# **Value Chain Optimization (VCO)**



### **Product Definition**





















Use Cases

Value Chain Optimization (VCO)

**Production Planning** 

Solutions (Products)

Platform

### **Native SaaS Platform**

#### **User Experience**

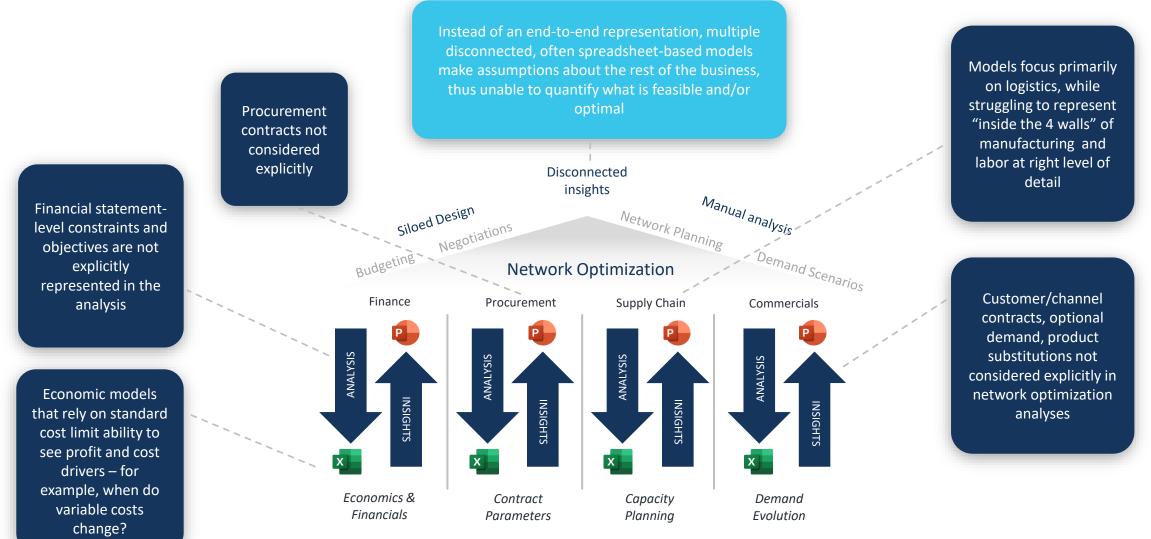
- Configurable dashboards, PowerBI, maps
- What-if scenarios, Monte-Carlo
- Rest API and cloud-based data integration
- Automation via Microsoft Power Automate
- SSO/Role-based access control
- Scalable, elastic infrastructure

#### Digital Planning Twin™

- End-to-end business representation
- Supports different business models: push/pull, ETO/MTO/MTS
- · Configurable level of detail
- Economic modeling tied to constraints
- GAAP/IFRS-compliant financial modeling



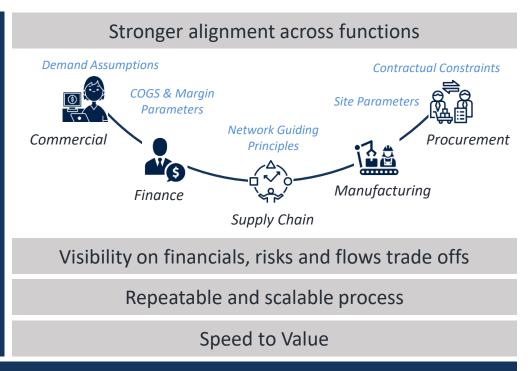
# The Underlying Causes of the Problem



### **Value Chain Optimization Solution**

Evaluate physical, commercial and financial factors to optimize different target functions through data-driven scenario analyses.

Stage	Scope	
Logistic Network Design	<ul> <li>Warehouse location/expansion/closure</li> <li>Inbound/outbound distribution flow-paths/policies</li> <li>NPI and channel evolution analyses</li> <li>Inventory and working capital requirements</li> </ul>	Impact
End-to-End Value Chain Optimization	<ul> <li>Manufacturing footprint, capacity planning, near vs. off-shoring</li> <li>Make vs. buy, production allocation, inventory planning</li> <li>Supplier contract negotiations, volume allocations</li> <li>Sustainability – CO2e objectives, constraints</li> </ul>	Business Im
Strategy & Financial Planning	<ul> <li>Product/customer profitability, customer segment priorities</li> <li>Financial forecasts, including transfer costs, roll-ups, taxes</li> <li>Financial constraints, Capex/Opex allocation, financial objectives</li> <li>Business Continuity Planning scenarios</li> </ul>	



### **Solution Approach**

### **Data Integration**

- Enterprise scale, bi-directional data integration via Azure Data Factory (ADF)
- Standard ADF connectors to SAP, Oracle, Snowflake, etc.
- Pre-configured data transformations and validations
- Data loading wizard

### **Digital Planning Twin™**

- Configurable, drag and drop mixed integer optimization modeling
- Extended value chain
- Integrated financial and Economic modeling
- Multi-time period and multi-objective

### Planning and decision-making

- Pre-defined workflow, alerts and visualizations
- Geolocation and distances calculation
- Multi-scenario analysis including soon to include Monte-Carlo optimizations
- Role-based permissions



## Value Chain Optimization Roadmap 2024 – Open Al

	Focus	Product Roadmap	Timeline*
Open Al Stage 1	Al <b>Assistant - Change</b> the way users can interact with EO+ across Use Cases using prompt-based natural language	<ul> <li>Data Modification + Job Submission</li> <li>Basic Decision Support</li> <li>Scenario Management + Auditing</li> <li>Querying &amp; Search</li> <li>Summarizing Results, Basic Analysis, Problem Diagnosis</li> </ul>	Q2-Q4 2024
Open Al Stage 2	Decision Support Al	<ul> <li>Scenario Interpretation + Analysis</li> <li>Scenario Differentiation + Comparison</li> <li>Strategic Simulations + Stochastic Evaluations</li> <li>Variable Optimization</li> </ul>	Q4 2024 onwards
Open Al Stage 3 * estimated tin	Modeling Copilot  Rules Engine Finetuned LLM  meline	<ul> <li>VCO Model Fine-tuning</li> <li>Advanced Solve Diagnostics, automated tunings and configurations</li> <li>Data Validation Rules Generation</li> <li>Data Transformation Script Generation</li> </ul>	2025 onwards