency Requirements Are Under-Specified

The PMS competency architecture offers an important route for institutionalisation because competence links knowledge and skill to observable behaviour. The framework should include emergency awareness, hazard reporting, safe decision-making, consultation, and role-specific technical competence. For safety professionals, competencies should cover risk assessment, incident investigation, occupational hygiene, emergency planning, legal interpretation, data analysis, and communication. International competency frameworks may inform development, but Nigerian standards and professional consultation are required.

D. Gap 4: Monitoring May Reward Activity Rather Than Control Quality

A weak indicator set could encourage attendance counts, form completion, or low reported incident rates while ignoring unresolved hazards. The PMS should therefore combine leading and lagging indicators and require qualitative review. Useful examples include percentage of high-priority corrective actions closed by agreed dates; quality of emergency exercises; timeliness and completeness of incident investigation; workforce participation in risk assessment; completion of role-specific competency assessment; and trends in hazard reports. None should be adopted nationally without definitions, baseline testing, data-quality rules, and assessment of unintended consequences.

E. Gap 5: Fragmented Data and Weak Learning Loops

PMS automation creates an opportunity to connect role expectations, competency records, review notes, and improvement actions. OHS information, however, includes personal and medically sensitive data. Digital integration should therefore comply with applicable data-protection requirements, use role-based access, distinguish personal health information from aggregate performance information, and limit data collection to legitimate purposes [44]. Dashboards should show trends and action status without encouraging public ranking of individuals or suppression of reports.

VII. PROPOSED GOVERNANCE MODEL**A. Pillar 1: Performance Integration**

OHCSF should consider an OHS addendum to the PMS framework after consultation and legal review. The addendum would establish a cross-cutting expectation that MDAs identify significant occupational risks, assign accountable owners, maintain emergency arrangements, consult workers, and monitor agreed controls. At institutional level, permanent secretaries and chief executives would sponsor an annual OHS plan tied to strategic risks. At departmental level, managers would maintain relevant controls and close corrective actions. At individual level, only role-relevant and controllable responsibilities would enter performance agreements.

For non-safety staff, appropriate commitments may include participation in required induction, reporting hazards, following emergency arrangements, and completing role-specific training. For supervisors, commitments may include risk-review conversations, corrective-action ownership, and consultation. For safety officers, deliverables may include facilitation of risk assessments, assurance reviews, data analysis, emergency exercises, investigation support, and capability development. The model rejects a uniform 10% or 70% weighting because weightings should follow verified job content and PMS rules.

B. Pillar 2: Competency Development

A dedicated OHS competency domain should be developed through job analysis and consultation. A tiered model could distinguish awareness, application, leadership, and specialist levels. Basic First Aid may serve as one pilot competency where supported by risk assessment, accredited training standards, medical oversight, and resources. It should not be treated as the defining competency for all OHS governance. Depending on role, other priorities may include fire prevention, ergonomics, psychosocial risk management, field safety, laboratory safety, electrical safety, driver safety, and emergency coordination. Competency should be demonstrated through assessment, not attendance alone. Refresher frequency and certificate validity should follow the requirements of the accredited provider or competent authority rather than an assumed universal period. The framework should also address trainer competence, accessibility, reasonable accommodation, record verification, and availability of equipment required to apply the training.

C. Pillar 3: Monitoring, Review, and Organisational Learning

Monthly and quarterly PMS conversations offer recurring opportunities to review safety conditions before annual appraisal. These reviews should ask: what material risks changed; which controls failed or weakened; what workers reported; which actions are overdue; what support is required; and what was learned from incidents, near misses, inspections, or exercises? The purpose is to solve problems early, not to wait for retrospective scoring. Improvement plans should name organisational as well as individual actions because performance barriers may arise from procurement delays, staffing, infrastructure, or conflicting priorities.

Recognition can reinforce desirable behaviour when it rewards learning, reporting, collaboration, and sustained control improvement. Awards based simply on zero incidents or 100% completion can create perverse incentives. A better approach is to recognise verified improvements, timely escalation of serious risks, high-quality investigations, worker-led solutions, and transfer of learning across MDAs.

D. Pillar 4: Digital Accountability With Safeguards

Digital PMS infrastructure could maintain verified competency status, action ownership, review dates, and aggregate indicators. Integration with other government systems should follow a documented business case, data-protection impact assessment, cybersecurity review, and clear data governance. The Nigeria Data Protection Act provides a contemporary legal framework for processing personal data [44]. Health information should not be used as a routine appraisal variable. The system should record whether required organisational support was provided and permit review or correction of inaccurate data.

TABLE I PROPOSED OHS-PMS INDICATOR ARCHITECTURE

Level	Objective	Illustrative indicator	Safeguard	Evidence status
Service-wide	Establish minimum governance expectations	MDAs with approved risk-based OHS plans	Do not compare unlike risk profiles	Policy proposal
MDA	Manage material risks and resources	High-priority actions closed by agreed dates	Validate action quality, not closure count alone	Evidence-informed
Department	Maintain controls and participation	Worker consultation and control reviews completed	Protect reporting and dissent	Evidence-informed
Supervisor	Respond to hazards and support staff	Verified actions from review conversations	Assess available authority and resources	Policy proposal
Safety officer	Provide competent advice and assurance	Quality-assured assessments, investigations, drills, learning reports	Do not make adviser solely accountable for line risks	Evidence-informed
Employee	Follow controls and report concerns	Role-relevant training/competency and good-faith reporting	No penalty for protected reporting	Policy proposal

VIII. PHASED IMPLEMENTATION ROADMAP

Phase 1 should establish legitimacy and design quality. OHCSF should convene representatives from relevant central agencies, MDAs, labour organisations, OHS professionals, legal advisers, data-protection officers, and employee groups. The group should confirm the legal mandate, clarify cadre functions, map current OHS arrangements, define terminology, and select a small set of pilot MDAs representing different risk profiles. Baseline assessment should document hazards, staffing, competencies, reporting practices, and data quality before targets are introduced.

Phase 2 should co-design the pilot. Each participating MDA should develop a risk-based OHS plan, role matrix, competency map, indicator definitions, and review process. The pilot should test Basic First Aid and emergency preparedness where relevant, alongside broader prevention indicators. Training should be accompanied by the equipment, time, supervision, and procedures required for application. Employees should receive accessible information on what data will be collected and how it will be used.

Phase 3 should implement and evaluate. Evaluation should examine feasibility, acceptability, fidelity, data quality, unintended effects, employee trust, reporting behaviour, corrective-action performance, and selected safety outcomes. A mixed-methods design would combine routine data, document review, surveys, interviews, and observations. Comparison groups or staggered implementation would strengthen inference where feasible. Importantly, increased reporting during early implementation may reflect improved trust rather than deteriorating safety.

Phase 4 should refine and scale. Indicators that are unreliable, gameable, burdensome, or outside the control of assessed employees should be revised or removed. National scaling should proceed only after legal review, cost assessment, workforce consultation, technology testing, and evidence that the framework improves governance without suppressing reporting or creating inequity. OHCSF should publish implementation guidance, definitions, model role profiles, and an evaluation report.

TABLE II RESPONSIBILITY MATRIX FOR PILOT IMPLEMENTATION

Workstream	OHCSF	FCSC/central HR	MDA leadership/H R	Safety cadre/workers	Digital/legal functions
Policy and legal review	Accountable	Consulted	Consulted	Consulted	Responsible
Role and competency design	Accountable	Responsible	Consulted	Responsible/consulted	Consulted
Pilot risk assessment	Informed	Informed	Accountable	Responsible/consulted	Consulted
Indicator and data design	Accountable	Consulted	Responsible	Consulted	Responsible
Training and implementation	Oversight	Consulted	Accountable	Responsible/participating	Support
Independent evaluation	Commission	Consulted	Provide data	Participate	Assure governance

IX. DISCUSSION

The analysis supports the central proposition that performance management can contribute to OHS institutionalisation when it is used as a governance cycle rather than a scoring device. The Nigerian PMS contains mechanisms that are conceptually compatible with prevention: cascading objectives, recurring review, competency assessment, improvement planning, and organisational reporting [21], [22]. These mechanisms address weaknesses commonly associated with episodic appraisal because they create repeated opportunities to identify barriers and align support. They also provide a route for clarifying how the new safety cadre interacts with line management and central administration.

However, the safety literature cautions against equating management-system presence with effective risk control [11], [12]. Safety climate research shows that employees respond to perceived priorities and enacted management behaviour, not merely formal policy [14]-[20]. The public-management literature adds that poorly designed targets can be gamed or used ceremonially [32]-[36]. Together, these findings indicate that the value of PMS integration will depend on indicator validity, leadership behaviour, employee trust, resource availability, and the quality of review conversations. OHS institutionalisation cannot be achieved by changing forms alone.

The revised conceptual model also changes the role of accountability. The original sanction-focused formulation assumed that career consequences would narrow an intention-behaviour gap. Deterrence may influence behaviour, but an exclusively punitive model is risky in safety-critical reporting systems. Employees may conceal errors and hazards when they expect automatic blame. Compliance accountability

is therefore framed as visibility plus proportionate response, including support and correction. This formulation is consistent with learning-oriented safety governance and more suitable for a public service bound by due process.

Basic First Aid remains a useful pilot because it is visible, teachable, and relevant to emergency preparedness, but it should not dominate the architecture. OHS governance is broader than emergency response. The risk profile of each MDA should determine priorities. A pilot that produces certificates without functioning emergency arrangements, equipment, trained responders, communication protocols, and post-event learning would reproduce the compliance problem the framework seeks to solve.

The paper's principal theoretical contribution is modest but testable. It proposes that perceived safety value, bureaucratic feasibility, and compliance accountability jointly shape implementation. It does not claim a validated new theory. Empirically, future studies can develop measures, examine construct validity, and test associations with participation, reporting, competency, and control performance. Practically, the contribution is a structured crosswalk between OHS governance requirements and PMS mechanisms. From a policy perspective, the framework shows how OHCSF could use an existing reform platform rather than create an entirely separate appraisal system.

X. IMPLICATIONS FOR POLICY AND PRACTICE

For OHCSF, the immediate implication is to undertake a formal policy-alignment exercise rather than impose universal sanctions or targets. The exercise should establish minimum expectations, model role profiles, data definitions, and safeguards while preserving risk-based adaptation by MDAs. For the Federal Civil Service Commission and human-resource authorities, the priority is to ensure that job analysis, schemes of service, competency requirements, and career structures accurately reflect professional OHS work. For MDA leadership, OHS should be included in strategic risk and resource discussions, not delegated entirely to the safety cadre.

For safety professionals, PMS integration offers visibility but also creates a risk of bureaucratisation. Officers should protect the technical integrity of indicators, distinguish assurance from line accountability, and promote reporting and learning. For workers and unions, participation in design is essential to fairness, trust, and practicability. For digital and data-protection functions, the challenge is to support useful aggregation while preventing inappropriate access to health information and misuse of personal performance data.

XI. LIMITATIONS AND FUTURE RESEARCH

This review has four main limitations. First, it is critical and non-systematic; it does not claim exhaustive retrieval or formal risk-of-bias assessment. Second, direct empirical literature on OHS governance in Nigeria's Federal Civil Service is limited, requiring cautious use of evidence from other sectors and countries. Third, interpretation of policy documents cannot establish how PMS or the safety cadres operate in practice. Fourth, the proposed framework has not been piloted, costed, or legally validated. Consequently, all claims about effectiveness remain provisional.

Future research should begin with descriptive institutional mapping across MDAs, including cadre deployment, reporting arrangements, competencies, budgets, hazard profiles, incident systems, and employee perceptions. Instrument-development studies should operationalise perceived safety value, bureaucratic feasibility, and compliance accountability and test reliability, construct validity, measurement invariance, and criterion relationships. Pilot evaluations should use mixed methods and, where possible, stepped-wedge or matched comparison designs. Outcomes should include reporting quality, corrective-action closure, competency demonstration, worker participation, safety climate, and carefully interpreted

injury or illness indicators. Economic evaluation should examine implementation cost, administrative burden, and distributional effects across large and small MDAs.

XII. CONCLUSION

Nigeria's creation of Occupational Safety Officer cadres and adoption of a modern PMS provide a rare opportunity to align professional capability with administrative accountability. The reforms are complementary, but their integration must be deliberately designed. This review identifies gaps in operational specification, cross-cutting objectives, competency requirements, indicator quality, data governance, and procedural safeguards. It proposes a four-pillar model based on performance integration, competency development, monitoring and learning, and digitally enabled accountability.

The central conclusion is cautious: PMS alignment may help institutionalise OHS by making responsibilities visible, reviewable, and improvable, but it cannot substitute for leadership, worker participation, competent risk control, resources, or legal due process. Basic First Aid can be tested as one practical entry point, not as a proxy for a complete OHS system. The framework should be piloted and independently evaluated before national scaling or connection to consequential employment decisions. Its immediate value lies in turning a broad reform opportunity into a structured, testable policy agenda.

REFERENCES

- [1] International Labour Organization, Occupational Safety and Health Convention, 1981 (No. 155). Geneva, Switzerland: ILO, 1981.
- [2] International Labour Organization, Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187). Geneva, Switzerland: ILO, 2006.
- [3] International Labour Organization, A Safe and Healthy Working Environment Is a Fundamental Principle and Right at Work. Geneva, Switzerland: ILO, 2022.
- [4] World Health Organization, Healthy Workplaces: A Model for Action. Geneva, Switzerland: WHO, 2010.
- [5] Federal Republic of Nigeria, Factories Act, Cap. F1, Laws of the Federation of Nigeria 2004. Abuja, Nigeria, 2004.
- [6] Federal Republic of Nigeria, Employees' Compensation Act, 2010. Abuja, Nigeria, 2010.
- [7] Federal Republic of Nigeria, Public Service Rules. Abuja, Nigeria: Federal Government Printer, 2021.
- [8] Federal Ministry of Labour and Employment, National Policy on Occupational Safety and Health. Abuja, Nigeria, 2020.
- [9] International Organization for Standardization, ISO 45001:2018 Occupational Health and Safety Management Systems - Requirements With Guidance for Use. Geneva, Switzerland: ISO, 2018.
- [10] International Labour Organization, Guidelines on Occupational Safety and Health Management Systems, ILO-OSH 2001. Geneva, Switzerland: ILO, 2001.
- [11] L. S. Robson et al., "The effectiveness of occupational health and safety management system interventions: A systematic review," *Safety Science*, vol. 45, no. 3, pp. 329-353, 2007, doi: 10.1016/j.ssci.2006.07.003.
- [12] J. Abad, E. Lafuente, and J. Vilajosana, "An assessment of the OHSAS 18001 certification process: Objective drivers and consequences on safety performance and labour productivity," *Safety Science*, vol. 60, pp. 47-56, 2013, doi: 10.1016/j.ssci.2013.06.011.
- [13] J. Reason, "Human error: Models and management," *BMJ*, vol. 320, no. 7237, pp. 768-770, 2000, doi: 10.1136/bmj.320.7237.768.

- [14] D. Zohar, "Safety climate in industrial organizations: Theoretical and applied implications," *Journal of Applied Psychology*, vol. 65, no. 1, pp. 96-102, 1980, doi: 10.1037/0021-9010.65.1.96.
- [15] A. Neal, M. A. Griffin, and P. M. Hart, "The impact of organizational climate on safety climate and individual behavior," *Journal of Occupational Health Psychology*, vol. 5, no. 1, pp. 99-109, 2000, doi: 10.1037/1076-8998.5.1.99.
- [16] M. A. Griffin and A. Neal, "Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge, and motivation," *Journal of Occupational Health Psychology*, vol. 5, no. 3, pp. 347-358, 2000, doi: 10.1037/1076-8998.5.3.347.
- [17] M. S. Christian, J. C. Bradley, J. C. Wallace, and M. J. Burke, "Workplace safety: A meta-analysis of the roles of person and situation factors," *Journal of Applied Psychology*, vol. 94, no. 5, pp. 1103-1127, 2009, doi: 10.1037/a0016172.
- [18] S. E. Beus, S. C. Payne, M. E. Bergman, and W. Arthur Jr., "Safety climate and injuries: An examination of theoretical and empirical relationships," *Journal of Applied Psychology*, vol. 95, no. 4, pp. 713-727, 2010, doi: 10.1037/a0019164.
- [19] S. N. N. Syed-Yahya, M. A. Idris, and A. J. Noblet, "The relationship between safety climate and safety performance: A review," *Journal of Safety Research*, vol. 83, pp. 105-118, 2022, doi: 10.1016/j.jsr.2022.08.008.
- [20] F. Saleem and M. I. Malik, "Safety management and safety performance nexus: Role of safety consciousness, safety climate, and responsible leadership," *International Journal of Environmental Research and Public Health*, vol. 19, no. 20, art. 13686, 2022, doi: 10.3390/ijerph192013686.
- [21] Office of the Head of the Civil Service of the Federation, *Policy on Performance Management System for Federal Public Service of Nigeria*. Abuja, Nigeria: OHCSF, 2022.
- [22] Office of the Head of the Civil Service of the Federation, *Guidelines on Performance Management System for Federal Public Service of Nigeria*. Abuja, Nigeria: OHCSF, 2022.
- [23] Office of the Head of the Civil Service of the Federation, "Creation of Occupational Safety Officer Cadre," Circular HCSF/306/S.1/57, Aug. 1, 2022.
- [24] J. Rasmussen, "Risk management in a dynamic society: A modelling problem," *Safety Science*, vol. 27, nos. 2-3, pp. 183-213, 1997, doi: 10.1016/S0925-7535(97)00052-0.
- [25] E. Hollnagel, D. D. Woods, and N. Leveson, Eds., *Resilience Engineering: Concepts and Precepts*. Aldershot, U.K.: Ashgate, 2006.
- [26] E. Hollnagel, *Safety-II in Practice: Developing the Resilience Potentials*. Abingdon, U.K.: Routledge, 2017.
- [27] Organisation for Economic Co-operation and Development, *Guidance on Developing Safety Performance Indicators Related to Chemical Accident Prevention, Preparedness and Response*, 2nd ed. Paris, France: OECD, 2008.
- [28] A. Hopkins, "Thinking about process safety indicators," *Safety Science*, vol. 47, no. 4, pp. 460-465, 2009, doi: 10.1016/j.ssci.2007.12.006.
- [29] A. Hale, "Why safety performance indicators?" *Safety Science*, vol. 47, no. 4, pp. 479-480, 2009, doi: 10.1016/j.ssci.2008.07.018.
- [30] N. V. Schwatka, S. Hecker, and L. M. Goldenhar, "Defining and measuring safety climate: A review of the construction industry literature," *Annals of Occupational Hygiene*, vol. 60, no. 5, pp. 537-550, 2016, doi: 10.1093/annhyg/mew020.
- [31] R. S. Kaplan and D. P. Norton, "The balanced scorecard - Measures that drive performance," *Harvard Business Review*, vol. 70, no. 1, pp. 71-79, 1992.
- [32] C. Hood, "A public management for all seasons?" *Public Administration*, vol. 69, no. 1, pp. 3-19, 1991, doi: 10.1111/j.1467-9299.1991.tb00779.x.
- [33] G. A. Boyne, "What is public service improvement?" *Public Administration*, vol. 81, no. 2, pp. 211-227, 2003, doi: 10.1111/1467-9299.00343.
- [34] D. P. Moynihan, *The Dynamics of Performance Management: Constructing Information and Reform*. Washington, DC, USA: Georgetown University Press, 2008.
- [35] R. D. Behn, "Why measure performance? Different purposes require different measures," *Public Administration Review*, vol. 63, no. 5, pp. 586-606, 2003, doi: 10.1111/1540-6210.00322.

- [36] W. Van Dooren, G. Bouckaert, and J. Halligan, *Performance Management in the Public Sector*, 2nd ed. Abingdon, U.K.: Routledge, 2015.
- [37] C. U. Umeokafor et al., "The pattern of occupational safety and health regulation in Nigeria," *Occupational Safety and Health Research*, [REFERENCE VERIFICATION REQUIRED: confirm complete bibliographic record before submission].
- [38] P. Idubor and M. D. Oisamoje, "An exploration of health and safety management issues in Nigeria's efforts to industrialize," *European Scientific Journal*, vol. 9, no. 12, 2013.
- [39] Z. A. Ali and M. S. Misnan, "Evaluating the current level of safety and health practices in the upstream sector of the Nigerian oil and gas industry: A review," *International Journal of Research and Innovation in Social Science*, vol. 9, no. 1, pp. 463-487, 2025, doi: 10.47772/IJIRISS.2025.9010044.
- [40] K. I. Ekpo, E. L. Esitikot, S. T. Ganranwei, N. B. Naworio, U. E. Nta, and N. P. Akpan, "Digital technologies in occupational health and safety management in Nigeria's upstream offshore oil and gas sector: A critical review of gap-bridging potential," *International Journal of Research and Innovation in Applied Science*, vol. 11, no. 7, pp. 705-718, 2026, doi: 10.51584/IJRIAS.2026.1107040.
- [41] C. Irondi and E. U. Asogwa, "Challenges of implementation of the National Occupational Health and Safety Policy in public universities in Rivers State," *International Journal of Innovative Social Sciences & Humanities Research*, vol. 11, no. 4, pp. 172-179, 2023.
- [42] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Quarterly*, vol. 13, no. 3, pp. 319-340, 1989, doi: 10.2307/249008.
- [43] E. M. Rogers, *Diffusion of Innovations*, 5th ed. New York, NY, USA: Free Press, 2003.
- [44] Federal Republic of Nigeria, *Nigeria Data Protection Act*, 2023. Abuja, Nigeria, 2023.
- [45] I. P. Adamopoulos, A. N. Bardavouras, and N. F. Syrou, "Occupational safety, policy, and management in public health organizations and services," *European Journal of Environment and Public Health*, vol. 7, no. 1, art. em0122, 2023, doi: 10.29333/ejeph/12445.
- [46] M. D. Cooper, "Towards a model of safety culture," *Safety Science*, vol. 36, no. 2, pp. 111-136, 2000, doi: 10.1016/S0925-7535(00)00035-7.
- [47] T. R. Lee and K. Harrison, "Assessing safety culture in nuclear power stations," *Safety Science*, vol. 34, nos. 1-3, pp. 61-97, 2000, doi: 10.1016/S0925-7535(00)00007-2.
- [48] D. Zohar and G. Luria, "A multilevel model of safety climate: Cross-level relationships between organization and group-level climates," *Journal of Applied Psychology*, vol. 90, no. 4, pp. 616-628, 2005, doi: 10.1037/0021-9010.90.4.616.
- [49] S. Clarke, "The relationship between safety climate and safety performance: A meta-analytic review," *Journal of Occupational Health Psychology*, vol. 11, no. 4, pp. 315-327, 2006, doi: 10.1037/1076-8998.11.4.315.
- [50] M. N. Vinodkumar and M. Bhasi, "Safety management practices and safety behaviour: Assessing the mediating role of safety knowledge and motivation," *Accident Analysis & Prevention*, vol. 42, no. 6, pp. 2082-2093, 2010, doi: 10.1016/j.aap.2010.06.021.