3D DIGITAL TWIN SOLUTION

3D INSTRUCTION MANUALS & PRODUCT COMMUNICATION

Digital 3D Twin based visualization &
interactive communication from CAD data

SIDE EFFECTS

USING CAD DATA THROUGHOUT THE COMPANY

Do you know this as well? Your construction is almost daily requested and claimed by the other departments of your company regarding visualizations of the products as pictures, videos, or reduced 3D models?

Our software solution automatically turns your CAD data into an optimized digital 3D twin, which can be used interactively throughout the company. Even by people without experience in handling 3D data.

Your CAD data in marketing, training, service and production.
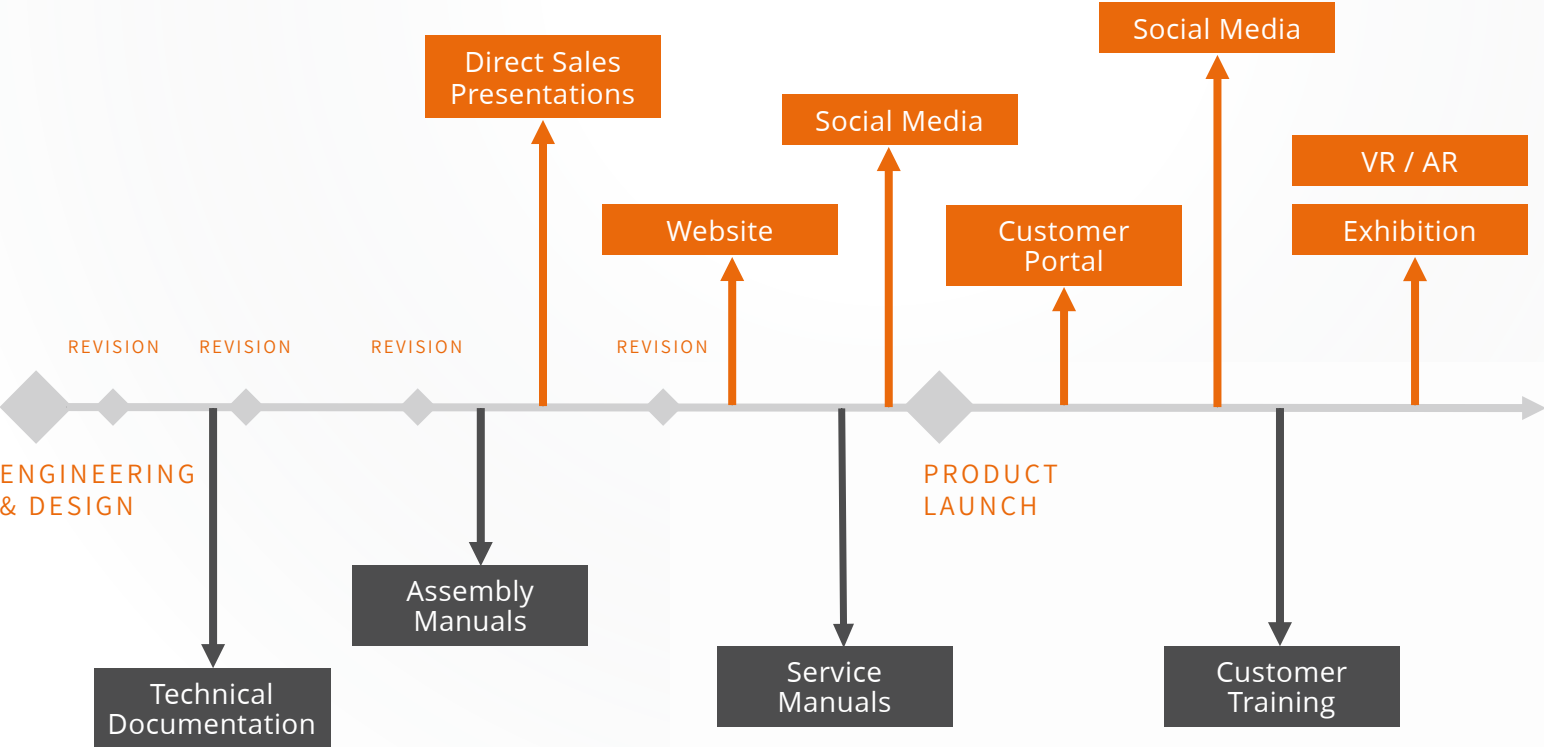
OUR CLIENTS

YOUR CHALLENGES

- High agency costs for the creation of images, videos and presentations.
- Visualizations are generic and do not represent individual customer configurations.
- Sales experts cannot visualize individual product configurations.
- Revisions make visualizations almost impossible to keep up to date.
- Shortage of skilled workers

https://player.vimeo.com/video/835861457?api=1
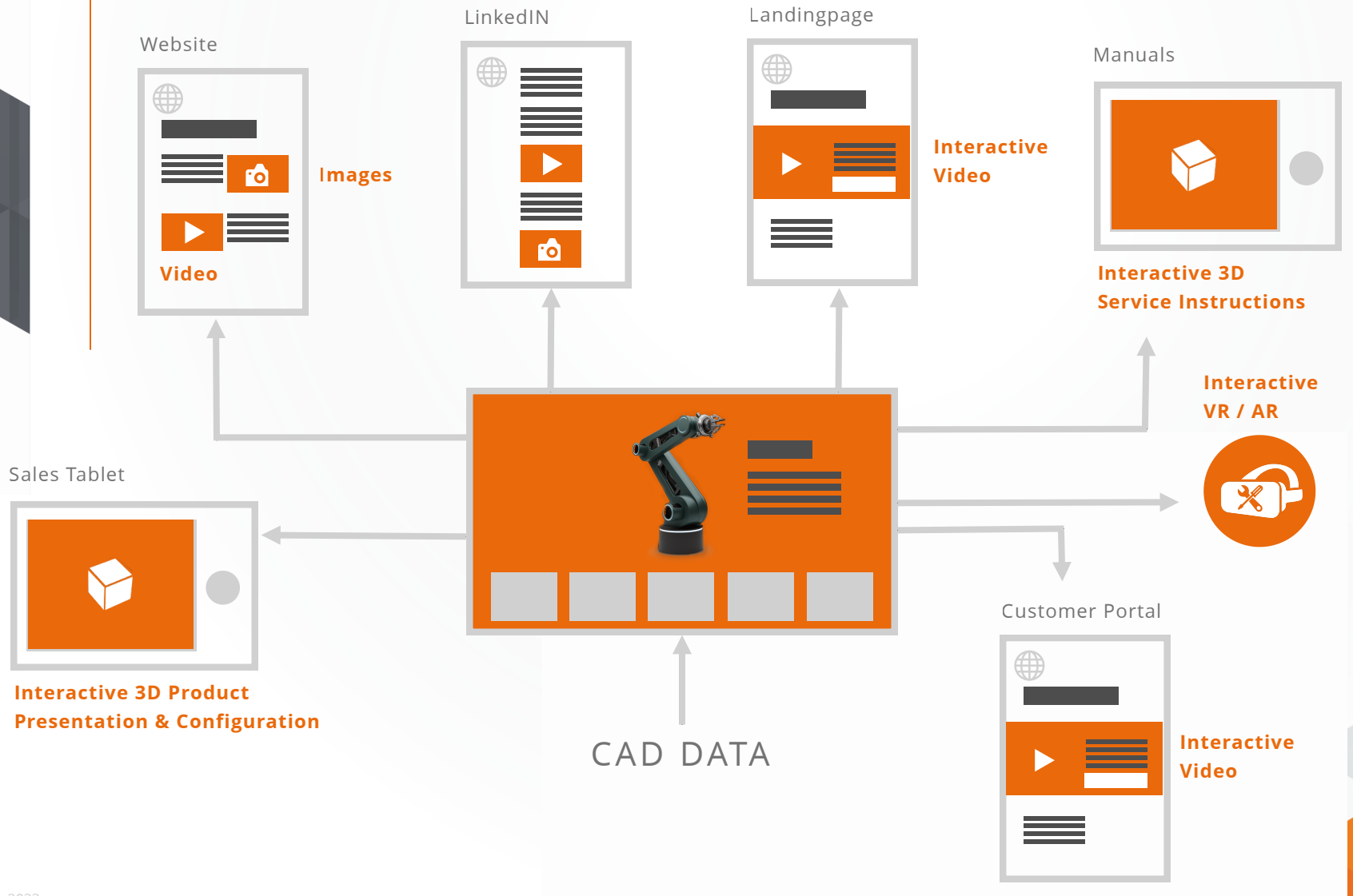
BENEFITS ALONG THE PRODUCT LIVE CYCLE

Product communication / product visualization during product development, as well as the creation of all instructional material (manuals, training, docu), is a major challenge. Our solution streamlines the production processes and reduces costs, increases the speed of knowledge transfer and increases your competitiveness.

Direct Sales Presentations

Social Media

Social Media

Website

VR / AR

Customer Portal

Exhibition

REVISION   REVISION   REVISION   REVISION

ENGINEERING & DESIGN

PRODUCT LAUNCH

Assembly Manuals

Technical Documentation

Service Manuals

Customer Training

THE SOLUTION: HOW IT WORKS

https://player.vimeo.com/video/810591240?api=1

3D DIGITAL TWIN BASED VISUALISATION

Website

Images

Video

LinkedIN

Landingpage

Interactive Video

Manuals

Interactive 3D Service Instructions

Interactive VR / AR

Sales Tablet

Interactive 3D Product Presentation & Configuration
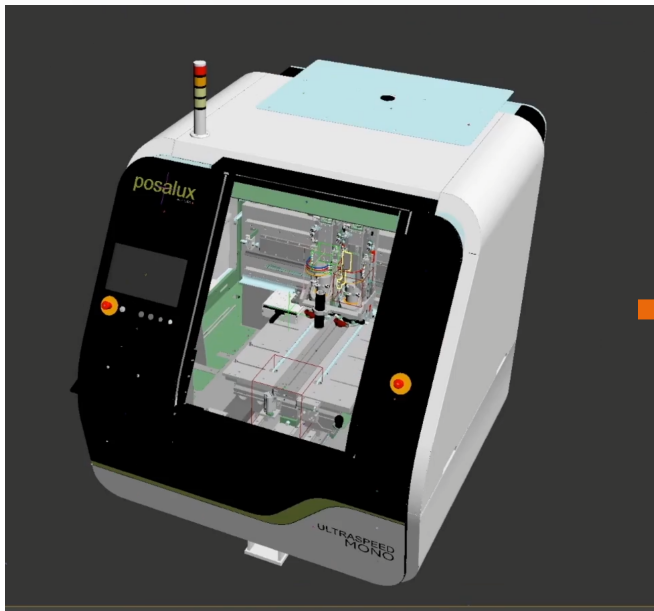
CAD DATA

Customer Portal

Interactive Video

THE SOLUTION : AUTOMATED 3D DIGITAL TWIN FROM CAD

- Complete hierarchy out of CAD systems
- Realistic materials
- Automatically optimised for Mobile, VR & AR
- The 3D Digital Twin connects Meta information IoT data and much more with the 3D components:

PROPERTIES Components know about their parameters (e.g. material, order number, or volume)

COLLISIONS Components react to interaction and can identify what they are interacting with (e.g. screwdriver)

CONNECTED Components can show real-time operating data and communicate scores to external systems (e.g. test results)

USE CASE DEMO: INSTRUCTION MANUAL

- Shorten training period / Increase operational safety
- Fewer false manipulations
- Up to 50% less text in manual
- Automatically update 3D visualizations based on revisions
- Interactive language change

https://player.vimeo.com/video/689627108?api=1

USE CASE DEMO: SPARE PARTS ORDERING

- Efficient and secure part identification
- Optical recognition via QR code possible
- All relevant ERP and PLM data directly in 3D space
- Active call for parts ordering based on lifetime of the parts
- Can be integrated into instruction manuals like guided maintenance

https://player.vimeo.com/video/846264385?api=1

USE CASE DEMO: MONITORING

- IoT supported service instructions
- More transparency thanks to position-relevant IoT data
- Faster response times
- Increase operational safety

https://player.vimeo.com/video/418854706?api=1

USE CASE DEMO: INTERACTIVE SHOWROOM

- Interactive and configurable product communication
- Increase product understanding in sales
- Fast creation of Images, Videos, and interactive presentations for different channels
- Avoid time-consuming agency briefings and reduce costs
- Automatically update 3D presentations, based on CAD revisions

https://player.vimeo.com/video/569708166?api=1

USE CASE DEMO: COLLABORATIVE / VIRTUAL LEARNING

- Remote learning & remote sales
- Virtual design review
- Multiplayer sessions for up to 25 users
- Hands free instructions for front worker

https://player.vimeo.com/video/820472832?api=1

RETHINKING PROCESSES

SERVICE

Autonomous Troubleshooting

No loss of time

No travel expenses

No CO2 produced

IMAGES, VIDEOS AND MANUALS

Cost reduction in visualisation and manual production

Up to 50% less text

50% faster manual production

No high agency costs

TRAINING COSTS

Virtual customer and employee training

4x faster learning

Less infrastructure costs

Digital traceability

FIRST STEPS

Thanks to our highly automated processes, a prototype can be created in just a few hours and further developed modularly.

Directly usable for the next trade fair, training, or service.

CONTACT US. WE SUPPORT YOU

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SIDE EFFECTS

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