Navigating the capital projects' risks and opportunities across the value chain

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Introduction

The capital project landscape in the Middle East is evolving at an unprecedented pace, driven by ambitious infrastructure investments, sustainability mandates and digital transformation. Countries that are at the forefront of spearheading giga projects aimed at achieving long-term economic transformation.

Despite increasing investment volumes, capital project delivery in the Middle East continues to be hindered by cost overruns, schedule delays and contractual disputes. These issues arise due to ineffective partnering and contractual frameworks, as well as early planning and design readiness, and fragmented risk management. While optimism around infrastructure growth remains high, execution challenges persist due to an ineffective delivery model that has seen little transformation over the past two decades.

Key issues include a lack of integrated systems approach, a short-term focus on cost over long-term value, ineffective stakeholder coordination and rigid planning frameworks that struggle to adapt to evolving project demands. These gaps frequently translate into high volumes of variation orders, prolonged claims cycles and contractual disputes — further eroding commercial value and straining stakeholder relationships.

Our Project and Asset Lifecycle Management (PALM) team utilizes a structured methodology for assessing, improving, and sustaining the performance of capital projects and assets under operations through a capex value creation and optimization (c-VCO) model to ensure alignment with business strategy and target financial viability of the project.

Unpacking the disconnect: growth outpacing delivery maturity

Projects in the MENA region face significant delays, and **>70%** **of the projects deviated from the planned schedule completion.**

Design errors or late information affect nearly half of MENA projects, fueling downstream delays, rework and claims.

Claimed costs on delayed projects average to **>30%** **of the original project capital expenditure (capex).**

Claims in the MENA region are on the rise, **indicating capital projects in the region are at an increased risk of disputes.**

Over **50%** of MENA projects experience scope changes, **compared to the global average of 30%, highlighting chronic variability and contract drift.**

While global leading practices emphasize data-driven project oversight across the project life cycle, the capital projects in the Middle East are slow to implement and integrate artificial intelligence and machine learning for predictive analytics or forecasts and risk monitoring.

Capital projects endure systemic challenges across the value chain

At the heart of persistent inefficiencies in capital projects lies a fragmented project delivery model that struggles to adapt to evolving complexities. Risks manifest at every stage of a project's life cycle, from pre-construction planning to execution and final handover. The lack of an integrated project governance framework, the absence of risk-based decision-making, inefficient resource planning, and limited use of data and artificial intelligence (AI)-driven decision-making continue to derail cost, schedule and business objectives.

Stage 1 Pre-construction

Where misalignment begins: strategy, design and cost diverge

- Tendering ahead of design maturity, leading to inflated provisional sums and costly rework
- Lack of design-to-budget alignment, driven by fragmented cost planning across design stages
- Stakeholders not embedded early, delaying buy-in and driving post-contract changes
- Weak value engineering governance, with late-stage ideas compromising function and delivery
- Sustainability intent not formalized, resulting in retrofitted environmental, social, and governance (ESG) compliance
- Unrealistic schedule compression, due to longer approvals or funding cycles

Stage 2 Construction

Where projects lose momentum: cost, control and coordination gaps surface

- Contractors are overcommitted across programs, straining labor and plant availability
- Labor productivity remains a significant challenge across construction life cycle
- High volumes of variation order stemming from design evolution and scope creep
- Informal change control process lacks a disciplined assessment of time-cost impact
- Single-sourced critical packages reducing price leverage, best-price discovery and increasing supply risk
- Reactive claims management, with entitlement tracking often absent or disjointed
- Minimal digital integration with PMIS, BIM and analytics is poorly leveraged across disciplines
- Minimal data-driven predictive modeling and forecasting for timely decision-making
- Delays and cost overruns continually erodes the profit margin projected during the feasibility phase, leading to higher impairments

Stage 3 Handover

Where operational readiness is hindered: integration, closure and recovery risks persist

- Poor inter-package integration, delaying commissioning and handover milestones
- Contractor de-mobilization before full closeout, leaving snag lists and operation & maintenance (O&M) handovers incomplete
- Weak liquidated damages (LD) enforcement and cost recovery discipline, leading to leakage at project closure
- Incomplete documentation and asset records, affecting facilities onboarding and life cycle operations
- Limited authority interface coordination, delaying final certifications and occupancy
- Challenges during asset transfer between main contractors to operations or asset management

EY MENA's project reviews in the Middle East show that cost overruns, ineffective delivery models and underutilization of digital tools are hindering productivity gains in capital projects. This highlights the need for better management practices and advanced technology integration.

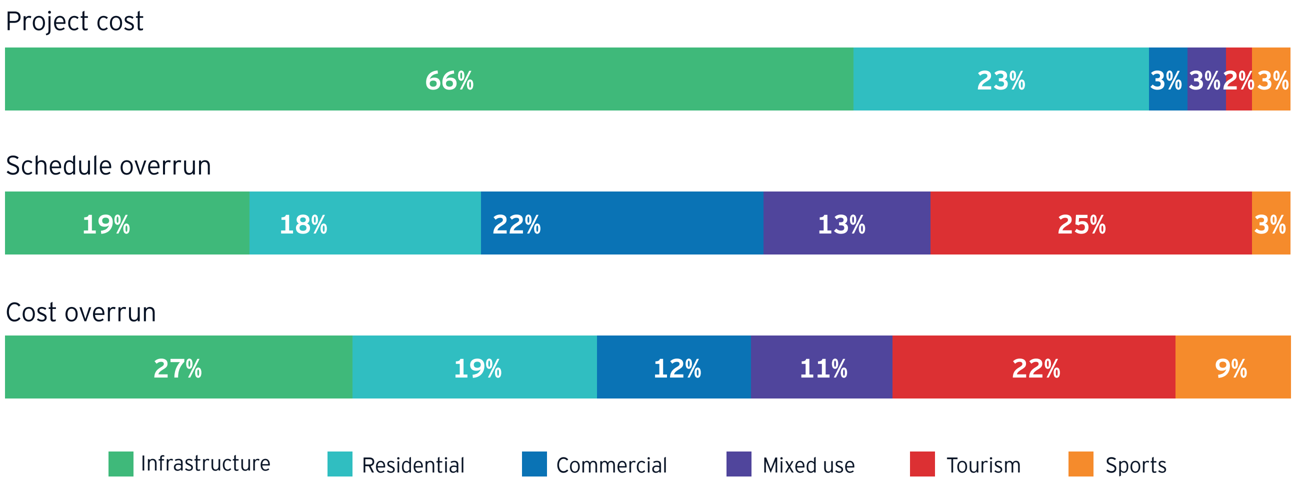
While the adoption of AI in capital projects in the Middle East remains limited, its potential to address complex challenges and drive significant impact is undeniable. The application of AI technologies, including advanced data analytics, machine learning and predictive modeling, can greatly enhance decision-making, improve resource allocation and project timelines. By enabling project managers to identify risks early, streamline operations and reduce costs, AI can contribute to more efficient project execution. Furthermore, it promotes collaboration among stakeholders through real-time insights and increased transparency. Given the substantial investments and intricate logistics involved in these projects, AI can not only enhance operational efficiency but also support sustainable practices, ensuring that projects are completed on time and within budget, while reducing environmental impact.

Our experience-based analysis

Leveraging extensive experience of EY teams in conducting deep-dive project reviews and capital projects across the MENA region, we analyzed more than 100 infrastructure packages with a cumulative capital outlay of more than US$20b.

Our reviews uncovered systemic value leakages and delivery inefficiencies across key capital project categories, such as residential, tourism, sports, commercial, mixed-use and infrastructure. Capital deployment and project performance varied significantly across sectors. While infrastructure and residential projects accounted for the largest share of capital outlay, it was tourism and commercial developments that saw the most pronounced schedule delays.

Chart 1: Project cost vs. schedule overrun vs. cost overrun by sector

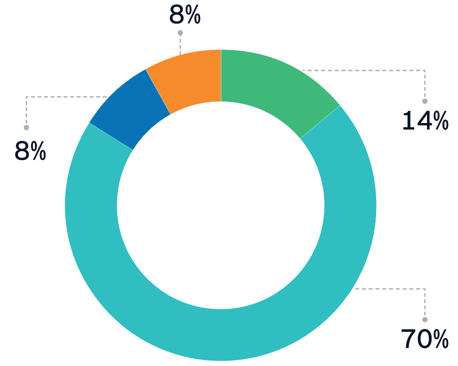


This comparison highlights that while infrastructure dominates overall capital investment, execution pressures and value erosion are more pronounced in tourism, commercial and residential sectors. These patterns signal sector-specific control gaps, ranging from planning slippages, design errors and changes, and cost escalations induced by variations.

Across the reviewed portfolio, five dominant risk themes emerged, spanning across procurement inefficiencies, gaps in commercial enforcement and reactive contract administration. A bespoke contracting model, including long-term relationship-based contracting and a robust project delivery and contract administration process should be adopted to mitigate the potential risks.

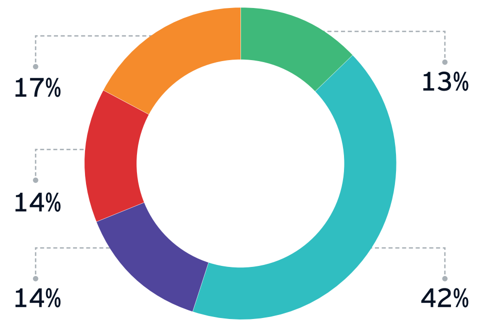
1 Stressed Tendering & Procurement

Over 70% of flagged projects involved stress in the tendering process such as inconsistent technical criteria, scoring methodology and single-sourced packages that deviate from the competitive bidding protocols. This not only inflated contract values but also limited transparency in vendor performance tracking, leading to missed opportunities for optimum price discovery.



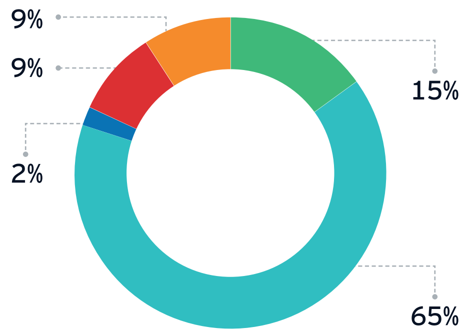
2 Payments deviating from the contractual payment terms

A recurring control breakdown was observed in certification of various cost heads such as material onsite payments, on-account variation payments, financial payment progress in relation to earned value progress, etc. These certifications were often made without supporting documentation or entitlement validation. As a result, these unchecked approvals increased untimely cost exposure and delayed recoveries.



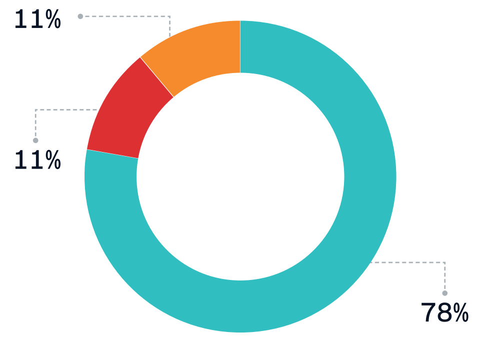
3 Implementing the penalty and delay damages

Despite evident schedule overruns, damages were often waived or not enforced. In several instances, no delay analysis or cost impact assessments were conducted, weakening contractual leverage.



4 Prolongation cost claims

Over three-quarters of the projects experienced extended execution timelines, leading contractors to raise associated claims. However, entitlement validation and mitigation strategies were either absent or inconsistently applied, resulting in audit risk and settlement uncertainties.

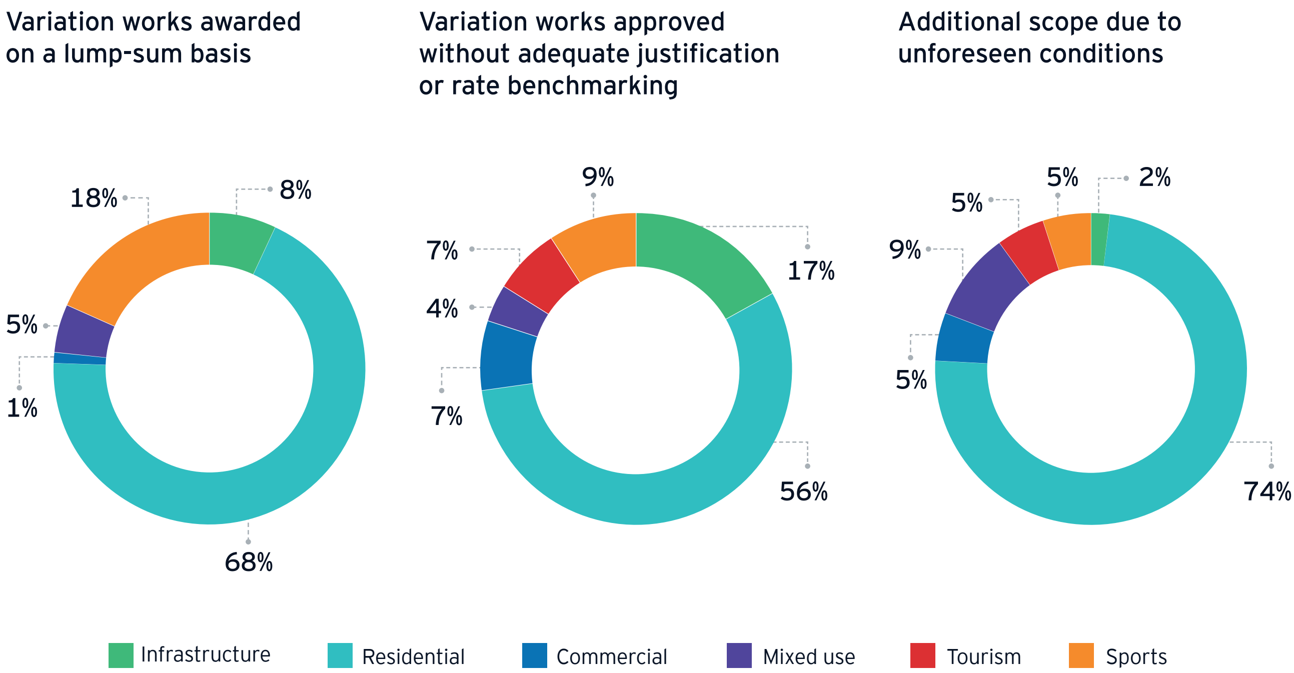


Infrastructure | Residential | Commercial | Mixed use | Tourism | Sports

5 Variation and Scope creep occurrences

Variation-related inefficiencies were the most prominent cause of value leakage, often stemming from the below.

- Variations awarded on a lump-sum basis without clear itemization
- Scope awarded outside original contract limits
- Inadequate justification, documentation or benchmarking for rate approvals
- Additional works executed under the guise of "unforeseen conditions," with poor traceability



These recurring issues demonstrate that capital project risks are not merely technical or contractual, but systemic and cross-functional. Without embedded assurance mechanisms and governance interventions, these risks continue to erode value silently across the project life cycle.

To move from reactive mitigation to proactive value optimization, organizations must rethink how they monitor, control and govern their capital programs. This is where EY MENA's capital projects team can bring value – by helping embed a structured assurance framework that aligns decision-making with the COSO framework, while driving performance, compliance and strategic outcomes.

Recent analyses suggest that owners and developers lose between 7% to 10% of project value due to poor cost estimation, change order mismanagement and insufficient contract enforcement – highlighting the urgent need for robust governance, transparency in procurement and real-time risk monitoring.

Source: Based on industry-wide findings and EY MENA project review experience across the GCC.

How EY MENA can help to optimize the value and unlock capital projects' potential

Projects and Asset Lifecycle Management (PALM) of EY MENA supports organizations in safeguarding and helping optimize the performance of large-scale project portfolios. Our assurance-led approach combines data-backed insights, predictive analytics and structured control reviews to help clients unlock measurable value across the project life cycle.

By independently assessing project risks, governance structures and delivery controls, we help organizations to proactively address value erosion, compliance exposures and decision bottlenecks. Our structured capital project assurance framework supports stakeholders to strengthen project performance, improve delivery certainty and enhance alignment with approved budgets, timelines, ESG commitments, and regulatory expectations.

1

Assess the evolution of design and traceability across planning phases to support alignment with approved budgets and facilitate early identification of divergence risks.

2

Performing project assurance across life cycle including inception, design, procurement, cost allocation and validation, construction, handover and property management to strengthen life cycle visibility and bringing out single version of truth.

3

Transforming the capex and asset management life cycle through frameworks, policy and process, digitization of gateway systems, and helping implement quality management systems that enable standardization and reduce manual inefficiencies.

4

Performing continuous program review and monitoring project time and cost optimization based on unique optimization levers, intelligent dashboards. This involves assessing on going risks through EY MENA's proprietary capital projects control assessment tools.

5

Help implement AI-enabled analytics and predictive models to support real-time decision-making, scenario planning and early detection of execution risks.

6

Review readiness for handover, commissioning and LD enforcement during operational transition and safeguard recovery opportunities.

EY MENA's structured review methodology is designed to plug into your existing capital project environment, not replace it. By leveraging intelligent diagnostics and targeted interventions, we help project owners to rebalance risk, restore cost and time predictability, and build resilience into capital delivery programs.

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EY teams work across a full spectrum of services in assurance, consulting, tax, strategy and transactions. Fuelled by sector insights, a globally connected, multidisciplinary network and diverse ecosystem partners, EY teams can provide services in more than 150 countries and territories.

All in to shape the future with confidence.

The MENA practice of EY has been operating in the region since 1923. Over the past 100 years, we have grown to over 8,500 people united across 27 offices and 14 countries, sharing the same values and an unwavering commitment to quality. As an organization, we continue to develop outstanding leaders who deliver exceptional services to our clients and who contribute to our communities. We are proud of our accomplishments over the years, reaffirming our position as the largest and most established professional services organization in the region.

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