UnoPro

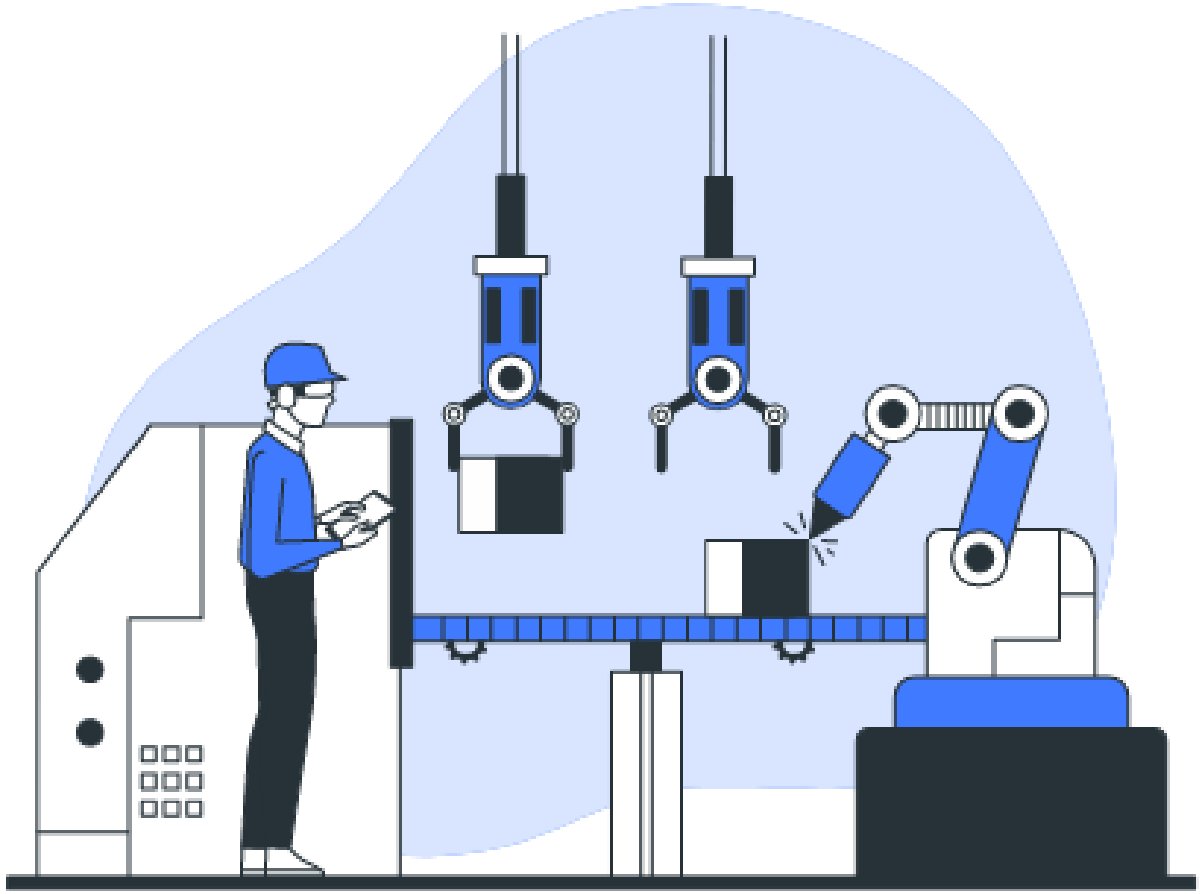
guiding to excellence

What We Do?

On the journey to Industry 4.0;

- By improving processes,
- Redesigning systems,
- Developing skills
- We provide most applicable and value adding solutions to organizations, guiding to sustainable success.

Within the scope of Industry 4.0 Digital – Lean Transformation, we are Turkey's leading training and consulting organization providing end-to-end service from factory setup to Industry 4.0 transformation.



What We Do?

UnoPro has developed 4 of the 8 Model Factories in Turkey from scratch, locally and nationally. Model Factories are jointly owned by the Ministry of Industry and Technology - General Directorate of Strategic Research and Productivity and the United Nations Development Programa and **the first Model Factory has been established in Ankara by McKinsey Consulting. UnoPro is the only local consulting company with the capability to develop model factories.**

End-to-End Solutions

Operational & Organisational Excellence	Digital Model Factory	Lean Transformation	Digital Transformation	Digital Twins

Scope

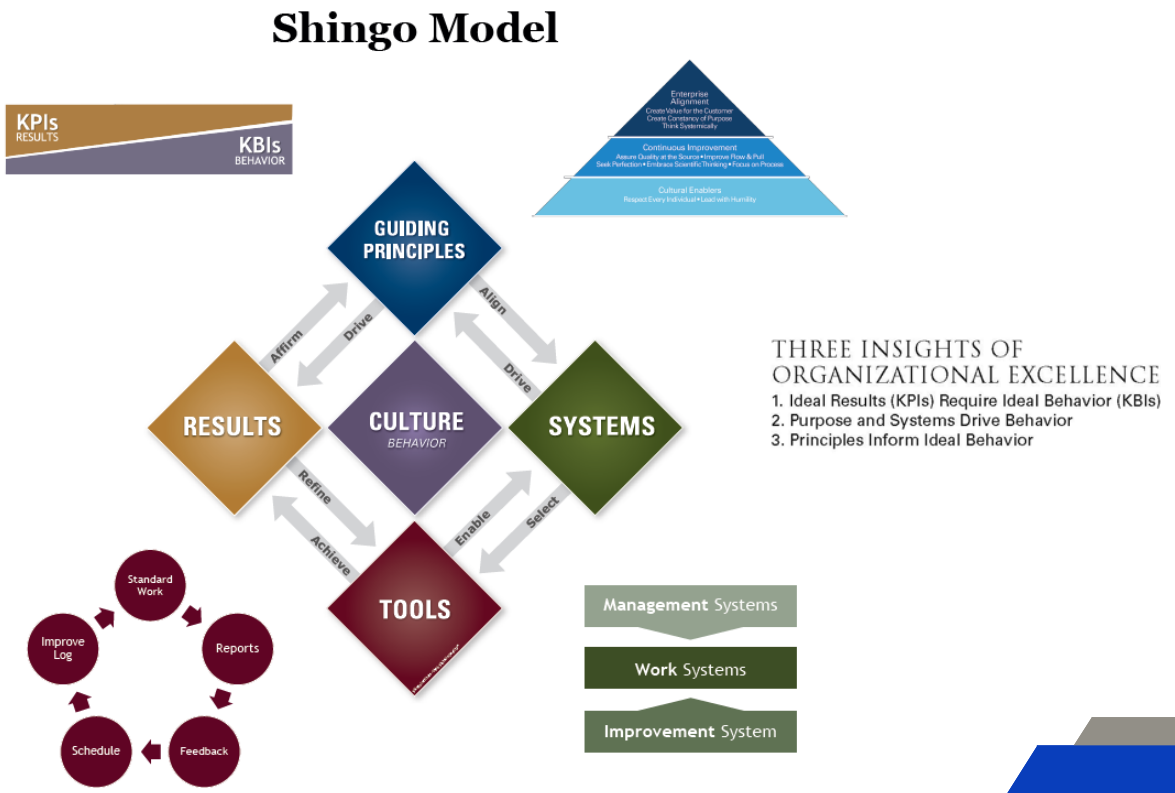
Lean and Digital Transformation approach aligned to Shingo Enterprise Excellence Model makes it possible for organizations to achieve both operational and organizational excellence, producing sustainable results as a result of lean and digital systems shaped by sustainable culture.

Within the scope of Industry 4.0; systems that produce sustainable results must continuously be improved, they have to be lean and digital. Digitalization is part of the enterprise excellence journey.

Shingo Institute Enterprise Excellence Workshops

Enterprise excellence means not only operational excellence but also organizational excellence. With the Shingo Excellence Model, it is possible to acquire the competences necessary for the pursuit of excellence, design systems and develop a business culture that enables teams to take the right actions and commitments at the right time towards common goals.

With the Shingo Model, organizations can develop systems that will produce the right actions and results. With these systems, they can shape and protect their enterprise culture through their principles. Thus, organizations can easily achieve their goals with a sustainable corporate culture.



Shingo Institute Enterprise Excellence Workshops

There are 6 Shingo workshops on the Enterprise Excellence journey.

DISCOVER EXCELLENCE
(Prerequisite #1)
Behaviors that lead to organizational excellence.

SYSTEM DESIGN
(Prerequisite #2)
Systems designed to drive behavior.

CULTURAL ENABLERS
Behaviors that enable a culture of respect and humility.

CONTINUOUS IMPROVEMENT
Behaviors that improve a continuous flow of value.

ENTERPRISE ALIGNMENT
Behaviors that align teams, systems and strategy.

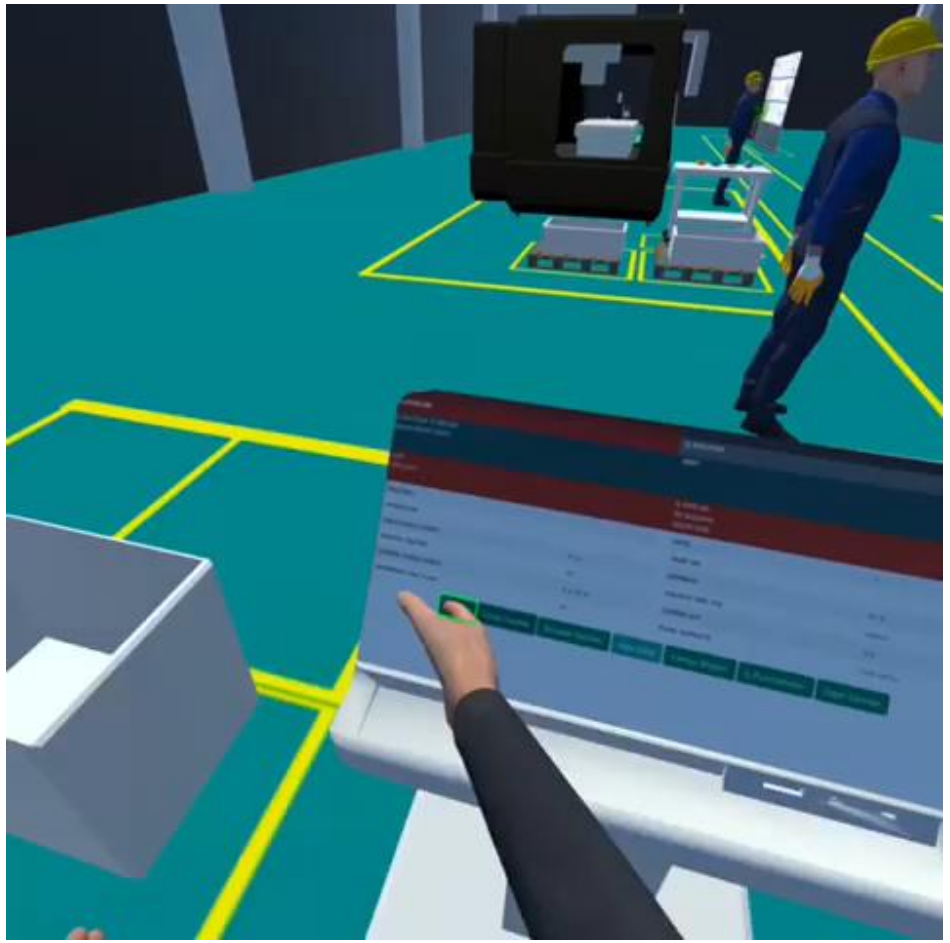
BUILD EXCELLENCE
(capstone)
Driving strategy to execution.

While the 6 enterprise excellence workshops in the Shingo Model are being delivered to senior and mid-level teams and implemented within the organization, UnoPro guides the entire process with its previous experience to ensure the correct design and development of systems, making the principles a part of the enterprise culture and ensuring total engagement towards enterprise excellence goals.

Digital Model Factory Applied Digital-Lean Transformation Workshops and Consultancy

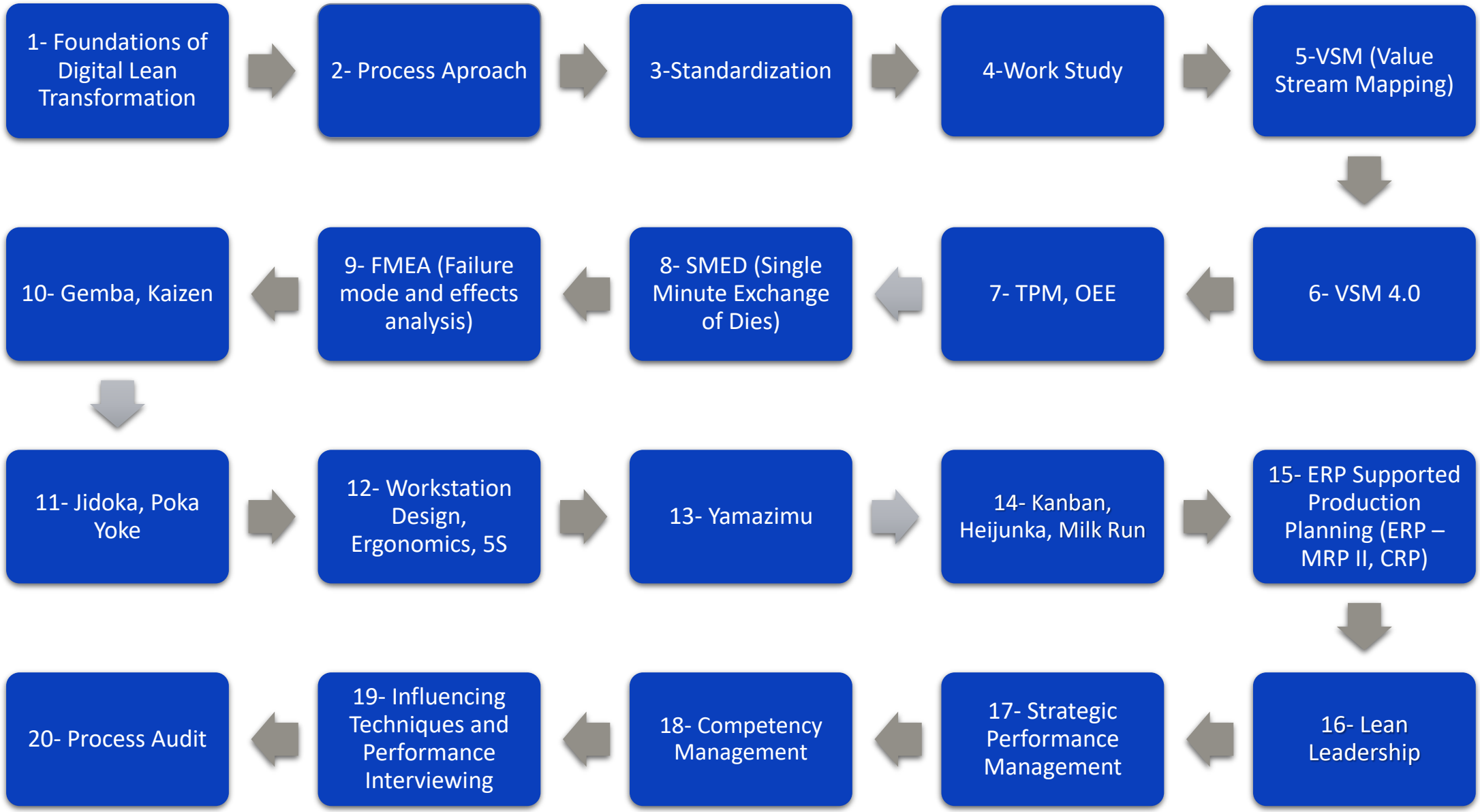
With Digital-LeanTransformation workshops, middle and lower-level teams are able to implement systems aligned to enterprise excellence principles and produce the expected results sustainably by using the necessary tools in the best way.

Thus, while the guiding principles are being deployed from the top and middle management to lower levels, the middle and lower levels can continuously improve correct systems to ensure alignment with the principles, goals and enterprise culture.

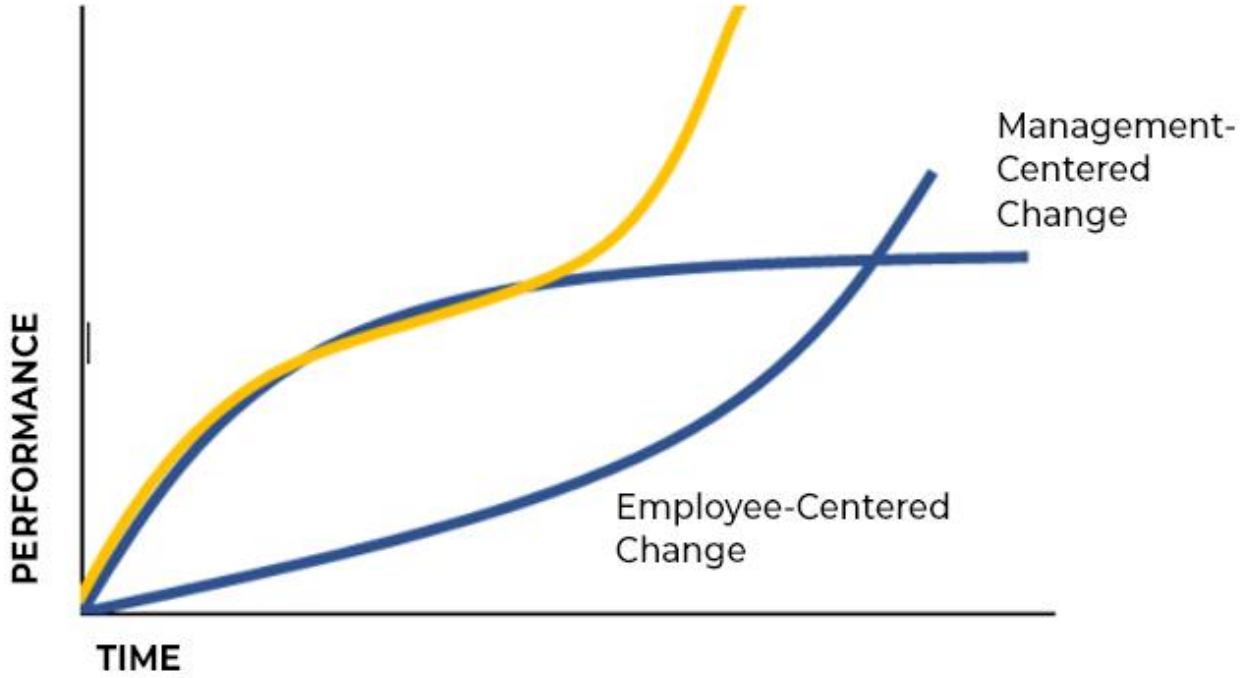


Click here to watch the video of the application example.

Digital-Lean Transformation Roadmap



As seen in the graph, transformation initiated by management start fast, but then stall and fail if all teams are not involved. Transformation initiated by employees progress slowly but show stabil improvement. It is not possible for employees to initiate change on their own within a management system. Therefore, operational and organizational excellence, digital-lean transformation projects should be initiated by the management and then performance improvement should be deployed throughout the organization by ensuring the engagement of all teams.

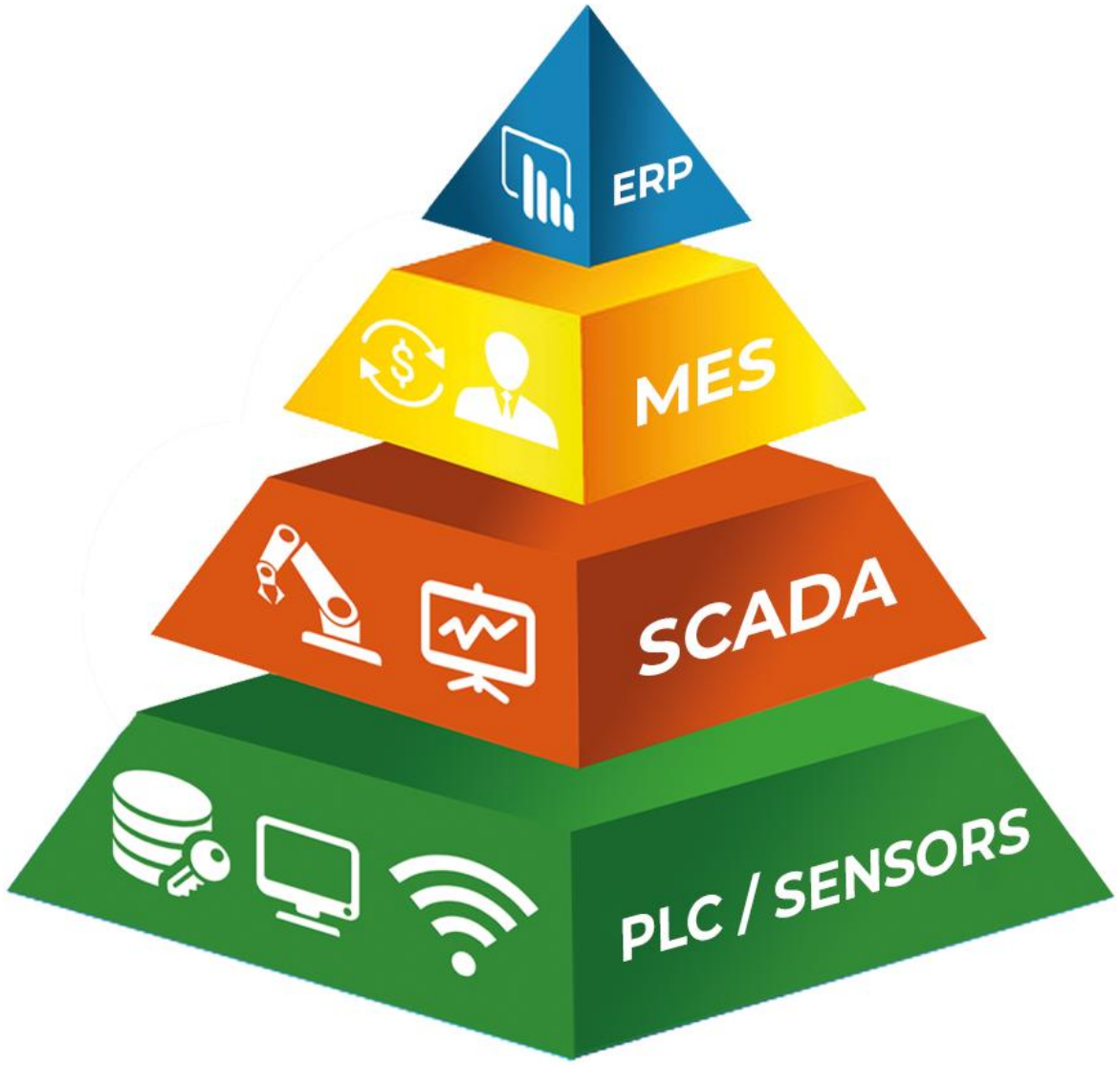


Business Excellence, EFQM

We can assess and improve your company according to EFQM Business Excellence model and help you align to UN Sustainable Development Goals

Digital Transformation Solutions

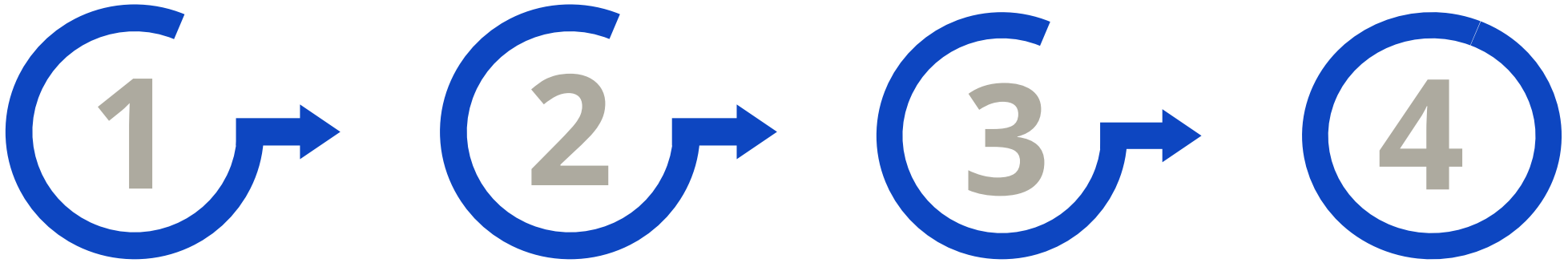
- Digital Transformation Consultancy
- ERP Solution & Consultancy
- MES Solutions & Consultancy
- Business Improvement Solution
- Continuous Improvement Solution



UnoPro accelerates Digital Transformation, but how?

UnoPro pioneers this transformation, over the principle of added business value and improved efficiency with the model of **Digital Transformation Roadmap**.

4 Steps of Digital Transformation



1. Digital Maturity Level Assessment
2. Value Chain Optimization via Industry 4.0 Value Stream Mapping
3. Digital Transformation Scope Assessment
4. Selection of Appropriate Software and Technologies

ERP Solution & Consultancy

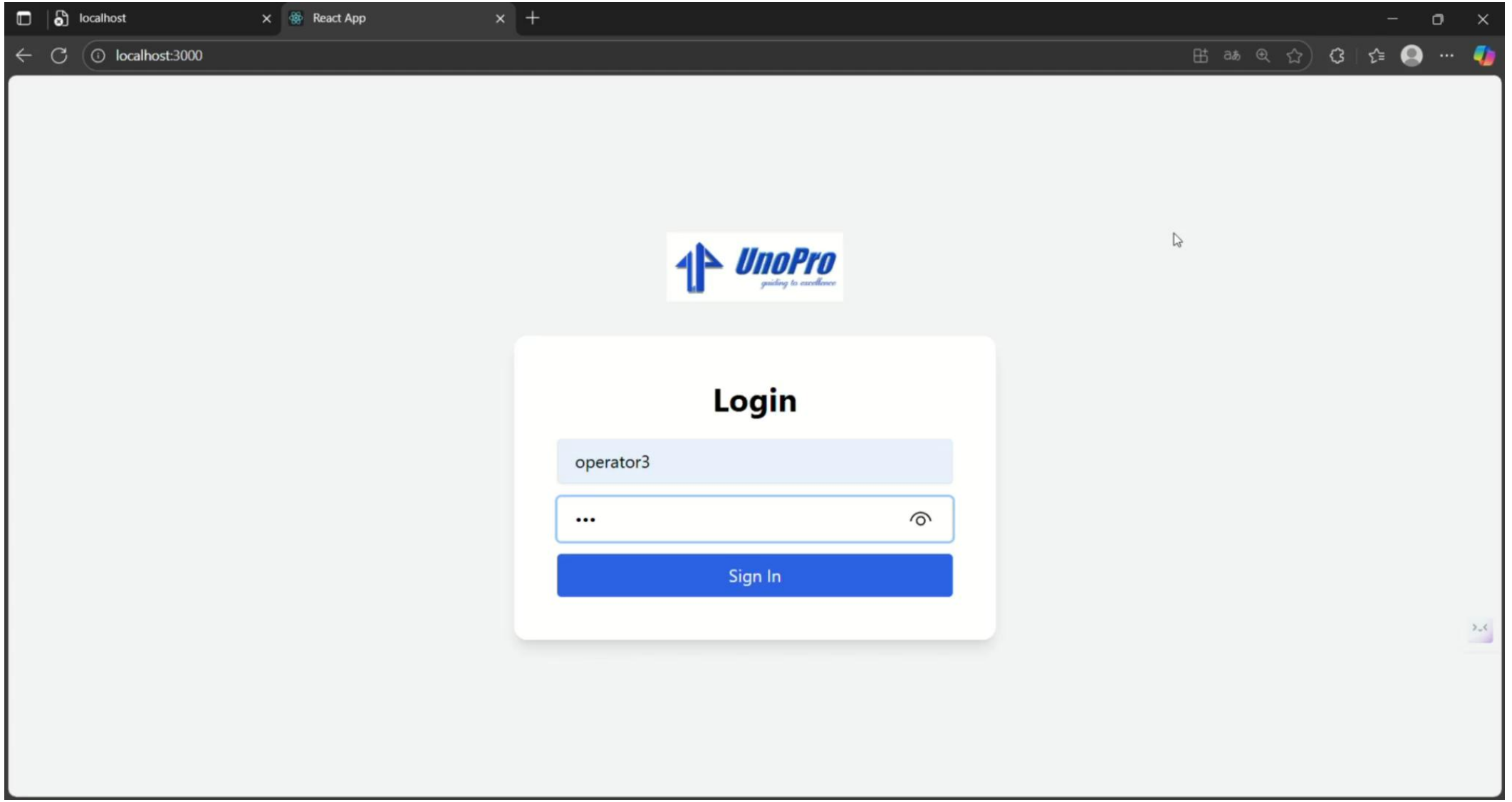
Within the scope of our end-to-end service approach, we can offer the installation, consultancy and training of **Dinamo ERP** software, of which we are business partners, as a whole package with customized solutions for your company.

We can offer the installation, consultancy and training of highly sophisticated **MES Softwares** in collaboration with our business partners, as a whole package with customized solutions for your company.

We can offer an economical solution with our own plug-and-play **MES** software as well.

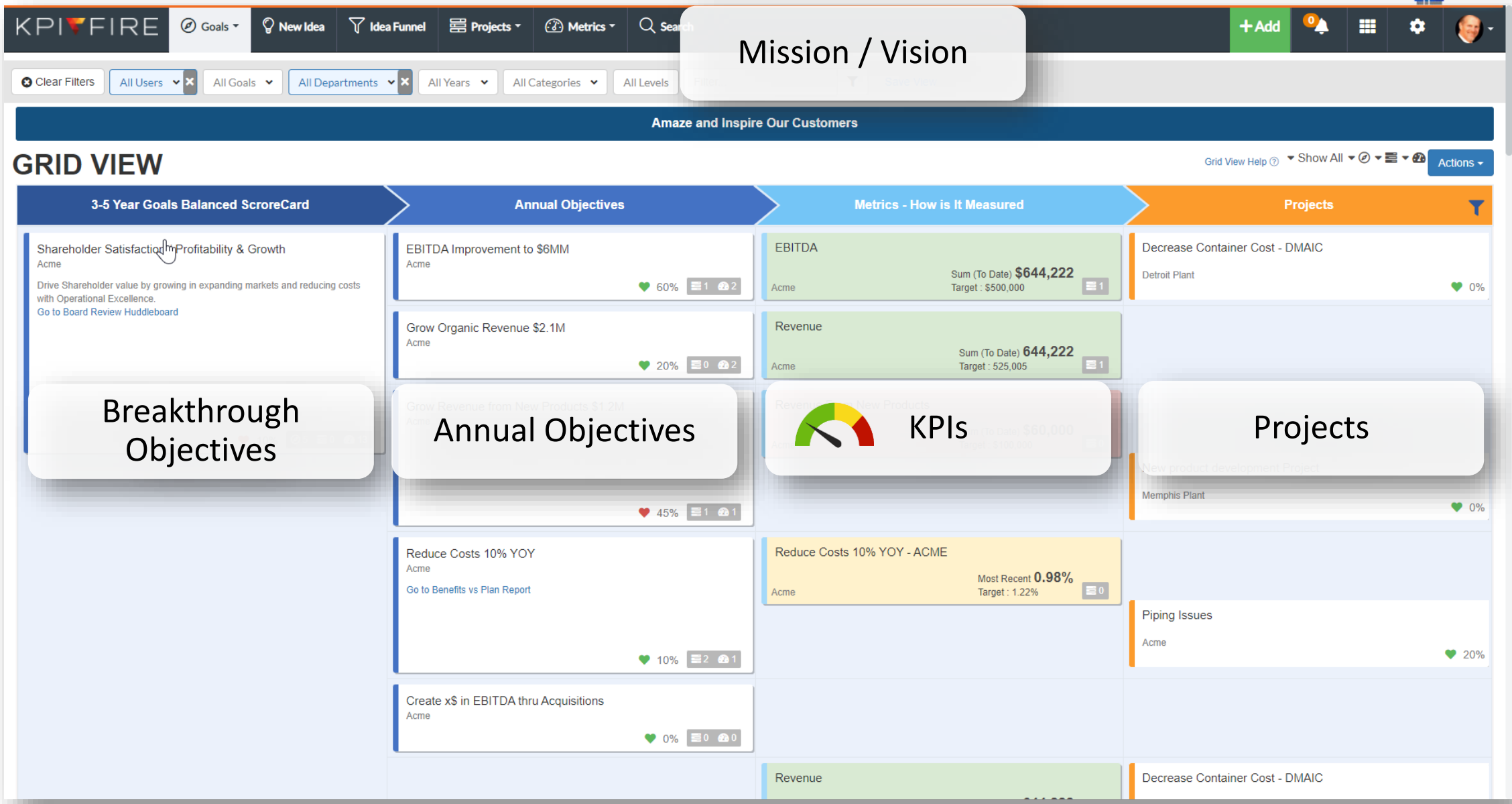
cormind

Demo of Our Own MES Product

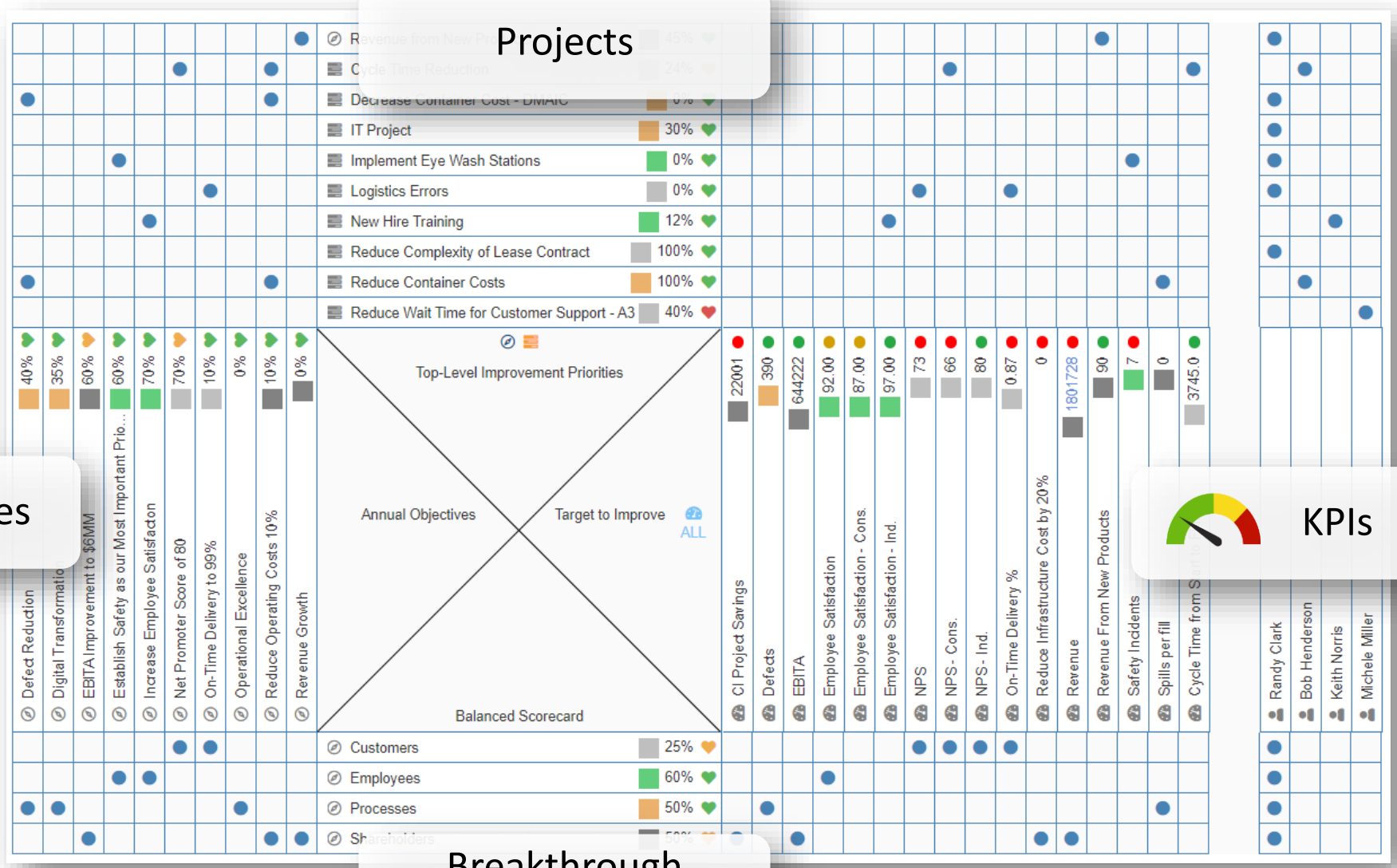


Click here to watch the video of the application example

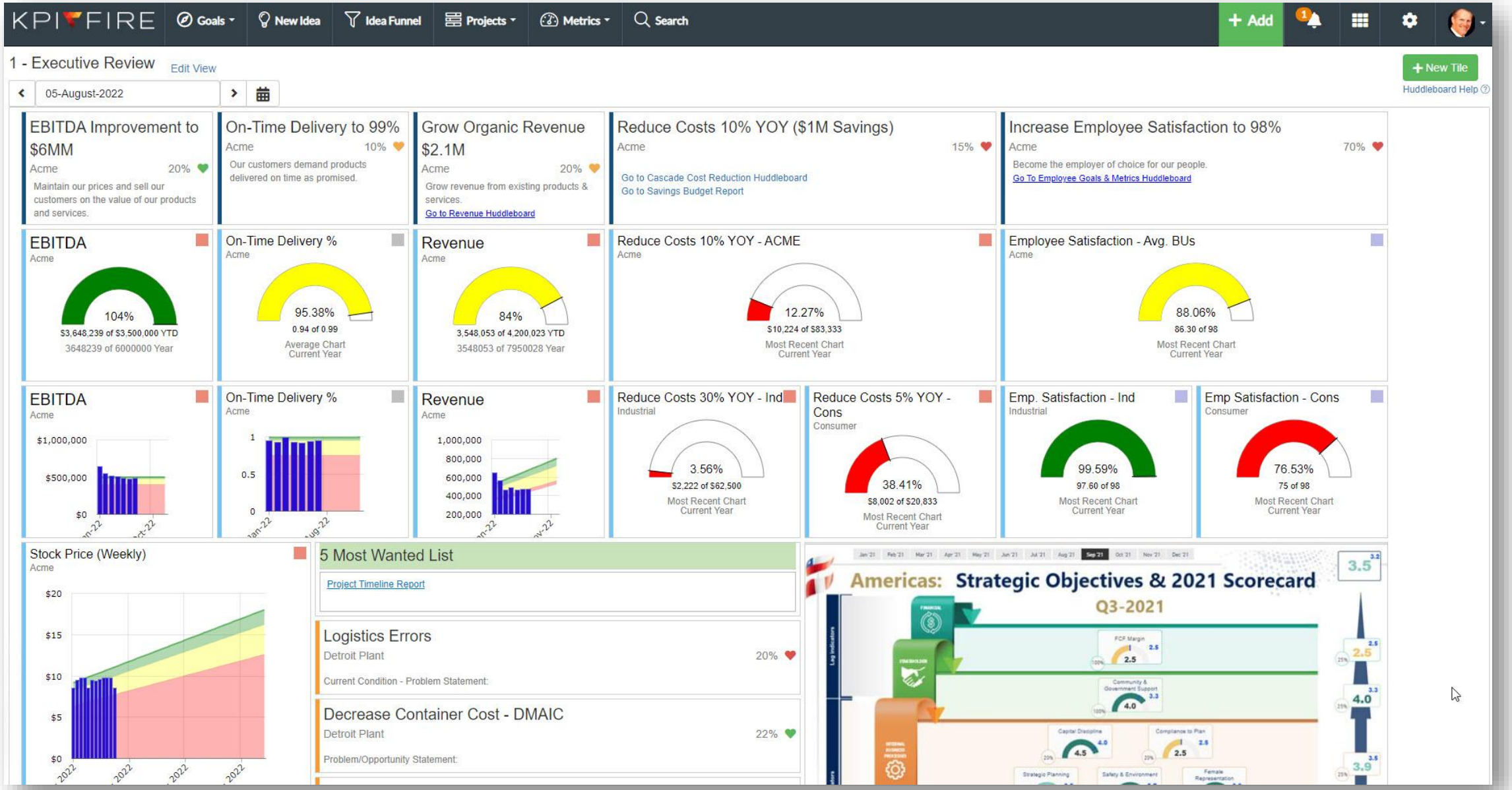
Business Improvement Solution



Business Improvement Solution



Business Improvement Solution



mlean® Production System (mPS)

The next performance level from the shop floor

IMPROVEMENT DRIVERS

Action Plans | Production Alerts | Improvement Ideas | Problem Solving | HSE Risks

Digital Twin Solutions

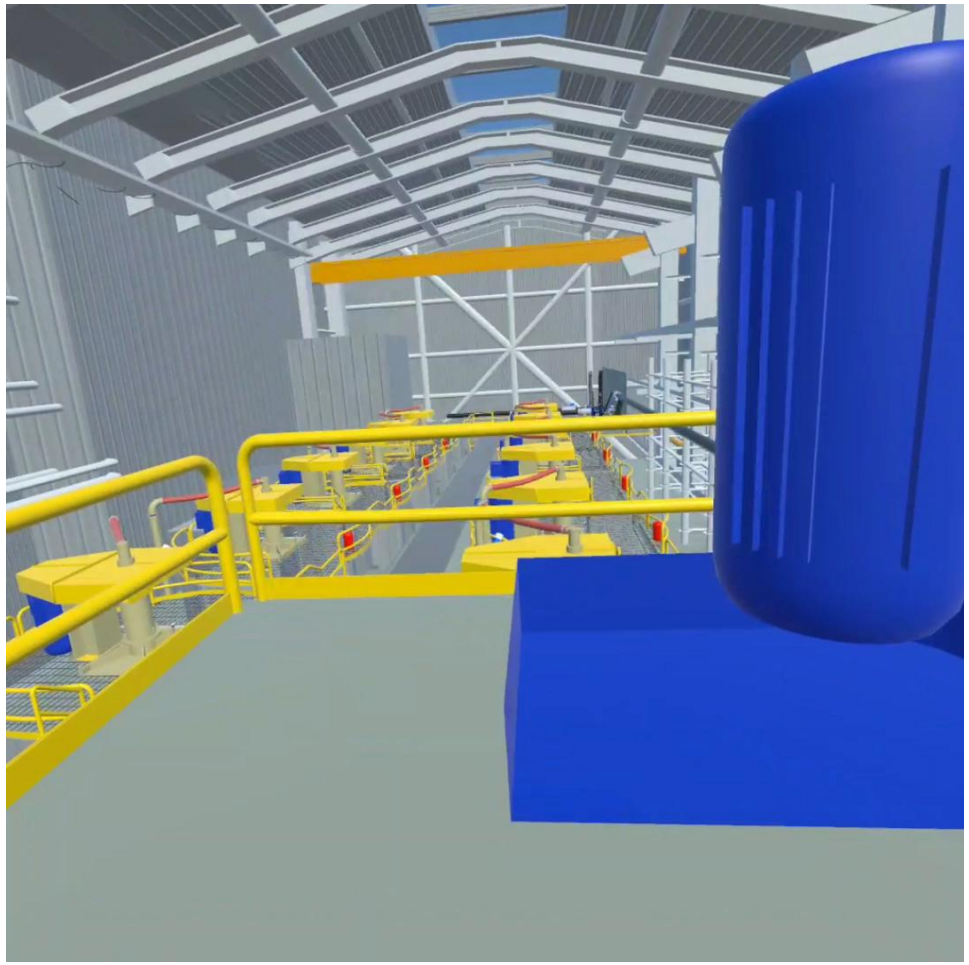
UnoPro
guiding to excellence

- On-the-Job Training in VR
- Real-Time MES Integration
- Maintenance Tracking System with AR
- Virtual Tour

Complex Processes
On-the-Job Training in Virtual Reality Environment

Virtual Reality (VR) is a technology used to create simulated environments where fictional events inspired by real life can be experienced in 360 degrees. In order to experience this technology, virtual reality headsets are used.

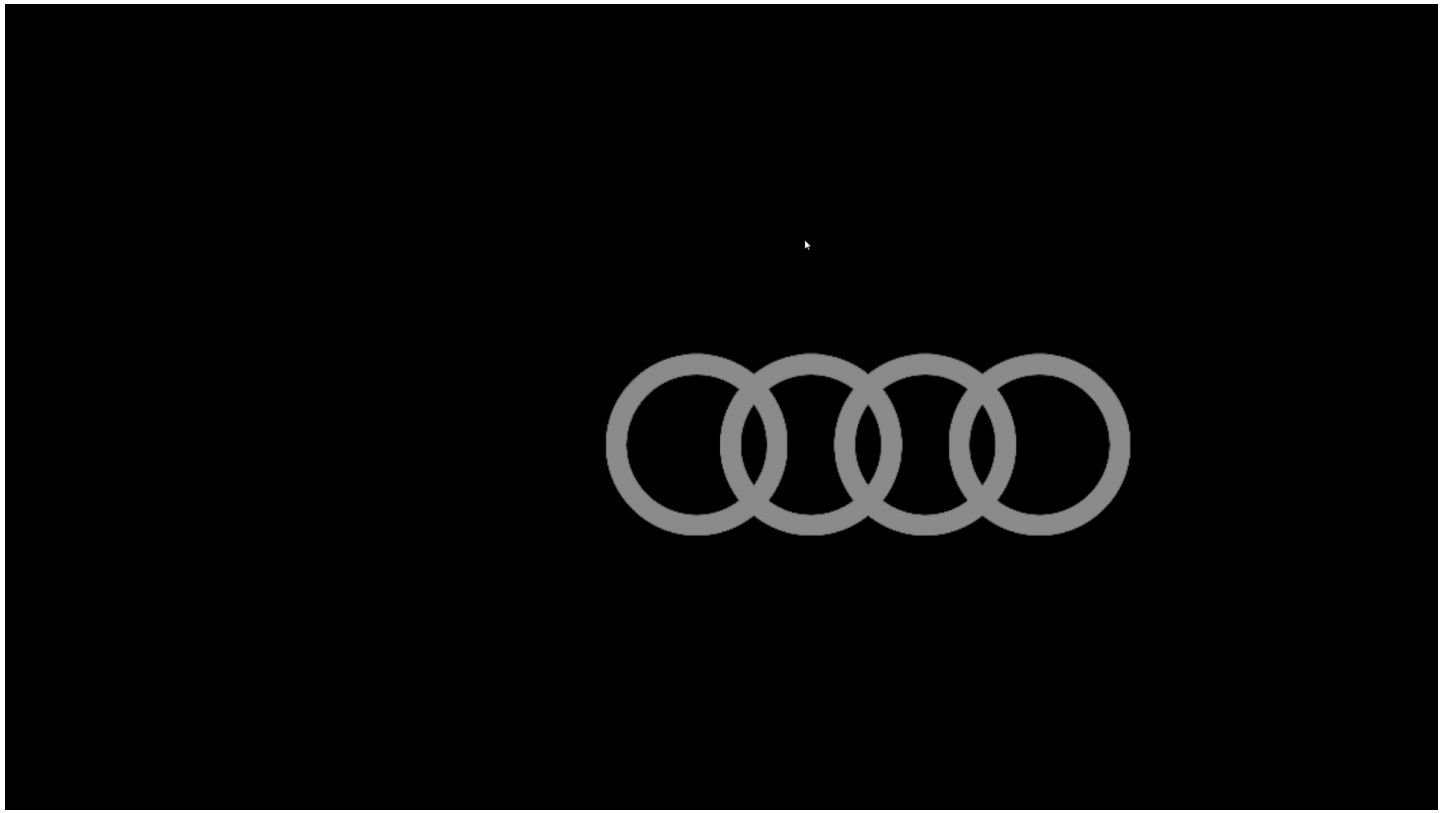
In the video on the side, you are watching on-the-job training in a virtual reality environment of a flotation facility.



Click here to watch the video of the application example.

Improving Remote Teams
On-the-Job Training System in Virtual Reality Environment

- ✓ With the audio and visual guidance in the software, the operator is able to receive on-the-job training on his/her own.
- ✓ The need to have a machine and a trainer during on-the-job training is eliminated.



Click here to watch the video of the application example.

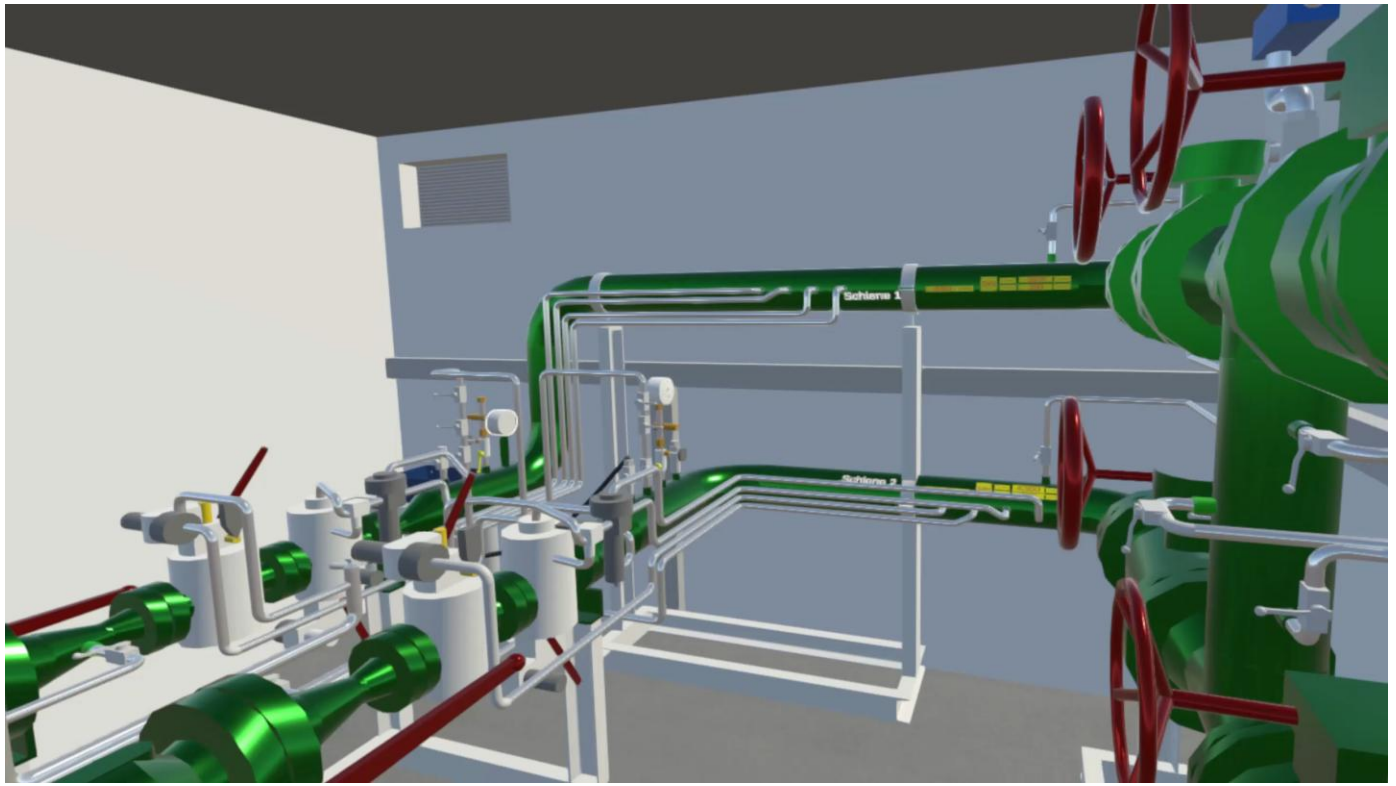
Mass Production
On-the-Job Training in Virtual Reality Environment

- ✓ Virtual Learning Framework makes on-the-job training more comprehensive, stimulating, and less costly.
- ✓ It ensures that the training is completed without endangering the operator in work areas and machines that require challenging training and without any casualties from the tools used.

Click here to watch the video of the application example.

Competency Management with Examination System
On-the-Job Training - Examination System in Virtual Reality Environment

- ✓ Operators can experience trainings that are difficult to remember and consist of complex processes more than once.
- ✓ Operators can document what they have learned by being tested at the end of their learning, and their learning can be integrated with competency matrices.



Click here to watch the video of the application example.

Problems of Skill Improvement

- High training costs
- High turnover leading to repeated training costs
- Work accidents due to insufficient competence
- Productivity loss cost (ramp-up)
- Rehiring costs
- Travel and accommodation costs due to training being spread across a large field
- Work loss cost (trainee, trainer, equipment)
- Travel and accommodation costs due to the need to train service specialists at the central facility

Click here to go to the app demo.

Solution: On-the-Job Training in Virtual Reality Environment

VR-based multiplayer platform

- Free interaction with objects
- Training recording
- Observing, pausing, rewinding, and repeating the training instead of passive watching
- Hands-on experience and practice with highlight guidance4
- Test mode for self-assessment
- Correct interaction scoring
- HR reporting
- Objective decision-making and unbiased evaluation
- Scalable competency development processes
- Low and measurable costs

Click here to watch the video of the application example.

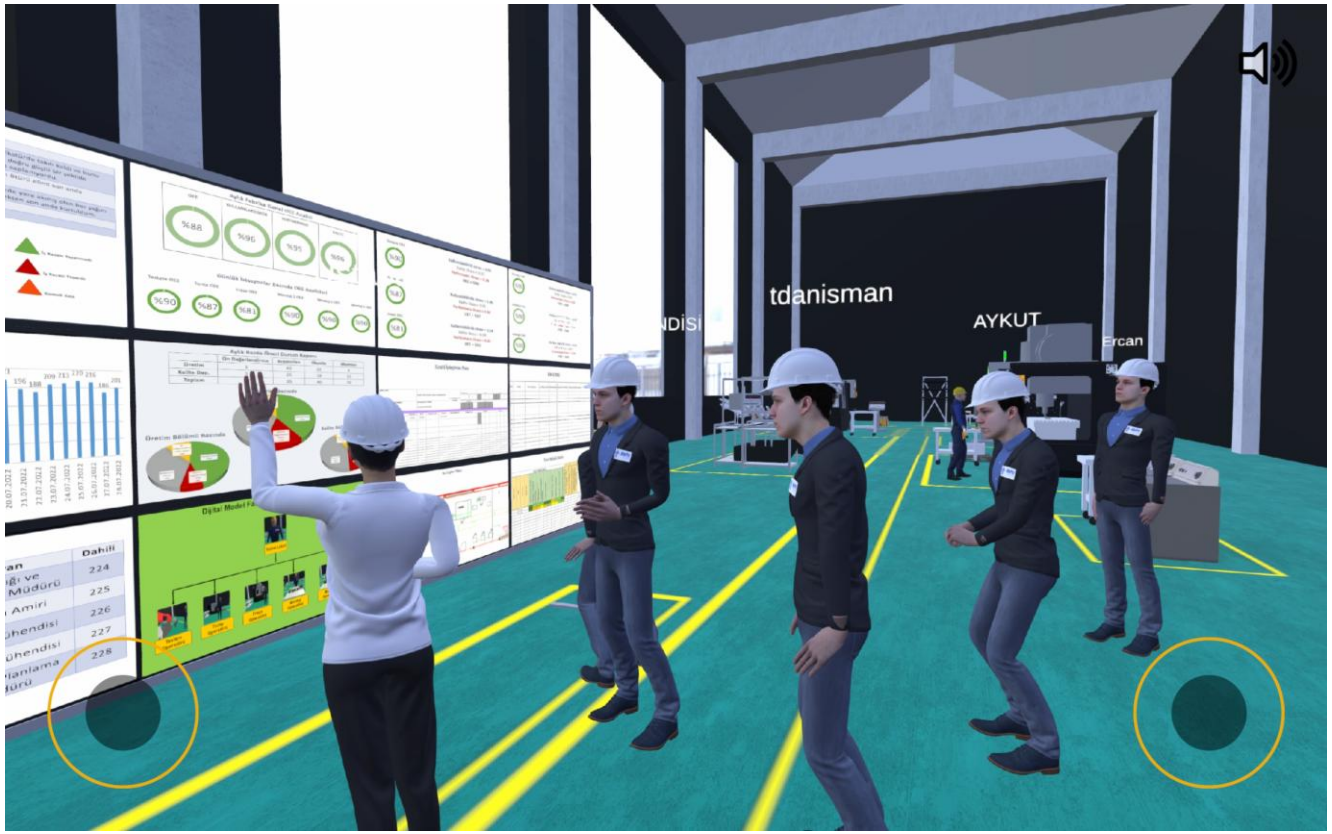
Visual Management and Performance Management System
Digital Twin with Real-time MES Integration in Virtual Reality

- ✓ The detection of bottlenecks in the production process makes it possible to digitally monitor and manage the manufacturing process through the (MES) integration applications.
- ✓ This big data, which we obtain from all stages of the production process and make meaningful, can be monitored simultaneously or retrospectively.

Click here to watch the video of the application example.

Visual Management and Performance Management System
Digital Twin with Real-time MES Integration in Virtual Reality

- ✓ With Digital Twin systems, the visual management system and the performance management system become the most effective.
- ✓ Operation components can be monitored, disruptions can be detected quickly, and parameters can be changed with remote intervention.
- ✓ Different scenarios for future situation predictions can be implemented and tested in the Digital Twin environment.



Remote Maintenance with Augmented Reality

- ✓ It allows users to complete maintenance and repair or receive training from technicians much faster and failıure-free.
- ✓ The data that users need is digitally transferred through augmented reality, without the need for users to look in separate places to obtain information and try to complete the process.

Click here to watch the video of the application example.

Our References

BALSU

OSAKA
TEL VE TELBANT SAN. TİC. LTD. ŞTİ.

TechNova

KLASS

SERİN

BURKAYGROUP

COMFYTEX
INNOVATIVE TEXTILES GROUP

ONURFIX

TOKMAN
RAKOR SANAYİ VE TİCARET LTD. ŞTİ.

bross
SOCKS

Creative TESTING SOLUTIONS

BELGİN

has vida
fasteners

samm
teknoloji

IşıkPlastik

SAGLAMETAL
Metal Sağlamdır...

decoyat
sleep technology

HONDA

Sensata
Technologies

KPMG

anagold
MADENCİLİK

egnatia
GROUP OF COMPANIES

HAYAT

MEXT

McKinsey
& Company

+90 551 021 37 27 info@unopro.com.tr www.unopro.com.tr/en