

# Mind the gap between finance and engineering in mining and industrial projects

*By Joe de Klerk, MD at CCSMI – the mining and industrial division of Construction Computer Software (CCS)*

Mining and industrial organisations need to adopt integrated business solutions that enable them to bridge the gap between their engineering and finance departments if they are to maximise the profitability of their projects and gain visibility into – and control over – project costs and performance.

With margins in this sector under severe pressure, it has become more important than ever for organisations to have a firm handle on tendering, procurement, project costs and time. They can only achieve this when they have access to real-time data that enables them to monitor project processes so that they can make better and faster business decisions.

Historically, a lack of integration between the finance and engineering departments (and their data and systems) has prevented mining and industrial organisations from achieving this level of real-time insight and control. Estimators and accountants do not speak the same language and there was a disconnect between financial data and engineering information.

Both finance and engineering are key to the profitability of any mining or large-scale industrial project, considering the number of variables, changes, people and equipment involved. Engineering control includes generating and managing allowable and actual quantities of resource, wastages, manhours of labour, production of equipment and time for construction activities. This is every bit as crucial as finance to the success of a project.

There are business solutions today that enable estimators and accountants to do their work in the language that is meaningful to them, while producing the real-time reporting about actual and allowable costs that management needs. Using interactive estimating and planning, such solutions provide a link between budgeted cost and time and allow for budgeted costs to be spread over the actual project

This produces an accurate project cashflow showing net present value and maximum funding required along with various other statistics. The cashflow could be remodeled to produce various scenarios to allow the organisation to make the right decision at the right time. This real-time, activity-based comparative analysis of costs and allowables provides the essential information that determines the success or failure of a project.

Organisations should seek a system that allows accurate comparison of what is actually happening on a project to what was expected – all in “real time”. It should allow all cost data (payroll, plant, stock, yard stock, MRP, and so on) to be captured once where the information is first produced (site, head office, yard) and then to be managed through a single database for full integration and real-time analysis.

The key to the overall success of any capital-intensive project, is delivery on time and within budget, while maintaining a profit margin. The software with the right controls will help mining and industrial organisations understand where they have already overspent, and help them forecast the project-to-completion and highlight upcoming problem areas.

The right software will not only ensure that an organisations maintains control over its actual spend, but also provide an intimate-level understanding of budgetary amounts, quantities, rates and actual costs. Thus, it brings all the key role players in the company together to make informed decisions from a complete holistic view of the project costs.