

Harnessing data to fuel continuous improvement in the packaging industry

The data imperative

As the packaging industry prepares to enter the next decade, survival could hinge on the ability to harvest insights from an ever-increasing deluge of data.

Several key structural changes are driving this data imperative:

- The global packaging market continues to grow. It is expected to reach US\$ 1 trillion by 2022.¹
- Regulations and consumer awareness are forcing packaging manufacturers to focus on sustainability. Fifty-seven percent of packaging executives cited sustainability as the top trend for the packaging industry.²
- Customers are demanding more packaging customization, particularly e-Commerce. Personalized packaging market expected to reach \$36B by 2024.³

Packaging manufacturers are facing fierce competition and rising raw material and energy costs, reducing margins.

To significantly boost manufacturing productivity and competitiveness in a time of dramatic structural upheaval, packaging manufacturers need to take a different approach.

1. PIRA Report on Global Packaging, 2017
2. Packaging Strategies "The Power of Packaging: 2018 State of Industry Report"
3. Zion Market Research

Real-time, System-wide visibility

The next level of continuous improvement in the packaging industry will be driven by data —, or, more specifically, by packaging manufacturers' ability to use all of their data, regardless of its format or where it was created.

Unfortunately, industry players often struggle to make this happen. Like their counterparts in many other industries, packaging manufacturers typically generate a flood of production data — but only a trickle of insight. Data from multiple sources isn't integrated, so there is no scalable way to understand the real-time interrelationships between machine data and production events. In addition, because information isn't shared across functional boundaries, there is no ability to drive cross-plant optimization and continuous improvement.

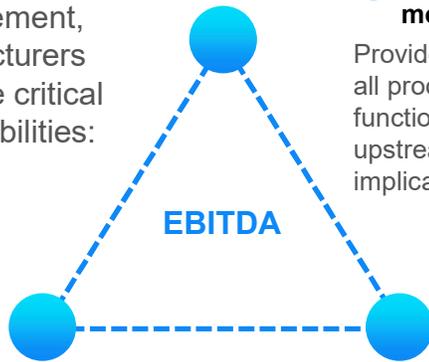


3 essential data capabilities enable continuous improvement

To reach the next level of continuous improvement, packaging manufacturers must possess three critical data-handling capabilities:

2 Real-time streaming

Enables informed decisions on current production activity



1 System-wide models

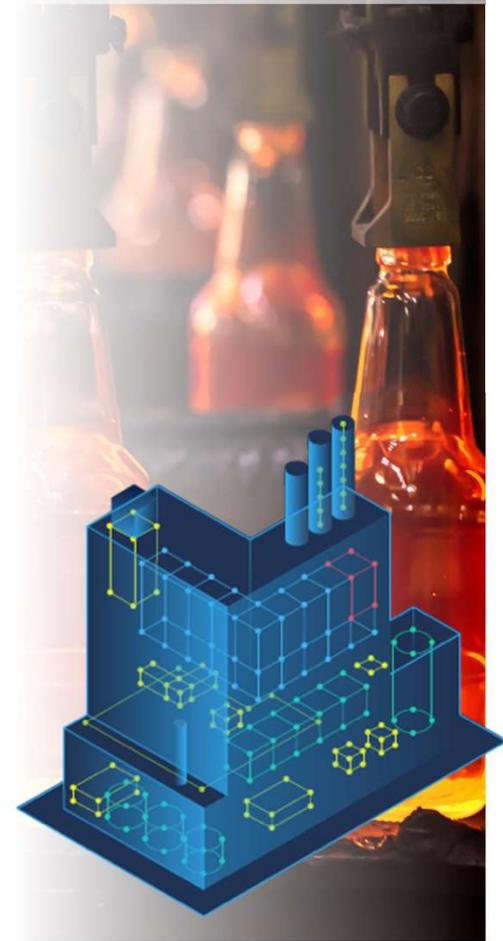
Provides an integrated view of all processes, assets, functions, and plants, including upstream and downstream implications

3 Digital manufacturing expertise

Ensures production operations can work with data, end-to-end

The Sight Machine platform offers all three capabilities:

- **First, it collects data** from across an entire packaging company — from the raw materials to the converting plant.
- That information is then **assembled, contextualized, and leveraged** to present a single source of truth for the entire organization.
- Finally, the data is **modeled** into a “digital twin” that mirrors the complete production process, transforming data into actionable intelligence to solve previously intractable problems.



Case Study

Global packaging manufacturer improves throughput by empowering managers with data

A leading packaging manufacturer, while highly optimized and data savvy, was challenged with reporting, analysis, and operations monitoring that was highly fragmented and analog.

Sight Machine automated the process of integrating machine, downtime, and quality data to create a system-wide model of the entire line. The platform transformed operations by providing real-time visibility into KPIs and enabling rapid process improvement analysis.

They were able to improve throughput, generate more revenue, and reduce the cost per unit of output.

Bottom-line impact: improved productivity, lower costs

By using Sight Machine to leverage data across the entire company, packaging manufacturers can maximize the value they derive from their aging assets, while minimizing the unit cost of production.

These lower unit costs will help manufacturers absorb rising raw material costs and more aggressively pursue production of premium-priced niche items — using current automation capabilities and data that already exists. Continuous improvement has never been easier.

To learn more about how packaging manufacturers are improving production with system-wide data visibility, visit

sightmachine.com/solutions/packaging/