# SYNCHRONIZING CHAOS

2020-07-01: Webinar: The Rise of Al and Analytics in Logistics

SYNAOS

ABOUT US

## Key Facts

SYNAOS at a glance

2018 **FOUNDATION YEAR** MIO. € SEED-FINANCING FINANCING ROUND **INVESTOR** 2019 36 **EMPLOYEES EMPLOYEES EMPLOYEES OPERATIONAL START END OF 2019 END OF 2018 END OF 2020 ADVISORY BOARD** MIO. € REVENUE 2019 **CUSTOMERS PROJECTS MEMBERS** 

Ø 9.8 YEARS OF SOFTWARE **DEVELOPMENT EXPERIENCE** 

**DOCTORAL THESES** 

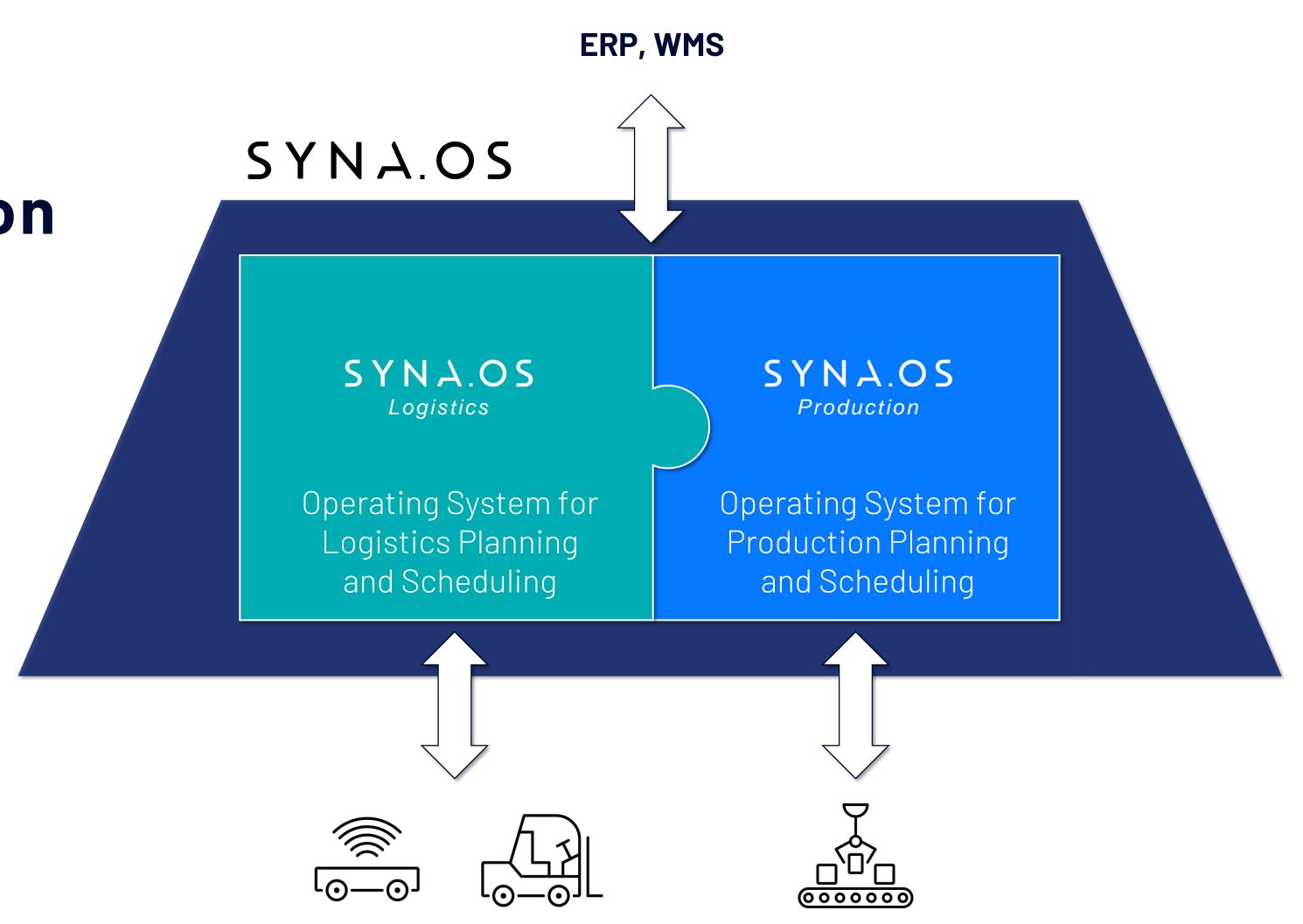
HARDWARE PARTNERS

90

**NETWORK PARTNERS** 

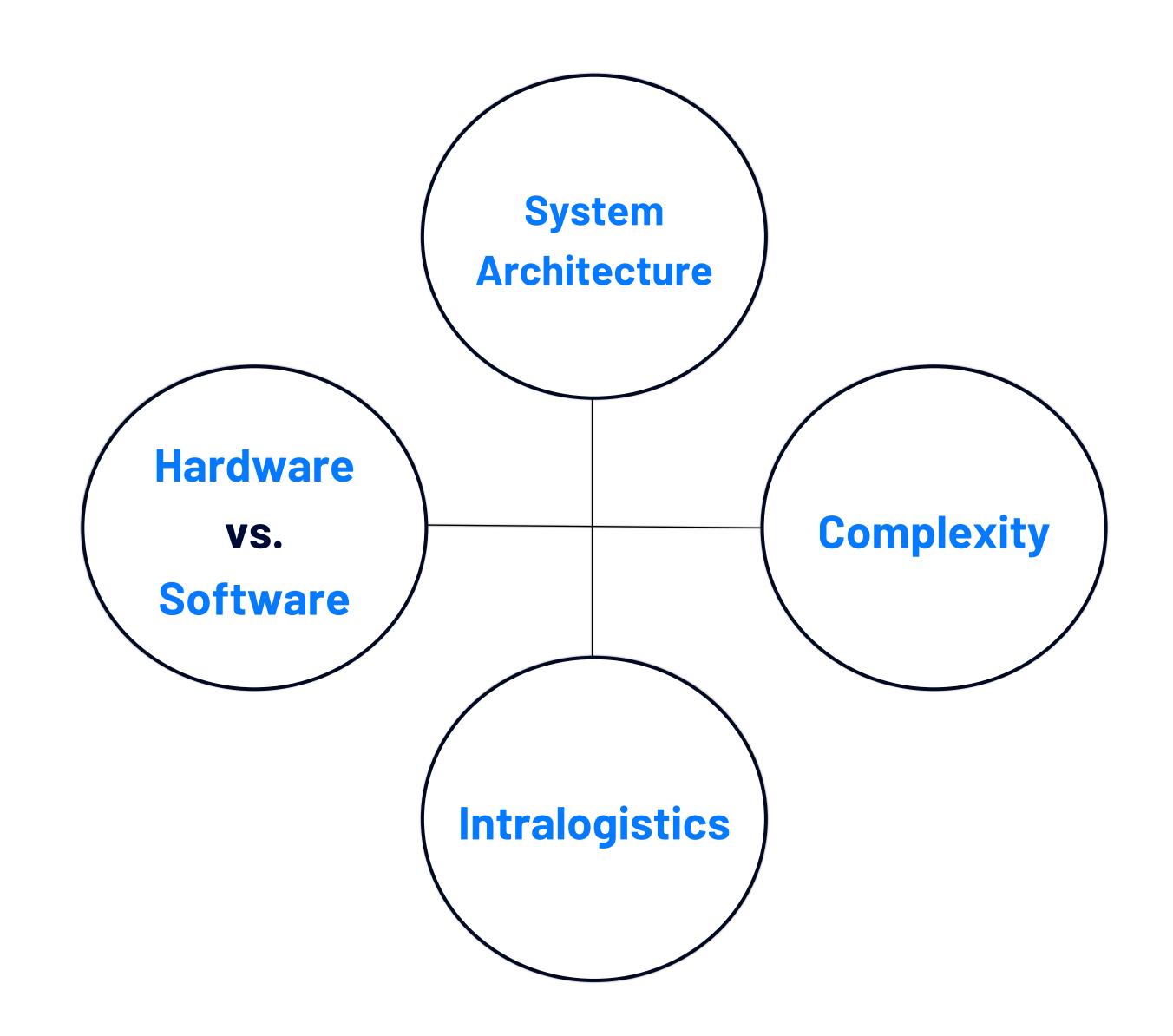
# SYNA.OS Next Generation Logistics and Production Software Platform

Our Software Platform SYNA.OS is the central solution for enabling all intralogistics and manufacturing processes within your factory and the processes in your logistics center.



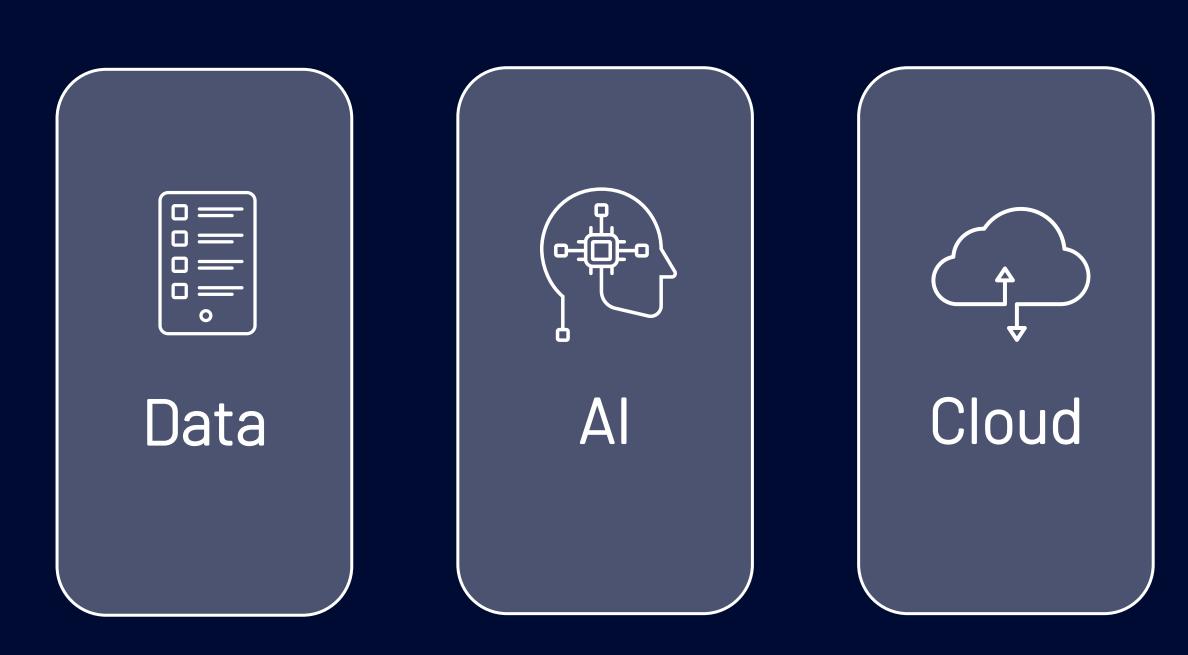
# Key challenges on the way to the future

Those who want to create the transformation into the future must attack the status quo.



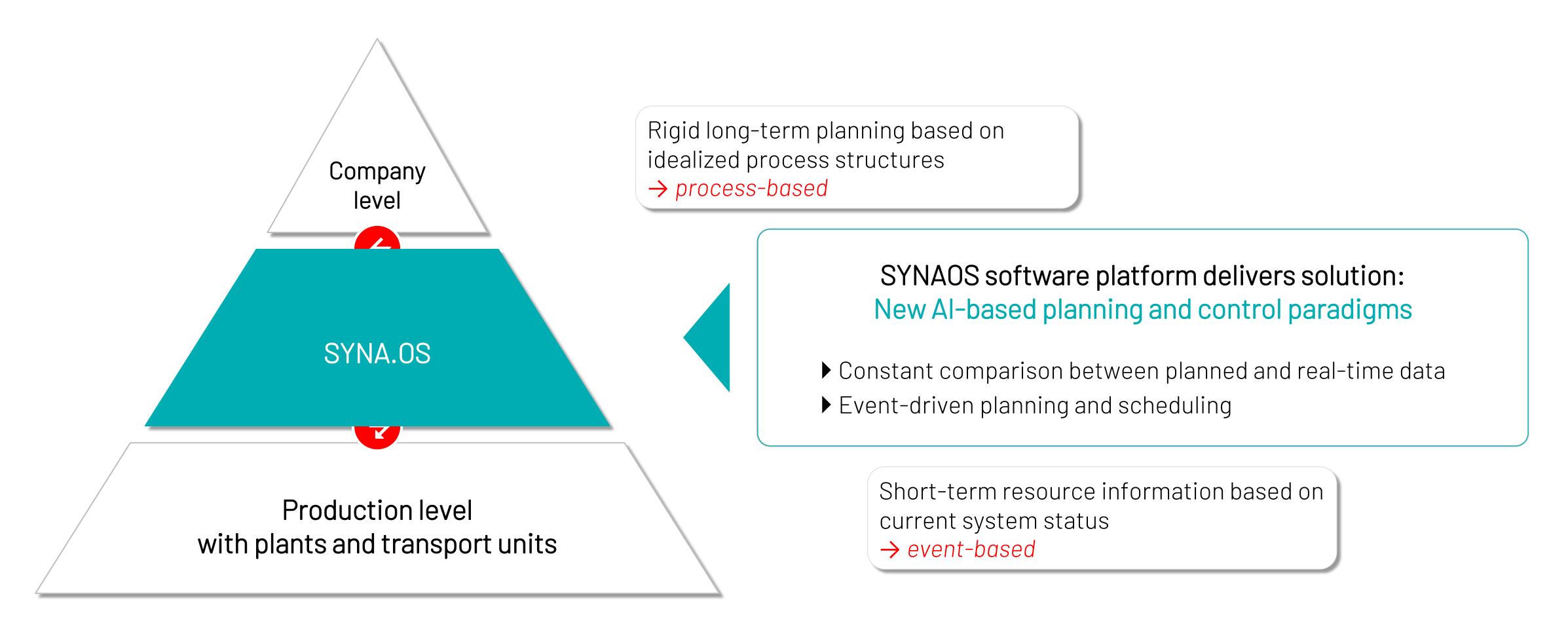
# Clear focus on the decisive levers

The data, Al and cloud approaches are the central lever for the holistic optimization of the factory and logistics center of the future.



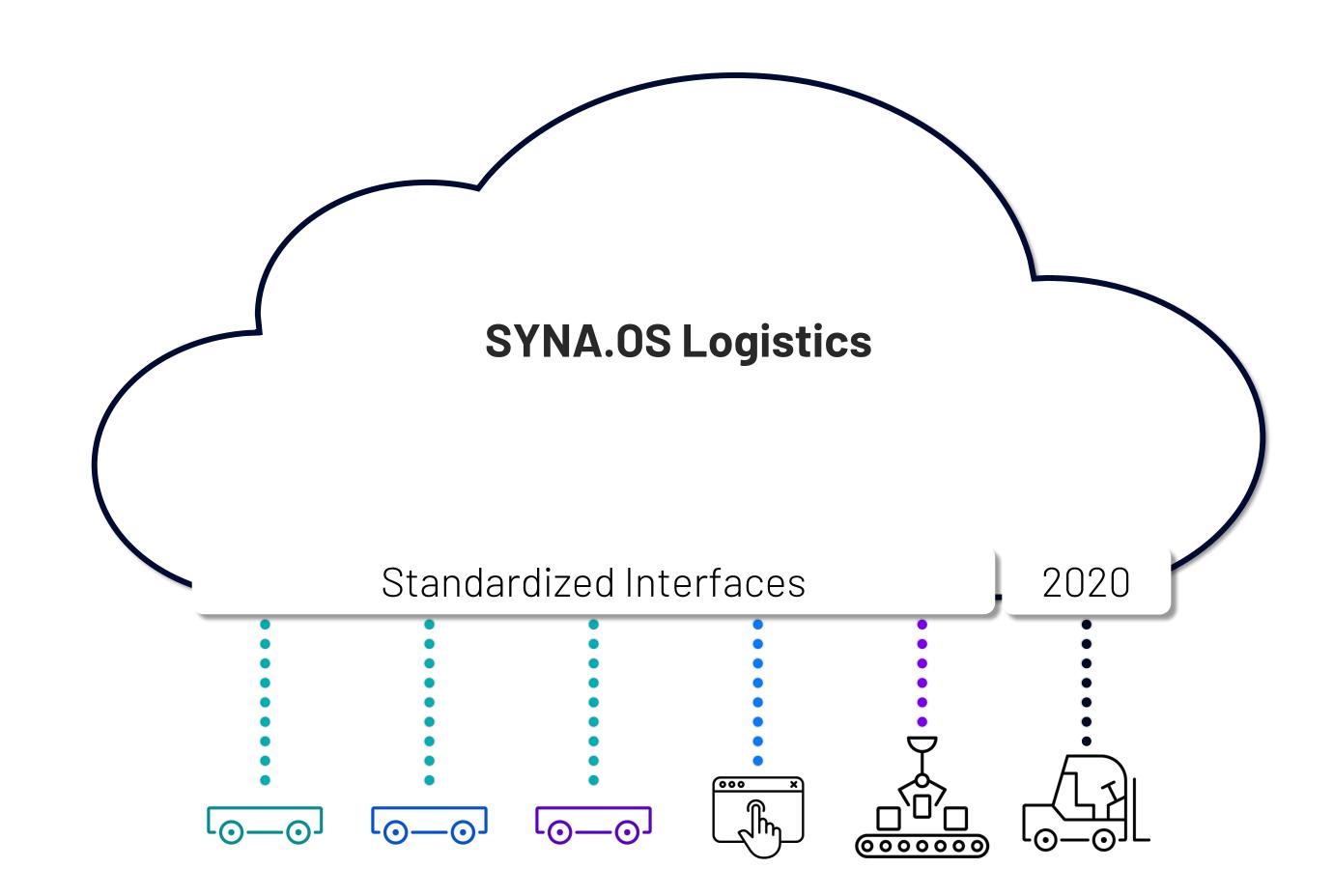
### We orchestrate the factory and logistics hub of the future.

SYNA.OS is the core of logistics and production.



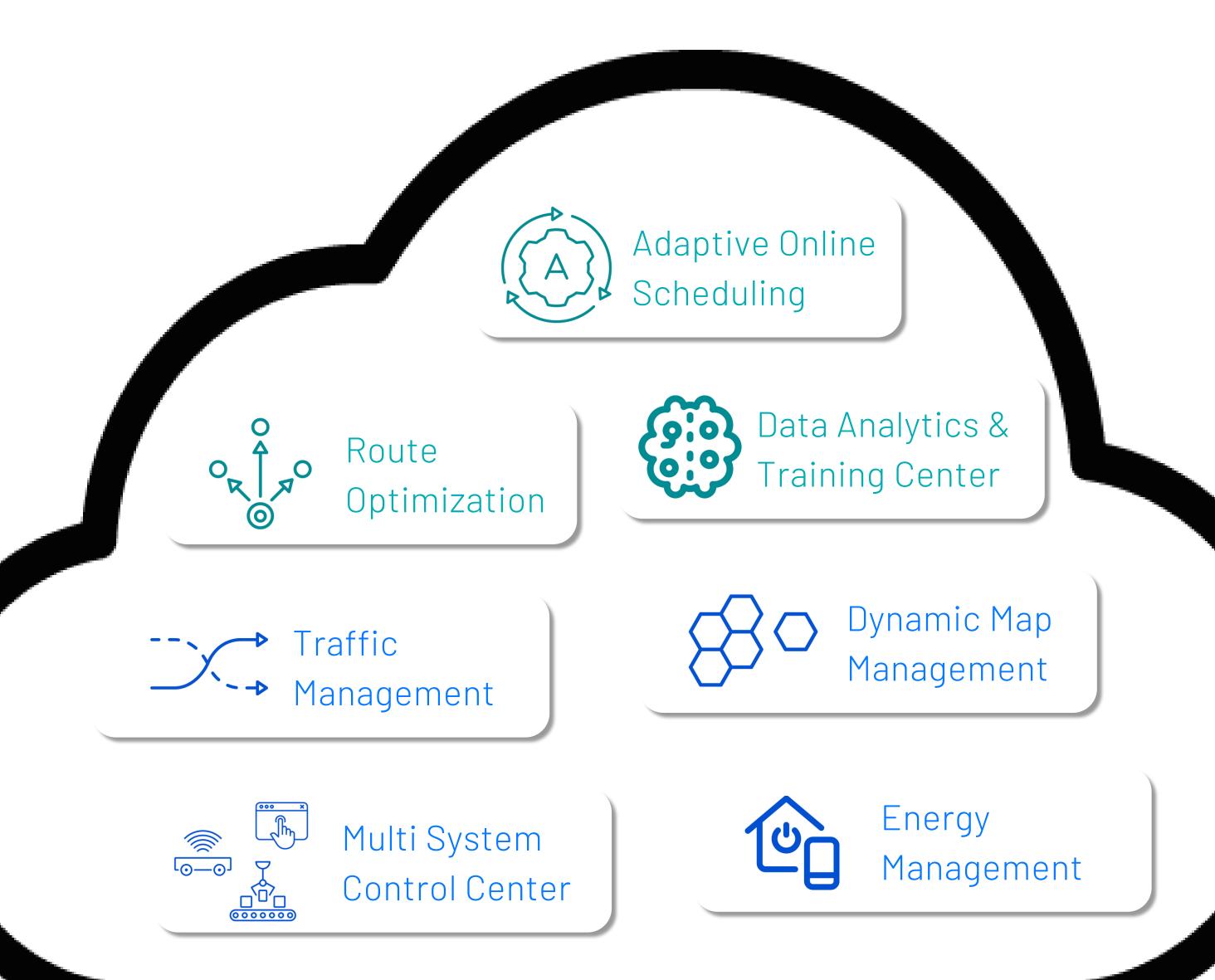
### SYNA.0S Logistics

A hardware independent operating system to monitor, control and optimize your logistics processes



### SYNA.0S Logistics

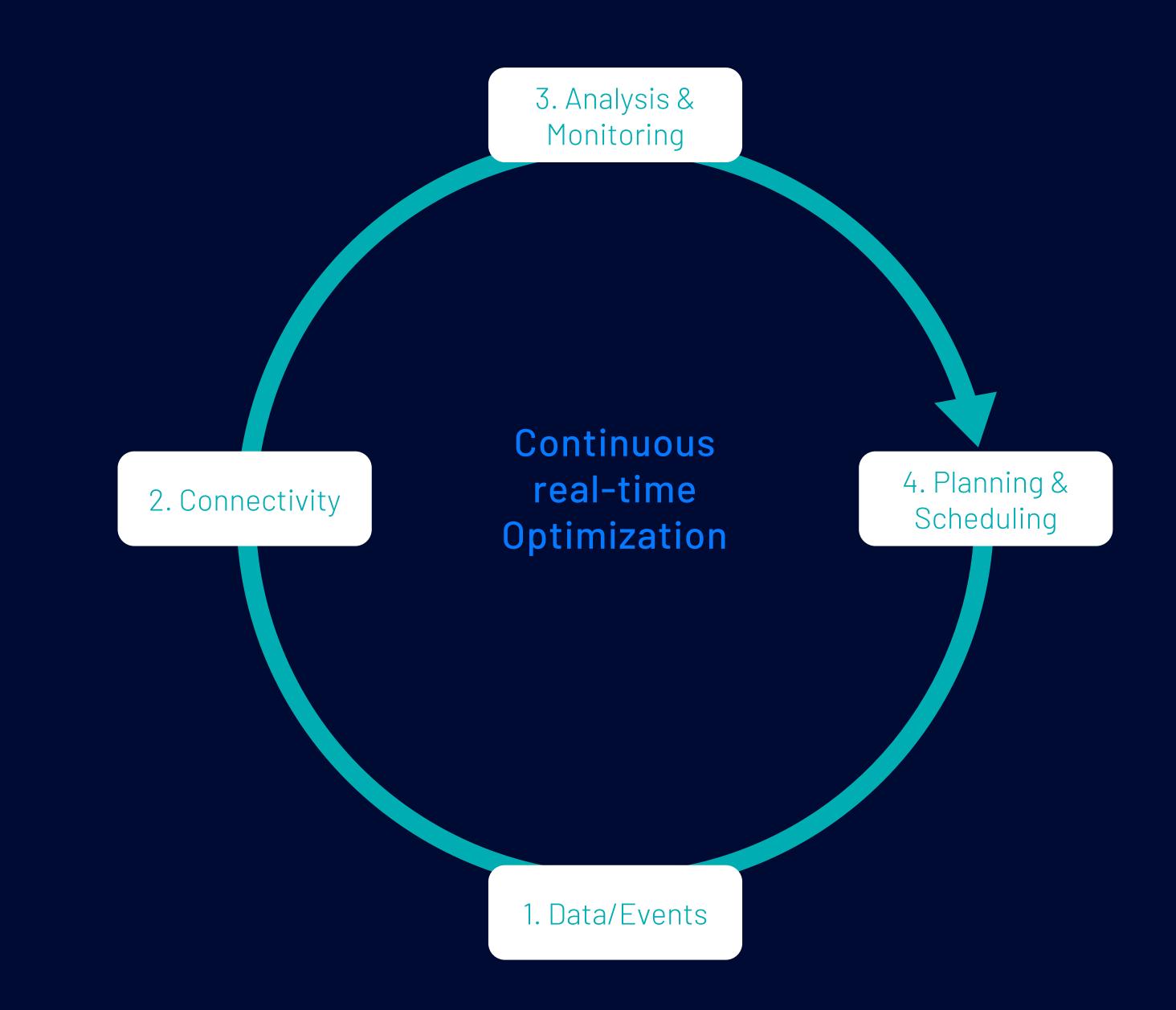
Services to lever our core value proposition



#### SYNAOS

# Increased efficiency through continuous real-time optimization

SYNA.OS utilizes and connects all digital development stages and thus enables the quantum leap into the data- and Al-driven, highly automated logistics and production of the future.

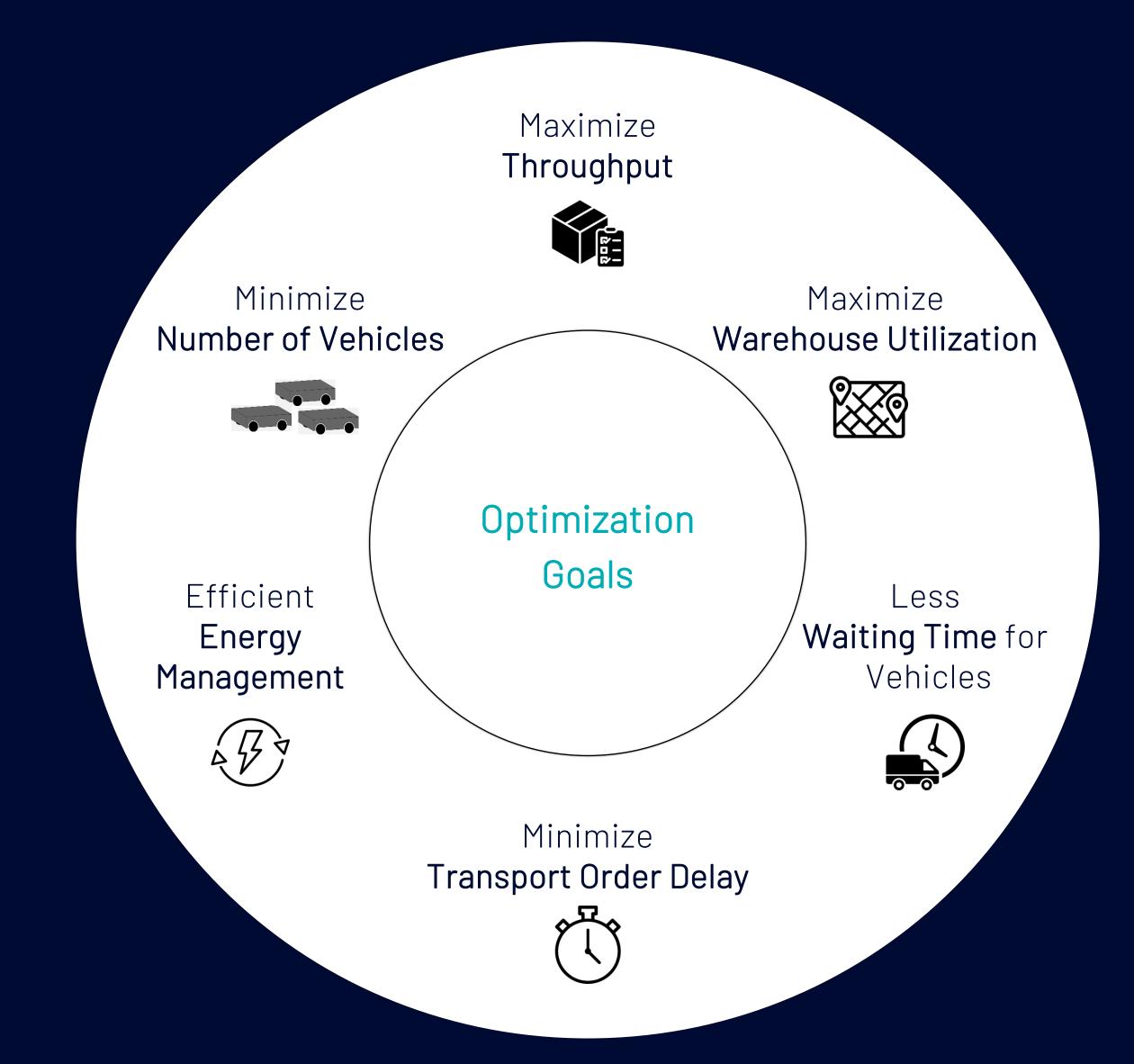


#### SYNAOS

# Flexible SYNAOS algorithms

Added value on the example of the service Adaptive Online Scheduling (AOS).

The AOS algorithms can optimize different customer requirements individually or in parallel.



### Cutting-edge Al-Algorithms

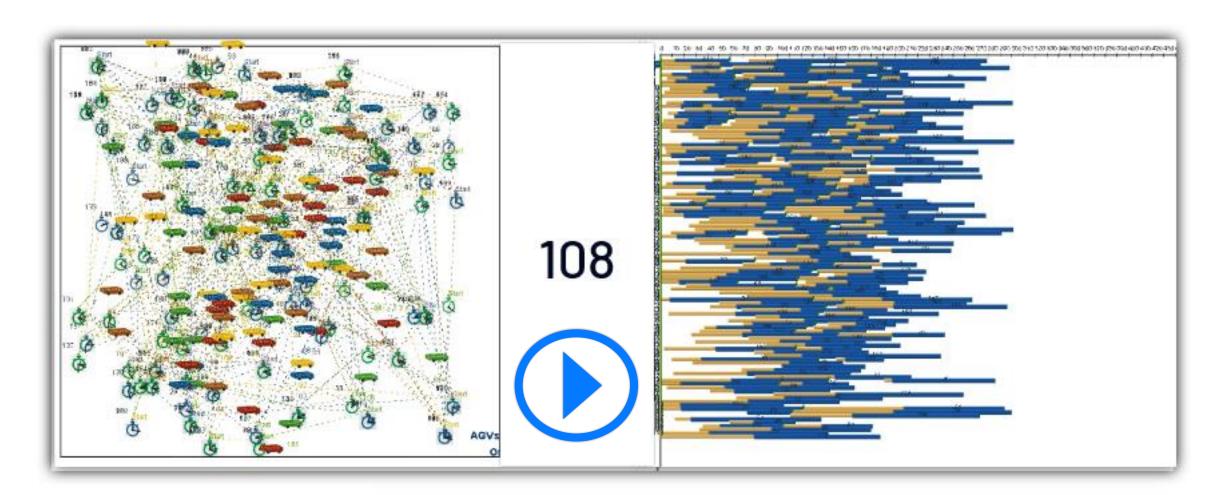
We focus on a continuous ongoing optimization of the planning in order to adapt to reality on the shopfloor.

Order pool: 200 transport orders; resources: maximum 150 AGVs

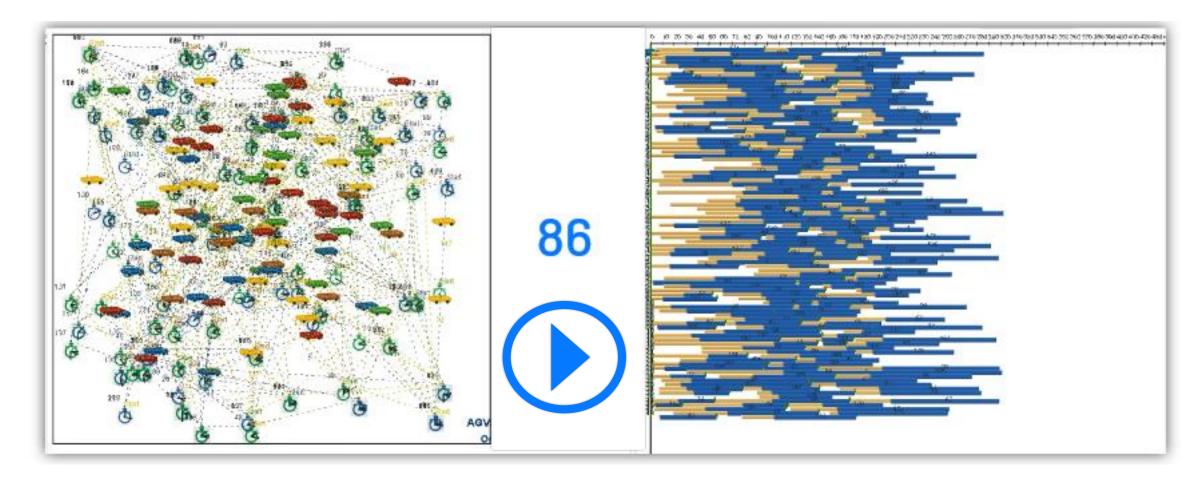
#### SCENARIO: MINIMIZING FLEET SIZE

- Conventional optimization approach:108 AGVs
- SYNAOS optimization algorithms:
   ≤ 86 AGVs (-20%)

#### CONVENTIONAL OPTIMIZATION APPROACH



#### SYNAOS OPTIMIZATION ALGORITHMS



### Cutting-edge Al-Algorithms

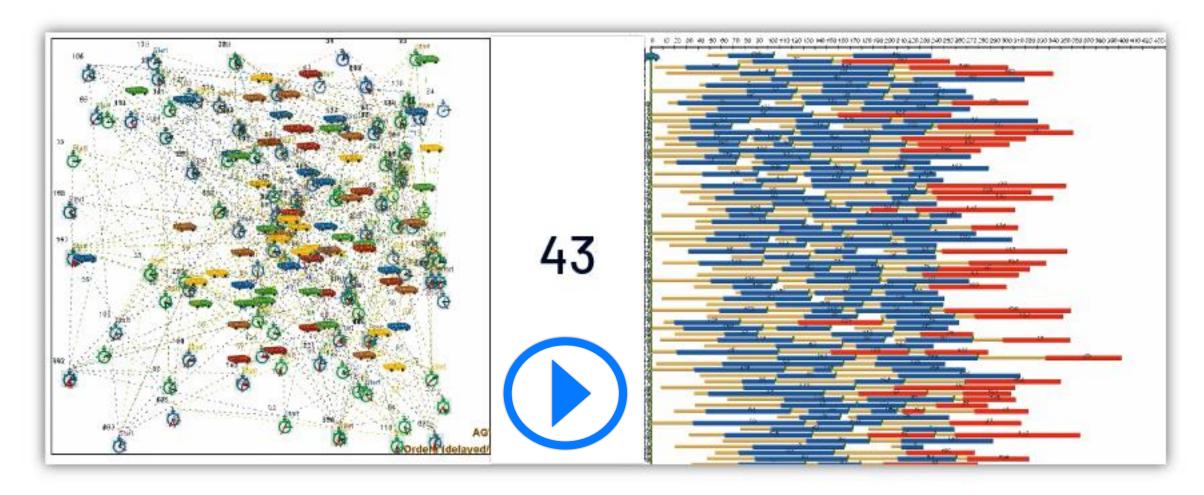
We focus on a continuous ongoing optimization of the planning in order to adapt to reality on the shopfloor.

Order pool: 200 transport orders; resources: maximum 70 AGVs

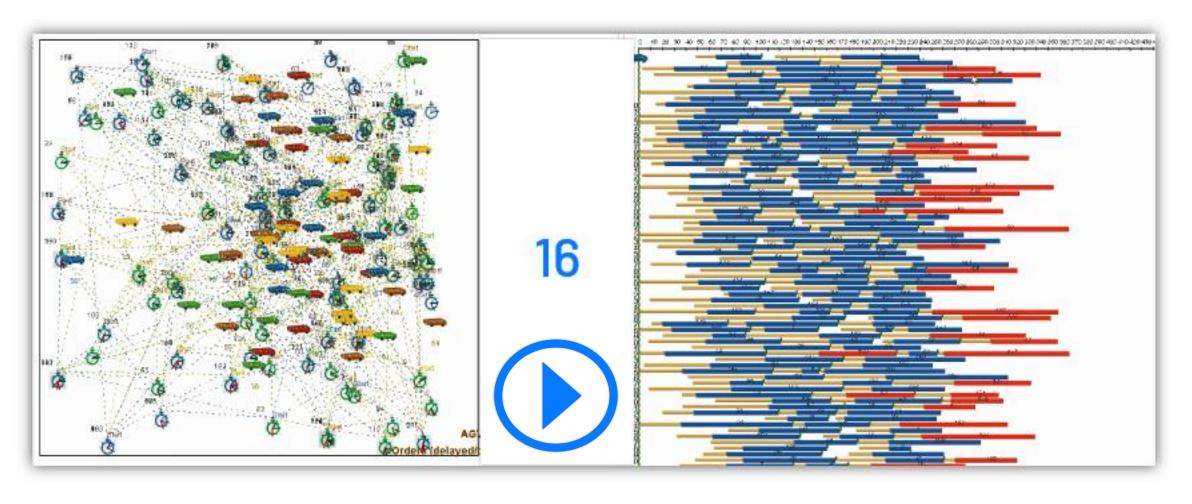
#### SCENARIO: MINIMIZING ORDER DELAYS

- Conventional optimization approach:43 delayed orders
- SYNAOS optimization algorithms:
   ≤ 16 delayed orders (-63%)

#### CONVENTIONAL OPTIMIZATION APPROACH



#### SYNAOS OPTIMIZATION ALGORITHMS



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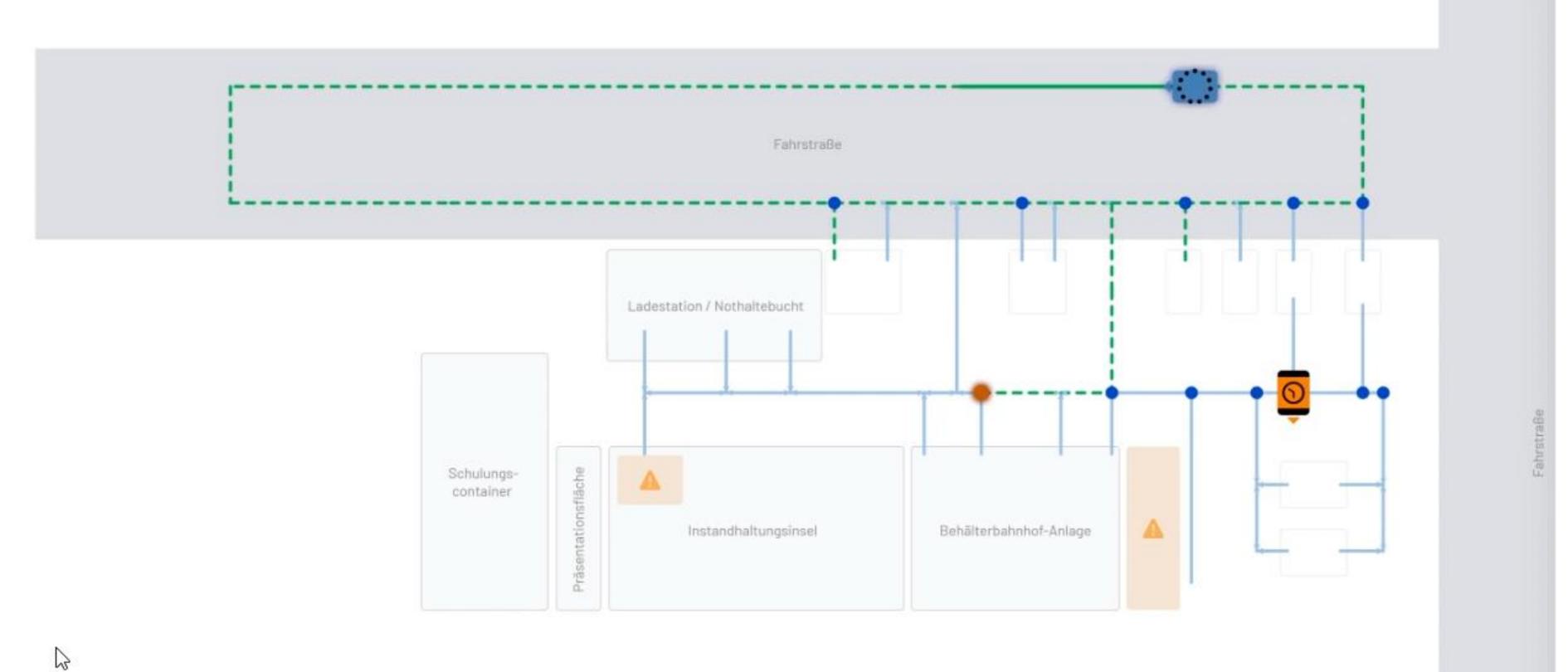
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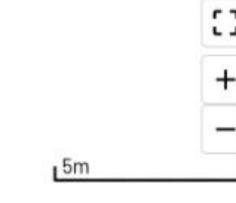
### SYNA.0S Logistics AGV presentation

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FTF-ID	entions out a suit pour sure pour sure parties and	
FTF-Typ	SYNAOS-AGV-heavy	
Betriebsmodus	Manuell	፥
	Manuellen Fahrauftrag erteilen	
Status	Keine Störungsmeldung vom FTF	
x	30,48 m	
Y	17,57 m	
Teil der Flotte	Ja	፥
Beladen	Nein	
Aktueller Auftrag	28864813/502815-4688-11053/57568568 Aktiv	Sco
	Fahrauftrag abbrechen	
Startzeit	Dec 6, 2019, 3:08:02 PM	
Endzeit	Dec 6, 2019, 3:09:53 PM	
Batterie	100 %	





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# Why SYNA.OS Logistics?

Our software satisfies the essential market requirements of todays customers.

- 1. Modern IT technologies and software architecture
- 2. Flexibility to integrate multiple different hardware systems and AGV types
- 3. Scalability with respect to number of vehicles and driving courses
- 4. Continuous intelligent optimization to increase the utilization of resources

### Get in touch



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