



# **From High Seas to High Tech:** Improving Container Management *with AI* *and Big Data Analytics*

Keynote by  
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08/09/2023

“Many would say rates are at the same level as they were in 2019, but costs today are much higher...”



Rolf Habben Jansen,  
CEO



28/09/2023

### Freightos Baltic Index (FBX): Global Container Freight Index

Date from 2023-09-08 2023-09-29



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“A record total of 2.2M TEU of new capacity is entering the market by the end of 2023 with 3M TEU scheduled for 2024.”



# Adapting to the new normal



Blank Sailings

## Uncontrollable costs



Newbuild costs



Fuel costs / IMO



Inflation

Costs that could be controlled



Container Management Costs

# Optimizing Container Management

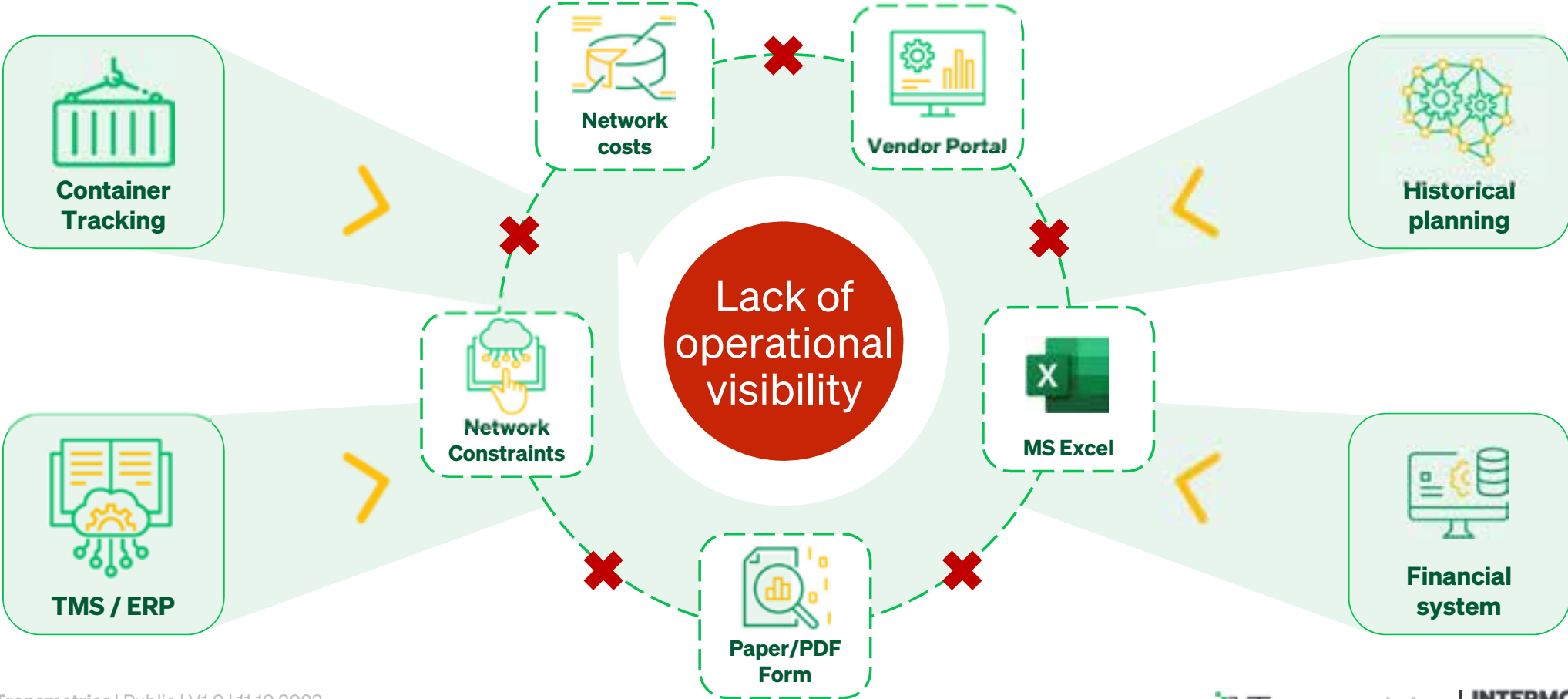


# Optimizing Container Management



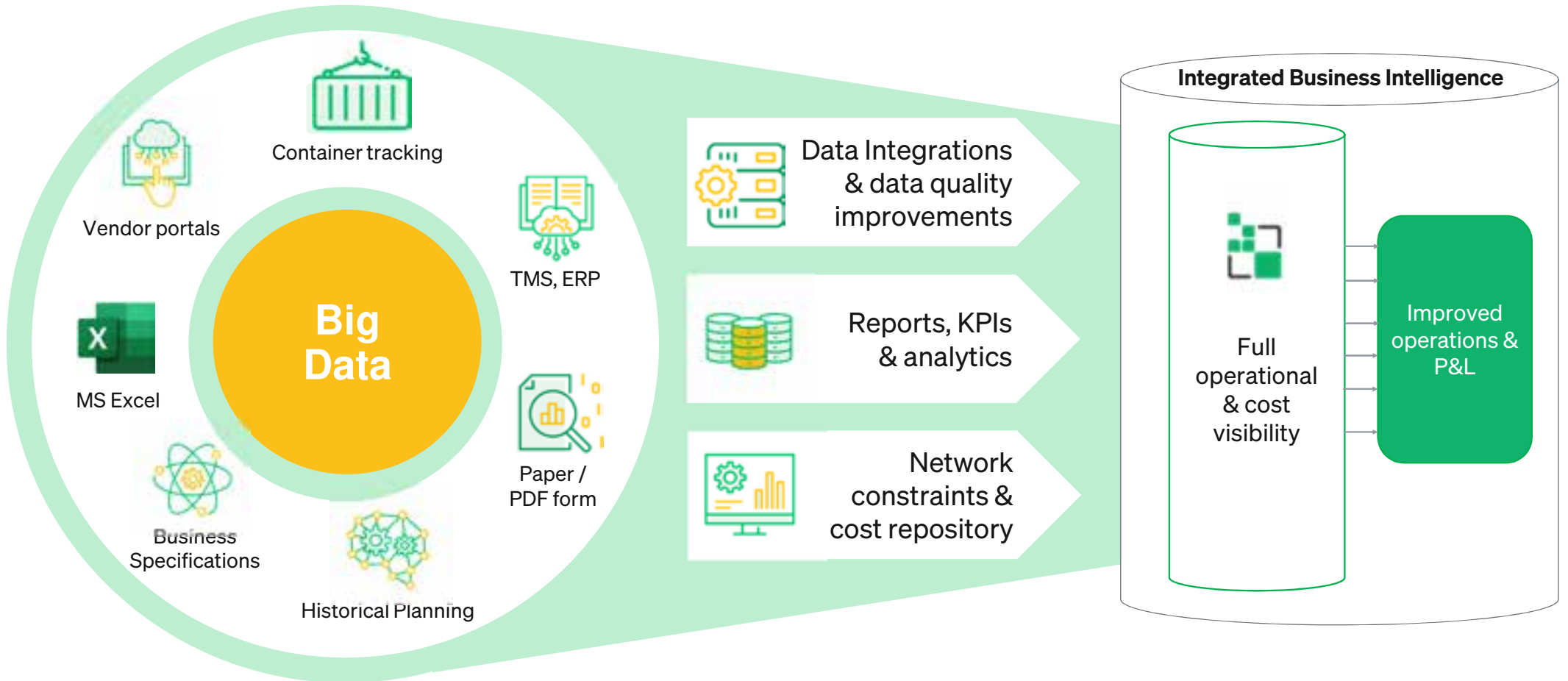
# Industry landscape

A lot of barely connected systems and questionable data quality.



# Complex Technological Landscape

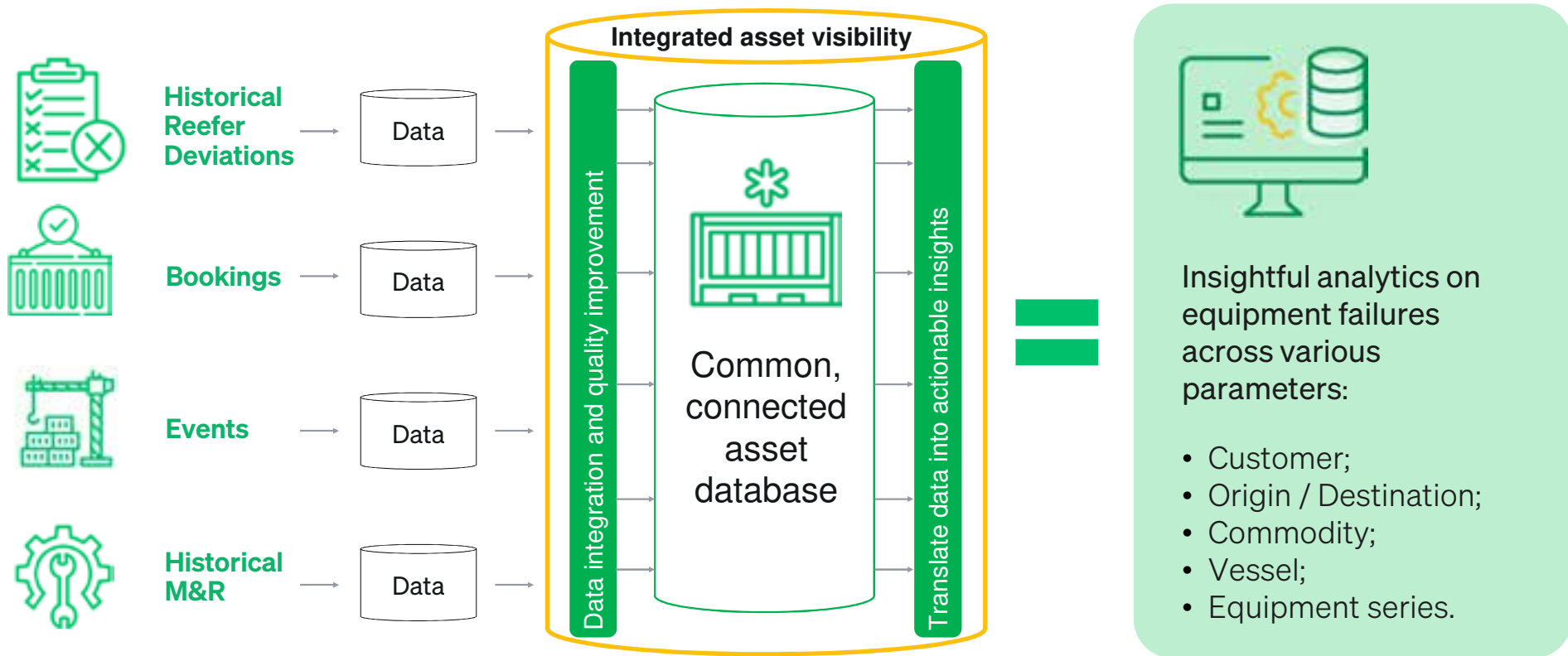
Leveraging multiple data sources, complex integrations, etc.





# Reefer Analytics

Standardize data flows and extract valuable insights







# Full equipment and cost visibility

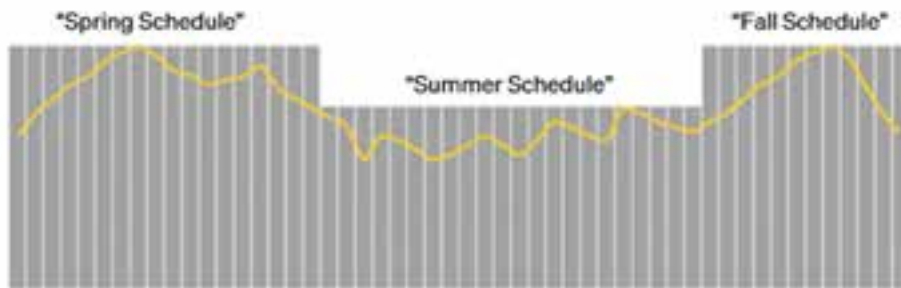
- Container Utilization;
- Detention & Demurrage;
- Equipment stocks & storage balance developments;
- Cost reporting – Storage (incl. gate-out billing), Stevedoring, Repositioning, etc.;
- Longstandings;
- FIFO.

# Tools to gain efficiency

By aligning supply and demand

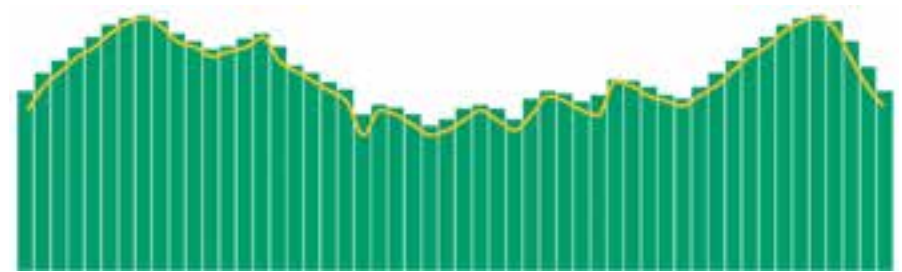
**NOW:**

Companies rarely adjust their resource planning



**WITH AI-POWERED DEMAND FORECASTING:**

Predictive, agile tactical management



Transition from static plans and gut feeling  
to precise agile equipment planning with AI

# Multi-variate demand forecast

To achieve an optimal plan tailored to every day / week

## Historical Data



- Orders
- Bookings
- Vessel schedules
- Reference data



## Demand Forecast



Align supply & demand for optimal container management



# Demand Forecasting

Forecasting the number of containers on the most granular level



## Current stock

- Location
- Container type;
- Container grade;
- Period;
- Etc.



## Forecasted Container Demand

- Location
- Container type;
- Container grade;
- Period;
- Etc.



## - Container pickups



## + Container returns



**Calculate future stock levels and identify excess or shortage locations**

# Repositioning optimization

Consider all available resupply options and **find the most optimal global scenario.**

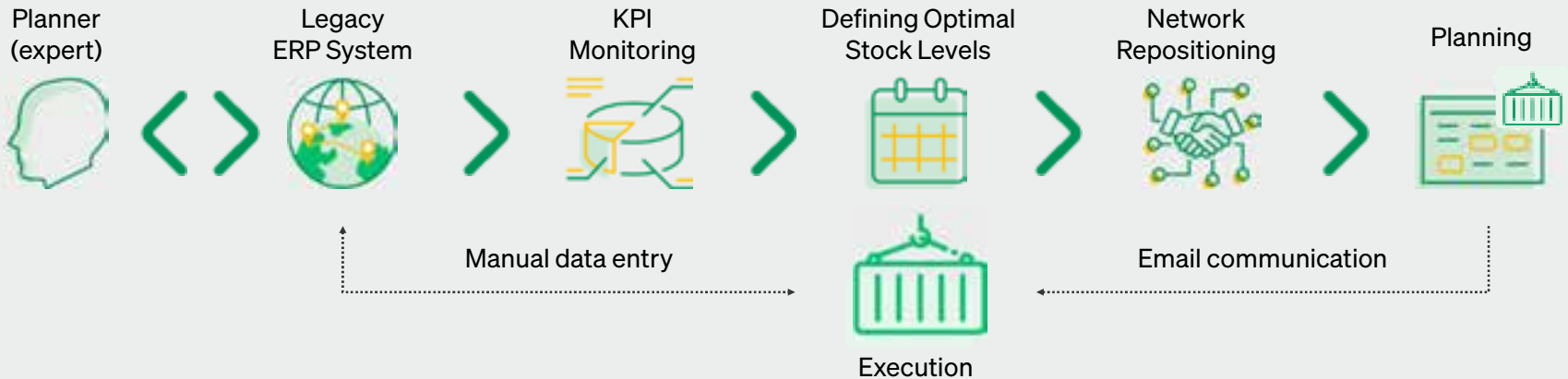
AI suggests **optimal decisions** based on a full cost model of the business.



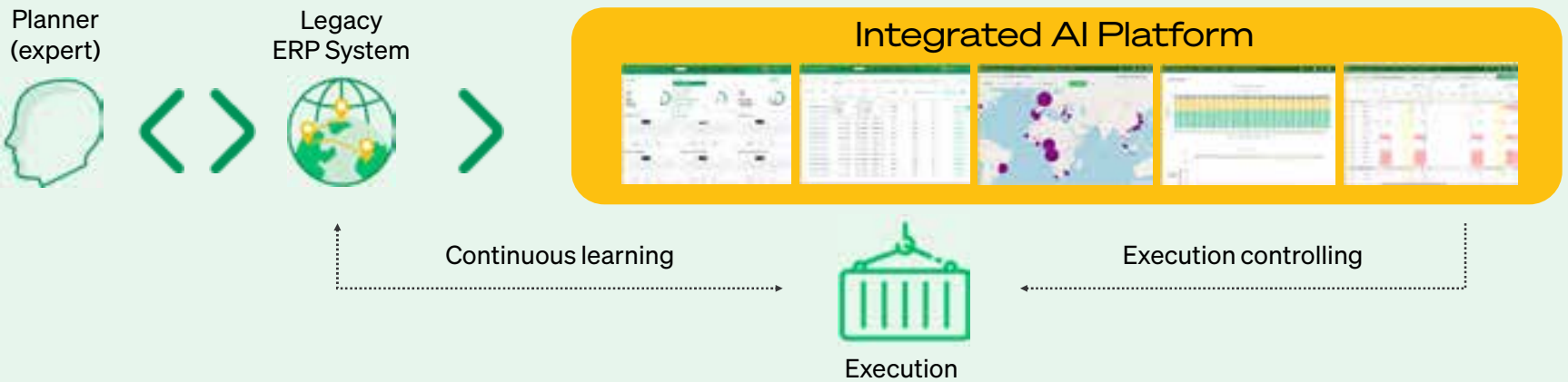
# AI automates Container Management

Bringing multi-million EUR efficiency savings

**Today's carriers  
planning:  
manual  
process**



**Integrated  
process  
with AI**





# Key takeaways



**Get full equipment & cost visibility** - streamline your data, integrate the different data sources, improve data quality, map container events & cost data and get a detailed view across your entire network;



**Forecast container demand** on the most granular level and dynamically define the optimal stock levels;



**Optimize your entire empty container management**, turn to just-in-time operations by considering all network costs and constraints and taking advantage of the various network agreements.



Transmetrics

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[www.transmetrics.ai](http://www.transmetrics.ai)

Thank you!  
Any questions?

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