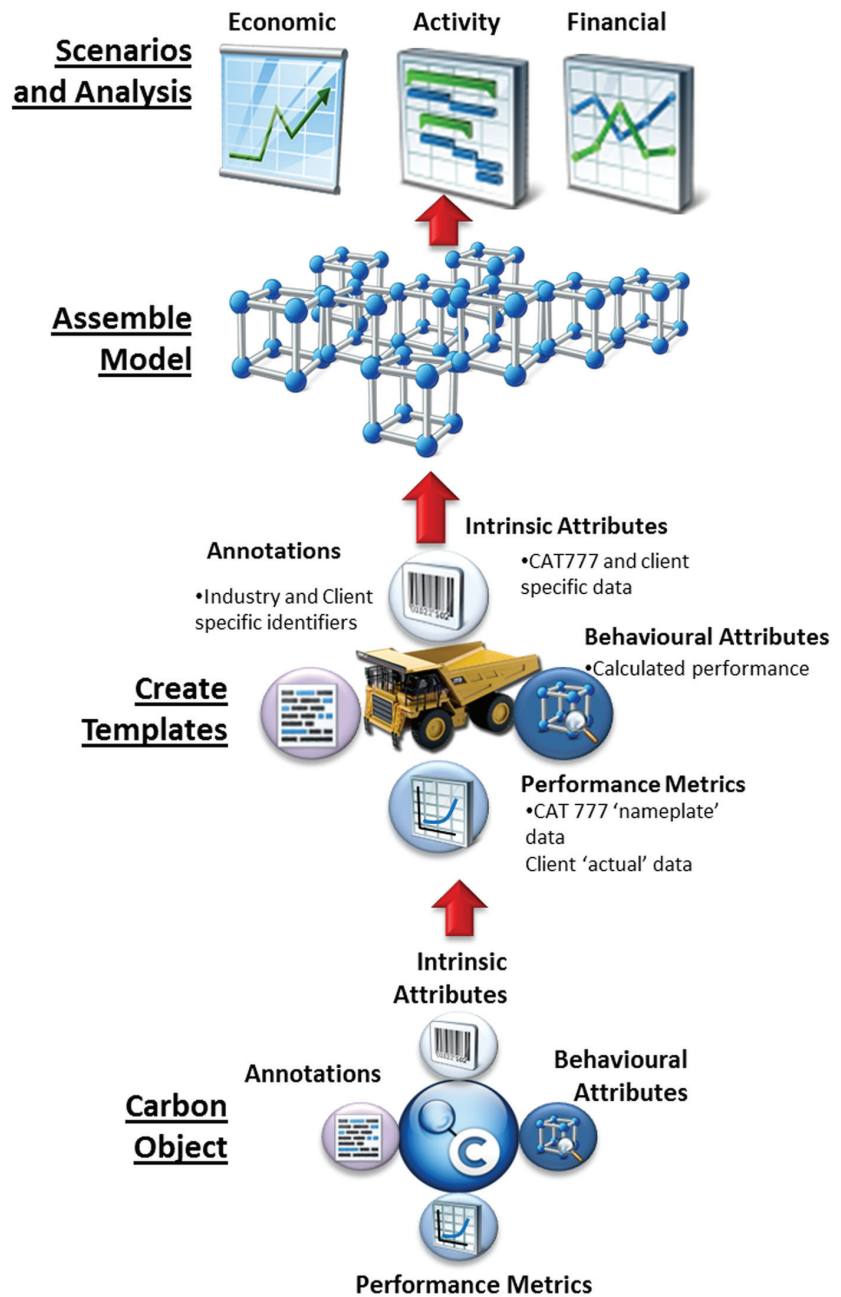


# Cyest Analytics



## Carbon Modelling Technology

The Cyest **Carbon Modelling Technology** is the next generation of business software. It takes the concept of multi-dimensional object oriented design into the world of business modelling. Using object orientated modelling techniques, business users can rapidly build and maintain models of their business using templates that contain the underlying business logic. Gone are the days of business analysts in the organisation maintaining multiple complex spread sheet based models for budgeting, optimisation or planning. The **Carbon Modelling Technology** puts business modelling in the hands of the business users.



Cyest has configured specific solutions for the mining industry built on the **Carbon Modelling Technology** that address specific business modelling needs:

## Carbon Solutions Offered

- **Carbon14 Mine Scheduler** – a rules based mine planning and scheduling solution. This allows for the rapid generation of a valid production schedule and scenario analysis to compare mine design, mining method and mine scheduling alternatives quickly and accurately.
- **Carbon Economics** – a detailed resource consumption and cost modelling solution that allows for the rapid generation of a rules based budget and forecast for Life of Mine and budgeting purposes. It integrates seamlessly into the **Carbon14 Mine scheduler** allowing for all the economics to be calculated for a production schedule for scenario analysis and comparison.
- **Carbon Processing** – a techno-economic modelling solution for processing, that integrates all technical and economic aspects of a processing plant. This provides scenario analysis and metals forecasting of plant output and performance management based on management levers.
- **Carbon Performance Manager** – a visual Value Driver Tree (VDT) based model that integrates actual and budget information into a powerful diagnostic performance management solution. Various diagnostic analysis tools such as 'attribution analysis' allow a manager to understand the drivers of performance variance. Specifically 'what is happening', 'where is it happening', 'why it is happening' and most importantly the underlying model allows management to test what can be 'done' to rectify this non-performance using scenario and what-if modelling capabilities.
- **Carbon Optimiser** – this module uses various optimisation techniques such as linear programming and genetic algorithms to automatically optimise the selected variables under consideration. This can be applied, for example, to ore routing optimisation between different processing plants with different treatment characteristics and can be integrated with any of the other Carbon solutions to do automatic optimisation.
- **Carbon Risk** – a quantitative risk module that can be integrated into any of the carbon solutions allowing for full stochastic modelling capability.

**Please contact Gary Lane to discuss your specific optimisation and modelling requirements.**

**Web – [www.cyestcorp.com](http://www.cyestcorp.com) | Email – [glane@cyestcorp.com](mailto:glane@cyestcorp.com) | Tel – +27 11 685-0300**

Powered by

**Carbon**  
modelling technology

