

BIM4Manufacturing implemented as a central hub to customers, vendors and manufacturing with an agile approach and mindset

Thomas Nagel

Agile Coach | NEXT Agile Coaching

Customer Outcome Executive | Autodesk

<https://www.linkedin.com/in/thomas-nagel-digital-leader/>



About the speaker

Thomas Nagel

I want to support people, teams and companies to grow and to learn in the digital world. To embrace the opportunities and potentials arising from the digital transformation is one of the greatest challenges we face both in companies and in society.

I am passionate about innovation processes. For me, this means to enable companies and in particular teams working on new visions and challenges on their innovation journey. My skills refer especially to various methods, like Design Sprints, Lean StartUp and Scrum combined with feasible approaches.

Supporting companies to transform their corporate culture and to support them on their digital innovation journey is his mission.

Technology you can trust...

...systems you can rely on



We know how



valuable software

individuals

working software

work together

interactions

effective

responding to change

AGILE

continuous

delivery

technical excellence

efficient

customer collaboration

software development

simplicity

satisfy the customer

Agenda

NEW CHALLENGES REQUIRE NEW SKILLS

Yesterday's know-how provides few answers to the questions of today and tomorrow!

New skills to learn!

Allow new ways of thinking, structures and communication!

Encourage a cultural change to become an agile company!

AGILE DISCOVERY OF BIM360

Defining a test team

Online Onboarding via Autodesk Team

Learning and testing features

Using Digital Catalysts!

Defining the BIM360 workflows

GETTING INSPIRED AND STARTED

Get inspired @ the Autodesk University!

Understand the meaning of modern cloud collaboration!

What are the criteria of efficient collaboration?

Why have a deeper look @ BIM360?

Testing BIM360 for big ReCap Pro files

BIM360 ROLL OUT SPRINT BY SPRINT

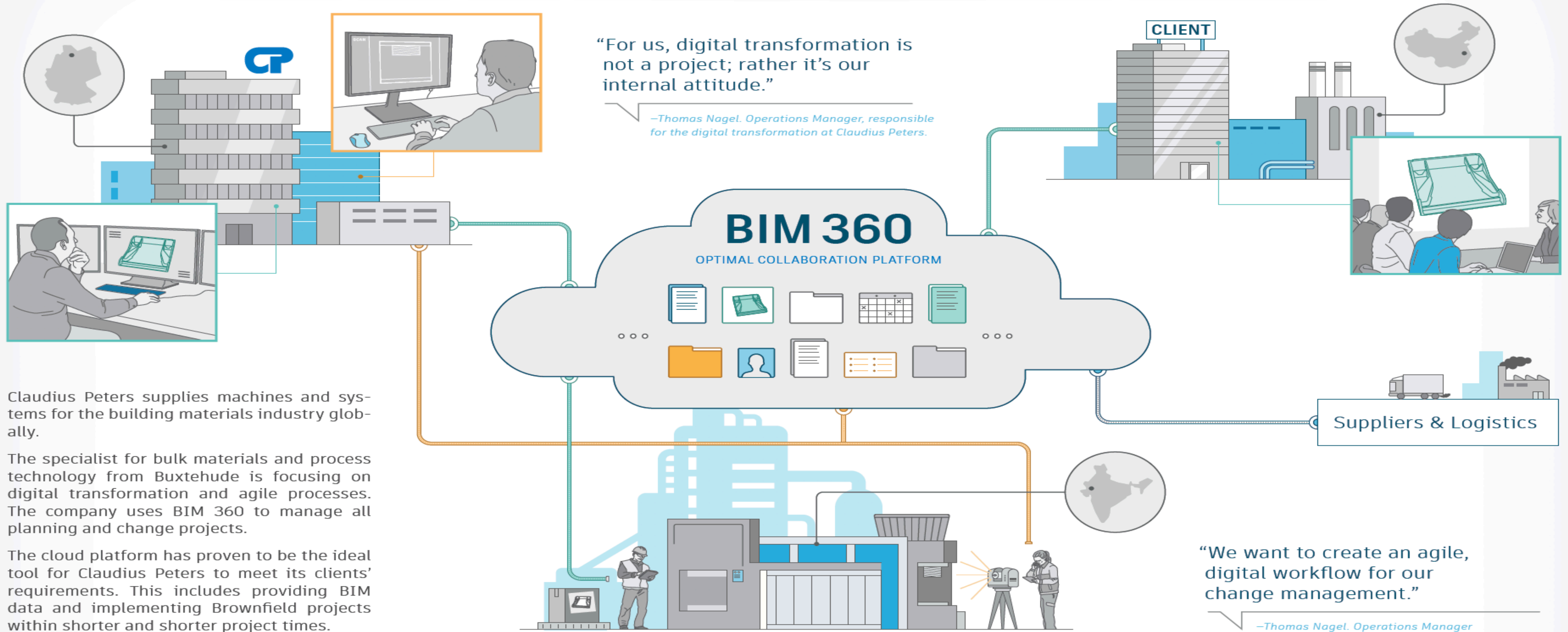
Start with internal collaboration in sales, engineering, automation ...

Integrate the customer in the collaboration loop!

Using BIM360 on the shopfloor and digitize the issue management

Adopting BIM360 in the procurement and external work benches.

CLAUDIUS PETERS: AGILE WORKFLOWS WITH BIM



INTEGRATION OF BIM 360 AT CLAUDIUS PETERS

NOVEMBER 2017

Getting familiar: Presentation at the Autodesk University

MARCH 2018

Test phase: Potential recognized. Excited team

APRIL 2018

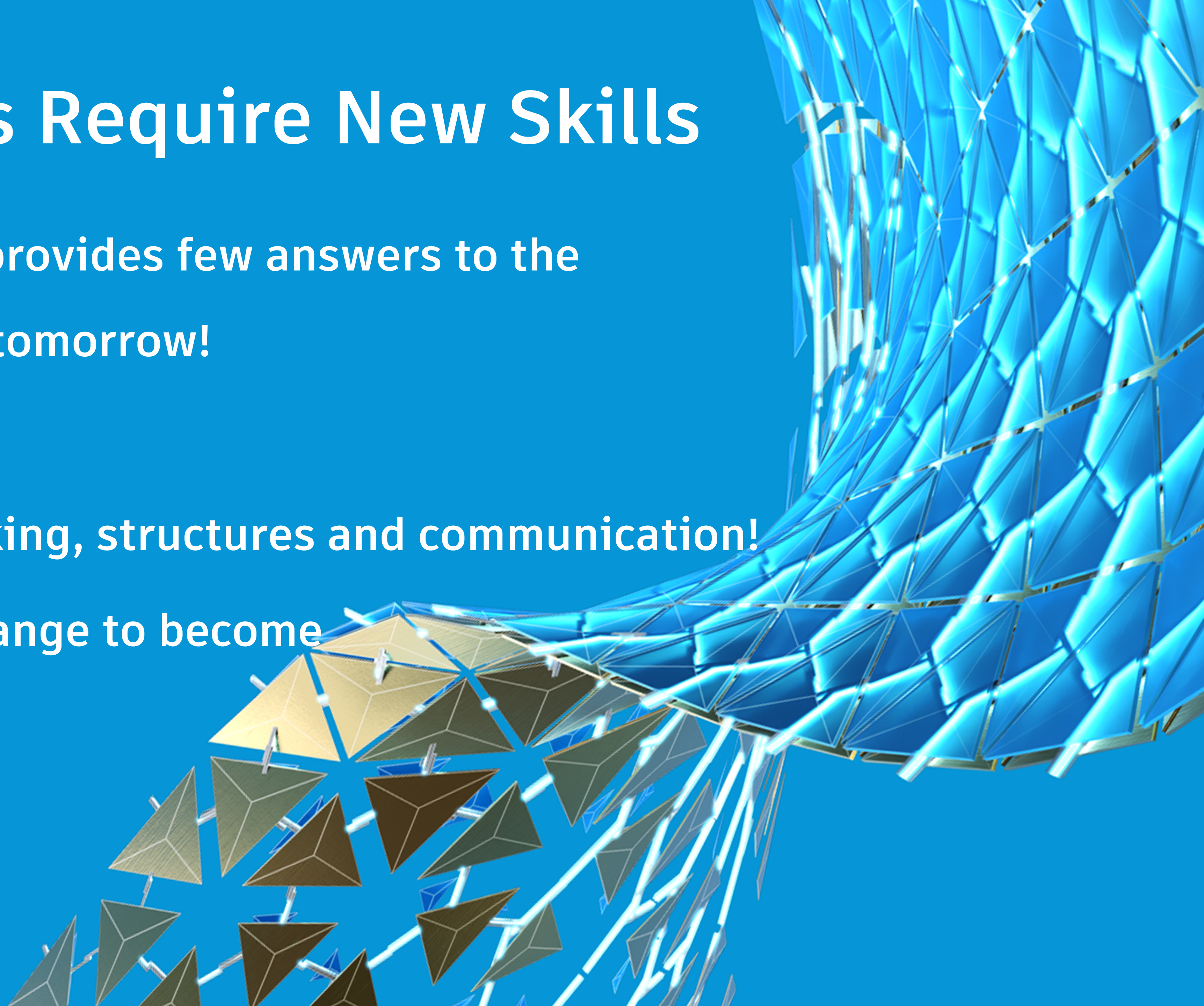
100% implemented: All new projects run with BIM 360

2019

New: Structure of supplier portal and direct connection of ERP/DMS

New Challenges Require New Skills

- ✓ Yesterday's know-how provides few answers to the questions of today and tomorrow!
- ✓ New skills to learn!
- ✓ Allow new ways of thinking, structures and communication!
- ✓ Encourage a cultural change to become an agile company!





Higher
Quality



Reduced Lead
Times



Increase Customer
Satisfaction



Reduced
Costs





A BRAVE NEW WORLD

Thomas Nagel talks to Jonathan Rowland,
World Cement, about Claudius Peters' latest steps into
the digital revolution.



German-based manufacturer, Claudius Peters, was awarded the Innovator of the Year award in 2016.

Generative design

In contrast with traditional design, whereby a designer forms the idea in their mind and then

designer can then select the solution that best suits their needs. In short, it provides algorithmic augmentation to human design.

because that is where the component to be designed will be attached to another component).

It's time to detonate a booster rocket!



The digital transformation
is not a project,
but an inner attitude.



*The electric light did not come
from the continuous improvement of candles*



How the customer explained it



How the Project Leader understood it



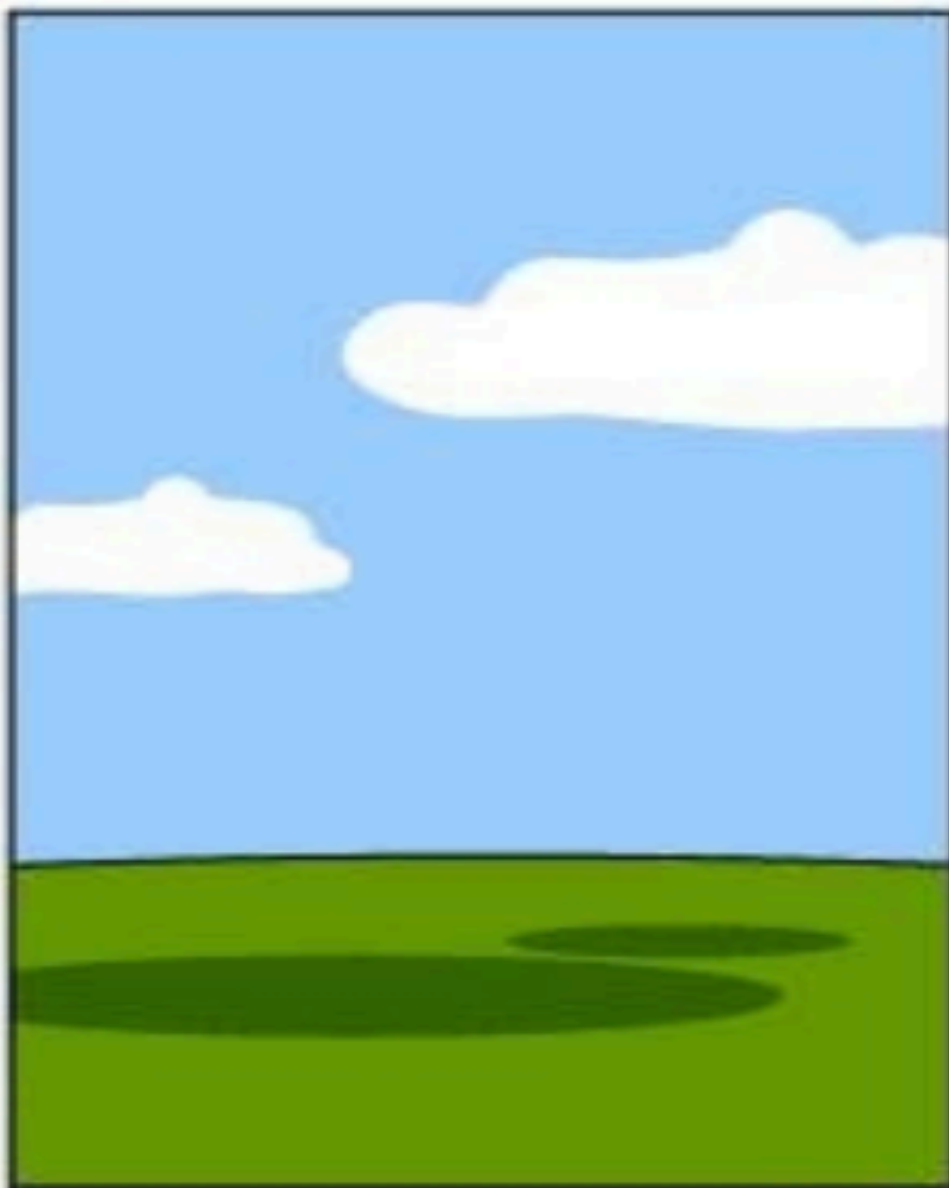
How the Analyst designed it



How the Programmer wrote it



How the Business Consultant described it



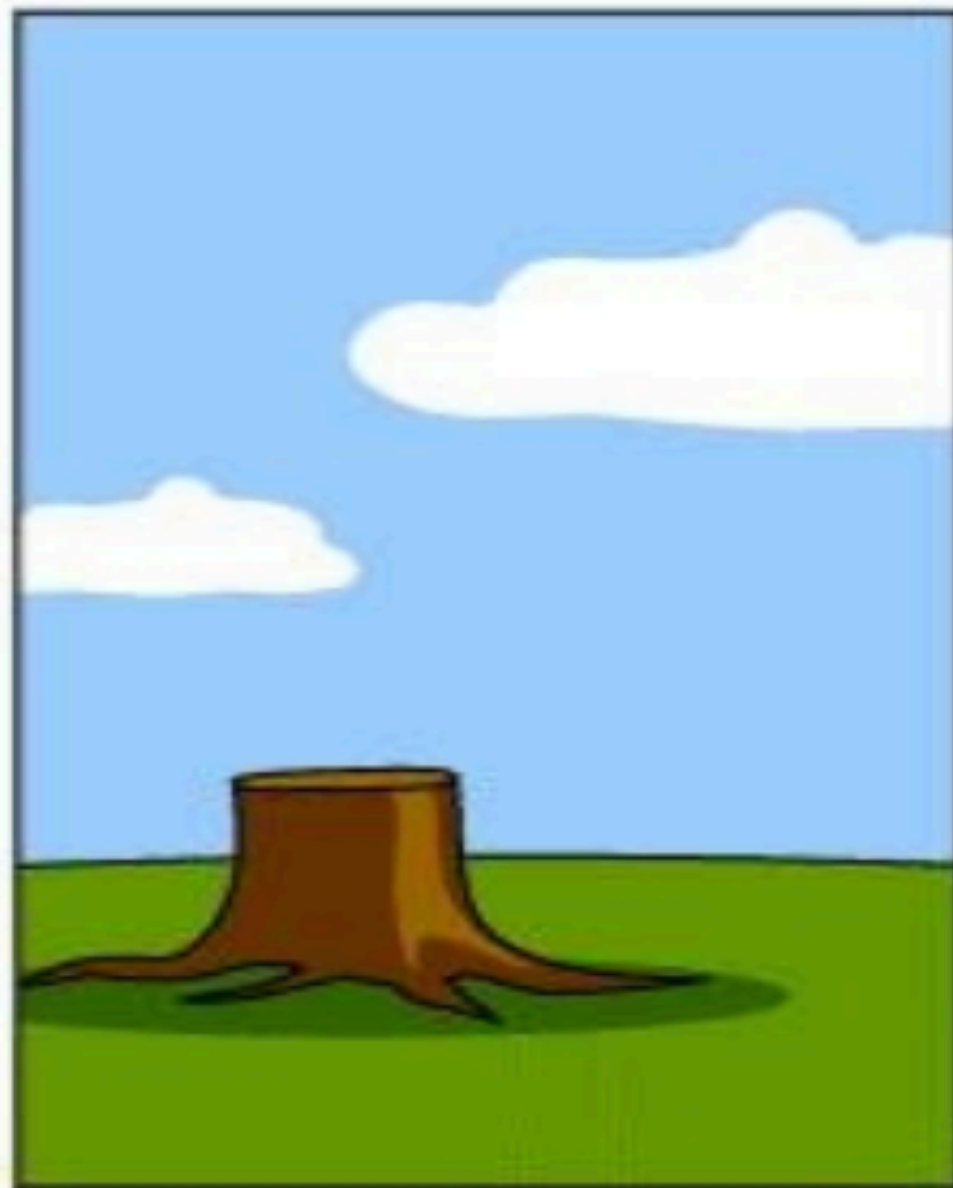
How the project was documented



What operations installed



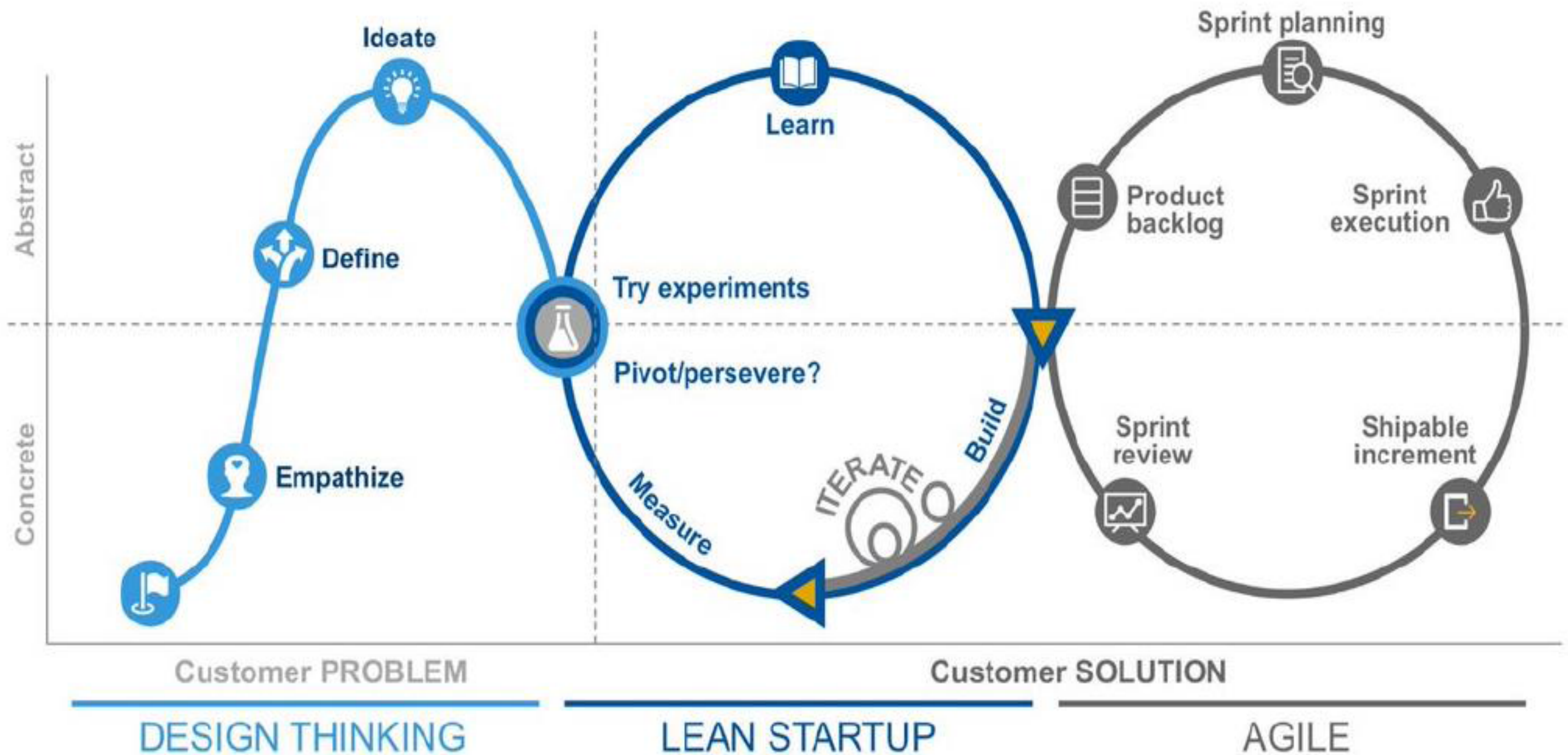
How the customer was billed



How it was supported



What the customer really needed









INNOVATORS' CLUB: A NETWORK FOR VISIONARIES

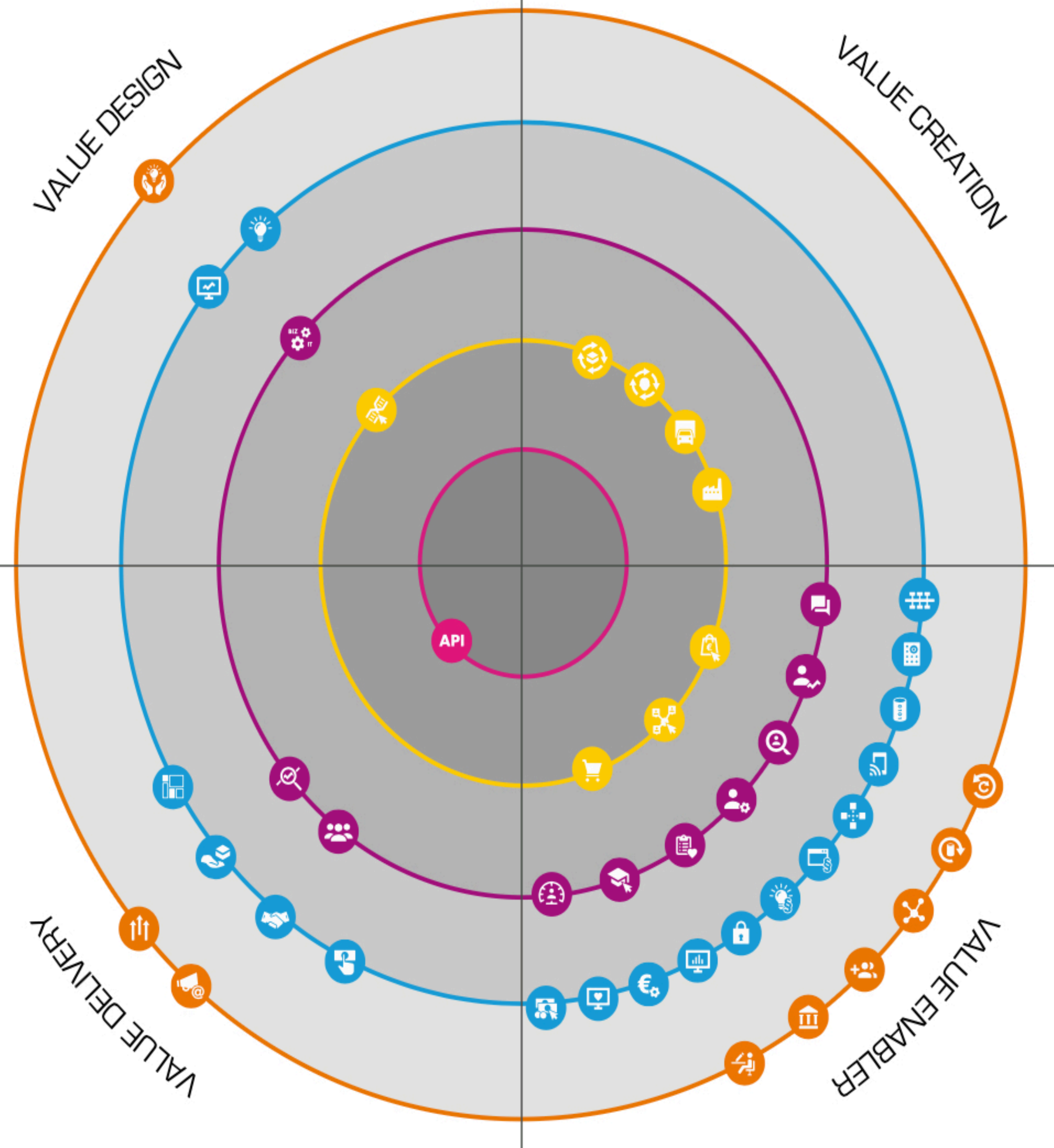
The Innovators' Club is a cross-industry innovation network with a diverse range of members. Under the auspices of SALT AND PEPPER, it organises quarterly conferences with selected partners, providing a forum for interdisciplinary discussion. Benefit from the experiences of other companies who are also getting to grips with the issues of digitalisation and the Fourth Industrial Revolution (4IR).



“Modern designers and engineers must adapt to modern ways. Increasingly, they have to understand themselves as a data manager and programmer. Modern design and engineering work requires a complete new set of digital skills. Not everybody is already on board. But we try to convince them that we have to change to avoid extinction.”

Thomas Nagel, Claudius Peters
#WednesdayWisdom #CementWisdom

**WORLD
CEMENT®**

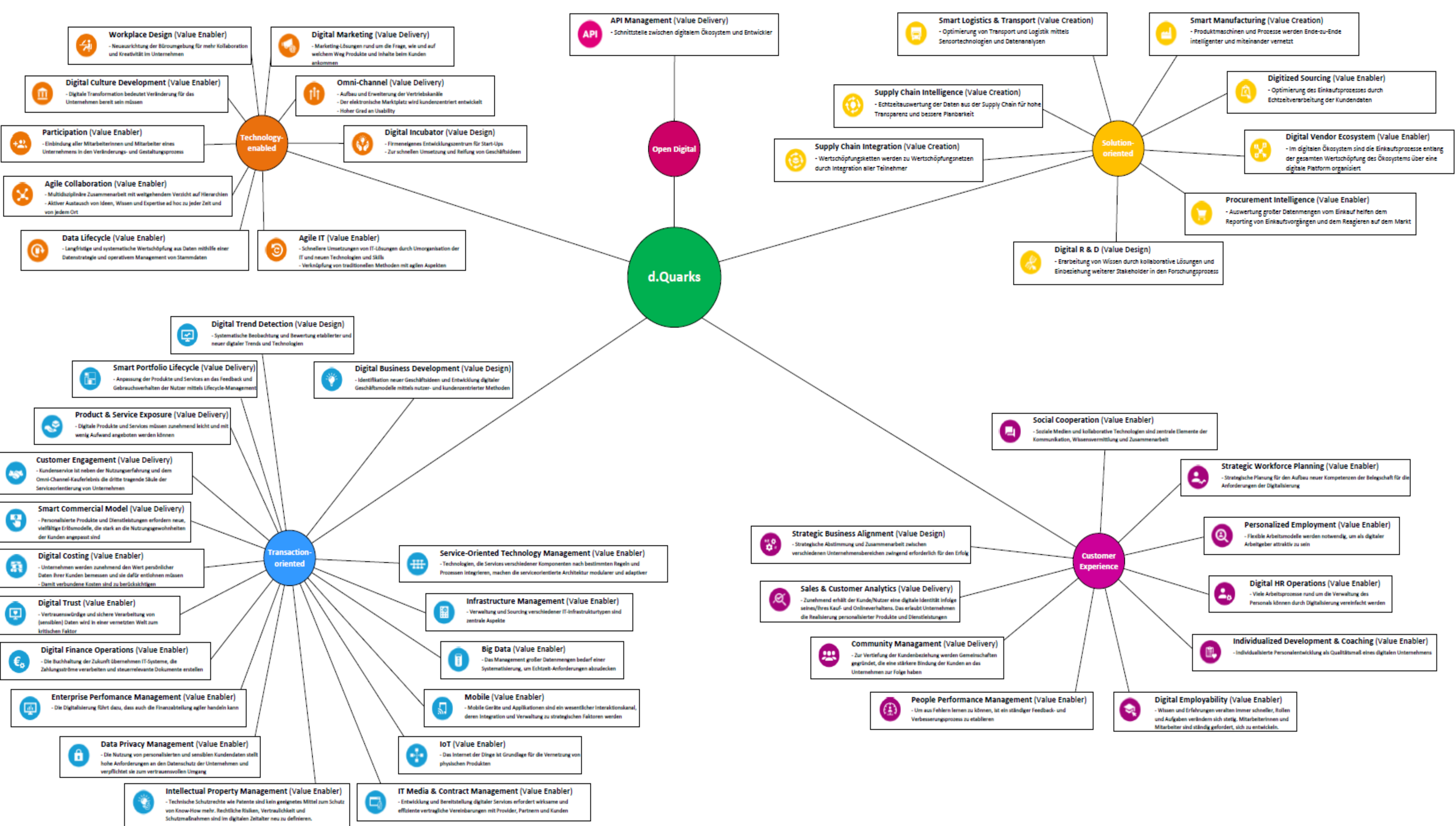


Carsten Hentrich / Michael Pachmajer

d.quarks

The Path to Digital Business

MURMANN
MURMANN PUBLISHERS

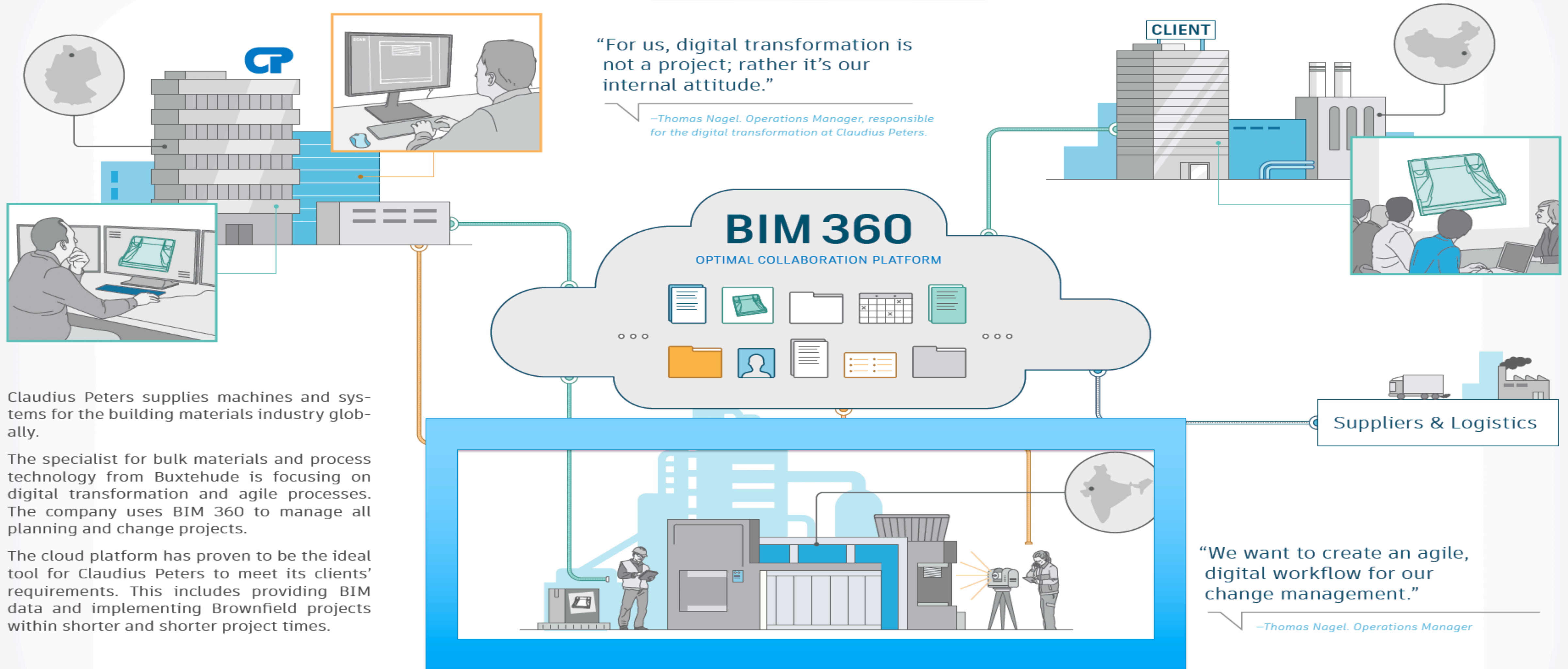


Getting Inspired and Started

- ✓ Get inspired on the Autodesk University!
- ✓ Understand the Meaning of modern cloud collaboration!
- ✓ What are the criteria of efficient collaboration?
- ✓ Why have a deeper look @ BIM360?
- ✓ Testing BIM360 for big ReCap Pro files



CLAUDIUS PETERS: AGILE WORKFLOWS WITH BIM



Claudius Peters supplies machines and systems for the building materials industry globally.

The specialist for bulk materials and process technology from Buxtehude is focusing on digital transformation and agile processes. The company uses BIM 360 to manage all planning and change projects.

The cloud platform has proven to be the ideal tool for Claudius Peters to meet its clients' requirements. This includes providing BIM data and implementing Brownfield projects within shorter and shorter project times.

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Getting Inspired @ the Autodesk University!



Autodesk
University

- Las Vegas November 2017

Social
Network

- LinkedIn

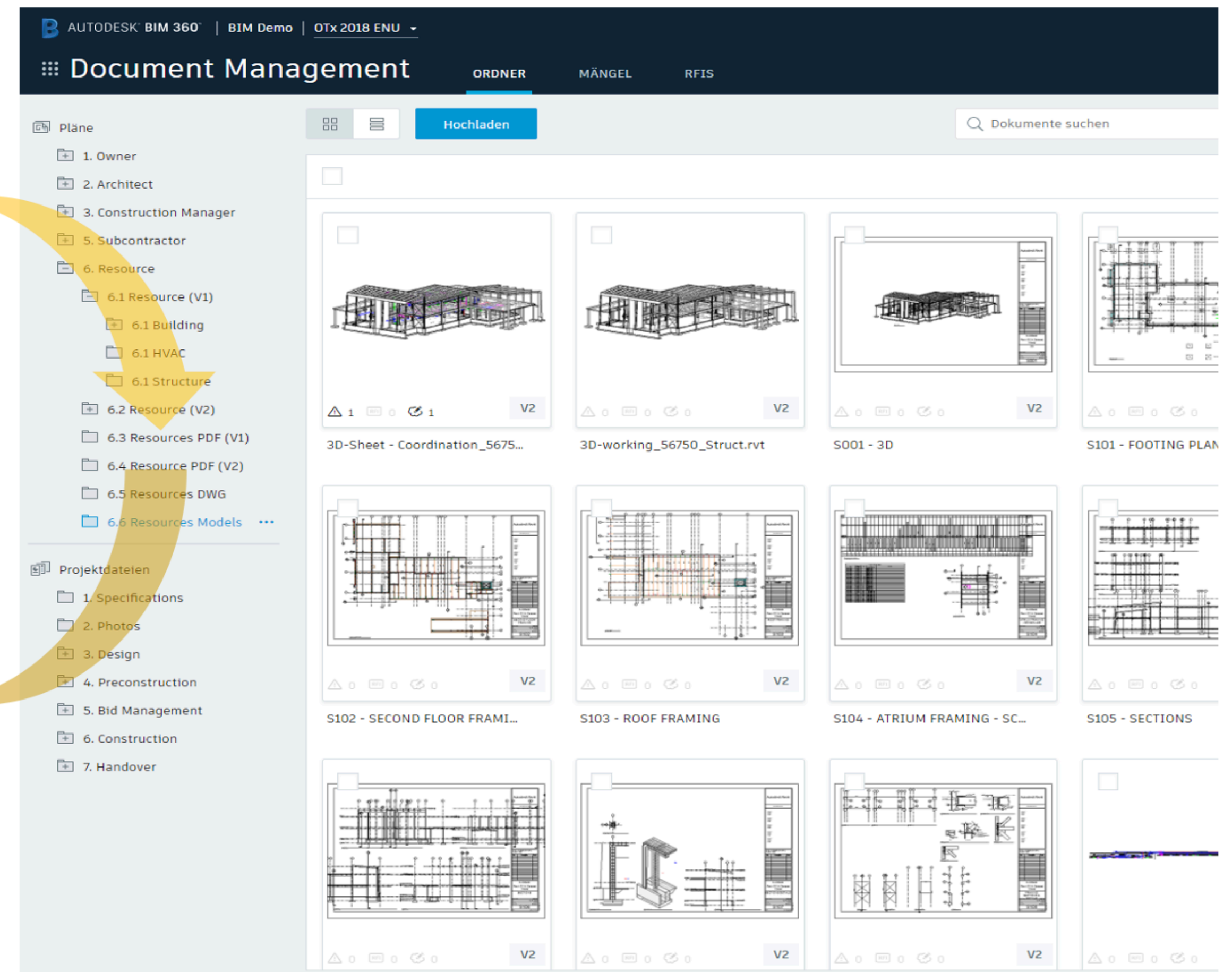
Understand the meaning of modern cloud collaboration

Author systems & Data generation

Platform & Teamwork

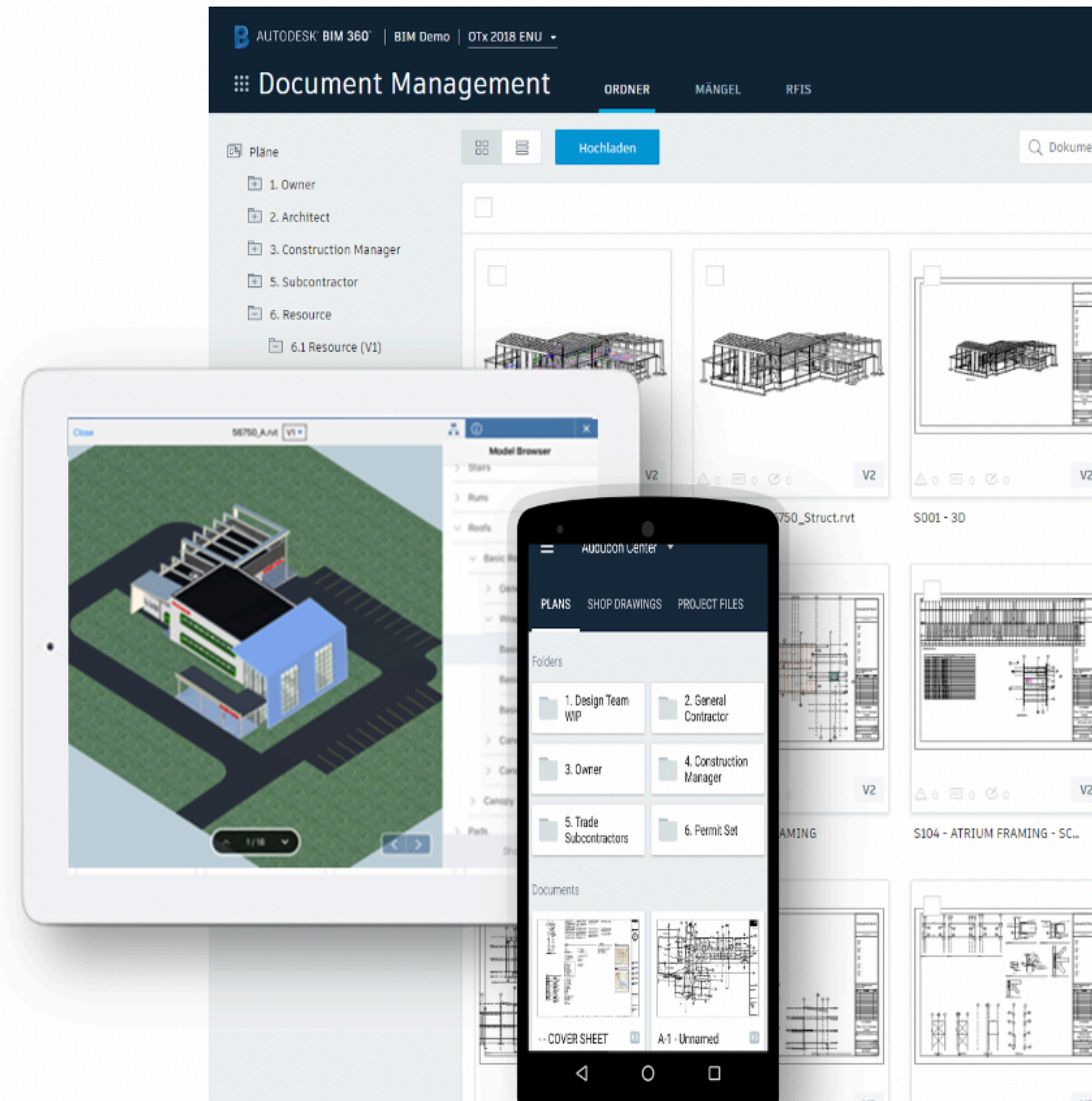


 **AUTODESK®**



Understand the criteria for efficient collaboration

- One source of information for everyone
- Optimization of cooperation
 - ...within the project team
 - ...over the life cycle
- process optimisation
- Simple and practicable



Why have a deeper look @ BIM360?

Cloudbased
database for

project files

plans

models

etc.

Access to files

anytime

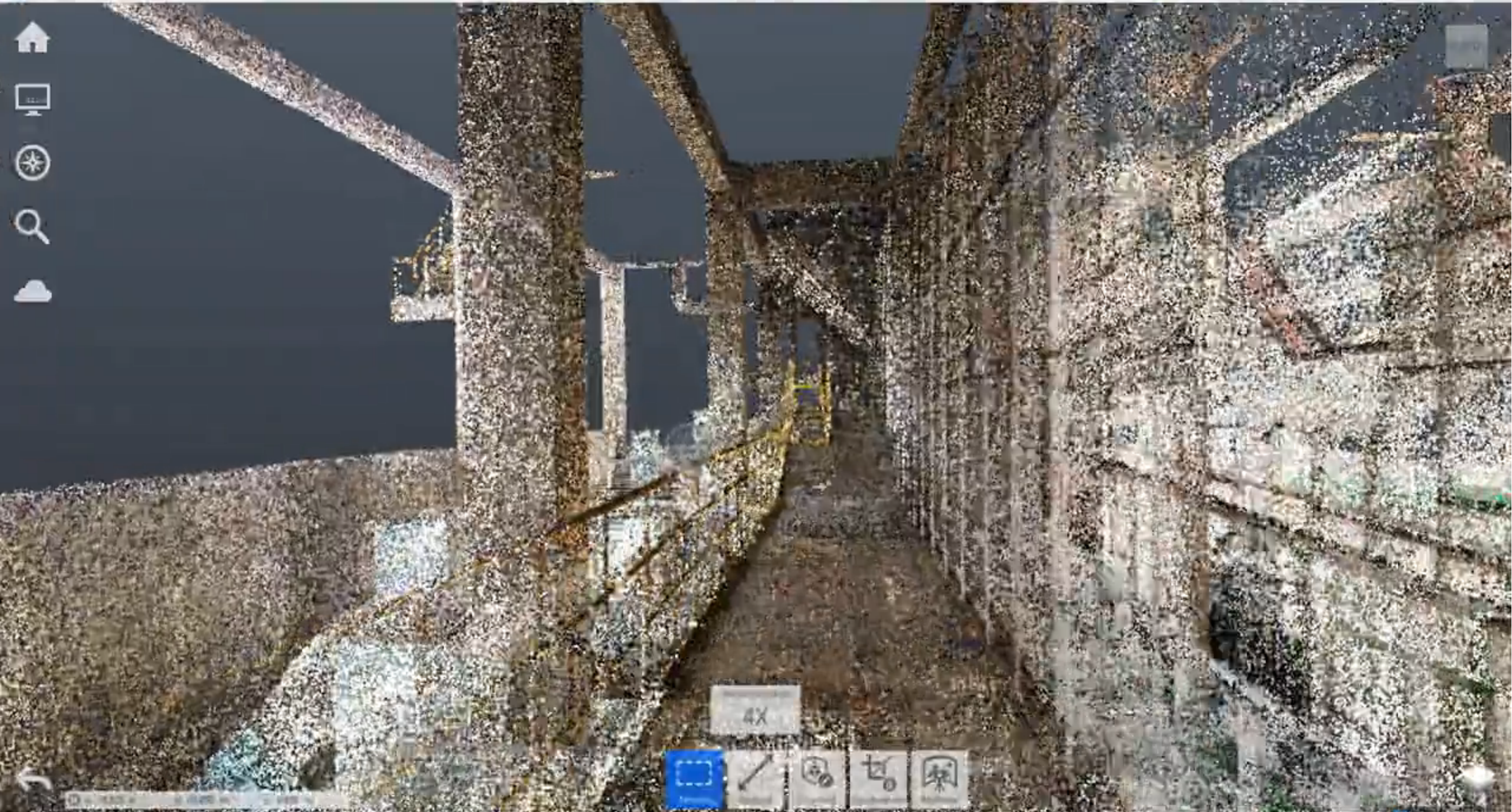
everywhere

for everyone

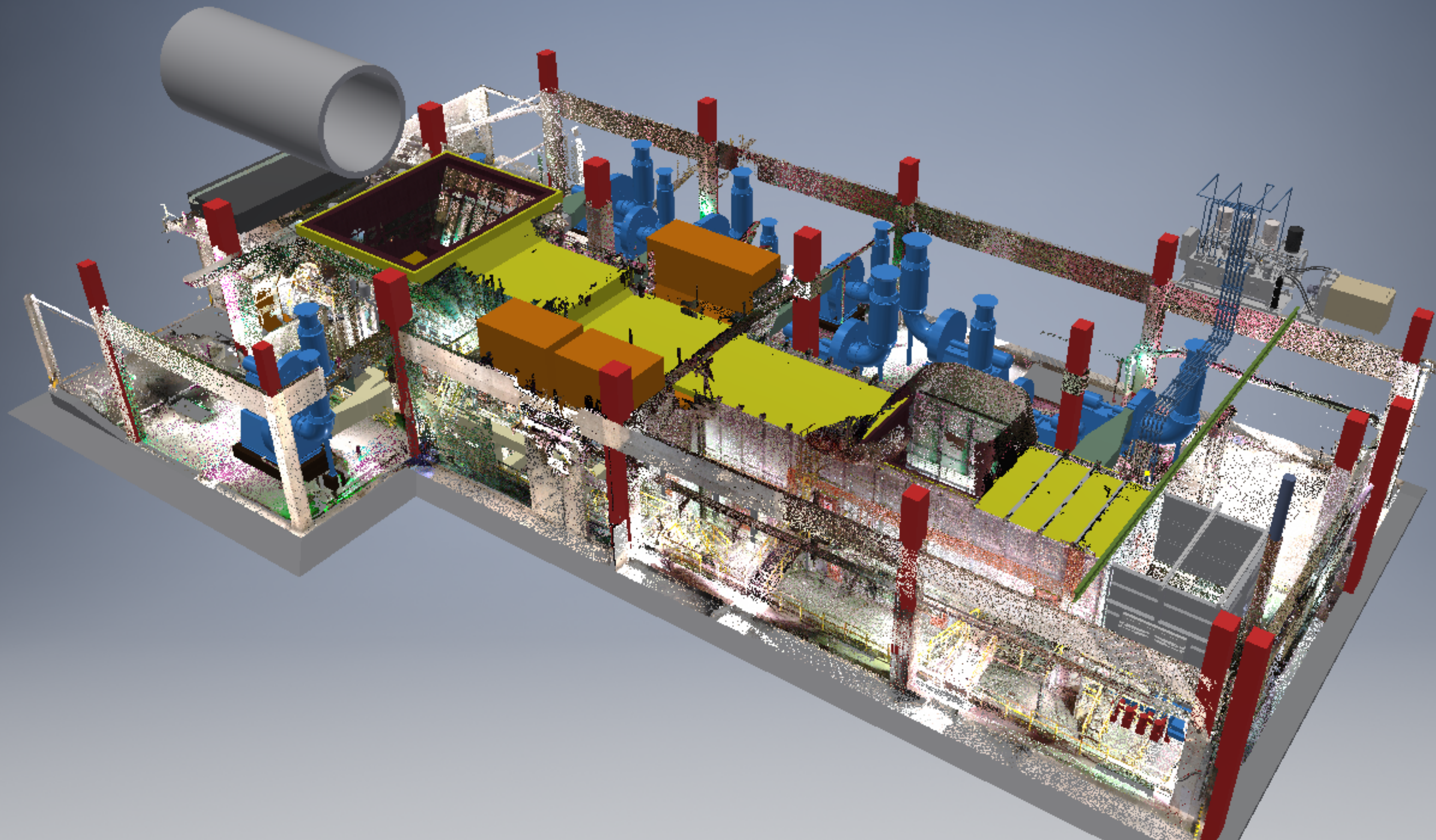
No software
installation for

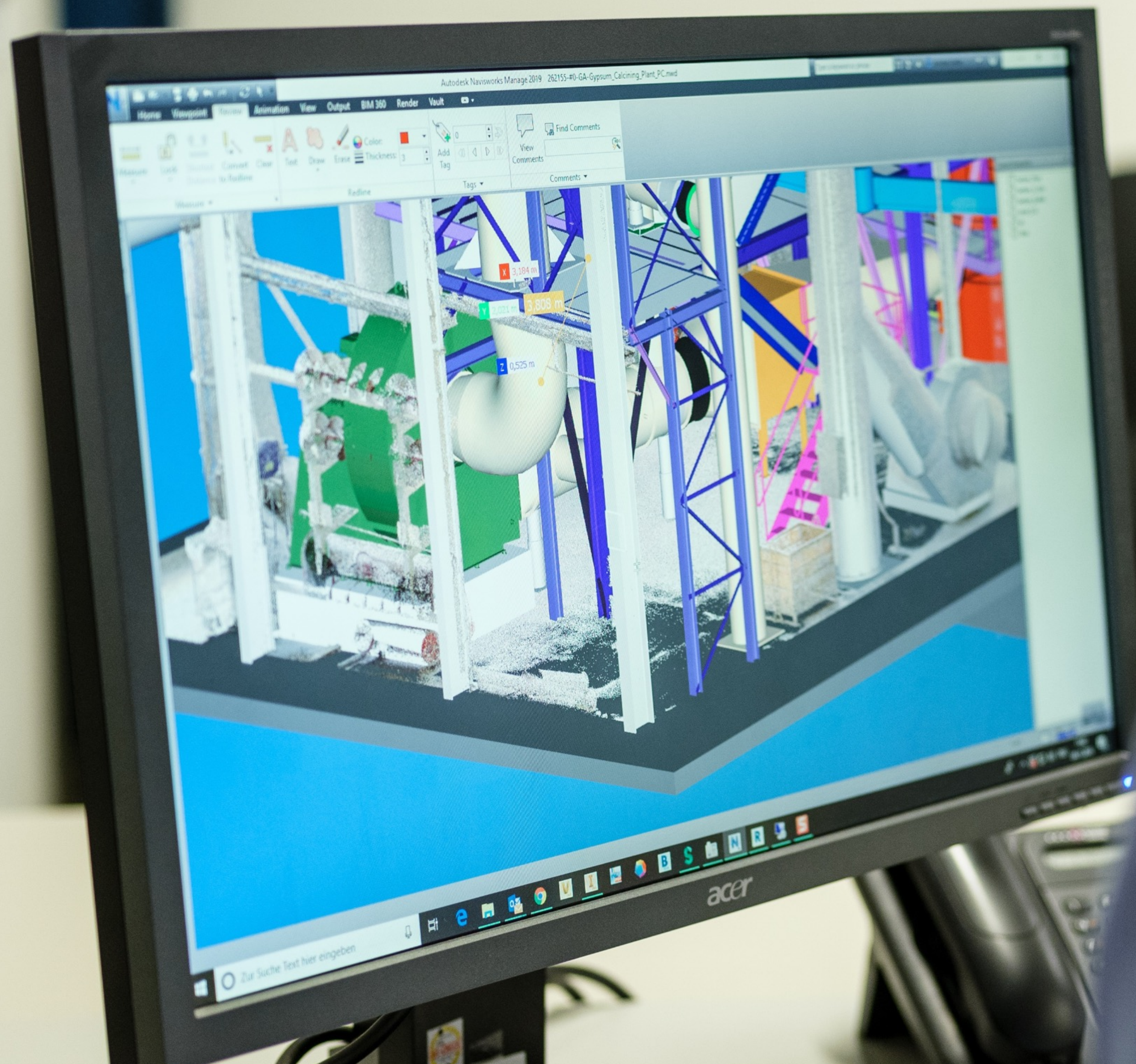
3D models

drawings



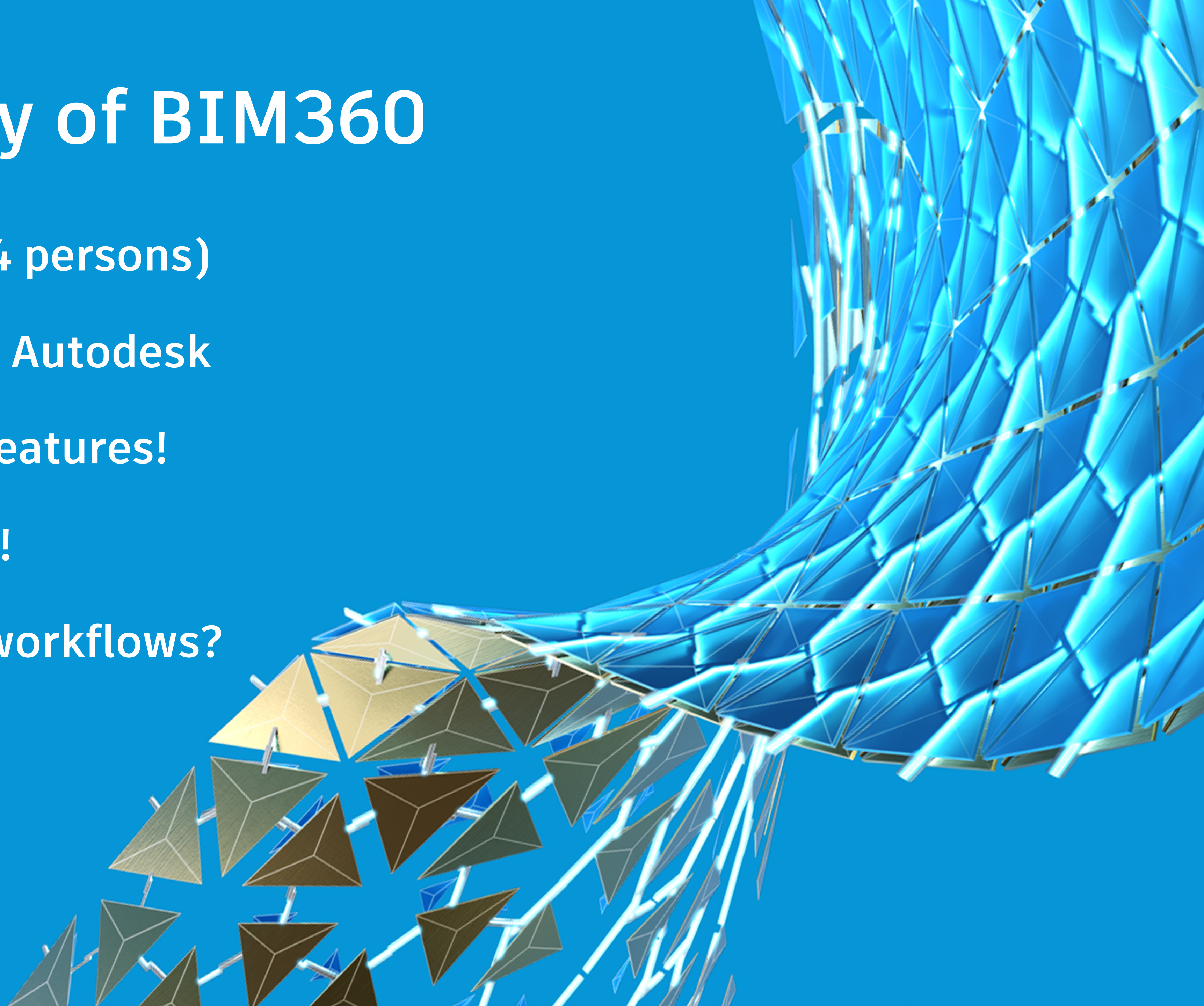






Agile Discovery of BIM360

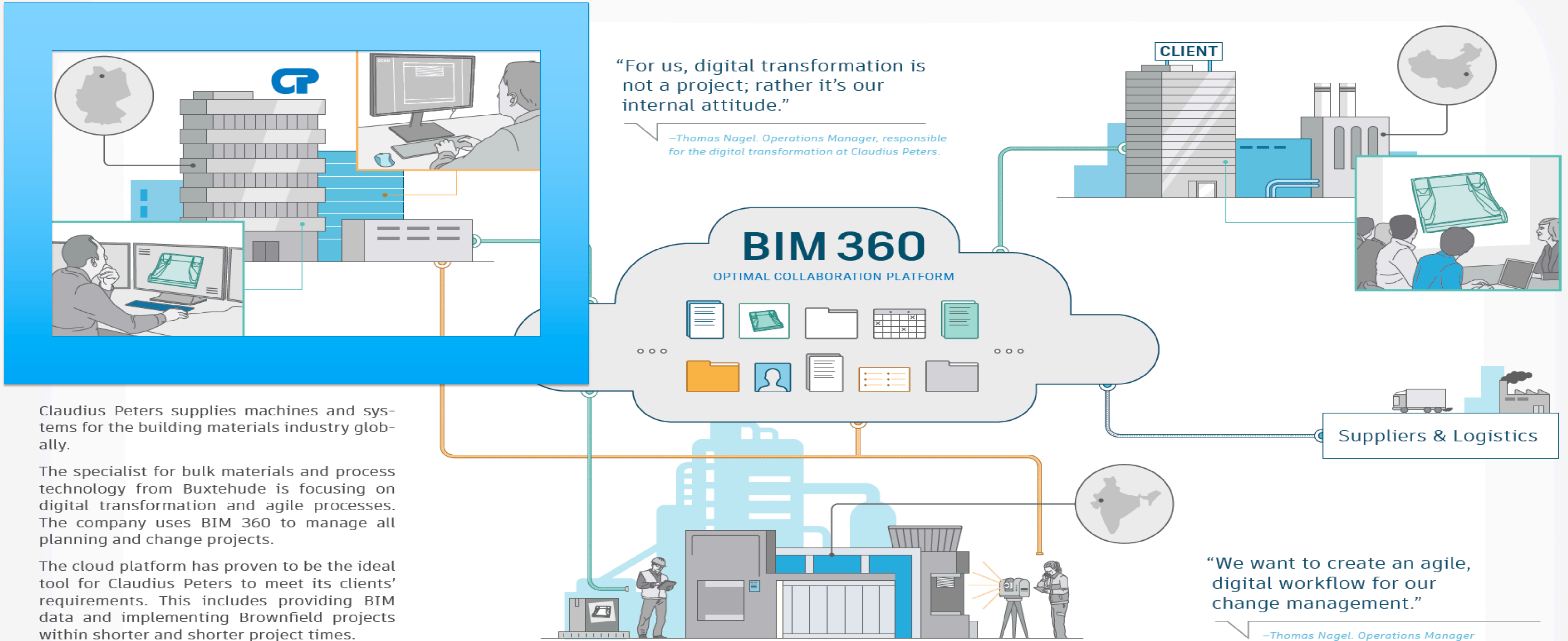
- ✓ Defining a test team (4 persons)
- ✓ Online Onboarding via Autodesk
- ✓ Learning and testing features!
- ✓ Using digital catalysts!
- ✓ Defining the BIM360 workflows?







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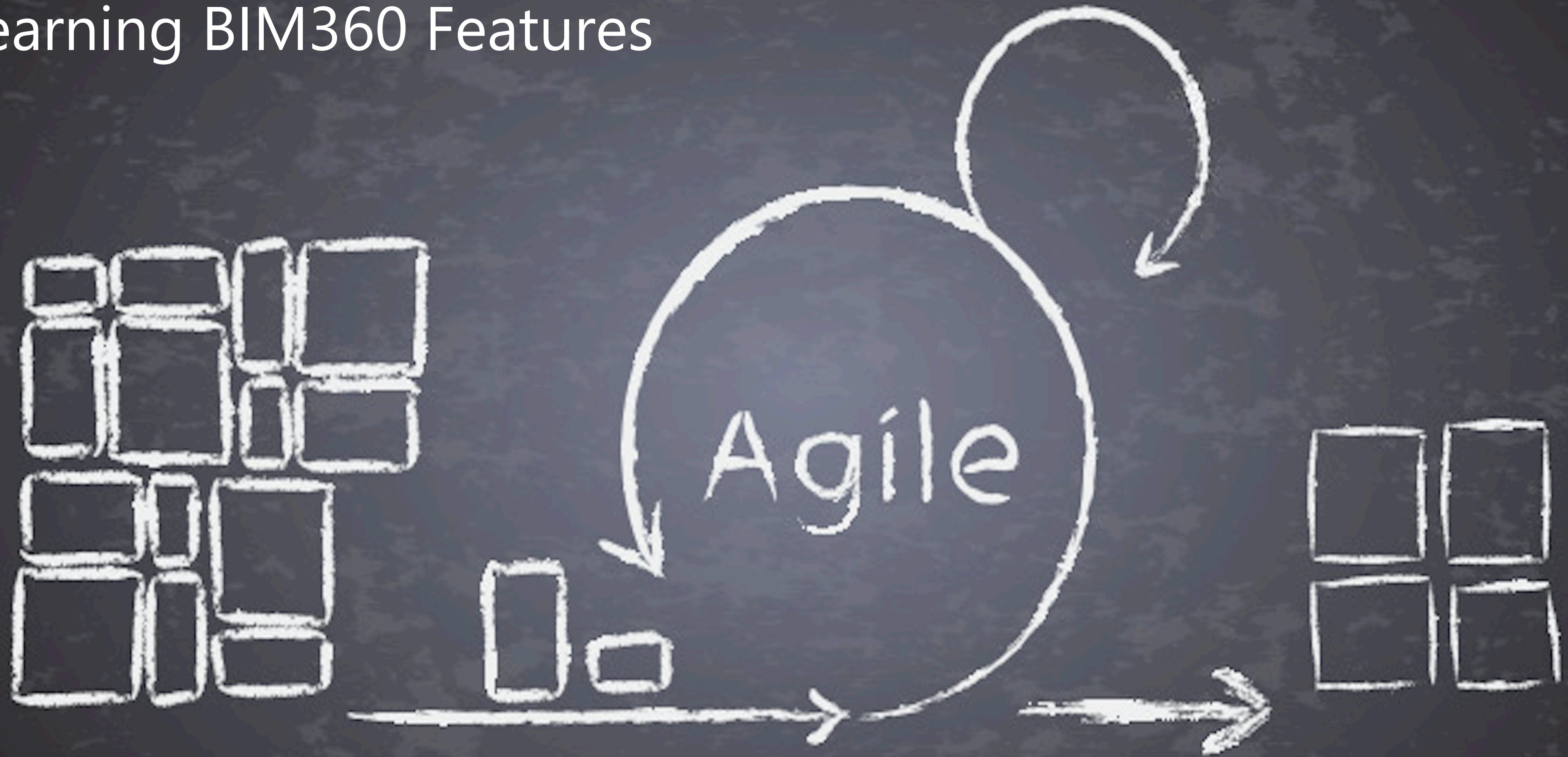
APRIL 2018

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


2019

New: Structure of supplier portal and direct connection of ERP/DMS


Learning BIM360 Features



Issue Management



Mängel



< Neue Bemerkung

Beschreibung

An dem Kühler ist ein weiterer Shock Blower vorzusehen.

Zuweisen an

Peter Lustig

Standort

Standort eingeben

Fällig am

Datum wählen


September 2018



Mo	Tu	We	Th	Fr	Sa	Su
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7


Datumsangaben bereinigen

Abbrechen

Erstellen



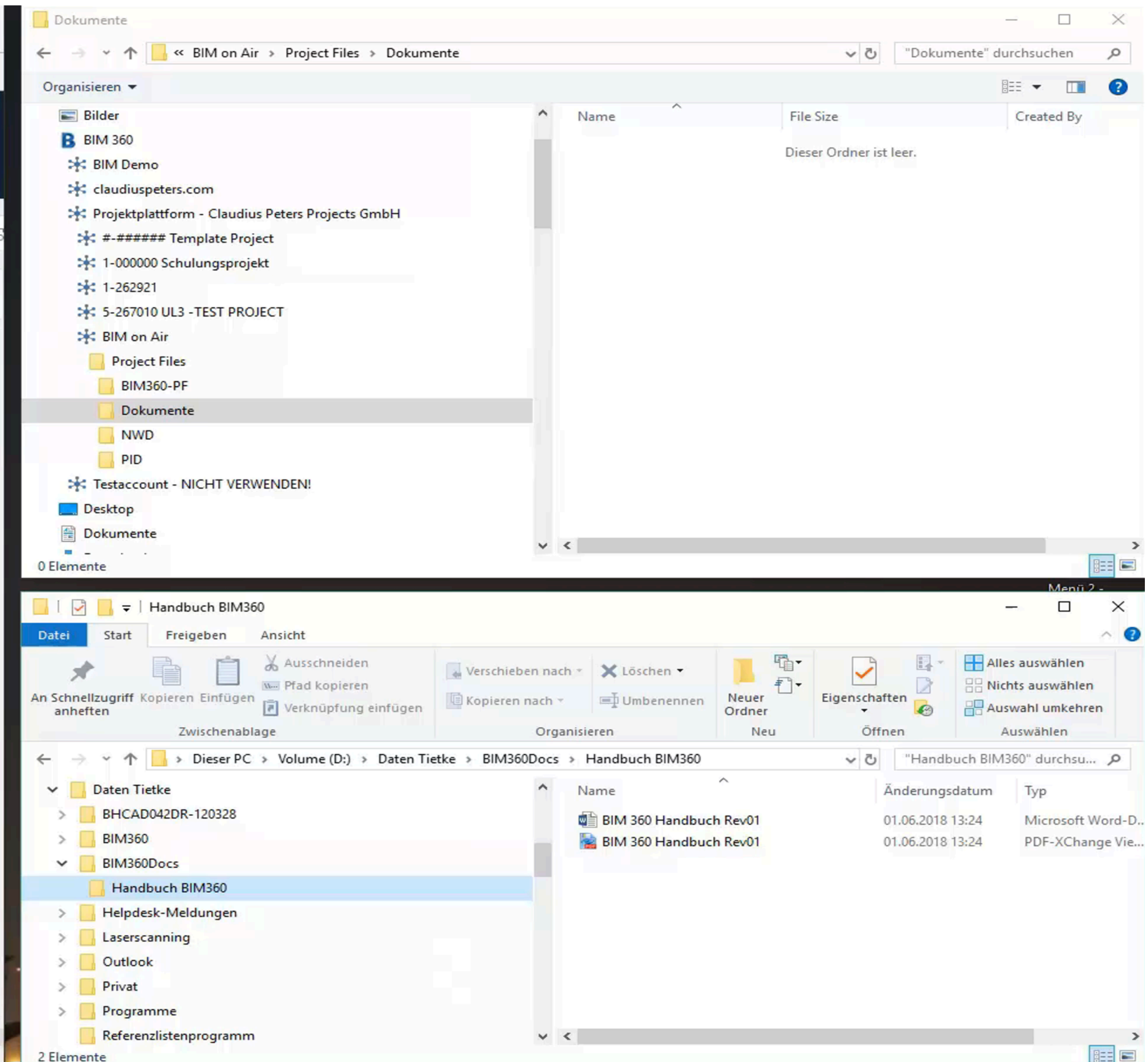
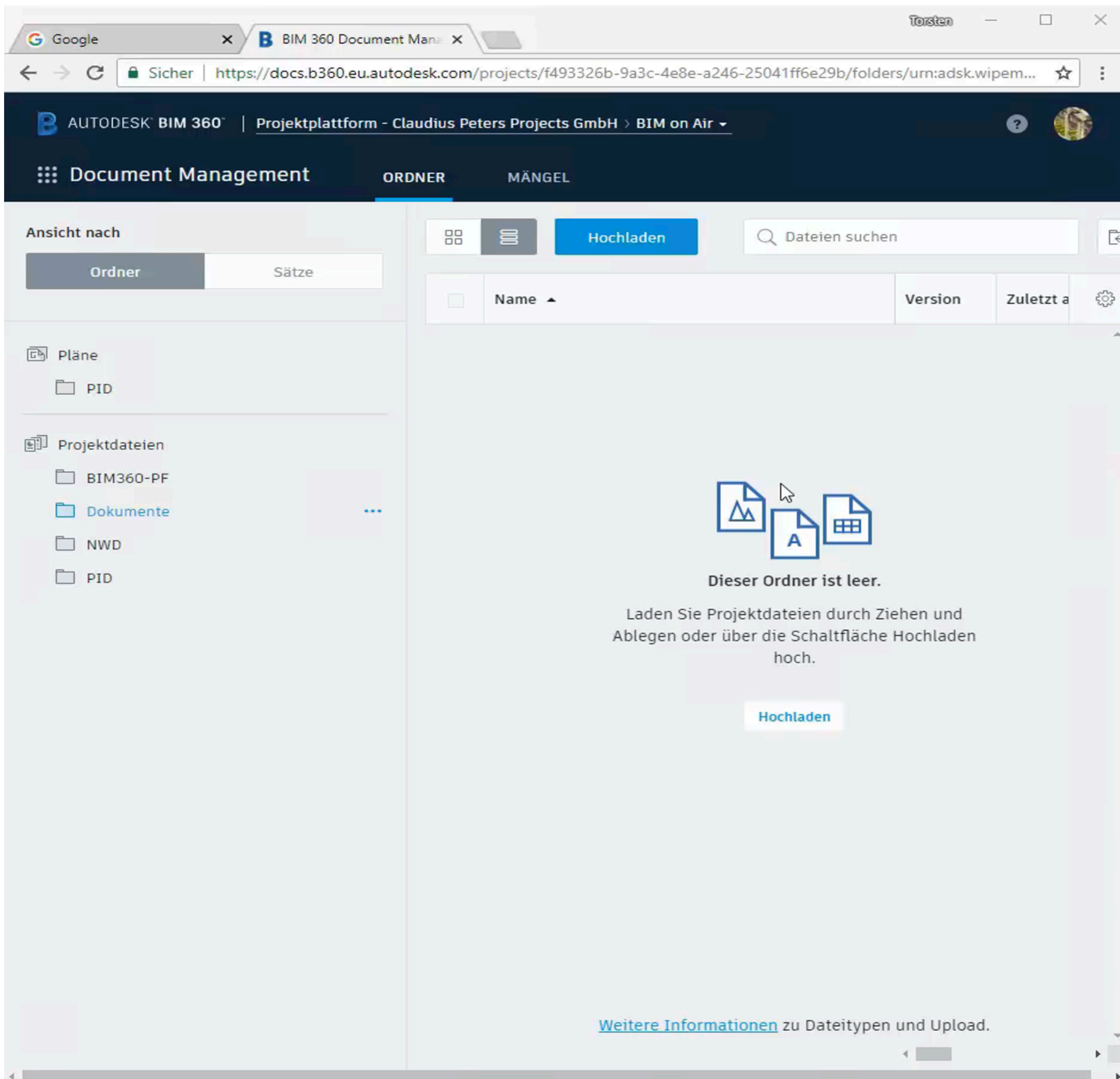




Creating Mark-ups



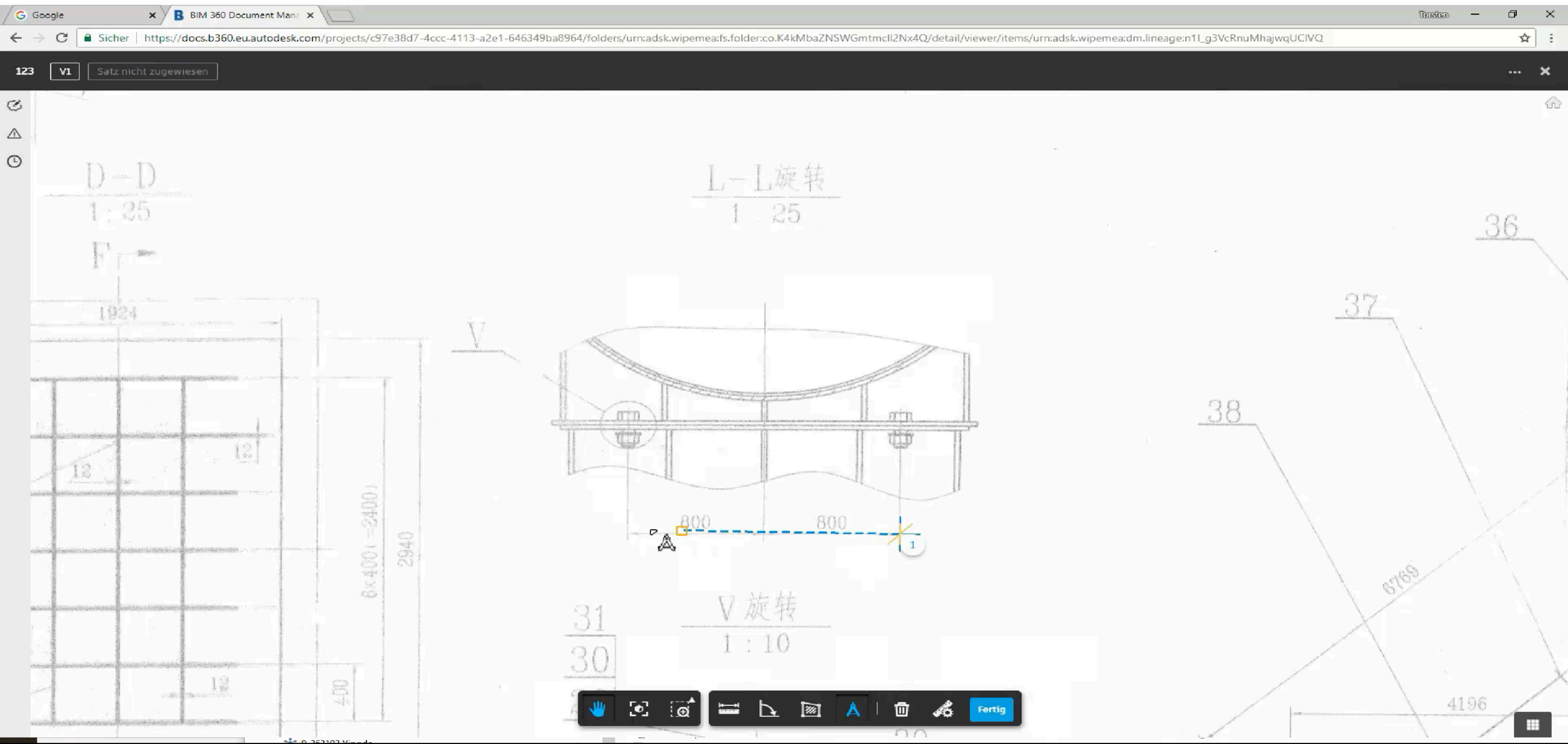
Using The Desktop Connector



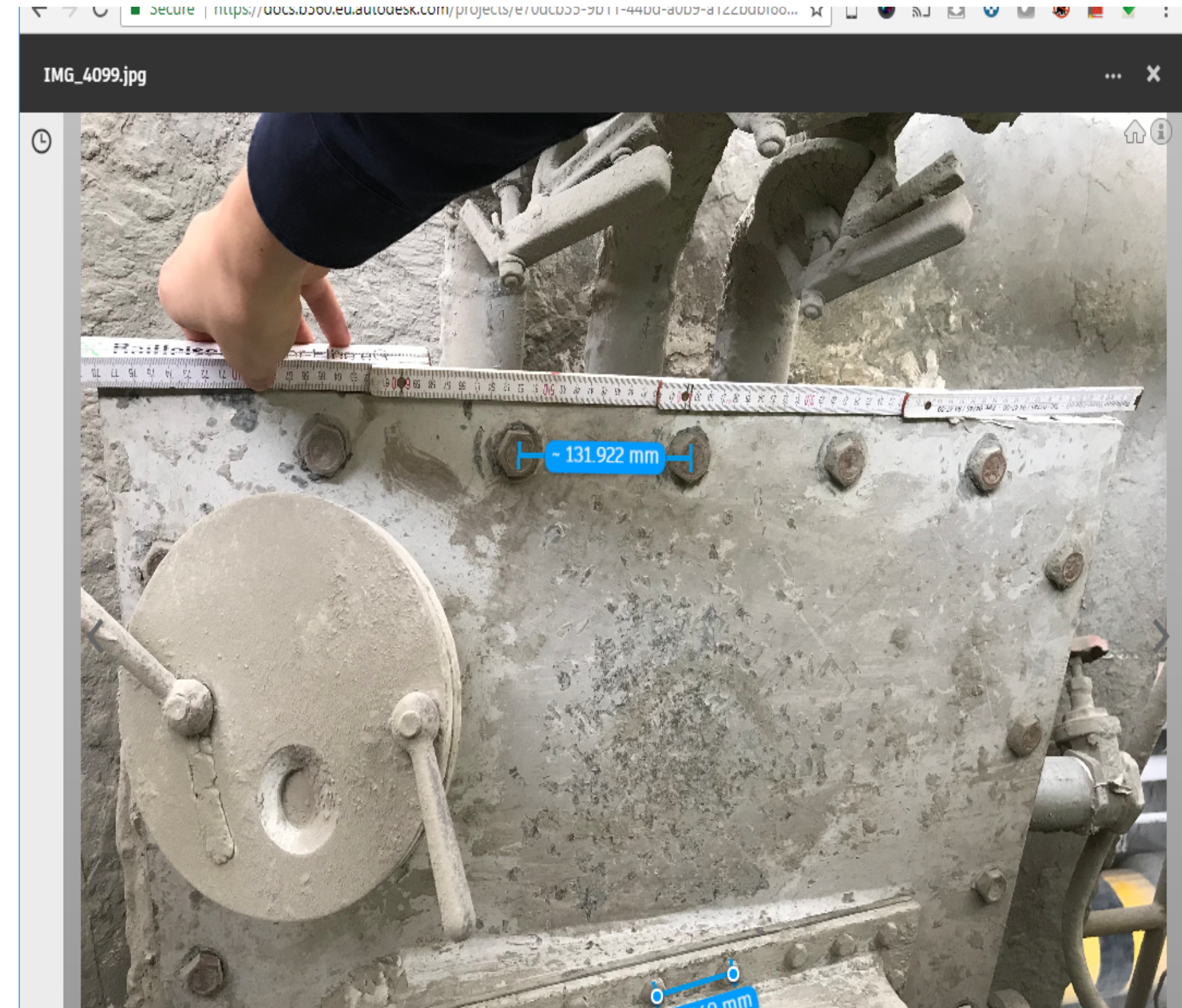
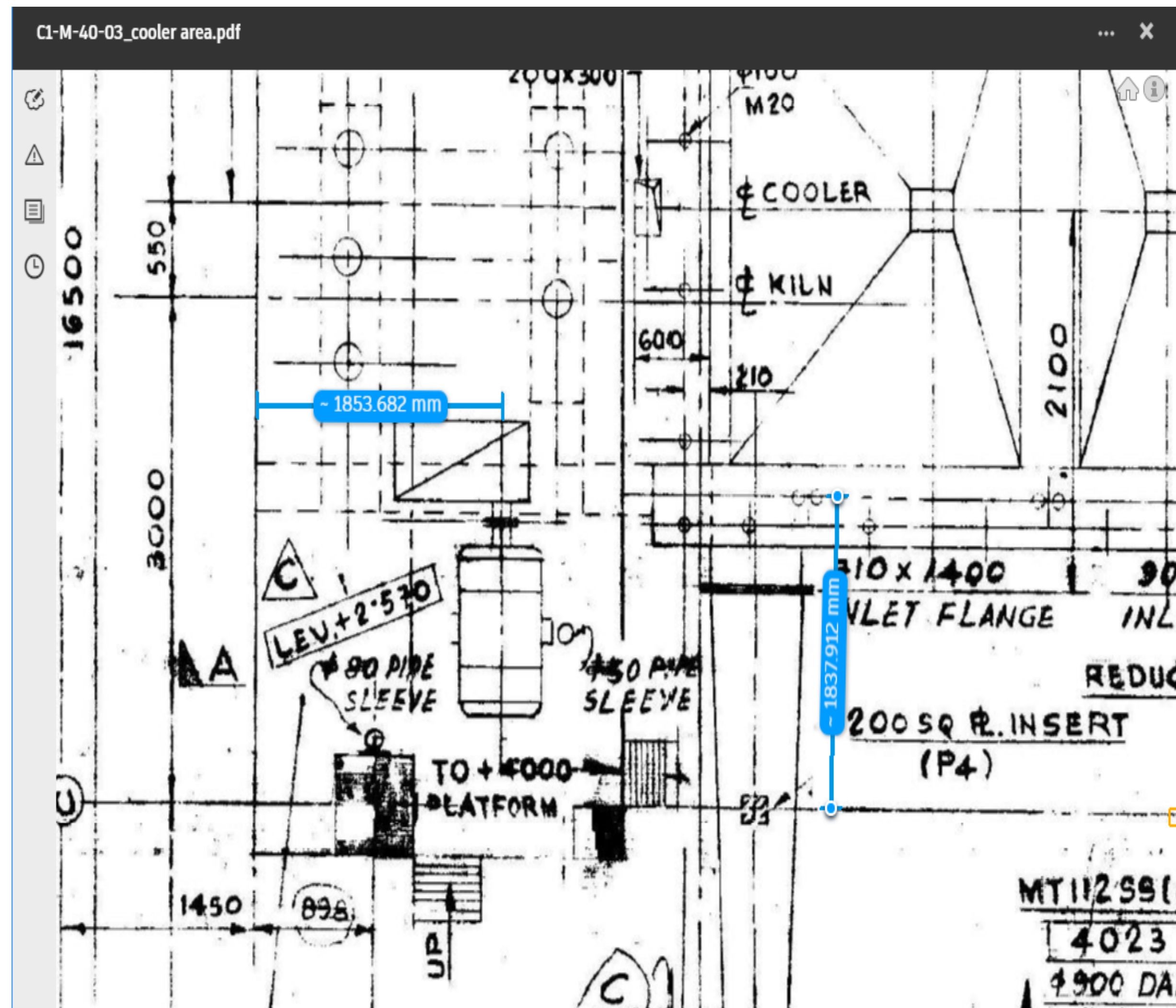
Comparison of Revisions

[illegible]

Measurements in PDF, 2D and 3D files



Measurements in pictures and manual drawings



General Benefits

Exchange data and documents easily

Central filing

Easily create annotations

Archiving the operations

Subscribing to files

3D models for all

Use of desktop, laptop, tablet and smartphone

offline usage

Good project overview

Desktop Connector for Word and Excel

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Internal Benefits

Shorter lead times

Notes simple

No more annoying e-mails

No search for relevant e-mails

User is guided to the right place

Inclusion of the construction site

Comments directly from the attachment
(photo)

Avoidance of redundancies

External Benefits

No complex e-mails for comments

Better partner for the customer

Direct and fast involvement of the customer

Approval processes are accelerated

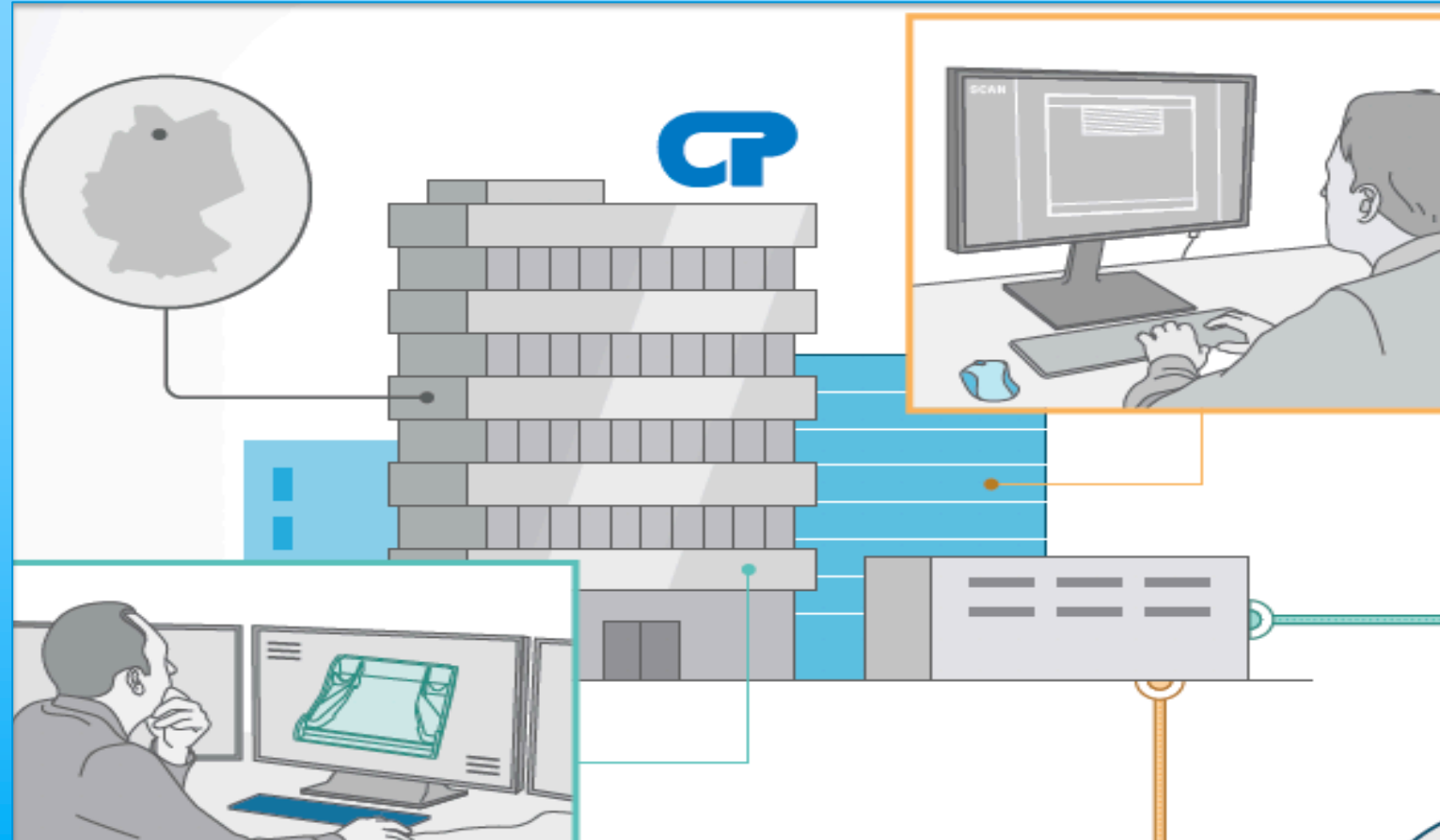
Shorter planning times

Roll Out Sprint By Sprint

- ✓ Start with internal collaboration in sales, engineering, automation ...
- ✓ Integrate the customer in the collaboration loop!
- ✓ Using BIM360 on the shopfloor and digitize the issue management
- ✓ Adopting BIM360 in the procurement and external work benches.



CLAUDIUS PETERS: AGILE WORKFLOWS WITH BIM



“For us, digital transformation is not a project; rather it’s our internal attitude.”

—Thomas Nagel, Operations Manager, responsible for the digital transformation at Claudius Peters.

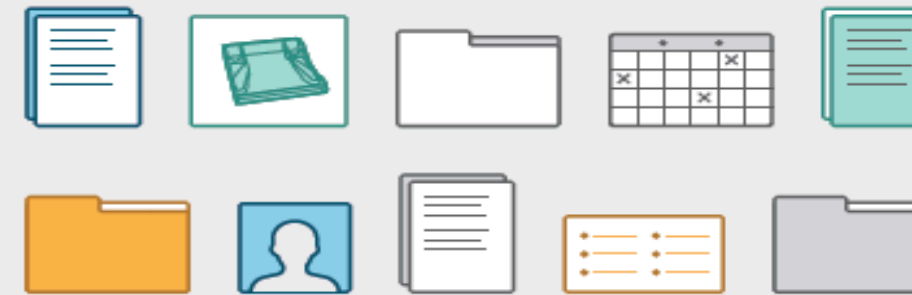
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BIM 360

OPTIMAL COLLABORATION PLATFORM



Suppliers & Logistics

“We want to create an agile, digital workflow for our change management.”

—Thomas Nagel, Operations Manager



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How did the introduction take place?

Webinars between Autodesk and Claudius Peters

- Presentation of the possibilities and functions
- 3-week test phase
- Comparison with conventional working methods
- Evaluation of the advantages

Start with BIM360 in April with the first projects and members

- Steady increase in projects used
- Rapid increase in members
- Great interest among employees
- Maximum number of members reached

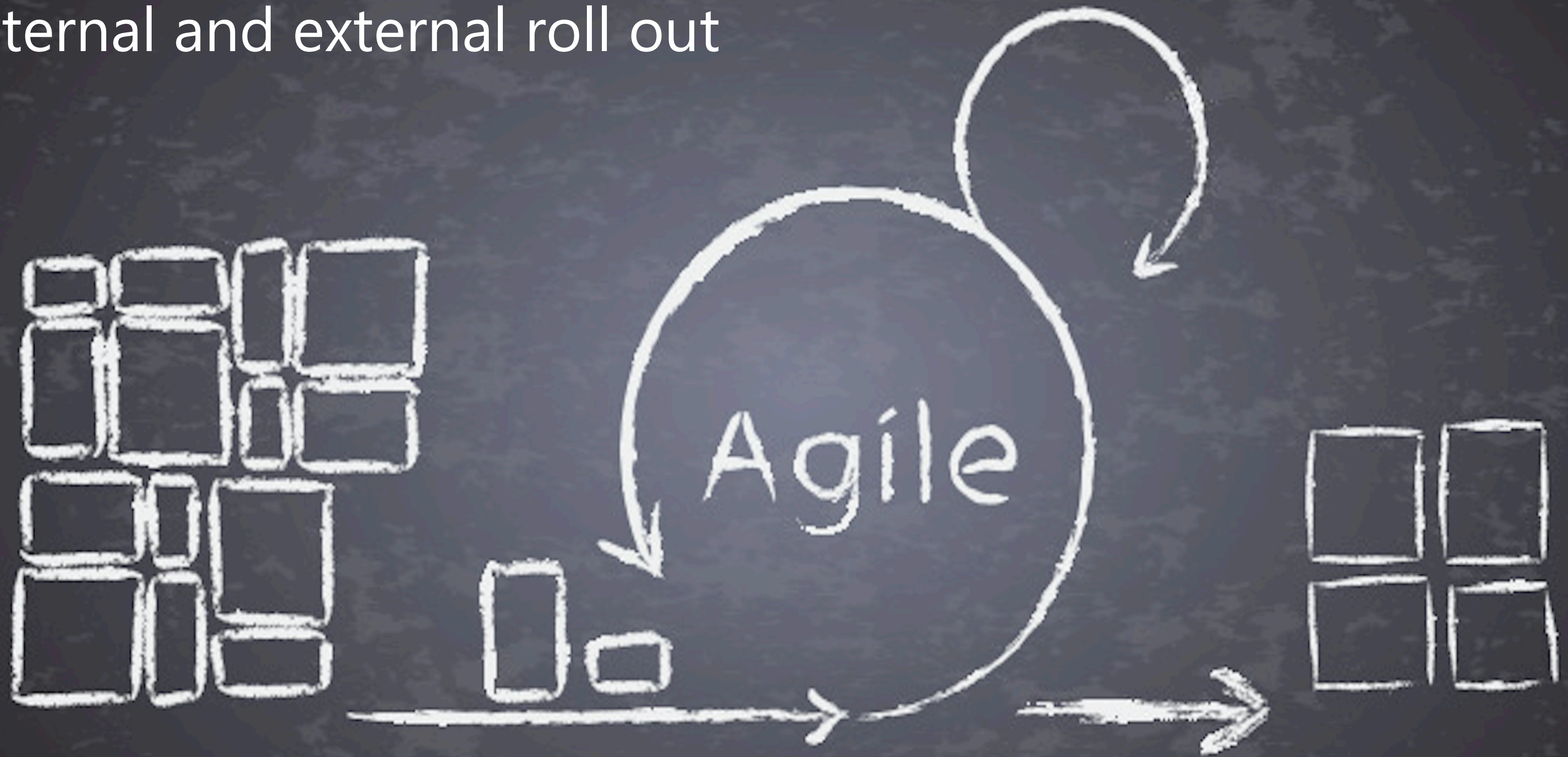
Creation of a manual

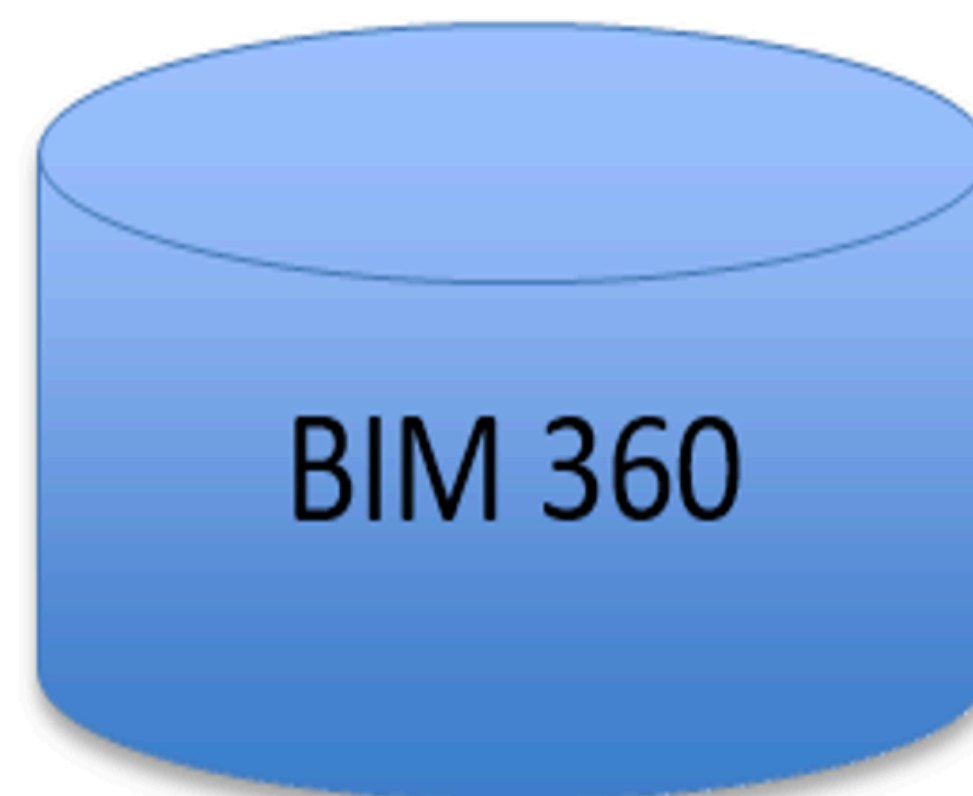
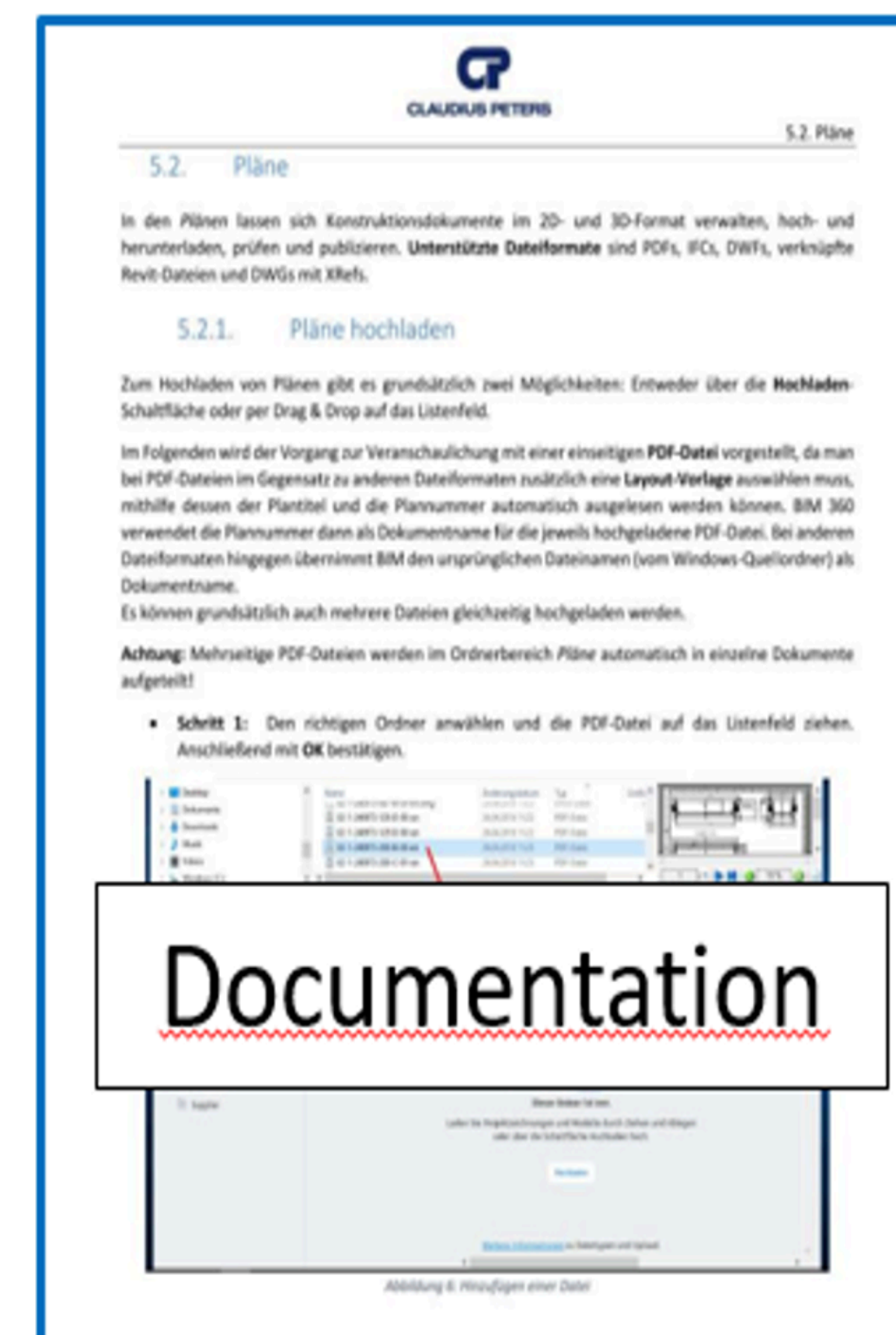
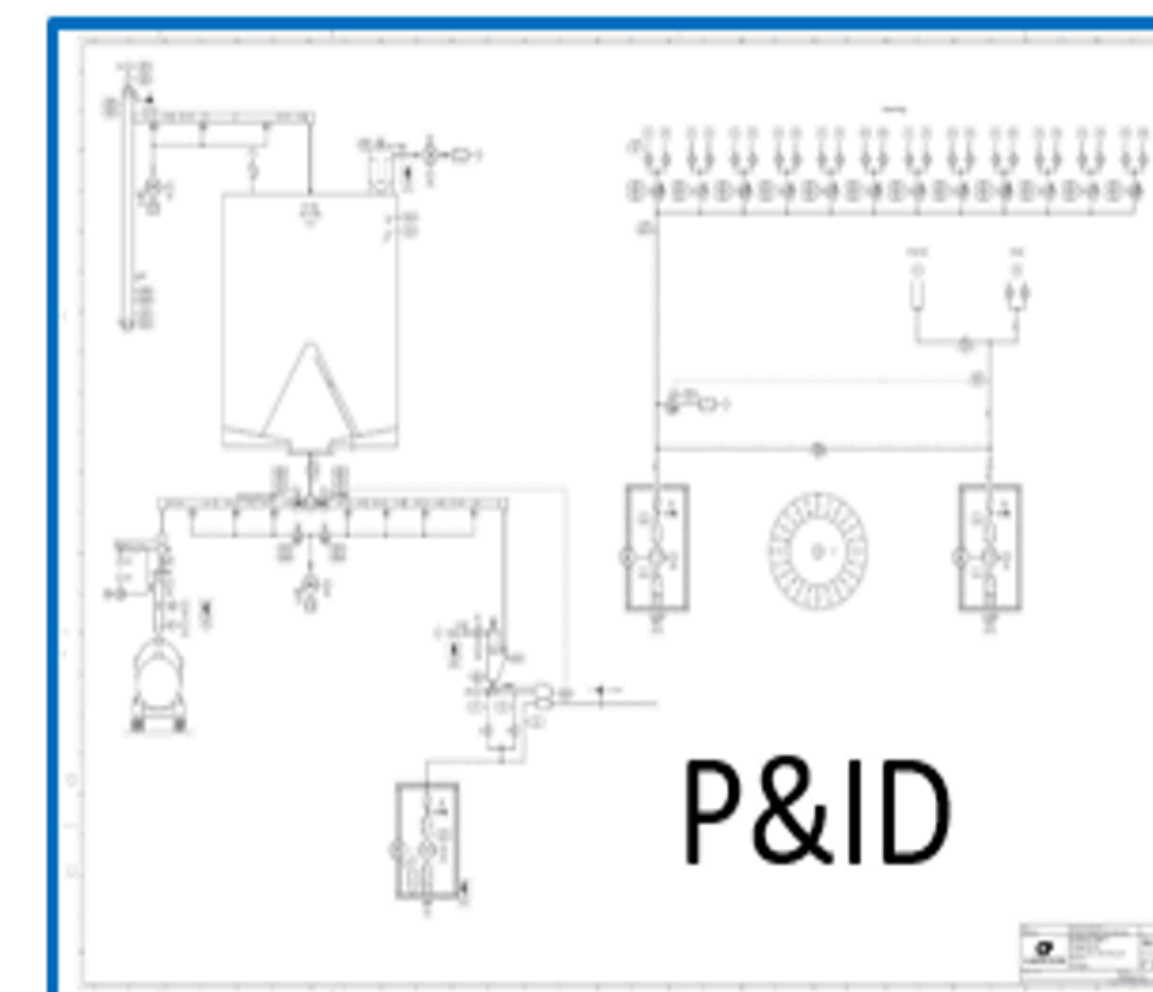
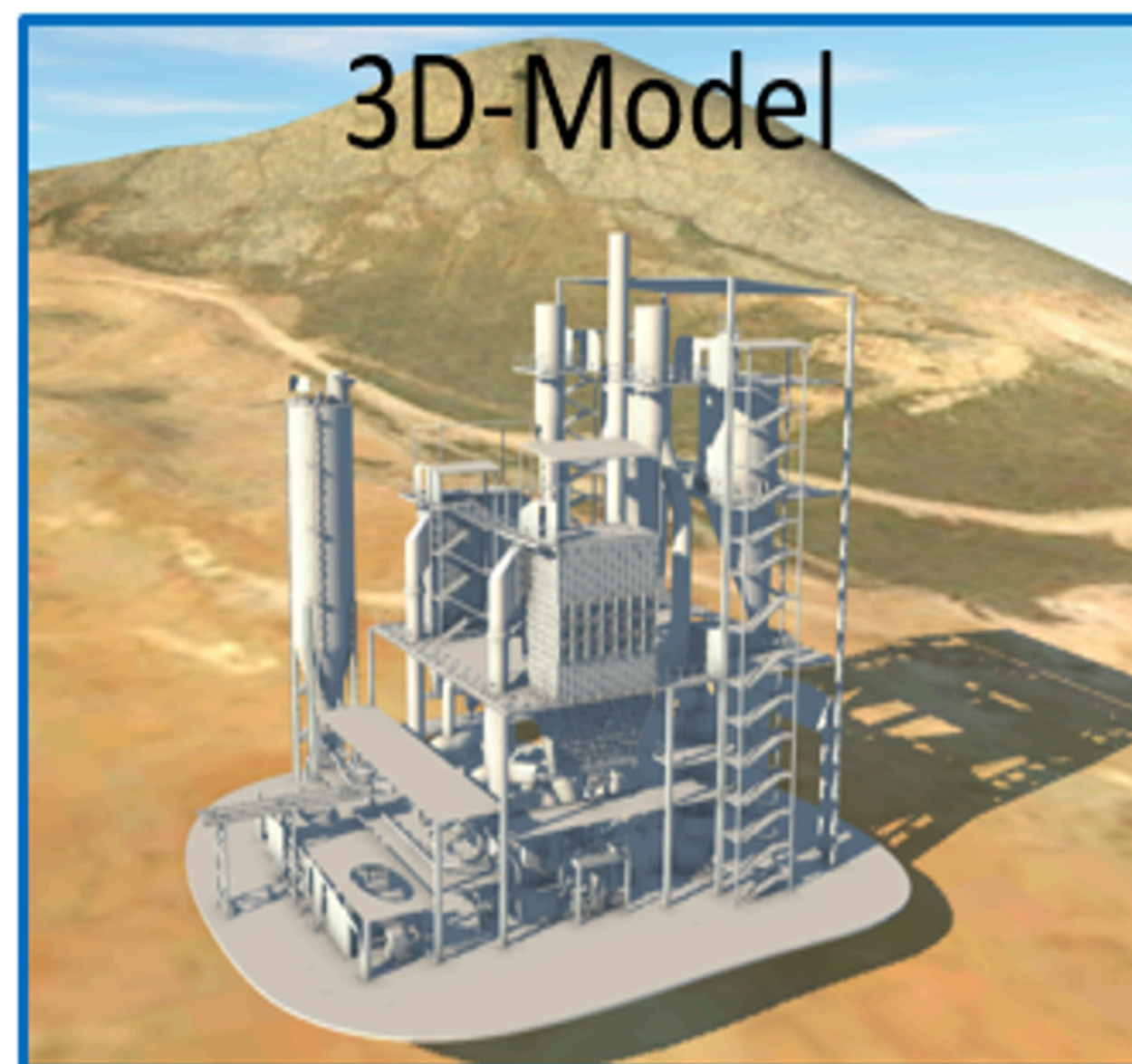
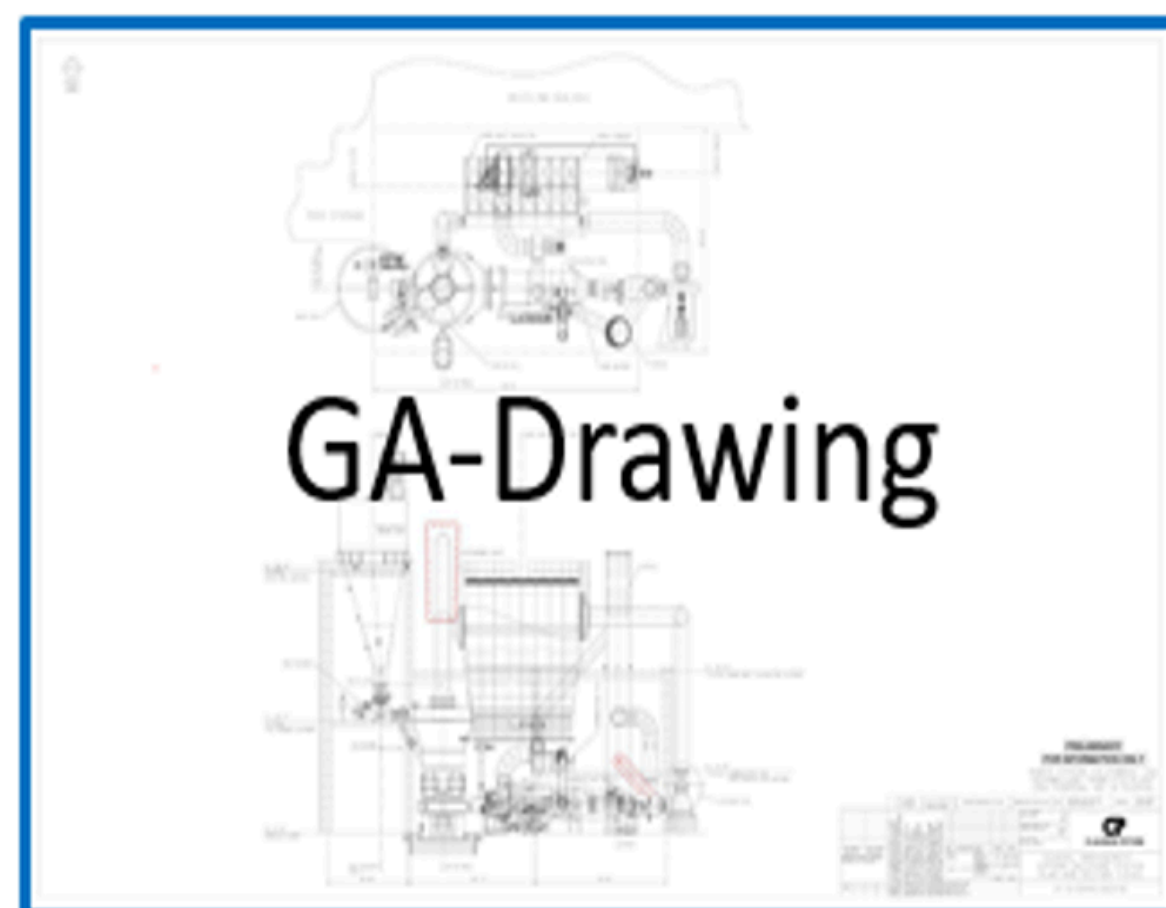
- All important functionalities of BIM360Docs have been compiled and combined in one easy to understand manual.
- Employees were specifically instructed by the BIM specialists

Involvement of customers and suppliers

- Creation of a manual for registration on the Autodesk platform

Internal and external roll out





Using BIM360 on the shopfloor



Mängel



< Neue Bemerkung

Status *

Offen

Titel *

Bohrung bitte versetzen

Beschreibung

Die Bohrung muss um 2mm nach rechts versetzt werden, sonst steht der Schraubenkopf über.
(Testmangel)

Zuweisen an

Karsten Lohrengel

Standort

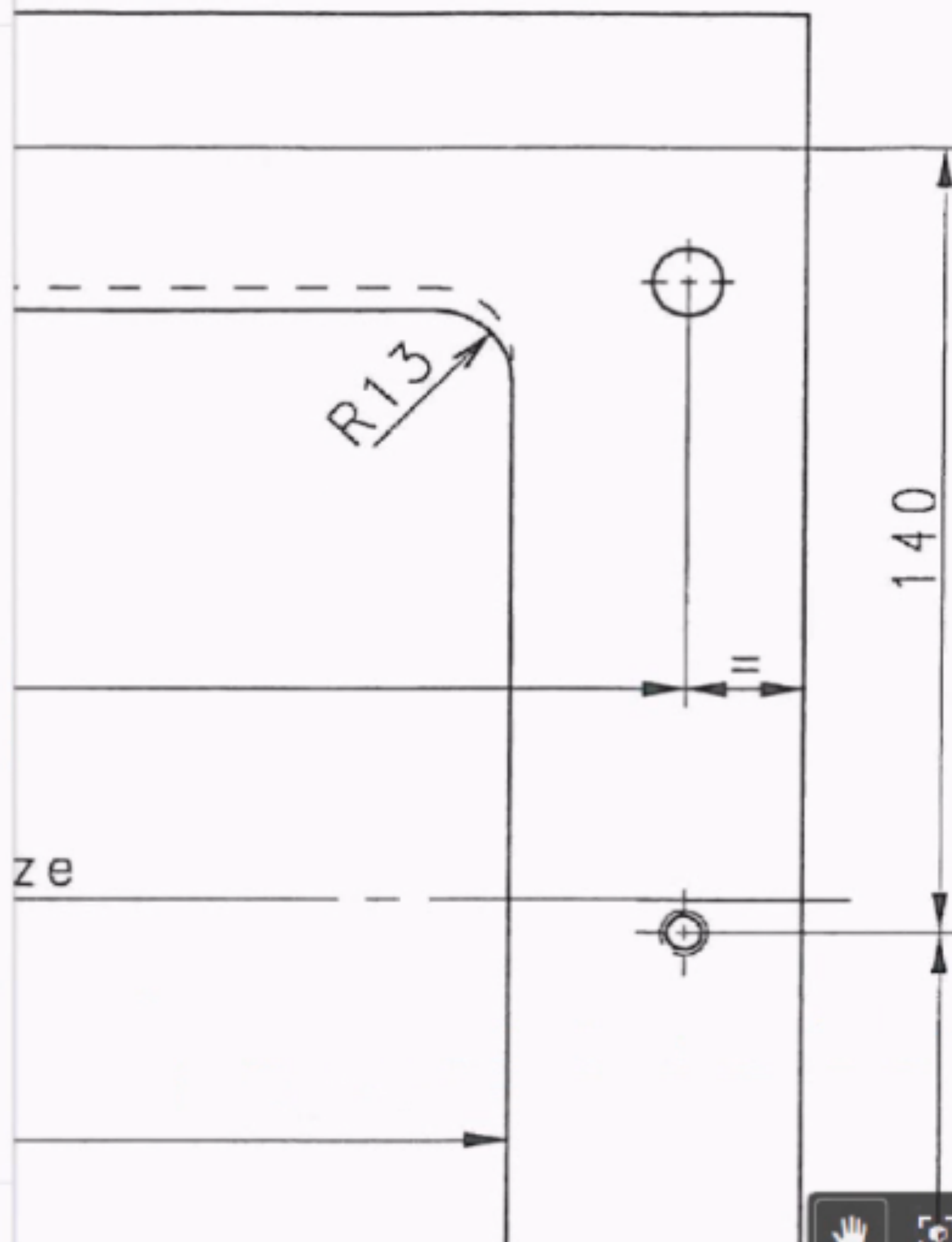
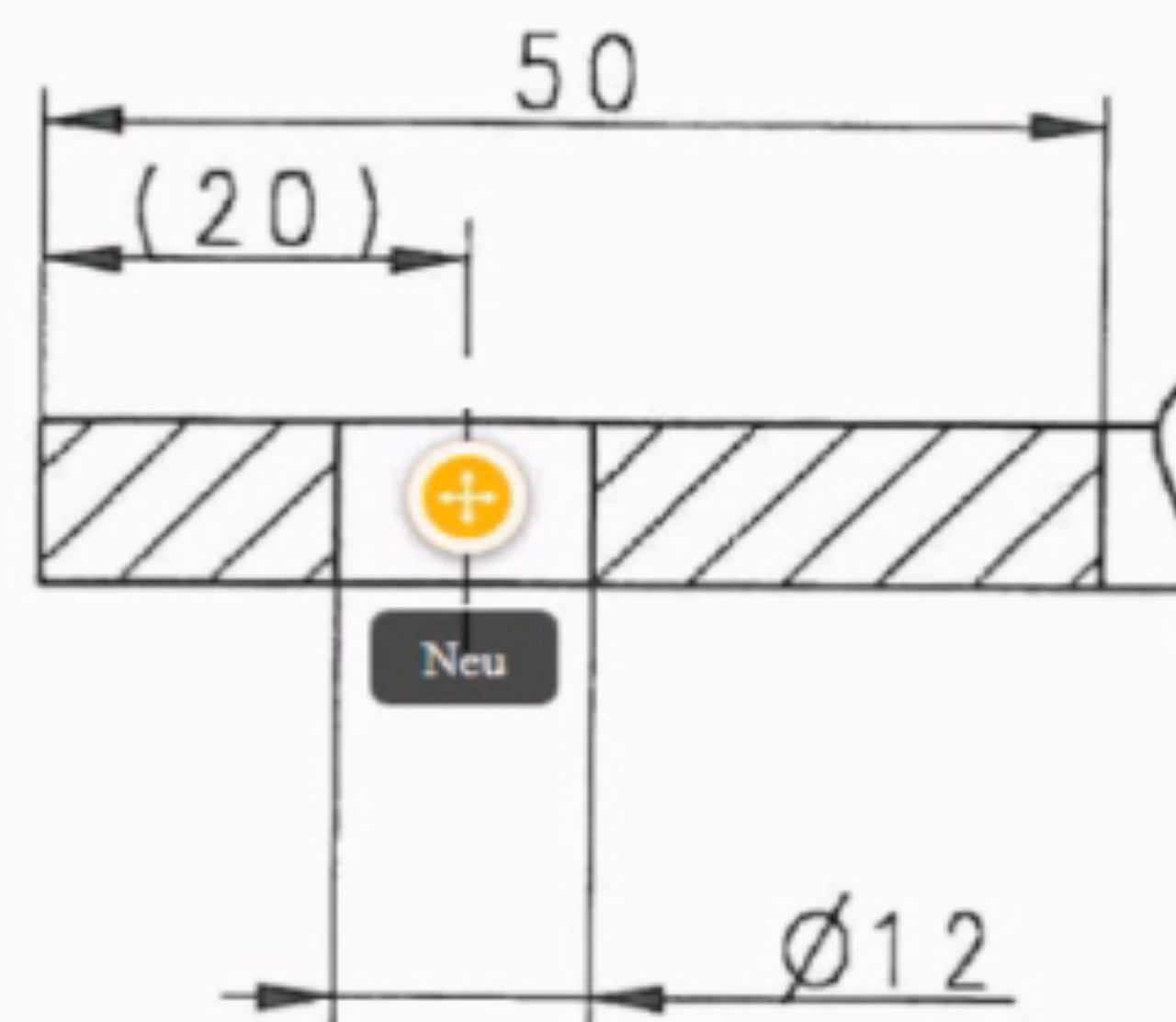
Standort eingeben

Fällig am

Jun 30

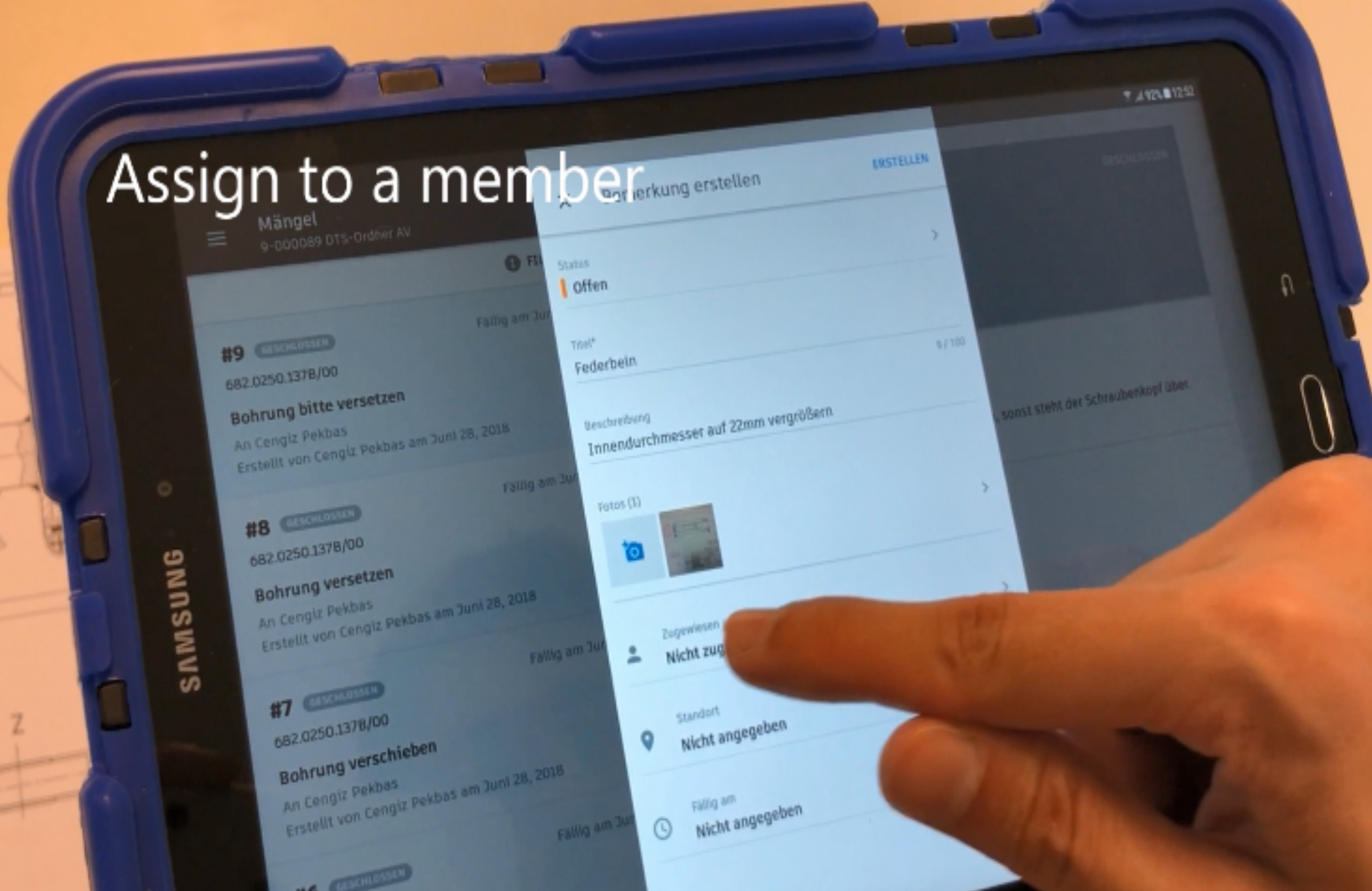
Abbrechen

Erstellen

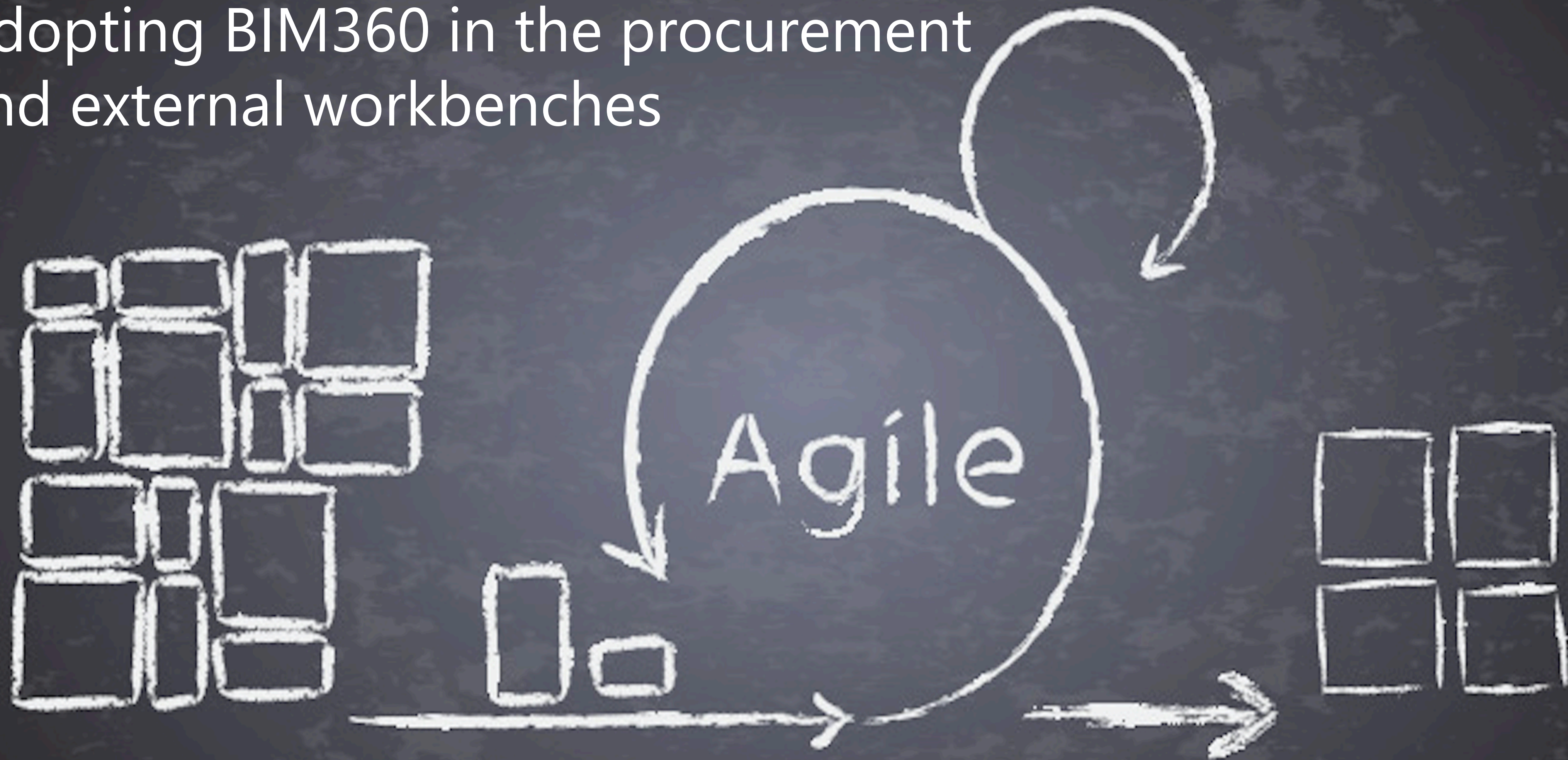
**A-A** 1:1

BIM 360 - Creating an issue

Assign to a member



Adopting BIM360 in the procurement and external workbenches



K..	Name	Beschreibung
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	86907-01	Airlifte + Pneumatikteile LT: 10.04.19 1/2558
	86907-02	Airlifte + Pneumatikteile LT: 10.04.19 1/2558
	86907-03	Airlifte + Pneumatikteile LT: 10.04.19 1/2558
	86907-04	Airlifte + Pneumatikteile LT: 10.04.19 1/2558
	86907-05	Airlifte + Pneumatikteile LT: 10.04.19 1/2558
	86907-06	Airlifte + Pneumatikteile LT: 10.04.19 1/2558

15367	
Bestellung	
Bestellnummer:	02- 86907
Änderungsnummer:	6
Ihr Zeichen u. Nachricht	
GEGENSTAND DES AUFTRAGS:	Airlifte + Pneumatikteile LT: 10.04.19 1/255863 LT Pos. 0010 24.10.19
VERSANDANSCHRIFT:	VERSANDVERMERK:
IPS International Packing Services GmbH	Bestellnummer/Bestellposition und Verursachernummer der Bestellposition
Halskestraße 54 - 56 DE-22113 Hamburg	

86907-06	
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Datum:	12.03.2019
Druckdatum und -zeit:	13.03.2019 06:31
Bestellwert:	64214.180
Bearbeiter:	
Prüfer:	

Document Management

ORDNER

ÜBERPRÜFUNGEN

ÜBERTRAGUNGEN

AUFGABEN

Ansicht nach

Ordner

Sätze








- ▼ 02-86907
 - DTS-86907-IN-Documentation-ED
 - DTS-86907-OUT-Documentation-ED
 - DTS-86907-OUT-Drawings-ED
- ▶ 02-87208
- ▶ 02-87329
- ▶ 02-87390
- ▶ 02-87557
- ▼ 02-87620
 - DTS-87620-IN-ORDER CONFIRMATION-ED-0001
 - DTS-87620-OUT-DOCUMENTATION-ED-0001



Hochladen

🔍 Dateien suchen



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<input type="checkbox"/>	 86907-06.pdf		V1	14. März 2019 11:47	Marco Witz	
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<input type="checkbox"/>	 QIP B Rinneneinlaufkasten 151A 0020_MS...		V1	26. März 2019 11:10	Marco Witz	

Rollout Overview

The platform is now used for more than 300 projects in sales and project execution. Customers and suppliers recognize the positive possibilities and accept the invitation to the project. But also internally at Claudius Peters more and more departments use the new functionalities.

sales engineers

customers

project
managers

lead engineers

CAD planners

automation

Job buyers

suppliers

quality control

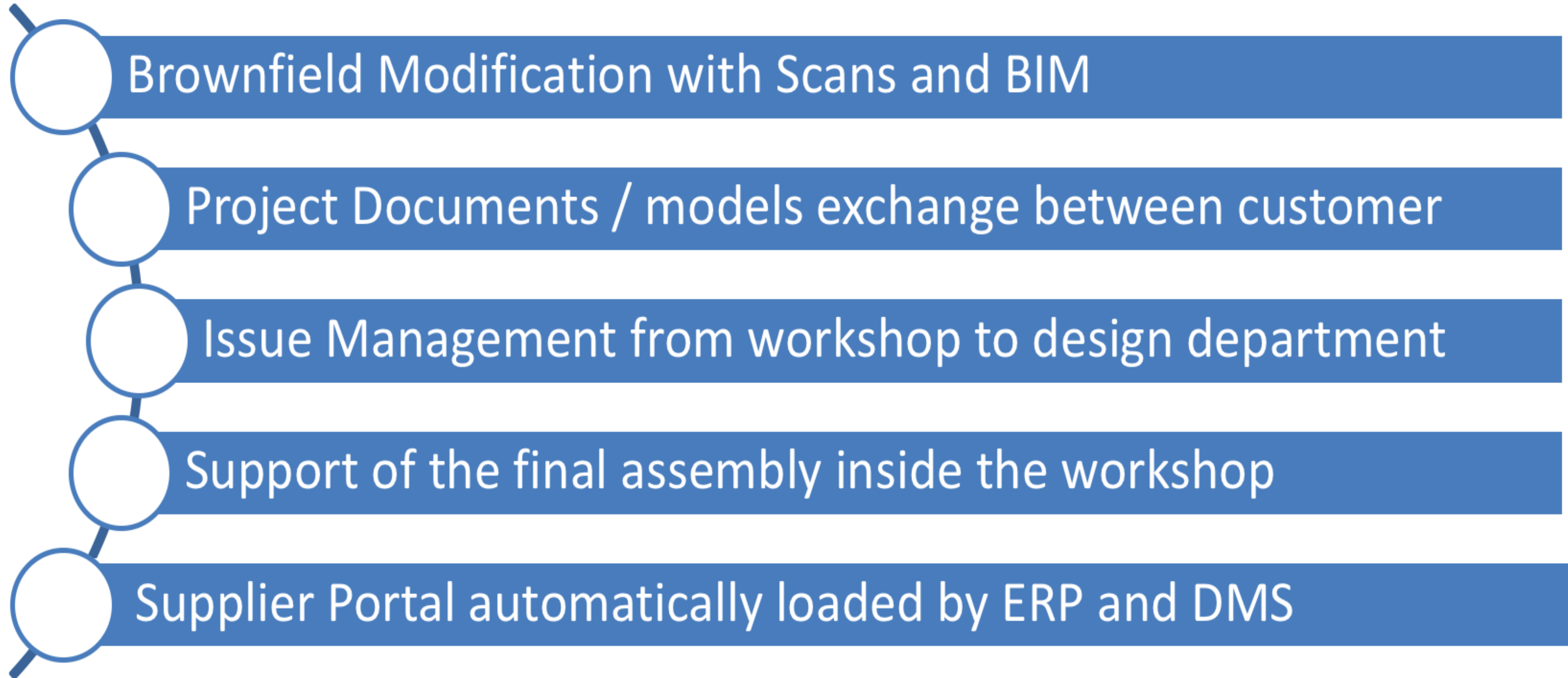
workshop

erection

commissioning



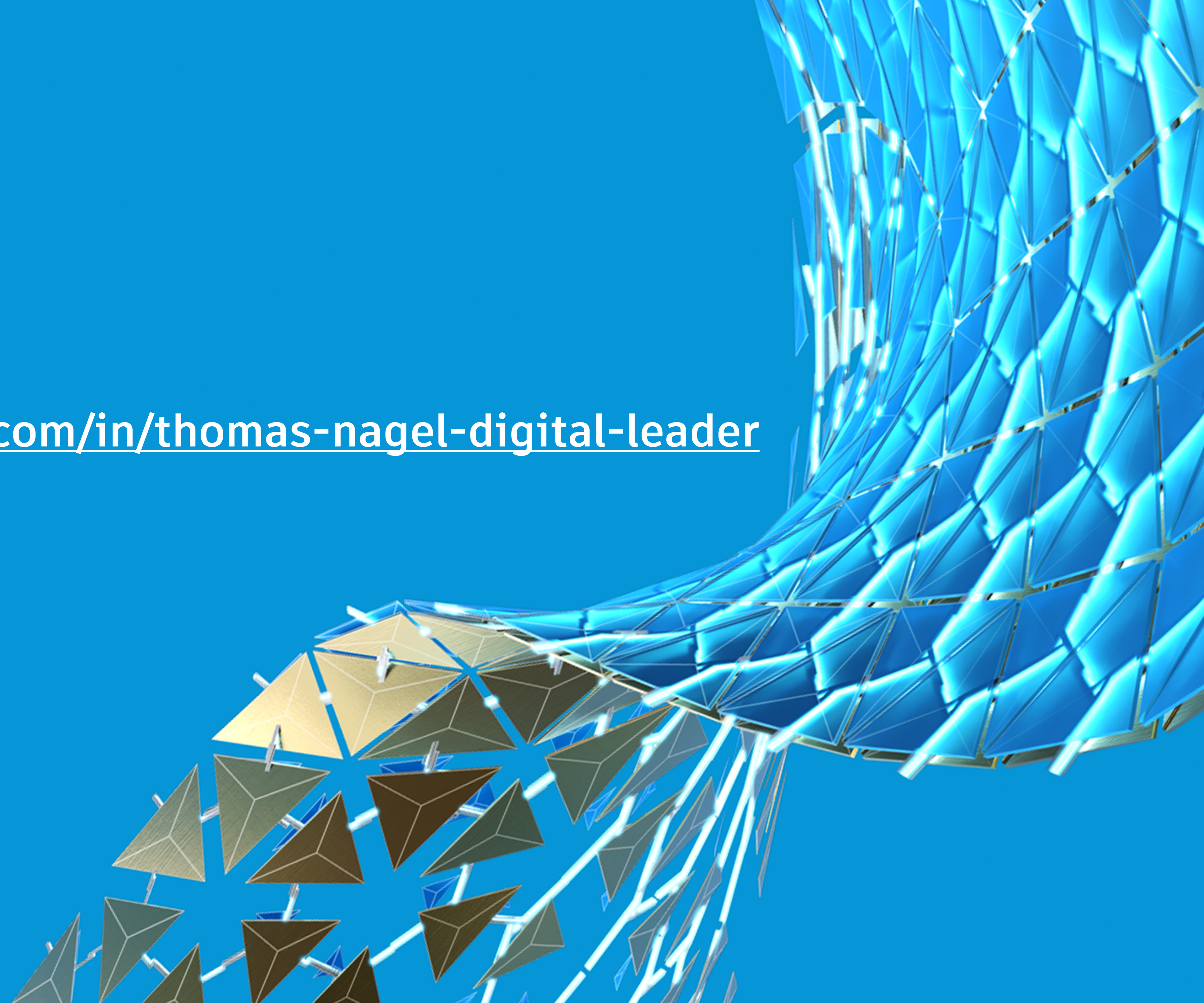
Rollout Overview



Thank you!

Thomas Nagel

<https://www.linkedin.com/in/thomas-nagel-digital-leader>





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