



## DIGITAL TWIN

# PREPARING FOR A DIGITAL FUTURE

"TECHNOLOGY IS JUST AN ENABLER FOR WHAT THE HUMAN MIND CAN ENVISION"

IN AN INDUSTRIAL SETUP, OFTEN THERE ARE SOME PROCESSES WHICH ARE



SOMETIMES THEY



A large windmill, a conveyor belt or a metro train are all examples of such projects.



They are often critical and any breakdown could put a halt to major business operations.



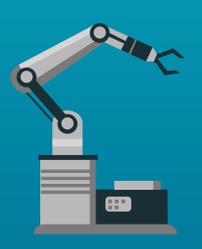
To keep them up and running, you need to predict problems before they arrive.

## DIGITAL TWIN

Bosch Digital Twin is a cyber physical system built on the sensors, software, services framework.



It involves modelling industrial assets with all their geometrical data, kinematic functionality, and logical behaviour, permitting business operations to be simulated, controlled, improved.



- Action**
- Performance management
  - Fleet optimization
- Insight**
- As designed - As built - As operated - As maintained comparison
  - Prognostics
- Data**
- Alert and warning systems
  - Diagnostics

Asset / process Digitization

Digital twin core

Insight Framework



Sensors



Software



Services



## BENEFITS



Predicts problems before they actually arrive

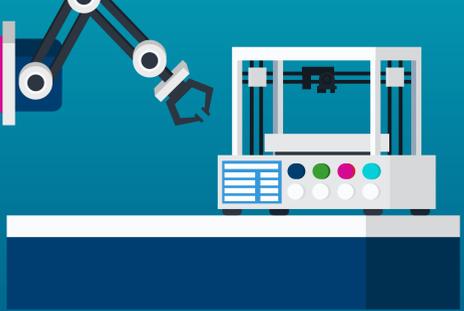


Automates & eliminates repetitive tasks



Addresses mutually exclusive problems

A Digital Twin



Provides spectrum of insights



Recommends solution to fix problems



Tames complexity



Reduces uncertainty



Empowers judgement based on data

## BUSINESS IMPACT

Reduce maintenance costs

Predictable RUL



Reduce down time



Investment deferrals on R&R costs



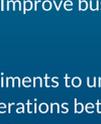
Improved OEE



Optimize TCO



Reduced MTTR & MTBF



Improve business margins

A digital twin enables an enterprise to see the unseeable, perform experiments to understand what-if scenarios, simulate, execute and control their business operations better. Ultimately, we are limited only by our imagination!

**Sensors. Software. Services.**  
All under one roof, you are **Simply. Connected.**

