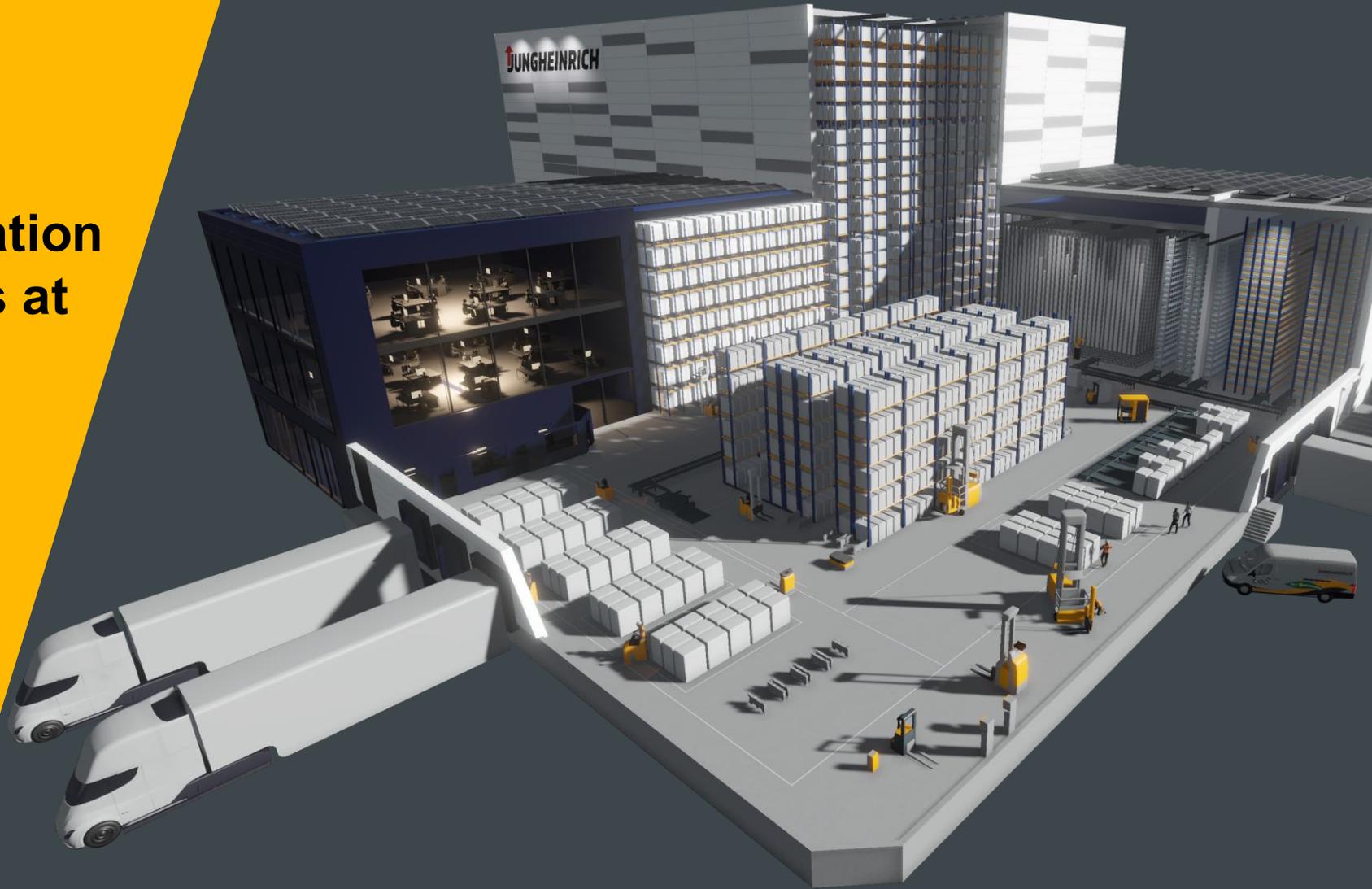




# Transformation to Automation in manufacturing logistics at SMEs



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Webinar, November 2025



# How does AUTOMATION work ?

## Best Practice E-T-A

As the global market leader, E-T-A produce and offer the complete technological range of overcurrent protection, power distribution and relays.

**1** WHAT do I need for my future logistic?

**2** HOW does the system look like ?

**3** HOW can I improve the material flow by automation?

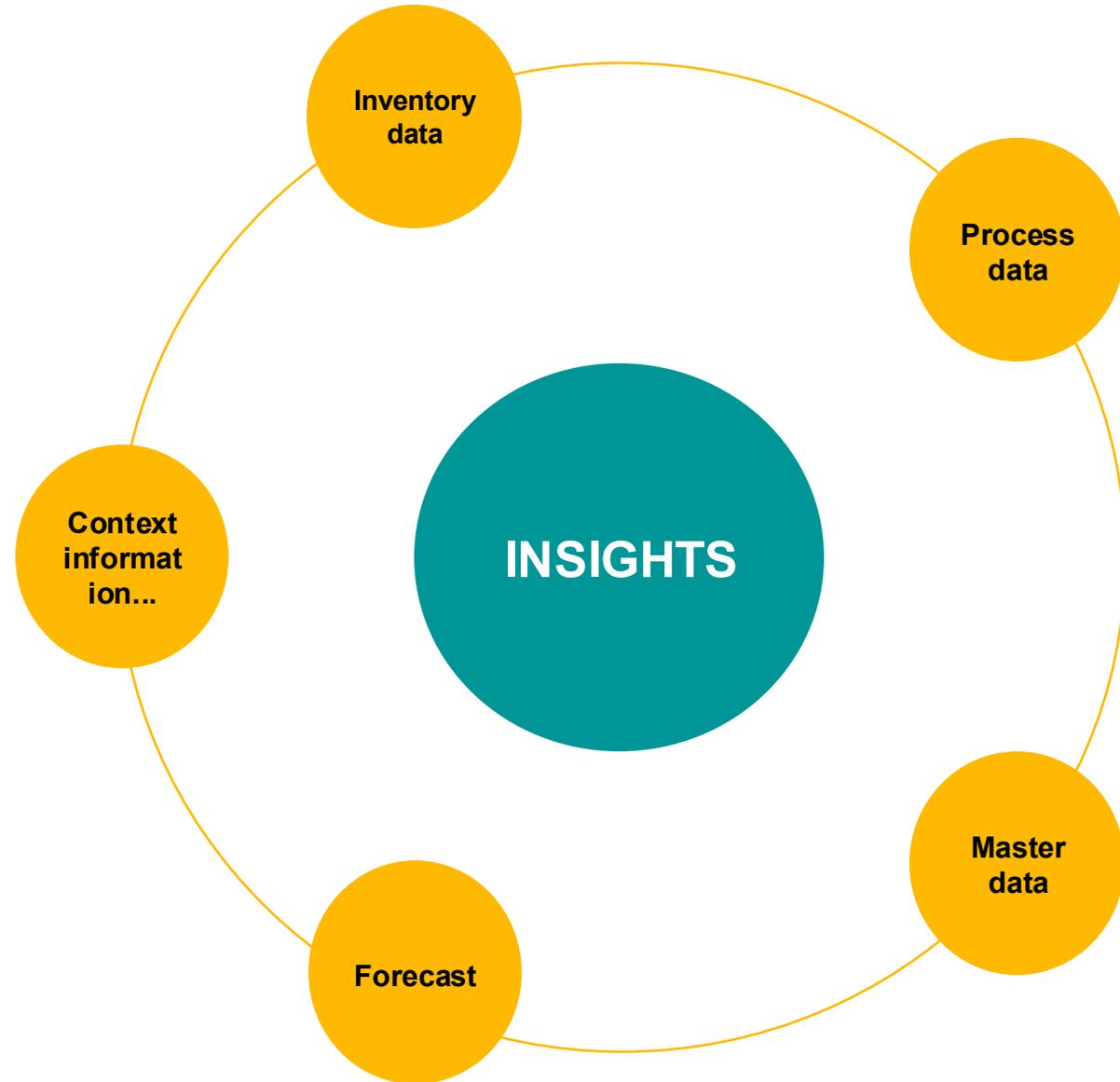
**!** Please raise your questions after the presentation

**1**

**WHAT  
do I need for my future logistic?**

What do I need for my future logistic?

# DATA!



What do I need for my future logistic?

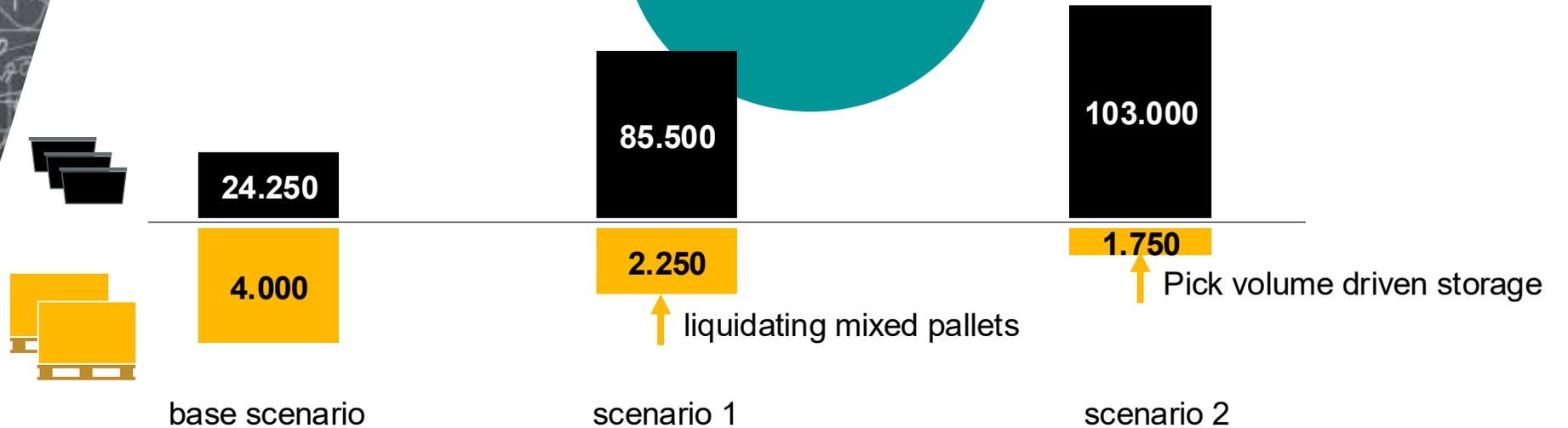
# DATA!



- Mixed pallets on stock
- Small pick quantities
- Wide assortment
- Picking-intensive operations

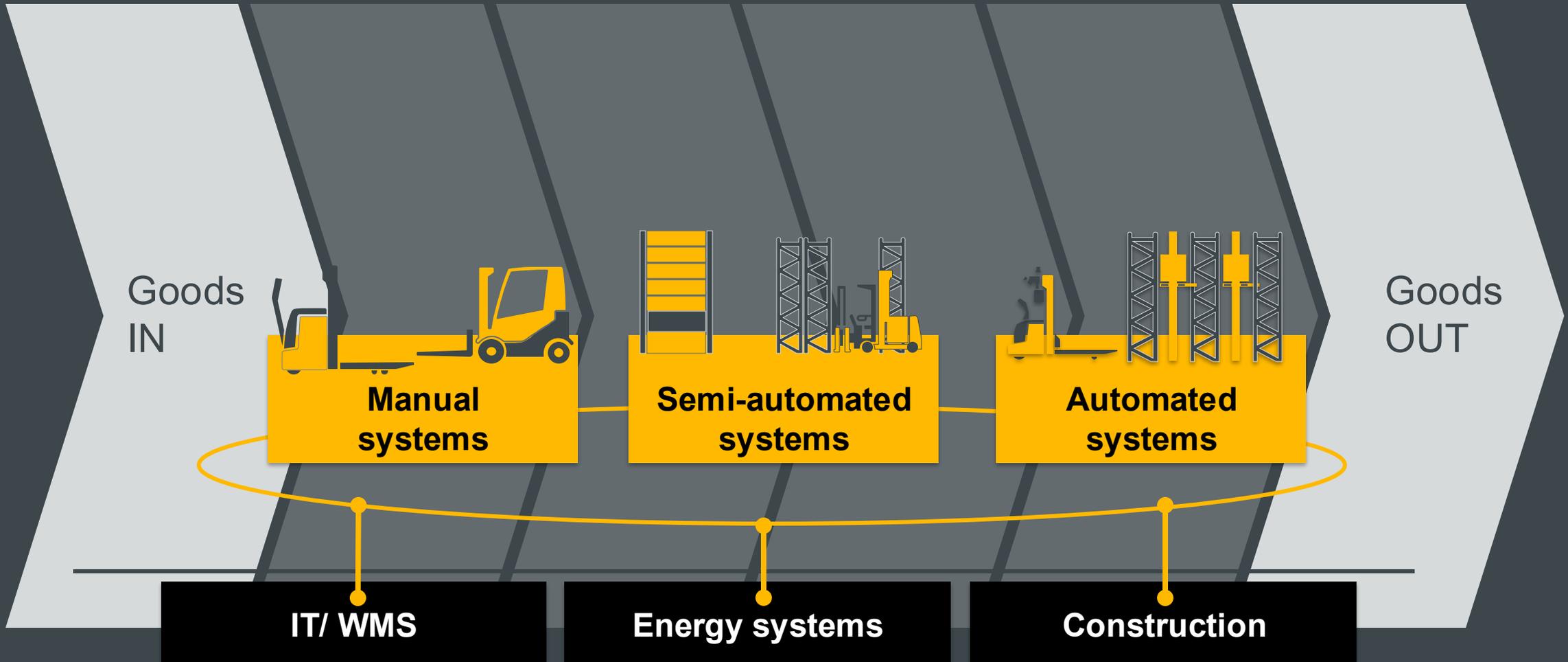


Building scenarios to investigate best-fitting solutions



# Our mindset

Independent on the solution – focusing on best overall process & system



# Single hand material flow solution

After concept phase solution will be detailed & offered for implementation

## Material Flow Consulting

## Jungheinrich products

01

### SKETCH

- ▶ Identification fields of action
- ▶ Development of initial solution approaches
- ▶ Rough prioritization regarding costs & benefits
- ▶ Identification of future planning challenges
- ▶ Sketch on relevant solution approaches

02

### ANALYSIS

- ▶ Acquisition of information regarding as-is material flow
- ▶ Analysis and plausibility checks on acquired data base
- ▶ Development of a material flow chart incl. growth factors
- ▶ Definition of future performance and capacity requirements
- ▶ Approval on planning base

03

### CONCEPT

- ▶ Investigation & evaluation of alternative solution approaches
- ▶ Rough dimensions on preferred approach
- ▶ TCO based budget costing (investment and running costs)
- ▶ Decision template on preferred concept
- ▶ Approval on concept

04

### DETAIL PLANNING

- ▶ Detailed engineering of best system concept
- ▶ Layouts with high level of detail
- ▶ Detailed budget costing
- ▶ Sound scheduling
- ▶ Detailed final planning report

Offer on implementation

05

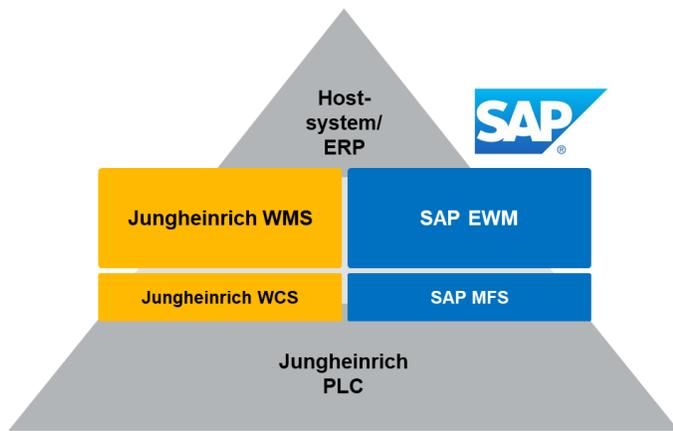
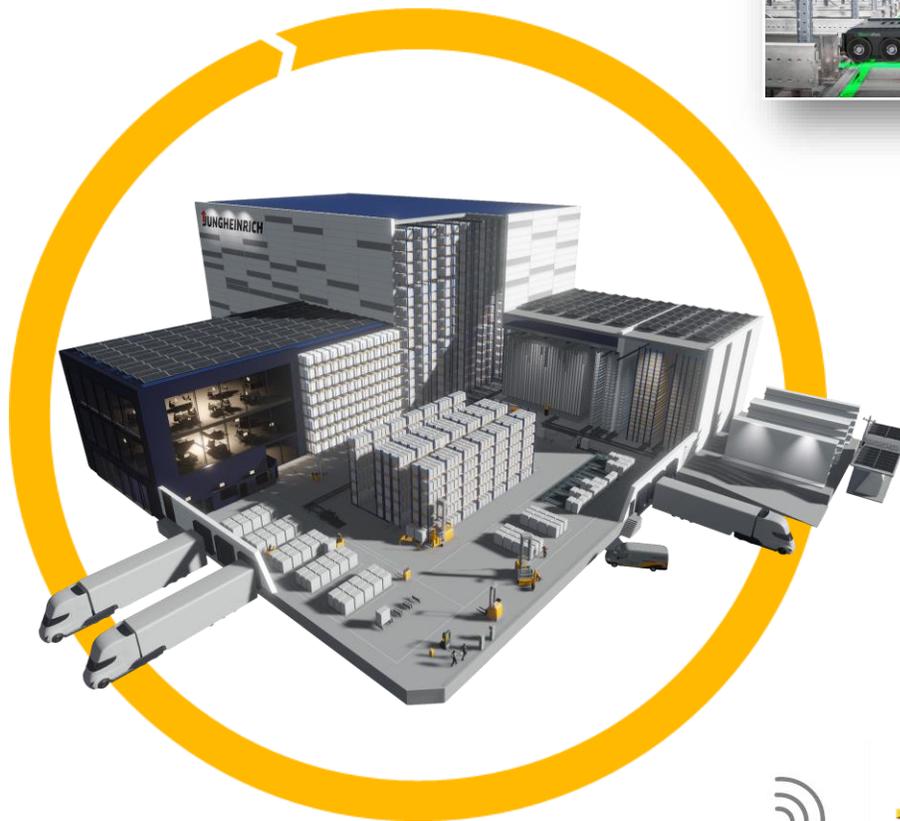
### IMPLEMENTATION

- ▶ Project management & site management
- ▶ Tender on all system components
- ▶ Cost and time schedule controlling
- ▶ Interface between construction/logistics
- ▶ Risk management
- ▶ Safety concept
- ▶ Ramp-up-Management

**2**

**HOW  
does the system look like?**

# The diversity of our solutions and services. Complete intralogistics – from a single source.



**Fully Automated Systems**

**Semi Automated Systems**

**Manual Systems**

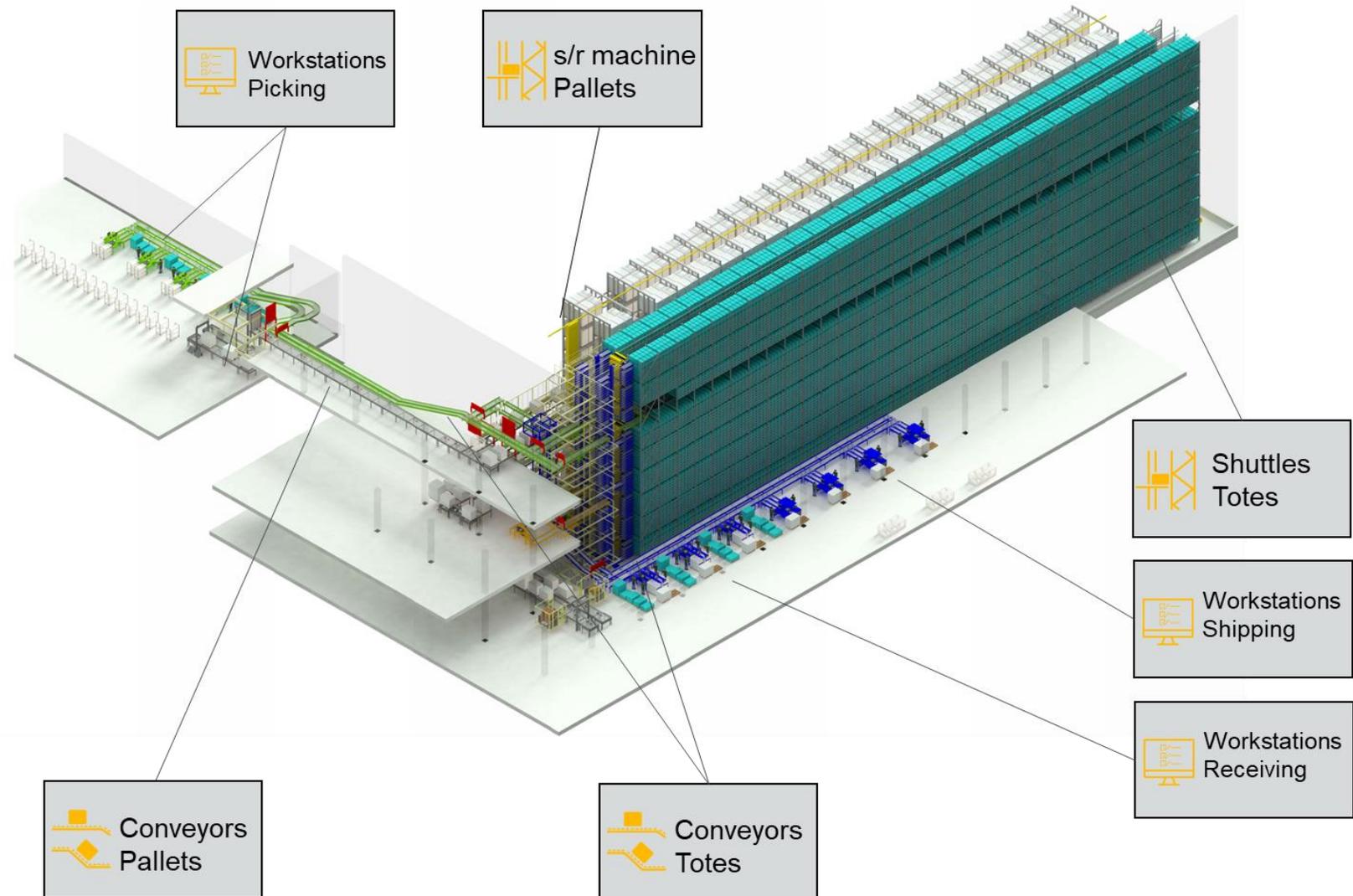


# The solution for E-T-A

- Automated pallet high-bay warehouse with almost 4,000 storage locations
- Automated miniload shuttle warehouse with almost 100,000 storage locations  
62 Levels with 27 shuttles 3-5 times deep
- Double cycle lifter for totes
- Jungheinrich WMS
- Storage dimensions (LxWxH):  
95m x 19m x 27m

## Specials:

- Scalability  
Today 27 shuttles in 62 levels  
Future upscaling, if necessary  
up to 62 shuttles in 62 levels
- Aisle performance  
800 totes/h with 27 shuttles





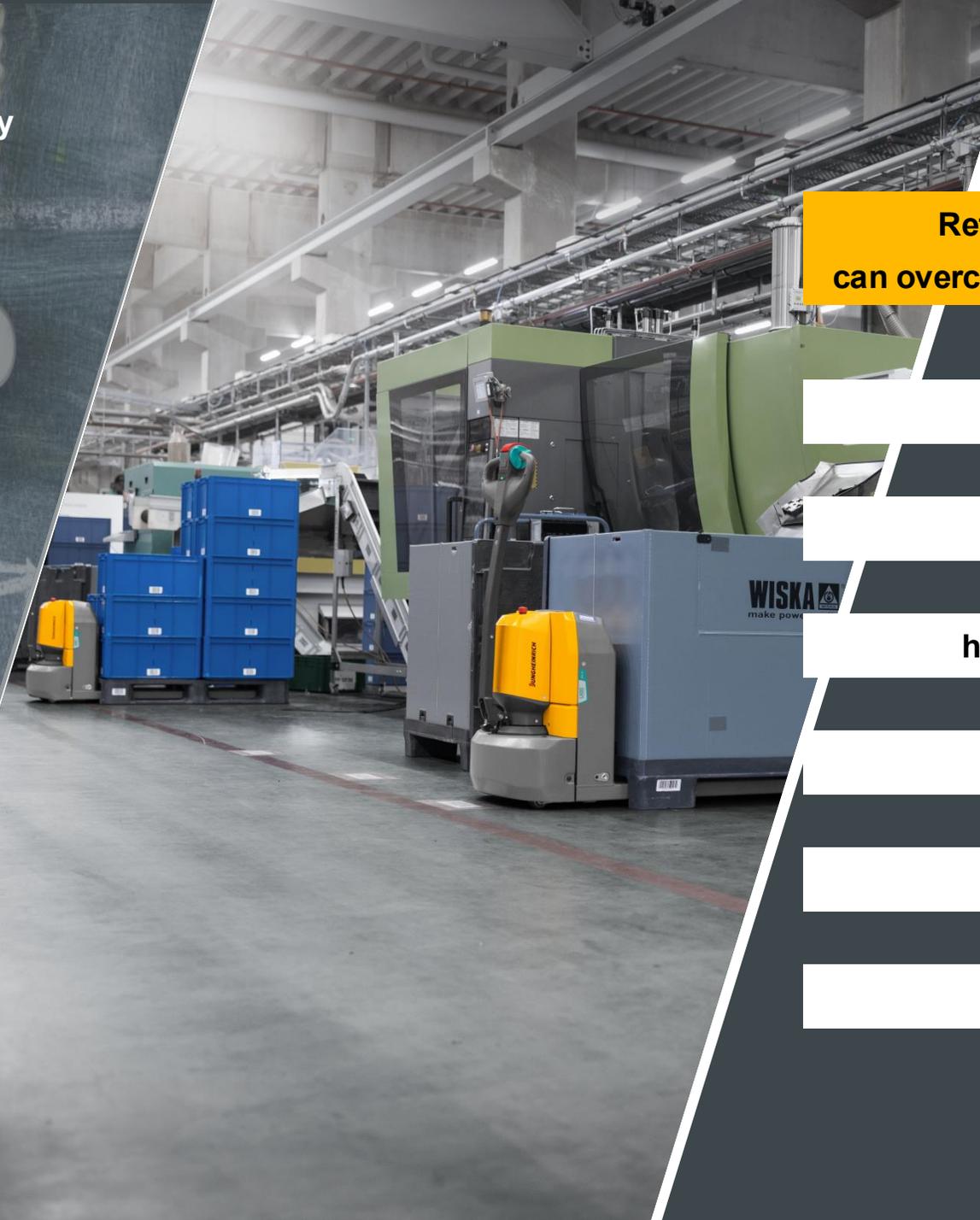
**3**

**HOW  
can I improve the material flow  
by automation?**

How can I improve the material flow by Automation?

# CHALLENGE what you are doing today!

...in your brownfield



Rethinking the status quo  
can overcome obstacles for automation

driveways & routes

load handling

handover/ buffer areas

supply principles

storage allocation

...

# Mobile Robots and their use cases

Automated Very Narrow Aisle (EKXa)

High Stack Applications (ERCa/EKSa)

Tote-Handling (SOTO)

Low Level Applications (EREa, EAEa)

Underload Transport (arculee S und M)

Load-Towing (EZSa)



# Success Story ProDrive



**STORE AND TRANSPORT**

**GREENFIELD**

**OVERCOME SHORTAGE OF SKILLED LABOUR**

# Success Story HAMA

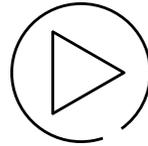
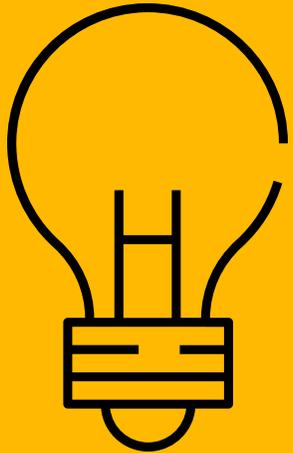


**HIGH STACKING AND TRANSPORT**

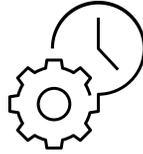
**BROWNFIELD**

**INCREASE EFFICIENCY**

# Tips and Tricks



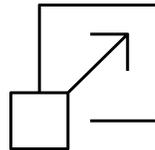
**Start !**



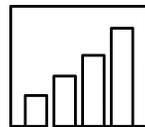
**Realistic timeline**



**Good data quality**



**Not too small, not too big**



**Think in steps**



**Honest view on ROI and TCO**



**Curious?**

**You can get in touch with us here:**



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[www.jungheinrich.com](http://www.jungheinrich.com)

A dark gray world map is centered in the background, showing the outlines of continents and countries. The map is slightly faded and serves as a backdrop for the logo.

***JUNGHEINRICH***