

# The Journey to a Self-Driving Supply Chain

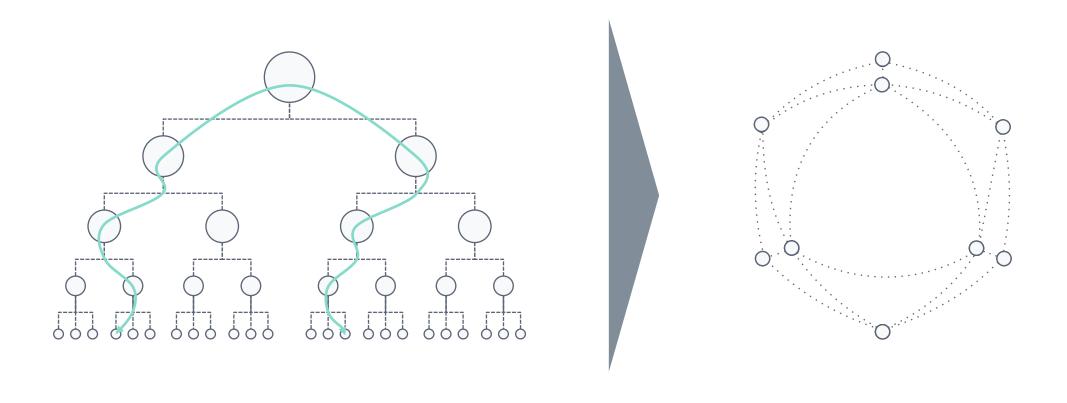
Fred Laluyaux
President & CEO, Aera Technology



Gartner Supply Chain Planning Summit November 4 – 5, 2019 | Denver, Colorado

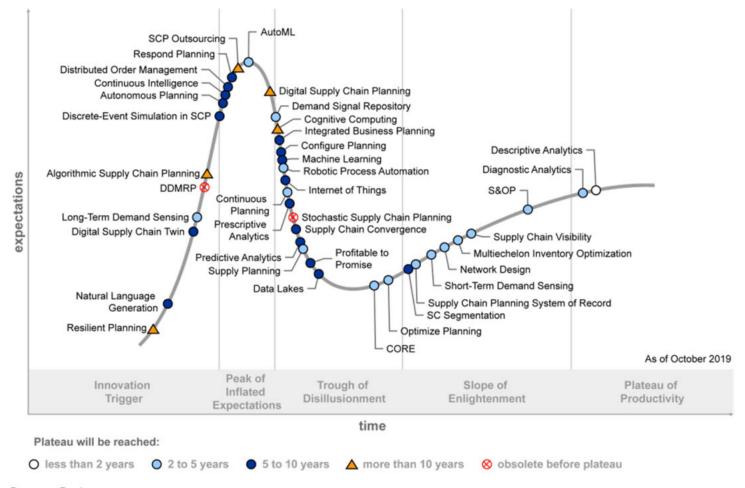


## The scale, complexity, & pace of decision-making in the digital era requires a new way of working & a new way of planning.



#### The dawn of Cognitive Automation...

#### Hype Cycle for Supply Chain Planning Technologies, 2019



Source: Gartner ID: 463637

#### **Respond Planning**

"...Consequently, AI/ML is increasingly being focused into respond planning to help improve prediction accuracy, automate decision making and allow nearer to real-time, granular data to be utilized in planning."

"The continuing convergence of planning and execution will take place at the interface between respond planning and execution/supply chain visibility. This will force planning systems of record to increasingly have to contain respond planning capabilities, with the associated technical architecture changes required to support it."

"User Advice: Respond planning is one of the planning layers in the CORE framework. It is the newest of these and as such is increasing in hype."

"To improve their planning organizations need to align planning decisions horizontally and vertically throughout the supply chain. Respond planning is one of these horizontal layers and as such acquiring an integrated end-to-end respond planning capability should be a key part of any companies SCP technology roadmap."



## Imagine if...

We could transform from an era of

people doing work supported by machines,

## Imagine if...

We could transform to an era of

machines doing work guided by people.



## **Enabling the Self-Driving Supply Chain**





Enterprise

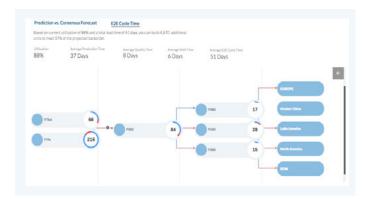
Systems

External

Data

Suppliers, External

Partners, Customers



**Understands** 

There are \$42M worth of open orders that can be filled by plant 31009 at present time. Acts

ACTION IMPACT

Product Revenue \$5.65M

LOGO PRODUCT \$10.16M

Plant

SAO PAULO Cost \$1.33M

Date Quantity \$2.4M

Q3 2018 4,570 Units

Utilization 88%



Accessible through:









Recommends

**Predicts** 



Aera, are there any Demand items that need my attention today?



**Understands** 

Senses Demand, Forecasts Demand, Tracks Demand Changes

**Recommends** 

Introduces New Products, Improves Customer Service, Decreases Inventory

**Predicts** 

Demand Variability, Changing Market Conditions, Customer Patterns

Acts

Changes Inventory, Improves Customer Service, Determines NPIs

#### The Four Pillars of Cognitive Automation.

#### **APPLIED SCIENCE**

- Industry and objective specific analytics, algorithms, scenarios, and models
- Bring your own algorithms, build your own, or use pre-packaged algorithms

#### HARMONIZED DATA

- Complete, live, and clear understanding of data in context, served in a unified digital data layer
- System-specific crawlers that accelerates data acquisition while also preserving context

#### **DIGITIZED PROCESS**

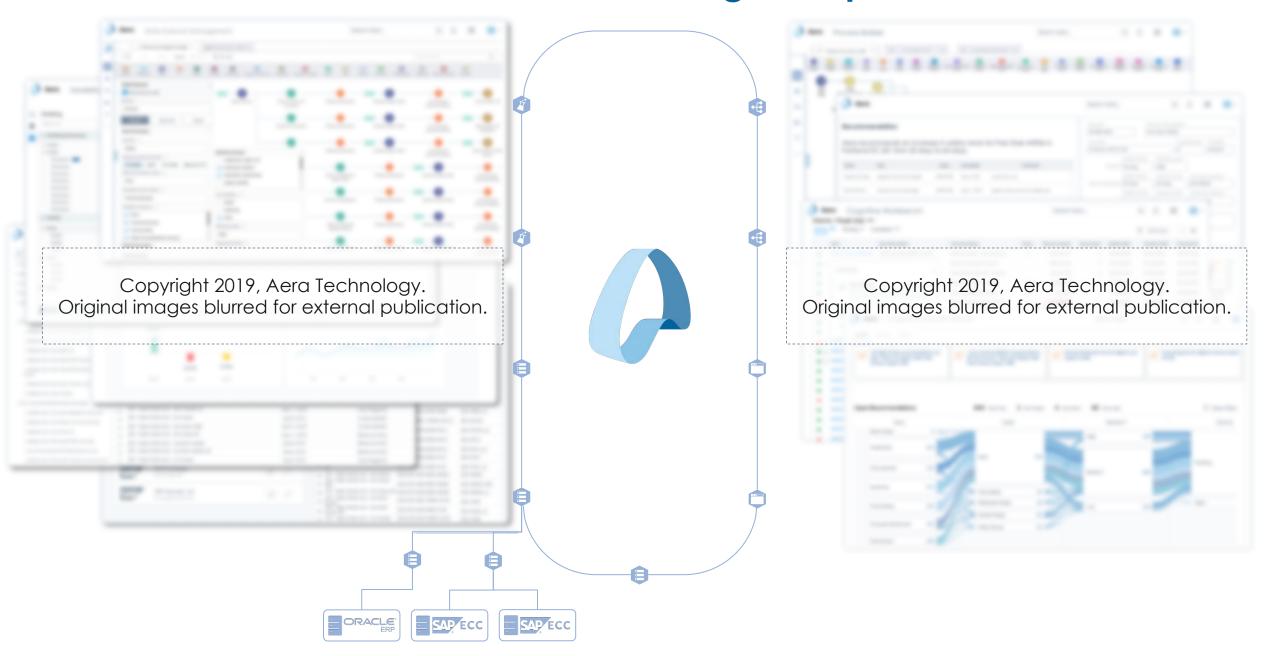
- Automate and and augment decision processes across complex organization structures
- Automated and assistive recommendations with transparent decision explainability

#### OPERATIONALIZED CHANGE

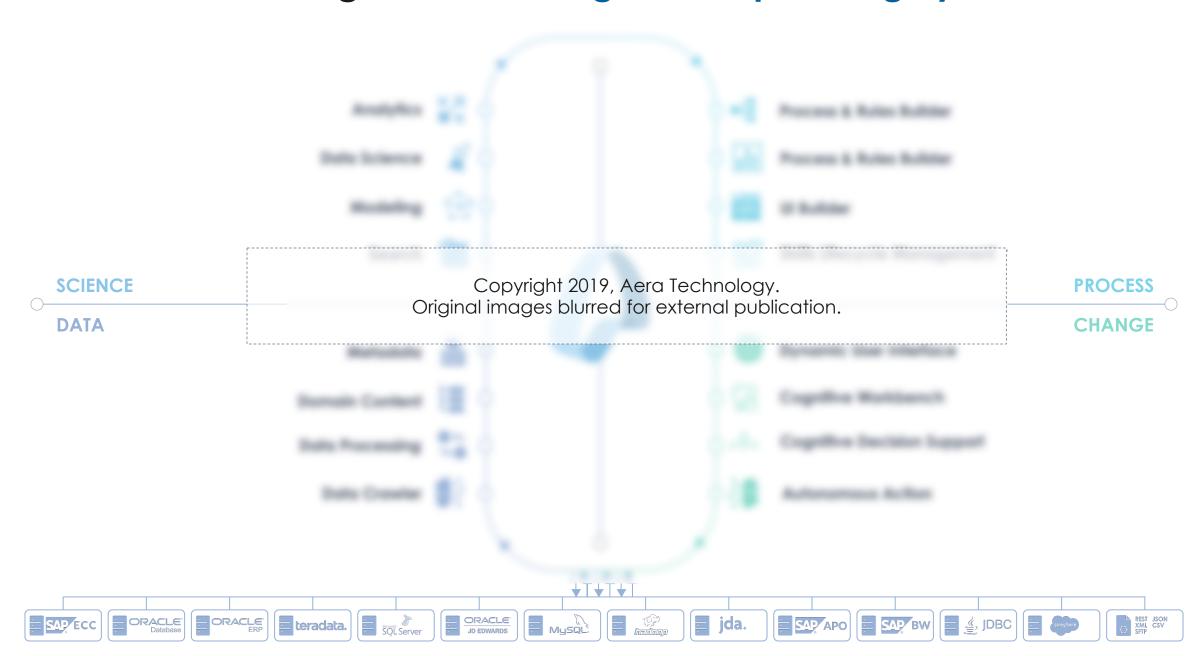
- Systematically enable change by digitizing institutional experience and expertise
- Incorporate decision and efficacy history into process and performance improvement



## How Aera Enables the The Self-Driving Enterprise™.



#### Introducing the Aera Cognitive Operating System.



#### The Pioneers of Self-Driving Enterprise



**Neil Ackerman**Senior Director, Global Supply

Chain

Advanced Planning

"We've been able to move towards a self-driving supply chain. We've been able to understand that the ideas of silos and these one-off decisions that used to be made or were made in the past now becoming more autonomous."

Johnson Johnson



Alessandro De Luca

Chief Information Officer Merck Health Care

"Since we've implemented this, we've been systematically improving our service, (which) in the pharma industry is fundamental,"





Sagib Mehmood

Chief Information Officer & SVP Hygiene/Home

"In partnering with Aera, the biggest benefit for us is in creating a brain within the company and having an ability to preserve it as people make decisions on top of it," said Saqib Mehmood, Global SVP Business Solutions & Insights, Hygiene Home, RB. "For us, it is not just about making smarter decisions but retaining that knowledge within the company."





**Marc Engel** 

Chief Supply Chain Officer

"Our partnership with Aera has been instrumental in our journey to transform our Supply Chain into a digital eco-system."

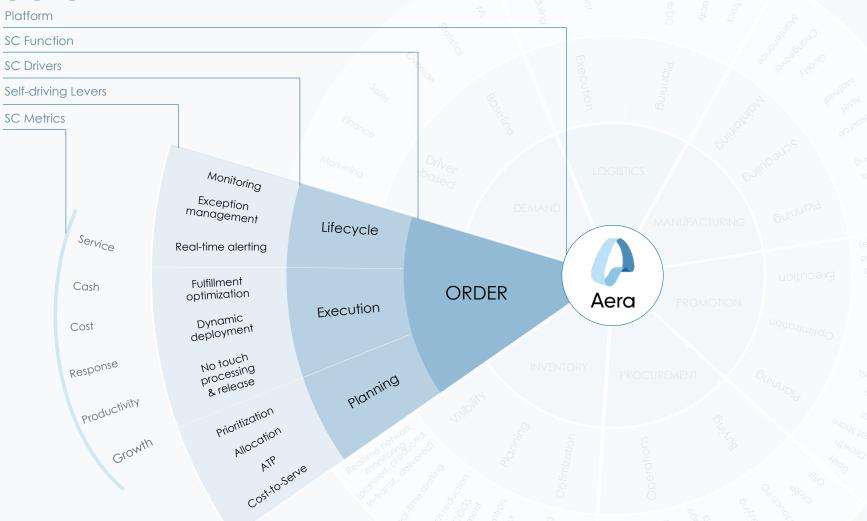




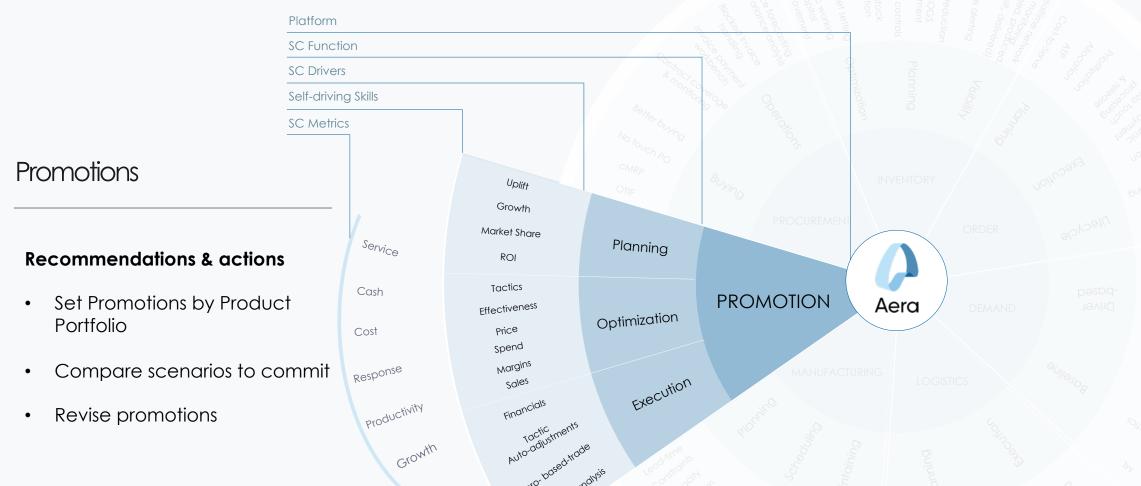
Order Management

#### **Recommendations & actions**

- Remove holds
- Reprioritize orders
- Adjust commit dates
- Expedite shipments





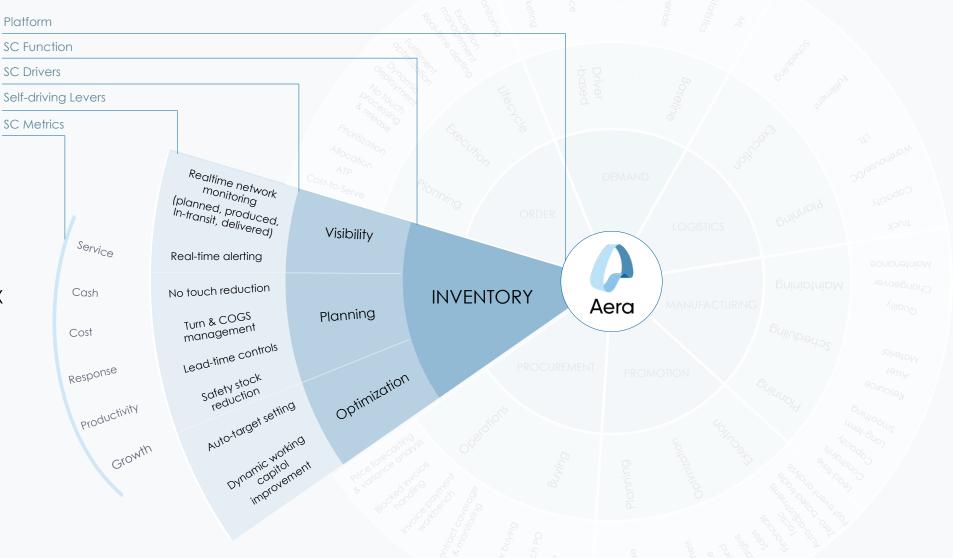




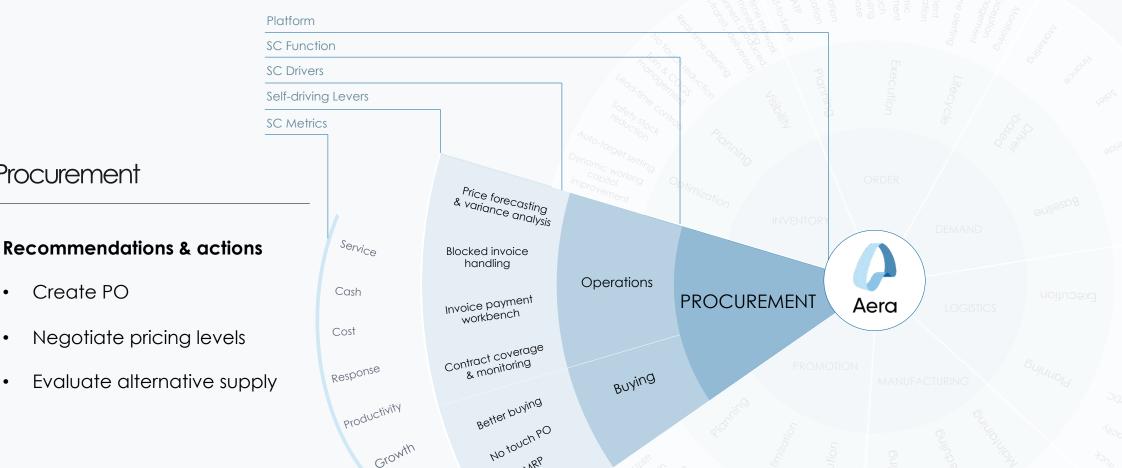
Inventory Management

#### **Recommendations & actions**

- Rebalance inventory
- Set safety stock level to XX
- Prioritize supply





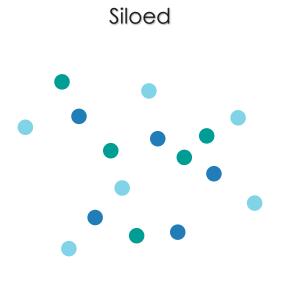




Procurement

Create PO

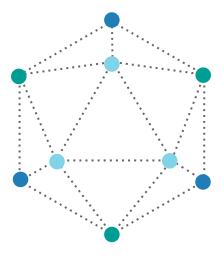
### Journey to the Self-driving Enterprise



- Silos of raw data
- Limited visibility
- Inaccurate

Retrospective

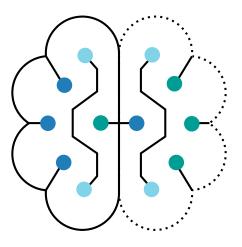




- End-to-End visibility
- Enriched external data
- Cognitive data model

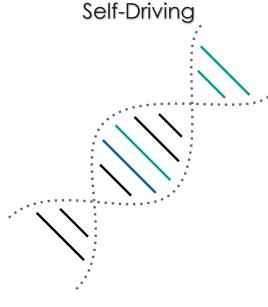
Real-time

#### Cognitive



- Time series for DS, AI & ML
- Predictive
- Prescriptive

Forward looking



- Closed-loop and continuous
- · Decisions operationalized
- Write-backs

**Autonomous** 

- Enterprise Data: Oracle, SAP, SFDC, JDE, Data Lakes, EDWs, etc.
- 3rd Party Data: Weather, Stocks, etc.
- IOT Data: Sensors, Instrumentation, etc.



#### Demo.





## Thank You!

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