

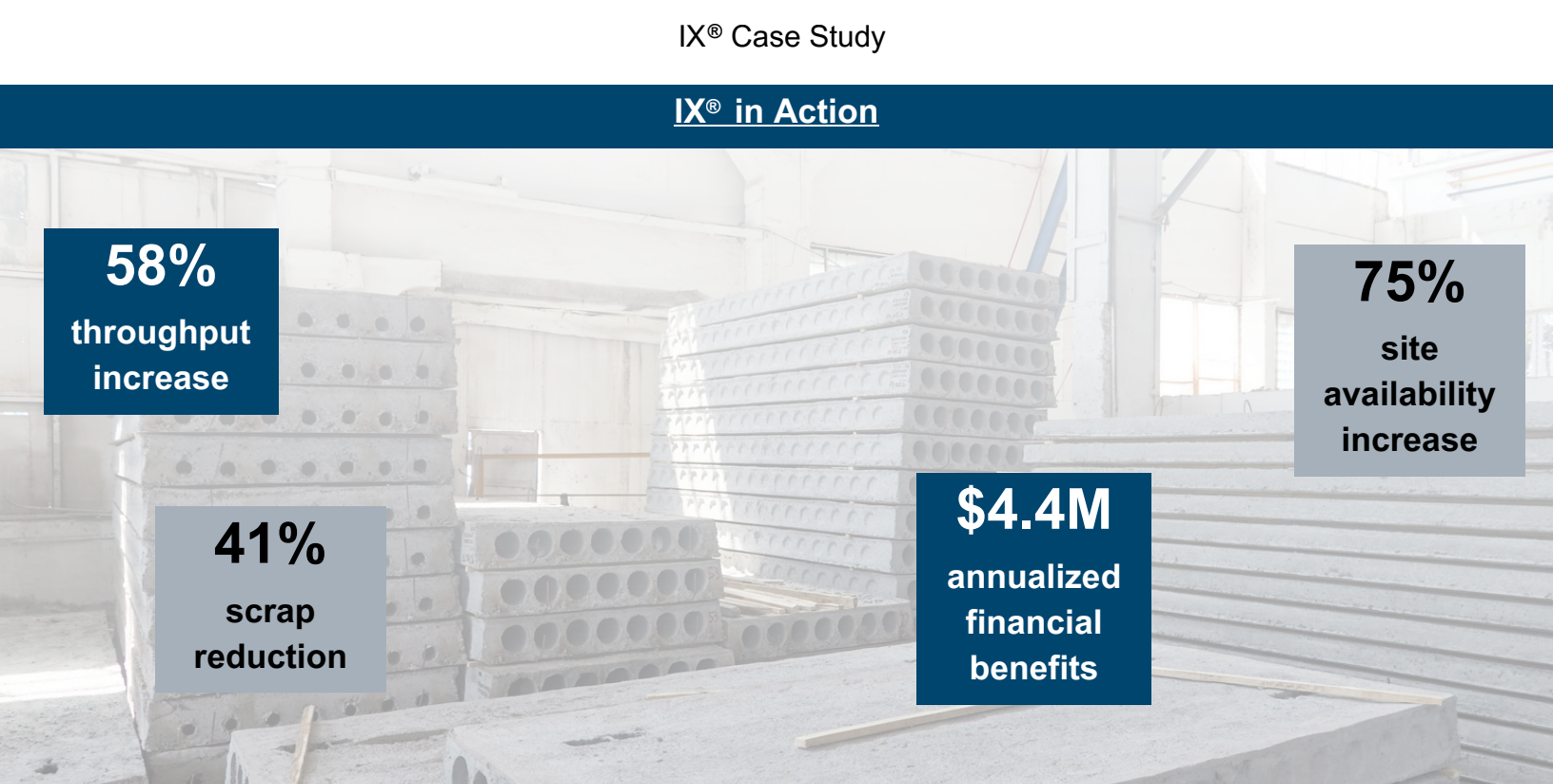


IMPLEMENTATION
ENGINEERS®
BEYOND CONSULTING

IX® Case Study

Transforming Building Materials Operations for Lasting Impact: A Case Study in Strategic Execution



**58%**throughput
increase**75%**site
availability
increase**41%**scrap
reduction**\$4.4M**annualized
financial
benefits

The Partner: A Global Building Solutions Leader

A U.S. division of a premier engineered building-solutions company specializing in concrete enclosures faced critical operational challenges. Low throughput, unstable processes, and quality issues led to long lead times, late deliveries, and a \$500K overdue backlog, undermining customer confidence and profitability.

The Challenge: Systemic Constraints Threatening Growth

The plant struggled to meet rising demand due to:

- **Inefficient Operations:** Inconsistent processes and non-value activities limited output far below the target.
- **Quality Gaps:** High scrap rates (casting/assembly and wet-mix processes) drove costs and delays.
- **Supply Chain Bottlenecks:** Inaccurate inventory and poor scheduling extended lead times and disrupted on-time delivery (OTD).
- **Maintenance Shortfalls:** Reactive maintenance practices reduced asset reliability and mold availability.
- **Management Misalignment:** Lack of standardized systems hindered accountability and performance tracking.

The company needed a partner to deliver a holistic transformation, not just recommendations.

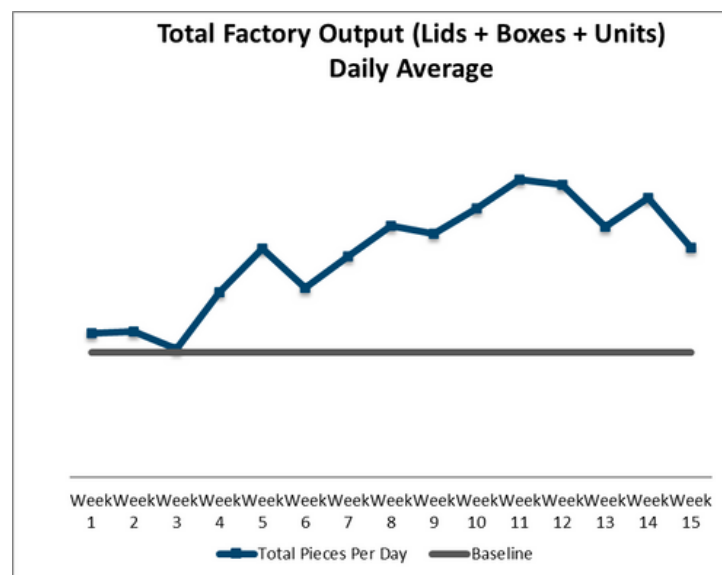
A Holistic Overhaul

As the client's strategic implementation partner, IE led a comprehensive, end-to-end transformation using our Align-Design-Execute framework. We embedded experts with plant leadership and frontline teams to co-create and deploy solutions, ensuring seamless integration across functions. The program featured overlapping sprints for rapid progress, weekly working-committee reviews for real-time adjustments, and monthly steering sessions for executive alignment. The initiative targeted five interconnected workstreams, driving systemic change in operations, quality, supply chain, maintenance, and management:

1. Production Optimization

Goal: Elevate daily output while locking in stable processes and 6S standards.

IE's Execution: Collaborated with operators to establish and control key process parameters, stabilizing cycle times and flow. Streamlined workflows by eliminating non-value activities and enhancing line balance. Built and replicated model 6S cells facility-wide, with targeted interventions to reduce scrap in casting and assembly—unlocking hidden capacity through hands-on implementation.



2. Production Support / Quality

Goal: Reduce casting/assembly scrap by 40% and wet-mix (process) scrap by 30%, while embedding source-control quality for proactive defect prevention.

IE's Execution: Partnered with quality teams to deploy boundary samples, visual aids, and containment checks at critical casting points. Standardized catalyst controls to minimize curing variability, introduced a streamlined defect decision workflow with rapid escalation protocols, and formalized customer complaint handling through root-cause analysis. Co-wrote and rolled out a comprehensive Quality Manual, integrating quality management system (QMS) behaviors to foster a culture of continuous improvement.

3. Supply Chain

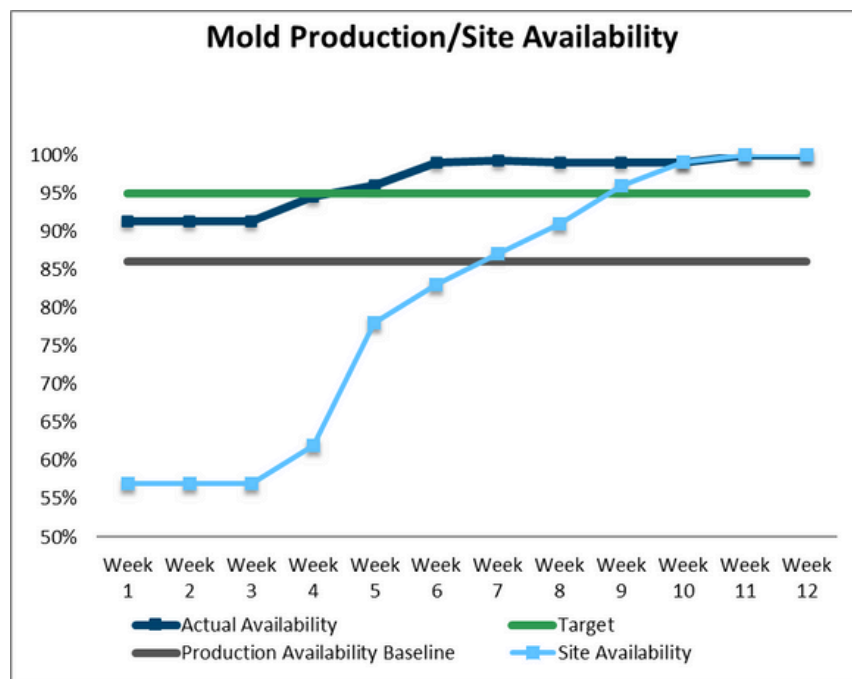
Goal: Attain 90% SKU-level inventory accuracy, minimize reschedules, and optimize days-on-hand to shorten lead times and elevate on-time delivery (OTD).

IE's Execution: Led a full physical inventory audit and launched a sustainable cycle-count program. Developed a Plan for Every Part (PFEP) alongside raw-material replenishment rules, implemented make-to-stock (MTS)/make-to-order (MTO) segmentation with pull signals for high-volume boxes and lids, and standardized scheduling processes fully integrated with Sales, Inventory, and Operations Planning (SIOP)—delivering resilient supply chain foundations.

4. Maintenance

Goal: Establish a robust Maintenance Management Operating System (MOS) to boost asset reliability, mold availability, and technician utilization.

IE's Execution: Embedded with maintenance crews to implement mold identification and tracking, plus downtime coding for precise loss targeting. Defined operator care standards and clear handoffs between operations and maintenance to reduce reactive work. Created an asset register with criticality rankings, followed by tailored preventive maintenance (PM) strategies for critical equipment. Configured and optimized the CMMS (FIXX) platform, while introducing high-performance management (HPM) routines to embed discipline and accountability.



5. Management Operating System

Goal: Deploy a best-practice management system to align leadership behaviors, meetings, metrics, and tools with site performance targets.

IE's Execution: Coached supervisors on essential tools like Leader Standard Work and Gemba walks, cascading KPIs through enhanced daily/weekly reporting and visual tier boards (from "crane to site"). Restructured site meetings into efficient "mini-flow" formats with defined inputs/outputs, and institutionalized a formal problem-solving process under strong governance—ensuring teams stay connected to outcomes and issues are resolved at the source.

The Impact: Measurable, Sustainable Results

The transformation delivered plant-wide outcomes that redefined operational excellence:

- **Throughput: +58%**, unlocking capacity to meet demand and absorb variability.
- **On-Time Delivery: +44%**, restoring customer confidence and reducing expedites.
- **Financials: \$4.4M** annualized savings from throughput gains and scrap reduction.
- **Backlog: \$500K** overdue backlog cleared in just 4 weeks.
- **Quality: 41%** reduction in daily scrapped pieces via standardized checks and root-cause closure.
- **Reliability: 75%** site availability increase through maintenance system overhaul.
- **Sustainability:** HPM infrastructure (KPIs, tier meetings, Leader Standard Work) aligned behaviors to targets, with a replication plan for ongoing success.

IE doesn't just advise—we deliver. Our hands-on approach aligns leaders, executes solutions, and embeds systems that drive compounding results. By partnering with your teams, we ensure transformations stick, delivering measurable value long after our engagement ends.

Let's Turn Your Vision Into Results

At Implementation Engineers, we don't just execute projects - we transform your vision into operational reality. Our proven 3-phase approach - **Align, Design, Execute** - delivers lasting value, from aligning your team on strategic goals to optimizing operations and driving measurable outcomes. Whether you're aiming to lead your market, boost efficiency, or maximize shareholder value, we're here to make it happen, step-by-step, side-by-side.

Ready to Get Started?

Let's explore how we can bring your vision to life. Contact us today to schedule a conversation. Together, we'll chart the path to your success.

Scan Me



Or visit www.bit.ly/ImplementationEngineersIntro

Learn More: www.implementation.com

