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**Creating a Risk Intelligent Enterprise:  
Portfolio optimization**

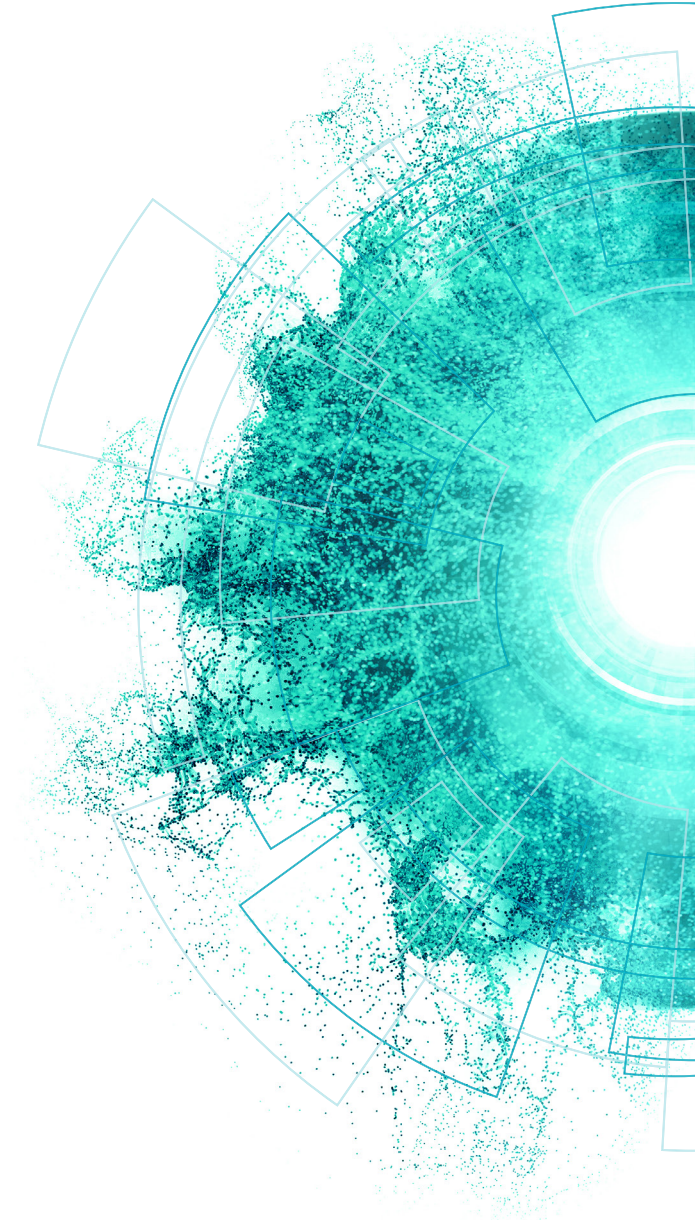
# Portfolio optimization: Investing for the organization of the future

A Risk Intelligent Enterprise aims to evolve in adaptive ways as the risk landscape expands.<sup>1</sup> Within this context, business leaders continually work to not only shed suboptimal investments and pursue new opportunities, but to transform the organization in ways that generate continual growth. Viewing risk management as value creation as well as loss prevention, these leaders seek to optimize the long-term performance and value of the organization amid ongoing disruption.

Yet many organizations' approaches to capital allocation emphasize cost reduction and incrementalism. They typically take prior-year investments as their starting point and add or subtract funds based upon budgetary considerations. They hold limited views of long-term market conditions and their potential impact on the enterprise. Too often, the resulting portfolios lack resiliency as well as transformative power, both of which are necessary in the business environment and can be achieved through true portfolio optimization.

Portfolio optimization stands among four key enablers of the Risk Intelligent Enterprise, along with risk governance, risk sensing, and scenario planning and war-gaming. Deloitte Risk and Financial Advisory's portfolio optimization approach provides the decision support that enables leaders to allocate capital toward activities that enhance long-term value and growth amid disruption.

<sup>1</sup> "Reimagining the Risk Intelligent Enterprise," Deloitte Development LLC, 2018.



# Three key questions

The organization of today will not be the organization of the future. The organization of the future must be envisioned and funded well before the future arrives, which raises three questions:

- 1 **What should our portfolio look like to ensure future success?**
- 2 **What are the implications for how we allocate capital and make investments?**
- 3 **How should we evaluate projects today with an eye toward long-term goals?**

To assist executives in answering these questions, our approach models the enterprise's definition of value, incorporates business constraints and risks, and develops an array of optimal portfolios to maximize value given those constraints and risks.

Our transformative approach differs sharply from incremental, cost-minimization methods in ways that are designed to help address the questions above. First, rather than taking “last year's numbers” as the starting point, it targets the future enterprise and desired outcomes. Second, it enables management to shape an array of portfolios under scenarios featuring alternative business and regulatory constraints and market conditions. Third, it assists management in evaluating the purpose, fit, and financial performance of alternative portfolios and individual projects in light of strategic goals.

The aim of portfolio optimization is to address the limitations of incremental, cost-reducing approaches to capital allocation in a disruptive environment. Portfolio optimization enhances capital efficiency by focusing on increasing value over desired time horizons, which can—depending on industry, business model, and investments—range from a few years to decades. It also enables prompt identification and culling of investments that underperform, lack strategic fit, or both.

# Shaping the optimal portfolio of the future

**What are the current business sector outlooks and exposures for the current core business?**



CURRENT PORTFOLIO: TODAY

**What are the alternative portfolio shapes and impacts on the core business?**



MEDIUM-TERM PORTFOLIO: 2025-2035

**What are the longer-term opportunities based on these shapes and implications on resilience?**



FUTURE OPTIMAL PORTFOLIO: 2035+

# Putting portfolio optimization to work

Successful business models are driven by portfolio decisions at the business unit, program, project, and asset levels. To that end, our approach to portfolio optimization enables management to both construct and analyze the impacts of model portfolios under a huge range of conditions.

## Specifically, this approach:

### 1. DEFINES BUSINESS VALUE, RISKS, AND CONSTRAINTS

We begin with the value the enterprise intends to deliver in the future and what it will take to deliver it under various conditions. This entails identifying strategies and risks that could impact investment as well as operational and regulatory constraints, and then constructing scenarios accordingly. Qualitative risks, such as geopolitical or weather-related threats, are also quantified for inclusion in the analysis.

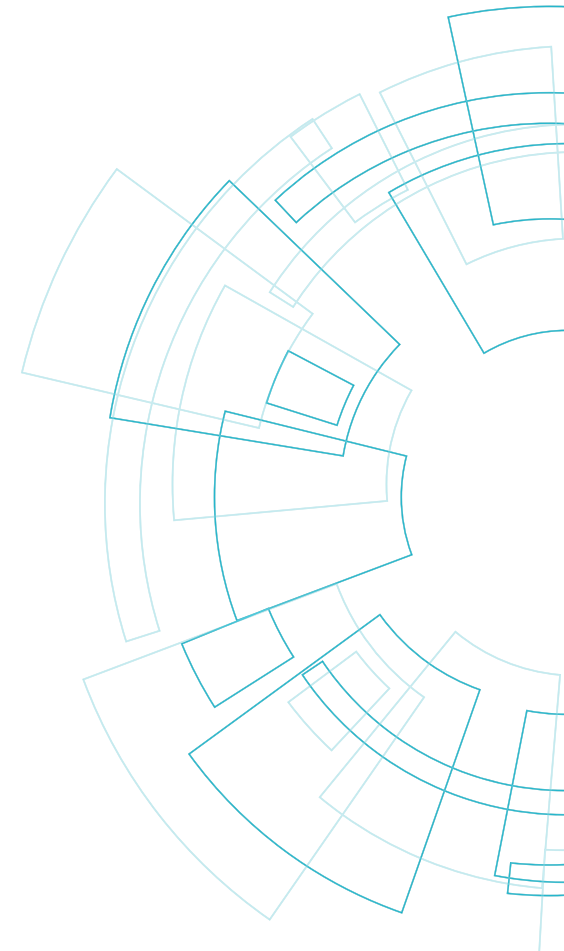
### 2. PROVIDES A MODELING ENVIRONMENT AND DASHBOARD

This approach combines operational and financial data as well as external data, such as commodity prices, interest rates, and market growth rates, to construct specific business cases and the portfolio optimization logic. A customized, interactive dashboard enables visualization of a range of outcomes.

### 3. ASSISTS WITH SOUND CAPITAL ALLOCATION DECISION

Management can more clearly consider a range of value-creation scenarios given specific conditions, risks, business constraints, and market and competitive assumptions. The resulting array of portfolios can be disaggregated and sequenced in various ways, with investments assigned specific start dates and tested for resiliency. Ongoing monitoring enhances understanding of decision outcomes over time and enables management to respond to emerging conditions with greater confidence.

Of course, this is a decision support platform rather than an “answer machine” in that it injects more useful information and analysis into the capital allocation process. In doing so, it makes that process both more rational and imaginative. This enhances not only discussions of capital expenditures, but also decision transparency and governance—watchwords within any Risk Intelligent Enterprise.





## Portfolio optimization in action

A global oil and gas company sought long-term sustainable value and growth by transforming itself from a traditional extractive industries company to an energy company. Yet management lacked an analytical tool to assess the impact of risks and tradeoffs on investment alternatives over the short-, medium-, and long-term.

We worked with the enterprise to develop scenarios identifying four plausible futures for the future of energy consumption over horizons up to 2035, with a focus on one top-line driver—the price of oil. The team identified specific financial and strategic variables for management to use to evaluate potential capital expenditures and portfolio shapes.

The resulting dynamic visualization tool presented an array of portfolio shapes based on various risk-return tradeoffs, project sequencing and scaling, resiliency to exposures, and financial performance.

### As a result, the organization realized:

- **Accelerated evaluation of investment alternatives**, thanks to an interactive, dynamic, data-driven dashboard for assessing strategic options, tradeoffs, and capital allocation strategies
- **Aligned decision making**, due to a common platform on which the finance and strategy functions share data, examine assumptions, explore alternatives, and finalize decisions
- **Improved financial performance**, including an 8.7 percent improvement in return on average capital expenditures and a \$4 billion increase in free cash flow

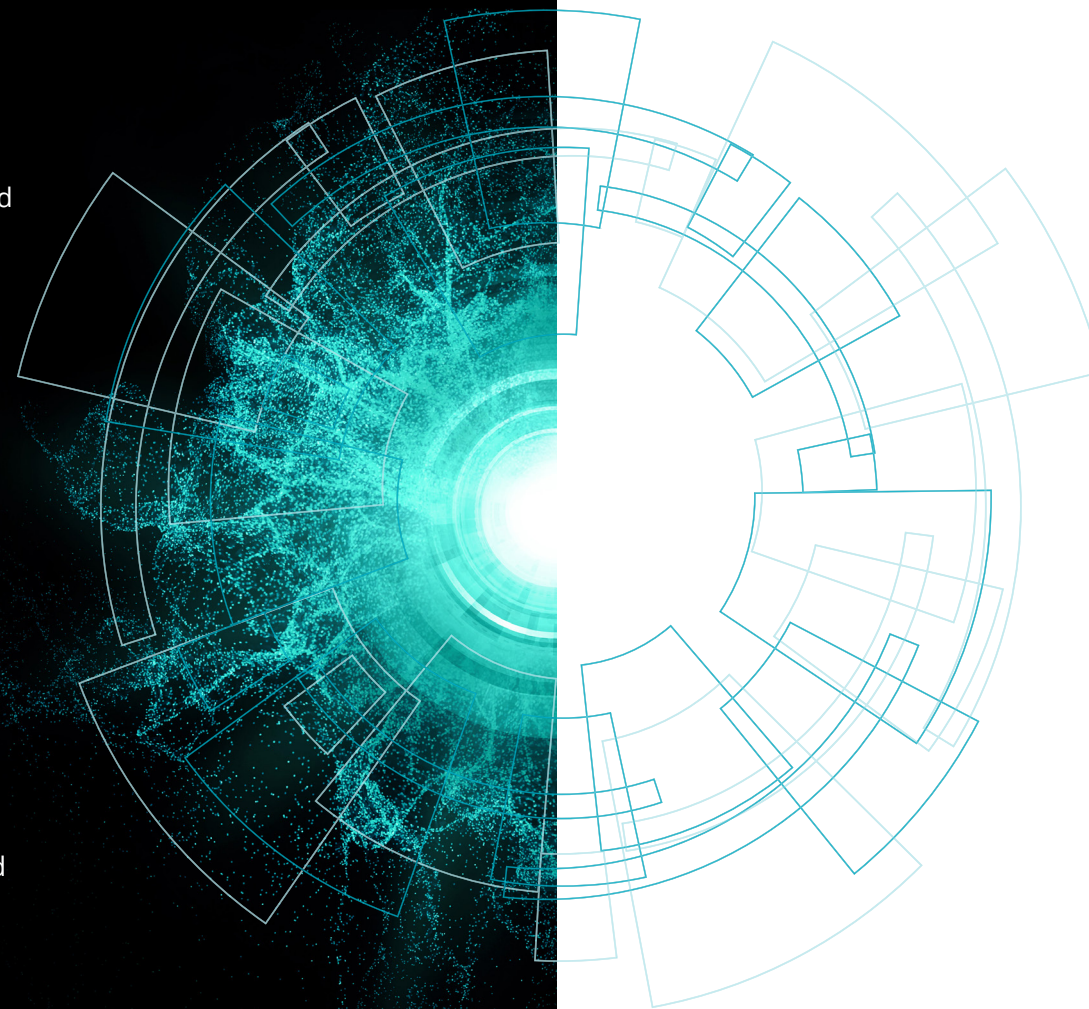
Like any organization, this company had to envision the enterprise of the future and invest to make it a reality. The ability to imagine future configurations, their capex requirements, and their likely outcomes helps management to address disruption. It also enables leaders to consider changes in the market, potential responses, what those responses will demand in terms of capital expenditures—and the expected results.

# Optimizing your way into the future

The business of today will not be the business of the future, and capital must be optimally allocated to create a thriving business in the years to come.

Achieving that allocation calls for more than squeezing higher returns from lower outlays. It means ensuring that the enterprise is equipped to continue to create value, within its broad charter and stakeholder expectations, as a disruptive future unfolds. A Risk Intelligent Enterprise aims not simply to reduce losses and protect assets, but to pursue the revenue- and profit-generating opportunities that a disruptive environment continually presents.

A transformative method is essential for any capital-intensive enterprise trying to take advantage of its long-term investment decisions. Our approach to portfolio optimization can help CFOs and key business leaders better understand the impact future market conditions have on their investment decisions and assist them in making the best strategic business decision.



## Contacts

Please share this perspective with your teams and contact us when you're ready to start your Risk Intelligence journey.

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