

Understanding and managing risk exposure

Whether you are exploring capital investment opportunities, trying to improve your existing project delivery performance or planning to transform & optimise your existing operation, understanding your risk exposure and managing it, is key to greater benefit realisation.

Whilst it's important to capture all the material uncertainties with investments, projects or transformation, there are decades of research, modelling and proven outcomes that show that it's the human side where our biggest risks lie (and these are almost always overlooked or hidden from view). For that reason, scientists at Stanford University developed an AI model, built on project dynamics and human behavior, based on the **concept of processing information & the quality of decision making and extended statistics**.

Leveraging

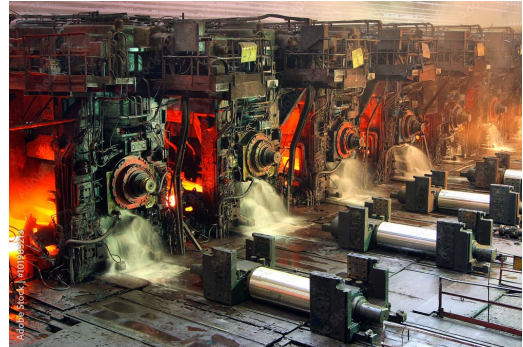
Leveraging the research and project successes of large portfolio delivery and megaprojects (like the NASA case shown below), we work with project investment- and transformation teams to accurately model risk management of, amongst others, the human side.

Proven approach

Cases elaborate on proven outcomes of this concept as applied in various industries. More cases on request i.e., **Civil (Infra) & Pharma**.



Mining: 7.5% Capex reduction of a \$20 bn onshore LNG project: 530 km pipelines, large process facility and extended automation.



Heavy Industry: over 10 times accelerated start-up time of one of the facilities of a Steel Mill, from >4 wks to <2 days



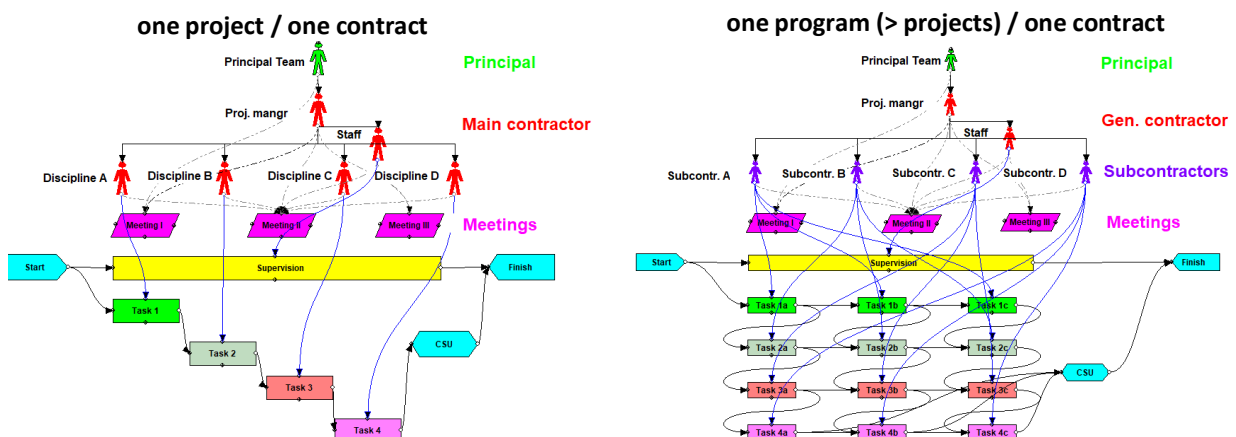
Space- and Defense: A twelve-month acceleration on the construction time of a rocket carrier on NASA Ares project:
https://blog.simul8.com/wp-content/uploads/2013/10/SIMUL8_NASA_case_study.pdf



Shipbuilding: Accurate prediction, four years in advance, of a six-month delay on the sail-away date of a Floating Production Storage Offshore vessel after a \$1 bn conversion (incl. installation of large process equipment). Actual delay: 5 months 3½ wks.

Live testing (of scenario narratives)

We can show, in front of a live audience, the outcomes of scenarios of, amongst others, the impact of organizational turbulence; how information is exchanged and decisions are made; the influence on team experience and organizational structures related to contract forms (see below). We have attendees in the room select their own variable(s) and run a scenario (s) of the model -preferable amongst peers- to see (live) the consequences of their choices on the project. Keep in mind that the outcomes of any model needs to be seen as **a learning machine** and not as an answering machine (<https://www.jorgdesign.net/article/view/7016/6218>).



Road Map (to reveal risks and related costs)

A model is compiled from various data sources: an org chart, a meeting schedule and a resource loaded schedule, or related estimate. **Duration: 3-6 wks**, depending on availability of data and requested deliverables, with limited time commitment of the project team.

Deliverables

- Recommendations in applying the experiences of the current project team in response to the demands of the project.
- Simulate prospective execution scenarios and provide information, to improve project execution by reducing time and cost.