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Standardizing Change Management Mechanisms in Large Organizations: A Review of Advances in Adoption and Sustainment

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Abstract
Large organizations manage change as a portfolio rather than as an event, and increasingly do so through standardized machinery: program offices, governance gates, readiness surveys, training pipelines, and benefit reviews. The scholarly literature, however, remains organized around competing stage models, and the applied literature is dominated by conceptual frameworks whose comparative effectiveness has not been tested. This integrative review asks what can defensibly be standardized in enterprise change management and what must remain local. Drawing on organizational development research, implementation science, information systems, safety science, quality and regulatory management, and formal process standards, it synthesizes advances along two outcome families the field increasingly treats as distinct: adoption, the uptake and use of a new practice, technology, or structure; and sustainment, its continued delivery, with benefit, after dedicated implementation support ends. Adoption advances include the reconstruction of readiness as a measurable multilevel construct, the taxonomic specification of change strategies, the maturation of determinant frameworks supporting tailoring, and evidence treating leadership as a dosed behavior rather than a disposition. Sustainment advances include conceptual clarification separating sustainment from survival, the reframing of adaptation as a condition of sustainment, the arrival of assessment instruments and maturity models, and incentive-linked and monitoring-based mechanisms for sustaining change after closure. A six-layer architecture is proposed that standardizes governance, diagnostic instruments, strategy vocabulary, reporting, and competencies while devolving strategy selection and change content. Nine design propositions and nine research priorities follow, including comparative trials of change methods and long-horizon sustainment measurement.

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1. Introduction

A large organization does not experience change as a single event but as a portfolio. In any given year the same enterprise may be replacing its procurement platform (Ahiaeke Patrick *et al*., 2020; Akinleye & Adeyoyin, 2021), rebuilding identity and cloud infrastructure (Ahmed & Odejobi, 2018; Ladapo *et al*., 2019), expanding a diagnostic network across sites (Aminu-Ibrahim *et al*., 2021), issuing a revised safety protocol to a construction workforce of thousands (Obogo *et al*., 2019a), automating customer

analytics (Oziri *et al*., 2020), introducing digital tools into classroom practice (Boakye *et al*., 2020), and executing a multi-year health system transformation (Ilodigwe & Adesemoye, 2021). These run concurrently, compete for the attention of the same managers, and land on the same front-line workers. The question that matters is therefore not how to manage a change but how to build the standing capability to manage many, repeatedly, without reinventing the approach each time and without exhausting the people who absorb them.

This is the impulse behind standardization. Organizations create change offices, adopt named methodologies, certify practitioners, and write change gates into project governance, and the applied literature mirrors the instinct in governance-oriented models for contractor performance (Arumosoye & Obriki, 2020) and capital project delivery in high-risk environments (Aminu-Ibrahim *et al*., 2019). External standards reinforce it: ISO 9001:2015 made the planning of changes an explicit clause requirement (International Organization for Standardization, 2015), ITIL 4 recast change management as change enablement with defined authorities and risk categories, the Project Management Institute (2013) linked change work to portfolio governance, and commercial providers offer branded methods, of which ADKAR is the most widely diffused (Hiatt, 2006).

The scholarly base does not straightforwardly authorize this. Armenakis and Bedeian (1999) described a literature rich in prescriptions and poor in tests, By (2005) found much of it resting on assertion, Weick and Quinn (1999) showed how differently the same vocabulary is used across studies, and Pettigrew *et al*. (2001) catalogued the scarcity of longitudinal and multilevel research. Stouten *et al*. (2018) set the practitioner models against the evidence and found only partial correspondence. The applied literature compounds the problem, being dominated by conceptual frameworks that propose an architecture without testing it, a genre visible across internal audit quality (Akomolafe & Agu, 2018), executive decision systems (Lawal & Oduleye, 2019b), supply chain transformation with embedded compliance controls (Mbonu *et al*., 2020a), and service operations management (Efobi *et al*., 2021). Meanwhile the field's most repeated claim, that roughly seventy per cent of initiatives fail, has no defensible provenance (Hughes, 2011).

Three features make large organizations the critical case. Multiplicity: the marginal initiative competes for absorptive capacity with everything in flight, a contention visible in coordinated multi-site program management (Aminu-Ibrahim *et al*., 2021) and in materials readiness as a constraint on performance (Okonkwo, Agbabiaka, *et al*., 2021). Heterogeneity: one corporate change lands in units differing in workload, leadership stability, and prior experience, as work on risk-managed construction in regulated healthcare (Ogbete *et al*., 2021) and contractor compliance across programs (Obogo, Uduokhai, *et al*., 2021) shows. Institutional distance: designers, sponsors, and deliverers are separated by several layers, and much enterprise reporting exists to bridge that gap (Ogbole, Okoruwa, Babatope, *et al*., 2021; Sanni & Atima, 2021b), a coordination gain that also risks purchasing legibility by counting what is easy rather than what matters. The review therefore maps what the major traditions contribute to a standardized account of change mechanisms, synthesizes adoption and sustainment separately, proposes a layered architecture specifying what should and should not be standardized, and identifies the research that would move the field toward comparative evidence.

2. Methodology

2.1. Design

This is an integrative narrative review with a framework synthesis, chosen over systematic review with meta-analysis because the relevant literatures use incompatible vocabularies for overlapping constructs, report outcomes on incommensurable scales, and include conceptual and standards material that a trial-focused protocol would exclude. The question is architectural rather than one of pooled effect size.

2.2. Sources and Search

Searches covered management, health services, information systems, safety science, and applied engineering outlets published between 1990 and 2021, with earlier foundational works retained where they remain load-bearing. Terms combined change vocabulary with mechanism vocabulary (readiness, adoption, routinization, institutionalization, sustainment, de-implementation, fidelity, adaptation) and standardization vocabulary (standard, framework, maturity model, competency, taxonomy, reporting guideline). Reference lists of major reviews were hand-searched, forward citation searching was run from anchor papers, and standards documents were identified separately. A consolidated multi-portfolio corpus spanning procurement, healthcare delivery and infrastructure, occupational safety, enterprise technology and cybersecurity, regulatory science, finance and audit, education, and public health was screened in full and supplies most of the applied material cited below.

2.3. Inclusion Criteria

Material was included if it addressed organizational or multilevel change in formal organizations and contributed to the specification of mechanisms, the measurement of adoption or sustainment, the comparison of change approaches, or the standardization of change practice. Conceptual frameworks were included where they specify mechanisms or measurement and are treated throughout as proposals rather than findings. Individual behavior change outside an organizational delivery context was excluded, as was financial work on restructuring performance.

2.4. Synthesis Procedure

Three passes were used. The first coded material against a framework distinguishing determinants, strategies, mechanisms, and outcomes (Nilsen, 2015). The second sorted outcomes into an adoption family and a sustainment family using the implementation outcome taxonomy of Proctor *et al*. (2011). The third tested each element for standardizability, asking whether its effect is plausibly invariant across contexts, whether it can be specified precisely enough to execute consistently, and whether it can be verified at proportionate cost. The architecture presented later is the product of that third pass.

2.5. Positionality of The Synthesis

Framework synthesis imports its framework's assumptions. The scaffold here draws disproportionately on implementation science and accordingly foregrounds fidelity, determinants, and measurable outcomes in a way that process or critical traditions would not. The choice is defended on the

grounds that implementation science has done the most sustained work on how to specify change activity so that it can be replicated and compared; its thin treatment of power and the political construction of change agendas is taken up in the discussion.

3. Literature Synthesis

The synthesis proceeds in four movements: the conceptual foundations on which any standardization argument rests, the distinct objects the word standardization can denote, and then advances in adoption and in sustainment, treated separately because these outcome families have different determinants and are routinely conflated.

3.1. Conceptual Foundations

3.1.1. Episodic and Continuous Change

Weick and Quinn's (1999) distinction explains why practitioners and researchers talk past each other. Episodic change is infrequent and intentional, inviting an unfreeze, move, refreeze logic with the change agent as prime mover; continuous change is ongoing and cumulative, inviting a freeze, rebalance, unfreeze logic in which the intervention is to make existing patterns visible so they can be redirected. The continuous tradition appears in lean adaptations for resource-constrained organizations (Ambali *et al*., 2021), the translation of regulatory requirements into repeatable workflows (Eyetsemitan *et al*., 2021), and data-driven operations improvement (Efobi *et al*., 2021), all assuming a permanent improvement engine, as do near-miss reporting systems where the loop rather than any single correction is the intervention (Obogo, Arumosoye, *et al*., 2021) and availability models in which uptime is maintained rather than restored (Okonkwo *et al*., 2018b). Most enterprise machinery is built for the episodic case, which is one reason sustainment is under-managed: it declares completion where a continuous account says the work begins.

3.1.2. The Practitioner Canon

Lewin's (1947) field theory is usually reduced to three steps, which does it a disservice; Burnes (2020) shows that the three-step reading detaches the model from the field-theoretic work that gives it content (see also Burnes, 2017). Its durable contribution is that behavior is held by an equilibrium of driving and restraining forces, so reducing restraint generally beats increasing pressure. Kotter's (1995, 1996) eight stages contributed urgency, guiding coalition, and short-term wins on an inductive base with untested ordering, though coalition building and early visible results map onto well-evidenced constructs. Hiatt's (2006) ADKAR model makes the person rather than the project the unit of analysis and converts diagnosis into a barrier-point question, but independent evidence for the sequence is thin relative to its market penetration. Bridges's (2009) transitions model observes that loss must be processed before commitment is available. Burke and Litwin's (1992) model is the most theoretically complete, distinguishing transformational from transactional factors and specifying directional paths between them, which supplies an account of why some interventions produce first-order and others second-order change.

3.1.3. Implementation Science Frameworks

Nilsen's (2015) typology is the standard orientation device: theories, models, and frameworks serve five purposes, namely describing translation, understanding determinants, evaluating implementation, providing classic theory, and providing implementation-specific theory. Confusing these is the field's commonest error and is endemic in corporate practice, where a determinant framework is mistaken for a process guide; Damschroder (2020) adds that framework proliferation has outrun the discipline of applying them, and that most projects would be better served using one well than naming several.

The Consolidated Framework for Implementation Research organizes determinants into intervention, outer setting, inner setting, individuals, and process (Damschroder *et al*., 2009), though examination of its use finds post hoc labeling rather than prospective design (Kirk *et al*., 2016). Normalization Process Theory specifies the work through which practices become embedded, namely coherence, cognitive participation, collective action, and reflexive monitoring (May & Finch, 2009), and is valuable here because embedding is its dependent variable. The Exploration, Preparation, Implementation, Sustainment framework treats determinants as varying by phase and names sustainment as a phase in its own right (Aarons *et al*., 2011). RE-AIM evaluates reach, effectiveness, adoption, implementation, and maintenance, insisting on denominators (Glasgow *et al*., 1999), and a twenty-year review has extended it toward iterative use (Glasgow *et al*., 2019). The implementation outcomes taxonomy separates implementation from service and client outcomes (Proctor *et al*., 2011), the single most useful import for corporate practice. Facilitation as a specifiable role sits at the center of the integrated PARIHS reformulation (Harvey & Kitson, 2016), and the broader synthesis is consolidated by Fixsen *et al*. (2005).

3.1.4. Acceptance, readiness, and sociotechnical perspectives

The technology acceptance model established perceived usefulness and ease of use as proximal determinants of intention (Davis, 1989), and the unified theory consolidated competing models into performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh *et al*., 2003). Applied work extends the logic: extension research treats the intermediary rather than the artifact as the driver of adoption (Michael & Ogunsola, 2021b), while access alone does not produce use (Michael & Ogunsola, 2021a). Education research reports the same pattern, teacher practice rather than platform capability determining whether a tool changes anything (Orise & Niniola, 2020; Boakye *et al*., 2020), with comparative work showing how differently an identical mandate lands across national systems (Boakye *et al*., 2021). Scaling frameworks make the point at system level (Oparah, Gado, *et al*., 2021), and security research shows voluntary compliance varying by role within one institution (Onche *et al*., 2020). These models predict intention well and organizational outcomes poorly. Greenhalgh *et al*.'s (2017) work on non-adoption and abandonment is the corrective, treating complexity across seven domains and predicting that programs complex in several will struggle whatever individual acceptance looks like; their earlier synthesis remains the most comprehensive account of organizational determinants (Greenhalgh *et al*., 2004), and Rogers (2003) supplies the diffusion base.

3.1.5. Process, Quality, and Safety Standards

Formal standards approach change from a governance rather than a behavioral direction. ISO 9001:2015 requires changes

to be planned, with consideration of purpose, consequences, resources, and authority (International Organization for Standardization, 2015); ITIL 4 specifies authority models and risk-tiered routes; and the Project Management Institute (2013) links change to portfolio governance. Parallel traditions outside information technology deserve more attention than the change literature gives them: internal safety audit systems (Obogo *et al*., 2020a) and critically reviewed management systems (Obogo *et al*., 2020c), implementation models for safety management systems in resource-constrained regulators (Adeyelu, 2019), risk-based decision frameworks for regulated manufacturing (Aneke & Adesemoye, 2020), traceability requirements specifying the record as well as the act (Aneke & Adesemoye, 2019), mandatory infrastructure security regimes (Adegbite *et al*., 2020), and audit trail architectures making compliance continuous rather than periodic (Oshoba *et al*., 2020; Anichukwueze *et al*., 2021), alongside transformation frameworks that embed technology risk and ISO compliance into the design itself (Mbonu *et al*., 2020a). These instruments standardize control and accountability, not mechanism. A change can pass every gate and still fail to alter behavior, because gate compliance measures artifacts rather than the normalization of practice, which is why governance and mechanism standards are complements and confusing them produces organizations that are highly auditable and weakly effective.

Table 1: Major frameworks and standardization traditions by purpose, unit of analysis, and contribution to a mechanism account.

Framework or tradition	Primary purpose	Unit of analysis	Mechanism contribution	Principal limitation for enterprise use
Lewin, force field	Explanatory	Group field	Restraint reduction over pressure increase	Under-specified for multi-unit portfolios
Kotter, eight stages	Process guide	Whole organization	Coalition, urgency, early wins	Sequence untested; inductive base
ADKAR	Process and diagnostic	Individual	Barrier-point diagnosis	Thin independent evidence; proprietary
Bridges, transitions	Explanatory	Individual	Loss processing precedes commitment	No specification of organizational levers
Burke-Litwin	Diagnostic	Whole organization	Transformational and transactional paths	Demanding to instrument fully
CFIR	Determinant	Setting	Comprehensive determinant checklist	Often used for labeling, not design
Normalization Process Theory	Explanatory	Collective practice	Embedding work: coherence, participation, action, appraisal	Less directive about what to do
EPIS	Process and determinant	System and organization	Phase-varying determinants; sustainment as a phase	Developed in public service contexts
RE-AIM	Evaluation	Population and setting	Denominators; maintenance as an outcome	Demands data most firms do not collect
Proctor outcomes	Evaluation	Mixed	Separates implementation, service, and client outcomes	Requires measurement investment
TAM and UTAUT	Explanatory	Individual	Performance and effort expectancy, social influence	Intention is a weak proxy for sustained use
NASSS	Explanatory and predictive	Sociotechnical system	Complexity across seven domains	Diagnostic rather than prescriptive
Lean and Six Sigma	Improvement method	Process	Continuous improvement as standing capability	Weak account of behavioral adoption
ISO 9001:2015 and ITIL 4	Governance standard	Management system	Authority, traceability, risk tiering	Standardizes artifacts, not behavior change
Safety management systems	Governance and culture	Project organization	Leadership dose, institutionalization, leading signals	Rarely cited by the change literature

3.2. What Standardization Can Mean

3.2.1. Four Objects of Standardization

Debate about standardization is unproductive because the parties discuss different objects. *Process standardization* fixes phases, deliverables, and gates. It has coordination value where work is technical and repeated, as the software delivery literature shows for deployment pipelines (Badmus *et al*., 2018), platform integration design (Badmus *et al*., 2019a), and release tooling (Badmus *et al*., 2020), but is weakest where work is behavioral, because the effective ingredient is rarely the sequence.

Competency standardization fixes what a qualified practitioner must know and do. Evidence is suggestive but broader than the change literature acknowledges: professional development improves teacher competence (Yeboah *et al*., 2019), talent development builds capability across distributed operations (Falemi *et al*., 2020), ethics and compliance training has been designed to produce measurable behavioral change (Anichukwueze *et al*., 2020), and security awareness has been assessed for its effect on records handling (Onche *et al*., 2020). What is missing is evidence linking change-practitioner certification to initiative outcomes.

Measurement standardization fixes constructs, instruments, and denominators. Enterprise practice has invested heavily, in performance frameworks for service institutions (Efobi *et al*., 2021), continuous monitoring (Ogbole, Okoruwa, Babatope, *et al*., 2021), return-on-investment measurement under regulatory constraint (Sanni *et al*., 2020), and profitability analysis in procurement (Akin-Oluyomi *et al*., 2020), almost none of it pointed at implementation outcomes.

Reporting standardization fixes how activity is described afterward so that it can be reconstructed. Implementation science has formalized this through specification guidance (Proctor *et al*., 2013), a reporting statement with checklist (Pinnock *et al*., 2017), and methods for tracking strategies as

deployed and modified (Bunger *et al*., 2017). Corporate practice has no equivalent, its nearest analogues lying in assurance rather than change: technology-enabled internal audit (Akomolafe & Agu, 2018), statutory budget compliance reporting (Dogbatsey & Ebhojie, 2018), accounting systems for transparency (Bola-Sadipe *et al*., 2019), and cross-border compliance analytics (Lawal & Oduleye, 2018b).

3.2.2. The Fidelity and Adaptation Tension

The literature has moved past the fidelity-versus-context impasse in two ways. The first is *core components*, the distinction between what is essential to the effect and what is adaptable delivery form, which makes the argument empirical rather than ideological; the difficulty is that core components are rarely known at implementation, so most fidelity requirements are assertions rather than findings. The second is *planned adaptation*. The dynamic sustainability framework argues that expected decline follows from holding an intervention fixed while its context evolves (Chambers *et al*., 2013). Two applied traditions already work this way. Maturity models standardize the direction of travel while permitting local variation in current state, as in organizational learning models for safety performance (Arumosoye & Obriki, 2021) and adaptive safety management implementation (Adeyelu, 2019). Risk tiering varies the control burden with the stakes, as in procurement frameworks for high-risk energy environments (Okonkwo, Ogunwole, *et al*., 2021), and decision frameworks reconciling genuinely conflicting standards, such as chemical safety against circular-economy targets, show what this requires where neither can be relaxed (Okojie & Abioye, 2020). An enterprise standard should therefore specify an adaptation process, including who may adapt, on what evidence, and with what documentation, rather than attempt to prohibit adaptation.

3.2.3. Standardizing Mechanisms Rather Than Steps

The appropriate object of standardization is the mechanism layer. A mechanism is the response an intervention's resources generate in a given context, more portable than a procedure and more specific than a principle. Lewis *et al*. (2018) argued that the field had classified strategies without establishing causality, and their systematic review found that although mechanism language is now common, few studies meet the criteria a mechanism claim requires (Lewis *et al*., 2020). The vocabulary is ahead of the evidence, which argues for standardizing it rather than abandoning it. Holding a town hall in week two is a procedure and travels badly; increasing perceived legitimacy by exposing the decision rationale to challenge from those affected is a mechanism, supported by work on procedural justice and recipient reactions (Oreg *et al*., 2011), and can be enacted through a town hall, a manager cascade, a written rationale with an open channel, or a working group. Multi-stakeholder governance alignment makes the same structural point: the alignment mechanism is standardized, not the meeting format (Eyetsemitan *et al*., 2020). This dissolves an apparent contradiction in Dempsey *et al*. (2021), who report standardized concepts among the most cited failure factors while recommending a consistent but adaptable framework. Standardized procedure fails; standardized mechanism and measurement do not; and the common failure mode is standardizing the former while believing one is standardizing the latter.

Table 2: Objects of standardization, current evidential support, and recommended posture for large organizations.

Object	What is fixed	Evidence base	Recommended posture
Process sequence	Phases, gates, deliverables	Weak for behavioral change; stronger for technical release work	Standardize minimally, for coordination only
Mechanism vocabulary	Named causal pathways and the strategies that activate them	Moderate and improving	Standardize enterprise-wide
Measurement	Constructs, instruments, denominators, cadence	Moderate to strong for readiness and sustainment instruments	Standardize enterprise-wide
Reporting	What was done, by whom, to what, when, how much, and why	Strong methodological rationale; little corporate uptake	Standardize enterprise-wide
Competency	Practitioner knowledge, skills, accreditation	Indirect; strong for training generally, absent for change certification	Standardize, but evaluate
Strategy selection	Which strategies are used in a given site	Tailoring evidence favors local determination	Do not standardize; constrain and document
Change content	The substance of what changes	Domain-specific	Do not standardize centrally

3.3. Advances in Adoption

3.3.1. Readiness as A Measurable Multilevel Construct

Readiness has moved from slogan to construct. Armenakis *et al*. (1993) framed it as the cognitive precursor to resistance or support, shaped by the change message and the influence strategies used to deliver it. Weiner (2009) supplied a theory of *organizational* readiness distinguishing change commitment, the shared resolve to pursue the change, from change efficacy, the shared belief in collective capability to execute it. The remedies differ: commitment deficits are addressed through valence work, efficacy deficits through resourcing and capability building, and campaigns aimed at what is actually an efficacy problem are a common and expensive error. Rafferty *et al*. (2013) extended this into a multilevel account, identifying when individual readiness legitimately aggregates, which implies that unit-level variance is more informative than the enterprise mean. Shea *et al*. (2014) then provided psychometric evidence for a brief measure built on Weiner's formulation, making it a strong candidate for enterprise-wide standardization: short, theory-anchored, diagnostic of distinct remedies, and comparable across units. The applied literature approaches the construct obliquely, through asset readiness as a precondition of performance (Okonkwo, Agbabiaka, *et al*., 2021), learning maturity as a precondition of sustained improvement (Arumosoye & Obriki, 2021), and designs treating embedded risk capability as a gating condition (Mbonu *et al*., 2020a).

3.3.2. Specification and Taxonomy of Change Strategies

The second advance is that what was done must be specifiable. Proctor *et al*. (2013) required strategies to be reported with named strategy, actor, action, target, temporality, dose, outcome addressed, and theoretical justification. The Expert Recommendations for Implementing Change project compiled a refined set through expert consensus (Powell *et al*., 2015), later sorted into distinct clusters (Waltz *et al*., 2015), and the Implementation Research Logic Model requires determinants, strategies, mechanisms, and outcomes to be specified as one connected chain (Smith *et al*., 2020). Powell *et al*. (2019) set out the corresponding agenda, calling for strategies to be better conceptualized, matched to determinants, and tested rather than assumed. Without a shared vocabulary no comparison across initiatives is possible, because each review describes activity in its own terms; with one, an organization can ask which strategies were used across forty deployments, which barriers they addressed, and whether any pattern relates to outcome. Procurement change alone has been studied as process automation (Akinleye & Adeyoyin, 2021), sourcing optimization (Okonkwo *et al*., 2018a), contract and vendor governance (Okonkwo *et al*., 2019), supplier relationship management (Ike *et al*., 2021), demand forecasting (Aifuwa *et al*., 2020), decision-support visualization (Akin-Oluyomi *et al*., 2020), and geospatial vendor evaluation (Ahiaeke Patrick *et al*., 2021), each naming its own intervention and none in terms another study could reuse. Two cautions apply: a taxonomy is not an effectiveness ranking, and counting strategies invites the assumption that more is better.

3.3.3. Determinant Frameworks and The Tailoring Problem

Birken *et al*. (2017) found that researchers select frameworks on familiarity rather than fit and proposed selection criteria; CFIR applications show retrospective categorization rather than prospective design (Kirk *et al*., 2016); and a scoping review found context named by nearly every determinant framework and operationalized consistently by almost none (Nilsen & Bernhardsson, 2019). Evidence that tailored strategies outperform standardized ones is weaker than the logic suggests, partly because tailoring is hard to do well and partly because barrier identification is imprecise; the tailored implementation program reported by Wensing (2017) is among the few coordinated attempts to test it directly, with mixed results. Context-specific studies illustrate the difficulty: risk profiles differ between project and steady-state operations (Agbabiaka *et al*., 2019), resilience constraints in critical infrastructure differ from commercial supply chains (Ogunwole *et al*., 2021), logistics bottlenecks in emerging economies are not those elsewhere (Okonkwo *et al*., 2020), access barriers in underserved regions are not those in urban ones (Aminu-Ibrahim *et al*., 2020), deployment conditions vary by market maturity (Yeboah & Ike, 2020), and security behavior varies by role within one institution (Onche *et al*., 2020). The middle position follows: mandate a structured determinant assessment and documentation of which strategies were chosen and why, and do not mandate the choices.

3.3.4. Leadership, Middle Managers, and Distributed Change Agency

Middle managers broker: they diffuse and synthesize information, mediate between strategy and daily work, and sell the change to those who enact it, their commitment predicting front-line uptake more strongly than senior sponsorship does. Safety research supplies the most concrete evidence of leadership as mechanism rather than background condition, in leadership-driven culture transformation across large workforces (Obogo *et al*., 2019a) and in the finding that the frequency and coverage of management safety walkthroughs is linked to culture outcomes in mega-projects (Obriki & Arumosoye, 2019), which is notable for identifying a dosed, countable behavior rather than a disposition. Complementary work links governance structure to delivery in multi-contractor and multi-site settings (Obogo *et al*., 2019b; Obogo, Uduokhai, *et al*., 2021), delivery models to outcomes in high-risk environments (Aminu-Ibrahim *et al*., 2019), senior financial leadership to execution in joint ventures (Isiekwu *et al*., 2021), and the attributes of administrative staff to institutional performance (Onche *et al*., 2021). Managerial attention is therefore a scarce resource consumed by every initiative at once, which makes portfolio sequencing a change intervention rather than a scheduling convenience.

3.3.5. Recipient Reactions, Justice, Communication, And Behavior

Oreg *et al*. (2011) synthesized six decades of quantitative work with two consequential findings: reactions are a product of the change context rather than a stable trait, making them partly a design variable, and perceived fairness of process rather than favorability of outcome predicts acceptance. Error causation models locate recurrent unsafe behavior in system conditions rather than individual carelessness (Obriki & Arumosoye, 2020), and work on near-miss and hazard observation data shows the value of a reporting system depends on whether reporting is safe to do, a justice question before it is a data question (Arumosoye & Obriki, 2019; Obogo, Arumosoye, *et al*., 2021). Ethics and compliance training has been designed for measurable cultural change rather than documented attendance (Anichukwueze *et al*., 2020); security research offers granular evidence on awareness and records handling (Onche *et al*., 2020); and studies of office practice and professional ethics supply the context in which those behaviors form (Onche, 2021; Onche & Ogbonna, 2021), as does work on structured participation (Ogbona *et al*., 2020). Dempsey *et al*. (2021) found the most cited success factors to be communication, a change vision, early participation, and top management commitment, with resistance, standardized concepts, and short-termism among the most cited failures, the third of which points directly at sustainment.

3.3.6. Digital, Distributed, and Instrumented Contexts

Change is now largely technology-mediated, so adoption is observable in telemetry rather than only through self-report. Deployment studies demonstrate the range: directory and identity rollouts (Ladapo *et al*., 2018, 2019), identity and access integration across hybrid estates (Mbonu, Aliliele, *et al*., 2020; Oshoba *et al*., 2019), zero trust in enterprise and operational technology (Ogbole, Okoruwa, Fadayomi, *et al*., 2021; Ahmed *et al*., 2021), infrastructure-as-code governance (Mbonu *et al*., 2020b), predictive resource scaling (Ahmed *et al*., 2020), and log analytics with automated response (Mbonu, Iwuanyanwu, *et al*., 2019). Physical instrumentation follows the same logic through geographic information systems in asset and corridor

monitoring (Dagodzo & Ahiaeke Patrick, 2021a, 2021b), interpretable failure prediction (Komi & Adamolekun, 2021), and predictive maintenance modeling (Mayo *et al*., 2021). Telemetry offers continuous, low-burden measurement of penetration and of the decay curve after go-live, and it invites serious error, because logged activity is not changed practice and workarounds that satisfy the system while defeating its purpose are invisible to it. The movement of work into distributed and automated settings meanwhile removed much of the informal machinery through which change was socialized; social influence and informal modeling did not stop operating, but the channels changed, and organizations standardized on channel rather than mechanism found their methods inoperative.

3.3.7. Measurement Infrastructure

Systematic appraisal has found the field's instrument stock large, uneven, and poorly evaluated, with many measures used once and never validated (Lewis *et al*., 2015), and the pragmatic criterion, that an instrument be short, free, easy to score, and actionable, matters as much as the psychometric one. Enterprise practice has meanwhile built an extensive reporting layer: executive dashboards (Sanni & Atima, 2021b), continuous monitoring through integrated visualization (Ogbole, Okoruwa, Babatope, *et al*., 2021), executive decision systems (Lawal & Oduleye, 2019b), capital allocation models (Lawal & Oduleye, 2021a), planning analytics aligned to strategy (Lawal & Oduleye, 2021b), cost management for performance evaluation (Oduleye & Medon, 2021), demand and revenue forecasting (Tonoyan *et al*., 2021a; Aifuwa *et al*., 2020), cash flow modeling (Tonoyan *et al*., 2021b), churn analytics (Oziri *et al*., 2020), market expansion analytics (Seyi-Lande *et al*., 2020), segmentation and forecasting (Basnet *et al*., 2021), and go-to-market frameworks built around compliance constraints (Sanni & Atima, 2021a), with public health supplying the clearest examples of measurement designed for population-level accountability (Oparah, Ezeh, *et al*., 2021). The apparatus is sophisticated, and it measures the business rather than the change.

3.4. Advances in Sustainment

3.4.1. Conceptual Clarification

Wiltsey Stirman *et al*. (2012) found the sustainment evidence base thin, the definitions inconsistent, and follow-up short; Scheirer and Dearing (2011) pushed the field to treat sustainability as a construct requiring its own theory and measurement. Moore *et al*. (2017) identified the elements definitions combine: after a defined period, the program continues to be delivered, behavior change is maintained, the program may evolve while core elements are maintained, and benefits continue. Shelton *et al*. (2018) consolidated the position and emphasized its dynamic, multilevel character and the need to attend to equity in who continues to receive benefit. The applied literature arrives similarly, treating durability as a design property rather than an outcome of enthusiasm in materials and energy efficiency strategies for facilities (Ogbete *et al*., 2020), integrated governance approaches to financial resilience (Akomolafe & Agu, 2019c), and resilience frameworks for critical infrastructure supply chains (Ogunwole *et al*., 2021). Organizations routinely measure the weakest version: a system still switched on two years later demonstrates survival, not that the work changed, that the change persisted, or that benefit accrued.

3.4.2. Dynamic Sustainability, Adaptation, and De-Implementation

If decline follows from holding an intervention static while its context moves (Chambers *et al*., 2013), sustainment is maintenance of fit through continued refinement rather than defence against erosion. Post-implementation closure removes the capability to refine exactly when fit begins to degrade, and fidelity monitoring without an authorized adaptation channel suppresses the local intelligence sustainment requires. Lifecycle framings agree: availability models treat performance as maintained after commissioning rather than certified at it (Okonkwo *et al*., 2018b), the shift from reactive to predictive regimes replaces scheduled with condition-triggered intervention (Sunday *et al*., 2020; Mayo *et al*., 2021), and monitoring frameworks assume both asset and environment change (Dagodzo & Ahiaeke Patrick, 2021b). The complementary problem is subtraction: organizations rarely retire what a change supersedes, the accumulated burden of unretired process determines whether the next change can be absorbed, and removal as a first-class activity with its own governance is under-theorized in both the scholarly and the standards literature.

3.4.3. Determinants and Assessment Instruments

Lennox *et al*. (2018) found little consensus, considerable overlap, and limited application guidance across sustainability constructs and tools, whose recurrent determinants include organizational capacity, leadership stability, fit with existing systems, partnerships, staff turnover, adaptability, and monitoring. Instrumentation has improved: the Program Sustainability Assessment Tool measures capacity across environmental support, funding stability, partnerships, organizational capacity, evaluation, adaptation, communications, and strategic planning (Luke *et al*., 2014). Safety governance supplies a parallel instrument tradition the change field has ignored, in models for contractor performance (Arumosoye & Obriki, 2020), risk governance for multi-contractor projects (Obogo *et al*., 2019b), compliance systems across programs (Obogo, Uduokhai, *et al*., 2021), and critical reviews of management systems (Obogo *et al*., 2020c), each specifying who holds which obligation over a long horizon. Maturity models (Arumosoye & Obriki, 2021) and predictive compliance monitoring that detects drift from routine operational data (Adeyelu, 2018) supply the staged and continuous measurement these instruments need.

3.4.4. Strategies for Sustainment

Hailemariam *et al*. (2019) found the sustainment strategy literature limited, methodologically weak, and dominated by strategies imported from implementation without adaptation, suggesting the field does not yet know how to sustain as distinct from how to implement. The strategies with most theoretical support concern embedding rather than exhortation. Work on institutionalizing life-preserving practices addresses the core problem, how a practice survives

the dissolution of the project that introduced it (Obriki & Arumosoye, 2021). Incident prevention models specify the standing control rather than the campaign (Obogo, Obriki, *et al*., 2021), hazard identification and risk control reviews describe the recurring cycle through which control is maintained (Obogo, Uduokhai, *et al*., 2019), and internal audit supplies the periodic verification that keeps the cycle honest (Obogo *et al*., 2020a). The workforce pipeline is the other route, through talent development across distributed operations (Falemi *et al*., 2020), professional development that builds competence into the role rather than the individual (Yeboah *et al*., 2019), and attention to the staff who carry most standing processes (Onche *et al*., 2021). Where turnover is high, a practice survives only if it lives in the role rather than the person.

3.4.5. Routinization and Institutional Embedding

Organizational theory contributes two underused constructs. The *organizational routine* has an ostensive aspect, the abstract pattern people refer to, and a performative aspect, the actions actually taken (Feldman & Pentland, 2003), and change succeeds at routine level only when both alter: procedure changed without performance produces the familiar gap between stated and actual process, and performance changed without the ostensive pattern produces a practice that cannot survive the departure of those performing it. Operations research supplies examples in which spatial and regulatory design determine what practitioners actually do (Ogbete *et al*., 2019) and in delivery models that reorganize where and by whom service is provided (Ilodigwe & Adesemoye, 2020). *Institutionalization* is the process by which a practice becomes taken for granted and ceases to require justification, the strongest form of sustainment because it removes the practice from recurrent decision. Regulatory work offers the clearest models: risk-based interdiction converting discretionary inspection into standing practice (Aneke & Adesemoye, 2021), post-merger compliance integration (Ominyi, 2020), clearance frameworks for cross-border transactions (Ominyi & Anichukwueze, 2020), harmonized anti-money-laundering and anti-bribery regimes (Ominyi & Anichukwueze, 2021), privacy embedded at structural design (Ominyi, 2021), and multinational consumer protection compliance (Anichukwueze *et al*., 2019). Each converts a contested practice into an unremarkable one. The counterpoint is instructive: innovation does not improve outcomes where the delivery infrastructure to carry it has not been institutionalized (Ilodigwe & Adesemoye, 2019b).

3.4.6. Sustaining Technology-Mediated and Regulated Change

When change installs a technical system rather than a procedure, the system degrades against a moving environment in a way a documented procedure does not, so the monitoring loop is not optional. Automated regression control and assurance testing address the operational end (Mbonu *et al*., 2021b), detection models must be maintained against an adversary that adapts (Idika *et al*., 2021), and detection, response, and forensic capability form the standing cycle through which a control remains effective rather than nominal (Dosunmu & Ogundele, 2019, 2020, 2021; Akeju *et al*., 2018), with risk-based assurance frameworks making the maintenance obligation explicit (Fadayomi *et al*., 2019). The governance question is also jurisdictional. Legal and ethical risk modeling specifies obligations that outlast any single system (Mbonu *et al*., 2018), comparative analysis shows how differently they bind across jurisdictions (Mbonu, Aliliele, *et al*., 2019), and risk-based architectures embed the constraint into the platform rather than the policy document (Mbonu *et al*., 2021a; Badmus *et al*., 2019b; Okoruwa *et al*., 2020). Analytics-led supervision of financial crime is the mature example of a control that must be continuously retuned (Atakpa, 2021; Fadayomi *et al*., 2021; Mbonu, Iwuanyanwu, *et al*., 2021). The requirement is identical across these cases: a named owner, a monitoring cadence, and an authorized route for revision.

3.4.7. Sustainment Governance and Incentive Design

Sustainment fails most often where the program ends and no one owns the practice, and the contracting literature offers the most direct remedy, building persistence into the incentive structure rather than into exhortation. Contract and vendor governance ties continued performance to continued commercial consequence (Okonkwo *et al*., 2019), supplier relationship management makes the relationship rather than the transaction the unit of management (Ike *et al*., 2021), and end-to-end visibility maintains traceability long after implementation (Nnabueze *et al*., 2021). Sustainable procurement embeds environmental and social criteria into standing purchasing decisions (Okojie *et al*., 2020), and programmatic deployment treats the program rather than the project as the durable unit (Yeboah & Ike, 2020). Health system work agrees from the financing side, in payment reform as the mechanism determining what providers continue to do (Ilodigwe & Adesemoye, 2019a) and in the data backbone required for sustained analytic capability (Ilodigwe & Adesemoye, 2021). Corporate finance supplies parallels in tiered treasury architectures that make control continuous (Dada *et al*., 2021a), forecasting embedded in the customer platform (Dada *et al*., 2021b), tax governance converting judgment into standing policy (Lawal & Oduleye, 2019a), and analytics-driven value creation persisting beyond a planning cycle (Lawal & Oduleye, 2018a). Where a transformation restructures the revenue mechanism itself, reverting becomes costlier than continuing (Okafor *et al*., 2021; Osuji *et al*., 2021), which also explains why fiscal change is absorbed quickly when mapped onto commercial strategy (Akinola *et al*., 2020) and why bottlenecks persist when no party bears their cost (Okonkwo *et al*., 2020).

Table 3: Adoption and sustainment as distinct outcome families.

Dimension	Adoption family	Sustainment family
Core question	Did the intended people take up the new practice?	Is it still delivered, still performed, and still producing benefit?
Constructs	Readiness, acceptability, appropriateness, feasibility, reach, penetration, initial fidelity	Continued delivery, maintained behavior, benefit persistence, adaptation quality, institutionalization
Proximal determinants	Change commitment and efficacy, procedural justice, middle-manager brokering, performance and effort expectancy, facilitation	Organizational capacity, leadership and staff stability, systems and workflow fit, ownership location, incentive alignment, monitoring and feedback
Typical measures	Readiness instruments, usage telemetry with denominators, fidelity checklists, short pulse surveys	Sustainment capacity instruments, periodic fidelity and adaptation audit, routine observation, benefit tracking, model monitoring
Observation window	Pre-launch to roughly six months after	Twelve months onward, with review at defined intervals
Common failure	Confusing training completion with practice change	Confusing system survival with sustained benefit
Governance owner	Change or program function	Permanent line ownership, with periodic independent review

4. Conceptual Model: A Layered Architecture for Standardized Change Mechanisms

The synthesis supports a six-layer architecture whose purpose is to separate what an enterprise should fix from what it should devolve, using the criteria set out in the methodology: plausible invariance of effect across contexts, specifiability, and verifiability at proportionate cost. It is a proposal rather than a finding, and is stated below in testable form.

Table 4: A layered architecture for enterprise change management.

Layer	Standardized centrally	Determined locally	Supporting basis
0. Governance and portfolio	Authority model, risk tiering, change calendar, absorptive-capacity limits, subtraction rule	Sequencing within a unit's allocation	International Organization for Standardization (2015); Project Management Institute (2013); Aminu-Ibrahim *et al.* (2021)
1. Diagnosis	Determinant assessment method, readiness instrument, required completion before commitment	Which barriers are identified and how they are interpreted	Damschroder *et al.* (2009); Weiner (2009); Shea *et al.* (2014); Rafferty *et al.* (2013)
2. Strategy vocabulary	The taxonomy of named strategies and the mechanisms each is held to activate	Which strategies are selected, at what dose, by whom	Powell *et al.* (2015); Waltz *et al.* (2015); Smith *et al.* (2020)
3. Execution discipline	Minimum specification: sponsor named, facilitation resourced, rationale open to challenge, core components declared	Channels, formats, timing, local messaging	Oreg *et al.* (2011); Harvey & Kitson (2016); Obogo *et al.* (2019a); Obriki & Arumosoye (2019)
4. Measurement	Construct set, instruments, denominators, cadence, data retention	Supplementary local measures	Proctor *et al.* (2011); Glasgow *et al.* (1999); Lewis *et al.* (2015); Pinnock *et al.* (2017)
5. Sustainment and adaptation	Definition of sustainment; mandatory review at defined intervals; adaptation authority and documentation; de-implementation; system monitoring	Adaptations made, within declared core components	Chambers *et al.* (2013); Moore *et al.* (2017); Luke *et al.* (2014); Obriki & Arumosoye (2021)

4.1. Design Propositions

P1. Organizations that standardize measurement and reporting while devolving strategy selection will show greater cross-initiative learning, evidenced by improving outcomes across a portfolio over time, than organizations that standardize process sequence.

P2. Readiness assessed as commitment and efficacy separately will predict adoption outcomes more accurately than composite readiness scores, and will support more effective remedy selection.

P3. Unit-level variance in readiness will predict subsequent variance in adoption more strongly than the enterprise-level mean, making disaggregated reporting a superior governance input.

P4. Initiatives that declare core components in advance and authorize documented adaptation outside them will sustain better than those imposing uniform fidelity or permitting undocumented drift.

P5. Transferring ownership to a permanent operational role at implementation close, rather than closing the program without transfer, will improve sustainment at twelve and twenty-four months.

P6. Portfolio-level limits on concurrent change exposure for a given unit will improve adoption outcomes for each initiative within that unit, through preservation of middle-manager and front-line attention.

P7. Explicit subtraction, meaning the retirement of superseded practices as a condition of introducing new ones, will reduce change fatigue and improve subsequent adoption.

P8. Telemetry-based adoption measures used without accompanying fidelity assessment will systematically overstate practice change, with the size of the overstatement increasing with the discretion available in the work.

P9. Changes whose sustained performance is tied to a contractual, budgetary, or regulatory consequence will sustain at higher rates than changes of equivalent scope that depend on continued managerial attention alone.

The Minimum Enterprise Specification: Standardizing only what the present evidence clearly supports yields a short list: a named and resourced sponsor; a structured determinant and readiness assessment before commitment; a declared set of core components; a shared strategy vocabulary with documented selection rationale; a common outcome set

separating implementation, process, and business outcomes; a named permanent owner at close; and scheduled sustainment review with an authorized adaptation route. Everything else is local design. Most corporate methodologies standardize far more than this and far less of this.

5. Discussion

5.1. Folklore and The Conceptual-Framework Genre

The persistence of the seventy per cent failure claim is the most visible epistemic failure but not an isolated one, since much of the applied literature consists of conceptual frameworks that propose an architecture and stop. This is visible across finance and audit (Akomolafe & Agu, 2018, 2019a, 2019b; Lawal & Oduleye, 2018a, 2019a; Oduleye & Medon, 2021), enterprise technology and data governance (Mbonu *et al*., 2018; Badmus *et al*., 2019a; Ogbole, Okoruwa, Fadayomi, *et al*., 2021), procurement and operations (Efobi *et al*., 2021; Okonkwo *et al*., 2018a), safety (Obogo *et al*., 2020b), and regulatory science (Aneke & Adesemoye, 2020; Ominyi, 2021). Individually reasonable, collectively they create a field where the supply of frameworks exceeds the supply of tests and the same construct is renamed in each proposal. A related hazard is incremental republication, since the corpus contains sequences of closely related models issued by the same author groups in consecutive years, differing in application domain rather than in mechanism (Obogo *et al*., 2020a, 2020b, 2020c; Adeyelu, 2018, 2019, 2020, 2021), and reviews aggregating by frequency of appearance are vulnerable to treating such sequences as independent evidence.

5.2. Weak Causal Inference

The dominant design remains the cross-sectional survey with a single informant per site measuring perceptions of both predictor and outcome. Such designs cannot separate causal direction, are vulnerable to common method variance, and cannot detect the temporal dynamics theory says are central. Longitudinal and multilevel designs remain scarce, and randomized comparison of change approaches is almost absent outside health services. The systematic review of implementation mechanisms reached the same verdict from inside that field, finding most studies claiming a mechanism met three or fewer of the seven criteria required to establish one (Lewis *et al*., 2020), and Grimshaw *et al*. (2019) propose implementation laboratories, in which a recurring intervention is varied systematically across many sites, as a practical remedy.

5.3. Fragmentation Across Fields

Organizational development, implementation science, information systems, quality improvement, safety science, and project management address overlapping problems through non-overlapping literatures. Implementation science has sophisticated determinant and outcome vocabularies but engages little with the strategy and political economy of corporate change; management research has rich theory there but weak measurement infrastructure; safety science has an unusually mature treatment of leadership dose, behavioral recurrence, and institutionalization (Obriki & Arumosoye, 2019, 2021; Obogo *et al*., 2019a) that the change literature almost never cites; and information systems has excellent individual-level models and limited organizational ones. The fragmentation is a cost the field pays without acknowledging it.

5.4. Construct Proliferation and Measurement Burden

Sustainability alone has attracted dozens of overlapping constructs across competing tools (Lennox *et al*., 2018), and readiness, commitment, engagement, buy-in, and support are used interchangeably by some authors and distinguished carefully by others, so apparently conflicting findings may reflect different operationalizations of one phenomenon. The binding practical constraint is survey fatigue, and every additional construct competes for a measurement budget that operating units experience as an imposition. Construct parsimony is therefore not merely a theoretical virtue but a precondition of any standard being used.

5.5. Change Fatigue, Recipient Welfare, And Equity

The literature treats the recipient primarily as an obstacle to manage or a resource to engage, and only secondarily as a person whose wellbeing is affected. Change fatigue is under-researched relative to its prominence and is the most plausible boundary condition on the whole project, since machinery that makes launching change easier will, absent a constraint, increase its volume. Work on capability building under distributed operating pressure (Falemi *et al*., 2020), on the conditions of staff who absorb most process change (Onche, 2021; Onche & Ogbonna, 2021), and on error causation under workload (Obriki & Arumosoye, 2020) bears on this and is rarely integrated into change design. Equity is similarly under-attended: units with weaker resourcing or less political access absorb the same requirement with less support, and measurement reporting only enterprise averages cannot detect it. Health services research has begun to foreground equity in sustainment and access (Shelton *et al*., 2018; Aminu-Ibrahim *et al*., 2020; Ilodigwe & Adesemoye, 2019a); management research has largely not.

5.6. Sectoral and Publication Bias

The strongest methodological advances reviewed here originate overwhelmingly in health services research, which is publicly funded, professionally regulated, and unusually tolerant of negative findings. Transfer to commercial settings is plausible but not established, and the differences in voluntariness of adoption, professional norms, regulation, and availability of outcome data are material. Conversely, much applied corporate literature appears in outlets with limited visible peer review and reports no negative results at all. Both bodies of evidence are biased, in opposite directions, and a synthesis drawing on both should say so.

6. Implications

6.1. Implications for Theory

Three implications follow. First, if the transferable content of a change method is its mechanism rather than its procedure, stage models are delivery conventions rather than theories, and the theoretical work belongs at the level of the causal pathway. This makes change management commensurable with implementation science and explains why the two literatures have been unable to speak to each other. Second, change theory is written about initiatives while organizational experience is of a portfolio; treating absorptive capacity, cumulative exposure, and sequencing as first-class constructs would relocate the theory from the project to the organization. Third, the corpus contains many coherent

frameworks that cannot be compared because they share no outcome definition, instrument, or reporting format. Theory accumulates through commensurability rather than proliferation, and the architecture above is offered less as another framework than as a specification of what any framework here must hold constant for the next to be testable against it.

6.2. Implications for Practice

Standardize the diagnostic layer first: A common readiness instrument, applied consistently and reported by unit rather than in aggregate, will do more for portfolio performance than a new phase model (Weiner, 2009; Shea *et al*., 2014), producing comparable data, distinguishing commitment from efficacy problems, and identifying units needing support before launch rather than after.

Adopt a strategy vocabulary: Whether borrowed from the implementation science compilations (Powell *et al*., 2015) or built internally, a shared list of named strategies, each linked to the mechanism it is held to activate, converts an unstructured portfolio into something analyzable, provided selections are documented with a reason (Proctor *et al*., 2013).

Separate three outcome questions in every review: Was it implemented, did the work change, and did the business result improve (Proctor *et al*., 2011). Conflating them is the most common evaluation error and hides both false successes and genuine ones; the existing measurement apparatus is well developed but pointed at the business rather than the change (Sanni & Atima, 2021b; Ogbole, Okoruwa, Babatope, *et al*., 2021).

Do not close without transferring ownership: Closure should be a transfer event with a named permanent owner, an agreed measurement cadence, and an authorized adaptation route (Obriki & Arumosoye, 2021; Chambers *et al*., 2013), and where the change installs a technical system the transfer must include monitoring and revision authority (Mbonu *et al*., 2021b; Fadayomi *et al*., 2019).

Govern the portfolio, not only the project: Track cumulative change exposure by unit and set limits (Aminu-Ibrahim *et al*., 2021), and treat retirement of superseded practices as a deliverable rather than a courtesy. **Build persistence into incentives**, since behavior tied to a contractual, budgetary, or regulatory consequence generally is sustained and behavior depending on continued enthusiasm generally is not (Okonkwo *et al*., 2019; Ilodigwe & Adesemoye, 2019a). **Resist standardizing the form of engagement**, mandating instead the mechanism, that those affected can contest the rationale and influence the design, and leaving the channel to local judgment (Oreg *et al*., 2011; Eyetsemitan *et al*., 2020).

7. Limitations

This review is narrative rather than systematic, so selection was informed by judgment and is not fully reproducible. The applied corpus is concentrated in multidisciplinary outlets whose peer review varies in visibility and rigor, and the conceptual frameworks cited are treated as proposals rather than evidence. It is also geographically concentrated, with a substantial share addressing African and other emerging-market settings, which strengthens coverage of resource-constrained contexts and weakens claims about firms in mature regulatory environments. The synthesis imports the assumptions of implementation science; one built on process, practice, or critical traditions would weight power and the contested construction of change agendas more heavily. The architecture has not been tested, its propositions are hypotheses, and the sustainment literature was developing rapidly at the point of writing in 2021.

8. Future Research Directions

R1. Comparative trials of change methods: No adequately powered comparison of named methodologies against each other exists. Multi-site stepped-wedge or cluster-randomized designs within large organizations are feasible and would answer the field's most basic question.

R2. Identification of active ingredients: Dismantling and factorial designs could establish which components carry the effect, letting fidelity requirements rest on findings rather than assertion.

R3. Long-horizon sustainment: Follow-up should extend to at least twenty-four and preferably sixty months, measuring delivery, behavior, and benefit separately and attending to trajectory shape rather than binary survival.

R4. Portfolio-level research: Shifting the unit of analysis from the initiative to the change portfolio would enable study of absorptive capacity, cumulative exposure, sequencing, and change fatigue.

R5. Sustainment-specific strategies: Since sustainment strategies are largely borrowed from implementation, primary research developing and testing strategies designed for the sustainment phase is a priority.

R6. De-implementation: Subtraction needs its own theory, taxonomy, and evidence base, including why organizations find removal harder than addition.

R7. Corporate reporting standards: An equivalent of implementation reporting guidance, adapted for enterprise change, would make post-implementation reviews comparable and create the dataset portfolio research requires.

R8. Change fatigue and recipient welfare: Validated measures, dose-response investigation, and study of the conditions moderating the relationship between change exposure and exhaustion.

R9. Cross-sector and cross-context transfer: Direct tests of whether instruments developed in health services, and in high-income settings, retain their properties in commercial, industrial, public administration, and emerging-market contexts.

9. Conclusion

Large organizations will continue to standardize change management because the coordination problem driving them is real. The question is what they standardize. The dominant answer, a fixed sequence of phases and deliverables, rests on the weakest part of the evidence base and is the object the literature's own failure-factor findings most consistently implicate (Dempsey *et al*., 2021). The stronger answer is to standardize the mechanism layer: how readiness is assessed and reported, what change strategies are called and what they are held to do, how implementation, process, and outcome results are separated, who owns a practice after the program closes, and what counts as evidence that the change has been sustained.

That reallocation makes an organization's change activity legible to itself without making it uniform. Every initiative remains free to choose its approach and every initiative becomes comparable to every other, and over a portfolio and over years that comparability is the only plausible route by

which an organization learns what works in its own context. The field's principal deficit is not a shortage of frameworks; the corpus reviewed here shows they are abundant, well-reasoned, and almost entirely incommensurable. The deficit is comparison, and standardized mechanisms, measurement, and reporting are the infrastructure through which comparison becomes possible.

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