

Review Article

Strategic Execution of Project Management in UAE Construction Firms: A Qualitative Thematic Study

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Abstract - The construction industry in the United Arab Emirates (UAE) is undergoing a massive transformation driven by national strategic visions. Yet, project delivery is frequently undermined by execution inefficiencies, budget overruns, and schedule delays. This study investigates the impact of Project Management Execution Strategy (PMES) on construction outcomes in the UAE. Data were gathered through 20 in-depth interviews with professionals across private-sector construction firms. Thematic analysis revealed four key domains: strategic alignment of execution, integration of technology and tools, lifecycle risk management, and project manager selection. The findings bridge theoretical frameworks such as Project Management Theory (PMT) and Constructivist Theory (CT) with real-world execution practices. The study presents a grounded roadmap for improving execution frameworks in the UAE construction sector.

Keywords - PMES, UAE construction, Project execution, Risk management, Leadership, Digital tools, Strategic alignment, Primavera, Construction project management.

1. Introduction

The United Arab Emirates (UAE) stands at the crossroads of rapid development and strategic national transformation. With ambitious initiatives like Vision 2021, Centennial Plan 2071, and the National Innovation Strategy, infrastructure development and construction projects have become the cornerstone of economic growth and urban modernization.

Massive undertakings such as Expo 2020, high-speed rail systems, energy diversification infrastructure, and smart cities like Masdar illustrate the country's commitment to world-class project execution. Amidst this backdrop, the field of Project Management (PM) has gained critical attention in ensuring that developmental aspirations are met with timely and efficient project outcomes.

However, despite the rise in Project Management certifications, strategic planning tools, and digital monitoring platforms, the UAE's construction sector continues to experience delivery challenges. Cost overruns, delayed completions, scope creep, and underutilization of human capital persist as recurring pain points [1]. The transition from project planning to execution is often where these issues materialize. Execution is not simply the implementation of plans—it is the real-time coordination of resources, management of stakeholder expectations, and navigation of on-site uncertainties. Execution Strategy,

therefore, is the mechanism through which a project transforms from a blueprint into a completed structure. As such, the effectiveness of the Project Management Execution Strategy (PMES) becomes a significant determinant of success.

Despite its importance, limited academic inquiry has been directed at exploring the nuanced role of PMES in the context of the UAE construction environment. While global models of project execution are available, their applicability to the UAE remains untested due to cultural, regulatory, environmental, and workforce-specific complexities. This gap calls for focused, empirical investigations that illuminate the local practices and bottlenecks of PMES from practitioners' viewpoints.

Objectives of the study

- To explore the role of Project Management Execution Strategy (PMES) in shaping project outcomes within UAE-based construction firms.
- To identify and analyze the tools and methods employed for execution monitoring and control.
- To investigate risk mitigation approaches embedded in execution strategies across the project lifecycle.
- To examine the criteria used for project manager selection and their relation to execution quality.
- To develop a conceptual model for contextualizing PMES practices in the UAE's construction sector.



By engaging directly with professionals actively managing project execution, this study adopts a grounded, qualitative perspective. Through semi-structured interviews and thematic analysis, we uncover insights that help bridge the gap between theory and practice.

2. Literature Review

Project execution is a critical phase within the broader Project Management (PM) field, encompassing the actual implementation of planned tasks, resource allocation, stakeholder engagement, and performance monitoring. In PM literature, the execution phase is frequently acknowledged as the point where project success or failure becomes evident. According to the Project Management Institute, execution typically accounts for over 70% of the project lifecycle in terms of time and resource utilization. Despite its significance, much of the academic and practical emphasis remains skewed toward planning, while execution is often treated as a linear follow-up. This oversight becomes more problematic in complex sectors like construction, where real-time decision-making, adaptability, and cross-functional coordination are essential.

Several global studies have attempted to outline frameworks and best practices for project execution. Kerzner [2] emphasized the need for continuous stakeholder alignment and iterative feedback loops during execution. Turner [3] advocated for empowering project teams through decentralized decision-making models. However, these studies are largely rooted in Western contexts and may not be wholly applicable to Middle Eastern or Gulf environments, where regulatory frameworks, labor structures, and cultural hierarchies differ significantly. For example, research by Almarri and Boussabaine suggested that Gulf-based construction firms operate in highly hierarchical settings, which influences how execution strategies are designed and enforced.

In the UAE, a handful of region-specific studies have surfaced. Mezher et al. [4] conducted a survey on risk management practices in the UAE construction industry and found a general absence of proactive execution control. Projects were often derailed by scope changes, procurement delays, and unclear responsibilities. Another study by Al-Hajj and Hamani [5] in Qatar, a culturally and operationally similar setting, reported that execution failures were predominantly linked to poor contractor oversight and misalignment between client expectations and site realities.

Execution strategy is not only a function of internal management but also of external environmental factors. The UAE construction sector operates in a climate-sensitive region with temperature extremes that affect construction scheduling and materials handling. Additionally, the labor force is heavily reliant on expatriates, creating

communication challenges and turnover risks. This calls for execution models that incorporate local adaptability rather than rigid procedural conformity. Studies like Kassem and Succar [6] recommend hybrid execution frameworks that blend formal tools like Work Breakdown Structures (WBS) with informal social feedback systems.

Technology adoption in execution strategy is another major theme in emerging literature. Building Information Modeling (BIM), cloud-based dashboards, and AI-powered schedule trackers are now being incorporated into project execution. Love et al. [7] observed that digital tools enhance project visibility and empower decision-makers with predictive analytics. However, in the UAE context, full integration of such tools remains limited. Organizational inertia, lack of skilled personnel, and cost concerns are frequently cited barriers [8].

The role of leadership in project execution has received increasing scholarly attention. Dulewicz and Higgs [9] proposed that emotional intelligence, cultural competence, and conflict resolution skills are as crucial as technical knowledge for project managers. In environments like the UAE, where multicultural teams are the norm, project leadership must go beyond schedule management to include cross-cultural sensitivity, regulatory navigation, and diplomatic engagement with public sector stakeholders.

Despite these developments, significant gaps remain in the literature. First, there is a lack of empirical, ground-level insights into how UAE firms actually practice execution. Second, execution strategy is often discussed in isolation, detached from upstream project planning and downstream benefits realization. Finally, academic studies often overlook how execution frameworks evolve over time, particularly in response to external shocks such as material shortages, financial crises, or public health emergencies like the COVID-19 pandemic.

In summary, existing literature lays a useful but incomplete foundation. There is an urgent need to contextualize PMES within the specific regulatory, operational, and cultural conditions of the UAE's construction sector. This study fills these gaps through a thematic analysis of qualitative interviews with experienced practitioners, offering a grounded framework that reflects real-world execution realities.

3. Execution Strategy Framework

The execution phase in project management bridges the gap between planning and realization. A robust execution strategy provides the blueprint for real-time management of resources, timelines, budgets, risks, and stakeholder expectations. This section presents a conceptual framework for understanding Project Management Execution Strategy

(PMES) in the UAE construction sector (Figure 1), integrating both theoretical models and empirical insights.



Fig. 1 Core Pillars of PMES Framework

The framework begins with the assumption that execution is not a passive process. Rather, it is a dynamic, strategic function that evolves in response to internal progress indicators and external environmental conditions. The framework is built around four core pillars based on existing project management theories and practical inputs from industry experts.

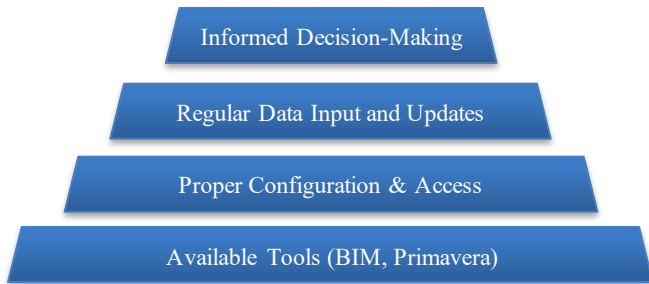


Fig. 2 Digital Tools Utilization Funnel in UAE Projects

3.1. Strategic Alignment

Execution efforts must align with broader organizational and project goals from inception to delivery. Strategic alignment includes change control processes, client engagement protocols, and a shared understanding of key success indicators. In the UAE, where national visions guide many large-scale developments, alignment is essential to avoid deviations that waste time and resources [10].

3.2. Execution Control Tools and Systems

Control tools like Gantt charts, BIM, Primavera, and dashboard analytics are critical in tracking execution progress. However, their value is dependent on staff discipline, training, and leadership engagement. Many UAE firms have the tools but lack the procedural rigor to apply them consistently.

3.3. Risk Lifecycle Integration

Rather than a static risk register, this framework promotes risk awareness across the entire execution lifecycle.

Functional risk leads, weekly escalations, and integrated contractor feedback loops are part of this proactive model. Cultural and procurement risks in the UAE further justify this approach.

3.4. Project Leadership Selection

Project leadership, particularly the Project Manager (PM), plays a pivotal role in execution. In UAE-based projects, the PM must be technically competent, culturally aware, and diplomatically effective. The framework advocates for competency-based selection and structured development programs over traditional tenure-based promotions.

This aligns with frameworks suggested in construction execution studies across emerging markets [11]. Together, these pillars provide a balanced lens through which UAE construction firms can design and evaluate their execution strategies.

4. Execution Strategy Development in the UAE

The development and refinement of execution strategies in the UAE construction industry are shaped by a unique confluence of governmental oversight, multinational labor forces, socio-cultural expectations, environmental constraints, and technological transformation. This section presents empirical findings from twenty in-depth interviews conducted with project professionals across private construction firms operating in Abu Dhabi, Dubai, and Sharjah. The analysis provides real-world evidence of how PMES is conceived, implemented, and adapted in the UAE context.

Participants emphasized that execution strategies are often drafted as generic templates but undergo real-time modification based on site realities. This dynamic nature of PMES contrasts with the rigid execution frameworks suggested in international PM models. A senior project manager stated, "What we plan in the boardroom almost never survives contact with the site. The strategy needs to breathe." This sentiment was echoed by over 80% of respondents, signaling the importance of flexibility and context awareness [12].

Four dominant themes emerged from the interviews:

4.1. Strategic–Operational Gap

Respondents frequently cited a disconnect between project goals outlined in planning documents and their translation into execution deliverables. This gap was attributed to inadequate communication between planning and execution teams, unclear delegation of authority, and siloed data systems. In multinational firms, cultural differences in communication styles also played a role [13]. Project managers reported hesitancy among junior team members—particularly those from hierarchical cultures—to

flag execution issues proactively. This led to delays in course correction and loss of time.

4.2. Underutilization of Tracking Tools

Although many firms had access to digital project management platforms such as Primavera and BIM, these tools were often not fully leveraged. Site engineers noted that data inputs into dashboards were irregular, often due to a lack of training or resistance to transparency. In several cases, subcontractors were not onboarded into the central tracking system, resulting in blind spots. A lead scheduler explained: "We had the data, but we did not have the discipline to use it in decision-making."

4.3. Fragmented Risk Ownership

Risk management was cited as one of the weakest links in execution. While all firms maintained a risk register, few had clearly defined escalation protocols or decision matrices. As a result, risks either lingered unaddressed or were escalated too late. Respondents called for integrated risk ownership frameworks, where each functional unit—procurement, quality, safety—had designated risk leads responsible for weekly updates. One notable example involved delays caused by unanticipated utility relocations. While flagged early by the site team, the issue took weeks to escalate to the client's liaison department, resulting in compounded delays.

4.4. Leadership Gaps in Project Management

A recurring theme was the shortage of experienced and context-savvy project managers. While many professionals held PMP certifications, fewer demonstrated the contextual intelligence needed to navigate UAE-specific challenges—such as bilingual communication, regulatory submissions, or coordination with government-linked developers. Respondents highlighted the absence of formal leadership development tracks in most firms. Promotions to project manager roles were often based on tenure rather than demonstrated execution excellence.

Best Practices Identified:

- Use of agile-inspired sprint reviews to track execution milestones.
- Daily stand-up meetings with cross-functional site teams [14].
- Appointment of "execution coordinators" who liaised between planning, procurement, and on-site operations.
- Embedding junior engineers in the project control room for real-time exposure to dashboards and KPIs.

- Visual "execution heat maps" were created from IoT data on equipment use and worker distribution.

These examples reflect early signs of an evolving execution culture, although they remain the exception, not the norm. These practices are aligned with research on project performance innovation in Gulf countries.

In conclusion, execution strategy development in the UAE is at a crossroads. Firms that invest in contextualized PMES—grounded in empirical evidence and tailored to local challenges—stand to improve their delivery timelines, cost efficiency, and stakeholder satisfaction.

5. Conclusion

This study confirms that Project Management Execution Strategy (PMES) plays a decisive role in the success of construction projects in the UAE. Through qualitative thematic analysis, four strategic pillars emerged: alignment with national vision, proper tool utilization, risk integration, and competent leadership.

Firms that ensure execution aligns with strategic goals are more likely to meet delivery benchmarks. Yet even with access to advanced platforms like BIM or Primavera, many UAE firms suffer from underutilized execution tools due to gaps in training and accountability.

Risk management continues to lag behind planning and reporting functions. Companies often lack real-time escalation mechanisms, delaying corrective action. A more dynamic, lifecycle-based approach to risk—integrated into daily execution—is essential.

Leadership, however, proved to be the most influential execution factor. Project Managers must be selected for credentials and their ability to lead multicultural teams, adapt in real time, and navigate complex stakeholder environments. To compete in a fast-evolving construction landscape, UAE firms must treat PMES as a core capability, not an afterthought. This includes structured leadership development, improved digital adoption, and stronger integration between planning and execution. The proposed framework offers a locally-grounded model for PMES, balancing structured processes with the interpretive flexibility needed in the field [15]. Future research should examine public-sector megaprojects, AI-assisted execution analytics, and cross-GCC comparisons to refine these insights further.

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