

Transforming **DEMAND MANAGEMENT**

for A Leading
Automotive
Manufacturer with

Agentic AI



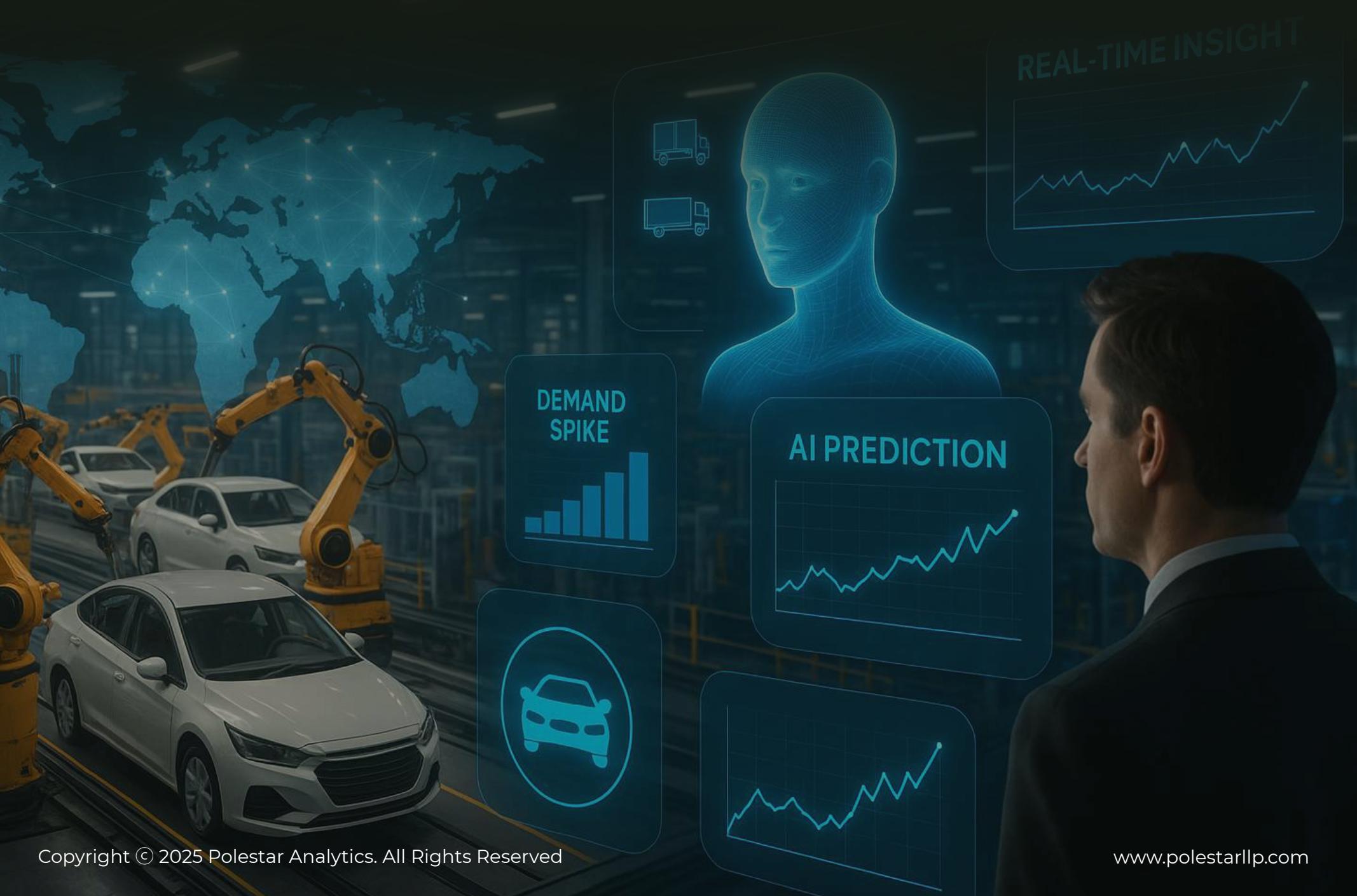
Client Overview

The client is a leading global automotive manufacturer, known for its vast supply chain network and a wide-reaching customer base. Despite its robust market position, the company came across complexities when it comes to managing sudden demand spikes.

With operations spread across numerous distribution centers and winding production lines, accessing real-time insights from the massive flow of data

across the company was becoming increasingly complex and time consuming.

To tackle this problem, the client teamed up with Polestar Analytics. By tapping into advanced Agentic AI abilities, they aimed to capitalize business users to make fast and more informed decisions — diminishing the dependence on IT teams and reducing the requirement for time-intensive manual interventions.



Key Challenges

1

Lack of real-time systems to flag demand spikes and inventory shortages.

Without real-time visibility, sudden demand spikes and inventory shortages went unnoticed until it was too late, leading to stockouts and production delays.

2

Inefficient coordination between inventory, logistics, and production teams.

Poor communication and disconnected workflows between teams often caused misaligned schedules, material shortages, and shipment delays.

3

Bottlenecks in approval workflows, causing slow response to market needs.

Slow and offline approval processes delayed critical decisions like production adjustments or supplier changes, limiting the client's ability to react quickly to market shifts.

4

Fragmented data sources slowing decision-making.

Data was spread across multiple systems without integration, forcing teams to manually piece together information, leading to slower, less informed decisions.

5

High operational costs due to poor production planning or last-moment expedited shipments.

Inaccurate planning and reactive measures often resulted in costly shipping and inefficient resource utilization, driving up operational expenses.



Solution Implemented

Polestar Analytics helped them to set up a connected system of AI agents, each putting focus on a disparate parts of the supply chain to keep things running in a smooth way.

Orchestrator Agent

When a large or unexpected order is received, it acted as the central coordinator. It assesses whether the order is potentially disruptive and seamlessly routes the necessary information to the appropriate agents to generate a solution plan.

Inventory Agent

It looked at the local stock to see if the order could be fulfilled immediately. If not, the Transportation Module stepped in to find nearby warehouses with available stock and suggested the best delivery options to minimize delays.

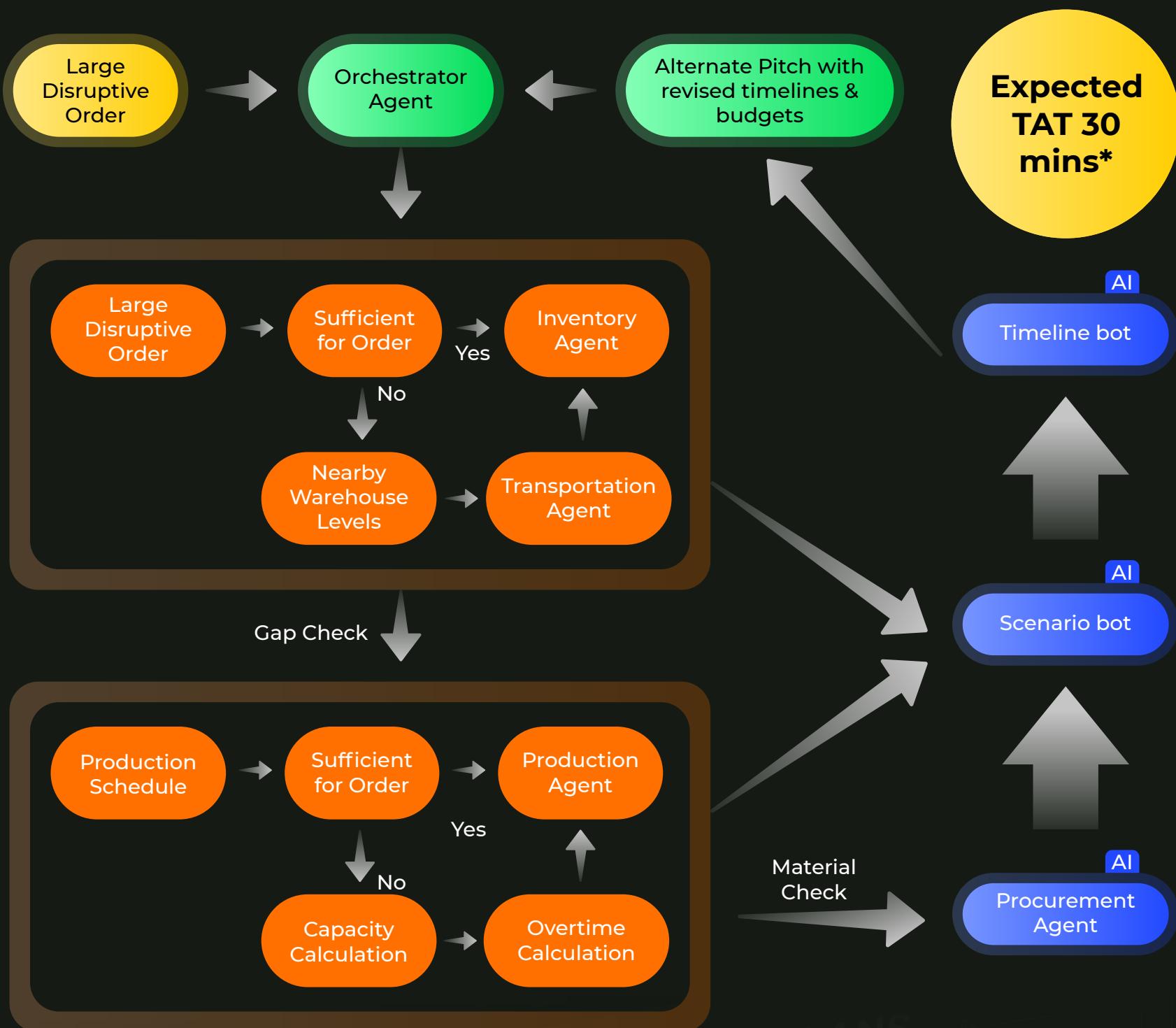
Production Agent

The Production Agent reviewed current production schedules to see if the new demand could fit in. If capacity was tight, the capacity and overtime calculation modules worked out how much adjustment like overtime or rescheduling would be needed.

Decision Support Agents

This consists of a group of AI Agents that helped with additional checks. The Procurement Agent confirmed if enough raw materials were available. The Scenario Bot created different options for fulfilling the order, showing what each option would cost and how long it would take. These options are then presented to an end user (decision-maker) as part of a Human-in-the-Loop workflow, enabling a final decision to be made with both speed and oversight.

Our Agentic AI Framework

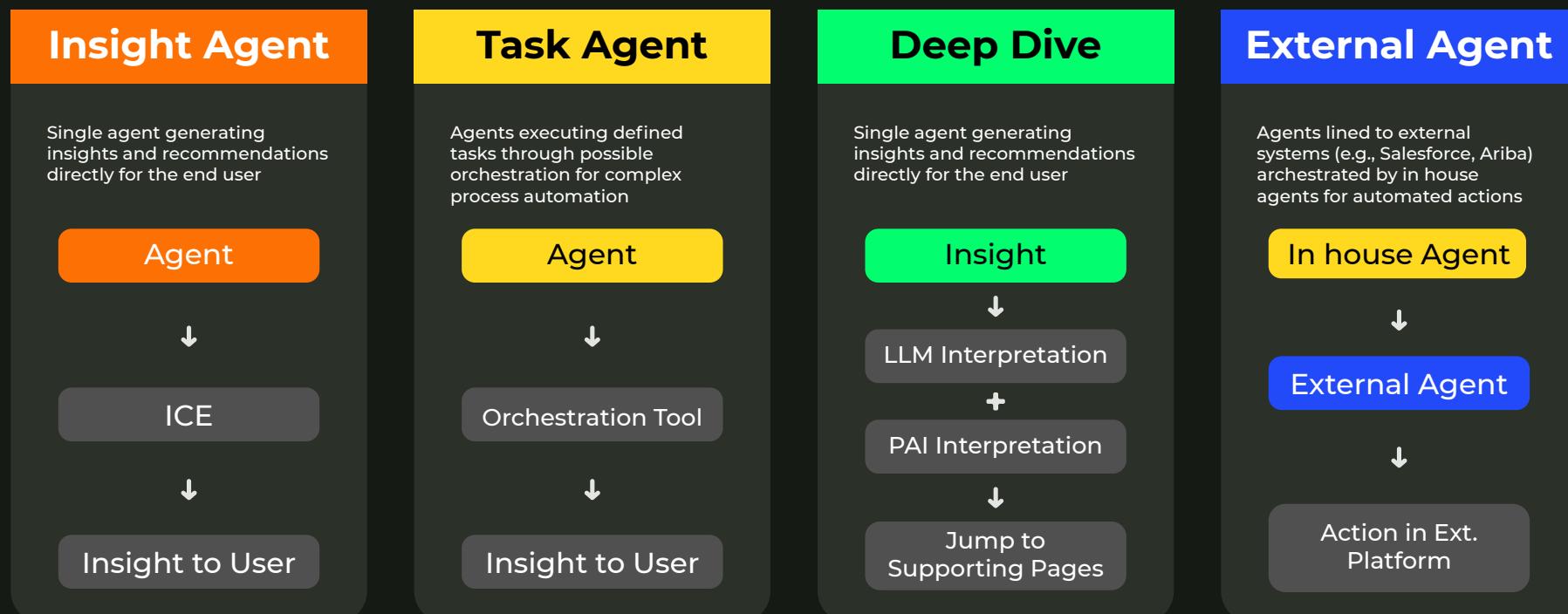


Throughout the process, human intervention remained integral. The system consistently presented alternate plans with revised budgets and schedules, enabling management to make informed, final decisions.

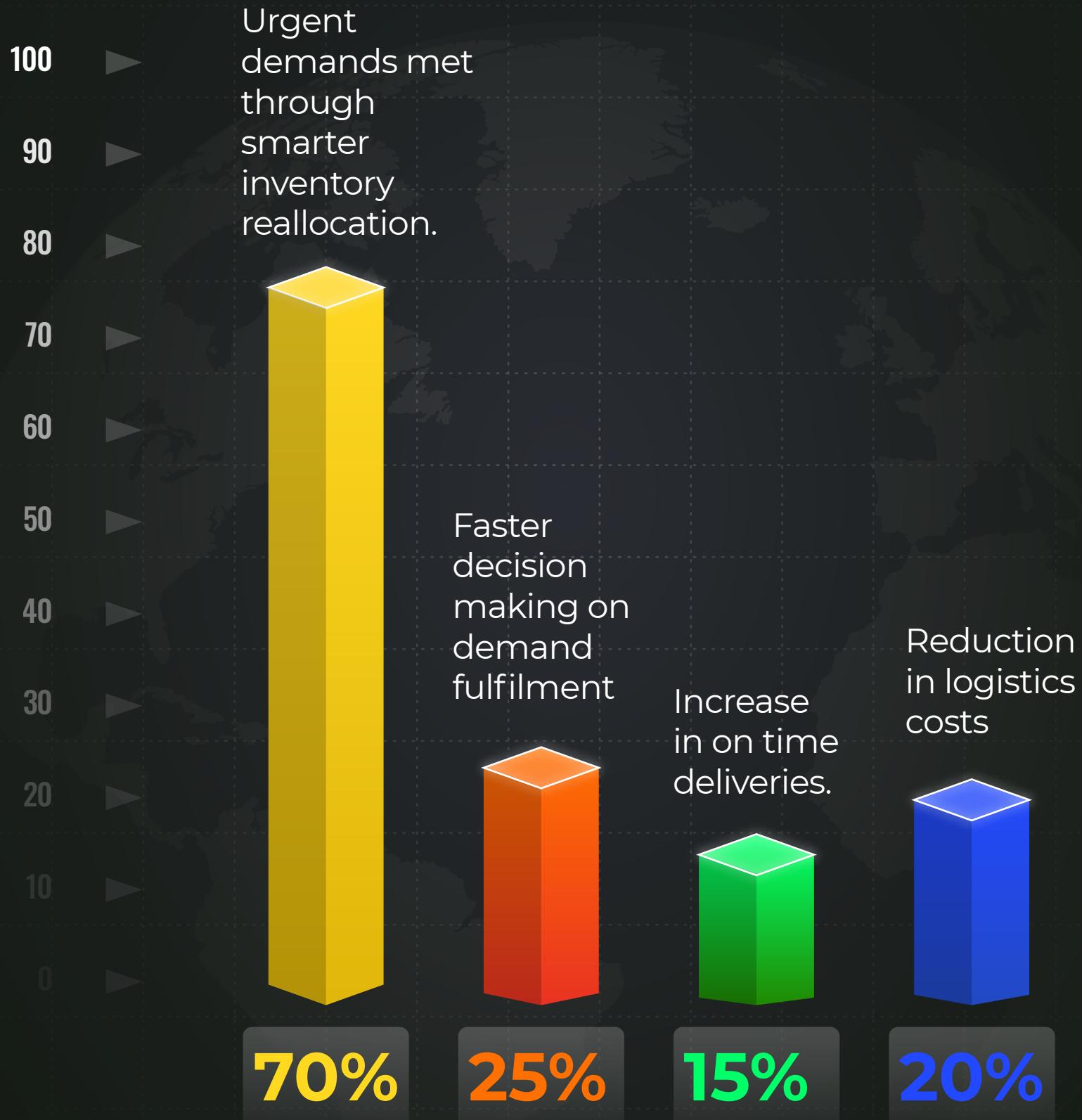
Agenthood AI:

The Technology Behind the Transformation

Using Agenthood AI's robust framework, we seamlessly integrated multiple intelligent agents—enabling one agent's output to drive the next stage of automation. Here's how we made it happen:



Business Impact



About Polestar Analytics

Polestar Analytics specializes in creating tailored data solutions for high-growth financial services companies. Our 1Platform technology combines enterprise-grade data management with the agility needed in today's regulatory environment. With a proven track record of successful implementations, we transform data challenges into competitive advantages.

