SKU Costing Analytics Use Case

True profitability analysis integrating MES, historian, and ERP data to replace standard costing assumptions.
Industry: Food Manufacturing

Quick Facts

Attribute	Value
ERP	Microsoft D365 (Cloud)
MES	GE Plant Applications
Historian	GE Proficy Historian
Front End	FrameworX dashboards (costing analysis)
PLCs	Rockwell Automation
Scope	Cost modeling based on years of historical production data
Impact	10-12% bottom line improvement

The Challenge

Challenge: ERP system used standard costing models with assumptions that varied up to 50% from reality. With sales demand exceeding capacity, management needed to decide which orders to accept or decline, but ERP data couldn't reliably show true profitability by SKU.

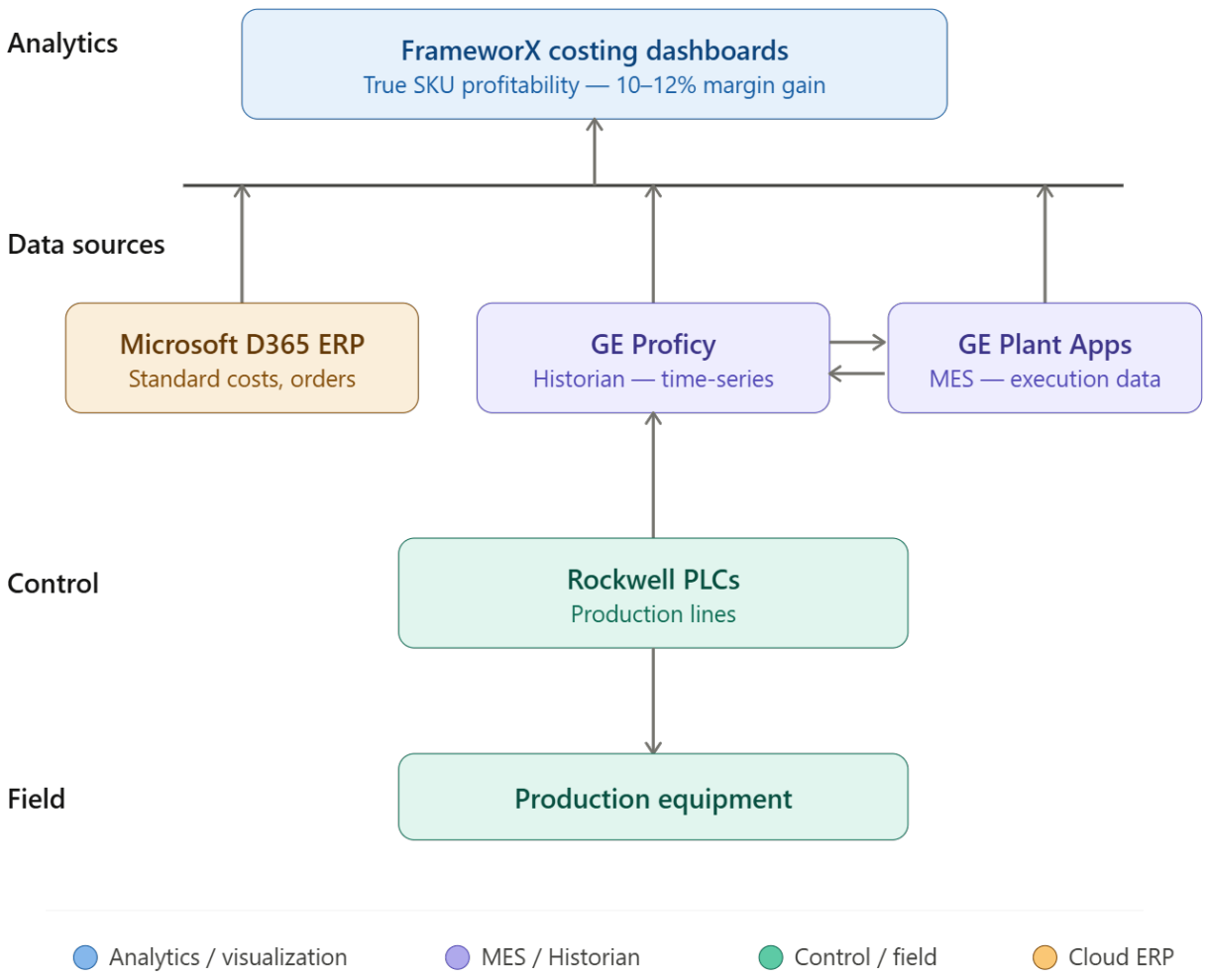
Specific pain points:

- Standard costing assumptions varied up to 50% from actual costs
- Sales demand exceeded production capacity
- No reliable data to prioritize which orders to accept or decline
- Some SKUs and customers appeared profitable but actually lost money
- ERP costing didn't account for real production factors

Impact: Without true cost visibility, company was accepting low-margin or money-losing orders while potentially declining profitable ones.

The Solution

Architecture



Tier	Component	Capabilities
ERP	Microsoft D365 (Cloud)	Standard costing, orders
MES	GE Plant Applications	Production execution data
Historian	GE Proficy Historian	Time-series production metrics
Analytics	FrameworX Dashboards	True SKU profitability visualization
Control	Rockwell PLCs	Production lines

Data Integrated for True Costing

Data Category	Source
Raw material consumption	MES/Historian
Packaging usage	MES
Changeover times	Historian/OEE
Waste and rework	MES
OEE and production states	Historian

Standard costs	ERP

Costing Intelligence

- Actual cost per SKU calculated from real production data
- Years of historical production data modeled
- Visualization enables sales and operations decisions based on actual margins

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Key Enablers

FrameworX capabilities that made this solution possible:

Capability	Application
Real-time Integration	Production metrics combined with ERP costing
Costing Dashboards	Visualize true SKU profitability
Flexible Data Model	Grows as more production metrics are tracked
Historical Analysis	Years of production data for accurate modeling

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The Results

- **Exposed Hidden Losses** — Identified SKUs and customers that appeared profitable but actually lost money
- **Prioritized High-Margin Orders** — Enabled sales to prioritize profitable orders during capacity constraints
- **10-12% Bottom Line Improvement** — Simply by shedding low-margin products
- **Sales Negotiation Tools** — Provided sales and marketing with real cost data for customer negotiations

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This case demonstrates production costing analytics replacing ERP standard assumptions with actual MES and historian data for true SKU profitability.

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