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Your Best Top-Down and Bottom-Up Approaches to Risk Management

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Risk abounds in our everyday life. We make decisions on how we travel, work, socialize, and even eat and sleep based on the perception of risk. Dozens, if not hundreds, of tiny decisions are made when making seemingly mundane decisions, like when to change lanes while driving to what to order at a restaurant. However, when determining whether and how to build a new asset, risk takes on an entire new scale, and risk models range from the macro to the micro.

Our discussion here involves how a comprehensive approach to risk management, combining top-down and bottom-up perspectives, is essential for successful project outcomes.

MACRO-LEVEL RISKS: THE PESTLE FRAMEWORK

On a macro level, risk professionals have devised the PESTLE acronym to encapsulate high-level risks: Political, Economic, Social, Technological, Legal, and Environmental. Identifying and mitigating these top-down risks is crucial before finalizing and approving a capital project budget.

Navigating the complexities of international borders magnifies these challenges, as different jurisdictions bring unique government, social, and legal systems into play. In today's climate of heightened social and environmental awareness, missteps in these areas can have lasting repercussions, affecting not only the project but also the reputation of all involved.



MICRO-LEVEL RISKS: THE GRANULAR PROJECT RISKS

At the micro level, granular "project" risks come into play. Questions about skilled labor, material stores, natural disasters, and logistics are part of this landscape. The impact of these "bottom-up" risks on cost and schedule performance can be significant.

Successful organizations bridge the gap between macro and micro risks by creating a repository of risk knowledge over time. This repository is invaluable for informed decision-making. Data-driven insights help in this endeavor.

Data, especially when harnessed through an integrated project controls platform, is a powerful tool for managing both macro and micro-level risks. Risks can be logged, mitigation strategies developed, and assessments of likelihood and severity performed. Monte Carlo analysis and computer models can help determine the most likely outcomes.

CONNECTING MACRO AND MICRO RISKS

Understanding how high-level PESTLE risks affect individual projects is vital. Logging project-specific micro-level risks contributes to a library of discrete risks and mitigation strategies, providing valuable resources for future projects.

Assigning objective attributes to data enhances analysis, uncovers trends, and introduces predictability across numerous data points. Powerful dashboards provide visualizations, facilitating the identification and management of outliers and common threads. An inference engine assesses past mitigation strategies to inform future decisions.

ADOPTING A HOLISTIC APPROACH TO RISK MANAGEMENT

But data alone is not enough. An organizational culture that supports data-driven decisions is essential. Integration cycles at project close-out, where macro and micro-level lessons learned are shared, ensure that predictable outcomes become the norm.

By combining a top-down and bottom-up approach to risk management, supported by data and organizational culture, you utilize a real key to enhancing project success and achieving predictable, efficient outcomes.



About the Author

Since 1998, Rick Deans has worked with InEight customers in more than 35 countries to help identify innovative solutions that address their biggest project management pain points. As executive vice president of industry engagement, Rick leads InEight's efforts to engage with its most strategic customers through the Industry Advisory Group (IAG). Rick works with IAG member companies to evaluate InEight solutions before they are put to work on projects and also to identify industry best practices. An engaging public speaker, he leads workshops on the value of InEight's product portfolio and is active in many industry associations.

About the Article

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