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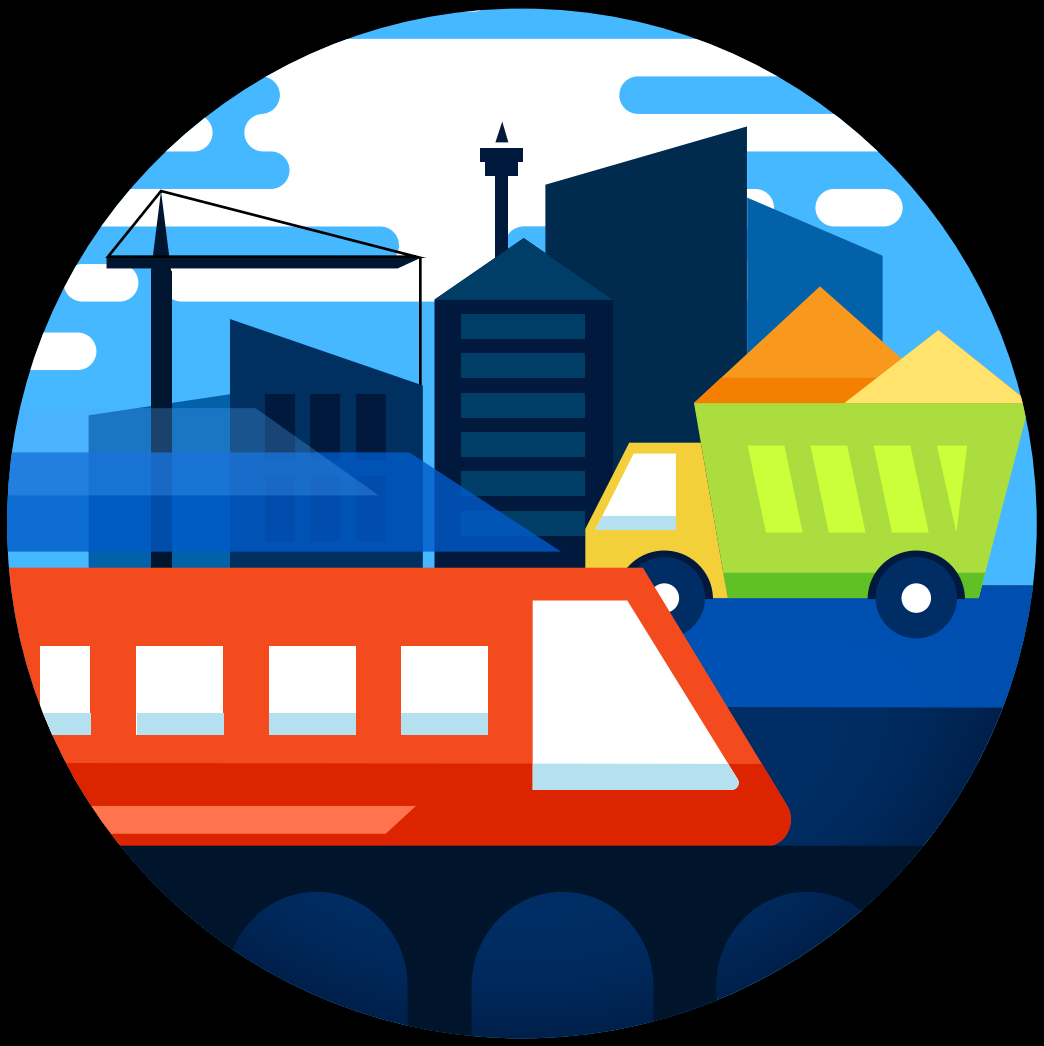


Improving ROI for Capital Projects through Capital Procurement Excellence

Contents

Introduction

Return on Investment has always been a leading key performance indicative ratio for most CEOs and CFOs globally, in assessing efficiency of an investment or in comparing the efficiency of a number of different investments. Through Deloitte's capital procurement excellence in capital project execution, ROI can be improved within the threshold of 2 to 5% as a result of efficiencies brought about by the capital procurement methodology. The end result and value offering enables our clients to grow profitably and maximize the value of their capital expenditure investments.

Point of view – current challenges in managing ROI

As many as 90% of major capital projects suffer from an average of approximately 28% budget overruns.[1] This in turn extends the rate of return of capital invested to achieve organisational growth, and significantly erodes the intended benefit of the delivered asset.

Common capital procurement challenges that contribute to overall value leakage in projects can be attributed to:

Insufficient Front End Planning

The evolution of a capital project starts with the identification of a specific opportunity, driven by a business case to justify a capital investment, that will ultimately deliver growth in either social or capital objectives. The development of this opportunity is to complete a capital asset, driven by the development of a business case that is often optimistic with full focus on the benefits, and with little evaluation of realistic challenges to achieve these benefits.

In as many as 90% of major capital projects, poor planning, integration management and misidentification of value drivers result in cost and schedule overruns. Inadequate stakeholder mapping and requirement analysis, lack of understanding of business objectives to achieve long-term strategies, and lack of clearly defined battery limits on incomplete designs eventually lead to inaccurate cost and schedule requirements to achieve completion.

Segregated Project Teams

Integration of every aspect of a capital project requires interface management between various core and supporting project stakeholders, each accompanied by a unique expectation and requirement that varies depending on the phase of the project. Project stakeholders include project owners, regulatory bodies, design and engineering, finance, assurance, local communities, suppliers and contractors. It is expected of the project management team to have a holistic view of the status of the project, with effective optimisation of the schedule and costs to deliver a capital asset, which is of benefit to the owner.

Depending on the degree of their involvement, each stakeholder has a different set of value drivers for the ultimate successful completion of their activities, and these value drivers are often in conflict with other stakeholders. This can be illustrated by a case where design and engineering value is driven by optimised performance and constructability, while financial value is driven by actual costs against planned costs.

Proper utilisation and integration of management systems and processes, as well as adequate identification and quantification of misaligned value drivers can assist realisation of cost improvement opportunities. In addition, identification and management of risks related to interdependencies between the various stakeholders are also exacerbated.

Misaligned Procurement Skills and Competencies

The activities of the capital procurement function are mostly reactive and administrative, performing a "post-office" like, mundane function. Traditionally, a few opportunities exist within the procurement function to generate value. A lack of understanding of the risks associated with the development of the value chain during the initial phase of the project results in poor evaluation of key partners, improper contracting strategies, misalignment of risk and benefits, and a piecemeal approach to engaging the market. Although the procurement function manages 80% of capital project costs, it lacks involvement early on in the strategic planning phase of the project. This results in fewer opportunities to monitor and drive performance of outsourced functions and to leverage market intelligence. Getting this right could ultimately mitigate risks and drive value through cost and performance.

Improving ROI through a holistic Capital Procurement approach

Best-in-class capital procurement methodologies that improve ROI are fundamentally based on three pillars:

Investing Enough Time in Planning

As a key principle in a project life, the planning stage is the most critical as it affects the success of the subsequent stages of the project. Proper project planning and investing adequate time to planning is paramount.

Involvement of the capital procurement function during the early stages of the Capital Project will improve the accuracy of establishing the CAPEX and OPEX budgets by applying appropriately skilled resources that will enable the integration of market intelligence and commodity trends. This will also allow for the development of an informed and market appropriate packaging and contracting strategy that allows for appropriate risk and benefit allocation, as well as integration of the FEED into the construction schedule. Additional benefits include benchmarking of cost and schedule performance, as well as appropriate establishment of performance metrics.

Strategic Partnerships in Capital Projects

Partnering with like-minded stakeholders as an organisation ensures that the right level of effort and input is obtained from each participating partner.

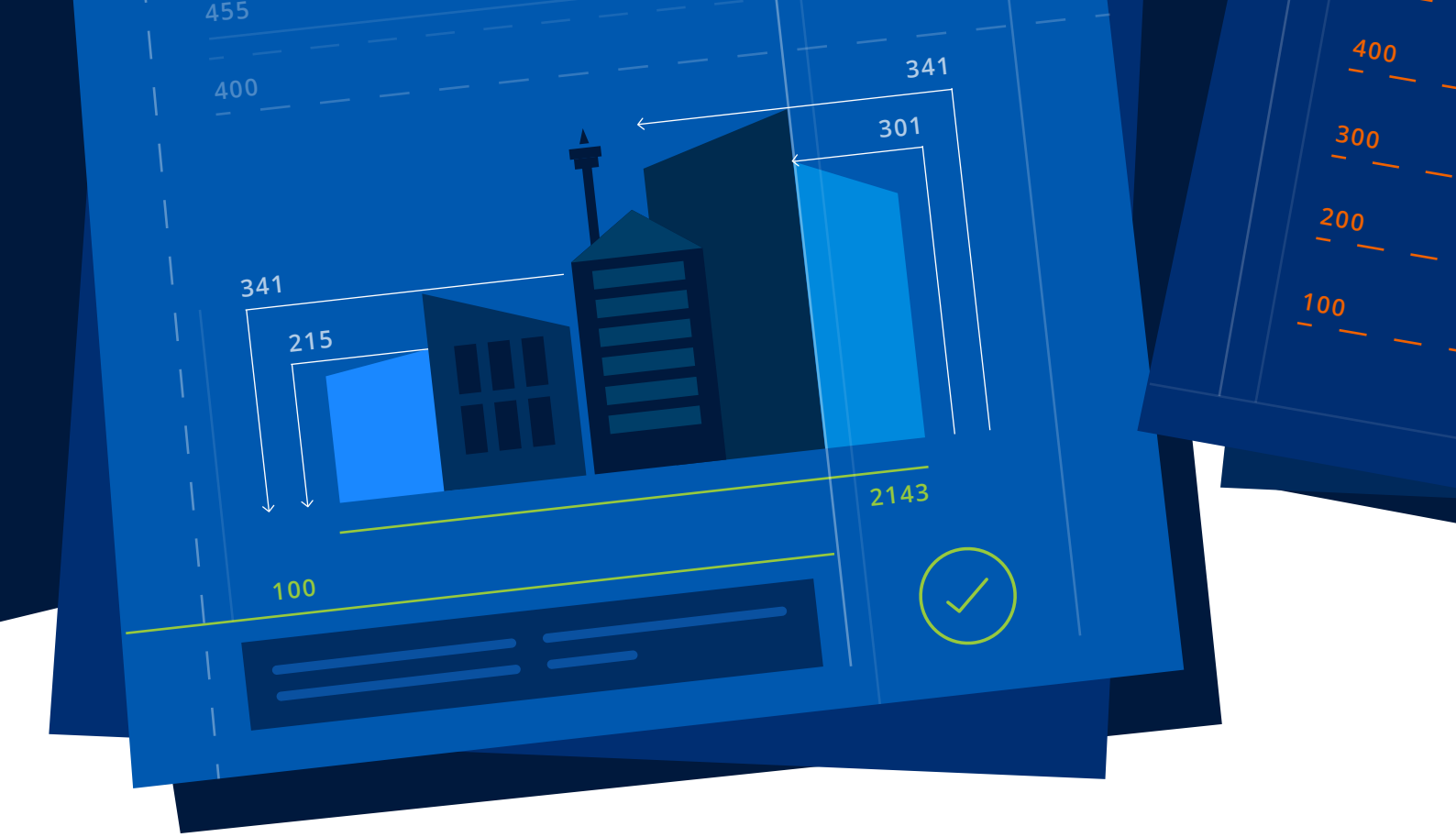
It is crucial that the partner selection process is guided by the below principles:

Understand what makes each partners business unique:
Having a clear grasp of your own intellectual property, the value you bring to a partnership, and that of your partners. Collaborations are required in order to increase the value of offerings by leveraging on each other's strengths.

Alignment of value systems of the organisation:
Establishing an alliance or partnership with organisations that have similar core business values allows for smooth and effective operating principles. Commercial models applicable to such partnerships ought to be agreeable and viable for both parties.

Establish clear objectives:
Making sure all parties are on the same page greatly improves your chances of a good outcome. It also gives you benchmarks for measuring a project's success. Understand what you want to get out of a partnership, and have a solid grasp of your partner's goals. This will ensure that all parties are aligned and have the same or complementary visions.

Continuous communication:
Once you have found a strategic partner, established a good rapport and align on the key objectives, always ensure consistent communication. Maintain contact with frequent check-ins to proactively identify and respond to any issues. This will keep confidence levels high on both sides, and showcasing how you can deal with any unexpected issues or changes swiftly.



Once such partnerships have been forged, a key element in capital procurement projects is the early involvement of strategic supply partners. This philosophy allows for modern adaptation and evolution from traditional sourcing methodologies. When strategic supply partners are involved in the project earlier, they are able to bring about agility in their sourcing plans, resulting in better project execution. It will also ensure that local communities are not overlooked in large-scale capital procurement projects.

Therefore, stakeholder engagement strategies should be put in place to ensure regular consultation with all stakeholders, with detailed plans for the upliftment of the local community thus meeting regulatory requirements and advancing local economic development.

Value Engineering

Successful Value Engineering is only achievable through an effective cross-functional team with the appropriate technical and commercial skills that allow the development and facilitation of value-chains within capital projects. The capital procurement function facilitates the shaping of product and service deliverables. This is done through the analysis of planning and budget requirements, technical specifications, and quality standards.

Integration of capital procurement within the project functions enables early identification of cost optimisation strategies though evaluation of scope and design requirements, engineering assumptions, appropriate interface and battery limits, as well as performance requirements.

Involvement of the procurement function in the early stages of project planning will leverage value from informed procurement strategy development. If organisations are to derive value, it is crucial to apply the appropriate skills and competencies within the procurement function. Skilled personnel will deter from only functioning as a purchase order process, as they will interrogate the base of assumptions, whilst incorporating performance improvement and risk management practices critical to extracting value.

Digitisation

As industries become more data intensive, disruptive technologies are increasingly taking a digital form.

Data, and specifically the ability to organise, manage, process and utilise that data has become a competitive differentiator.

Beyond cost and productivity benefits (typically targeted at 10-20% improvement), the digital revolution presents some terrific opportunities. These include forging closer relationships with project stakeholders, improved knowledge sharing, decision-making and performance, as well as access to new markets; making day-to-day operations safer for operators.

By utilising LEAN project management principles in the capital procurement function and driving new technologies to improve efficiencies and replace manually exhaustive administration processes, the Capital Procurement discipline is capable of maintaining ROI expectations and improving ROI by between 2% to 5% when applying best in class methods to achieve a commercial model that best suits the project objectives.

These improvements are evidenced by the Ethiopian government that commissioned a capital infrastructure project that achieved a 48% reduction in capital costs by employing an integrated project management approach in conjunction with the utilisation of disruptive technology. Overall, the project was

able to achieve the savings by reducing waste, using prefabricated components, and SOTA technology, increasing Ethiopia's student teaching capacity fourfold.[2]

Deloitte has a firm belief that much can be done in capital procurement process in order to improve the ROI in the capital projects. To achieve this, one has to take a 360 degree approach.

This approach can be viewed in five high level phases:

- Planning
- Strategy & Value Engineering
- Technology Intergration
- Sourcing
- Contract Lifecycle Management & Operational Readiness.

Individual elements of this model allows organisations to have full view and application of opportunity improvement areas. All areas executed well bring about many advantages, such as:

- Cost optimisation
- Lean processing
- Digitization of technologies
- Operational efficiency

Thus brings value in various aspects and ultimately, procurement excellence.

Capital Procurement Office As An Intelligent Control Unit

Operational Readiness

- People, process, infrastructure and systems readiness
- Developing policies & procedures for operational requirements
- Material Requirements planning
- Master Data Management
- Inventory Norms
- Integration

Planning

Integrating information from FEED
Construction Schedule, Capex and Opex
Budget, POP and Local Content requirements

Contract Lifecycle Management

- Governance & risk management
- Monitor and evaluate the contract management cycle to manage cost, schedule, quality and contractual terms compliance, KPI tracking & performance reporting

Capital procurement office acts as an intelligent control unit

Strategy

Packaging strategy based on POP, Market Intelligence (PESTEL Analysis, accommodated trends, commodity and currency trends, benchmarking) make an informed decision

Value Engineering

Cost optimisation strategies focusing on scope, engineering, battery limits, and performance requirements

Source to Contract

- Analyse suppliers & contracts organisational capabilities and capacities (safety, technical, commercial, technologies, logistics and project delivery) including contract award and supplier onboarding
- Establishing systems & processes for smart procurement

Technology Integration

Integration and innovation to increase capital procurement efficiency, transparency and holistic decision-making

This 360 degree approach can be viewed in five high level phases, the first being Planning, followed by Strategy & Value Engineering, Technology Integration, Sourcing and Contract Lifecycle Management & Operational Readiness. Individual elements of the 360 degree model allows organisations to have full view and application of opportunity improvement areas. All areas executed correctly bring about many advantages, such as cost optimisation, lean
processing, digitisation of technologies, operational efficiency, thus brings value in various aspects and ultimately, procurement excellence.

Conclusion

Ensuring the application of best-in-class methodologies which comprise of the five afore-mentioned high level phases, namely; Planning, Strategy & Value Engineering, Technology Integration, Sourcing and Contract Lifecycle Management & Operational Readiness with an integrated management approach, can significantly contribute to the improvement of ROI for capital projects. This allows for profitability growth as well as maximisation of the value of client investment. The essential mechanisms, as suggested, should include; investing sufficient time in project planning, especially on the front-end strategy. This must be accompanied by the integration of market intelligence and commodity trends as well as deliberately involving the capital procurement function during early stages of the capital project; employing appropriately skilled resources.

Continuous integration of project teams is a key characteristic of a capital project with all core and supporting project stakeholders understanding their delivery expectations and requirements at each phase of the project. Moreover, partnership within the organisation allows for the right level of effort and input from each participating partner. The digital revolution undoubtedly offers unique opportunities to enhance and manage project communication among all stakeholders, facilitating rapid knowledge sharing and decision-making while fast-tracking performance improvement and providing access to new markets, ultimately contributing to safer project operations thus ensuring capital procurement excellence.

Endnotes

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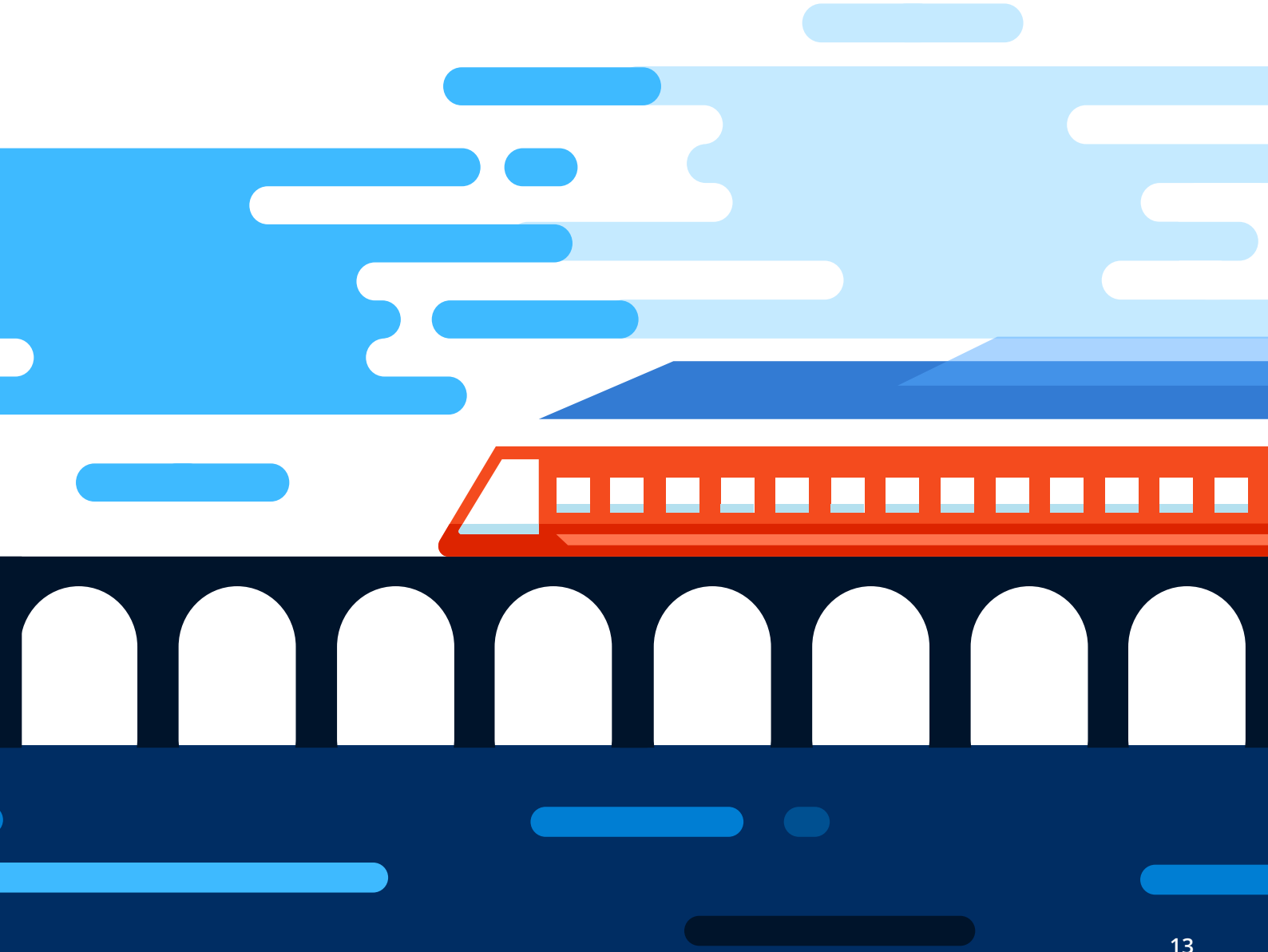

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