

Project Risk Management – An Executive Concern

Actively Manage Risk to Deliver Capital Projects on Time and to Budget!



Risk management is regarded in the oil and gas industry and more broadly in energy industries as a well-established concept to avoid delays and cost creep, yet it is not uncommon to hear of capital projects suffering significant delays and cost overruns, greatly impacting project economics and in some cases even their viability and destroying shareholder value. More often than not these companies do not lack suitable processes and procedures aimed at appropriate risk management, but they often do lack a sound risk management culture, the critical element in enabling successful risk management practices.

Project risk management is often regarded, by project teams, as a mere paper exercise. As a result these teams lose an opportunity to strengthen the management of their projects and deliver the best possible project results by leveraging Project Risk Management to:

- bringing a balanced perspective to the management of complicated and interconnected issues in capital projects
- prioritising work in a rapidly changing context with an approach that is better than simple intuition and that facilitates communication between people
- identifying knowledge gaps and actively closing these gaps
- active management (and not the avoidance) of risk and grasping of opportunities by being alert and prepared

Project risk management matters!

The general risk level in oil and gas projects is increasing, as competition for depleting resources drives the need for better discovery and recovery rates in more and more technically challenging settings and at competitive operating costs. This means more forays into complex projects (both in terms of technology and of scope).

Take a minute to think of the risks to which your current capital projects are exposing your business. What, for example, would be the cost of:

- a delay in commissioning one of these projects in terms of higher project costs and/or lost revenues from unrealised production? To Woodside Petroleum, the cost was nearly AUD 1.5 billion, wiped off its market value when it announced a six-month delay and a cost overrun of AUD 900 million at its flagship Pluto gas-export project, with a corresponding delay in the export of LNG cargoes to their Japanese customers;
- a major incident involving pollution and or fatalities in a remote area or at sea? Well, the BP/Transocean Macondo accident represents a major example.

We believe that proactive risk management is a key tool that companies need to apply in order to address these challenges and to help them succeed in terms of delivering quality assured projects on time and on budget, fulfilling shareholder expectations.

The basics of project risk management

“All of life is the management of risk, not its elimination.”

Risk management is not the total avoidance of risks but rather on one hand the reduction of the negative deviation from plan and emphasis of business opportunities and on the other hand the mitigation of the value at risk due to major disruptive events affecting the company through the project.

Focus is on anticipating future potential issues and opportunities and taking a conscious decision on whether to:

- **Avoid the risk, grasp the opportunity** – choosing an option that eliminates the risk or makes the opportunity certain
- **Control the risk or opportunity** – decreasing either the probability of the occurrence of the risk or the impact were the risk to happen, or for an opportunity, increasing either its probability or impact
- **Accept the risk or opportunity** – taking a decision to take no action with regards to the risk or opportunity
- **Transfer the risk or opportunity** – transferring the risk or opportunity to another party
- **Investigate the risk or opportunity** – creating consensus on a risk or opportunity that is not yet fully understood

To be able to make conscious decisions and arrive at a conclusion on the measures that need to be taken the risks and opportunities need to be identified and properly assessed. For risk identification it is essential to promote a culture where people are encouraged to raise and discuss risk, not just within the project focusing on technical aspects, but also outside the project involving all stakeholders. For risk and opportunity assessment it is necessary to understand the probability of occurrence and severity of impact in order to make the correct estimation of the risk level the item found is exposing the business to.

What is also crucial, but in many cases forgotten, is assessing the time you have to solve the risk or grasp the opportunity before it is too late to take action. Combining the risk level with the timing of necessary action, will enable the project to define a management priority for each item enabling their timely management.

Figure 1. Estimation of risk level

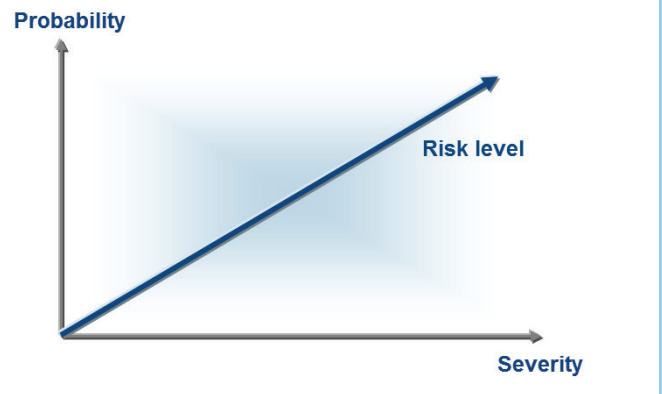


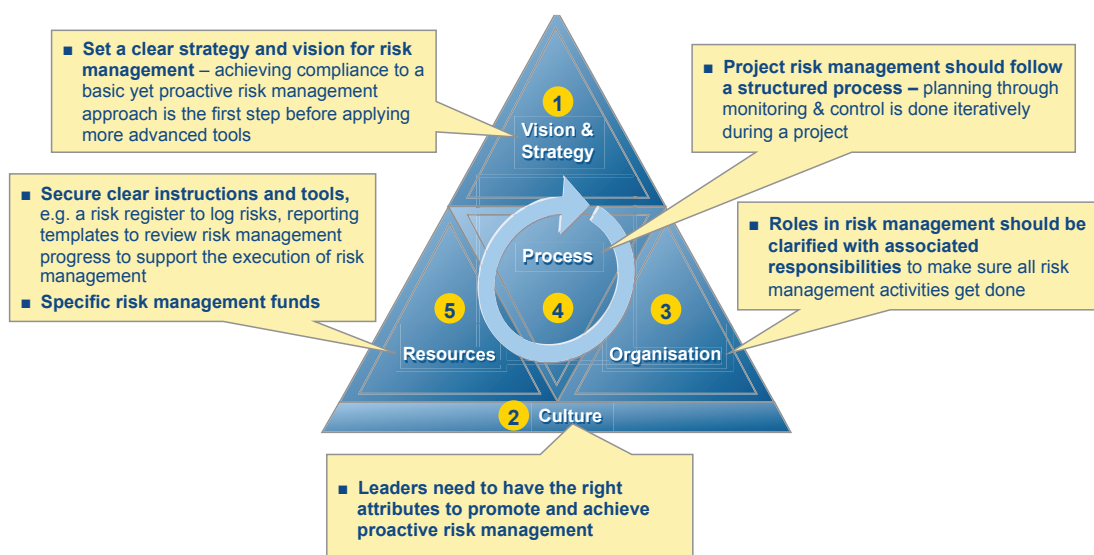
Figure 2. Risk management priority



The building blocks of successful project risk management

To achieve proactive risk management in development projects five building blocks needs to be in place: a clear vision and strategy, a proactive risk management culture, an established organisation, clear processes and dedicated resources.

Figure 3. Project risk management in the High Performing Business Model



Most companies have well defined risk management methodologies and tools, i.e., the “hard aspect” of risk management. However an area where even progressive organisations fail to perform is the “soft aspect” of risk management, which includes ownership and responsibility, risk related performance metrics and targets, adequate representation of risk, functional recognition of risk and innovation.

Therefore the soft building blocks are needed to underline the importance of risk management in a company and create the prerequisites to execute project risk management effectively and efficiently.

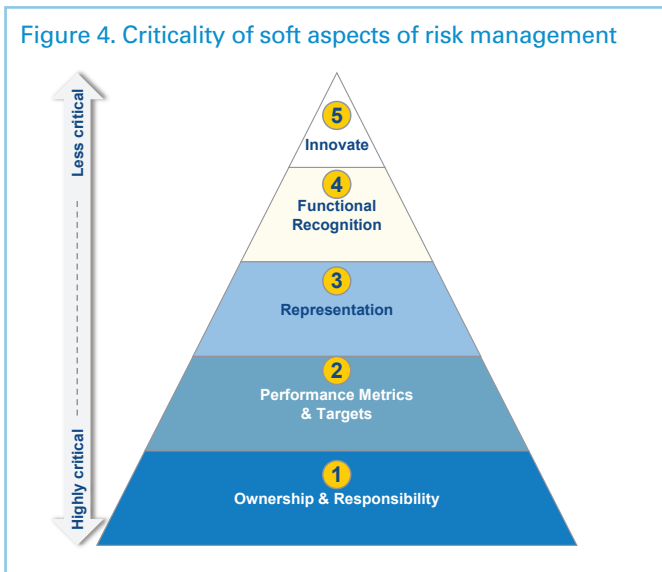
Leverage project risk management in decision making

For many, project risk management is just another administrative burden. If they are just making the effort to identify and assess risk simply so as to have something to report then, yes, the value of risk management is limited. It is only when they proactively take measures to mitigate the risk or grasp the opportunity that they will see the benefit. This requires a project to take conscious decisions on appropriate measures based on cost-benefit analyses and then to actually deliver on those measures.

Information generated in project risk management can and should also be utilised to inform crucial project decisions, such as concept selection. When facing a situation where a decision needs to be taken to change the content/scope of a project the decision should be risk / opportunity based, which can easily be done through a structured exercise utilising the information already available from continuous risk analysis, to understand which option at hand would be less risky and for what reason.

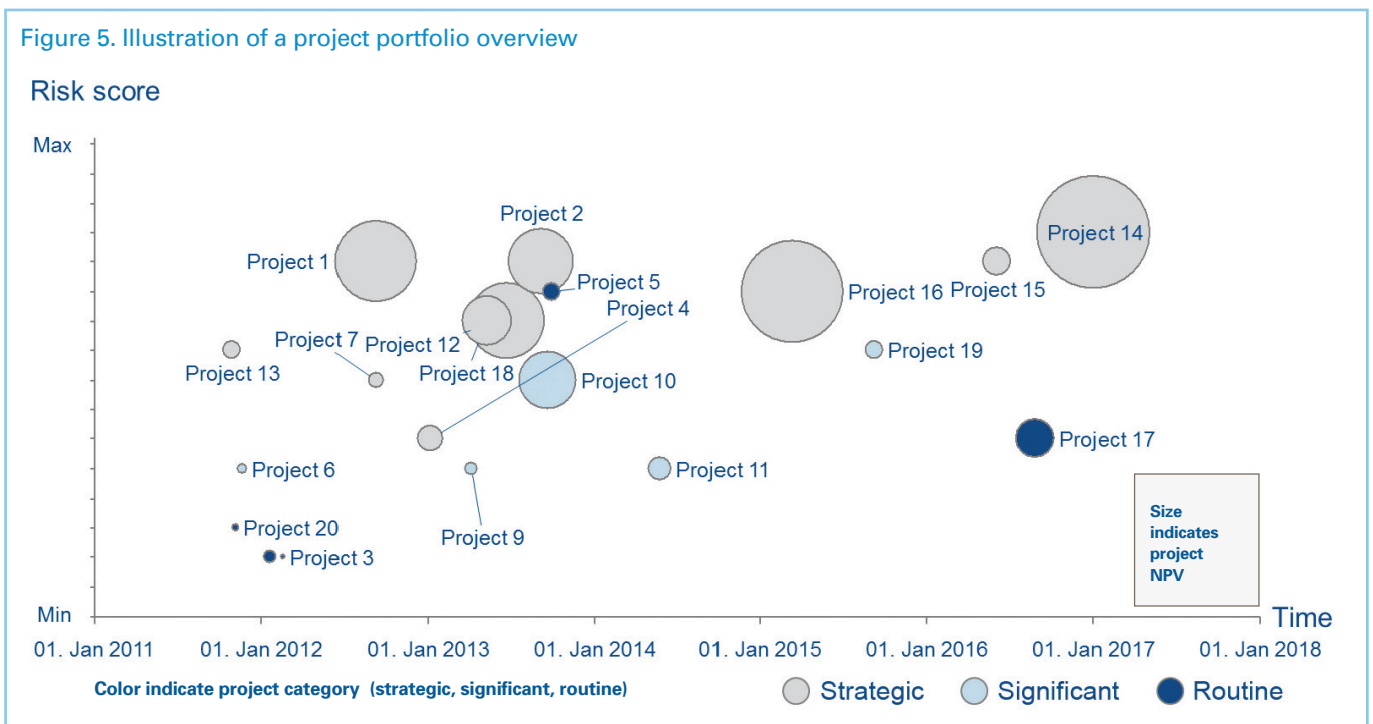
Project risk management also enables a discussion on risk appetite at a project portfolio level. Understanding how many high risk projects are taken on at any one time and the risk

Figure 4. Criticality of soft aspects of risk management



Good project managers recognise the importance of proper risk management, which in fact ultimately is their job. But not all project managers have that insight and they are often more focused on problem solving instead of problem prevention, as solving things is more tangible and personally rewarding.

Figure 5. Illustration of a project portfolio overview



profile of these projects is the first step towards calibrating an appropriate level of risk exposure in a project portfolio. In the end it is a question how risk averse a company is.

Insights for the executive

Project risk management is an iterative process with continuous planning, identification, assessment, action planning, and monitoring and control of risks and opportunities. It is neither a one off activity at the beginning of the project nor a paper chase exercise to document risk to be able to say in the end "I told you so". Risk management should be in the mindset of the project team and included in their day-to-day work so as to manage measures in a timely manner and by doing so dramatically increase the likelihood of delivering all capital projects on time and to budget!

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