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CFO Agenda

Improving capital management

How CFOs can help capital projects stay on track

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According to our recent study, only 2.5% of companies delivered their capital projects on time, on budget, in-scope, meeting the benefits expected by the business. And 92% of 'failed' projects traced the failure to managerial matters—from poor planning and unclear objectives to inadequate resources.[1]

The successful execution of major capital projects is a critical business activity for companies in asset-intensive sectors such as mining, oil and gas, energy, manufacturing and transportation. These projects have the potential to create shareholder value—but they can also have the opposite effect, thanks to the potential for cost overruns, scheduling delays and returns that do not meet expectations. And when that happens, the CFO and the rest of the senior leadership team are often held ultimately responsible. The experience of mining companies in dealing with the challenges associated with capital projects provides important lessons for CFOs and their finance teams across all industries.

Globally, mining companies have had mixed success in the execution of major capital projects. High commodity prices in the wake of the global financial crisis spurred a boom in capital spending, as mining organizations launched new projects around the world to improve the efficiency and effectiveness of their existing operations. Yet time and time again, these projects ran late and over-budget—sometimes incredibly so. According to our recent study, only 2.5% of companies delivered their capital projects on time, on budget, in-scope, meeting the benefits expected by the business. And 92% of 'failed' projects traced the failure to managerial matters—from poor planning and unclear objectives to inadequate resources.

As a result, many investors and stakeholders have lost confidence in the ability of mining executives to successfully deliver capital projects. Investors are highly sceptical of the industry's ability to control costs, be disciplined in its use of capital, improve return on capital—and not expand too far, too fast. Share prices across the industry have fallen, curtailing the amount of capital available and compelling CFOs and their teams to pull back on spending and adopt a far more careful approach to capital management.

The mining industry's recent experience is both a lesson and a warning to companies in other capital-intensive sectors. Failing to get capital spending under control today could well cause investors to lose confidence in your business and send share prices tumbling. The result? Less capital available—and severely diminished growth potential.

Many of the world's mining giants have responded to the capital management challenges affecting their industry by establishing rigorous frameworks for evaluating major capital investments. Our work with these companies has given us insight into leading practices for managing capital projects from drawing board to production. We believe that CFOs are ideally placed to influence how their company determines where and how to deploy its capital. They're also in an excellent position to help shape the oversight and governance of approved capital projects once they're underway.

There are three key aspects of the capital lifecycle where a CFO can have an impact – first in ensuring that there's an effective process to evaluate and prioritize capital projects to determine the right projects to pursue. This is normally done by establishing processes for capital planning and budgeting as part of the overall business planning process. Once the capital plans for the year have been established, a CFO must ensure that all capital projects are subjected to

1. PwC. June 2012. Are you ready to dig? Looking beyond current market conditions. http://www.pwc.com.au/industry/energy-utilities-mining/publications/are-you-ready-dig.htm

a robust financial evaluation, or cost/benefit analysis, prior to the expenditure of funds. Generally, CFOs will establish a capital authorization process, to evaluate projects from both technical and financial perspectives. Finally, once project expenditure is underway, the CFO must ensure there's a strong control and governance process to ensure selected projects are delivered on time and on budget. This process should include a post-completion review to evaluate the success of the project on delivering on its business case, and to capture lessons learned for future work.

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The project portfolio management approach

Asset-intensive companies often have several capital projects on the go at a time. Each of these projects—whether operational, under construction, or in a planning stage—clamours for management attention and capital investment.

All too often, these projects are evaluated in isolation. Approvals and investment decisions are made without regard to their impact other capital projects, or because the project sponsor has influence or budget to push it through. The risk in such an approach is that the newly approved project or investment doesn't align with the company's overall strategy—or worse yet, causes other, more important projects to be scaled back or deferred for want of capital investment.

To avoid this risk—and to focus capital spending on projects that are strategically aligned and that build shareholder value—leading mining companies have adopted a project portfolio management approach to capital management. In an environment of sagging share prices and diminished available capital, using the portfolio approach is enabling these companies to deploy their capital in the most optimal manner.

Projects can be saved
Causes of cost overruns

Under project portfolio management, all projects are subjected to a rigorous, standardized and highly structured investment evaluation process. Each project is evaluated using identical criteria and must pass through a series of distinct 'gates' or decision points before it's finally approved. This approach enables management teams to identify, prioritize and execute an optimal set of projects based on strategic fit and risk appetite. Other benefits of this approach include:

- the right projects are selected to achieve strategic outcomes and priorities
- resources are deployed where they're needed most
- projects are monitored against key outcomes
- projects are consistently delivered—and consistently successful

In most organizations, this approach is embedded in the capital planning processes. Potential capital project ideas are raised at the mine site level and go through a prioritization approach where they're reviewed and evaluated until a final set of projects to include in the capital budget is finalized.

Decisions in the early stages of a project are critical to achieving the desired outcome. The CFOs ability to influence the success and value of a project is greatest at the very start, when a project is being evaluated, and rapidly drops as implementation draws near. The cost of change rises dramatically the closer the company gets to project implementation.

A key role for the CFO in this process is to champion the development of an effective capital planning process that results in an alignment between the organization's strategic priorities and capital availability with the set of capital projects that will be undertaken in the coming year. This process will include the necessary trade-offs to maximize the financial returns from these projects with their strategic importance.

Building a realistic project business case

Once the portfolio of capital projects has been identified and the capital budget for the year finalized, a capital authorization process should be undertaken to perform a detailed review of each project from both a technical and financial perspective prior to the commencement of the project. This process should forecast both project costs and financial benefits to understand the impact on shareholder value of the project. This normally includes a scenario analysis to understand how variability in key aspects of the project may impact the financial returns.

From the CFOs perspective, the financial evaluation should include a detailed build-up of project costs based on the project design and schedule. Finance should review these cost estimates in conjunction with their technical counterparts to ensure the estimates are complete and contain realistic assumptions. The financial evaluation should also include an estimate of project benefits (lower costs, higher productivity, etc.) that should be reviewed by Finance for reasonableness. Finally, the CFO will define the format of the financial evaluation (e.g. number of years to consider, use of agreed discount rates for net present value or internal rate of return calculations, etc.)

Project portfolio management stages

STAGE 1: Define strategic objectives, strategic risk and risk appetite

- Articulate corporate strategy into a clearly defined objectives hierarchy.
- Define key strategic risks that should be considered in project design.
- Articulate and define risk appetite, risk acceptance and its impact on proposed strategy and projects.
- Consider corporate risk culture and possible impact on project success.

STAGE 2: Standalone project evaluation

- Enhance the consideration and quantification of risk into standard commercial project evaluation, methodologies (e.g., net present value, internal rate of return).
- Identify project optionality and impact on project design and value.
- Review uncertainty around project delivery parameters.
- Review health & safety compliance parameters and key performance indicators.

STAGE 3: Project portfolio modelling and optimization

- Model cash flow at risk and assess project impact under probabilistic scenarios.
- Consider risk-vs.-return trade-offs.
- Model portfolio diversification benefits.
- Assess portfolio delivery capability and constraints (e.g., financial, skilled labour, management time, third-party contracts).
- Assess financial risk—hedging foreign exchange, commodities, fuel prices, strategy.

STAGE 4: Project delivery

- Validate project on an ongoing basis against financial and other strategic objectives.
- Communicate project progress and risks.
- Ensure project governance and assurance.
- Select third parties and review regimes.
- Conduct ongoing project risk management.

Establishing a rigorous governance structure

While project portfolio management and a strong business case can enable CFOs to determine how best to deploy capital, it doesn't ensure project success. Many projects still fail to achieve their cost, schedule or quality commitments because of inadequate controls and common project challenges, including:

- unclear project definition
- lack of project transparency and internal accountability
- inappropriate or poorly defined contracting and project delivery strategies
- poor communication and reporting

To mitigate these challenges, it's essential that companies and project owners establish a rigorous governance structure at the outset. In our experience, organizations that put in place strong project governance practices, specifically designed to meet the demands of deadline-driven, technically complex projects are more likely to achieve their cost, schedule and project quality goals. This means companies need to put a framework in place to support predictable, consistent project execution—and lay the groundwork for a successful outcome. The CFO and the finance team are an important element of this control framework.

Five key characteristics of a successful capital project

Clear project definition

External pressures or past successes can tempt project owners to start work before a project is clearly defined. Yet early investment in defining a project's technical requirements and commercial objectives is an important factor in its successful delivery.

Project definition and planning plays as much a role in a project's success or failure as the quality of the execution itself. Well-defined project requirements provide a solid foundation for a successful execution, and can help limit the need for later changes that can confound efforts to bring a project to completion on time and on budget.

CFO's should ensure that the organization's project delivery approach includes steps to clearly define the project's scope and desired outcomes before execution of the project proceeds. This process must also include the review and approval of scope changes during design and construction.

Transparent control environment

Capital projects aren't executed in an organizational vacuum. They commonly involve several business functions and different organizations, business units and even geographic regions. Any governance framework put in place must be designed to facilitate transparency, and be established early in the project life cycle.

A transparent control environment is as critical for activities at the start of a capital project as they are during project execution and close out. Applying sound governance principles from the start enables organizations to avoid costly course corrections down the road—while providing them with a high degree of confidence that the project will be completed successfully. The financial reporting of capital expenditures (both actual, as well as a project of estimated expenditures to project completion) typically fall within the mandate of the Finance function, and requires coordination and integration with Operations and/or Technical Services. CFOs must ensure that cost reporting and control processes are in place to track actual expenditures and highlight any potential issues while there's still time to mitigate them.

Internal accountability

Large capital projects typically involve many stakeholders, both inside and outside the organization. Assigning and defining roles and responsibilities—and communicating them throughout the organization—can help minimize the risk of overlap or gaps in key management areas and support a successful project outcome.

Establishing an organizational and functional framework around a project enables the project owner to identify the controls and procedures needed to manage project risk—and clearly set out who is responsible for those controls and procedures.

Equally important, is that the people assigned these roles and responsibilities are up to the task. It takes highly specialized expertise to successfully plan, organize, manage and execute projects, and companies should ensure their project team has this expertise. If they can't find it in-house, they should give serious consideration to bringing it in from the outside. As part of the leadership team, it's important for the CFO to ensure the necessary accountability frameworks to support successful project delivery are established.

Clear and structured contractual framework

Capital project owners commonly appoint contractors to design and deliver projects—and in many cases, they contract out day-to-day project management as well. Too often, project owners assume they can abdicate their responsibility for project execution, relying on their contractors to bring the project to a successful close. This is a rarely successful—and highly risky—approach.

As a CFO, you and your team should pay careful attention to contracting and project delivery strategies at the very outset of project planning. The project delivery strategy should account for the project's unique risks, such as technical challenges, as well as the level of in-house resources available to monitor and direct project performance.

Once the delivery strategy is chosen, companies should focus on the clarity and structure of the contractual framework as well as the related risks. In particular, performance incentives and disincentives should be carefully designed to ensure they achieve their intended goals. Good governance helps ensure that incentives connect to the corporate objectives underpinning the project, and scenario analyses can confirm that the incentive is applied in a manner consistent with the performance achieved.

As well, contract terms should carefully spell out the contractor's responsibilities to establish, maintain and report defined performance metrics—and specify that the project owner has the right to access and audit the underlying project information. It's essential that as the CFO, you maintain visibility across—and into—every area of the project.

Communication and reporting

Infrequent and untimely communication between members of the project team—especially between the project owner and contractors—can quickly unravel a project and cause significant cost increases and delays.

In setting out project roles and responsibilities, and in negotiating contracts, project owners should clearly define and document their expectations regarding the nature, frequency and detail of progress reports. The goal is to ensure that management has access to complete, real-time information about project status and performance, both financial and operational, so that timely decisions can be made throughout the project as needed.

Improving capital management: Where to begin

CFOs are well-positioned to influence discussions and promote change around capital allocation and capital project management. But where do you begin?

1. **Evaluate your current governance framework.** Does your existing capital management framework specifically address the unique challenges and risks inherent to each stage of a capital project (planning, business case, design, procurement, build and operate)?

2. **Review information systems.** Can your existing information systems—from enterprise resource planning and risk management (ERP and ERM) programs to document management and financial planning applications—deliver the data you need to manage a major capital project?

3. **Review past projects.** Don't pass on the 'post-mortem' debrief once a project is over. Re-examine past projects, both the ones that met expectations and those that didn't. Review project documentation and contracts, and speak to those involved to identify best practices to continue—and areas to improve.

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