



roctate
CONTROL

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Confidence in complex investments



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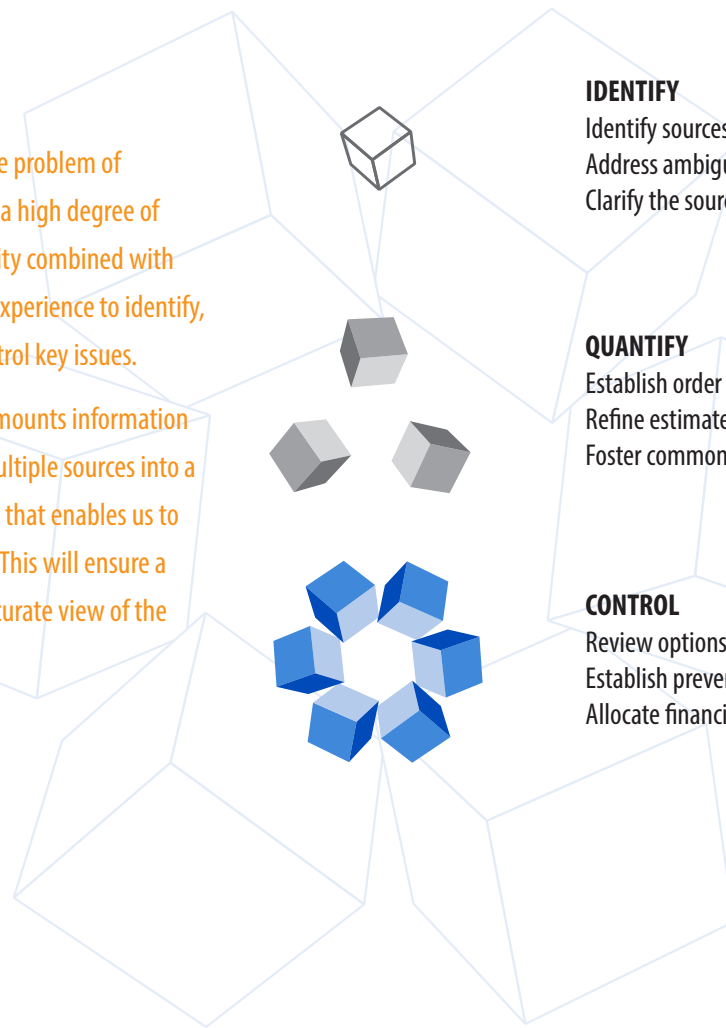


Manage Uncertainty IDENTIFY. QUANTIFY. CONTROL.

Increase knowledge to improve control

Roctate solves the problem of uncertainty with a high degree of technical capability combined with knowledge and experience to identify, quantify and control key issues.

We bring large amounts information and data from multiple sources into a defined structure that enables us to make sense of it. This will ensure a complete and accurate view of the total project.



IDENTIFY

Identify sources of uncertainty
Address ambiguity that is the source of concern
Clarify the source of uncertainty in the current context

QUANTIFY

Establish order of magnitude range to test significance
Refine estimates for significant issues
Foster common understanding for better decision making

CONTROL

Review options to handle uncertainty
Establish preventative and mitigating controls
Allocate financial and managerial responsibility

Roctate has been developing innovative systems for breaking down complexity and managing uncertainty for more than 20 years across multiple industries.

Managing multi-billion dollar projects you are often faced with high-consequence investment decisions that need to be made based on uncertain information—Roctate drives your projects toward certainty.

Leverage new and innovative ideas that have been born from deep experience across several industries and cultures: oil and gas, infrastructure, mining, mineral processing and telecommunications; a global perspective from Malaysia to Australia, Europe, Canada, England, Ireland, Africa and China.

Roctate gives you a more efficient way to understand uncertainty; giving you more confidence in complex investments by helping you understand what is missing and what matters most.



Improve the certainty of the outcome

Determine what's important, what is missing and what might happen.

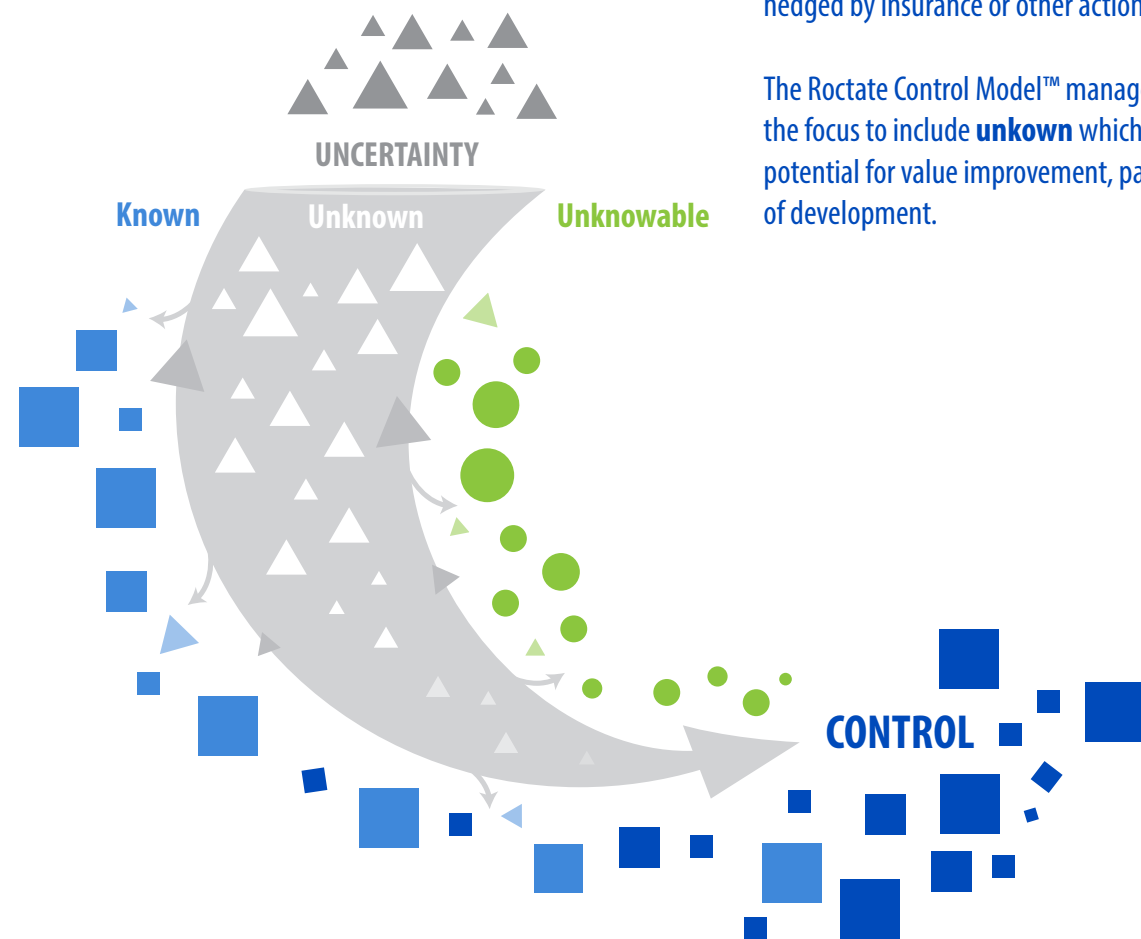
Roctate analyses information to help the project team understand the uncertainty inherent in complex situations.

"Uncertainty involves variables that are unknown and changing, but will become known and resolved through the passage of time, events and action. Risk is something one bears and is the outcome of uncertainty." ~ MUN, 2010

Driving uncertainty to control

Typical analysis is focused on **known**, with **unknowable** factors hedged by insurance or other actions.

The Roctate Control Model™ manages uncertainty by expanding the focus to include **unknown** which provides the most significant potential for value improvement, particularly in the early stages of development.



Uncertainty as a starting point

Isolate the key issues that cause you to question the underlying basis and have the potential to impact, positively or negatively, the intended outcome.

Maintaining control of key issues is critical to managing risks, exploiting opportunities and improving outcomes. It's an ongoing challenge in capital-intensive projects.

Using tailored information analysis, we model the key issues of large projects to help the project team identify what matters. We develop integrated project controls which, combined with succinct reporting, enables the team to keep an eye on the things that matter most during execution.

This is achieved by handling the inherent complexity of capital-intensive projects.



Clearly identify, evaluate and clarify uncertainty to support buy-in and ownership.

Large-scale project development involves a myriad of fast-changing variables, conflicting factors and uncertainty—challenging in terms of business risk and personal frustration.

Roctate identify and analyse sources of uncertainty, providing perspective on what matters, what is missing, and what might happen.

Sources of uncertainty are incorporated into a model that depict the potential cost range of the total project. The model highlight issues with the potential for greatest impact, either positively or negatively, so that the project team has the knowledge to apply critical resources to priority issues.



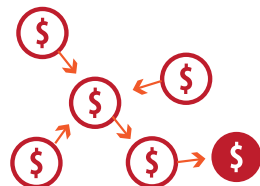
Maximum confidence for minimum investment
Identify, quantify and control what matters most to focus resources and minimize uncertainty.

Build a model that incorporates key issues
Project model to penetrate complexity and prioritise issues for action



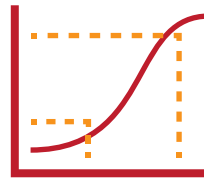
DETERMINE THE EXPECTED COST

Minimum
Maximum
Distribution between min/max



MODEL WITH KEY ISSUES & INTER-RELATIONSHIPS

Link from cause to effect
All key issues incorporated
Model converges to total cost



RESULT IS TOTAL COST RANGE FOR THE PROJECT

Reflects sum total min, sum total max
Probability distribution from min to max
Depicts expected cost range for modelled complexity



ANALYSIS FOR IMPACT

Prioritize based on potential impact
Focus on majors threats (positive) to mitigate
Identify opportunities (negative) to exploit

Major aspects of development

Focus on the major aspects in each development phase to highlight key issues

		MAJOR ASPECTS OF DEVELOPMENT			
DEVELOPMENT PHASES		DIRECTION SETTING	INVESTIGATION/DESIGN	CONTROLLING	ORGANIZING
PHASE 1	PREFEASIBILITY Business Planning	Focus on leverage points, major issues and option recommendations	Adequate analysis to ensure broad option generation	Ensuring allocation of resources is relevant	Contribute to creative process
PHASE 2	FEASIBILITY Options Studies & Planning	Fully define and agree on project scope and objectives	Detailed investigation and assessment of selected options	Managing diversion and ensuring integrity of outcomes	Application of expertise, experience and discipline
PHASE 3	EXECUTION Manage & Control	Focus on achieving project objectives	Innovation in engineering and construction techniques	Managing application of agreed processes to change, cost and schedule	Managing of structure and processes for effective execution of the project
PHASE 4	START-UP / OPERATE Improvement Projects	Establish the culture and style of the operating organization	In-depth startup plan. Institute systems and procedures to drive the requisite behaviour	Ensure the operating process is safe and in control and costs are being continuously reduced	Effective training