Aucerna

Case Study

The core tenets of a portfolio system relate to four key areas, theory, process, systems and data. A portfolio system must deliver in all of these areas to deliver results. A portfolio system will never be achieved simply by installing a piece of software.

Without good data there is nothing to build a portfolio system on. Data preparation revolves around quality assurance and versioning. It is important that data manipulation is minimized or removed altogether. Users should not be copying and pasting or manually converting data from one system to another. The panacea is ‘evergreen’ availability wherein the latest data is always available and portfolio refresh does not require that a big data-gathering business process to be triggered each time.

A corporate portfolio system also requires dedicated systems including appropriate software and connectors. As far as possible this should be automated and minimize the number of steps and loads processes.

A process must be designed for each company that is timely, repeatable and practical. An additional consideration is that the process must be ‘owned’ rather than ‘imposed’. All too often Aucerna sees companies where it is seen as an annoying or tedious reporting burden by asset teams. By transferring a degree of ownership and visibility of results to the teams we obtain buy-in and ownership.

The theory is also important with the process and systems enabling the theory to be practiced. The ambition is to support good decision making and optimize a company’s chosen value measures. It must be possible to apply constraints, targets and business rules and provide access to portfolio options. When critical areas is a good approach to uncertainty and risk that is consistently understood and consistently applied across the organization. Always model the impact of individual large and risky projects. Try to show the probability of achieving targets along with the overall variance of the portfolio. Showing an efficient frontier is not essential but remember that fully risked data is needed to achieve it.

All too often we see portfolio processes run in parallel with entirely independent business processes such as strategy, business planning, reserves and reserves. There are massive opportunities to share data, templates and systems, thereby simplifying lives and reducing the burden on staff.

A good portfolio system requires good metadata (data that describes the data). It is important to decide what metadata is required and design for it up-front since it is very hard to obtain later on. Examples include project categories, location, business activity type, levels of flexibility vs. obligation etc. Always consider business reality and ensure that enough information is captured to properly model it. What is the point in a portfolio system that allows a project to be cancelled when the reality is that there is legal/contractual obligation to do it? Perhaps there is a work commitment or an obligatory HSE project that simply can't be removed.

Always consider correlation when considering uncertainty. If you decide to model a range of outcomes they may be entirely uncorrelated such as separate exploration outcomes, or heavily correlated such as the oil price achieved across projects.

Aucerna leads projects to not only implement a portfolio system but design one from the ground up. It includes an extensive analysis phase in which a wide range of executives are interviewed about their needs, expectations and opinions. In addition workshops are run on KPIs, risking and granularity. Discussions are held with other groups such business planning, reserves and exploration to explore shared requirements. In parallel with the analysis phase we perform an experimental portfolio build. This helps to identify pain-points, bottlenecks and data quality issues that can then be designed for.