

## Drive Success with Lower Failure Costs: Learn How Inside

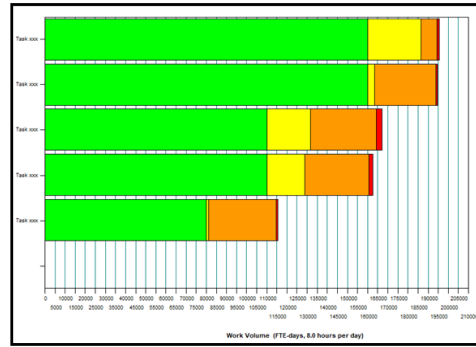
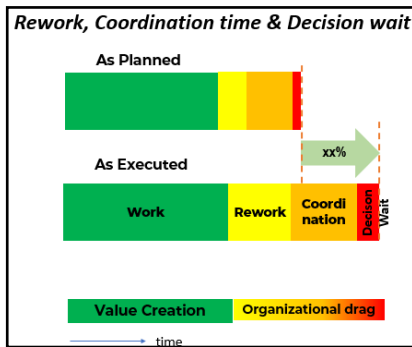
Whether you are exploring capital investment opportunities, trying to improve your existing project delivery performance or planning to transform and optimize your existing operation, understanding your risk exposure and managing it to keep **fail costs as low as possible**, is key to greater benefit realization.

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 Agent Based Model (as part of AI), built on project dynamics and human behavior: <https://www.jorgdesign.net/article/view/7016/6218>. This model is based on the concept of statistical analysis of **processing information & quality of decision making**, as executed by the project team and other parties involved.

## 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.

## Three universal risks



## Artificial Intelligence (AI)

By means of a model based on AI, it is possible to objectively quantify three universal risks in time (left) and analyze, i.e., the top five risks of activities from the schedule (right), which cause organizational drag. Most of the time, this drag occurs during **phase transitions** of projects: i.e., from Engineering to Execution, and during **interfaces of systems**. Within these time intervals a lot of information is transferred, whether or not complete, but with related organizational dynamics. If one, or more, activity(ies) from the top 5 is/are part of the critical path of the schedule, it is possible to test/simulate mitigating measures upfront, **using altered settings of org. characteristics**

## Proven approach

Cases elaborate on proven outcomes of this concept as applied in various industries. More cases on request i.e., **Petro Chem. & Civil**



**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](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 (FPSO) vessel after a \$1 bn conversion (including the installation of large process equipment). Actual delay: 5 months 3½ weeks.

## Roadmap

A model is compiled to reveal risks and related costs, from **various data sources**: an org chart, a meeting schedule and a resource loaded schedule, or related estimate. Also organizational characteristics are collected by means of an online questionnaire (< 6 min to fill in). **Duratn: 3-6 wks** depending on availability of data and requested deliverables, with limited time commitment of your project team.

## Deliverables

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

[Contact Us](#) to Start Saving on Project Costs!