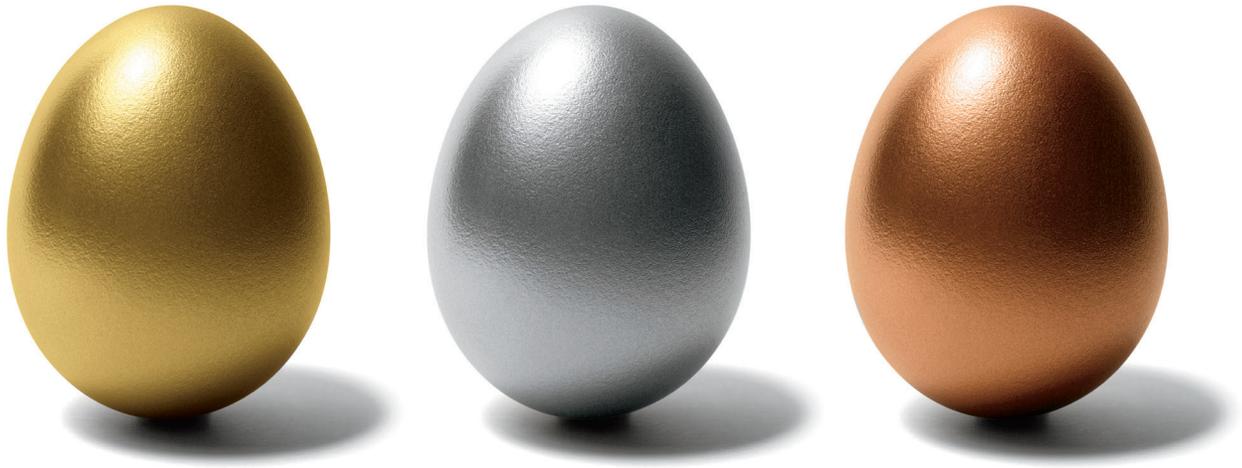


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CORPORATE FINANCE PRACTICE

Why capital expenditures need more CFO attention

Companies in capital-intensive industries need to get more out of their capital budgets. CFOs can play a critical role.

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It's no secret that cost overruns and delays run rampant in large capital projects. Research points the finger at decision biases, which often play an important role in skewing the forecasting of costs and timing as projects are being planned. But a lack of internal discipline, in both the proposal and management stages of a project, further raises costs—both of individual projects and entire portfolios of investment.

It's a drain on the bottom line even when times are good, but it also leaves companies less prepared for capital constraints prompted by external events such as the recent swoon in oil prices. By our reckoning, for example, energy and petroleum companies have already had to trim between

20 and 50 percent off their current year's capital budget over last year. And when the capital budget consumes around two-thirds of cash flows, as it does in upstream oil and gas, cuts of that magnitude can force companies into painful trade-offs between cutting exploration, which imperils future growth, and reducing existing production at the risk of cash shortfalls and liquidity issues. Such decisions are especially difficult when projects can't be easily compared, when managers resist change to their budgets, and when efforts to review them are ad hoc.

Whether or not CFOs are the primary owners of the capital-expenditure process, they are major stakeholders, and in most cases they should play

a bigger role. CFOs are well placed to ensure that the capital budget is consistent with an overall strategy for the use of cash, informed by their knowledge of both the capital requirements of current and future projects and balance-sheet and cash-flow constraints. The impact can be substantial, especially at companies managing hundreds of capital projects every year. Taking a more disciplined approach, one global energy company, for example, was able to trim more than \$1 billion from a multibillion-dollar portfolio of more than 500 projects over the course of four years. Its experience, which we review below, is illustrative and highlights the need to create a standard, comparable model for projects; improve the business-case rigor of individual projects; and assemble a multidisciplinary team to bring independent challenge and support to managing the capital portfolio.

Create a standard, comparable model for projects

The global energy company mentioned above had a flagship business unit with a multibillion-dollar portfolio of capital investments, including more than 500 projects of all sizes, from \$100,000 to \$1 billion in capital expenditures. The process to develop and manage the company's vast portfolio of small capital projects—those below \$5 million—was mostly left to operations and engineering. The CFO's office was responsible only for collating and distributing a master list of the hundreds of projects that the various project teams had proposed for funding. When times were good, cash was plentiful, and this approach was not questioned. However, managers realized the shortcomings in their approach when corporate executives asked them to cut costs.

The problem started in the proposal stage, when attempts to demonstrate the merits of a proposed project's underlying rationale and business case were patchy and lacked a standard methodology.

Project teams that took pride in their engineering and technical excellence often proposed highly complex projects, which meant projects were often overly expensive by design. Few proposals were challenged, and most were approved as long as they appeared to be sufficiently robust to solve a real problem or could be justified on important dimensions of value or risk. This lack of standardization in project development, process, and accountability created an opacity in the portfolio that made it impossible to play a more constructive role in challenging proposals, comparing projects, or assessing the trade-offs of investing in one project over another without compromising operational integrity and sustainability.

To play that more constructive role, CFOs must implement a standard model for all projects that identifies the detailed sources of value in the business case and metrics that reflect that value for comparison with other projects. This includes setting standard rules and parameters for key outputs and assumptions on, for example, exchange rates, inflation, capital costs, and product prices. It's also essential to ensure that the standard model includes the parameters necessary to create a business case both for straightforward growth projects, where metrics like net present value and internal rates of return are easy to calculate, and also for maintenance and compliance projects, where such calculations are often more complex.

In the end, the energy company's project-development model required that each proposal demonstrate both expected direct benefits, in economic value added, and expected indirect benefits, in the value of prevented loss or mitigated risk over its life cycle. While this initially imposed a more extensive analytical burden on project teams, the effort always provided better and earlier clarity into the true value of each

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project and allowed for important early adjustments—in itself a key element of defining an optimal capital portfolio. In addition, project teams began to appreciate the need to develop their proposals more carefully and comprehensively up front, which paid dividends later on, as fewer projects were delayed at important decision gates.

The CFO's office should also build and govern an aggregated and dynamic view of all projects as a single portfolio. This is a critical yet often missing step that provides important insights for capital allocation. It allows managers to address fundamental questions about the likely returns of different portfolio configurations and the best mix of compliance and maintenance relative to growth projects. The goal is to drive as much transparency and internal comparability as possible across the project portfolio and connect it to critical sources of value, so that senior managers can make informed decisions as demands on capital shift—ideally acting preemptively, and, if not, then reacting quickly. Implementing such steps, the global energy company went from no portfolio view at all to a formal capital-review process. The CEO and other senior executives compared capital-expenditure-portfolio scenarios on a semiannual basis when they made funding decisions.

Improve the rigor of individual projects

While engineers play an irreplaceable role in capital projects, engineering organizations are often biased toward including costly and unnecessary features and refinements in capital projects—

so-called gold plating—such as buying the latest models of equipment even when a refurbishment would do just as well. They also often resist changes to their original business case without prompting from above. Moreover, business-unit leaders see the capital budget as an opportunity to win allocation of as much money as possible with the expectation that they will later be able to spend as they see fit.

The finance organization can assert a level of rigor into the review of projects and scrutinize proposals for the kinds of arrangements that mask such problems. In one such arrangement in our energy-company example, business-unit managers often bundled together projects with poor financial viability, typically under general labels of sustaining capital or environmental, health, and safety risk. But since finance had a seat at the table for each stage-gate review of a project and was empowered to challenge both the business case and the technical case for the project, it was able to conduct a detailed review of each proposal, compelling project teams to single out discrete elements and justify those not directly related to the stated purpose of the bundle on their own merits.

Another such arrangement comes in the form of cost-avoidance projects. These do not enhance profitability but arguably prevent profitability from deteriorating. Too many of them can lead to a capital portfolio with a high headline level of returns without much improvement in the bottom line. An involved finance team can examine

the wisdom of deferring the cost of, say, replacing a pump. It can compel project managers to quantify the magnitude and probability of the risk of the pump failing by asking questions such as how often pumps have historically failed. Is there a quicker fix, like having a spare readily available? Is the pump a bottleneck in the plant such that downtime would reduce overall production?

In cases like these, finance can bring a useful independence to what are often emotive issues. Environmental, health, and safety-compliance projects, for example, often include fierce arguments for immediate and total funding, without which, proponents argue, the company would surely face ruin or shutdown. In some cases this may be true; in other cases, the decision to fully fund such projects may be determined by regulation. Yet there are many examples where challenging the expectation of calamity leads to a joint realization that the speculated risk is not that high or that a cheaper solution is available. Enforcing this rigor is valuable for all projects above a certain threshold, particularly for mega-projects—those valued at more than \$1 billion. These often run over time and budget and can single-handedly mar both the financial performance and reputation of a company for years.

Dedicate a multidisciplinary team to manage the capital portfolio

A close review and improvement of a large capital portfolio, sometimes called “scrubbing,” requires more—and more reliable—resources and capabilities than the usual ad hoc approach provides. A dedicated team can help. In our energy-company example, once such an effort proved its value for the flagship business unit, the group’s CFO built a dedicated capital-portfolio team to lead a similar process across the remaining business units. Since previous efforts by a team with only finance-related expertise had encountered objections that projects could not be

changed for technical reasons, the new team included members with a full range of technical, financial, and procurement skills. The team was also designed with softer characteristics in mind, such as resilience, an ability to build relationships across different businesses and technical disciplines, and the kind of career-advancing opportunities that would attract the necessary talent.

In this example, the CFO also controlled the investment committee. While this needn’t always be the case, the committee and process must have an owner independent from the businesses—such as the chief operating officer or a corporate-project organization—and finance should set the tone for rigor and at least have a voice on the quality of each project’s business case. The CFO can also push businesses to raise their aspirations for how much can be cut, weighing productivity against canceling or deferring projects.

Finally, improving the postmortem process played an important role in boosting accountability. While an existing process reviewed safety and on-time and on-budget performance, the executive committee expanded its remit to review each project’s overall business case at a pre-determined interval after completion of the project (typically six months to three years) and whether it had delivered the expected value. The committee also put into place a rule holding each project’s original sponsor accountable for its outcome, even if he or she changed roles. This improved perceptibly the level of focus and rigor in project business cases.

In the end, approximately 10 percent of proposed projects did not survive the scrubbing exercise. The team further lowered the cost of remaining projects by removing excess that often plagues highly engineering-centric project development. The sum of the two activities led to

an approximately 22 percent reduction in capital-expenditure needs for the current year (about \$300 million in savings for the year, realized within six months). Recognizing the size of the impact, the team was elevated to the CFO's office at the group level, with the mandate to review the entire group's capital-project portfolio. This team has since delivered a total realized capital-expenditure savings exceeding \$1 billion to date, over a four-year period.



Capital productivity is an important and often underused value lever in capital-intensive industries. The CFO who takes this to heart and knows where to plug in and how to push can make a big difference in boosting both return on invested capital and free cash flow. ■

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