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Decision-Making Framework for Evaluating Outsourcing Strategies in Industrial Projects

Seyed Mohammad Amin Javid[1]*

1. Ph.D. Candidate, Department of Management, Faculty of Economics and Administrative Sciences, Ferdowsi University of Mashhad, Mashhad, Iran

*Correspondence: m.amin.javid@gmail.com

Abstract

The objective of this study was to develop a context-sensitive decision-making framework for evaluating outsourcing strategies in industrial projects, based on insights from industry professionals. This qualitative study employed a thematic approach to explore how outsourcing decisions are made within industrial project environments. Data were collected through in-depth, semi-structured interviews with 21 professionals involved in project management, procurement, and strategic planning in Tehran-based industrial companies. Participants were selected through purposive sampling, and interviews continued until theoretical saturation was reached. The interview transcripts were analyzed using NVivo software through an inductive thematic analysis process to extract key themes and patterns. The analysis revealed four major thematic categories influencing outsourcing decisions: (1) Strategic Evaluation Criteria (e.g., cost-benefit analysis, risk assessment, competitive positioning), (2) Organizational Readiness and Internal Capabilities (e.g., technological infrastructure, process maturity, decision-making structures), (3) Stakeholder Involvement and Communication (e.g., intra-organizational coordination, relationship management, risk communication), and (4) Post-Outsourcing Performance Management (e.g., KPI tracking, SLAs, knowledge retention). Participants emphasized the importance of aligning outsourcing strategies with business goals, ensuring internal capacity for integration, and maintaining relational continuity through performance monitoring and feedback loops. The study provides an empirically grounded framework for evaluating outsourcing strategies in industrial projects, highlighting the necessity of a systemic and multidimensional approach. The results suggest that effective outsourcing decisions depend not only on economic and operational logic but also on organizational maturity, stakeholder alignment, and adaptive performance management. These insights offer both theoretical advancement and practical guidance for organizations seeking to implement outsourcing strategically within complex industrial settings.

Keywords: Outsourcing Strategy, Industrial Projects, Decision-Making Framework, Organizational Readiness, Performance Management, Thematic Analysis, Stakeholder Engagement

1. Introduction

In the contemporary landscape of industrial development, outsourcing has emerged as a pivotal strategic tool for firms aiming to enhance competitiveness, operational efficiency, and flexibility in project execution. Particularly in large-scale industrial projects, where complexity, uncertainty, and resource constraints dominate, outsourcing decisions significantly influence project outcomes, stakeholder satisfaction, and organizational agility. Outsourcing is no longer restricted to cost-

reduction purposes; instead, it has evolved into a nuanced managerial decision encompassing risk management, innovation potential, strategic alignment, and long-term capability development (Alpago, 2022; Zhang et al., 2025).

The growing interdependence among supply chain actors and the rapid globalization of production networks have intensified the need for well-grounded outsourcing strategies. As industrial projects increasingly rely on third-party partners for specialized functions—ranging from design and procurement to information systems and logistics—the necessity for structured, evidence-based decision-making frameworks becomes evident (Skochylias & Skochylias, 2024; Wee et al., 2009). However, the effectiveness of outsourcing varies considerably across industries and contexts due to heterogeneous factors such as market conditions, organizational maturity, and stakeholder alignment (Sandhu et al., 2018). This inconsistency underscores the importance of understanding the multidimensional criteria and conditions under which outsourcing decisions are evaluated and executed.

Multiple studies have revealed that the success or failure of outsourcing initiatives is shaped not only by the economic logic of cost-saving but also by strategic variables such as core competency protection, supply risk assessment, regulatory constraints, and technological integration (Lai et al., 2022; Santa et al., 2023). Yet, there remains a lack of comprehensive and context-specific frameworks to guide project managers and decision-makers in evaluating outsourcing strategies tailored to industrial project settings. Much of the existing literature either focuses on general business process outsourcing or isolates specific dimensions such as vendor selection, overlooking the systemic nature of outsourcing evaluation in large, capital-intensive environments (Faraji et al., 2020; Hee et al., 2020).

From a strategic management perspective, outsourcing can be conceptualized as a dynamic interplay between organizational capabilities and environmental contingencies. The resource-based view (RBV) suggests that outsourcing should be pursued when external vendors offer superior capabilities that do not compromise the firm's strategic resources (Yao, 2015; Zhang et al., 2013). Simultaneously, transaction cost economics (TCE) emphasizes the need to balance transaction costs—such as monitoring, negotiation, and enforcement—against the benefits derived from market-based arrangements (Cui et al., 2011; Zhang et al., 2025). In this vein, recent research advocates for hybrid decision-making models that integrate both RBV and TCE perspectives to formulate high-performance outsourcing configurations (Zhang et al., 2025).

However, empirical studies specific to industrial project contexts—especially in developing economies—remain limited in number and scope. For instance, while the construction and manufacturing sectors in countries like China and Iran have witnessed a rise in project outsourcing, few studies have investigated how organizational readiness, regulatory frameworks, and stakeholder collaboration shape the decision-making process (Faraji et al., 2020; Lai et al., 2022; Zakharchenko et al., 2024). Moreover, issues such as capability gaps, cultural misalignment, technological incompatibility, and risk underestimation often lead to project delays, cost overruns, or underperformance, despite initially favorable outsourcing plans (Khidzir et al., 2014; M'Mbihi, 2015).

The significance of a decision-making framework is further accentuated in environments where projects are characterized by high uncertainty and resource volatility. According to (Alrawabdeh et al., 2023), outsourcing can serve as a mediating factor to manage fluctuating capacity demands and operational risks in complex industrial settings. This perspective is echoed by (Yunitarini, 2021), who stresses the importance of intelligence-based decision support systems for optimizing outsourcing decisions in production scenarios. Nevertheless, such systems can only be effectively deployed when the decision-making process is underpinned by a structured understanding of contextual variables, organizational dynamics, and relational interdependencies.

A critical dimension often overlooked in outsourcing strategy literature is the sociotechnical interplay that governs the implementation and evaluation of outsourcing initiatives. (Hassan et al., 2015) emphasizes that beyond the contractual and logistical aspects, project success hinges on the alignment of management strategies, knowledge sharing practices, and stakeholder engagement. The role of communication, trust, and adaptability becomes particularly salient when projects are cross-functional or span multiple organizational boundaries (Macharia, 2017; Santa et al., 2023). These human and relational factors are difficult to quantify but have demonstrable effects on the sustainability of outsourcing partnerships.

Furthermore, recent developments in digital transformation, particularly in the domains of IT outsourcing and supply chain automation, have redefined the boundaries of traditional outsourcing models. (Lin et al., 2016) and (Hee et al., 2020) highlight how technology-enabled outsourcing—such as cloud-based services or modular IT infrastructures—requires a re-evaluation of risk management practices, vendor performance monitoring, and capability retention strategies. Similarly, studies in freight and logistics outsourcing reveal that the integration of supply chain management systems is critical to unlocking the full benefits of outsourcing (Skochylias & Skochylias, 2024; Yun et al., 2009).

Within this dynamic and evolving context, a pressing need emerges for qualitative, field-based research that captures the lived experiences of professionals engaged in outsourcing decisions in industrial projects. As (Xiu & Ali, 2025) notes, there exists a persistent "gap" in understanding the real-time complexities and subjective evaluations that shape outsourcing strategies. This study aims to address that gap by constructing an empirically grounded decision-making framework based on the perceptions, strategies, and practices of industrial professionals in Tehran.

2. Methods and Materials

This study employed a qualitative research design with an exploratory approach, aiming to understand the decision-making dynamics involved in evaluating outsourcing strategies within industrial projects. The research was grounded in interpretive paradigms that prioritize the perspectives and lived experiences of key stakeholders. The participants were purposefully selected based on their direct involvement in industrial project management, procurement, or strategic decision-making related to outsourcing in Tehran-based companies.

A total of 21 individuals participated in the study, representing a diverse range of roles, including senior project managers, industrial engineers, procurement officers, and outsourcing consultants. Inclusion criteria required that participants have at least five years of professional experience in industrial projects with exposure to outsourcing decisions. The process of participant selection continued until theoretical saturation was achieved, meaning no new themes or categories were emerging from subsequent interviews.

Data were collected through in-depth, semi-structured interviews designed to capture rich, detailed insights into participants' experiences, perceptions, and evaluative criteria regarding outsourcing strategies. The interview guide was developed based on a review of relevant literature and expert consultation, covering core themes such as decision-making drivers, risk assessments, cost-benefit analyses, vendor selection, and post-outsourcing evaluations.

Each interview lasted between 45 to 75 minutes and was conducted face-to-face at a location chosen by the participant to ensure confidentiality and comfort. All interviews were audio-recorded with prior consent and transcribed verbatim for analysis. Ethical standards were upheld throughout the research process, including informed consent, voluntary participation, and the protection of participant identities.

Thematic analysis was conducted using NVivo software to systematically code and categorize the qualitative data. Transcripts were reviewed iteratively to identify initial codes, which were then grouped into broader categories and emergent themes. The coding process followed a combination of inductive and deductive approaches, allowing both theory-driven and data-driven insights to emerge.

To enhance the trustworthiness of the findings, strategies such as member checking, peer debriefing, and maintaining a detailed audit trail were employed. The constant comparative method was applied throughout the analysis to compare new data with existing codes and refine the emerging framework. Ultimately, the analysis led to the construction of a conceptual decision-making framework for evaluating outsourcing strategies specific to industrial project contexts.

3. Findings and Results

The study included 21 participants, all of whom were professionals involved in strategic decision-making or operational execution of outsourcing in industrial projects based in Tehran. Of these, 14 were male (66.7%) and 7 were female (33.3%). In terms of professional roles, 6 participants (28.6%) were senior project managers, 5 (23.8%) were procurement officers, 4 (19%) were outsourcing consultants, 3 (14.3%) were industrial engineers, and 3 (14.3%) held executive leadership positions (e.g., operations director or strategic planning head). The participants' years of experience ranged from 6 to 28 years, with a majority

(13 participants, 61.9%) having more than 10 years of professional experience. Additionally, 17 participants (81%) had direct involvement in evaluating or implementing outsourcing strategies within the last five years, ensuring the relevance and recency of their insights.

Table 1. Themes, Subthemes, and Concepts from Thematic Analysis

Category (Theme)	Subcategory (Subtheme)	Concepts (Open Codes)
1. Strategic Evaluation Criteria	Cost-Benefit Analysis	Initial cost estimation, long-term cost efficiency, hidden costs, return on investment, budget alignment
	Core vs. Non-Core Functions	Strategic importance, core competency focus, operational dependency, value chain relevance
	Risk Assessment	Operational risk, supplier reliability, legal liabilities, market volatility, contract enforcement
	Alignment with Business Goals	Strategic alignment, organizational fit, performance impact, scalability, long-term adaptability
	Competitive Advantage	Market positioning, innovation leverage, agility enhancement, access to specialized expertise
	Vendor Market Conditions	Supplier saturation, vendor credibility, competition intensity, market entry barriers
2. Organizational Readiness and Internal Capabilities	Human Resource Readiness	Skill gaps, resistance to change, training needs, knowledge transfer, internal expertise
	Technological Infrastructure	System compatibility, cybersecurity capability, IT integration, infrastructure adequacy
	Process Maturity	Standardized procedures, workflow documentation, quality assurance, operational clarity
	Decision-Making Structure	Centralized authority, stakeholder inclusion, approval layers, delegation efficiency
	Organizational Culture	Change acceptance, innovation mindset, outsourcing openness, team collaboration
3. Stakeholder Involvement and Communication	Intra-Organizational Coordination	Cross-functional alignment, interdepartmental communication, coordination frequency, role clarity
	Stakeholder Expectations	Performance benchmarks, delivery timelines, quality expectations, shared objectives
	Communication Mechanisms	Reporting structure, escalation routes, feedback protocols, communication transparency
	Relationship Management with Vendors	Trust-building, collaboration depth, performance reviews, dispute resolution
	Legal and Regulatory Engagement	Contract clarity, regulatory compliance, negotiation flexibility, legal oversight
	Feedback and Learning Loops	Lessons learned, retrospective meetings, institutional learning, adaptive feedback
	Risk Communication	Early warnings, risk logs, contingency planning, stakeholder briefings
4. Post-Outsourcing Performance Management	Monitoring and Evaluation Systems	KPI tracking, periodic performance reviews, benchmarking, real-time dashboards
	Service-Level Agreements (SLAs)	SLA design, enforcement processes, penalty clauses, compliance audits
	Adaptability to Change	Flexibility clauses, renegotiation protocols, crisis handling, change responsiveness
	Knowledge Retention	Documentation practices, internal learning programs, onboarding procedures, institutional memory
	Value Realization	Outcome tracking, value delivery verification, stakeholder satisfaction, benefit measurement

Theme 1: Strategic Evaluation Criteria

Cost-Benefit Analysis: Participants consistently emphasized that economic rationality plays a primary role in outsourcing decisions. The evaluation involves not only initial cost savings but also long-term cost efficiency and return on investment. One senior project manager noted, *"Sometimes the upfront cost looks low, but we realize later that the maintenance and coordination costs outweigh the benefits."* Concepts like budget alignment and lifecycle costs were also frequently mentioned, with participants stressing the importance of examining hidden expenses across project phases.

Core vs. Non-Core Functions: A recurrent idea was the strategic separation of core and non-core functions. Interviewees indicated that outsourcing should primarily target non-core areas that do not directly impact the company's competitive advantage. As one consultant stated, *"When you outsource something tied to your core identity, you risk losing control over*

your market value." Respondents referred to criteria such as operational dependency and the function's position within the value chain to assess outsourcing appropriateness.

Risk Assessment: Risk emerged as a crucial dimension in decision-making, especially in relation to supplier reliability and legal liabilities. Participants voiced concerns over data confidentiality, vendor default, and unforeseen market shifts. For example, one engineer mentioned, *"We had a case where the vendor suddenly shut down, and the recovery cost was huge."* Concepts such as operational risk, contract enforcement, and volatility analysis were central to this subtheme.

Alignment with Business Goals: Several interviewees described the need for outsourcing strategies to reflect broader organizational goals, including scalability, long-term adaptability, and performance integration. One participant explained, *"An outsourcing plan must grow with us—otherwise, it becomes a bottleneck."* Themes like strategic alignment and organizational fit highlighted the importance of harmonizing external partnerships with internal objectives.

Competitive Advantage: Some respondents indicated that outsourcing could serve as a tool to enhance competitiveness by enabling access to innovation and specialized expertise. One interviewee noted, *"By outsourcing advanced analytics, we outpaced our competitors who tried to build it all in-house."* The underlying concepts included agility, innovation leverage, and market positioning.

Vendor Market Conditions: The maturity and saturation of the vendor market significantly influenced outsourcing strategies. Participants assessed supplier availability, entry barriers, and vendor credibility. *"We needed to be sure the market wasn't monopolized,"* a procurement officer observed. Others stressed the risk of being overly dependent on a narrow supplier base.

Theme 2: Organizational Readiness and Internal Capabilities

Human Resource Readiness: Many participants stressed the internal workforce's readiness as a gatekeeper to successful outsourcing. The discussion focused on existing skill gaps, staff resistance, and the organization's ability to manage knowledge transfer. One HR manager shared, *"We underestimated how much training our team needed to interact with the new vendor efficiently."*

Technological Infrastructure: Participants pointed out that technological compatibility and cybersecurity are key concerns. Inadequate IT systems or poor integration capability can severely hinder outsourcing outcomes. One participant noted, *"Our systems couldn't talk to theirs; we had to spend months fixing middleware issues."* System compatibility and infrastructure adequacy were dominant codes in this area.

Process Maturity: Several respondents referred to the importance of having clearly defined internal processes before outsourcing. One operations lead explained, *"If you don't have your process documented, you can't expect the vendor to deliver consistently."* This subtheme revolved around standardized procedures, documentation rigor, and internal quality controls.

Decision-Making Structure: Organizational decision-making emerged as a facilitator or inhibitor of outsourcing implementation. Some participants criticized centralized systems for creating bottlenecks, while others favored cross-functional collaboration. *"Too many layers of approval killed our speed,"* one project director stated. Open codes here included authority delegation and stakeholder involvement.

Organizational Culture: Culture played a subtle yet pervasive role. Participants highlighted the need for a culture of openness to external collaboration and adaptability. *"Outsourcing won't work in a company that sees outsiders as threats,"* remarked one senior executive. Codes related to change readiness and internal cohesion were frequently coded under this subtheme.

Theme 3: Stakeholder Involvement and Communication

Intra-Organizational Coordination: Interviewees consistently mentioned the necessity of strong internal coordination before and during outsourcing. *"Our departments didn't talk to each other—each had different expectations from the vendor,"* one respondent admitted. The analysis revealed themes such as role clarity, coordination frequency, and internal alignment.

Stakeholder Expectations: Discrepancies between what internal and external stakeholders expect can derail outsourcing efforts. Many participants discussed the challenge of aligning goals, quality benchmarks, and timelines. *"Our top management wanted cost savings, while the users wanted speed and flexibility,"* one engineer shared.

Communication Mechanisms: Formal and informal communication channels were cited as critical success factors. Participants stressed the importance of clearly defined reporting structures, escalation protocols, and regular updates. *"Once we set up a bi-weekly vendor check-in, issues got resolved much faster,"* one project manager recalled.

Relationship Management with Vendors: Long-term relationship building was highlighted as more effective than purely transactional outsourcing. *"You need to build trust—vendors are more responsive when they feel like partners, not tools,"* said a procurement lead. Codes such as performance review cycles, trust-building, and conflict resolution populated this subtheme.

Legal and Regulatory Engagement: Compliance and contractual clarity were recurring themes. Participants emphasized the need for thorough legal vetting and ongoing regulatory consultation. One legal officer warned, *"We had a contract clause mismatch that cost us six months in arbitration."*

Feedback and Learning Loops: Participants noted that organizations often fail to institutionalize learnings from outsourcing experiences. *"Every project had lessons, but we never documented them properly,"* one interviewee reflected. Codes here included retrospective sessions and experience sharing.

Risk Communication: Timely risk reporting and contingency planning were cited as necessary to avoid project disruption. *"It wasn't the risk itself, but our delay in acting on it that caused real damage,"* a quality assurance officer observed.

Theme 4: Post-Outsourcing Performance Management

Monitoring and Evaluation Systems: Participants highlighted the importance of continuous monitoring through well-defined KPIs and dashboards. *"Without solid metrics, we were flying blind,"* one project analyst commented. Automated systems and benchmarking were also commonly referenced.

Service-Level Agreements (SLAs): Well-structured SLAs were described as essential tools for managing expectations and ensuring accountability. *"The SLA was our backbone; it clarified who's responsible for what,"* said a service coordinator. Codes included enforcement mechanisms, penalties, and incentives.

Adaptability to Change: The need for flexibility within contracts and relationships was emphasized. One participant noted, *"What works today might not work in six months—we need built-in renegotiation points."* Adaptability, flexibility clauses, and crisis protocols formed the core codes here.

Knowledge Retention: Concerns about losing organizational knowledge when outsourcing were prevalent. *"We outsourced support but forgot to document the know-how—we had to relearn it from scratch later,"* shared a participant. Codes included documentation practices and internal learning systems.

Value Realization: Ultimately, participants assessed outsourcing success based on the value delivered relative to expectations. *"If the business units don't feel the benefit, then what's the point?"* stated a senior executive. Outcome tracking and stakeholder satisfaction were key concepts coded in this subtheme.

4. Discussion and Conclusion

The findings of this study revealed a multifaceted decision-making framework for evaluating outsourcing strategies in industrial projects, grounded in the perspectives of 21 professionals from Tehran's industrial sector. The thematic analysis yielded four main domains: strategic evaluation criteria, organizational readiness and internal capabilities, stakeholder involvement and communication, and post-outsourcing performance management. Each of these themes encompasses a range of practical sub-dimensions and conceptual concerns that, when integrated, form a context-sensitive approach to outsourcing decision-making. These results support and extend prior research by highlighting the complexity, contingency, and contextuality inherent in outsourcing strategy within industrial project environments.

One of the most prominent themes was the role of strategic evaluation criteria, particularly in cost-benefit analysis, core vs. non-core function distinction, and alignment with broader business goals. Participants emphasized that outsourcing decisions often begin with financial logic but ultimately depend on their strategic implications—an observation aligned with prior findings by (Alpago, 2022), who emphasized the need to evaluate outsourcing not merely as a cost-saving mechanism but as a strategy for optimizing resource allocation in a globalized production process. Similarly, the emphasis on distinguishing core from non-core functions echoes the framework proposed by (Zhang et al., 2025), which argues that outsourcing must be selectively applied to avoid eroding core competencies and compromising competitive positioning. This strategic filtering process reflects a hybrid logic that balances internal capabilities with market offerings, aligning with both the resource-based view and transaction cost perspectives.

Risk assessment also featured prominently in participants' decision-making processes, especially concerns related to legal liabilities, supplier reliability, and market volatility. These findings parallel those of (Khidzir et al., 2014), who highlighted

that the vulnerability of ICT outsourcing projects is often underestimated, leading to downstream operational failures. In industrial projects, where scale and capital intensity amplify risk, such concerns are even more critical. Participants in this study confirmed that thorough pre-contractual evaluations, scenario planning, and risk forecasting are necessary preconditions for outsourcing success. (Cui et al., 2011) supports this by demonstrating how software project risk management in Japan requires multi-layered stakeholder coordination and preventive controls—practices that could be adapted to industrial projects through contractual frameworks and vendor screening mechanisms.

The second major theme, organizational readiness and internal capabilities, highlighted the pivotal role of internal maturity, particularly in technological infrastructure, decision-making structures, and cultural attitudes. This is consistent with (Faraji et al., 2020), who noted that the effectiveness of outsourcing strategies in major Iranian construction firms was highly contingent upon the maturity of internal processes and the organizational system for vendor evaluation. Participants in our study echoed these insights, often citing fragmented IT systems, lack of standard operating procedures, and siloed organizational culture as barriers to successful outsourcing. These observations reinforce the idea that outsourcing is not a substitute for internal capacity, but a strategy that requires an operational and cultural foundation to be effective.

The relevance of technological infrastructure and integration capabilities further aligns with research on e-commerce and IT outsourcing in hospital environments by (Lin et al., 2016), who argued that system compatibility and data security considerations are often neglected until late stages, resulting in implementation delays. Similarly, the findings of (Hee et al., 2020) emphasize that digital transformation efforts necessitate cross-departmental technological literacy and integration protocols, supporting our participants' views that technology-readiness must precede vendor engagement. A participant in our study noted, *"We had the budget and the vendor, but not the IT architecture to support the project timeline."* This quote encapsulates a key insight: that technological and procedural maturity are not supplementary, but foundational, to outsourcing efficacy.

The third theme, stakeholder involvement and communication, underscored the social and relational dynamics underlying outsourcing decisions. Subthemes such as intra-organizational coordination, stakeholder expectation alignment, and vendor relationship management emerged as critical, non-technical success factors. These findings resonate with the study by (Santa et al., 2023), which demonstrated that quality and innovation outcomes in the hotel sector are strongly mediated by effective outsourcing relationships and strategic communication. Similarly, (Hassan et al., 2015) emphasized that successful outsourcing depends as much on relational trust and knowledge transfer mechanisms as on contractual clarity. Our study adds qualitative depth to these claims, illustrating that communication breakdowns—both internal and external—can derail outsourcing projects despite sound technical planning.

Moreover, participants in our study described feedback loops, transparency, and risk communication as essential mechanisms to sustain adaptive outsourcing relationships. These findings reinforce those of (Macharia, 2017), who showed that logistics outsourcing in Kenya's oil and gas sector required sustained inter-organizational learning and performance reviews to maintain alignment. Additionally, (Skochylias & Skochylias, 2024) argued that in freight transport, the coordination between supply chain actors must be continuous and data-driven—a practice echoed by our participants who valued KPIs, automated dashboards, and vendor scorecards as essential monitoring tools. Thus, performance communication not only builds trust but also institutionalizes learning and drives continuous improvement.

The fourth theme, post-outsourcing performance management, emphasized the importance of evaluation systems, SLAs, adaptability, and knowledge retention. Participants widely agreed that without proper performance metrics and post-contract management, outsourcing strategies become directionless and reactive. (Sandhu et al., 2018) critically examined this issue, warning that outsourcing may fail not because of flawed strategy but due to poor follow-up and evaluation mechanisms. Our findings support this argument, especially in regard to value realization and stakeholder satisfaction. Furthermore, the insights of (Yun et al., 2009) on IT risk management in banks resonate with our findings on adaptability and renegotiation, where flexibility clauses and real-time issue resolution were deemed essential to ensure outsourcing resilience.

A particularly novel insight from our study is the importance of organizational learning and knowledge retention post-outsourcing. Participants described situations where critical knowledge was lost or failed to be transferred back into the organization, leading to repeated mistakes and performance gaps. This aligns with (Yunitarini, 2021), who proposed that

outsourcing frameworks must integrate decision support systems that preserve institutional knowledge while outsourcing execution. Our study contributes additional evidence that such systems must not only support initial decision-making but extend across the outsourcing lifecycle to retain expertise and ensure strategic continuity.

The interplay between these four themes suggests that outsourcing in industrial projects cannot be understood in isolation but must be approached as a dynamic, systemic process. This study confirms the assertion by (Zakharchenko et al., 2024) that outsourcing, particularly in transitional economies like Iran or Ukraine, requires organizational structures that are capable of both managing external engagements and internal transformation. It also supports (Alrawabdeh et al., 2023), who stressed that outsourcing can mediate the relationship between operations management and capacity expansion—but only when embedded within a holistic strategy.

While this study offers valuable insights into outsourcing decision-making in industrial projects, it is not without limitations. First, the research was geographically limited to Tehran, which may constrain the generalizability of the findings to other regions with different institutional or market conditions. Second, although theoretical saturation was achieved, the sample size of 21 participants might not capture all variations of outsourcing practices across industries. Third, the study focused on participant perceptions and self-reported experiences, which may introduce subjective bias or retrospective rationalization in how decisions and outcomes were described.

Future research should explore cross-national comparisons of outsourcing decision-making frameworks to identify cultural, regulatory, and market-specific variables that influence strategic outsourcing. Longitudinal studies could also provide deeper insights into how outsourcing relationships evolve over time and how organizations adapt their frameworks in response to performance feedback. Additionally, the integration of quantitative methods—such as decision modeling or multicriteria analysis—alongside qualitative approaches could strengthen the predictive validity of outsourcing evaluation models in industrial contexts.

For practitioners, the findings of this study highlight the importance of building internal readiness before engaging in outsourcing, particularly in terms of technological integration, process maturity, and human capital alignment. Organizations should establish clear communication protocols, involve stakeholders early in the decision-making process, and develop robust performance monitoring systems that extend beyond contract initiation. Finally, outsourcing should be treated as an adaptive, relational strategy—one that requires continuous learning, renegotiation, and alignment with evolving business goals.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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