

SOLUTION SHEET

Meeting customer commitments

Improve the reliability of your value chain to ensure operational plan delivery, improve customer satisfaction, and maintain a sustainable business.

The reliability of operational plans depends on predictable availability of assets, resources, and materials. It also relies on minimizing unforeseen change and measuring the impact of external disruption to the production schedule and execution.

Supply chain disruptions and increasingly volatile markets challenge manufacturing companies to meet customer obligations while remaining profitable.

AVEVA's value chain optimization approach minimizes disruption and maximizes value chain profitability with integrated production planning, scheduling, and execution capabilities. Edge to enterprise visibility in the cloud enables collaboration across operational planning, supply chain management, and plant execution teams, and provides a complete software portfolio to continuously improve asset and operations reliability and profitability.

Challenge: Meet customer obligations despite external and internal disruption and dynamic markets

Value chain reliability is based on predictable production asset reliability and operational efficiency reliability, while sales, operational planning, and supply chain management enable the development and execution of feasible production plans.

The challenge arises when operational planning, supply chain management, and production operations act in isolation. Planning decisions based on forecasts might not meet future demand, and reality can deviate from assumed operational capacity.

Another risk is that corrective action to realign production execution with demand, supply, and inventory availability can cause disruptions to production schedules and daily operations.

These disruptions result in waste or loss to production downtime or rework, which may lead to delayed shipments. Additional costs such as overtime pay, demurrage or expedited fees can further result in lost revenue and customer trust.

Only one in five (20%) consumer industry firms believe that their demand planning is currently effective in dealing with the challenges of COVID-19

Annual productivity growth has slowed or gone into reverse after 2012
COVID-19 will likely compound the erosion

Most companies are still in the early stages of their efforts to connect the entire value chain with seamless dataflow

Solution: Value Chain Optimization

From long term planning to real-time production optimization, the opportunity to have impact across the value chain is significant. AVEVA helps ensure reliable operations and closes the collaboration gap to find the best utilization for your assets, supplies, and resources. Value chain optimization solutions from AVEVA integrate production planning, scheduling, and execution across a digital platform that connects people and systems from edge to enterprise. We help you redefine processes, enable deeper collaboration, reduce value leaks, and ultimately make better and more robust planning and execution decisions to reliably deliver your plan in time, in full.

Understand inter-dependencies by unlocking siloed data and gain new asset reliability, profitability, and eco sustainability insights. AVEVA cloud and digital twin technologies deploy consistent KPI and reporting standards across your organization, supported by the collection and centralization of data that feeds predictive analytics and machine learning.

Advanced analytics and artificial intelligence allow you to explore more complex data relationships to identify improvement opportunities and optimal operating conditions.

AVEVA helps businesses exceed operational goals by reducing refining costs by up to \$0.70/barrel for energy companies or improving productivity by 20% in Food & Beverage (F&B) or Consumer Packaged Goods (CPG) processing plants. We work with over 400 refinery/ petrochemical sites around the world, over 100 mining and metals sites, and over 900 Food and Beverage and Consumer Packaged Goods manufacturing sites worldwide.

AVEVA helps organizations in any industry optimize value chains by:

- Reducing unplanned downtime by 25%
- Improving on-specification quality compliance by 20%
- Increasing productivity and throughput by 5-10%

Customer Success Stories

Manufacturing Customer Case Study New Belgium Brewing Co. optimized their brewery to operate at full production capacity

Producing some of the world's most popular craft brews, New Belgium Brewing Co. was looking to implement a software strategy for greater visibility and understanding of actual production capacity for predictable order fulfillment. The AVEVA based solution helped identify the source and the quantity of scheduled and unscheduled downtime events and decreased downtime by more than 50%, increased efficiency of scheduled run time by 25% - 30%, and increased OEE from 45% to 65% in just over two years.

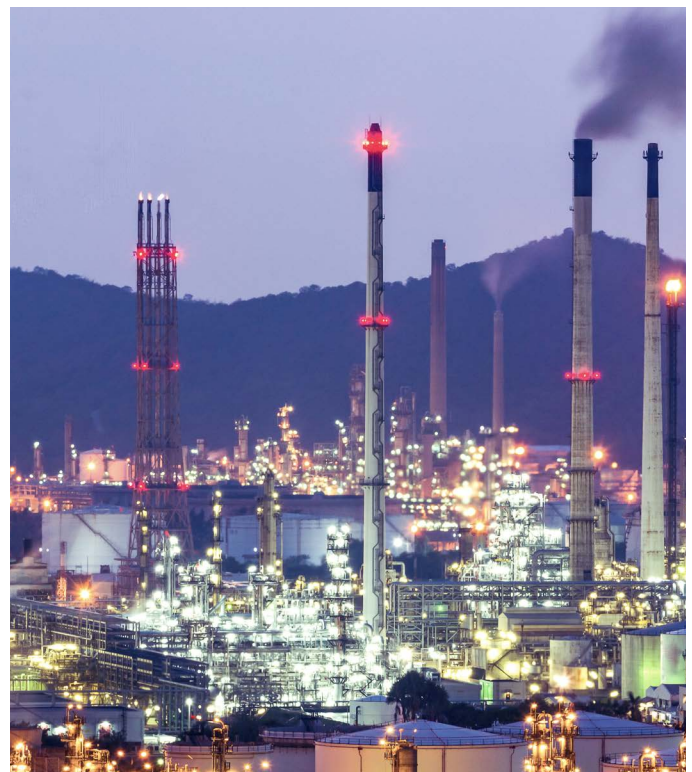
The brewery achieved record production, producing 190,000 to 200,000 cases consistently, and successfully meeting customer demands. Taking advantage of the full capabilities of existing resources at the plant enabled the executive management team to delay funding of additional capital investments, reduce overhead, and make new commitments.



Refining Customer Case Study Astron Energy transforms crude assay management process and reduces assay creation time by 50%

Astron Energy, a leading independent refiner in South Africa, re-architected its crude assay management process in three months to take over crude analysis and assay database maintenance previously managed by its super major parent company. AVEVA Unified Supply Chain enabled Enterprise Crude Knowledge Management to streamline crude analysis and develop new workflows for improved collaboration across diverse teams in the cloud.

Astron Energy unlocked competitive advantage and maximized profitability by deploying a single application for crude oil evaluation, tracking cargo quality and variability, exploring potential blends, and accurately characterizing the oil crude feed to the refinery, allowing Astron Energy to meet customer expectations.



How AVEVA can help

Boost operational reliability and sustainability across the business with integrated planning, scheduling, and execution that links information and artificial intelligence (AI) with human insight to enable faster and more precise decision making.

AVEVA's cloud-enabled operational data management solutions include software that spans design, engineering and operations, asset performance, and monitoring and control solutions to deliver proven business value to over 20,000 customers, 5,500 partners and 5,700 certified developers.

Software offerings to optimize value chain and operational reliability

| For Manufacturing Industries: F&B, CPG, Specialty Chemicals and Discrete Manufacturing | For Continuous Process Industries: O&G, Mining, and Power |
|---|---|
| AVEVA Manufacturing Execution System: Maximize profitability, flexibility, quality, and compliance in manufacturing by digitally managing rules and information for all operational activities in real-time. | AVEVA Unified Supply Chain: Ensures security and visibility of supply chain knowledge, with simple, consistent access to data and easy integration to external business systems. |
| AVEVA Discrete Lean Management: Improve your operational effectiveness by measuring, visualizing, and analyzing your manufacturing performance with proven lean management practices. | AVEVA Process Optimization: Uses first-principle simulation models and process data to sharpen plant performance and profits. |
| Advanced Planning and Scheduling: Flexible, Multi-Factor Optimization to improve on-time delivery and increase production plan visibility. | AVEVA APC: Extracts maximum value from your processes by reducing control fluctuations. |
| AVEVA Insight: Actionable information and Artificial Intelligence capabilities to help teams improve asset reliability and operational performance. | AVEVA Offsites Management: Provides accurate, reliable, and accessible inventory and movement information, movement automation, and off-line/on-line multi-blend optimization. |
| AVEVA Batch Management: Flexible batch operations with reliable quality and optimal asset utilization. | AVEVA Refinery Reactor Models: Used rigorous kinetic models to optimize the operation of the reactor units. |
| AVEVA APC: Extracts maximum value from your processes by reducing control fluctuations. | AVEVA Production Accounting: Addresses unaccounted losses for refineries, petrochemical plants, and other processing facilities. |

For more information on how AVEVA helps optimize your value chain for manufacturing and process industries, visit [AVEVA Value chain Optimization](#)

To talk with one of our experts please [contact us](#)



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