Port Optimizer™

Driving visibility & execution in an integrated supply chain

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A New Era of Interdependence
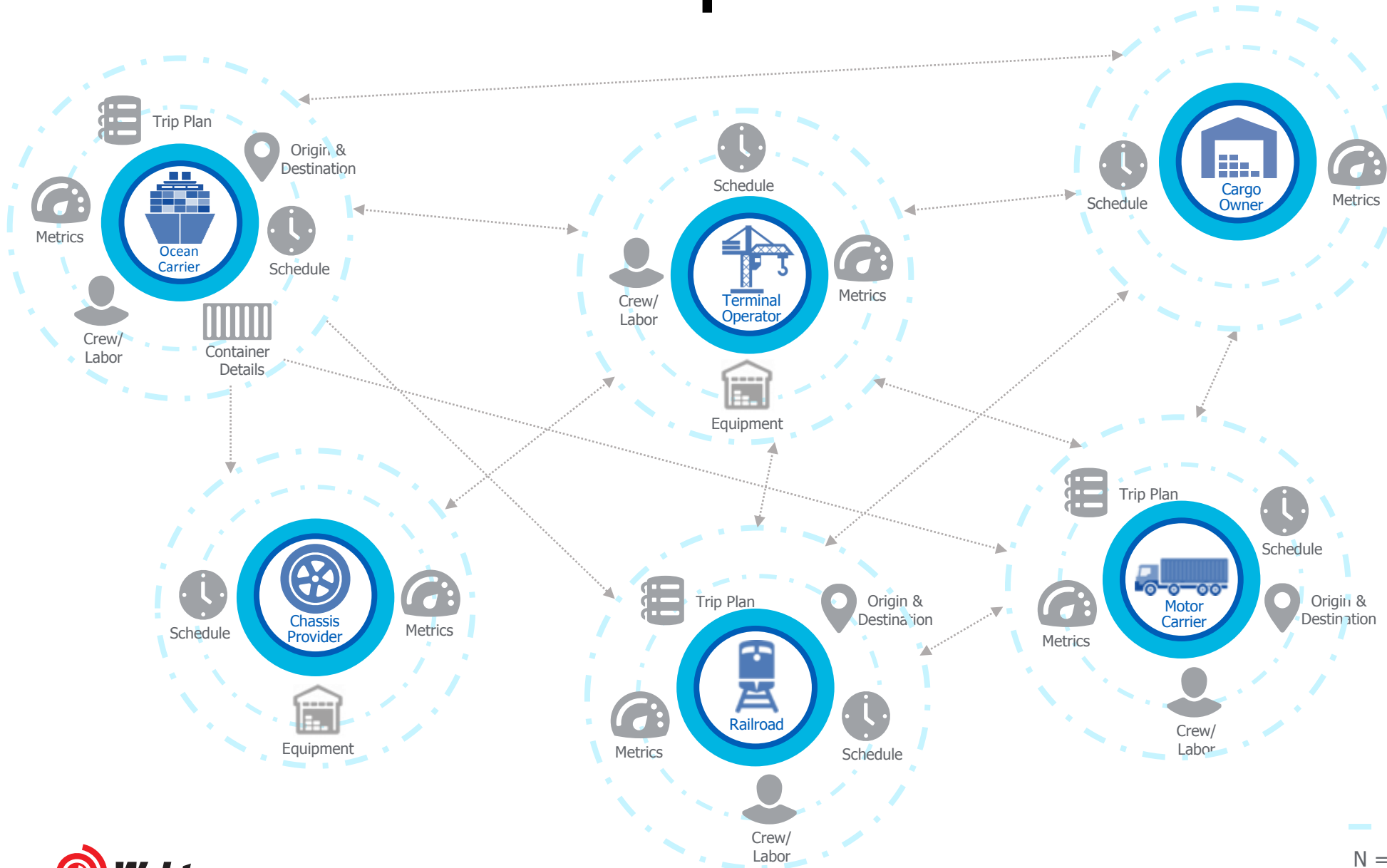
@ **Scale: x N**

Today, success requires:
- Eliminating silos
- Sharing information
- Predicting & optimizing

data

N = number of companies/transactions

Confidential & Proprietary

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Port Optimizer

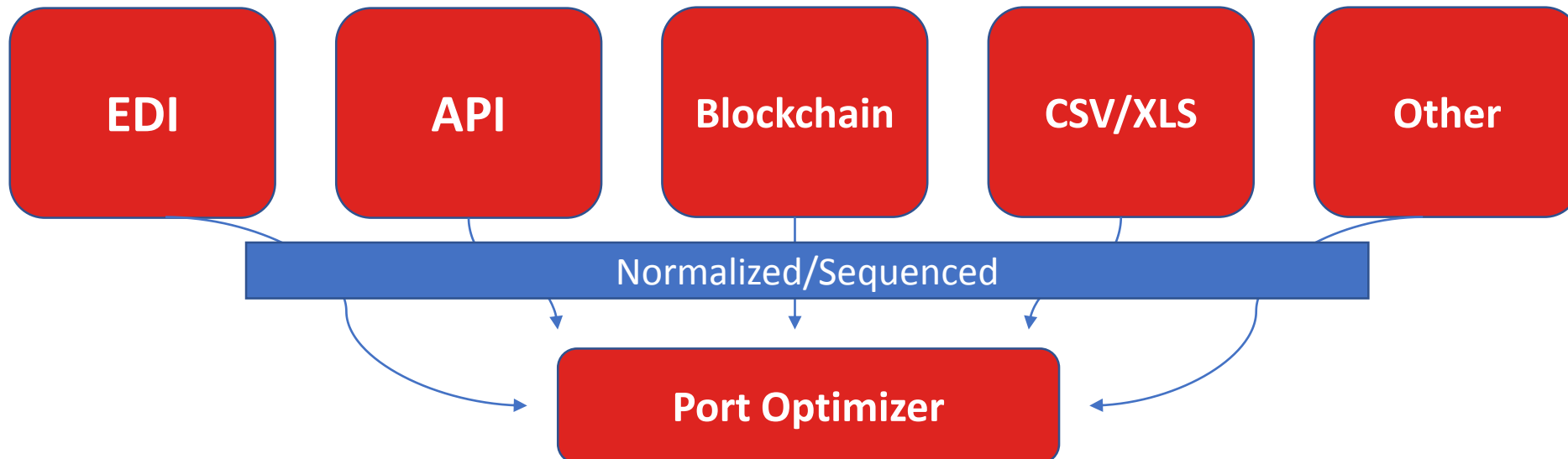| Cargo Owner	Marine Terminal Op'r	Ocean Carrier
Visibility + Cargo Velocity	**Cargo Dwell + Cargo Velocity + Productivity**	**Visibility + Cargo Velocity**
• ↑ visibility for better customer service • Better planning for dray partners → ↑cargo velocity thru ports	• ↓ container dwell • ↑ velocity through better planning • Reduced and improved handling (touches, etc)	• ↑ velocity of cargo thru port • ↑ velocity of empty returns
Motor Carrier	**Railroad**	**Chassis Provider**
Turn Times + Productive Turns	**Rail Volume + Visibility + Speed**	**Accuracy + Chassis Utilization**
• Faster truck turn times • ↑ number of productive turns per day	• ↑ rail volume through ports • ↑ visibility to export dates • Improved equipment planning • ↑ speed of rail volume thru ports	• ↑ accuracy of chassis inventory and forecast → ↑ chassis utilization • Improved planning → ↑ chassis utilization

Enabling visibility and execution across an integrated supply chain
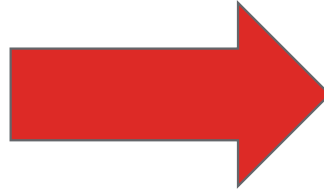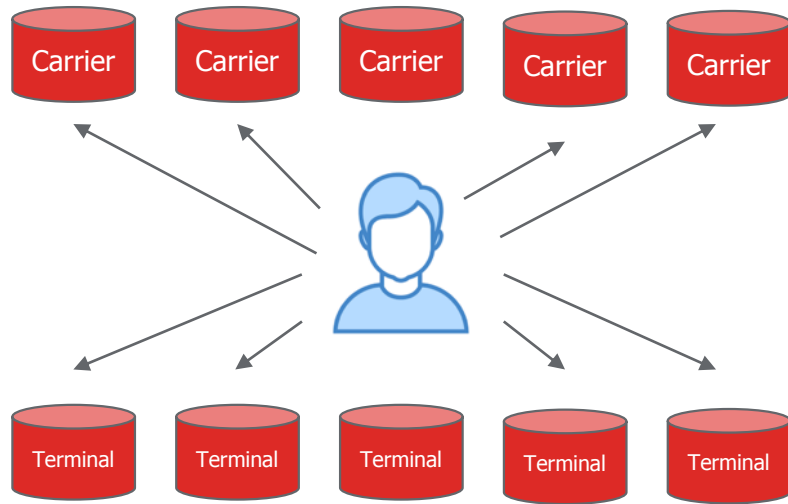
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Product Principles

- **"System of systems"** … fits within the existing Supply Chain ecosystem to enable interoperable supply chain visibility. GET architecture / delivery mechanism is purposely flexible.

- **Partnerships** … open to and actively exploring technology partnerships across the Maritime shipping / broader Supply Chain ecosystem.

- **Data Stewardship** … you own your data and should define how it is used. GET role is to act as independent data stewards and software providers. Transparent & consultative about how data is used. GE is not seeking to share sensitive information.

Evolving to Meet Stakeholder Needs

Existing Websites

- **Siloed Data**
  Data exists on many different sites

- **Unreliable Information**
  Sites not updated in a timely manner, stale/incorrect information

- **Lack of Consistency**
  Different sources report data in different ways

Pilot Program

- **Earlier/More reliable visibility to inbound traffic**
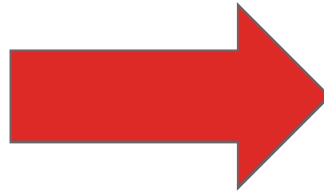 *"We only find out what's coming 2 or 3 days out" – BCO*

- **Combine multiple different data sources in a single, curated portal**
  "I am going to 14 different websites every morning and they are all different" – Dray Provider

- **Secure, Managed Access**

Evolving to Meet Stakeholder Needs

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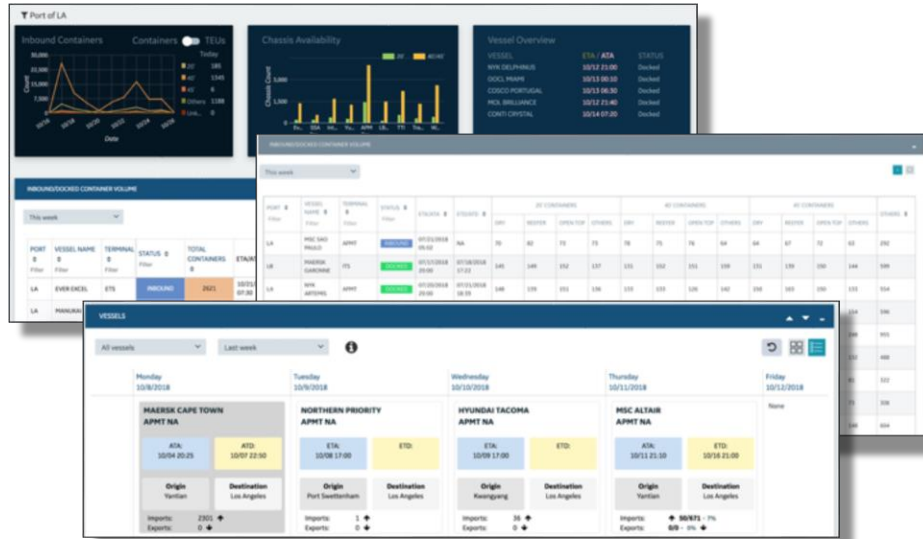
Port Optimizer™ Next Phase
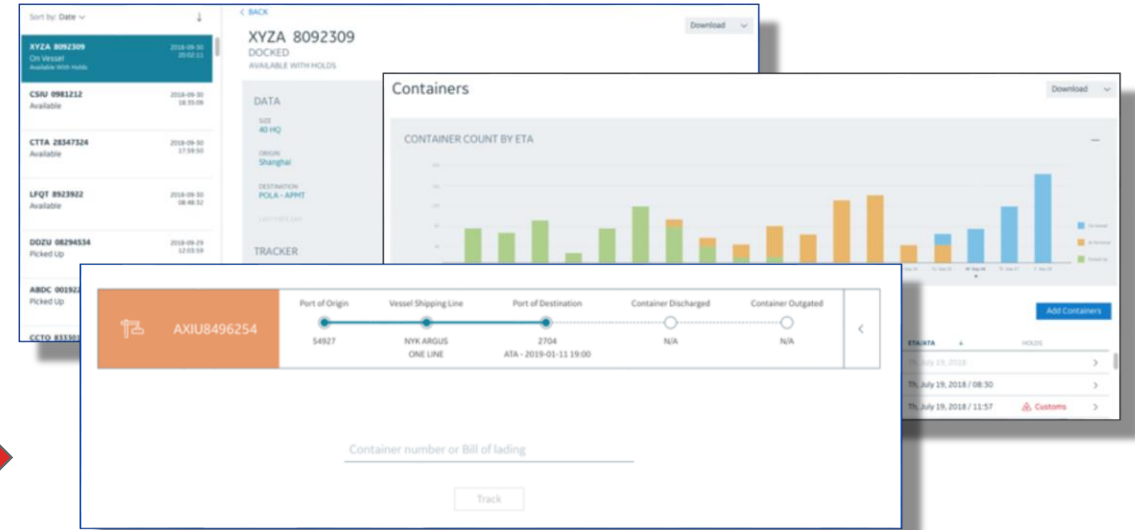
- **Targeted, Persona-Based Information**
  Focusing the right data to the right users

- **Vessels/Containers Updated Consistently**
  "If my container gets rolled, I need to know as soon as possible." - BCO

- **Business-Critical Information Readily Available**
  Last Free Day, Availability, ETAs

- **Enhanced for Dray and BCO**
  Added focus on container movements across entire flow

- **Multi-Terminal Appointment Scheduling**
  "Everybody does something different. I want to be able to do all my scheduling in one spot." – Dray Provider

- **Advanced Analytics**
  Better planning of what's coming next through predictive/prescriptive analytics

Data Foundation Enabling Port Optimizer

Data is the foundation - Grow technically, organizationally and culturally around data

Connected Logistics

| Data centric | App centric | Machine centric | Mobile Centric |

Data foundation capability

Infrastructure Capabilities
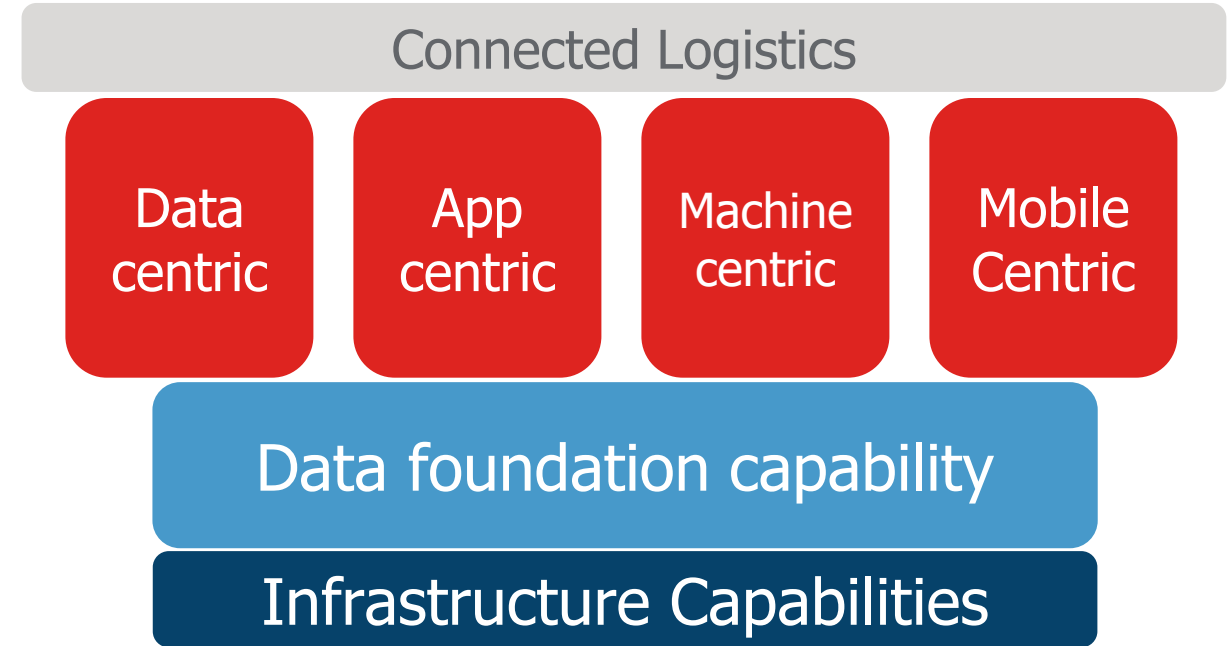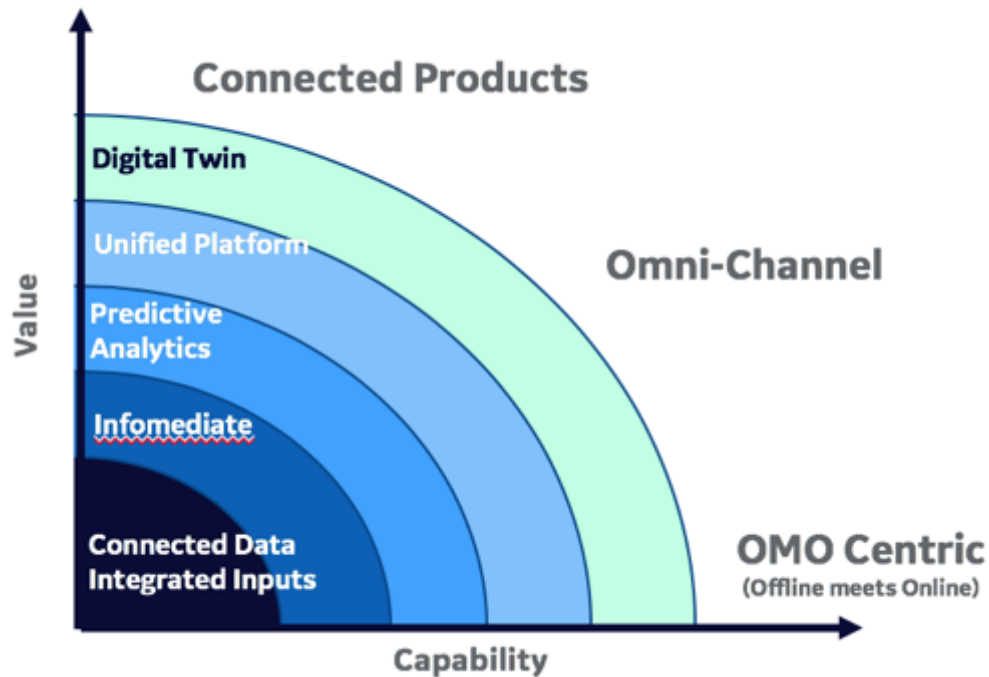
➢ *Common distributed platform across organization enables a cross function digital thread*

➢ *Productize data insights to connect data providers to users with data in the right direction*

➢ *Build solutions to scale at a company level, across partners & enable open source innovation*

Data Foundation Enabling Port Optimizer

Shipper · Truckers · Rail · Ports · Marine · Analytics · Ship · BI · Assets

- Unified transport logistics data model consolidation in the multi-tenant system
- Data quality cleansing, and deduplication
- EDI messages unification and consolidation
- Transactional data integration with the industry reference files
- Scalable big data platform as service
- Portable data services for different geographies and customers
- Schema-less data consumption
- Data Analytics services using industry reference data and transactional data

Data Foundation

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