

SIMULATION DIGITAL TWINS FOR ASSET INVESTMENT PLANNING

MANUFACTURING / ENERGY & UTILITIES

Asset-heavy and process intensive industries are swamped monthly with an avalanche of decisions they have to take that can significantly impact the organization's long-term revenues and expenses, thus leaving little room for error in asset investment and risk management strategies. Cosmo Tech 360° Simulation Digital Twin platform allows organizations to create different asset management strategies so they can find the optimal trade-off between their objectives and operational constraints.

KEY RESULTS

50-80 %

CAPEX
avoidance

-20%

Operational
conflicts

-10%

TOTEX

NOT YOUR STANDARD SIMULATION SOFTWARE

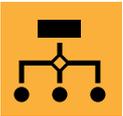
- Run predictive what-if scenarios
- Understand the future evolution of your business environment and assess risk profiles accordingly
- Switch from a pure accounting asset lifespan to an investment strategy that minimizes TOTEX and maximizes asset revenues
- Ensure consensus regarding asset replacement between Maintenance, Production and Finance departments and align corporate strategies with specific sites' needs
- Decrease downtime cost and optimize CAPEX allocation strategy.



Renault Transforms Asset Obsolescence Management with Cosmo Tech Digital Twins

Renault is one of the world's largest automakers maintaining 40 manufacturing plants in 17 countries. Renault asset managers are responsible for more than 20,000 assets across those manufacturing plants. They need to manage the obsolescence of these different industrial assets. Most of the components are becoming obsolete, which leads to downtime, high maintenance costs and revenue losses. The scarcity and increasing price of spare components and the loss of expertise of the maintenance teams on aging assets are also a major concern. By modeling and simulating their asset obsolescence management strategies and using Cosmo Tech's Digital Twin technology to develop an optimal asset management strategy, Renault was able to generate enormous returns with real bottom-line impact.

KEY FEATURES



Simulate sustainement plan

Simulate the full asset management plan including representation of every type of intervention / job plan.



Simulate asset financial lifecycle

Forecast asset condition, simulate asset financial depreciation and compute associated capital costs.



Simulate asset physical lifecycle

Simulate effect of time, physical degradation, loss of structural integrity, occurrence of defects or failures.



Sensitivity analysis

Test robustness to unexpected events to mitigate risk and improve the business plan.



Unlimited what-if scenarios:

Design and simulate scenarios to predict the impact of your decisions on your whole organization.



How-to optimization:

Prescribe the best strategy for your investment plan at any time scale to support your KPIs.

50-80%
CAPEX AVOIDANCE

“ The results are more than convincing. Cosmo Tech simulation technology helped us to optimize our asset management strategy in Europe. We were able to identify clear levers to lower risk and generate savings over 5 years of 50 to 80% depending on the year.

Jean Goutierre, Expert Leader Industrial System 4.0 at Renault

Gold
Microsoft Partner




Interested in learning more?

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