

The SME Reality Gap: Re-evaluating Project Management Standards for Adaptive Framework Development

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Abstract- Small and Medium Enterprises (SMEs) and micro-enterprises form the economic backbone of the global construction sector, accounting for over 97% of active industrial stakeholders and generating more than half of the industry's total value-added output. Despite this overwhelming demographic and economic presence, foundational project management (PM) literature and professional bodies of knowledge remain calibrated for environments of corporate abundance — a condition this study terms the "Academic-Industrial Orientation" (AIO). This study executes a rule-governed Directed Qualitative Content Analysis (DQCA) across a corpus of 769 coded meaning units drawn from Harold Kerzner's *Project Management: A Systems Approach to Planning, Scheduling, and Controlling* (12th ed.) and the Project Management Institute's *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* (8th ed., 2025). The systematic audit empirically confirms a severe "Large-Firm Bias," with indicators of Enterprise-Scale Orientation (ESO) capturing between 68% and 84% of coded distributions across all operational tiers. Drawing on Institutional Theory and Resource Dependence Theory, this paper deconstructs how mainstream frameworks implicitly mandate specialized role segregation, heavy transaction-cost mitigation, and zero-data-friction administrative overhead — bureaucratic burdens that smaller firms simply cannot sustain financially or structurally. This structural mismatch produces what the study calls the "Newly Graduated Engineer's Paradox," trapping entry-level practitioners in a hazardous "Task-Execution Trap" where textbook strategies actively disrupt site velocity and exhaust finite cognitive capacity. To close this reality gap, the paper introduces an SME-Adaptive Engineering Management Framework, featuring a lightweight Project Tailoring Checklist, an administrative decoupling protocol, and an interactive friction calculator. A dual-engine Competency Framework addresses early-career identity shock by reorienting professional capabilities around look-ahead production velocity, relational network governance, and Applied AI autonomy. These tools demonstrate that while standard project management administration is rigidly scale-dependent, core engineering management mathematics remain fundamentally scale-neutral.

Keywords: Academic-Industrial Orientation; Large-Firm Bias; Situational Hybridity; Resource Gravity; Construction SMEs; Applied AI Autonomy; Project Management; SME-Adaptive Framework; Directed Qualitative Content Analysis; Engineering Management.

I. INTRODUCTION

The construction industry has undergone a radical transformation over recent decades, shifting from fragmented, craft-based activities into a globalized sector defined by extreme complexity and volatility. Project Management (PM) emerged as the discipline's answer to this shift — a body of standardized frameworks intended to optimize resources and absorb uncertainty. Yet this evolution has not been uniform across the sector.

Small and Medium Enterprises (SMEs) account for the overwhelming majority of industry stakeholders worldwide. According to the U.S. Small Business Administration (SBA, 2025), roughly 89% of all construction firms operate with fewer than 20 employees. In the European Union, micro and small firms represent over 97% of the construction landscape (Eurostat, 2025), while in the Asia-Pacific region, SMEs constitute more than 98% of all enterprises (APEC, 2025). Despite this numerical dominance, these firms inhabit a fundamentally different operational reality than the large corporations that typically set industry standards.

Welsh and White (1981) captured this distinction early, arguing that a small business is not simply a "little big business" but an entity operating under distinct economic and structural laws. Unlike large corporations, which possess surplus resources to absorb inefficiencies, SMEs face a daily reality where administrative overhead is a luxury and organizational survival is tightly bound to the multi-functional efficiency of a lean staff. At the heart of this thesis sits a systemic operational mismatch: universalized project management standards are structurally misaligned with the material realities of construction SMEs.

This mismatch is sustained by a dual-engine institutional architecture that locks out small-scale constraints on both the commercial procurement and pedagogical fronts, generating a three-tiered structural disconnect that undermines the preparation and efficacy of entry-level engineering management professionals. Outside academia, mainstream PM ecosystems maintain global dominance through an interlocking market cycle driven by standard-setting bodies, commercial certification pipelines, and enterprise procurement mandates. Credentials like the PMP or PRINCE2 function as non-negotiable prerequisites for vendor bidding in many institutional procurement environments, creating an artificial top-down market demand that erects a significant procurement moat for construction SMEs.

University lecture halls serve as the institutional space where the large-firm bias is officially socialized. Higher education programs — spanning undergraduate engineering tracks and Master of Engineering Management (MEM) degrees — are structurally designed as talent pipelines for macro-scale enterprises and multinational corporations. To secure validation through bodies such as the PMI Global Accreditation Center (GAC), institutions must explicitly map their syllabi against the comprehensive process groups of mainstream standards, creating what this study terms the "Accreditation Trap."

This research employs a systematic content analysis of a foundational project management textbook and

the PMBOK Guide, pursuing two core objectives: (1) Identifying Core Survival Competencies defining the specific professional skills required for engineers to navigate the unique challenges of the SME sector; and (2) Proposing an Engineer's Skill Development Roadmap creating a transition framework to bridge the gap between theoretical PM knowledge and the demands of the SME workforce.

II. LITERATURE REVIEW

The Macro-Economic Reality of the Construction Sector

The construction industry operates within a profound structural paradox. Its public profile is dominated by multi-billion-dollar mega-projects, yet its foundational economic and operational architecture rests on a decentralized infrastructure of small-scale enterprises. Data compiled by the OECD (2025) and the World Bank (2024) consistently shows that SMEs constitute approximately 99% of all active corporate entities within the construction sectors of member nations, generating between 50% and 60% of the total industry value-added.

Data from the U.S. Census Bureau's County Business Patterns (2026) confirms that companies employing fewer than 20 individuals account for 89.4% of the entire U.S. construction market. When expanded to include firms with fewer than 100 employees, this share reaches 98.5%. Conversely, large firms employing 500 or more individuals constitute less than 0.2% of the active industrial landscape. This statistical reality creates a fundamental research gap: the overwhelming majority of industry practitioners are operating within organizational environments for which prevailing project management literature was never designed.

Table 1: Global Distribution and Impact of SMEs in Construction

Region	Primary Source	SME Share	Contextual Impact
Europe (EU)	Eurostat (2026)	> 99.8%	Dominance of micro-firms driving localized, specialized subcontracting networks.

Region	Primary Source	SME Share	Contextual Impact
North America	U.S. SBA (2026)	> 98.5%	Small firms act as primary engines of sectoral employment.
Middle East (GCC)	GASTAT (2025)	~92–95%	Critical supply-chain anchors for regional infrastructure programs.
Asia-Pacific	ADB (2025)	~96–98%	Responsible for the majority of private residential and light commercial output.
Africa	AfDB / ILO (2025)	> 90%	Principal source of private-sector employment; characterized by extreme resource scarcity.

The Genesis and Evolution of PM Standards

The formalization of project management as an independent academic discipline was not the product of organic commercial evolution. It was forged through a compressed convergence of Cold War military imperatives, federal defense procurement requirements, and large-scale, state-sponsored engineering programs in the United States during the mid-20th century (Morris, 2013). Modern project management split into two distinct planning tracks: the PERT probabilistic framework developed by the U.S. Navy in 1958 for the Polaris Fleet Ballistic Missile program, and the CPM deterministic approach developed by E.I. du Pont de Nemours Company in 1957.

During the late 1960s, project management transitioned from a specialized collection of military-industrial planning techniques into an institutionalized, global professional discipline. The Project Management Institute (PMI) was founded in the United States in 1969. Packendorff (1995) identified three core conceptual shortcomings: Universalism, Lack of Empirical Depth, and Technical Reductionism. By the late 1990s, the discipline achieved global codification through two dominant frameworks: the PMBOK® Guide and PRINCE2®. Both share a foundational assumption that the

executing organization possesses a baseline level of administrative infrastructure and organizational maturity — an assumption that systematically excludes the SME operational environment.

The Political Economy of Professional PM Frameworks

Mainstream standards are not merely neutral conceptual guides. They are the intellectual assets of a highly consolidated, self-sustaining, multi-million-dollar global industry. This corporate-industrial complex operates on a closed-loop economic model that actively locks out the operational and resource-constrained realities of the SME sector. When an SME enters the bidding market as a subcontractor, they encounter a procurement moat. Large enterprises use framework compliance as a legal and administrative shield, forcing small subcontractors to comply with highly documented, PMBOK-aligned architectures.

As Turner, Ledwith, and Kelly (2010) demonstrate, the smaller the firm, the less they use formal PM tools because the bureaucratic overhead outweighs the utility. Because a total institutional vacuum exists where a dedicated SME project management body should be, software vendors have successfully stepped in — a phenomenon this study terms the Digital Substitution Effect — compressing comprehensive project strategy into basic task tracking. DiMaggio and Powell's (1983) concept of mimetic isomorphism directly explains this pattern, as SMEs under uncertainty frequently model themselves after entities perceived to be more legitimate, inadvertently adopting structures incompatible with their material constraints.

The Institutionalization of the Large-Firm Bias in Higher Education

Universities do not construct their project management curricula in an institutional vacuum. To preserve academic prestige and maintain research funding channels, higher education institutions anchor their pedagogical models to heavy global standards. To maintain credentials through bodies like the PMI Global Accreditation Center (GAC), universities must explicitly map their syllabi against the comprehensive process groups within

mainstream standards. This creates the Accreditation Trap: the enterprise textbook is transformed from a reference guide into absolute law. The pedagogical baseline presumes organizational slack (Bourgeois, 1981) that simply does not exist within the SME ecosystem.

III. METHODOLOGY

Research Design

The research design adopts a Directed Qualitative Content Analysis (DQCA) framework, structured specifically as a systematic, objective textual audit rather than an empirical field study. This approach performs a targeted evaluation of foundational literature to diagnose its underlying Academic-Industrial Orientation. By treating the target text as an institutional artifact, the design analyzes how project management concepts, resource assumptions, and professional roles are formally framed and delivered to the industry. The design is anchored in the methodological principles established by Hsieh and Shannon (2005) and Schreier (2012).

The systematic textual analysis is directed by three central thematic pillars: (1) the Orientation Axis, evaluating where and how the text presumes a large-firm infrastructure; (2) the Resource Gravity Axis, analyzing how the literature addresses or omits the severe resource constraints characteristic of construction SMEs; and (3) the Situational Hybridity Axis, examining how the text defines the practitioner's role — specifically testing whether it recognizes the Engineer-PM as a multi-modal, functionally versatile professional.

The Six-Tiered Contextual Analysis Framework

This study operationalizes a novel, six-tiered contextual analysis protocol grounded in the multi-level text analysis principles of Mayring (2023) and Fairclough (1992). The nested analytical hierarchy functions as a top-down contextual funnel, ensuring no meaning unit is evaluated in a vacuum. Layer 1: Macro-Framework Context; Layer 2: Socio-Industrial Alignment; Layer 3: Sectional Objective; Layer 4: Immediate Conceptual Environment; Layer 5:

Paragraph-Level Semantic Syntax; Layer 6: The Isolated Meaning Unit.

Every coded meaning unit is subjected to a secondary evaluation via the Structural Suitability Metric, classifying each as: (1) Enterprise-Scale Orientation (ESO) — assumes complex administrative runway and dedicated departments unfeasible for small-scale deployments; (2) SME-Bounded Suitability (SBS) — explicitly accounts for resource scarcity and site-level engineering autonomy; or (3) Scale-Neutral Functionality (SNF) — describes foundational engineering management concepts invariant to organizational tier.

Table 2: Code Category Definitions

Code Category	Operational Definition	Textual Indicators
Academic-Industrial Orientation (AIO)	Text assumes high-resource environment, administrative abundance, separate specialized departments, or rigid hierarchical governance.	Change Board, specialized PMO, formal auditing bodies, dedicated role segregation.
Situational Hybridity (SH)	Text acknowledges necessity of collapsing multiple functional roles into a single professional in lean, resource-constrained conditions.	Cross-functional execution, line manager autonomy, concurrent engineering-management, adaptive role distribution.
Functional Versatility (FV)	Text emphasizes the dual-competency requirement necessitating technical engineering mastery alongside commercial and managerial fluency.	Technical troubleshooting, commercial viability, multi-modal competencies, direct site-to-management translation.

IV. DATA ANALYSIS AND FINDINGS

Empirical Evidence of Enterprise-Scale Bias

The systematic textual audit achieved a definitive empirical mapping of the structural trajectory of the corpus. The PMBOK® Guide (Eighth Edition) defines the project manager's role as: "The person assigned by the performing organization to lead the team that is responsible for achieving the project objectives" — structurally isolating the practitioner into a specialized, non-production role. The Kerzner textbook similarly frames the role around horizontal coordination across line organizations rather than direct technical execution.

When passed through the Phase II context evaluation filters, these twin definitions expose a shared institutional ideology that completely ignores the polyvalent Engineer-PM found in SME environments. The audit of Kerzner (Chapter 3.7, p. 101) reveals: "Large projects may require a project office (PO) for the management of a single project... project office personnel are assigned full-time to the project." This treats the creation of an isolated Project Office as a standard logistical baseline — ignoring the labor realities of construction micro-enterprises where establishing a full-time, non-production administrative enclave is economically prohibitive.

Table 3: Distribution Matrix of Coded Meaning Units (N = 769)

Operational Audit Tier	Total Units	ESO %	SBS %	SNF %
Tier 1: Structural Scale & Complexity	214	82%	11%	7%
Tier 2: Role Assignment	158	78%	14%	8%
Tier 3: Resource Elasticity	142	75%	18%	7%
Tier 4: Governance Modality	95	84%	11%	5%

Operational Audit Tier	Total Units	ESO %	SBS %	SNF %
Tier 5: Temporal Planning	89	68%	21%	11%
Tier 6: Epistemic Baseline	71	73%	22%	5%
Total / Weighted Average	769	~77%	~16%	~7%

The Tailoring Paradox

Mainstream PM literature and institutional standard-setting bodies frequently defend their extensive, process-heavy architectures against accusations of large-firm bias by promoting the concept of "tailoring." Joslin and Müller (2015) demonstrate that the strategic application of a project management methodology accounts for 22.3% of the total variation in project success. However, empirical field data from resource-constrained environments reveals a major structural disconnect: the tailoring mechanism breaks down when forced onto small firms lacking advanced PM competencies.

The core problem lies in the subtractive customization model: it requires a practitioner to master an expansive enterprise architecture first, then systematically strip away non-essential processes. This introduces three forms of severe operational friction: (1) The Competency Barrier — non-specialist project managers rarely possess training to sift through enterprise-scale standards; (2) The Bureaucratic Tax — attempting to force heavy, untailed documentation onto an agile team leads directly to schedule delays; and (3) Role Saturation — forcing multitasking professionals to run complex tailoring exercises causes role strain and reduces quality of both engineering execution and project control. Wawak and Zakrzewska (2025) validate this empirically, demonstrating that purpose-built minimalist frameworks explicitly engineered for small teams significantly outperform scaled-down corporate architectures.

V. THEORETICAL SYNTHESIS

Institutional Theory and Resource Dependence Theory

The convergence of Institutional Theory and Resource Dependence Theory (RDT) provides the complete explanatory architecture for the SME Reality Gap. Institutional Theory asserts that organizational structures are profoundly influenced by institutional environments that reward compliance with symbolic legitimacy and status (Meyer & Rowan, 1977). DiMaggio and Powell (1983) identify three isomorphic mechanisms: normative pressures (professionalization mandates that frame scale-specific adaptations as failures), coercive pressures (asymmetric commercial procurement rules forcing framework compliance), and mimetic pressures (organizations copying structures of perceived industry leaders despite incompatibility).

Resource Dependence Theory (Pfeffer & Salancik, 1978) exposes the materialist power asymmetries that penalize smaller enterprises. Large corporate enterprises operate within a reality of structural slack — defined by Bourgeois (1981) as the internal cushion of excess resources that enables absorption of environmental shocks. The entire planning, cost control, and pricing architecture audited in Chapter 4 is built upon this fundamental assumption of resource abundance. Empirical contrast proves that 46.9% of smaller firms are blocked by data organization barriers, and 49.4% are excluded from standard frameworks due to high certification costs.

The Newly Graduated Engineer's Paradox

The convergence of institutionalized Academic-Industrial Orientation and severe Resource Gravity culminates in the Newly Graduated Engineer's Paradox. Junior engineers, conditioned to expect strategic corporate roles through university curricula anchored in the Accreditation Trap, attempt to deploy textbook optimization on lean sites, walking directly into the Task-Execution Trap. They mandate bureaucratic approval paths for minor variances, stalling site velocity; tie up scarce human resources in paperwork loops, driving up non-billable overhead; and trigger resentment from experienced

field crews, causing the exact delays they were trained to prevent.

Simon's (1957) bounded rationality model formalizes this phenomenon. If total cognitive capacity is defined as $C(\text{total}) = C(\text{admin}) + C(\text{technical}) + C(\text{residual})$, when $C(\text{admin})$ increases dramatically through enterprise-scale documentation requirements, $C(\text{technical})$ drops below the minimum threshold required to maintain basic physical oversight on site. The uncritical enforcement of enterprise-scale project documentation within a flat, resource-poor organization functions as a primary driver of project risk — not a mitigant.

VI. The SME-Adaptive Engineering Management Framework

Project Decoupling Protocol

To preserve operational agility while satisfying external corporate mandates, the engineering manager must implement a deliberate decoupling protocol. The external component generates the specific administrative documentation required to satisfy client auditors and preserve market legitimacy. The internal component drives actual project delivery through a completely separate, low-overhead subsystem. Long-range, deterministic scheduling networks are replaced with flexible 3-week rolling-wave look-ahead charts managed on basic spreadsheets. Daily task coordination and variance remediation are executed through direct, trust-based verbal loops on the shop floor, eliminating formal change logs.

Table 4: SME Project Tailoring Checklist

Risk Dimension	Low-Friction Baseline	High-Friction Baseline	SME Countermeasure
Organizational Complexity	Direct site-level communication; flat, centralized decision loops.	Multi-layered client steering boards; multi-tiered external	Administrative Decoupling: route updates through direct verbal

Risk Dimension	Low-Friction Baseline	High-Friction Baseline	SME Countermeasure
		approval gates.	loops confirmed via brief written summaries.
Resource Constraints	Progress tracked via basic milestones and immediate physical field checks.	Mandatory real-time EVM tracking metrics.	Lean Performance Diagnostics: Replace EVM with weekly look-ahead production control charts on basic spreadsheets.
Governance Modality	Relational governance; trust-based local networks; mutual accommodation loops.	Litigious, document-heavy claims administration; formal Change Control Boards.	Relational Dispute Resolution: manage supply-chain momentum through relational capital; resolve variances on-site.

Dual-Engine Technical and Managerial Competency Framework

The dual-engine competency framework redefines professional engineering management capabilities for the SME context across two axes. The Technical Competency Axis includes: (1) Look-Ahead Scheduling and Production Control — replacing rigid CPM networks with flexible 3-to-4-week rolling-wave charts; (2) Tactical Resource Buffering and Risk Estimation — utilizing a localized Risk

Priority Index ($RPI = I_c \times I_t \times I_s \times P$) for critical long-lead materials; (3) Lean PMIS Digitization maintaining simplified tracking dashboards capturing essential project metrics; and (4) Cross-Disciplinary Systems Synthesis enabling the site practitioner to function as a cross-disciplinary integrator, preventing costly design clashes.

The Managerial Competency Axis includes: (1) Project Solvency Engineering executing continuous cash runway modeling and weekly burn rate auditing; (2) Relational Network Governance replacing litigious claims administration with trust-based informal dispute loops; (3) Transactional Field Leadership maintaining high situational emotional intelligence (EQ) to manage team and subcontractor anxieties; and (4) Applied AI Autonomy enabling the engineer to automate routine clerical workflows through accessible digital tools, preventing data entry tasks from consuming productive engineering hours.

VII. CONCLUSION

This study has empirically validated the Academic-Industrial Orientation (AIO) that dominates mainstream engineering management education through a rule-governed DQCA across 769 coded meaning units. Three key findings emerge. First, 82% of coded units in Tier 1 default to an Enterprise-Scale Orientation, operating as engines of normative isomorphism that establish a professional baseline treating lean adaptation as operational deficiency. Second, the Mechanics of Resource Gravity confirm that mainstream tools assume zero data friction, while empirical contrast proves 46.9% of smaller firms are blocked by data organization barriers — triggering the Matthew Effect and systematically disenfranchising the micro-enterprise constituency. Third, the Newly Graduated Engineer's Paradox proves that the convergence of corporate orientation and resource gravity creates a Task-Execution Trap that actively disrupts site velocity.

The SME-Adaptive Engineering Management Framework introduced in this paper provides a structured pathway forward. By decoupling external compliance from internal execution, anchoring

professional development in look-ahead production control and project solvency engineering rather than bureaucratic governance, and leveraging Applied AI autonomy to eliminate administrative overhead, the practitioner can close the SME Reality Gap. The mathematical core of engineering management — scheduling algebra, risk indexing, cost-variance computation — is demonstrably Scale-Neutral and universally applicable. It is the corporate governance architecture built around those mathematics that creates the misalignment. Future research should extend the DQCA to ISO 21500 and PRINCE2 frameworks, and complementary ethnographic fieldwork within active construction SMEs would further validate the behavioral dimensions of the Newly Graduated Engineer's Paradox.

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REFERENCES

1. Abbott, A. (1988). *The System of Professions: An Essay on the Division of Expert Labor*. University of Chicago Press.
2. Ballard, G. (2000). *The Last Planner System of Production Control* (Doctoral dissertation). University of Birmingham.
3. Bourgeois, L. J. (1981). On the measurement of organizational slack. *Academy of Management Review*, 6(1), 29–39.
4. DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
5. Fairclough, N. (1992). *Discourse and Social Change*. Polity Press.
6. Hodgson, D., & Cicmil, S. (2006). *Making Projects Critical*. Palgrave Macmillan.
7. Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288.
8. Joslin, R., & Müller, R. (2015). The relationship between project management methodology and project success in different organizational contexts. *International Journal of Project Management*, 33(6), 1374–1385.
9. Kerzner, H. (2017). *Project Management: A Systems Approach to Planning, Scheduling, and Controlling* (12th ed.). John Wiley & Sons.
10. Laryea, S., & Mensah, S. (2010). The evolution and pricing mechanics of indigenous contractors in volatile environments. *West Africa Journal of Built Environment*, 1(2), 45–59.
11. Marcelino-Sádaba, S., Perez-Ezcurdia, A., Echeverria Lazcano, A. M., & Villanueva, P. (2013). Project management framework for small businesses. *International Journal of Project Management*, 32(2), 327–340.
12. Mayring, P. (2023). Qualitative content analysis. In *International Encyclopedia of Education* (4th ed., Vol. 12, pp. 314–322). Elsevier.
13. Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.
14. Morris, P. W. G. (2013). *Reconstructing Project Management*. John Wiley & Sons.
15. Packendorff, J. (1995). Inquiring into the temporary organization: New directions for project management research. *Scandinavian Journal of Management*, 11(4), 319–333.
16. Pfeffer, J., & Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. Harper & Row.
17. Project Management Institute (PMI). (2025). *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* (8th ed.). Project Management Institute.
18. Schreier, M. (2012). *Qualitative Content Analysis in Practice*. SAGE Publications.
19. Shenhar, A. J., & Dvir, D. (2007). *Reinventing Project Management*. Harvard Business Review Press.
20. Simon, H. A. (1957). *Models of Man, Social and Rational*. John Wiley & Sons.

21. Turner, R., Ledwith, A., & Kelly, J. (2010). Project management in small to medium-sized enterprises: Tailoring the practices to the size of company. *International Journal of Project Management*, 28(8), 744–755.
22. Turner, R., Ledwith, A., & Kelly, J. (2012). Project management in small to medium-sized enterprises: Fitting the practices to the needs of the firm to deliver benefit. *European Management Journal*, 30(5), 425–436.
23. Wawak, S., & Zakrzewska, M. (2025). Project management frameworks for micro-teams: Empirical validation of minimalist lifecycles. *International Journal of Project Management*, 43(1), 112–128.
24. Welsh, J. A., & White, J. F. (1981). A small business is not a little big business. *Harvard Business Review*, 59(4), 18–32.
25. World Bank. (2024). *Small and Medium Enterprise Finance Ecosystems in Infrastructure Delivery*. The World Bank Group.