

Capability Statement

Data Analytics and Dashboarding: A Core Skill for Project Controls

Project Intelligence and Business Intelligence

We live in a world where data is abundant in the project environment. So abundant in fact, that the next challenge becomes extracting intelligence from the project that serves the various forums and stakeholders of the project. These audiences include the project steering committee, the project management owners' team and its resources, the contractors, and even external stakeholders who have a vested interest in the project.

VBKOM recognises that a core skill required for successful project controls, is the presentation of information in a clean, concise and easy to understand format – the right information to the right forum. Project Intelligence integration with Business Intelligence is crucial – the purpose of a project is, after all, to implement business change, and no project functions in isolation!

In this document VBKOM explores some of the critical questions that need to be answered to ensure project and business success. What information and inputs does the project require? What essential project-related information does the business need? How is the project interacting with other projects in a programme or portfolio?



Different Focus Areas of Project- and Business Intelligence

| Project Control Item | Project Intelligence | Business Intelligence |
|----------------------|---|---|
| Schedule (Time) | <p>Is the project ahead of schedule or behind?</p> <p>What is the expected completion date?</p> <p>What does the SPI trend indicate?</p> | <p>Is the timing of the project still inline with the portfolio strategy?</p> <p>How will the expected completion date impact other critical projects in the portfolio?</p> <p>What are the root causes for the variation, and is this trend visible in other projects??</p> |
| Cost | <p>Are there positive variances in the cost performance?</p> <p>Are there negative variances in the cost performance?</p> <p>Unutilised risk contingency funds of completed work packages?</p> <p>What does the CPI trend indicate?</p> | <p>Can these funds be channelled to another area in the portfolio?</p> <p>Do we have a management reserve in place, or where do we obtain the capital from to fund the shortfall?</p> <p>Can these funds be withdrawn from the project?</p> <p>What are the root causes for the variation, and is this trend visible in other projects?</p> |
| Risk | Exposure of known-unknown risks | Does the portfolio have a management reserve to mitigate threats or enhance opportunities? |
| Decision Support | Exceeding the project managers decision making threshold | Who in the portfolio need to intervene or make the required decision and can it impact the project parameters? |
| Resourcing | Variances in resource availability and or productivity | Can the portfolio support the project with alternative or more resources from the internal pool, or do they need to recruit new resources? |
| Product | Transfer of the deliverables and final product to business | Are the post-investment review strategy and assessment criteria agreed upon and planned to ensure it gets measured to qualify the business case? |

In the consulting space, it is important to maintain a tool-agnostic approach. This means that the data analytics skills of individual project controls resources should be generic enough to apply to the system of the client's choice, yet informed enough to make quality recommendations when the client is exploring new territory. Remaining tool agnostic enables VBKOM to serve our clients' best interests and not influence decision-making through our own preferences and bias. That said, all reporting tools should be evaluated critically against the following items:

- > Version control and tamper proof
- > A single source of truth
- > Versatility
- > Ease of use
- > Minimal duplication of effort

The initial set up of the project plays an important role in the ease with which project controls are implemented. A project that is set up and structured correctly is easier to report on. Therefore, it is important to be involved in the project from the very early phases to ensure that the project is structured with value-adding reporting in mind.

Below are some examples of reporting for project intelligence and business intelligence purposes:

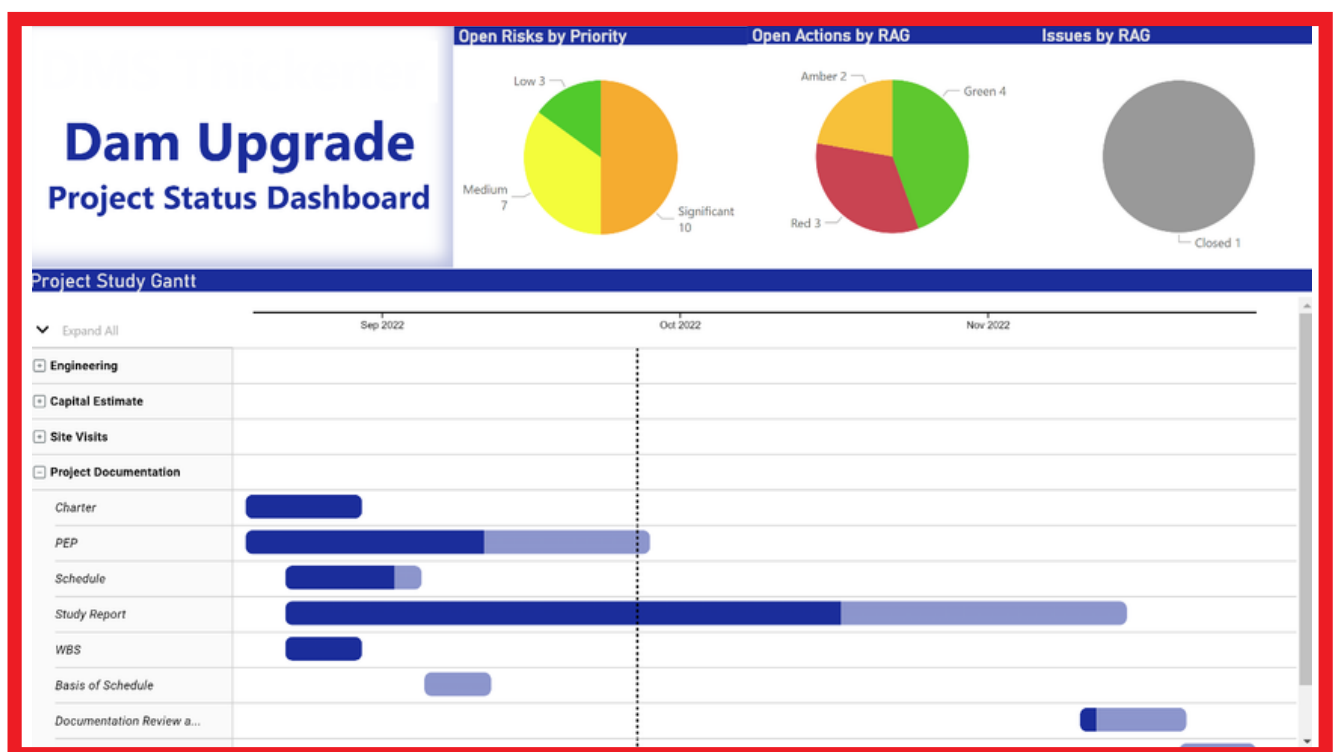


Figure 1: A Project in Study Phase

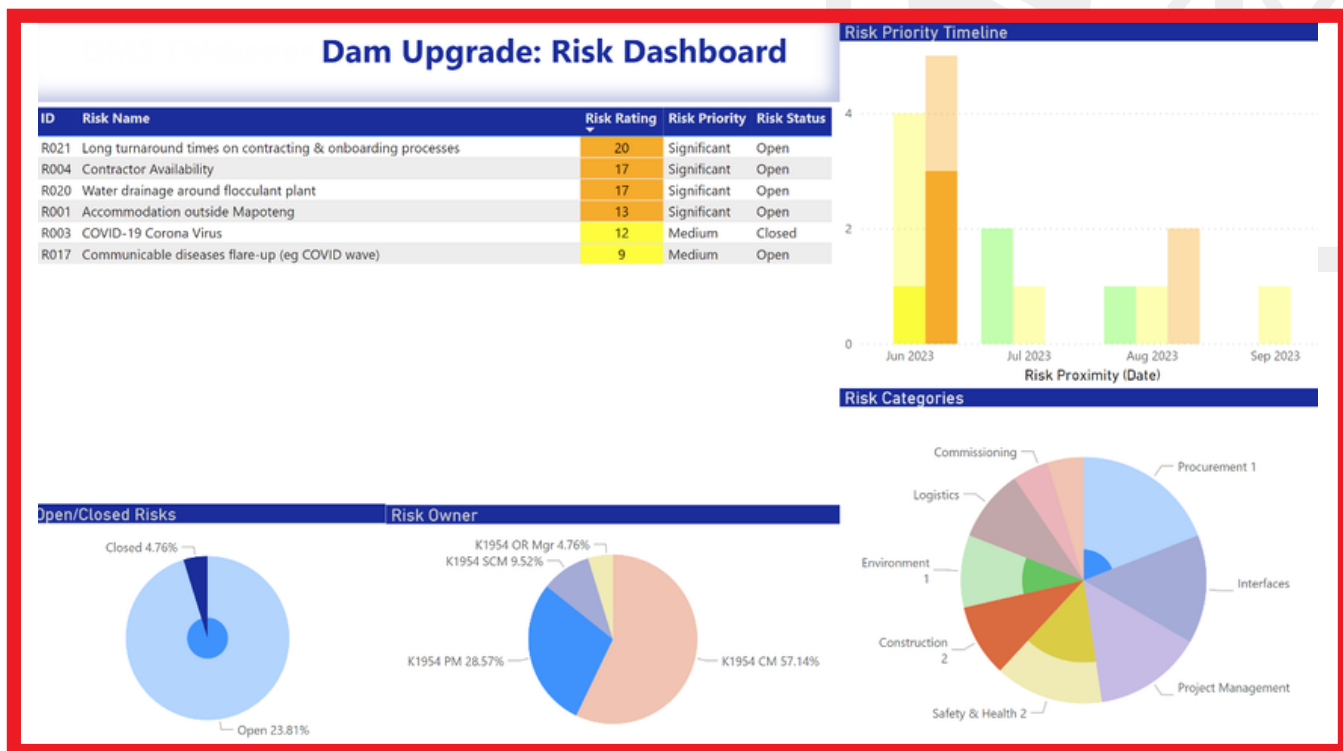


Figure 2: Risk Dashboard, filtered by Risks allocated to Project Manager

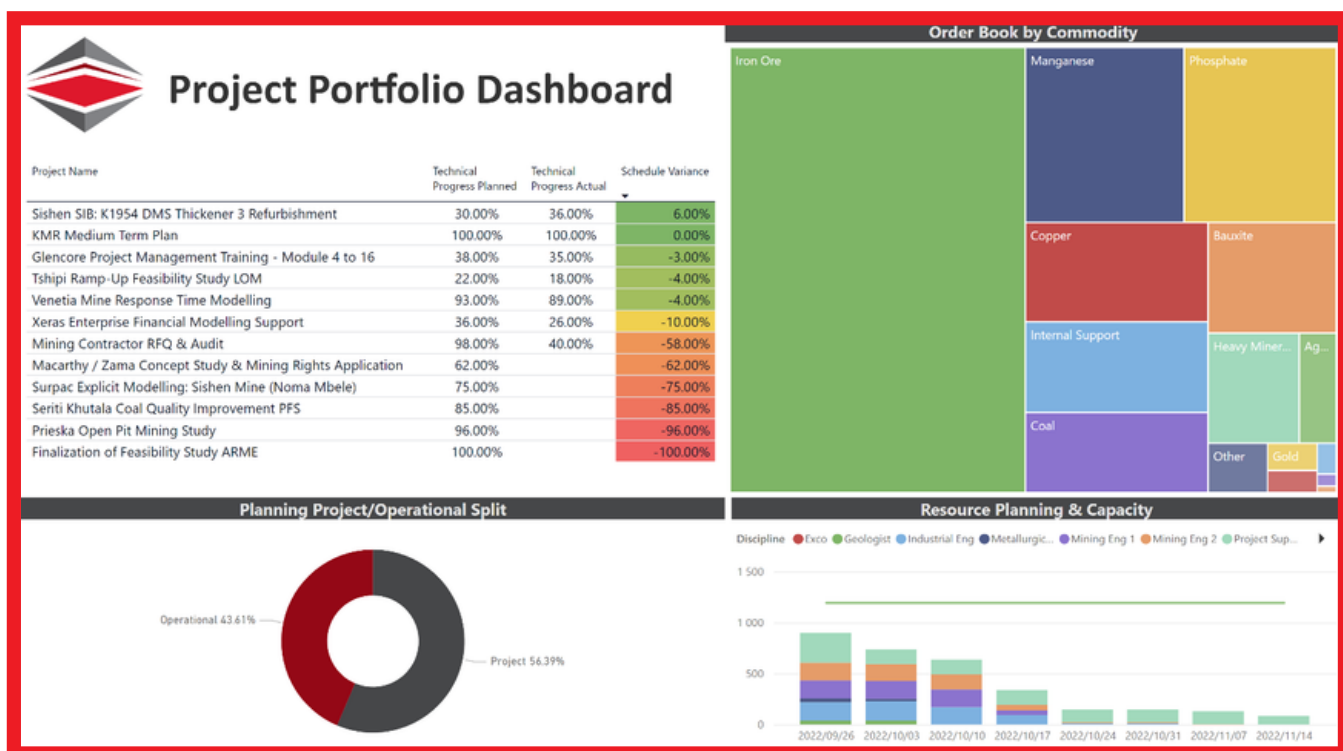


Figure 3: Project Portfolio View for Business Intelligence

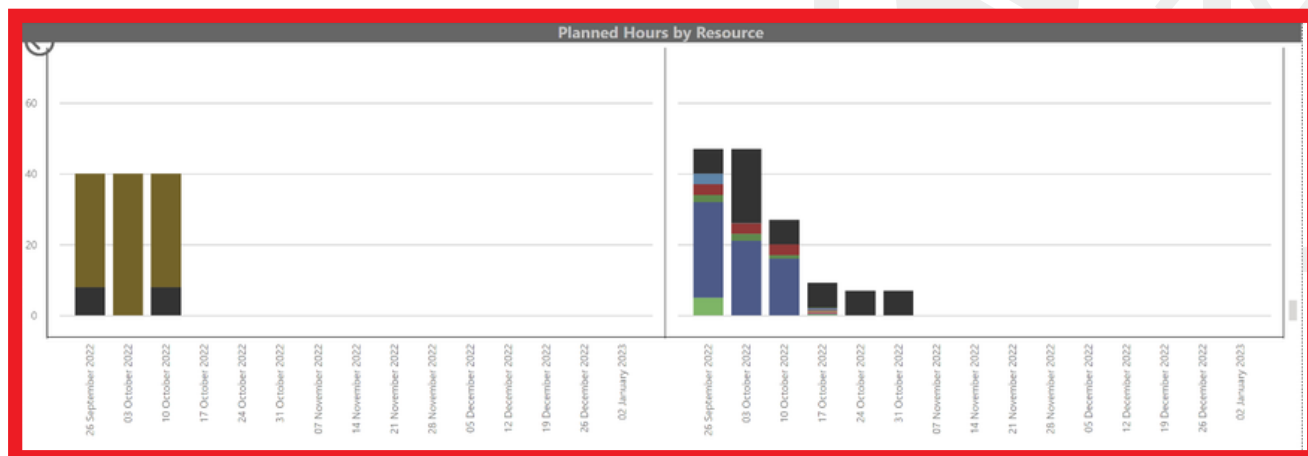


Figure 4: Resource Planning, stacked per Project Consulting Best Practice indicated that a single resource loses efficiency when allocated to more than three projects - this shows that the resource on the right should be relieved from some projects

One of the key benefits identified from dashboarding and data analytics for projects, is the depth to which one can generate intelligence with a thorough understanding of the data available, and identification of additional data required. Quality reporting also benefits the project and business in terms of efficiency and accuracy of having a single source of truth and communication from which reports are generated.



Our Value Proposition

VBKOM is a provider of innovative business and technical consulting services and solutions for the mining and capital-intensive industries throughout Africa. We challenge ourselves to apply fresh thinking and to utilise our experience and technology in pioneering new ways to deliver forward-thinking solutions.

Due to VBKOM's diverse pool of expertise, we can offer our clients specialised skills within a one-stop-shop culture. Our engineering, risk, and project management capabilities as well as simulation and decision support expertise, make us an ideal partner to the mining, petrochemical, agricultural, and construction industries.

Our focus on long-term client relationships, combined with our technical skills, ensures that our clients can fully optimise their value chain.

At VBKOM, the quality of our work is guided by a simple philosophy – our success is driven only by the success of our clients and the achievement of our professionals. By using cutting-edge technology and the most advanced computer modelling systems on the market, our technical expertise comes unrivalled. Our capacity and continuity have earned us the trust of some of the world's most prestigious mineral resource companies. Staying true to our core values; utilizing our vast project-specific experience and qualifications; and applying proven world-class methodologies and processes, makes the VBKOM team a dynamic, flexible and innovative team with a track record standing as solid proof of our competitive edge in our field.

VBKOM employees have been successful in providing solutions of an independent nature to a range of clients in the mining industry. Our consultants have developed a good understanding of the needs and opportunities of both open pit and underground studies and operations, and we look forward to adding value to your company. We believe that independent consultants can provide optimal solutions to the Client without any risk of providing a solution with an inherent conflict of interest. The VBKOM strategy is to form part of the owner's team, to define and protect the owner's interest within our area of influence and control. VBKOM is committed to adding value to each client through innovative, practical, and trustworthy engineering solutions.

Please visit our sites to find out more:

VBKOM website, social media and ProjectPro website: