



IX® Case Study
Unlocking Value Through Asset Integrity Management



IMPLEMENTATION
ENGINEERS
BEYOND CONSULTING

A large industrial facility, likely a chemical plant, with numerous tall distillation columns, pipes, and storage tanks. The scene is brightly lit, possibly during sunrise or sunset, with a warm glow. Two callout boxes are overlaid on the image: a dark blue one on the left and a grey one on the right.

18%

increase in
throughput

\$6.8M

annual P&L
benefit

A \$1B specialty chemical company grappled with chronic asset availability issues, stemming from repeat equipment failures, inadequate maintenance practices, and insufficient turnaround planning. Critical machinery suffered from poor design and testing, exacerbated by the absence of preventive maintenance and standardized processes. With product demand consistently exceeding supply, unplanned downtime translated directly into lost production and shrinking margins. Local teams were bogged down in reactive repairs, leaving no capacity for strategic planning or skill development, while global support and capital investments lagged. The stakes were high: low uptime threatened both profitability and market share.

The Solution

Implementation Engineers delivered an Asset Integrity Management (AIM) program as part of a holistic operations and supply chain optimization effort. Our multidisciplinary approach tackled root causes and built a foundation for sustained performance:

- **Asset Reliability Overhaul:** We conducted consequence classification across all operating units and developed tailored preventive maintenance (PM) programs for critical assets. Using SAP PM, we standardized planning, scheduling, and failure reporting, ensuring data-driven decisions and accountability.
- **Turnaround Management Transformation:** We optimized turnaround processes with structured pre-planning (e.g., 8-week cadence meetings), daily short-interval controls, and post-event reviews. This reduced downtime duration and improved execution precision.

- **Root Cause Analysis (RCA) Reinforcement:** We enhanced RCA with a 5-Why program for unscheduled breakdowns, targeting “bad actors” and implementing corrective actions to prevent recurrence—boosting mean time between failures (MTBF).
- **Capital Investment Prioritization:** Collaborating with technical teams, we identified and launched high-ROI CAPEX projects to address systemic asset weaknesses, aligning investments with long-term reliability goals.
- **Workforce Enablement:** Through training, process audits, and ongoing coaching, we shifted teams from fire-fighting to proactive execution, embedding a culture of ownership and continuous improvement.

Our IE Maturity Pyramid guided a full maintenance analysis, aligning global best practices with site-specific realities to create a scalable, resilient framework.

The Results



- **18% Increase in Throughput:** Enhanced asset uptime unlocked production capacity, enabling the company to meet sold-out demand and capture market opportunities



- **\$6.8M Annual P&L Impact:** Savings from reduced downtime, lower maintenance costs, and streamlined operations delivered a significant financial uplift



- **Operational Shift:** Teams moved from reactive repairs to planned work, freeing up 20% more time for training and role development, strengthening organizational capability

A targeted AIM program can turn operational liabilities into profit drivers. The 18% throughput gain and \$6.8M P&L boost reflect the power of integrating reliability engineering, turnaround efficiency, and workforce empowerment. Implementation Engineers doesn't just fix problems—we reengineer systems for resilience, profitability, and growth. Whether you're battling downtime or seeking a competitive edge, our proven approach delivers measurable impact at scale.

Next Steps

- > Schedule a meeting with our team to discuss how Implementation Execution (IX®) can help your organization achieve its goals. Submit an IX® request on our website at www.implementation.com
- > Visit www.implementation.com to read more about IX® and how we have helped our clients create sustainable results
- > Follow us on LinkedIn to stay up to date with the latest industry insights and updates. Join our network to access exclusive content and stay connected with our team of experts

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