

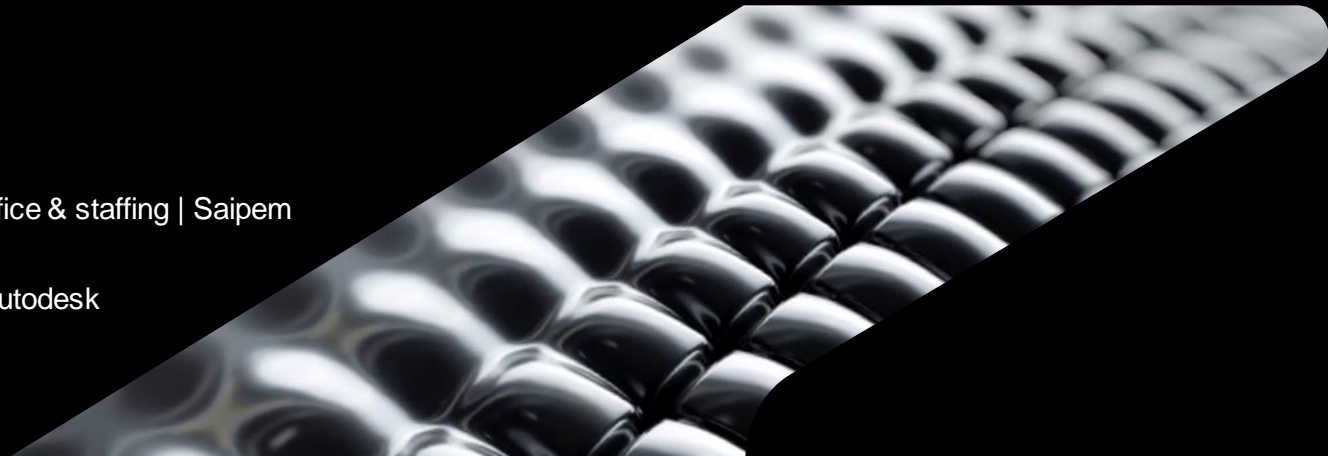
How Saipem Built Data-Sharing Habits to Accelerate Digital Business

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Autodesk

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Introduction

Who we are



- Forged by Saipem since 2010, always focused on innovation for Construction dept.
- Data-sharing mindset "promoter" in the OnShore E&C Division in follow the road toward a Data Driven Company.
- 3rd time speaker at the AU.

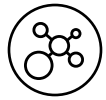


- An explorer and proud Autodesk since 2008, constantly looking forward to new challenges and learning opportunities!
- Leading a team of rockstar Solution Architects and Business Consultants in the EMEA Consulting practice, a team relying on diversity, inclusion, collaboration values with a feedback-culture that welcome different point of views.
- His aim being customer-focused, is to ensure that he understands his customers' problems, reflect on their declared or inferred demands, solve the correct problem in the right way, and execute long-term and useful innovation for them.

Learning Objectives



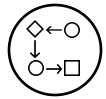
Enable efficient cross-team collaboration strengthening teamwork



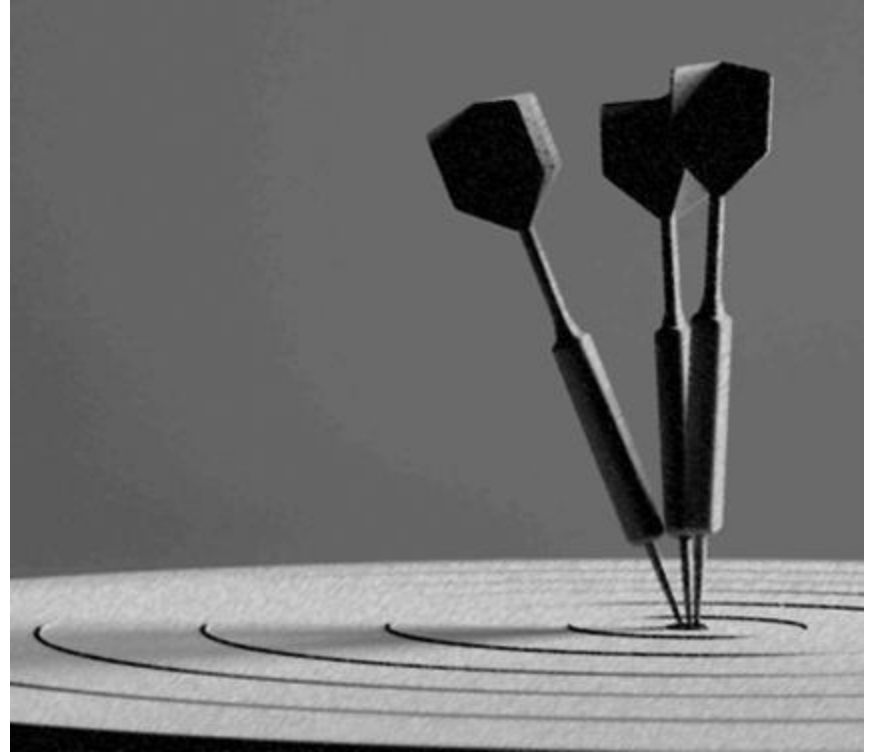
Facilitate knowledge and information sharing



Increase business execution and reduce rework



Enhance workflows to make daily tasks easier





Saipem

WHO WE ARE

Saipem is an advanced technological and engineering platform for the design, construction and operation of complex, safe and sustainable infrastructures and plants.

MISSION

Transform our clients' strategies and projects into competitive and sustainable infrastructures, plants and processes.

DISTINCTIVE COMPETENCIES

Technological innovation capacity; engineering and management skills; consolidated experience in project management; strong penchant for problem-solving orientation; dialogue and transparency.

VALUES

We value our projects thanks to the ingenuity of everyone and the different cultures of each; we execute them responsibly, having the safety of people and the environment at heart; we carry them out with the utmost commitment to build trusting relationships with customers.



A TECHNOLOGICAL GLOBAL ENGINEERING PLATFORM: **THE PILLARS OF OUR INTEGRATED BUSINESS MODEL**



ASSET BASED SOLUTION



ENERGY CARRIERS

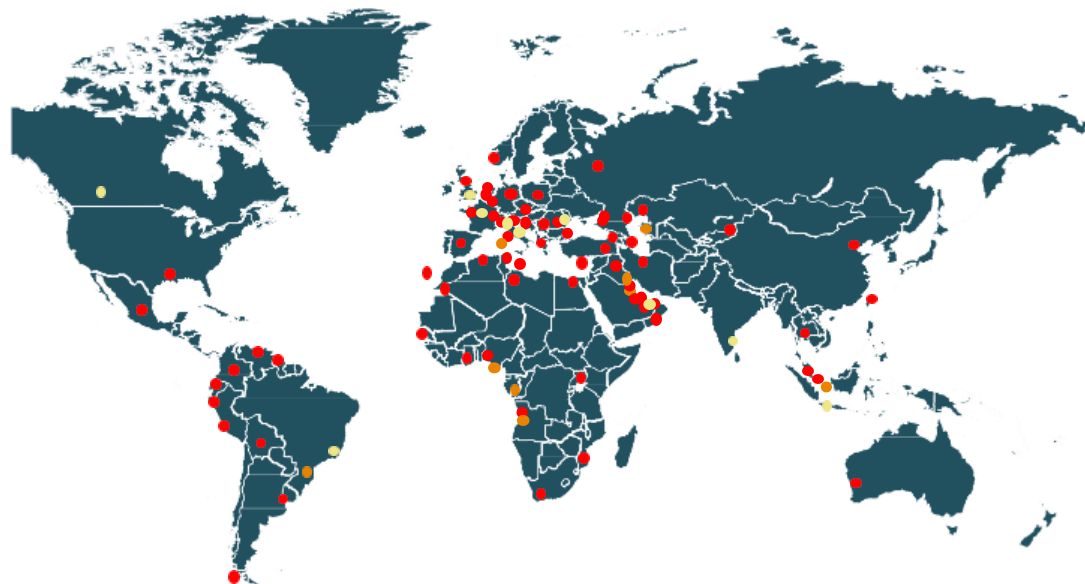


ROBOTICS AND INDUSTRIALIZED SOLUTIONS



SUSTAINABLE INFRASTRUCTURES

SAIPEM IN THE WORLD



- Engineering centres
- Prefabrication yards
- Other relevant sites (headquarters, branches, etc.)

KEY FIGURES *

WE OPERATE IN **> 60** COUNTRIES

> 34,000
EMPLOYEES WORLDWIDE

> 130
DIFFERENT
NATIONALITIES

**8 PREFABRICATION
YARDS**
Italy, Brazil, Republic of the
Congo, Angola, Saudi Arabia,
Indonesia, Kazakhstan, Nigeria

**7 ENGINEERING
HUBS**
Italy, Mexico, France, UAE,
India

40 VESSELS

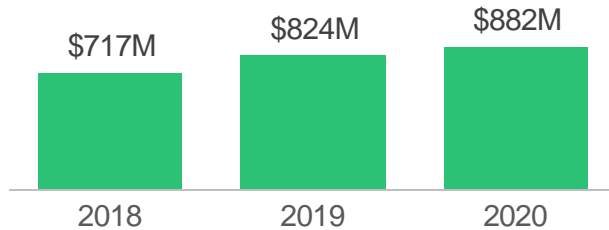
298 M €
INVESTMENTS IN INNOVATION

2,827
ACTIVE PATENTS

* as of 2021

Autodesk: Your innovation partner

R&D SPEND

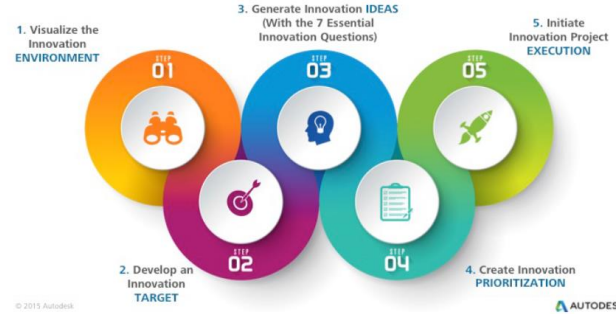


965
patents

ACQUISITIONS

- 2019 **PlanGrid, Building-Connected, Assemble Systems**
- 2020 **Pype** AI / machine learning to automate construction data
Spacemaker AI/ gen design for architects, designers
- 2021 **Innovyze** Water Intelligence at Scale

AUTODESK INNOVATION GENOME METHODOLOGY



AUTODESK RESEARCH



AEC and MFG
industry futures



AI and
Robotics



Simulation and
Systems Modeling

Technology opportunity

Emerging use cases



DATA TO INSIGHTS

Draw actionable insights with data analytics and machine learning



PLATFORM FOR NEW BUSINESS

Expand your products and services using the Autodesk platform



PROCESS AUTOMATION

Improve your productivity through process automation



FUTURE OF WORK

Strengthen your resiliency with agile operating models

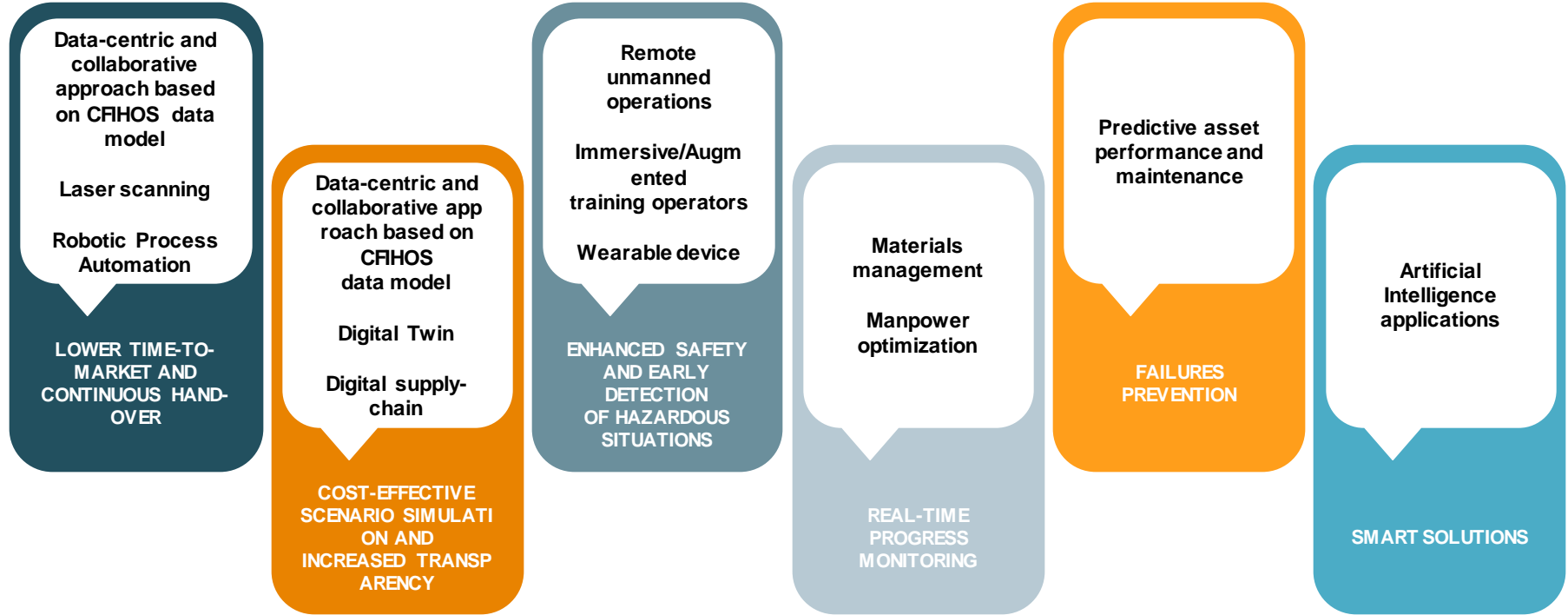


SUSTAINABILITY

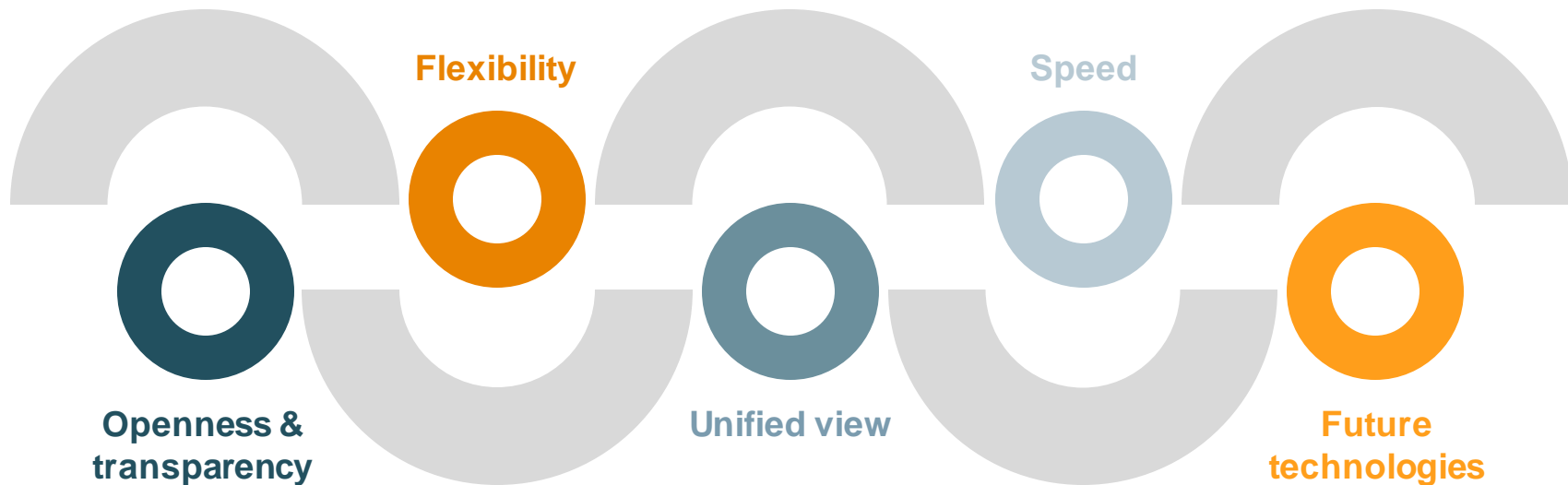
Ingrain sustainability into your business

Challenges & Objectives

Saipem's Challenges



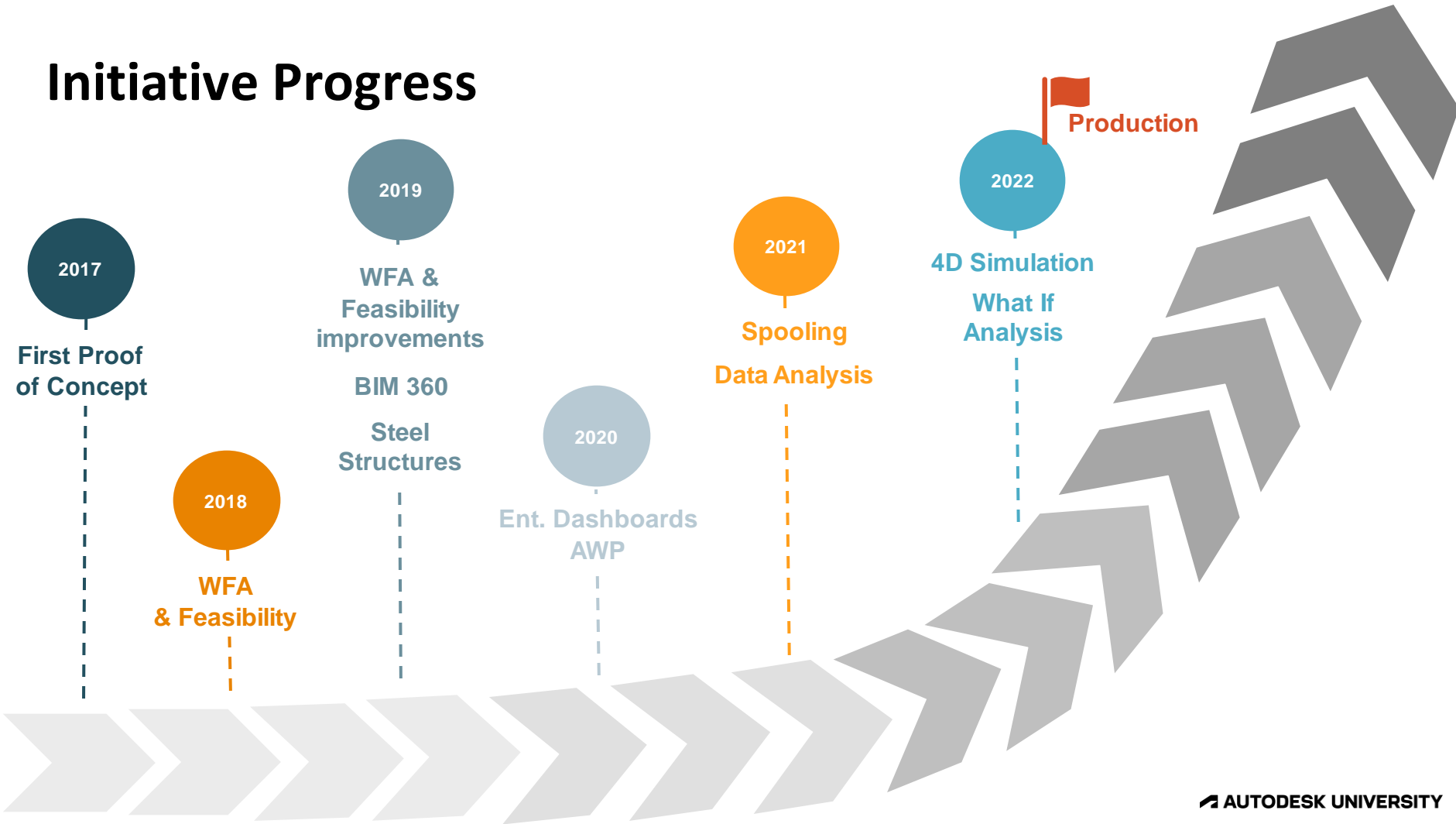
What data sharing looks like, our objective



**Foster a culture that
encourages “data-sharing”
instead of “data-ownership”**

The Solution

Initiative Progress



Solution Overview



Enhancements



DATA ANALYSIS

New views and
analysis
reports



SPOOLING

From text files
to 3D models
and their
representation
in the Solution



4D SEQUENCING

4D sequencing
animation to
anticipate
issues and
reduce risk



WHAT-IF SIMULATION

Visualize what
happens
modifying
plans



OTHERS

smallest, but
greatest...

Data Analysis



**DIFFERENT USERS NEED DIFFERENT
ANALYSIS AND ONLY ONE
ENVIRONMENT TO LOOK AT**

Guarantee a visualization and navigation
of **data customized to the needs of
users.**

Data Analysis



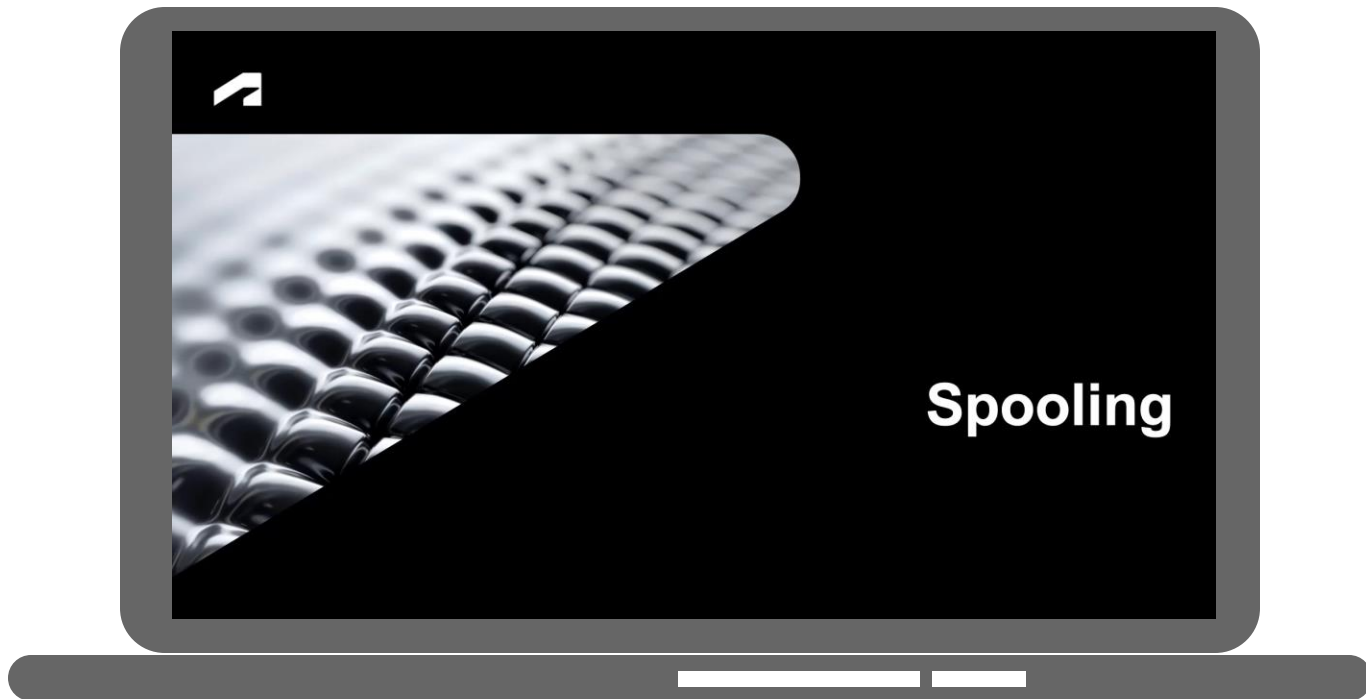
Spooling



OVERVIEW OF SPOOLS IN THE CONTEXT OF THE 3D MODEL

The **missing workflow** to move from text files to **3D piping models** with all metadata with **spooling information**

Spooling



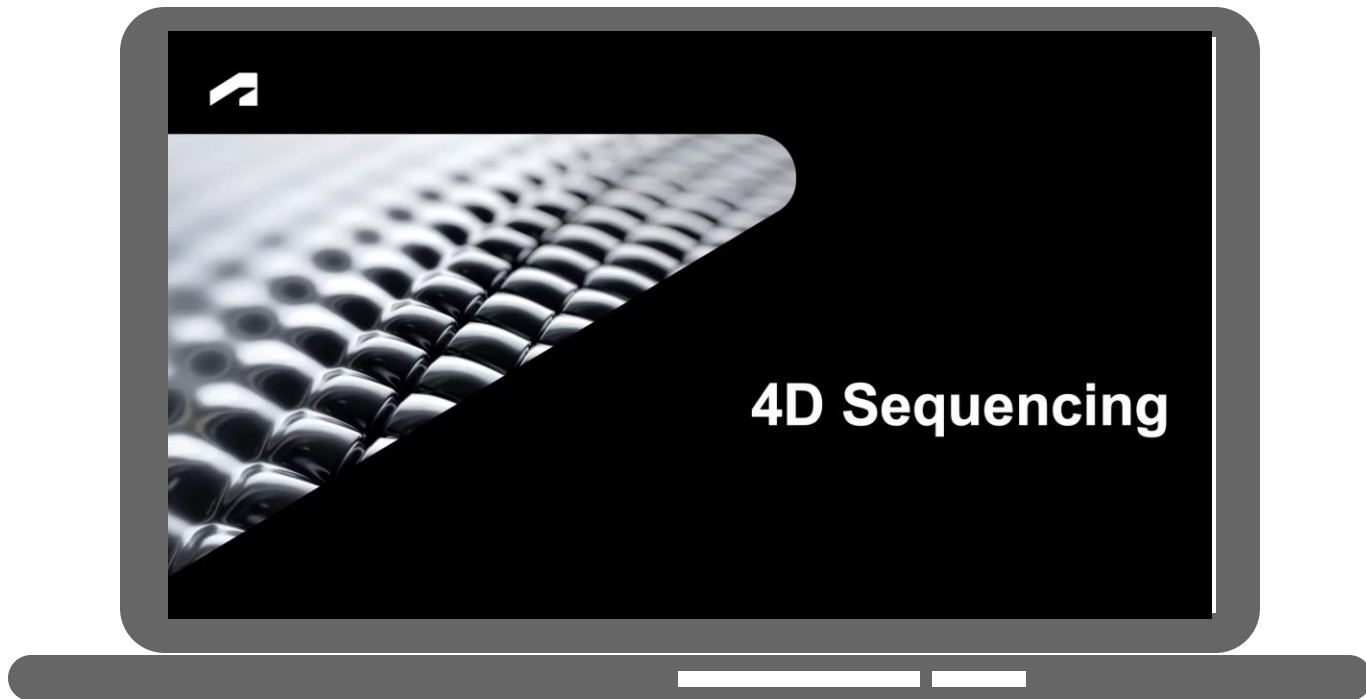
4D Sequencing



OVERVIEW OF CONSTRUCTION FEASIBILITY

Monitor through dashboard and 3D/4D models the consistency and effectiveness of planning and construction sequences

4D Sequencing



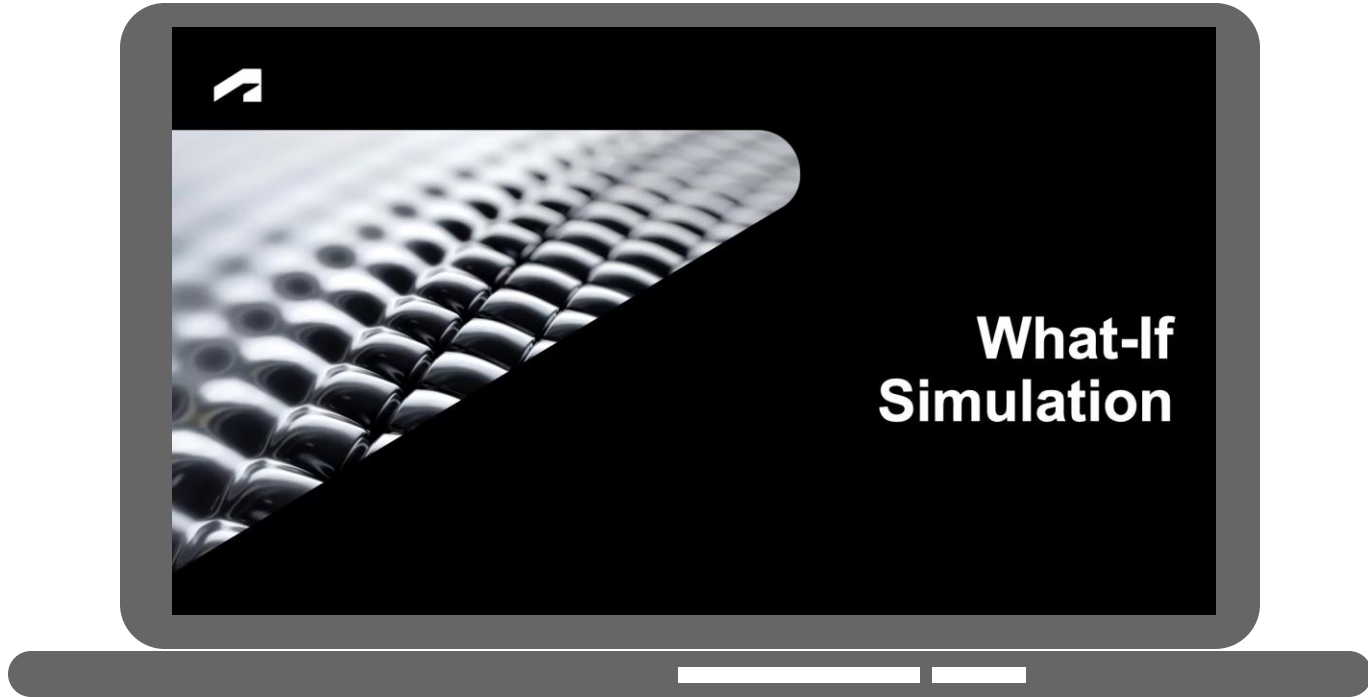
What-If Simulation



CONSTRUCTION MONITORING

Improve **Construction management** and **decision making** during the execution phases, enabling “what-if” scenarios definition

What-If Simulation



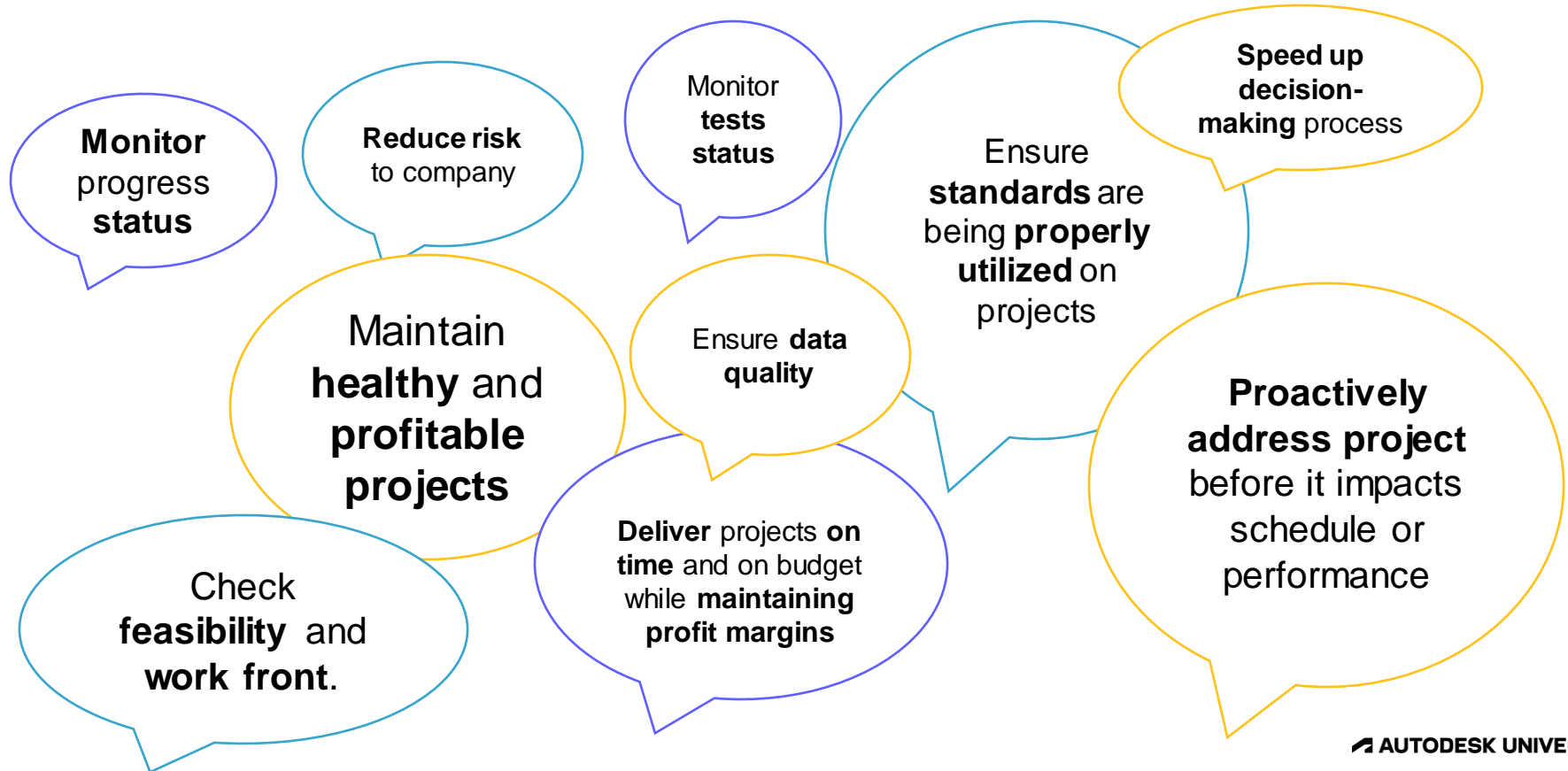
OTHERS



A SINGLE SCALABLE SOLUTION TO ENSURE SECURE SHARING

Ensure easy configurations on project, security management and high-level performance within a user friendly easy to adopt Solution

Value to Stakeholders



Users Voices

“Now I can check during revision if the fabrication is already started for a particular isometric”

Technical Manager

“Visual representation simplifies construction analysis”

Construction Manager

“Millions documents...just a click away”

Quality Manager

“Quantity surveyors can create reporting including 3D details”

Construction System Manager

"One solution, million answers"

Project Manager

“Now data is truly driving the business”

Business Unit Manager



Future

we know the way...we just want to make it better...





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