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Prioritizing Corporate Turnaround Strategies in Construction State-Owned Enterprises: A Single-Case Study

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ABSTRACT

Indonesia's state-owned construction enterprises must reconcile their public infrastructure role with commercial discipline, particularly after pandemic-related disruption and the accumulation of project-financing pressure. This study identifies the external and internal drivers of performance decline, evaluates corporate performance, formulates turnaround alternatives, and determines strategic priorities for PT Wijaya Karya (Persero) Tbk. (WIKA). A multiphase mixed-method design combined archival analysis of corporate and government documents with structured managerial and expert judgment. Internal resources were assessed through VRIO by three directors; PESTLE findings and the integrated SWOT were validated with three directors and four external experts; performance gaps were evaluated through the Balanced Scorecard; and sixteen SMART alternatives were ranked using a Quantitative Strategic Planning Matrix. The 2023 results showed a net loss of IDR 7.825 trillion, cash and cash equivalents of IDR 3.233 trillion, and equity of IDR 9.572 trillion. WIKA retained durable underlying strengths in reputation, brand value, and organizational knowledge, though the severity of its financial distress raises questions about the extent to which these intangibles remain undiminished, alongside clear weaknesses in liquidity, leverage, digital integration, talent readiness, and portfolio dependence on government projects. The leading priorities were innovation-led lean management (TAS 41.58), acquisition of green and digital infrastructure projects (40.84), financial risk and backlog monitoring (40.78), strict cost and asset-utilization control (40.65), and accelerated process digitalization (40.53). The findings support a sequenced turnaround architecture that stabilizes cash and project economics while converting intangible strengths into diversified, technology-enabled, and sustainable growth.

Keywords: Balanced Scorecard, Corporate Turnaround, PESTLE Analysis, QSPM, VRIO

1. Introduction

Construction remains a strategic component of Indonesia's development model because it links public investment, industrial demand, employment, and regional connectivity. The sector contributed 10.43% of national gross domestic product in the fourth quarter of 2024 and remained one of the country's largest economic sectors (Badan Pusat Statistik, 2024). That scale, however, does not remove the sector's structural exposure to long project cycles, front-loaded working-capital needs, delayed payments, price escalation, regulatory change, and execution risk. Evidence from Indonesian construction companies shows that state-owned enterprises (SOEs) tend to carry higher debt and financial risk than private contractors, even when their role in strategic infrastructure provides access to a large project pipeline (Wibowo et al., 2024). The policy

mandate and the commercial model therefore create a dual requirement: SOE contractors must deliver public value while maintaining liquidity, profitability, and an investable capital structure.

PT Wijaya Karya (Persero) Tbk. (WIKA) illustrates this tension. The company developed from a public electrical and water-installation enterprise into an integrated engineering, procurement, construction, and investment group with businesses in infrastructure, energy, industrial products, real estate, and precast concrete. Between 2019 and 2023, WIKA's financial position deteriorated sharply: consolidated revenue fell from IDR 27.213 trillion to IDR 22.530 trillion; net income swung from a profit of IDR 2.621 trillion to a loss of IDR 7.825 trillion; cash and cash equivalents dropped from IDR 10.347 trillion to IDR 3.233 trillion; and equity contracted from IDR 19.216 trillion to IDR 9.572 trillion (PT Wijaya Karya (Persero) Tbk., 2023). These figures indicate more than a temporary sales shock, they reveal deterioration in earnings quality, cash conversion, balance-sheet resilience, and the capacity to absorb project volatility.

The pandemic intensified existing vulnerabilities. Project postponements and mobility restrictions reduced productivity and delayed billing, whereas the completion of capital-intensive strategic projects continued to consume funding. In the recovery period, revenue improved, but higher financing costs, accumulated receivables, cost overruns, and slower order-book conversion weakened the benefit of that recovery. Sector-level studies similarly identify leverage, liquidity, cash-flow quality, and project execution as central determinants of financial distress in Indonesian construction companies (Anggraeni et al., 2022; Gunardja et al., 2023). For an SOE, these financial pressures interact with government project dependence, administrative complexity, stakeholder expectations, and obligations to maintain national development commitments. A turnaround strategy must consequently address both immediate financial stabilization and the capabilities required for sustainable competitiveness.

Existing studies concerning WIKA provide useful but fragmented explanations. Research has assessed capital structure before the pandemic (Naima & Yudanto, 2020), cash-flow performance (Anggraeni et al., 2022), and information-technology governance maturity (Adam et al., 2020). These studies clarify specific symptoms, but they do not integrate external turbulence, internal resources, multidimensional performance gaps, alternative-strategy formulation, and quantitative prioritization at the parent-company level. This evidence gap is important because isolated interventions can work against each other. Aggressive cost reduction may erode digital and human capabilities; rapid portfolio expansion may increase working-capital exposure; and technology investment without organizational readiness may not improve project economics. A coherent diagnostic architecture is required to distinguish resources that can anchor recovery from weaknesses that must be repaired and external opportunities that can finance renewed growth.

This study addresses four questions: which external and internal factors contributed to WIKA's performance decline; how did performance evolve during 2020-2023; which turnaround alternatives follow from the integrated diagnosis; and which alternatives should receive implementation priority? The study contributes by combining PESTLE, VRIO, the Balanced Scorecard (BSC), SWOT/TOWS, SMART target design, and the Quantitative Strategic Planning Matrix (QSPM) in one decision sequence. The contribution is not the use of any single framework, but the traceability from evidence to decision: external conditions are translated into opportunities and threats; internal resources into strengths and weaknesses; performance gaps into urgency; and strategic alternatives into comparable priorities. Practically, the resulting portfolio provides WIKA's top management with a phased basis for financial stabilization, operational renewal, digital capability building, and market diversification.

Corporate health in construction should consequently be assessed through the quality of the operating system, not a single period's profit or contract awards. A company may report a large project pipeline while its contracts produce negative working capital, weak risk allocation, or unrecognized cost-to-complete exposure. It may also own sophisticated technology while project teams continue to work with fragmented data and delayed controls. Conversely, temporary losses do not necessarily eliminate the future value of a trusted brand, complex-project knowledge, or strategic partnerships. The analytical challenge is to distinguish recoverable capability from structural weakness and to identify the order in which interventions release value. This distinction motivates the combination of financial outcomes, nonfinancial performance, resource quality, and environmental conditions used in this study.

2. Literature Review

2.1. Corporate Turnaround in Construction SOEs

Corporate turnaround is a deliberate response to sustained performance decline in which management first restores organizational viability and then rebuilds the basis for competitive performance. Recent crisis research emphasizes that effective responses extend beyond retrenchment. They may involve renewed stakeholder relationships, revised pricing and contracting, organizational compliance, resource redeployment, and strategic reorientation (Kozachenko et al., 2021). Empirical evidence also shows that an entrepreneurial posture, decentralized control, and an organic organizational structure can reduce the likelihood that decline becomes persistent (Oliveira Saraiva et al., 2024). The implication is a two-horizon logic: short-run actions protect cash and reduce avoidable costs, while medium-run actions renew capabilities and the revenue model.

This dual logic is especially relevant in project-based construction. Contractors cannot discontinue every low-performing activity immediately because contractual obligations, completion risk, guarantees, and public-service consequences constrain exit. Financial recovery depends on project-level cost control, receivable conversion, and risk visibility, while strategic recovery depends on selective bidding, partnering, technology adoption, and differentiated capabilities. Shibani et al. (2024) demonstrate that construction financial risk emerges from interacting economic, financing, contract, and project factors, making integrated monitoring essential. In Indonesia, the risk is amplified for state-owned builders, whose leverage and efficiency profiles differ materially from those of private firms (Wibowo et al., 2024). Turnaround in this setting is therefore an enterprise-level portfolio problem rather than a single-project or single-ratio correction.

SOE governance adds another layer. Strategic posture, ownership structure, market concentration, firm size, and capital support jointly influence Indonesian SOE performance (Apriyantopo et al., 2022). A turnaround recommendation must therefore be commercially credible without ignoring public ownership, regulatory accountability, and national infrastructure priorities. Governance and liquidity are also linked: evidence from Indonesian construction-supporting firms suggests that cash holdings and ownership arrangements affect financial performance, reinforcing the importance of board-level cash discipline and monitoring (Malelak et al., 2024). These conditions support the use of a framework that combines internal resources, external dependence, performance measurement, and explicit strategic choice.

2.2. Integrated Strategic-Diagnostic Framework

The resource-based view explains performance differences through heterogeneous resources and capabilities. Under the VRIO logic, a resource can support sustained advantage when it is valuable, rare, costly to imitate, and effectively organized (Barney, 1991). This distinction is useful in turnaround research because a distressed firm can still possess strong brands, relationships, knowledge, and execution experience. The central strategic question is whether those assets can be mobilized before financial weakness destroys their value. Applications that combine VRIO and SWOT show that resource classification makes internal-factor selection more disciplined than an unstructured list of strengths and weaknesses (Amertha et al., 2021). For WIKA, VRIO provides a way to separate legacy scale from defensible intangible capabilities and to identify where organization, digital integration, or capital constraints prevent value capture.

PESTLE complements that inside-out view by organizing political, economic, social, technological, legal, and environmental influences. Its value lies in converting diffuse macro developments into explicit strategic implications. Political dependence affects project continuity and payment timing; economic conditions affect funding cost and input prices; social change affects workforce readiness; technology changes coordination and productivity; legal conditions affect tendering and compliance; and environmental standards alter both project requirements and market opportunities. SWOT reviews show that combining external scanning with structured internal analysis reduces the tendency to treat SWOT as an unsupported brainstorming exercise (Benzaghta et al., 2021). PESTLE in this study therefore supplies the evidence base for opportunities and threats rather than serving as a descriptive end point.

The BSC adds a performance and implementation lens. Its four perspectives - financial, customer, internal process, and learning and growth - connect lagging outcomes with leading capabilities (Kaplan & Norton, 1992). Contemporary reviews confirm that the BSC remains useful when measures are causally linked to the strategy rather than treated as an unconnected dashboard (Kumar et al., 2023; Tawse & Tabesh, 2023). A

systems perspective further emphasizes that learning investments, organizational processes, stakeholder outcomes, and financial results influence one another (Yawson & Paros, 2023). In a turnaround, this prevents a narrow diagnosis based only on revenue and profit. It also reveals whether financial distress is accompanied by customer deterioration, process delays, insufficient innovation, or capability gaps.

SWOT/TOWS and QSPM complete the decision chain. TOWS converts the diagnostic factors into four types of strategic response: using strengths to exploit opportunities, using opportunities to remedy weaknesses, using strengths to mitigate threats, and reducing weaknesses that magnify threats. QSPM then compares those alternatives against the same weighted factors, limiting the risk that the most visible or politically attractive proposal automatically becomes the priority (David et al., 2017). In this study, SMART targets make each TOWS alternative auditable, while QSPM preserves a clear line between diagnostic importance and strategic attractiveness. The integrated sequence is particularly appropriate where management must choose among several interdependent recovery initiatives under scarce financial and organizational capacity.

The frameworks also correct one another's limitations. VRIO can overemphasize internal uniqueness if external demand or regulation changes; PESTLE can generate an extensive issue inventory without showing which firm can respond; the BSC can measure a failing strategy efficiently; and SWOT can become subjective when factor selection is not evidence based. In the integrated design, PESTLE tests the relevance of resources, VRIO identifies response capacity, BSC reveals whether that capacity is producing results, and QSPM makes trade-offs explicit. The sequence therefore links strategic fit, organizational feasibility, performance urgency, and implementation choice. This linkage is particularly important during decline, when management cannot pursue every plausible initiative and the cost of sequencing error is high.

2.3. Prior Research and Evidence Gap

The literature also indicates why digitalization cannot be treated as a stand-alone technology purchase. Construction digital transformation requires organizational coordination, capability development, and changes to information flows, contracting, and decision rights (Oesterreich & Teuteberg, 2016; Samuelson & Stehn, 2023). Research in developing-country construction contexts identifies leadership, top-management support, standards, training, and client demand as important drivers of Building Information Modeling adoption (Rinchen et al., 2024). At the broader firm level, digital transformation is an ongoing strategic renewal process that depends on dynamic managerial and organizational capabilities (Plekhanov et al., 2023; Warner & Wäger, 2019). A turnaround model that prioritizes systems without addressing people, governance, and process design is therefore unlikely to realize the expected efficiency.

Likewise, lean management is most valuable when connected to project controls and continuous learning. Lean construction reduces non-value-adding activity, improves workflow reliability, and strengthens coordination (Ansah et al., 2016). Evidence from highway projects shows that lean practices can improve management efficiency and reduce waste (Wu et al., 2019). Yet few studies have integrated lean cost resilience, digital transformation, intangible resources, financial risk, green-market development, and quantitative strategy prioritization for an Indonesian parent-level construction SOE. This study fills that gap with a case-based decision architecture centered on WIKA's 2020-2023 decline and the choices available to its top management.

3. Methodology

3.1. Research Design and Case Boundary

The research used a multiphase mixed-method case-study design. The unit of analysis was WIKA at the corporate-parent strategic governance level. Consolidated group performance was used to assess enterprise-level financial outcomes because turnaround decisions undertaken by the parent affect and are affected by subsidiary and project portfolios. Subsidiary-specific operational and technical analyses, however, remained outside the case boundary. Fieldwork and expert engagement were conducted from July to November 2024 in Jakarta. The design was sequential and integrative rather than a parallel collection of unrelated analyses. Document evidence established the external conditions and performance trajectory, managerial assessment

identified internal resources, member checking refined the interpretation, and structured scoring generated strategy priorities. This design follows the mixed-method principle that qualitative and quantitative strands should be connected through the research questions, sampling, analysis, and interpretation (Creswell & Plano Clark, 2018).

The principal analytical period was 2020-2023, covering the pandemic shock and the initial post-pandemic recovery. The 2019 figures were retained as a pre-shock benchmark, while selected 2015-2018 values were used in the thesis for historical context. The study did not attempt to estimate causal effects from a large sample. Instead, it used within-case triangulation to explain how financial outcomes, external pressures, resources, and strategic choices were connected. The results are consequently analytical and decision-oriented: they support prioritization for the focal company and theory-informed transfer to similar project-based SOEs, but they do not claim statistical generalization to all construction firms.

3.2. Data Sources and Participants

Secondary data comprised WIKA's annual reports, the 2020-2025 Long-Term Corporate Plan (RJPP), official construction statistics, government regulations, policy documents, and peer-reviewed studies. The annual reports supplied consolidated group financial outcomes and selected corporate-level performance measures, while the RJPP supplied target values for the BSC comparison (PT Wijaya Karya (Persero) Tbk., 2020, 2023). PESTLE evidence was drawn from official sources and literature and was triangulated across at least two source types before validation. Financial values were standardized in IDR trillion for presentation. Nonfinancial BSC measures were retained in their reported units; approximate values in management documentation are explicitly marked with a tilde in the results.

Primary data were obtained through purposive sampling. Three directors responsible for human capital and transformation, finance and risk, and operations completed the VRIO assessment because their roles provided cross-functional visibility over WIKA's resources. For PESTLE validation, SWOT weighting, and QSPM assessment, the panel consisted of seven participants: the same three directors and four external experts. The external members represented strategic management, human resources and organization, the construction industry association, and the public-works regulatory environment. Selection criteria included senior decision experience, domain knowledge, and familiarity with construction or SOE strategy.

3.3. Analytical Procedure

Analysis proceeded in six linked stages. First, a content analysis classified macro evidence into the six PESTLE dimensions and translated each issue into an opportunity, threat, and implication. Second, the three directors evaluated 30 resource elements spanning physical assets, human capital, organization, finance, technology, and intangible assets against value, rarity, inimitability, and organization. Third, the BSC compared planned and realized performance across financial, customer, internal-process, and learning-and-growth perspectives. Fourth, the validated PESTLE, VRIO, and BSC findings were integrated into a SWOT matrix. Fifth, the panel used TOWS to formulate sixteen alternatives and converted them into SMART statements with measurable targets and time horizons.

Sixth, QSPM prioritized the alternatives. Panelists first rated the importance of each validated SWOT factor on a 1-4 scale and then assigned an Attractiveness Score (AS) from 1 (not attractive) to 4 (highly attractive) to each applicable factor-strategy pair. For strategy j , the comparative score followed $TAS_j = \sum(w_i \times AS_{ij})$, where w_i is the panel-aggregated importance weight of factor i . Ratings from the seven assessors were aggregated before ranking. Because the thesis reports panel-aggregate TAS values rather than a normalized 1-4 QSPM index, the absolute totals should be interpreted comparatively within this decision set. A higher TAS indicates that an alternative responds more strongly to the factors the panel considered important; it does not represent a probability of success.

Interpretation considered both rank and strategic interdependence. A small TAS difference was not treated as proof that one alternative should displace another when the two addressed different stages of the same causal chain. Instead, alternatives were grouped into stabilization, capability integration, and growth. The ranking identified resource-allocation emphasis within and across those groups. This portfolio reading is important because lean controls depend on reliable digital and human capabilities, while project

diversification depends on financial capacity and risk-screening discipline. The final roadmap therefore uses QSPM as a prioritization input and the BSC as the execution logic.

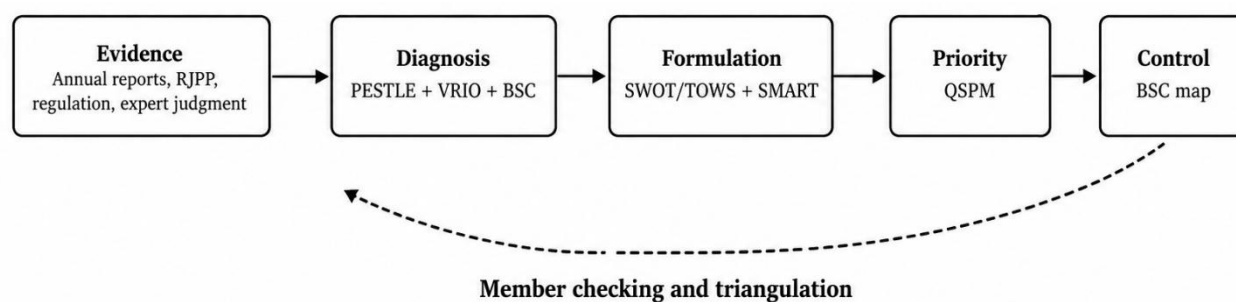


Figure 1. Integrated Research and Decision Sequence

Source: Authors' compilation

3.4. Validity and Ethical Considerations

Validity was strengthened through source triangulation, role triangulation, and member checking. PESTLE interpretations were reviewed in a focus group; VRIO results were returned to the three directors; and the integrated SWOT and strategy formulations were confirmed by internal and external panel members. Individual QSPM questionnaires were completed separately to reduce conformity pressure before scores were aggregated. The article reports participants by role rather than name and does not disclose individual ratings. These safeguards support interpretive credibility while acknowledging that senior-expert judgment remains context dependent.

An evidence chain was maintained from source material to factor classification, validation, strategy formulation, and ranking. This traceability was especially important where the same observation could plausibly enter more than one framework. For example, weak cash conversion was recorded as a BSC financial gap, while the capability to manage liquidity and receivables was assessed under VRIO; the two were linked but not counted as independent evidence of the same construct. Apparent contradictions were retained for interpretation rather than averaged away. A large order book alongside falling cash, for instance, was treated as evidence that volume and quality of backlog must be separated. This audit logic reduces double counting and allows future reviewers to update a factor when its underlying evidence changes.

4. Results and Discussion

4.1. Research Results

4.1.1. Corporate Performance Deterioration

WIKA's financial trajectory shows a sharp break between the pre-pandemic position and the condition at the end of 2023. Revenue fell by 39.2% in 2020 relative to 2019 and had recovered to only 82.8% of the 2019 level by 2023. Net income declined from IDR 2.621 trillion in 2019 to IDR 0.322 trillion in 2020, was nearly eliminated in 2022, and became a loss of IDR 7.825 trillion in 2023. The 2023 net margin was -34.7%, compared with 9.6% in 2019. The pattern confirms that post-pandemic revenue recovery did not translate into earnings recovery. Rising liabilities (31.5%) and falling cash (68.8%) over the same period are consistent with financing cost, project losses, and slowing cash conversion absorbing the benefit of higher activity, though the consolidated data used here cannot isolate the relative weight of each driver; this is noted as a limitation in Section 5.

Liquidity and capitalization moved in the same adverse direction. Cash and cash equivalents fell 68.8% between 2019 and 2023. Total liabilities increased by 31.5%, while equity fell by 50.2%, narrowing the buffer available to absorb project volatility. Order book rose to IDR 108.023 trillion in 2021, partly because delayed projects remained unconverted, then declined 25.3% to IDR 80.650 trillion in 2023. The coexistence of a large order book and deteriorating cash demonstrates why contract volume alone is an insufficient health indicator. Turnaround decisions must emphasize order quality, margin, payment security, and cash conversion rather

than maximizing nominal backlog. This interpretation is consistent with sector findings that debt and efficiency differentiate the financial risk of Indonesian construction SOEs (Wibowo et al., 2024).

As discussed in the following section, Table 1 (shown below) summarizes WIKA's selected consolidated financial indicators from 2019 to 2023.

Table 1. Selected Consolidated Financial Indicators of WIKA, 2019-2023

Year	Revenue	Net income	Assets	Liabilities	Equity	Cash	Order book
2019	27.213	2.621	62.111	42.895	19.216	10.347	81.383
2020	16.536	0.322	68.109	51.452	16.657	14.952	97.714
2021	17.810	0.214	69.386	51.951	17.435	6.984	108.023
2022	21.481	0.013	75.070	57.576	17.493	5.670	91.976
2023	22.530	-7.825	65.981	56.410	9.572	3.233	80.650

Note: Values are IDR trillion

Source: Authors' compilation based on PT Wijaya Karya (Persero) Tbk. Annual Reports

4.1.2. External Environment: PESTLE

The PESTLE analysis identified a mixed external environment. Politically, national strategic projects provide demand visibility and reputational opportunities, but concentration in government-sponsored work creates exposure to budget reprioritization, leadership transitions, and slow tender or payment processes. The panel therefore treated public-private partnerships, private investment, and selected international projects as diversification mechanisms rather than as an abandonment of WIKA's public mandate. The core issue is portfolio balance: government projects can remain strategically important, but their liquidity and policy risks should not dominate the total portfolio.

Economically, input-price volatility, exchange-rate exposure, high borrowing costs, and slower investment intensify pressure on project margins and cash. These threats are reinforced when fixed-price contracts, delayed variation approval, or long receivable cycles prevent timely recovery of cost escalation. The same environment creates an incentive to redesign treasury, contract, and financing practices, including syndication and eligible green-financing instruments. Social and technological factors are similarly interdependent. Digital tools can improve productivity and visibility, but uneven literacy and resistance among field and managerial personnel can convert technology investment into another source of cost. This finding is consistent with the construction digital-transformation literature, which stresses leadership, skills, standards, and organizational change in addition to software adoption (Rinchen et al., 2024; Samuelson & Stehn, 2023).

Legal and environmental developments are both control requirements and market signals. More demanding governance, disclosure, procurement, licensing, cyber-security, and environmental standards increase the cost of noncompliance and may delay projects when documentation is fragmented. Conversely, integrated digital permitting, stronger audit trails, and verified green-construction capability can reduce risk and differentiate bids. The panel therefore did not treat compliance as a purely defensive expense. Properly integrated with project data and design capability, it becomes an enabler for certified green projects, private partners, and financing sources that value transparency and sustainability.

Cross-impact among the six dimensions is more important than any factor in isolation. A policy change can alter the timing of public expenditure; delayed expenditure can tighten cash; tight cash can postpone technology and workforce investment; and weaker control capability can then raise legal or environmental exposure. The reverse sequence is also possible: interoperable project data can strengthen compliance, accelerate billing evidence, and improve the credibility of green-financing proposals. Accordingly, the PESTLE findings should be translated into linked scenarios rather than six separate action lists. At a minimum, portfolio reviews should test a base case, a funding-delay case, and a combined cost-escalation and payment-delay case, with explicit thresholds for bid acceptance, liquidity reserves, and partner participation. This makes environmental scanning actionable within project and treasury decisions.

Given the interdependence among the six PESTLE dimensions, Table 2 below synthesizes the validated findings and distills them into specific turnaround actions for WIKA.

Table 2. Validated PESTLE Findings and Turnaround Implications

Dimension	Key condition	Opportunity	Threat	Turnaround implication
Political	PSN demand and public mandate	Continuing infrastructure pipeline; PPP	Policy shifts; slow tender/payment	Rebalance portfolio and apply policy-risk scenarios
Economic	High funding and input costs	Alternative and green finance; treasury innovation	Liquidity pressure; price escalation; default risk	Strengthen cash, hedging, contract, and cost controls
Social	Changing work and skill requirements	Digital training; cross-sector certification	Resistance; low field digital literacy	Link technology rollout to change and workforce plans
Technological	BIM, ERP, automation, real-time data	Efficiency, transparency, faster decisions	Uneven readiness; cyber risk; stranded investment	Integrate systems, data governance, and adoption KPIs
Legal	More demanding governance and licensing	Digital permitting and stronger audit trail	Overlapping rules; administrative delays	Embed compliance in project workflows
Environmental	Green standards and climate expectations	Certified green projects and financing access	Adaptation cost; sanctions; reputational loss	Build verifiable green-delivery capability

Source: Authors' analysis (2026)

4.1.3. Internal Resources: VRIO

The VRIO assessment shows that WIKA's most defensible resources are intangible. Corporate reputation, brand value, and accumulated organizational knowledge and innovation met all four criteria and were classified as sources of sustained competitive advantage. This classification reflects the panel's assessment of the underlying capability, cultivated client relationships, project track record, and institutional knowledge, rather than an assumption that reputation and brand were unaffected by WIKA's 2023 financial distress. A net loss of IDR 7.825 trillion, a 50.2% contraction in equity, and public debt restructuring plausibly carry some reputational cost, particularly among creditors, capital-market participants, and prospective private partners, even where longstanding client and government relationships remain intact. The VRIO panel's rating should therefore be read as an assessment of the resource's underlying durability and potential for recovery, not as evidence that reputational value was undiminished during the distress period; this distinction is treated further as a limitation. Strategic networks were valuable, rare, and organized, but not judged costly to imitate, producing a temporary advantage. These resources matter because they support access to clients, consortium partners, policy stakeholders, specialist knowledge, and complex-project credibility. In a turnaround, they can shorten the path to selective new revenue if management protects trust and avoids bids that transfer excessive risk to the company.

Physical scale, project experience, and basic professional competence remained valuable but were not rare, so they provided parity rather than differentiation. More importantly, several valuable resources were not sufficiently organized to capture value. Digital processes, ERP integration, artificial intelligence, project and supply-chain monitoring, talent pipelines, and change readiness were uneven across units. The financial-resource dimension was the weakest: liquidity, leverage, receivable quality, and funding flexibility constrained the deployment of otherwise strong capabilities. The result supports a conversion thesis for turnaround: WIKA does not need to build its strategic identity from zero, but it must reorganize and financially discipline the assets it already possesses.

This pattern also clarifies why technology appeared simultaneously as a weakness and an opportunity. Technology was valuable, but fragmented implementation prevented it from becoming rare or difficult to imitate. Competitive advantage would come not from owning commonly available ERP or BIM software, but from embedding interoperable data, decision rules, trained people, and project-control routines throughout

the group. That interpretation aligns with research describing digital transformation as capability-based strategic renewal rather than isolated automation (Plekhanov et al., 2023; Warner & Wäger, 2019).

The organization criterion deserves particular attention because a resource can be valuable and scarce while still failing to produce cash or resilience. For WIKA, organization means more than formal ownership: it includes decision rights, incentives, portfolio gates, information quality, and accountability across the parent and operating units. The finding also cautions against assuming that asset divestment will automatically correct financial weakness. Disposal may release liquidity, but it can destroy future option value if assets are sold without reference to strategic fit, utilization potential, or replacement cost. A resource-by-resource response is therefore required: reconfigure knowledge and digital capability, govern networks and brand exposure, invest selectively in critical talent, partner where complementary capability is missing, and monetize genuinely nonstrategic assets.

The foregoing VRIO findings are consolidated in Table 3 below, which maps each resource against the four VRIO criteria and derives the corresponding strategic implication.

Table 3. Condensed VRIO Assessment of Strategic Resources

Resource/capability	V	R	I	O	Implication	Strategic interpretation
Corporate reputation and image	Y	Y	Y	Y	Sustained advantage	Protect trust; use for selective acquisition
Brand value	Y	Y	Y	Y	Sustained advantage	Differentiate green/digital offers
Organizational knowledge and innovation	Y	Y	Y	Y	Sustained advantage	Anchor lean and project renewal
Strategic networks	Y	Y	N	Y	Temporary advantage	Deepen partner governance and co-investment
Facilities, equipment, and project portfolio	Y	N	N	Y	Parity	Raise utilization and portfolio quality
Professional workforce capability	Y	N	N	Y	Parity	Close digital and leadership gaps
Liquidity and capital structure	Y	N	N	N	Turnaround weakness	Prioritize cash, leverage, and receivables
Digital process, ERP, BIM, and AI integration	Y	N	N	N	Turnaround weakness	Organize enterprise-wide data and adoption
Talent pipeline and change readiness	Y	N	N	N	Turnaround weakness	Build critical-role pipeline and change capacity

Source: Authors' analysis (2026)

4.1.4. Performance Gaps: Balanced Scorecard

The BSC evaluation confirmed that the decline was multidimensional. Financial targets were missed by a wide margin: 2023 revenue reached 75.1% of the IDR 30 trillion target, and the planned IDR 0.9 trillion net profit became a loss of IDR 7.825 trillion. Customer satisfaction was below target, and retention weakened as delays and competitive pressure affected service experience. Internal execution showed a mixed result. The company maintained the capacity to complete important national projects, yet the proportion of projects completed on schedule and the conversion of backlog remained below plan. Learning and growth also showed underinvestment: training hours and strategic innovations did not reach their targets.

These target-realization gaps are consistent with a learning-process-customer-financial pathway but do not establish it causally, given the study's cross-sectional design and the presence of alternative explanations (project mix, impairments, payment delays); the chain is treated here as a hypothesized pathway drawn from strategy-map logic (Kaplan & Norton, 1992), not a demonstrated mechanism. The BSC therefore becomes a bridge between strategy formulation and execution. It prevents the turnaround from being defined solely as debt restructuring and supports a sequence in which capability investment is tied to measurable process and financial outcomes. This use is consistent with recent BSC research that emphasizes causal coherence,

implementation involvement, and the balance between leading and lagging indicators (Kumar et al., 2024; Tawse & Tabesh, 2023).

Target-realization comparisons must nevertheless be interpreted carefully. Some indicators aggregate projects with different contractual risks, maturity, and measurement practices; a single corporate average can therefore conceal a small number of severely distressed contracts or units. Before the scorecard is used for incentives, WIKA should standardize each indicator's definition, owner, reporting frequency, data source, and assurance rule. Project timeliness, for example, should distinguish contractual completion, physical progress, and milestone acceptance, while digital adoption should measure decision use rather than login counts. The corporate BSC can then be cascaded to comparable project clusters, with exception reporting for high-risk contracts. This preserves strategic visibility without encouraging managers to optimize a headline metric at the expense of cash, quality, or claims recovery.

To translate this multidimensional diagnosis into measurable terms, Table 4 below presents the 2023 BSC gaps across all four perspectives.

Table 4. Selected 2023 Balanced Scorecard Gaps

Perspective	2023 indicator	Target	Realization	Assessment
Financial	Revenue (IDR tn)	30.0	22.53	Below target
Financial	Net income (IDR tn)	0.90	-7.825	Severe adverse gap
Customer	Customer satisfaction	85%	80%	Below target
Customer	New contracts (IDR tn)	85.1	73.9	Below target
Internal process	Projects completed on time	90%	~75%	Below target
Learning and growth	Training hours/employee	20	15	Below target
Learning and growth	Strategic innovations	4	2	Below target

Note: A tilde marks an approximate management-document value

Source: Authors' analysis based on PT Wijaya Karya (Persero) Tbk. 2023 Annual Report and 2020–2025 RJPP

4.1.5. Strategy Formulation and Prioritization

Integration of PESTLE, VRIO, and BSC produced eight strengths, twelve weaknesses, nine opportunities, and seven threats. The strength set was dominated by reputation, brand, strategic networks, innovation knowledge, workforce development, and complex-project experience. Weaknesses concentrated on liquidity, leverage, digital fragmentation, talent readiness, bureaucratic structure, underused assets, lower customer retention, backlog conversion, and dependence on government projects. Opportunities included continuing infrastructure demand, private and partnership financing, digital construction, green projects, workforce collaboration, and digital permitting. Threats covered policy change, price and funding volatility, payment risk, skill resistance, cyber risk, regulatory overlap, and environmental compliance.

TOWS converted these factors into sixteen SMART alternatives. Growth-oriented alternatives used WIKA's reputation and networks to acquire green and digital infrastructure, create partnerships, and diversify toward non-government projects. Capability-oriented alternatives accelerated ERP/BIM integration, digital certification, knowledge management, talent reform, and organizational agility. Stabilization alternatives strengthened lean cost control, asset utilization, compliance documentation, financial risk monitoring, and backlog verification. Each alternative specified a measurable horizon, such as 10% annual operating-cost reduction, 60% digital-construction certification, three green or digital projects per year, or a debt-to-equity ratio below 2.5 times within three years.

The mapping of diagnostic logic to strategy emphasis for each TOWS family is summarized in Table 5 below.

Table 5. Integrated TOWS Strategy Families

TOWS Family	Diagnostic Logic	Strategy Emphasis
Strength-opportunity	Use reputation, brand, networks, innovation, and project experience to capture green/digital, private, and partnership demand	Selective green/digital acquisition; strategic partnerships; market diversification; verified green positioning

Weakness-opportunity	Use digital, governance, financing, and collaboration opportunities to remedy capability and financial gaps	Digital capability and certification; agile organization and talent pipeline; cash and financing reform; retention and backlog recovery
Strength-threat	Use knowledge, culture, networks, and execution experience to reduce price, policy, legal, and capability threats	Lean cost resilience; digital compliance; non-government portfolio expansion; compliance and digital-literacy training
Weakness-threat	Reduce weaknesses that amplify liquidity, cyber, regulatory, and project risks	Knowledge management; strict cost and asset control; administrative simplification; financial-risk and backlog monitoring

Note: The complete TOWS exercise generated sixteen SMART alternatives; their priorities are reported in Table 6.

Source: Authors' analysis (2026)

QSPM placed innovation-led lean management first with a TAS of 41.58. The result indicates that cost resilience should use WIKI's innovation knowledge, corporate culture, and strategic-project experience, rather than rely on indiscriminate expenditure cuts. The second-ranked alternative, acquisition of green and digital infrastructure projects (40.84), shows that stabilization must be paired with selective growth. Financial risk and backlog monitoring ranked third (40.78), followed by strict cost control and asset utilization (40.65), and accelerated process digitalization (40.53). The narrow spread among these five scores suggests that they form a mutually reinforcing priority portfolio rather than five fully substitutable choices.

The remaining rankings reinforce that conclusion. Digital compliance and project documentation, strategic partnerships, workforce digitalization, and knowledge management all scored strongly. Purely symbolic green positioning ranked below strategies that directly affect cash, cost, risk, capability, or project acquisition. This does not make certification unimportant; it means that certification should follow operational green capability and commercially viable projects. Similarly, debt restructuring and new financing cannot substitute for project-economic discipline. The panel favored strategies that combine immediate financial relevance with a credible path to future competitiveness.

The score distribution also supports a tiered interpretation. The top five alternatives constitute Tier 1 because they directly connect cost, cash, risk visibility, digital process, and selective growth. Ranks six through nine form Tier 2 enabling initiatives covering compliance integration, partnerships, workforce certification, and knowledge transfer. The remaining alternatives are Tier 3 conditional initiatives that should be activated when their financial, capability, or market prerequisites are met. Tiering does not discard the lower-ranked options; it prevents simultaneous launch of sixteen programs from diluting scarce managerial attention. It also makes dependencies explicit: partnership and portfolio diversification need reliable risk data, while green certification needs proven delivery routines and qualified personnel. The score distribution that supports the three-tier classification is detailed in Table 6 below, which ranks all sixteen alternatives from highest to lowest TAS.

Table 6. QSPM Ranking of Corporate Turnaround Alternatives

Rank	Type	Prioritized Strategy and SMART Target	TAS
1	ST	Innovation-led lean management; reduce operating cost 10% annually through 2028	41.58
2	SO	Acquire at least three green/digital infrastructure projects annually through 2028	40.84
3	WT	Verify strategic backlog and strengthen financial-risk monitoring by 2026	40.78
4	WT	Strict cost control and asset optimization; cut cost 10% annually and raise utilization 20% by 2028	40.65
5	SO	Implement at least two integrated digital systems annually and certify 60% of relevant personnel by 2027	40.53
6	ST	Digitize and document 100% of strategic projects for compliance by 2026	40.16
7	SO	Establish at least five cross-sector strategic partnerships within two years	40.10
8	WO	Digitize every business unit and certify 60% of personnel in digital construction by 2027	39.73

9	WT	Run three cross-functional knowledge programs and increase digital-talent retention 15% annually through 2028	39.55
10	ST	Increase non-government project contribution 30% within three years	38.56
11	WO	Create an agile structure and ready successors for all critical positions by 2026	38.26
12	ST	Train 70% of frontline personnel in compliance, digital literacy, and project governance by 2027	37.82
13	WO	Use alternative financing and reduce debt-to-equity below 2.5x within three years	37.64
14	WO	Increase customer retention 15% annually and backlog 25% through 2028	37.52
15	WT	Digitize core administration and shorten tender cycle 25% within three years	37.39
16	SO	Obtain at least one recognized green-project certification or award annually through 2028	36.10

Note. TAS values are panel-aggregate comparative scores. SO = strength-opportunity; WO = weakness-opportunity; ST = strength-threat; WT = weakness-threat.

Source: Authors' analysis (2026)

4.2. Discussion

The first substantive insight is that WIKA's turnaround should begin with operational economics, not with growth volume. The highest-ranked strategy combines lean management with innovation and project experience. This differs from conventional retrenchment because it targets waste, forecasting error, rework, idle assets, procurement leakage, and weak workflow rather than applying uniform cuts. Lean construction can improve coordination and resource reliability (Ansah et al., 2016; Wu et al., 2019), but the financial benefit depends on linking field measures to estimate-at-completion, cash-flow, procurement, and change-order controls. A 10% annual operating-cost target is meaningful only if baseline definitions, project segmentation, and value-protection rules are established.

The second insight is that stabilization and strategic renewal must run in parallel. WIKA's reputation, brand, networks, and organizational knowledge retain value despite the financial decline. Using them to win better-quality green and digital projects can improve revenue mix and reduce policy concentration. However, the bidding gate must incorporate cash profile, risk allocation, client payment capacity, and expected margin. Otherwise, brand strength may generate more backlog without generating cash. The finding extends the resource-based view by showing that a valuable intangible asset can contribute to turnaround only when the organization protects it from financially destructive deployment.

Third, financial risk monitoring is a strategic capability rather than an accounting afterthought. The third-ranked alternative calls for verification of strategic backlog and collaboration with financial institutions and independent assurance providers. An integrated control room should connect contract terms, billing milestones, receivables, cost-to-complete, claims, guarantees, and funding needs. Such visibility can support early corrective action, renegotiation, selective disposal, or partner engagement. It also improves the credibility of management information to creditors, investors, and the state owner. This result is consistent with construction research that treats financial risk as an interacting system of project, macroeconomic, and financing exposures (Shibani et al., 2024).

Fourth, digital transformation must be governed as an enterprise operating model. ERP, BIM, digital permitting, supply-chain systems, and dashboards create value when they use consistent data definitions and are embedded in decision routines. The VRIO results show that WIKA already recognizes the value of these systems but has not organized them uniformly. The strategic target of implementing at least two integrated systems per year and certifying 60% of relevant personnel should therefore be accompanied by process ownership, interoperability standards, cyber controls, and adoption measures. Digital adoption research similarly finds that strategic alignment and organizational readiness determine whether technology improves construction performance (Oesterreich & Teuteberg, 2016; Rinchen et al., 2024).

Finally, the integrated ranking offers a governance response to the common criticism that SWOT produces long, subjective lists. VRIO constrained the internal assessment, PESTLE grounded the external assessment, BSC added performance evidence, and QSPM required panelists to compare alternatives against the same factors. The method does not eliminate judgment, but it makes judgment visible and traceable. This is important in an SOE, where strategic choices must be defensible to multiple principals. The framework can

be updated as financial data, policy priorities, and project conditions change, turning the QSPM from a one-time ranking into a repeatable portfolio-governance process.

A practical synthesis is to govern projects through three concurrent portfolios: rescue, repair, and renewal. The rescue portfolio contains contracts that require immediate cash protection, claim acceleration, renegotiation, partner intervention, or an orderly exit. The repair portfolio contains viable projects and shared services whose economics can improve through lean controls, asset redeployment, and integrated data. The renewal portfolio contains carefully screened green, digital, private, partnership, or international opportunities that can rebuild future earnings. Each portfolio requires different success measures and risk tolerances. Applying one growth target to all three would conceal value destruction in rescue cases and discourage capability investment in renewal cases. The three-portfolio structure turns the ranked strategies into explicit capital-allocation choices while retaining a coherent corporate direction.

The SOE setting adds a further governance challenge: commercial recovery must coexist with public-value obligations and stakeholder scrutiny. A project may be strategically important to the state yet unattractive under ordinary commercial thresholds. Such exceptions should not be hidden inside portfolio averages. They should be approved through a transparent mandate, with the public-service rationale, risk owner, funding or compensation mechanism, and performance obligations recorded explicitly. This distinction protects both the company and the state owner. It prevents commercially weak contracts from being misclassified as ordinary growth, while allowing management to demonstrate the resources required to deliver legitimate policy goals. Clear exception governance is therefore part of financial discipline, not a rejection of the enterprise's development role.

The ranking should also be read with explicit uncertainty. TAS values are products of factor weights and attractiveness judgments, and the differences among several leading alternatives are small. The scores therefore do not establish statistical superiority. Before a major capital commitment, management should recalculate the ranking under plausible changes in funding costs, project-payment risk, policy continuity, and digital-readiness assumptions. A strategy that remains in the leading tier across those scenarios is robust; one that changes sharply should be treated as contingent and supported by trigger conditions. The same principle applies after implementation begins. Realized cash conversion, margin, delivery, and adoption data should replace expert assumptions at scheduled review points. In this way, QSPM supplies a disciplined starting portfolio while the BSC supplies the evidence needed to learn, reweight, and reallocate.

4.2.1. Managerial Implications and Implementation Roadmap

Implementation should be organized as a staged portfolio with a single executive sponsor and a cross-functional turnaround office. During the first 12 months, management should establish a verified project and backlog baseline, deploy cash and cost-control routines, segment projects by value and risk, and set decision gates for bids and capital commitments. Key indicators should include operating cash conversion, receivable aging, forecast-at-completion accuracy, cost variance, claim realization, asset utilization, and the proportion of projects with independent risk review. These measures provide the financial and process discipline required before expansion.

During months 12-24, WIKA should integrate core project, finance, procurement, and compliance data; certify priority personnel in digital construction; strengthen the talent pipeline; and simplify approval layers. The relevant indicators are system adoption, data completeness, decision-cycle time, digital certification, critical-role coverage, procurement lead time, and reduction in rework. In parallel, the company should develop partnership and financing propositions for green and digital infrastructure. Selection must be based on risk-adjusted cash value rather than headline project size.

From months 24-48, management can scale the strongest green and digital offerings, increase the share of non-government revenue, and institutionalize external assurance over risk and sustainability claims. The BSC strategy map provides the control logic: learning and digital capability enable lean, integrated, and compliant processes; stronger processes improve delivery, customer retention, and selective project acquisition; and those outcomes improve margin, cash generation, leverage, and resilience. The board should review this causal chain quarterly, because a leading indicator without improvement in downstream outcomes signals that the assumed relationship or implementation design requires correction.

Governance cadence should match the speed of the risks. A turnaround office should review project cash, forecast-at-completion, claims, and threshold breaches monthly; the executive committee should decide cross-functional interventions and resource reallocations; and the board should review the portfolio and strategy map quarterly. Initiative owners should report realized financial and operational benefits against a verified baseline, not merely activities completed or systems installed. Where downstream benefits do not appear within a specified learning period, management should test the causal assumption and pause, redesign, or terminate the initiative. This closed-loop discipline is essential because turnaround programs often accumulate activity while failing to improve cash or risk.



Figure 2. Balanced Scorecard Causal Map for Turnaround Execution

Source: Authors' analysis (2026)

The figure 2 depicts the cause-and-effect chain from Learning and Growth investments through Internal Process and Customer improvements to Financial results. Each higher-level outcome follows only when the preceding capability and process measures improve, making the map a practical tool for sequencing turnaround initiatives.

To operationalize this causal logic, Table 7 below presents a three-horizon implementation roadmap with priority actions and core control indicators for each phase.

Table 7. Sequenced Implementation Roadmap

Horizon	Priority Actions	Core Control Indicators
0-12 months: Stabilize	Project/backlog verification; cash and lean cost control; risk-based bid and capital gates; receivable acceleration	Operating cash conversion; receivable aging; EAC accuracy; cost variance; claim realization; project risk review
12-24 months: Integrate	ERP-BIM-finance-procurement integration; digital certification; talent pipeline; approval simplification; partnership design	System adoption; data completeness; decision time; certification; critical-role coverage; rework; asset utilization
24-48 months: Scale	Green/digital portfolio growth; non-government diversification; strategic partnerships; external assurance; continuous BSC review	Risk-adjusted margin; non-government revenue; customer retention; cash generation; leverage; verified sustainability outcomes

Source: Authors' analysis (2026)

5. Conclusion

This study shows that WIKA's decline during 2020-2023 resulted from the interaction of external volatility and internal conversion failures. The company retained strong intangible resources - reputation, brand, strategic relationships, and organizational knowledge - but liquidity pressure, leverage, fragmented digital systems, uneven talent readiness, underused assets, and dependence on government projects reduced its ability to convert those resources into performance. The integrated PESTLE-VRIO-BSC-SWOT/TOWS-QSPM analysis ranked innovation-led lean management, green and digital project acquisition, financial-risk and backlog monitoring, strict cost and asset control, and process digitalization as the leading priority

portfolio. The central managerial conclusion is that financial stabilization and capability renewal must be executed together: cost and cash discipline preserve viability, while selective digital and sustainable growth rebuilds competitiveness.

The study is limited to one SOE examined at the corporate-parent strategic governance level, a 2020-2023 analytical period, available corporate documents, and purposively selected senior participants. Consolidated outcomes support enterprise-level interpretation but not subsidiary-specific operational or technical conclusions. QSPM scores represent context-specific expert judgment and should be refreshed rather than treated as permanent coefficients. Future research can extend the series beyond 2023, compare several construction SOEs and private contractors, test the strategy map with project-level leading indicators, and examine whether prioritized initiatives improve cash conversion, margins, and risk-adjusted portfolio quality. Even with these limitations, the study provides a transparent, replicable structure for moving from multi-source diagnosis to sequenced turnaround decisions in a project-based state-owned enterprise.

Interpretation should also recognize three measurement limits. Panel aggregation can conceal disagreement, reported corporate indicators may apply different definitions across periods, and project-level distress can be obscured by consolidated values. These limits do not invalidate the prioritization, but they make transparent baselines, sensitivity review, and project-cluster reporting necessary conditions for use. Replication should preserve the integration logic while recalibrating factors, weights, and thresholds to the focal firm's mandate, portfolio, and financing environment.

The framework is therefore best treated as an adaptive management instrument rather than a fixed recovery blueprint. Its value lies in preserving a visible connection between evidence, strategic choice, ownership, and measurable outcomes. If later data contradict the assumed causal chain, the relevant factor weight, initiative design, or portfolio allocation should change. This learning orientation is particularly important in construction, where project risk, financing conditions, and policy priorities can shift faster than a formal corporate planning cycle.

An implementation study should prospectively register indicator definitions and intervention dates, then compare matched project clusters exposed to different rollout sequences. Monthly project-level data on cost variance, cash conversion, schedule reliability, rework, claims recovery, and digital adoption would permit interrupted time-series or difference-in-differences analysis, subject to adequate comparability. Qualitative follow-up with project teams and clients could explain why measured effects differ across contracts. Such a design would move beyond expert prioritization to test whether the proposed capability-process-customer-financial chain operates in practice and whether improvements persist after crisis governance is relaxed.

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