



Cross-Functional Capability Development for Scalable Operations: A Review of Frameworks Linking Business Requirements to Execution

Uchechukwu Nkechinyere Anene ^{1*}, Valentina Ochuko Obukadata ², Rosalyn Ezeako ³, Isaac Awulu ⁴

¹ Julia Valler Event Staffing, Chicago, Illinois, USA

² University of New Haven, West Haven, Connecticut, USA

³ University of Central Missouri, Warrensburg, Missouri, USA

⁴ Novartis Nigeria Limited, Lagos, Nigeria

* Corresponding Author: Uchechukwu Nkechinyere Anene

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Abstract

Organizations rarely fail to scale because they lack strategy; they fail because the chain converting a business requirement into coordinated action across functions is long, lossy, and dependent on individuals. This review examines the frameworks that attempt to close that gap, drawing on a multi-domain corpus spanning lean operations, procurement, enterprise information systems, analytics, risk and regulatory governance, occupational safety, project delivery, and workforce development. Eight framework families are assessed against six dimensions: unit of analysis, translation mechanism, treatment of cross-functional interfaces, scalability stance, evidence base, and characteristic failure mode. Four convergences emerge across otherwise unrelated domains, three divergences persist, and four gaps are identified, the most consequential being the queueing behaviour of shared functions such as legal, audit, and safety assurance that cannot be embedded in every delivery unit. The paper synthesizes the corpus into a five-layer chain linked by five mechanisms and derives five falsifiable propositions concerning ownership, interface contracts, cadence, measurement, and the amplifying effect of automation on existing capability quality.

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Introduction

The Problem of Scale

Scaling an organization is not the same as scaling its output. What stops working is the coordination fabric connecting a business requirement to the hand-offs that deliver it. The symptoms recur across sectors: requirements arrive at inconsistent altitudes, some as outcomes and some as pre-decided solutions (Eyetsemitan *et al.*, 2021); ownership blurs wherever work crosses functions, so escalation becomes the default coordination device (Akhigbe *et al.*, 2025); delivery units optimize local throughput while end-to-end lead time deteriorates (Oyeleye *et al.*, 2022); and measurement stays functional, so nobody can price a hand-off (Sakyi *et al.*, 2022). The same signature appears in national energy supply chains (Okonkwo *et al.*, 2025), multinational infrastructure programmes (Amayo *et al.*, 2023), hospital supply operations (Filani *et al.*, 2022), pharmaceutical quality systems (Aneke *et al.*, 2022), and enterprise IT service delivery (Ladapo *et al.*, 2023b). Its recurrence across domains sharing no technology, regulator, or vocabulary is the strongest evidence that the problem is structural rather than technical.

The Requirements-to-Execution Gap

Four discontinuities separate requirement from execution. Semantically, requirements are written in the vocabulary of markets, patients, and regulation while execution happens in the vocabulary of processes and constraints, and translation loses information

asymmetrically, since constraints survive and intent decays (Ominyi & Anichukwueze, 2022b). Structurally, requirements are stated as end-to-end outcomes while organizations are structured as functions, so an outcome requiring procurement, engineering, finance, and legal belongs to none of them and goes either to all of them, diffusing accountability, or to a coordinator without authority (Isiekwu *et al.*, 2021). Temporally, strategy moves annually, delivery weekly, and markets continuously, and frameworks connecting them must reconcile three clock speeds (Okonkwo *et al.*, 2024b). Epistemically, feasibility knowledge sits with execution and value knowledge with the business, and the standard combining devices are lossy, which is why structured validation such as acceptance testing matters (Eyetezmitan *et al.*, 2023b).

Capability development is the response, since a capability is durable where a project is transient and is defined by an outcome rather than a function. The difficulty is that guidance on building capabilities is fragmented across domains that rarely cite each other.

Research Questions

Four questions organize the review. RQ1: how do the families conceptualize the link between requirements and execution, and what mechanism makes it hold? RQ2: how does each treat the interfaces where a capability crosses an organizational boundary? RQ3: what does each assume about scale, and which assumptions break during growth? RQ4: where do the families converge, conflict, and leave gaps?

Method

This is an integrative narrative review rather than a systematic one, because the relevant material is heterogeneous: conceptual frameworks, applied case analyses, and maturity models drawn from operations, supply chain, information systems, finance, safety, health, and education research. A protocol restricted to one method or discipline would exclude most of what organizations actually use.

Material was included where it addressed the translation of business intent into operational action, treated capability or process rather than individual task as its object, made a claim about behaviour at scale, and presented a framework intended for reuse. Each family was then coded against six dimensions: unit of analysis, translation mechanism, cross-functional treatment, scalability stance, evidence base, and characteristic failure mode. The last deserves comment, since frameworks are usually presented with their success conditions and rarely with their failure signatures, yet the signature is more diagnostic yet: families succeed for overlapping reasons and fail for distinctive ones. Coding involves interpretive judgment, and the corpus is weighted toward conceptual contributions rather than large-sample tests, which constrains claims about effect size and causal direction.

Conceptual Background

Three usages of capability run through the corpus and conflating them causes harm. The behavioural usage holds that a capability exists only insofar as the organization performs the outcome reliably and independently of any individual, which is why standard operating procedures are better treated as strategic assets than documentation (Eyetezmitan *et al.*, 2022). The evaluative usage holds that a

capability matters to the degree it produces advantage (Annan, 2025). The developmental usage places it on a maturity trajectory (Arumosoye & Obriki, 2021). The three answer different questions: whether a capability exists, whether it matters, and whether it can change. Programmes answering only the second produce inventories describing aspiration rather than behaviour. Two further ideas are load-bearing: capability is built by codification as much as experience (Aneke *et al.*, 2022), and capabilities ossify, since the standardization that makes one efficient makes it resistant to reconfiguration, which is why change management is itself a capability (Eyetezmitan *et al.*, 2023a).

A cross-functional capability is one whose activities are distributed across two or more functions such that none can produce the outcome unilaterally. Order-to-cash, incident-to-resolution, and idea-to-launch are archetypal, as are end-to-end supply network visibility (Nnabueze *et al.*, 2021), client onboarding across sales, legal, and delivery (Oyeleye *et al.*, 2022), and cross-border payment operations (Okafor *et al.*, 2024). Three difficulties follow. Dependency management is first, and the useful frameworks name the dependency type and assign a mechanism to it rather than exhorting collaboration (Akinleye & Adeyoyin, 2022). Knowledge integration is second, since requirements originate in one domain and are executed in another, visible in frameworks embedding regulatory obligations into procurement workflows (Akin-Oluyomi *et al.*, 2023) and in data governance serving analytic and compliance requirements at once (Aliliele *et al.*, 2024). Representation is third: capability maps, dashboards, and interface contracts are all attempts at artefacts stable enough to hold meaning across functions yet flexible enough to be locally useful (Filani *et al.*, 2022).

Scalability, for this review, means outcome volume can grow substantially without proportional growth in coordination cost, defect rate, or lead time. Three assumptions typically break during growth. Shared context fails once new joiners outnumber those present when it formed, which makes readiness for adoption a capability rather than a communications task (Akhigbe *et al.*, 2024). The available expert fails when the few people who can resolve anything become queues, which capability building across distributed operations exists to prevent (Akin-Oluyomi & Akhigbe, 2023). Uniform demand fails because growth increases the variety of demand faster than its volume, which is why staffing frameworks built for volatility outperform those built for average load (Falemi *et al.*, 2023b).

Review of Framework Families

Family A: Governance and Requirement Translation

The unit is the decision right. Intent is decomposed into obligations assigned to named bodies with defined authority, seen plainly in regulatory-compliant procurement in high-risk environments (Okonkwo *et al.*, 2021), where the requirement is external and the framework's task is to place it inside the operating process rather than beside it. Interfaces are handled better here than anywhere else, since governance exists to hold what no single function owns: data protection harmonization across jurisdictions (Ominyi & Anichukwueze, 2022a), anti-money laundering regimes (Ominyi & Anichukwueze, 2021), and pharmaceutical regulatory harmonization (Eze *et al.*, 2024). Governance suppresses coordination paths by making some decisions non-negotiable, which is efficient at scale and rigid under novelty. It fails as governance theatre, where charters exist

while decision rights are untouched and escalation still does the real work.

Family B: Lean and Process Improvement

The unit is the value stream (Ambali *et al.*, 2021). Requirements become targets in time, cost, quality, and flexibility, localized through current-state and future-state analysis. Diagnostically this family is the strongest, since value stream analysis makes hand-offs and waits first-class objects and the ratio of value-adding time to lead time measures coordination overhead directly (Tonoyan *et al.*, 2022a). Standardization, flow, and variability reduction are its scaling mechanisms, and the tradition understands that variability rather than average load destroys throughput (Efobi *et al.*, 2022). It fails by mapping without changing, or by standardizing what should stay variable.

Family C: Supply Chain and Procurement

The unit is the multi-party flow. Requirement becomes specification, specification becomes sourcing and contracting, and contract terms become operational obligations, which makes this the most complete chain in the corpus because procurement is definitionally a translation function (Akinleye & Adeyoyin, 2021). Interfaces are unavoidable, since procurement cannot act without engineering specification, finance authorization, legal review, and operational acceptance, and frameworks that survive practice model the whole chain rather than the procurement step (Okonkwo *et al.*, 2024c). Category standardization, digitization (Okoruwa *et al.*, 2025), and analytics-based prioritization (Akinleye *et al.*, 2023) absorb volume without proportional headcount. It fails as compliance-first procurement, where the control regime becomes the process; the counter-pattern is joint optimization of cost, risk, and speed (Akokodaripon *et al.*, 2023).

Family D: Enterprise It, Platform, And Service Management

The unit is the service and the platform delivering it (Ladapo *et al.*, 2023a). Requirement becomes a service definition with a service level, and the level becomes a monitored target, extended forward by predictive capacity planning (Edivri & Oteri, 2022). This family alone routinely converts an expectation into a published, measurable promise. Interfaces are handled by embedding skills in the delivery unit and treating platforms as internal products, visible where a platform team must serve business units without becoming their bottleneck (Badmus *et al.*, 2024), leaving as residue the functions that cannot be embedded in every team. Elasticity and decoupling are native concepts, making this the most explicit family on scale. It fails as tooling without economics, where pipelines and dashboards are adopted while architectural coupling remains.

Family E: Analytics and Decision Support. The unit is the decision and the signal informing it (Efobi *et al.*, 2021). A requirement becomes a measurable proxy, the proxy is monitored or forecast, and the result triggers action; the strongest instances name the decision the analysis should change (Oduleye & Medon, 2023). Interface treatment is ambivalent, since analytics is inherently boundary-spanning

and several frameworks are designed as shared instruments across marketing, finance, and operations (Sanni & Attah, 2023), yet analytics functions frequently become their own silo producing outputs no accountable owner must act on, a tension attribution modelling shows clearly (Sanni *et al.*, 2022). It is the most credible mechanism in the corpus for absorbing demand variety rather than volume (Tonoyan *et al.*, 2023), and it fails through measurement displacement, optimizing the proxy rather than the outcome.

Family F: Risk, Audit, Compliance, and Legal Governance

The unit is the control and the assurance activity testing it (Akomolafe *et al.*, 2023). A requirement is decomposed into controls, controls are assigned to process owners, and assurance tests whether they operate, which in regulated settings is the only translation chain with legal force. This family contains the clearest treatment of the non-embeddable function: legal, audit, model risk, and privacy review cannot sit inside every delivery unit, partly for cost and partly because some require independence from those they oversee, so they are permanent shared services and permanent queues. The corpus responds by automating the control (Mbonu *et al.*, 2022) and by moving it upstream into design (Ominyi, 2021). Controls suppress variance, which supports scale, but assurance capacity grows with volume unless automated. It fails as assurance without design influence, detecting deviation with no route into how work is designed.

Family G: Safety, Reliability, and Operational Assurance

The unit is the hazard and the barrier controlling it (Obogo *et al.*, 2022). Requirement becomes a barrier, and the barrier becomes an inspectable condition with a leading indicator attached; this literature is unusually explicit about when leading signals are recorded rather than suppressed (Obriki *et al.*, 2025). Structurally it mirrors Family F, since assurance must be independent enough to challenge delivery yet embedded enough to influence design, and contractor governance makes it the hardest case because the capability spans legal entities as well as functions (Obriki & Arumosoye, 2024). Multi-site models address scale directly (Obogo *et al.*, 2025). It fails as compliance-shaped safety, where documentation improves and exposure does not; the counter-pattern is leadership behaviour and organizational learning (Arumosoye & Obriki, 2024).

Family H: Workforce, Competency, And Organizational Performance

The unit is the role and the competency connecting it to organizational capability (Falemi *et al.*, 2023b). A capability requirement becomes a competency profile, and the profile becomes hiring, training, and progression decisions, which is the least mechanized chain in the corpus and the one most often left implicit. Interface treatment is one-directional: frameworks describe how workforce practice supports operations (Falemi *et al.*, 2025), and few describe how a cross-functional requirement should reshape job architecture, which is the direction determining whether gains persist. It fails when programmes change structure and process while leaving incentives, roles, and progression pointed at functional performance.

Comparative Analysis

Table 1: Comparative Summary of the Eight Framework Families

Family	Unit of analysis	Translation mechanism	Cross-functional strength	Failure mode
A. Governance	Decision right	Obligation assignment	Strongest by design	Governance theatre
B. Lean and process	Value stream	Targets localized by mapping	Strongest diagnostically	Mapping without change
C. Supply chain	Multi-party flow	Specification to contract	Unavoidable and explicit	Compliance-first procurement
D. Enterprise IT	Service and platform	Published service level	Solved by embedding; residue unsolved	Tooling without economics
E. Analytics	Decision and signal	Instrumentation and inference	Ambivalent	Measurement displacement
F. Risk and audit	Control and assurance	Obligation-to-control mapping	Clearest on shared functions	Assurance without design influence
G. Safety assurance	Hazard and barrier	Barrier with leading indicator	Spans functions and legal entities	Compliance-shaped safety
H. Workforce	Role and competency	Capability to competency profile	One-directional	Incentives left unchanged

Note. "Cross-functional strength" refers to how directly a family addresses interfaces between functions rather than activities within them.

Points of Convergence

Four propositions command near-unanimous support across families sharing no vocabulary, regulator, or citations, which is a stronger signal than agreement within one tradition. Every family organizes around a customer-recognizable outcome rather than a functional specialty; value stream, service, capability, and barrier are four names for one idea. Every family locates the loss at hand-offs rather than activities, counted as wait time in lean, queue and restoration time in IT service, the principal-contractor interface in safety, and approval cycle time in procurement. Every family treats feedback frequency as first-order, from real-time tracking and continuous auditing to near-miss reporting (Aliliele *et al.*, 2023), holding that the interval between decision and evidence sets the rate of improvement. And every family warns against local optimization, from lean's whole-stream insistence to integrated planning that refuses to separate cost and revenue decisions (Nnabueze *et al.*, 2024).

Points of Divergence

Three conflicts persist. On standardization versus autonomy, Families B, F, and G derive scalability from consistency while Families D, E, and H derive it from decoupling; both hold within their home domains, so the reconciliation is contingent, standardizing where the process is understood and variance is costly and decoupling where the problem is novel and delay is costly. On where requirements are formed, governance frameworks locate formation upstream while lean, platform, and analytics frameworks locate it beside the delivery unit, arguing that separating discovery from delivery reintroduces the epistemic discontinuity (Eyetsemitan *et al.*, 2024). On ownership, Families A, F, and G imply named owners with cross-functional authority while Families B and D prefer restructuring so the capability sits inside one boundary, which is the most consequential divergence since it decides whether capability development proceeds by appointment or by reorganization.

Gaps

The Queueing Behaviour of Non-Embeddable Functions

Legal, audit, compliance, model risk, and safety assurance cannot be replicated into every delivery unit, and several require independence from those they serve, making them permanent constraints on lead time in regulated sectors (Eze *et al.*, 2023). The corpus contains strong work on making them faster and almost none modelling them as queues with

measured waits and published service levels. Work on quoting lead times under contingency is instructive, since it treats the promised date as a decision variable set against congestion rather than an estimate reported afterwards (Ekun & Muriel, 2024), which is the move an interface contract asks of a shared assurance function.

The Capability-To-Competency Link

Frameworks stop at organizational level, leaving the route from capability requirement to role definition and progression criteria to human resource practice working from an unrelated job architecture. Both halves exist in the corpus; bridges are rare.

Capability Retirement

Portfolios accumulate. Maturity models describe advancement and none describes deliberate retrenchment, yet improvement capacity is finite.

Validation of The Mechanisms Themselves

The corpus validates relationships between practices and outcomes but rarely tests whether cascaded objectives, capability maps, and control matrices actually preserve intent across the chain.

Recurrence Across Domains

The same signature recurs in literatures sharing no professional body. In healthcare capital delivery, investment intent must survive programme management and construction before reaching a patient (Aminu-Ibrahim *et al.*, 2021). In clinical service delivery the boundary is between clinical, administrative, and information functions, and work on care coordination and on the effect of information delay converges on one finding, that the patient waits at hand-offs rather than during care (Akinlolu *et al.*, 2023). Public health systems face the problem at inter-agency scale, where surveillance produces signal another body must act on (Oparah *et al.*, 2023). In financial crime and audit the failures are failures of ownership at the seam between detection and response (Atakpa, 2021). Cyber and operational technology supplies the clearest case of two functions with different vocabularies obliged to produce one outcome (Adegbite *et al.*, 2022), financial planning shows the analytics version in which instrumentation outruns the decision it was meant to change (Lawal & Oduleye, 2023), sustainability programmes must embed external obligation into decisions taken by others

(Abioye *et al.*, 2023), and occupational safety is the limiting case, since exposure sits at the interface between principal and contractor (Arumosoye & Obriki, 2022). These literatures were produced independently and converge on the same diagnosis, which is the central empirical claim this review can support.

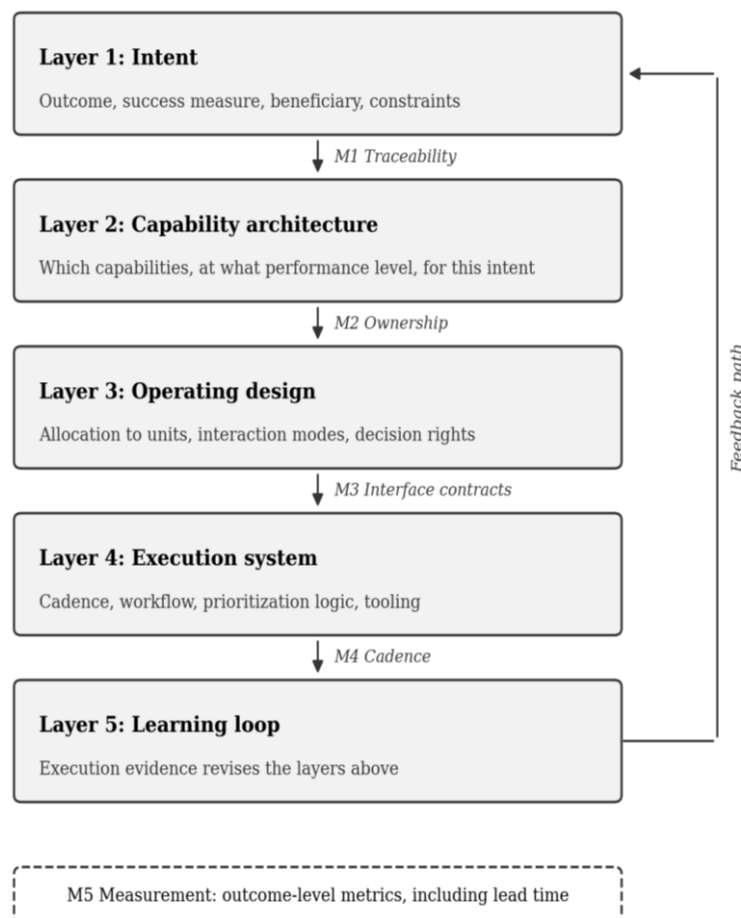
Synthesis

No family covers the whole chain, and each assumes the segments it does not. Governance assumes someone will operationalize the obligation; lean assumes a well-formed requirement arrives; platform work assumes a prioritized demand stream; analytics assumes an accountable recipient; assurance assumes design influence it often lacks. Integration failures cluster at these assumed boundaries, so what follows is not a competing method but a means of locating which segment of a chain is unmanaged.

Five layers describe the chain. Intent states the requirement as an outcome with a measurable definition of success, a named beneficiary, and inviolable constraints, and its critical attribute is solution neutrality, since a requirement stated as a solution has already destroyed the design space (Filani *et al.*, 2023). Capability architecture identifies which capabilities must exist at what performance level, and its attribute is decision relevance, since an architecture that cannot determine an investment decision is decorative. Operating design allocates capabilities to units, defines interaction modes, and assigns decision rights, which is where the

standardization-autonomy divergence is resolved per capability rather than globally. Execution system is the cadence, workflow, prioritization logic, and tooling by which work moves. Learning loop is the mechanism by which execution evidence updates the layers above, the layer most frequently absent and the one distinguishing an adaptive capability from a static one (Sanni *et al.*, 2025).

Five mechanisms link them. Traceability connects executable work to a capability and each capability to an intent, addressing the semantic discontinuity; one required link field usually suffices, and its value lies in making untraceable work visible (Aneke & Adesemoye, 2025). Ownership gives every capability crossing a boundary one named accountable owner with end-to-end authority, addressing the structural discontinuity; the viable implementations are appointment with matrix authority or restructuring, while the coordinator with responsibility and no authority, which organizations usually choose, is cheaper and does not work. Interface contracts govern each hand-off with an explicit statement of what is provided, to what standard, within what time, and with what escalation on breach, which converts a mapped hand-off into a managed one. Cadence synchronizes layers running at different clock speeds at defined points rather than continuously. Measurement defines metrics at capability-outcome level rather than functional contribution, with at least one end-to-end lead time or flow efficiency measure, since these alone price a hand-off (Edivri & Oteri, 2024).



Note. M1 to M4 govern transitions between adjacent layers, M5 spans the chain, and the feedback path returns execution evidence to the level at which intent is set. Diagnosis begins with the weakest link rather than the least mature layer.

Fig 1: The Requirements-to-Execution Capability Chain

Five propositions follow, stated for falsification.

P1: cross-functional capabilities with one named accountable owner holding end-to-end authority will show shorter lead times than those governed by committee or escalation.

P2: interface contracts with published service levels between delivery units and non-embeddable functions will reduce lead-time variance more than they reduce the mean.

P3: capability representations linked to budget allocation stay accurate, while unlinked ones diverge from actual activity within twelve to eighteen months.

P4: problem novelty moderates the standardization-performance relationship, so standardization improves well-understood processes and degrades novel ones.

P5: automation introduced into a chain with unmanaged hand-offs increases rather than reduces performance dispersion, because accelerating value-adding steps raises queue pressure at the next unmanaged boundary.

Discussion

Coordination capacity is better treated as a budget, and every family proposes how to spend it. Families B, F, and G spend on standardization, paying once to define a process and little per instance, at the cost of handling variety poorly (Obogo *et al.*, 2021). Families D and H spend on encapsulation, redrawing boundaries so most coordination becomes internal, at the cost of duplication and an unsolved shared-function residue (Ladapo *et al.*, 2025). Families A, C, and E spend on representation, documenting obligations and signals so coordination happens through artefacts rather than conversation, at the cost of maintaining them (Okonkwo *et al.*, 2024a). Mature organizations use all three, and what distinguishes those that scale well is deliberateness of allocation, since unallocated spend defaults to escalation: the most expensive mechanism available, consuming the scarcest attention and producing no reusable asset.

A substantial and recent portion of the corpus concerns artificial intelligence in operational settings, from compliance monitoring (Ominyi *et al.*, 2024) and model governance (Nwakamma *et al.*, 2024) to secure software engineering (Odejobi *et al.*, 2025), warehouse robotics (Akanbi & Sunday, 2025), and health system delivery (Ilodigwe & Adesemoye, 2025). Three implications follow, none of them the ones usually asserted. Capability quality becomes more consequential rather than less, since automation applied to a well-formed chain compounds its advantages while automation applied to an unmanaged chain accelerates rework (Akhigbe *et al.*, 2024). Hand-offs become the binding constraint sooner, since automation compresses activity duration far more readily than waiting time, so where value-adding time is a small fraction of elapsed time, accelerating it yields small end-to-end gains and large queue pressure at the next boundary (Oteri & Edivri, 2024). And a new cross-functional capability is required, since evaluating and governing AI-assisted work spans engineering, legal, risk, and the function being augmented (Ominyi & Anichukwueze, 2024), which by Proposition P4 means fixed maturity targets applied to it are a predictable error.

Four failure signatures recur, each with a diagnostic question faster than a formal assessment. The capability inventory with no owners: for the three most important capabilities, who is accountable, and do they control the resources? The shared service as an unmodelled queue: what is the median and ninety-fifth percentile wait, and who owns that number?

The cascade that never returns: name a strategic objective changed last year because of what delivery learned.

The reorganization as capability programme: which measures and decision rights changed when the boxes did?

Implications

For theory: Capability is normally theorized as something an organization possesses, located in a unit and measured by that unit's maturity. The evidence here suggests it is better theorized at chain level, since the binding constraint repeatedly sits in the transitions between units rather than inside any of them, and a theory that cannot represent an interface cannot explain the observed failures. The evidence on assurance functions, where independence is required and replication impossible, further suggests that a queueing and interface formulation explains more than a possession formulation: a mature function with an unmanaged queue in front of it delivers like an immature one. If automation amplifies existing organizational properties rather than substituting for them, adoption models predicting benefit from the technology alone are also misspecified.

For practice: The review supports no single framework wholesale, but it does support a sequence in which each step produces a decision rather than an artefact. Measure end-to-end lead time and flow efficiency for two or three important outcomes before building any model, since the results usually reorder priorities set from intuition (Tonoyan *et al.*, 2022a). Judge strategic differentiation and problem novelty for each capability, which determines whether the treatment is standardization, encapsulation, or exploration (Tonoyan *et al.*, 2022b). Assign ownership explicitly by appointment or restructuring, accepting that both are expensive and the coordinator-without-authority option is cheap and ineffective. Contract the seams with non-embeddable functions, publishing service levels and measuring waiting time, which is typically the highest-return intervention in regulated environments. And align role definitions and progression criteria to capability requirements, since gains not reflected in incentives regress (Falemi *et al.*, 2023a).

For policy and education: Where obligations differ across jurisdictions, every regulated organization pays a translation cost that produces value for no one, so harmonization has an operational payoff independent of its legal merits (Aneke *et al.*, 2024). And if cross-functional capability is a chain-level property, the competencies to build it are cross-disciplinary, so curricula organized strictly by discipline will not produce them.

Limitations

The review is narrative rather than systematic, so framework selection is defensible but not exhaustive. Coding against six dimensions involves interpretation, particularly on translation mechanism. The corpus is weighted toward conceptual frameworks and applied case analyses rather than large-sample empirical tests, so claims about direction and magnitude of effect are hypotheses, and Table 1 should be read with that asymmetry in mind. The synthesis is derived analytically and untested; the propositions are offered for falsification.

Future Research

Four programmes follow from the gaps, ordered by tractability. Measuring translation fidelity: sample requirements at formation and again at delivery within one

organization, and model loss against cascade depth, mechanism, and number of boundaries crossed, which tests P3 directly. Modelling assurance functions as queues: legal, audit, and safety assurance behave as shared servers with variable service times and priority disciplines, yet the corpus treats them as events, and queueing models calibrated against observed waits would quantify that constraint and test P2, for which existing formulations on quoting lead times under contingency offer a starting point (Ekun & Muriel, 2024). Comparative framework studies: almost all evidence here is within-family, so comparing outcomes across organizations adopting different families, controlling for size, sector, and regulatory intensity, would improve the position summarized in Table 1. Testing the amplification hypothesis: P5 predicts that automation widens rather than narrows the performance distribution, which is testable with repeated measurement of lead time before and after adoption, stratified by an independent assessment of chain quality.

Conclusion

Four discontinuities separate a business requirement from its execution: semantic, structural, temporal, and epistemic. Eight framework families have grown up around that distance, each rigorous within its own segment and each assuming the adjacent segments are handled. The assumption is generally false, and the resulting gaps are where cross-functional capability development fails. The review finds convergence on the outcome-defined unit, on the primacy of hand-off cost, on feedback frequency, and on the dangers of local optimization, and it finds this convergence across domains as different as construction safety, pharmaceutical regulation, enterprise IT, procurement, and financial planning. It finds unresolved divergence on standardization versus autonomy, on where requirements are formed, and on whether ownership comes by appointment or restructuring. The practical implication is that no framework should be adopted whole: what an organization needs is a complete chain, achieved by locating which layer and which mechanism is unmanaged and borrowing from whichever family addresses it. Across this corpus the element most often unmanaged is ownership of capabilities that cross functional boundaries, followed by the ungoverned interface with shared assurance functions.

References

1. Abioye RF, Okojie JS, Filani OM, Ike PN, Idu JOO, Nnabueze SB, *et al.* Automated ESG reporting in energy projects using blockchain-driven smart compliance management systems. *Int J Multidiscip Evol Res.* 2023;4(2):120-9. doi: 10.54660/IJMER.2023.4.2.120-1292.
2. Adegbite MP, Adebayo A, Ahmed MO. A security architecture model for IT and OT convergence in regulated energy networks: design principles and governance alignment. *Int J Comput Sci Math Theory.* 2022;8(2):81-132. doi: 10.56201/ijcsmt.v8.no2.2022.pg81.1323.
3. Akanbi O, Sunday EA. A systematic review of AI-driven autonomous mobile robots (AMR) in scalable micro-fulfillment centers. *Int J Adv Multidiscip Res Stud.* 2025;5(6):2363-79. doi: 10.62225/2583049X.2025.5.6.61824.
4. Akhigbe R, Falemi A, Akin-Oluyomi OT. An advanced framework for technology adoption that supports employee readiness in modern organizations. *Int J Adv Multidiscip Res Stud.* 2024;4(1):1637-59. doi: 10.62225/2583049X.2024.4.1.53445.
5. Akhigbe R, Falemi A, Akin-Oluyomi OT. An advanced governance model for improving transparency accountability and strategic execution in complex enterprises. *Int J Adv Multidiscip Res Stud.* 2025;5(6):1169-88. doi: 10.62225/2583049X.2025.5.6.53416.
6. Akin-Oluyomi OT, Akhigbe R. An advanced framework for improving multi-site operational efficiency using data-driven performance indicators. *Int J Adv Multidiscip Res Stud.* 2023;3(1):1763-81. doi: 10.62225/2583049X.2023.3.1.53437.
7. Akin-Oluyomi OT, Atima ME, Akinleye OK. Regulatory compliance and supplier risk assessment frameworks in international pharmaceutical procurement. *Int J Adv Multidiscip Res Stud.* 2023;3(6):2194-204.8.
8. Akinleye OK, Adeyoyin O. Process automation framework for enhancing procurement efficiency and transparency. *Shodhshauryam Int Sci Ref Res J.* 2021;4(4):356-87.9.
9. Akinleye OK, Adeyoyin O. Supplier relationship management framework for achieving strategic procurement objectives. *Gyanshauryam Int Sci Ref Res J.* 2022;5(4):565-98. doi: 10.32628/GISRRJ22543010.
10. Akinleye OK, Okoruwa PO, Babatope OM, Akokodaripon DA. Leveraging big data and business intelligence for optimization of manufacturing sector procurement. *Int J Adv Multidiscip Res Stud.* 2023;3(6):2164-72.11.
11. Akinlolu VS, Fapohunda M, Omaghomi TT, Atima ME, Igweonu C. A proposed care-coordination framework for reducing readmissions among chronic disease patients. *Multidiscip Glob Environ J.* 2023;4(5):1187-95.12.
12. Akokodaripon DA, Akinleye OK, Okoruwa PO, Babatope OM. Procurement cost optimization strategies: comparative analyses across UK, Nigeria, and emerging economies. *Int J Adv Multidiscip Res Stud.* 2023;3(6):2224-34.13.
13. Akomolafe O, Agu MU, Bello A. A conceptual model for implementing risk-based auditing in strategic financial management. *Int J Adv Multidiscip Res Stud.* 2023;3(6):2274-86. doi: 10.62225/2583049X.2023.3.6.535914.
14. Aliliele C, Mbonu IS, Iwuanyanwu U. A conceptual framework for continuous cloud misconfiguration monitoring and enterprise risk mitigation strategies. *Int J Sci Res Comput Sci Eng Inf Technol.* 2023;9(10):373-94. doi: 10.32628/CSEIT236107115.
15. Aliliele C, Mbonu IS, Iwuanyanwu U. A conceptual framework for enterprise data sensitivity classification and regulatory traceability mechanisms. *Int J Adv Multidiscip Res Stud.* 2024;4(6):3103-24. doi: 10.62225/2583049X.2024.4.6.599116.
16. Amayo EB, Owulade OA, Isi LR. Optimizing project governance in multinational infrastructure projects: insights from General Electric's global operations. *Int J Multidiscip Res Growth Eval.* 2023;4(1):975-83. doi: 10.54660/IJMRGE.2023.4.1.975-98317.
17. Ambali KB, Eyetsemitan RA, Oyeleye AO, Fadayomi

- O. Lean Six Sigma for small enterprises: a systematic review and Lite-DMAIC adaptation framework for resource-constrained organizations. *Iconic Res Eng J.* 2021;5(5):562-83. doi: 10.64388/IREV5I5-171695718.
18. Aminu-Ibrahim AY, Ogbete JC, Ambali KB. Program management models for coordinated multi-site healthcare infrastructure expansion projects. *Int J Multidiscip Res Growth Eval.* 2021;2(6):661-78.19.
 19. Aneke OB, Adesemoye AC. Advances in cold chain integrity and good distribution practice for temperature-sensitive pharmaceuticals. *Int J Health Pharm Res.* 2025;10(3):99-137.20.
 20. Aneke OB, Adesemoye AC, Sydney E. Corrective and preventive action effectiveness in pharmaceutical quality management systems: a systematic review of root-cause methodologies. *Int J Health Pharm Res.* 2022;7(2):78-111.21.
 21. Aneke OB, Adesemoye AC, Sydney E. Regulatory harmonization and convergence in global medicine quality assurance: a review of frameworks, pathways, and implementation barriers. *Int J Med Eval Phys Rep.* 2024;8(6):213-52.22.
 22. Annan AO. Cybersecurity compliance as a source of competitive advantage in technology markets. *Int J Sci Res Comput Sci Eng Inf Technol.* 2025;11(5):456-87.23. Arumosoye OM, Obriki OD. Organizational learning-based conceptual maturity model for continuous safety performance improvement. *Int J Multidiscip Res Growth Eval.* 2021;2(1):970-80. doi: 10.54660/IJMRGE.2021.2.1.970-98024.
 23. Arumosoye OM, Obriki OD. Conceptual risk pathway model for lifting and rigging operations in heavy industrial construction. *Gyanshauryam Int Sci Ref Res J.* 2022;5(5):346-69. doi: 10.32628/GISRRJ225623725.
 24. Arumosoye OM, Obriki OD. Conceptual model of safety leadership influence in large temporary project organizations. *Int J Adv Multidiscip Res Stud.* 2024;4(6):3034-47. doi: 10.62225/2583049X.2024.4.6.589526.
 25. Atakpa MI. A review of predictive analytics models for anti-money laundering detection in commercial banking systems. *Int J Sci Res Comput Sci Eng Inf Technol.* 2021;7(2):778-804. doi: 10.32628/CSEIT206481327.
 26. Badmus O, Jooda D, Anunagba CO. A privacy-by-design framework for role-based security architecture in Salesforce environments handling sensitive personal data. *Int J Adv Multidiscip Res Stud.* 2024;4(6):3244-54. doi: 10.62225/2583049X.2024.4.6.624328.
 27. Edivri J, Oteri O. Predictive capacity planning and resource utilization forecasting models for multi-program and multi-stakeholder IT portfolios. *Int J Sci Res Comput Sci Eng Inf Technol.* 2022;8(4):826-45.29.
 28. Edivri J, Oteri O. A conceptual KPI-driven decision and optimization framework for IT service delivery, portfolio performance, and adoption. *Gyanshauryam Int Sci Ref Res J.* 2024;7(1):167-87. doi: 10.32628/GISRRJ24664330.
 29. Efobi OZ, Akinleye OK, Fasawe O. Framework for data-driven operations management and performance improvement in educational institutions. *Gyanshauryam Int Sci Ref Res J.* 2021;4(6):127-58.31.
 30. Efobi OZ, Akinleye OK, Fasawe O. Conceptual model for data-driven lean supply chain optimization in manufacturing and retail operations. *Int J Sci Res Comput Sci Eng Inf Technol.* 2022;8(2):703-34. doi: 10.32628/CSEIT254133532.
 31. Ekun K, Muriel A. Online lead time quotation under contingency. In: Brown Greer A, Contardo C, Frayret JM, editors. *Proceedings of the IISE Annual Conference & Expo 2024.* 2024. doi: 10.21872/2024IISE_609033.
 32. Eyetsemitan RA, Ambali KB, Oyeleye AO, Fadayomi O. Translating tax and regulatory requirements into SME compliance workflows: a conceptual framework for implementing IAS 12, VAT, PAYE, and withholding tax. *Iconic Res Eng J.* 2021;4(11):621-41. doi: 10.64388/IREV4I11-171695634.
 33. Eyetsemitan RA, Ambali KB, Oyeleye AO, Fadayomi O. Change management in small business digital transformation: a systematic review and lean change adoption framework. *Gyanshauryam Int Sci Ref Res J.* 2023;6(6):521-50. doi: 10.32628/GISRRJ23664835.
 34. Eyetsemitan RA, Ambali KB, Oyeleye AO, Fadayomi O. User acceptance testing in small business technology deployment: a structured validation framework for lean operational environments. *Int J Multidiscip Res Growth Eval.* 2023;4(6):1512-31. doi: 10.54660/IJMRGE.2023.4.6.1512-153136.
 35. Eyetsemitan RA, Oyeleye AO, Ambali KB, Fadayomi O. Standard operating procedures as strategic assets in small business operations: a systematic review and implementation framework. *Gyanshauryam Int Sci Ref Res J.* 2022;5(2):438-65. doi: 10.32628/GISRRJ22535637.
 36. Eyetsemitan RA, Oyeleye AO, Ambali KB, Fadayomi O. Data-driven process optimization in micro-enterprises: a conceptual framework for funnel analysis and bottleneck identification. *Int J Multidiscip Res Growth Eval.* 2024;5(6):1950-68. doi: 10.54660/IJMRGE.2024.5.6.1950-196838.
 37. Eze FI, Akinleye OK, Anene UN. Development of a cross-border regulatory harmonization model for African pharmaceutical markets: the ARCH-Model framework. *Int J Health Pharm Res.* 2024;9(5):148-86. doi: 10.56201/ijhpr.v9.no5.2024.pg148.18639.
 38. Eze FI, Anene UN, Akinleye OK. Pharmaceutical supply chain governance, environmental risk management, and sustainable access to essential medicines in emerging economies: the PSCG-ERM framework. *Int J Health Pharm Res.* 2023;8(4):192-241. doi: 10.56201/ijhpr.v8.no4.2023.pg192.24140.
 39. Falemi A, Akhigbe R, Akin-Oluyomi OT. A proposed framework for integrating employee retention systems with operational productivity metrics. *Int J Adv Multidiscip Res Stud.* 2023;3(1):1704-24. doi: 10.62225/2583049X.2023.3.1.533941.
 40. Falemi A, Akhigbe R, Akin-Oluyomi OT. A supply chain workforce optimization framework for addressing staffing volatility during rapid expansion cycles. *Int J Adv Multidiscip Res Stud.* 2023;3(1):1745-62. doi: 10.62225/2583049X.2023.3.1.534242.
 41. Falemi A, Akhigbe R, Akin-Oluyomi OT. A proposed operational growth framework linking leadership effectiveness with measurable business outcomes. *Int J Multidiscip Res Growth Eval.* 2025;6(6):1081-102. doi: 10.54660/ijmrge.2025.6.6.1081-110243.
 42. Filani OM, Nnabueze SB, Ike PN, Wedraogo L. Real-time risk assessment dashboards using machine learning in hospital supply chain management systems. *Int J*

- Multidiscip Evol Res. 2022;3(1):65-76. doi: 10.54660/IJMER.2022.3.1.65-7644.
43. Filani OM, Nnabueze SB, Sakyi JK, Okojie JS. Scenario-based financial modelling for enhancing strategic decision-making and organizational long-term planning. *J Front Multidiscip Res*. 2023;4(2):251-65. doi: 10.54660/JFMR.2023.4.2.251-26545.
 44. Ilodigwe L, Adesemoye AC. Advances, risks, and implementation challenges of artificial intelligence as a force multiplier for clinical decision making and health system efficiency. *Int J Med Eval Phys Rep*. 2025;9(7):165-85. doi: 10.56201/ijmepr.v9.no7.2025.pg165.18546.
 45. Isiekwu CP, Oluwo K, Dada T. A conceptual model for CFO-led strategic finance in joint venture and cross-border partnerships. *Iconic Res Eng J*. 2021;4(7):383-400. doi: 10.64388/IREV4I7-171435047.
 46. Ladapo OO, Dosunmu AA, Jooda D, Abolaji TO. An IT service management literature review: challenges, benefits, opportunities, and implementation practices. *Int J Adv Multidiscip Res Stud*. 2023;3(6):2875-89. doi: 10.62225/2583049X.2023.3.6.20548.
 47. Ladapo OO, Dosunmu AA, Jooda D, Abolaji TO. Migration of applications and information systems to cloud computing infrastructure: lessons from a South African retail bank. *Int J Multidiscip Res Growth Eval*. 2025;6(6):1361-75. doi: 10.54660/IJMRGE.2025.6.6.1361-137549.
 48. Ladapo OO, Jooda D, Dosunmu AA, Abolaji TO. A comprehensive survey on ServiceNow for IT service management. *Int J Multidiscip Res Growth Eval*. 2023;4(6):1532-45. doi: 10.54660/IJMRGE.2023.4.6.1532-154550.
 49. Lawal OA, Oduleye TE. A review of decision analytics models for sustainable profitability in technology firms. *Gyanshauryam Int Sci Ref Res J*. 2023;6(6):455-75.51.
 50. Mbonu IS, Aliliele C, Iwuanyanwu U, Uzoka E. A conceptual framework for AI enabled IT general controls and SOX audit automation processes. *Gyanshauryam Int Sci Ref Res J*. 2022;5(5):384-414. doi: 10.32628/GISRRJ225623952.
 51. Nnabueze SB, Ike PN, Olatunde-Thorpe J, Aifuwa SE, Oshoba TO, Ogbuefi E, *et al*. End-to-end visibility frameworks improving transparency, compliance, and traceability across complex global supply chain operations. *Int J Multidiscip Futuristic Dev*. 2021;2(2):50-60. doi: 10.54660/IJMFD.2021.2.2.50-6053.
 52. Nnabueze SB, Sakyi JK, Filani OM, Okojie JS, Abioye RF, Okereke M, *et al*. Revenue optimization in energy distribution through integrated financial planning and advanced data-driven frameworks. *Int J Adv Multidiscip Res Stud*. 2024;4(4):1427-45.54.
 53. Nwakamma S, Ojukwu J, Oyesiji SO. LLM-as-a-judge for automated model governance: a review of methods, biases, and release-gating practices. *World J Innov Mod Technol*. 2024;8(6):185-216. doi: 10.56201/wjimt.v8.no6.2024.pg185.21655.
 54. Obogo SF, Obriki OD, Arumosoye OM. Conceptual safety governance model for large commercial facility operations. *Gyanshauryam Int Sci Ref Res J*. 2022;5(6):383-410. doi: 10.32628/GISRRJ22563956.
 55. Obogo SF, Ozobu CO, Sanusi AN, Ajirotutu RO. Conceptual integrated safety management model for multi zone urban infrastructure projects. *Int J Sci Res Civ Eng*. 2025;9(5):22-55. doi: 10.32628/IJSRCE259301257.
 56. Obogo SF, Uduokhai DO, Ozobu CO. Review of contractor safety compliance systems in infrastructure engineering projects. *Int J Sci Res Civ Eng*. 2021;5(4):76-100. doi: 10.32628/IJSRCE21541258.
 57. Obriki OD, Arumosoye OM. Conceptual governance framework for subcontractor safety performance management. *Int J Adv Multidiscip Res Stud*. 2024;4(6):3020-33. doi: 10.62225/2583049X.2024.4.6.589459.
 58. Obriki OD, Arumosoye OM, Ozobu CO. Conceptual model linking leading safety signals to sustained injury-free project performance. *Int J Sci Res Humanit Soc Sci*. 2025;2(3):233-54. doi: 10.32628/IJSRHSS25234260.
 59. Odejebi OD, Okonkwo CS, Ahiake Patrick MC, Okeke OT, Mayo W. AI-augmented secure software engineering: leveraging deep learning for autonomous threat detection and mitigation. *Int J Eng Mod Technol*. 2025;11(12):101-21. doi: 10.56201/ijemt.vol.11.no12.2025.pg101.12161.
 60. Oduleye TE, Medon JJ. A quantitative model for measuring the strategic impact of financial analysis on enterprise growth. *Int J Adv Multidiscip Res Stud*. 2023;3(1):1663-72. doi: 10.62225/2583049X.2023.3.1.533462.
 61. Okafor CM, Farounbi BO, Adesanya OS, Akinola AS. Controls for cross-border payments operations: correspondent banking risk reduction via end-to-end monitoring. *Int J Sci Res Comput Sci Eng Inf Technol*. 2024;10(4):1050-71.63.
 62. Okonkwo CS, Agbabiaka J, Mayo W, Okeke OT. Conceptual framework for digital supply chain governance in energy and infrastructure sectors. *Gyanshauryam Int Sci Ref Res J*. 2024;7(4):335-56. doi: 10.32628/GISRRJ24742364.
 63. Okonkwo CS, Agbabiaka J, Mayo W, Okeke OT. Model for predictive procurement planning to sustain operational uptime. *Int J Sci Res Humanit Soc Sci*. 2024;1(2):909-28. doi: 10.32628/IJSRSSH24277265.
 64. Okonkwo CS, Agbabiaka J, Mayo W, Okeke OT. Review of advances in procurement strategy, ERP adoption, and logistics performance. *Int J Adv Multidiscip Res Stud*. 2024;4(6):2827-35. doi: 10.62225/2583049X.2024.4.6.549566.
 65. Okonkwo CS, Agbabiaka J, Okeke OT, Mayo W. Framework for national-scale supply chain optimization through integrated IT and procurement systems. *Gulf J Adv Bus Res*. 2025;3(12):1610-25. doi: 10.51594/gjabr.v3i12.18967.
 66. Okonkwo CS, Ogunwale O, Mayo W, Okeke OT. Framework for regulatory-compliant procurement in high-risk energy environments. *Int J Multidiscip Res Growth Eval*. 2021;2(6):595-605. doi: 10.54660/IJMRGE.2021.2.6.595-60568.
 67. Okoruwa PO, Babatope OM, Akokodaripon DA, Akinleye OK. Digital procurement transformation approaches for strengthening efficiency in global supply chain management. *Int J Multidiscip Res Growth Eval*. 2025;6(5):975-85.69.
 68. Ominyi M. Toward a conceptual framework for embedding privacy by design in corporate restructuring and transaction structuring. *J Account Financ Manag*.

- 2021;7(5):152-73. doi: 10.56201/jafm.vol.7.no5.2021.p152.17370.
69. Ominyi M, Anichukwueze CC. A systematic review of anti-money laundering and anti-bribery compliance regimes across emerging and developed markets. *Int J Econ Financ Manag.* 2021;6(2):89-118. doi: 10.56201/ijefm.v6.no2.2021.pg89.11871.
 70. Ominyi M, Anichukwueze CC. A conceptual framework for harmonizing data protection compliance across GDPR, NDPR, and United States privacy regimes. *Int J Soc Sci Manag Res.* 2022;8(5):148-74. doi: 10.56201/ijssmr.v8.no5.2022.pg148.17472.
 71. Ominyi M, Anichukwueze CC. Reviewing greenhouse gas disclosure and ESG compliance obligations for energy and infrastructure enterprises under evolving regulatory regimes. *Int J Econ Financ Manag.* 2022;7(6):94-124. doi: 10.56201/ijefm.v7.no6.2022.pg94.12473.
 72. Ominyi M, Anichukwueze CC. Conceptualizing responsible AI governance structures for automated decision systems in regulated industries. *Int J Soc Sci Manag Res.* 2024;10(11):403-30. doi: 10.56201/ijssmr.v10.no11.2024.pg.403.43074.
 73. Ominyi M, Anichukwueze CC, Uzougbo NS. Developing a conceptual framework for AI-assisted compliance monitoring and anomaly detection in high-volume transaction environments. *World J Innov Mod Technol.* 2024;8(6):204-28. doi: 10.56201/wjimt.v8.no6.2024.pg204.22875.
 74. Oparah OS, Ezech FE, Olatunji GI, Ajayi OO. Framework for designing national real-time disease surveillance dashboards for public health stakeholders. *Shodhshauryam Int Sci Ref Res J.* 2023;6(1):208-27.76.
 75. Oteri O, Edivri J. Applied performance optimization frameworks for managing high-demand enterprise technology programs and system rollouts. *Gyanshauryam Int Sci Ref Res J.* 2024;7(1):188-210.77.
 76. Oyeleye AO, Eyetsemitan RA, Ambali KB, Fadayomi O. Reducing client onboarding cycle time in small professional services firms: a Lean Six Sigma process redesign framework. *Gyanshauryam Int Sci Ref Res J.* 2022;5(2):467-98. doi: 10.32628/GISRRJ22535778.
 77. Sakyi JK, Filani OM, Nnabueze SB, Okojie JS, Ogedengbe AO. Developing KPI frameworks to enhance accountability and performance across large-scale commercial organizations. *J Front Multidiscip Res.* 2022;3(2):81-93. doi: 10.54660/IJFMR.2022.3.2.81-9379.
 78. Sanni JO, Attah A. Market research frameworks addressing entry barriers within highly regulated industrial service sectors. *Int J Sci Res Comput Sci Eng Inf Technol.* 2023;10(2):904-30. doi: 10.32628/CSEIT234243980.
 79. Sanni JO, Atima ME, Attah A. Systematic review of attribution modeling methods resolving bias in multi-touch journeys. *Shodhshauryam Int Sci Ref Res J.* 2022;5(1):304-34. doi: 10.32628/SHISRRJ24713581.
 80. Sanni JO, Iwuanyanwu UA, Essien MA. Problem-oriented process mining for auditable marketing automation lifecycle control. *Int J Adv Multidiscip Res Stud.* 2025;5(6):1933-47. doi: 10.62225/2583049X.2025.5.6.565082.
 81. Tonoyan A, Dada O, Ayivi-Donkor SS. Algorithmic process optimization and cost reduction: a review of simulation modeling and financial impact assessment. *J Account Financ Manag.* 2022;8(8):139-69. doi: 10.56201/jafm.vol.8.no8.2022.p139.16983.
 82. Tonoyan A, Dada O, Ayivi-Donkor SS. Conceptual model for predictive cost optimization: machine learning applications in business transformation analysis. *Int J Econ Bus Manag.* 2022;8(6):68-102. doi: 10.56201/ijebm.v8.no6.2022.pg68.10284.
 83. Tonoyan A, Dada O, Ayivi-Donkor SS. A conceptual framework for retail asset valuation: integrating quantitative pricing and multi-unit financial performance prediction. *J Account Financ Manag.* 2023;9(12):218-50. doi: 10.56201/jafm.v9.no12.2023.pg218.250

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