

Connect the Shop Floor to the Top Floor.
Bridge real-time manufacturing data to the enterprise for faster, smarter decisions.



The Digital Backbone for Smart Manufacturing

Sapience™ Manufacturing Hub enterprise (MHe) is a cloud-native **enterprise integration platform** that standardizes manufacturing data and **connects factory systems to ERP** in real time, enabling accurate costing, traceability, visibility, and faster financial and operational decisions.

Problem with Status Quo

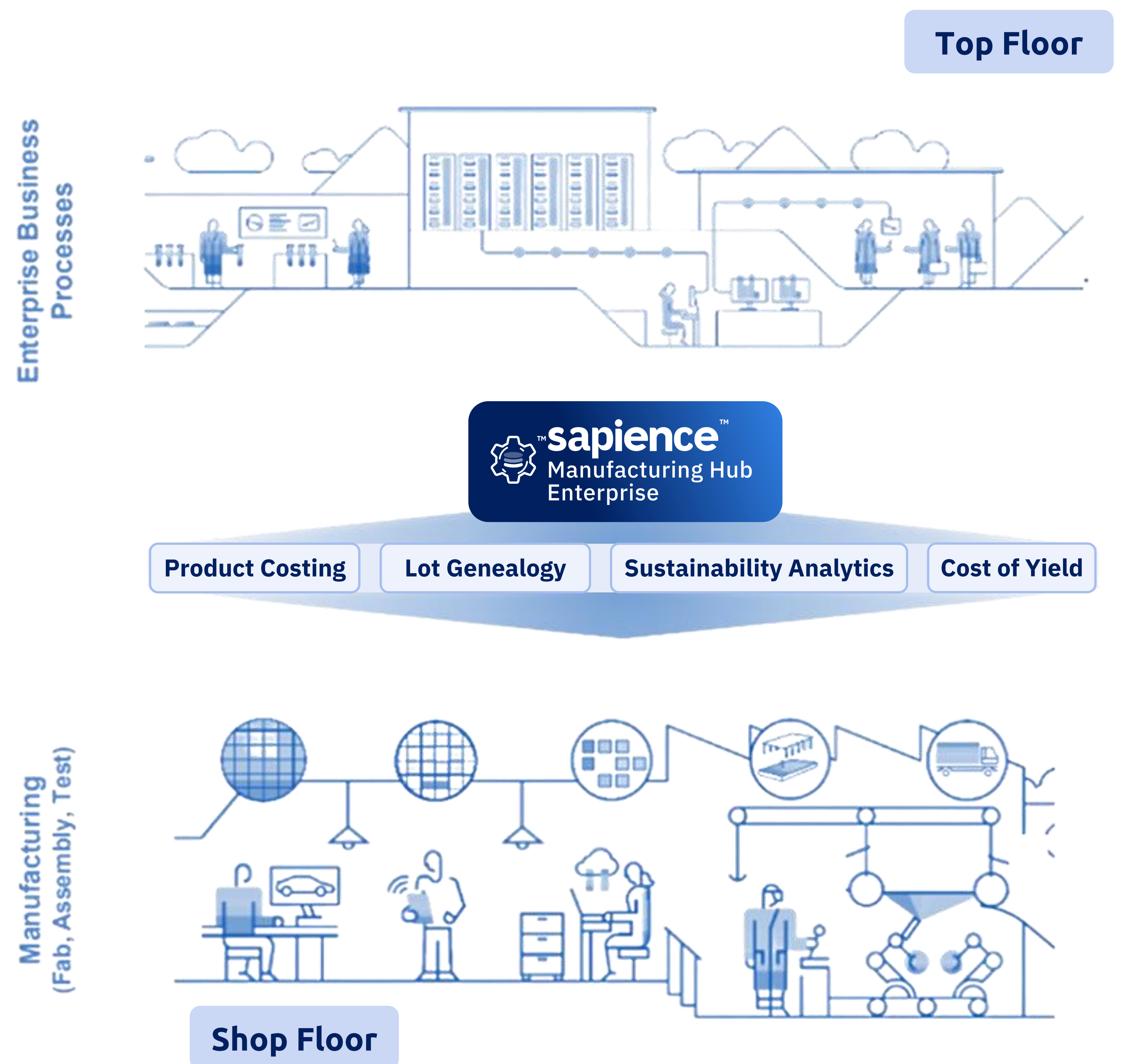
ERP systems capture only a **summarized view of manufacturing**. Critical data remains **fragmented** across MES, equipment, and test systems, **delaying financial insight, obscuring true costs, and limiting timely operational decisions**.

Solution Highlights

- Real-time product costing from actual usage
- End-to-end WIP, yield, and order visibility
- Shop-floor data to enterprise systems instantly

Components

- Connectivity Layer**
Connects MES, tools, ERP, and devices across fabs via standard APIs.
- Transformation Layer**
Automates data flows and milestones with built-in monitoring and error handling.
- Orchestration Layer**
Standardizes and aggregates manufacturing data into enterprise-ready formats.
- Data Storage Layer**
Scalable store for streaming, historical, and traceable manufacturing data.

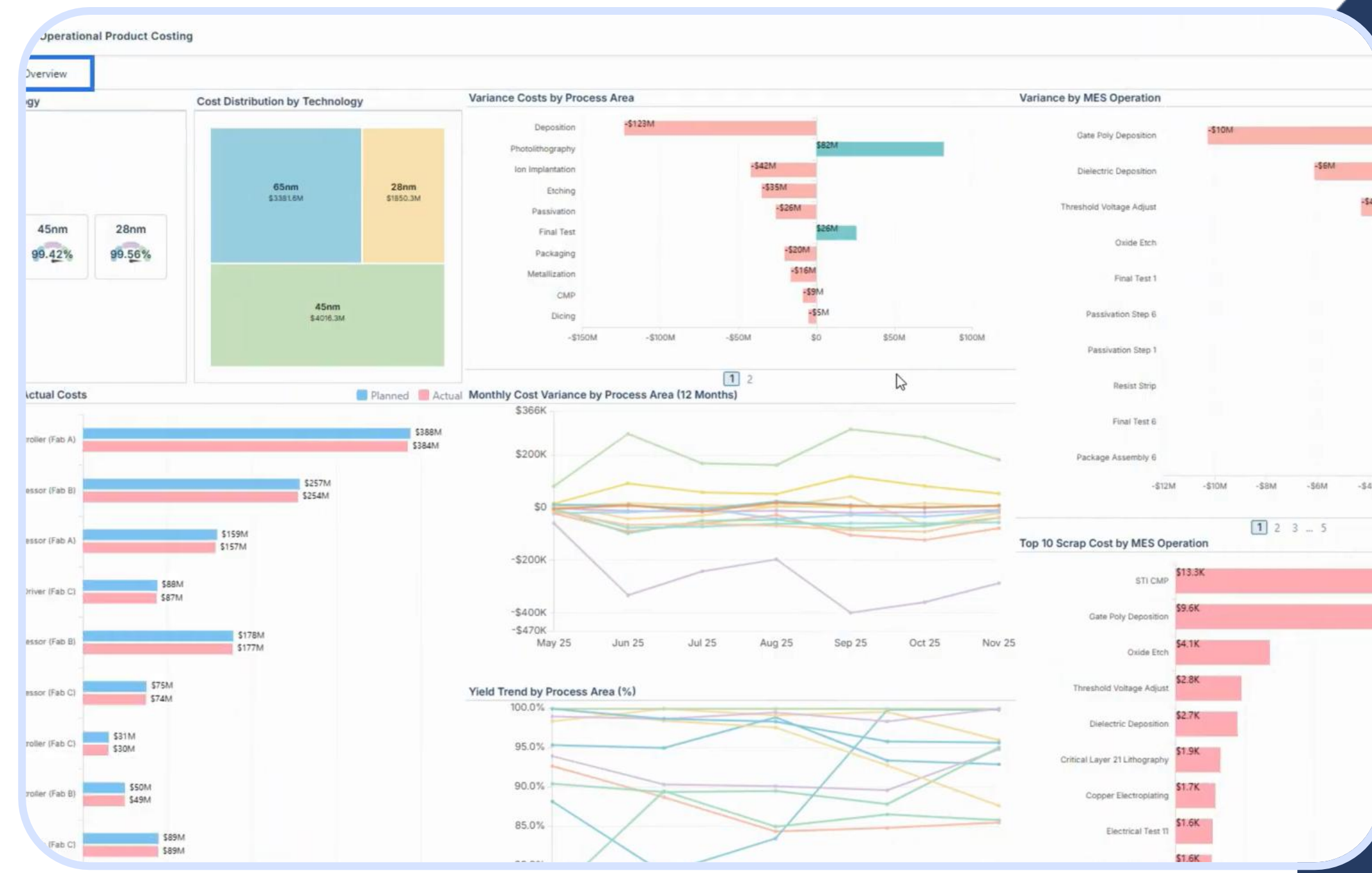


Use Cases

Real-Time Operational Costing

A semiconductor manufacturer used Sapience MHe to **stream real-time MES data into SAP**, calculating **product cost** based on actual equipment usage, yield, and material consumption.

Finance and operations gained **live cost and profitability insights** across lots and stages.



Challenge

Product costs were **averaged** across months, hiding true margins and the impact of yield loss and rework.



Result

Accurate, real-time product costing improved **margin visibility and profitability by 1–2%**.



Challenge

Limited traceability slowed root-cause analysis and **increased the cost** of quality incidents.



Result

Lot traceability **efficiency improved by 20–40%**, reducing quality risk and customer impact.

Lot Genealogy & Quality Control

Sapience MHe **unified shop-floor and enterprise data** to provide **complete lot genealogy** across fabs, assembly, and test.

Teams **traced defects** to source processes and quickly contained at-risk material before shipment.

1-2%

Margin/Profitability Improvement
from accurate operational costing

results based on typical Sapience MHe customers

20-40%

Efficiency Gains
in lot genealogy and traceability

70-80%

Cost Reduction
in MES-ERP interface maintenance costs

Our Partners



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