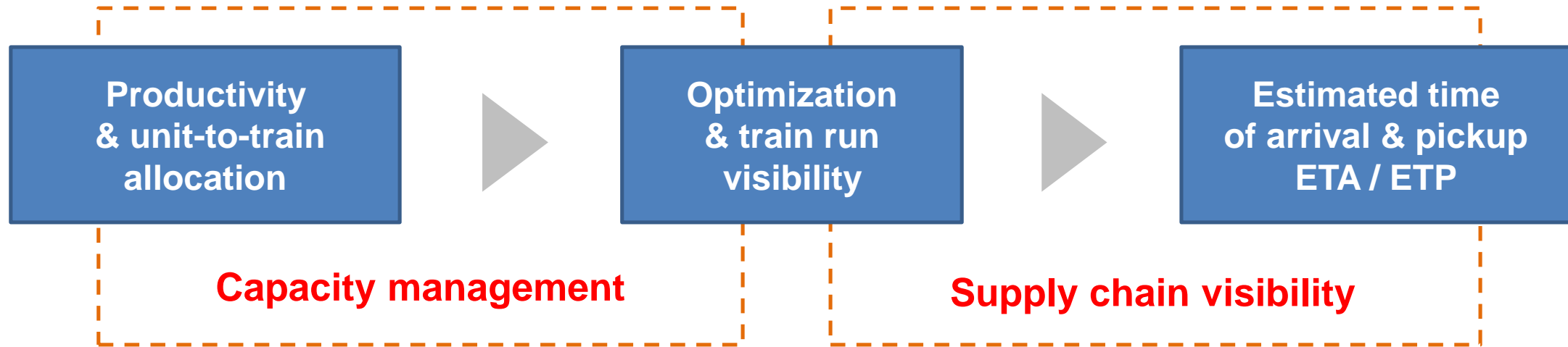# Leading digital transformation for intermodal transport

Michail Stahlhut
CEO Hupac Intermodal

Our main focus 2019-2020:
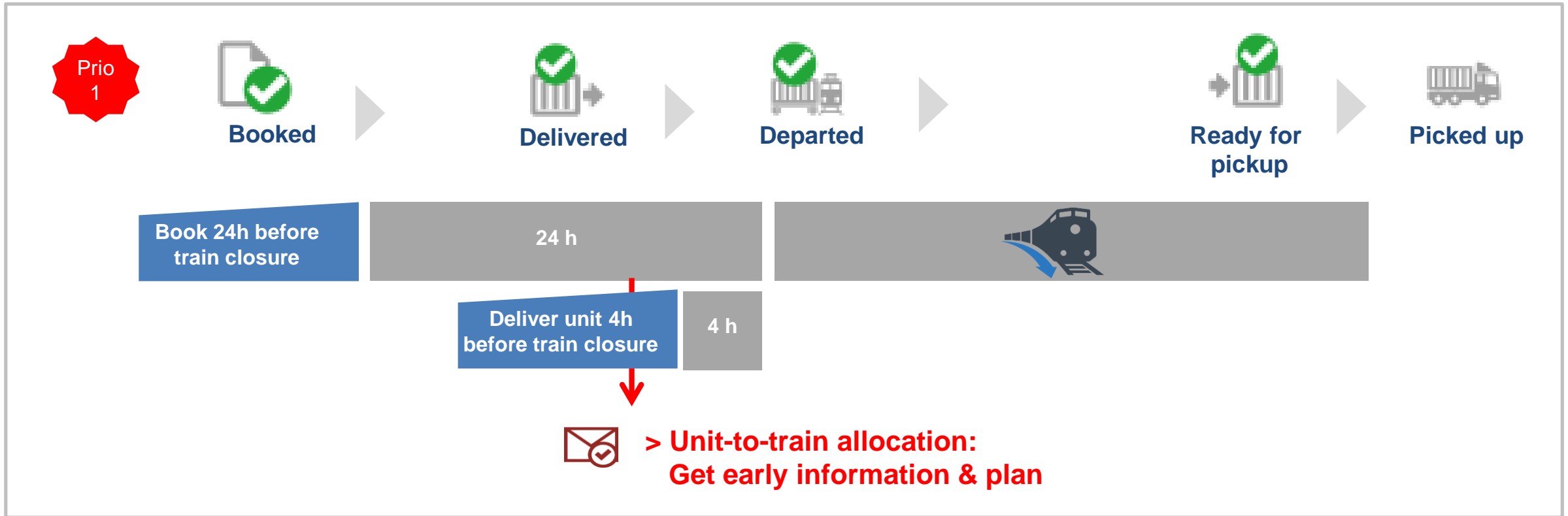# Capacity management & supply chain visibility

HUPAC

Productivity & unit-to-train allocation	▶	Optimization & train run visibility	▶	Estimated time of arrival & pickup ETA / ETP

Capacity management

Supply chain visibility

Tool	SPEAK & new booking system
Aim	> Optimised train utilization > Early booking confirmation
Status	Test in place 2020 full implementation
Needed	Bookings 24 h in advance

Tool	Hupac Train Radar
Aim	> Transparency of train runs > Estimated time of arrival > Optimised logistics flows
Status	Available end 2019/2020
Needed	Standard data transmission

Capacity management: new booking system, better service

Prio 1

Booked ▶ Delivered ▶ Departed ▶ Ready for pickup ▶ Picked up

Book 24h before train closure | 24 h | 🚄

Deliver unit 4h before train closure | 4 h

> **Unit-to-train allocation:**
> **Get early information & plan**

> **Book 24 h before train run**

> **Deliver unit 4 h before train closure**

Supply chain transparency: Hupac Train Radar
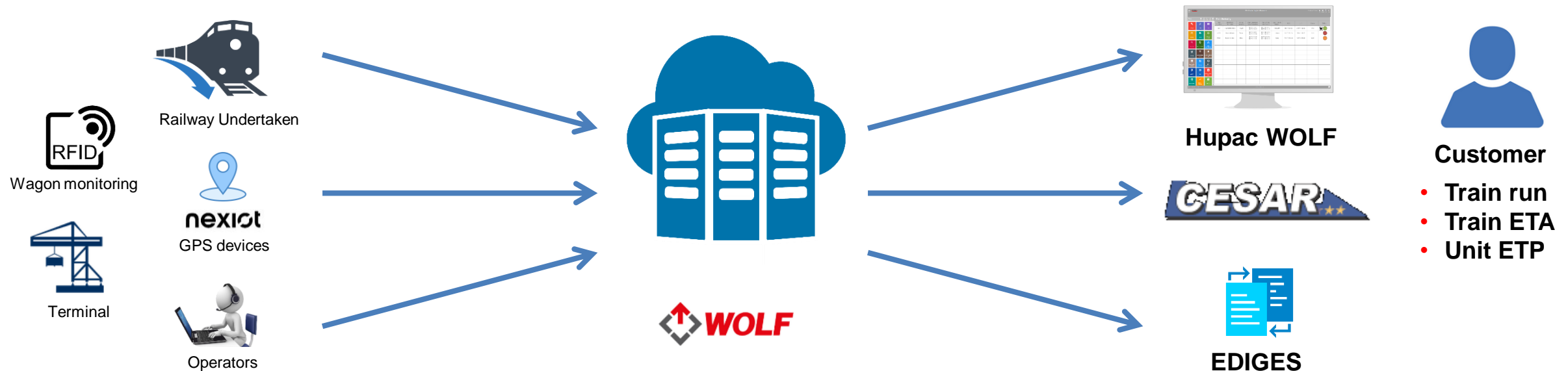

Data sources

- **GPS on Hupac trains**
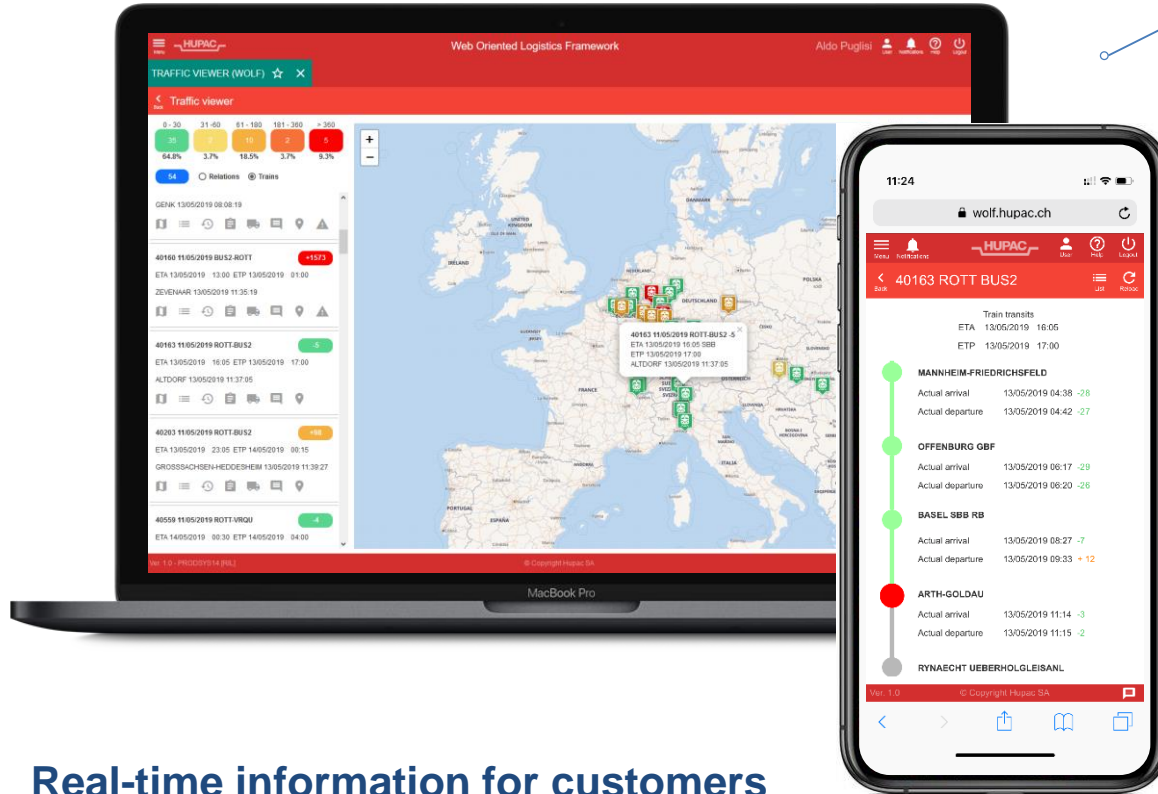- **Railways and Terminals: EDIGES or semi-automatic**

Data processing

- **Big data architecture**
- **Transformation of data in useful business information**

Data distribution

- **Online via WOLF, CESAR**
- **Data integration with customers and partners**

RFID
Wagon monitoring

Railway Undertaken

nexiot
GPS devices

Terminal

Operators

WOLF

Hupac WOLF

CESAR

EDIGES

Customer
- **Train run**
- **Train ETA**
- **Unit ETP**

Hupac Train Radar: how it works

Precise localization of trains with tracking of train movements

Geofencing: notification when train enters and leaves defined areas (terminal, border station, etc.)
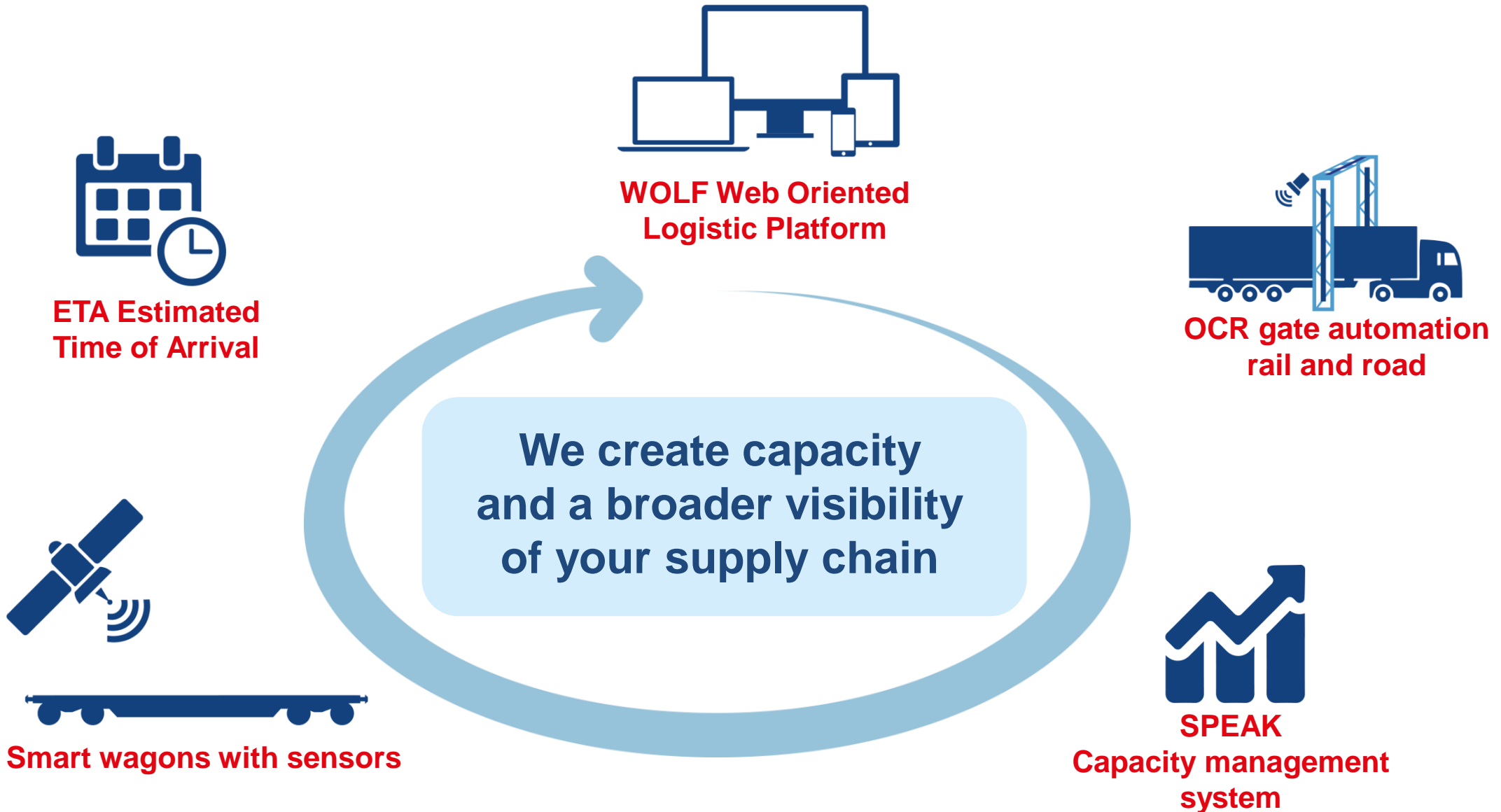
Integration and Big Data to derive an ETA Estimated Time of Arrival and Pickup

Real-time information for customers
> available end 2019

Estimated time of arrival:
> available 2020 for Terminal Busto Arsizio

Digital transformation: our main projects

HUPAC

ETA Estimated Time of Arrival

WOLF Web Oriented Logistic Platform

OCR gate automation rail and road

We create capacity and a broader visibility of your supply chain

Smart wagons with sensors

SPEAK Capacity management system

Digitalisation challenges - what do we need?

HUPAC

Logistic service providers

Early booking 24 h before train run	▶	Optimised planning and loading	▶	Estimated time of arrival & pickup ETA / ETP

Capacity management   **Supply chain visibility**

Support from politics

1) **Tracking & Tracing:** "Unique train ID" (TAF-TSI) as priority n.1: 2021 is too late!

2) **European portals with standard EDI access for dissemination of data**
   > Tracking data of railway undertakings
   > Temporary capacity restrictions in planning phase from Infrastructure Managers
   > Safety related data (wagon running etc.) from Infrastructure Managers

3) **Paperless train management:** e-CIM document for all players: 2024 is too late!