

MIDSTREAM ENERGY SERVICES EXPERIENCE CASE | Standing Up Operational Excellence



Extending Management's Capacity and
Reach in Midstream Services





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Positioning For Growth

Expectations were high. Management was already busy working on doubling processing capacity in 2 years by commissioning a new processing plant. They also needed to utilize rail cars more effectively than years prior to keep up with their growing customer base (gas, energy, end-user and exploration & development firms). Engaged to boost midstream service capabilities, support new plant commissioning, and match talent with anticipated volume increases, we accelerated process, tools, and training implementations to ensure Management achieved their longer-term capacity goal — all while keeping their pressing day-to-day responsibilities under control.

Impetus For Change

The Organization was growing faster than their processing skills and management tools could keep up with internally. Processed products were slipping out of customer specifications at an alarming pace. Maintenance talent was stretched. The veteran Management Team needed to find ways of extending their own support and influence across current assets while keeping control of construction projects and the legions of contractors involved with their new developments (especially new processing plant commissioning).

Adding more complexity, the Executive Team was also preoccupied with raising additional capital to fund yet another future expansion. They planned on offering bonds to reduce the draw-down of their revolving line of credit and reinvest in the business. Our Engagement Team needed to perform in lock-step with goals presented to the investment community to support future fundraising at favorable rates.

Experiencing talent shortages in Engineering, Maintenance, and Production across key job markets, the Organization needed to get the most out of their existing employee base — while improving asset utilization.

Understanding Opportunity | Trapped Value Analysis

We partnered with Management and two Private Equity (PE) Operating Partners to understand the overall strategic plan, learn from prior internal assessments of operational and cost pains, and co-develop a 4-week Trapped Value Analysis across Processing, Maintenance, Procurement, Transportation, and Project Management. Examples of diagnostic methods applied included cost analysis, employee surveys, work flow and process mapping, project management artifact review, team observations, and procurement professionalization benchmarking.

While several areas of opportunity were uncovered during our Analysis, Executive Management decided processing efficiencies, supply chain cost containment, and a practical system to manage projects (construction, asset upgrades, fleets, continuous improvement, etc.)



MIDSTREAM ENERGY SERVICES

Case Synopsis

- Embedding operating expense controls, building up processing & maintenance management, and accelerating momentum through training and a project management office (PMO) in midstream services

Client Profile

- \$300 Million U.S.-based midstream gas, oil, and condensate energy firm focused on gathering, treatment, processing, transportation, and marketing services
- Private Equity ownership

Financial Results

- 12% reduction in operating expenses
- 20% reduction in overtime costs
- 14% reduction in contractor costs

Operational Results

- 21% increase in processing productivity
- 11% increase in Overall Equipment Effectiveness (OEE)
- 33% increase in project milestone achievement

Organizational Benefits

- New Project Management Office (PMO) capabilities, collaboration process and tool set
- Improved transportation planning, management, and analytics
- Upgraded production process controls, training, and performance trend reporting
- Customized, scalable training modules supporting processing, maintenance, transportation, and project management
- Energized Continuous Improvement culture, constraint analysis tool sets, standard operating procedures (SOPs), and "Lessons Learned" organizational knowledge repository



lined up best with their business strategy and near-term priorities.

Working with Management, we drafted an Implementation Roadmap laying out the improvement teams, design & development workstreams, operational & financial upside ranges, and a change management framework best-suited to the Organization's culture.

Management was already under duress to get capacity built up on time. The Executive Team agreed there was no need to wait; so, we started the longer-term modification phase of our collaboration the following week. A quick transition helped keep momentum going, ensured team member continuity, and moved the Organization closer to *realizing* out-lined upside potential.

Bolstering Midstream Services

With a fresh Implementation Roadmap in hand, the Engagement Team went to work. This particular opportunity was structured across 36 weeks focusing on 5 key workstreams:

- Operational & Financial Metrics
- Processing & Maintenance
- Supply Chain
- Project Management Office (PMO)
- Human Capital Talent & Training

The Engagement Team was comprised of the firm's Management, two PE Operating Partners, consulting subject matter experts, and our consulting Engagement Manager. Working collaboratively across 2 sites, the Engagement Team designed, developed, and implemented several standardized processes, tool sets, and multimedia training platforms to build up processing, maintenance, transportation, and project management capabilities. Key implementations near and dear to our partners' strategy included:

Metrics — This workstream established project performance baselines to objectively validate we were accelerating at the expected pace and the collective operational changes made were driving financial results. The Metrics Team was also heavily involved with updating work-to-time standards in the Enterprise Resource Planning (ERP) system and building out a standardized update process for iterative calibration — designed to perform well beyond our time together.

Not stopping at ERP updates, the Metrics Team was also instrumental in turning an existing maintenance Key Performance Indicator (KPI), Overall Equipment Effectiveness (OEE), into prescient, useful information. Essentially, OEE is a measurement of how well equipment is operating by comparing measured performance to its full potential (represented as *Availability x Performance x Quality*). The Organization was already calculating OEE but this KPI was buried in maintenance reports with nary a discussion around trending or much insightful interpretation of OEE's significance. Working with the Training Team, Metrics co-developed training content focused on how OEE was calculated, why OEE mattered to more departments than Maintenance, what OEE historical trends looked like, why OEE improvement bumps were tied to specific interventions, which data interpretation heuristics were relevant, and how to practically apply OEE to everyday problem-solving and management decisions.

Processing & Maintenance Control — The Engagement Team worked together to bolster in-house capacity planning necessary for crewing



Catalyft Team's Past Experiences:

20+
Energy
Engagements
Team's Collective Count

3
Site Locations
Per Engagement
Historical Avg.

40
Weeks
Energy Engagement Avg.

\$500 Million
Company Size
Historical Avg.

5.2 to 1
Energy
Return On Investment
Historical Avg.



Operations, also with scalable parameters for modeling new processing plant requirements. This modeling tool and planning process ensured labor and equipment resources matched expected leaps in demand. Processing and Maintenance talent was planned and scheduled based on historical work-to-time relationships bounced against forecasted demand. Capacity planning empowered Management to schedule with data-driven nuance, thus, ratcheting down labor costs. Models were run in advance of crews showing up for each shift—much improved from former practices of copying and pasting old schedules over each week (and not quantifying the peaks and troughs of production down to each shift).

More insightful management dashboards were developed to provide every shift with easy-to-interpret, highly visual reporting on their productivity, operating efficiency, quality attainment, and health & safety metrics. All these KPIs were in existence prior to the project; the necessary data hierarchy was already in place as well. However, the Organization did not get the full benefit of these KPIs due to the fact that all necessary KPIs were not flowing into one report. Adding to information breaks, the distribution had not been updated in years; so, Management was not fully apprised of performance consistently across departments. Without efficient data flow and easy-to-interpret visibility, the KPIs were not the focal point of reviews prior to our collaboration—and, historically, reviews were centered on anecdotes and conjecture rather than on facts. Working together with Management, we upgraded the Organization's data flow, put the right emphasis on using the data to make a case for changes, and helped in-house talent to see their actions & impacts in the numbers.

Even the "look and feel" of reporting evolved. Prior management reports presented a smattering of processing and quality KPIs in one report, maintenance KPIs in another, and then health and safety sprinkled in across each department's home-grown reporting. Inherited performance reporting was too fragmented and not trusted—thus, dampening a sense of urgency and stifling collaboration. KPIs were mostly displayed in data table form and in challenging small fonts spanning across each week. There's not necessarily anything wrong with a table filled with numbers—but not everyone can see insights amongst the minutiae. Most Managers wanted graphical representation of trending, simple color coding to flag concerns needing immediate attention, and weekly plan numbers framing the week's expectations. We incorporated Management's wishes and modeled the changes in Excel-based reporting prototypes first. This provided Management with the opportunity to practice using a now-comprehensive operating report, become more comfortable with the trend chart feature, and hone in on the flagged KPIs edging outside defined control parameters. These enhancements allowed Management to better prioritize their time & attention, focus only on KPIs screaming for attention, and discuss ways to combat the largest variances as a team. Once the reporting "look and feel" was up to Management's evolving requirements and the Organization at-large was comfortable with using a more visual, comprehensive operating report to drive decisions, we migrated the new report to a cloud-based software application to make distribution convenient and viewing on multiple devices easy.

Supply Chain Cost Efficiencies — Against a backdrop of escalating customer expectations, challenging new pipeline construction projects, and barge access still in the future, the team anticipated truck and rail car transportation usage to grow in the near-term. Our collaboration designed and implemented a transportation master schedule (pipeline, rail, truck, and barge) to keep track of volumes, vendor support,



Partnering With Midstream Services



Key Industry Challenges:

- ⇒ Employee, Citizen, and Environmental Safety
- ⇒ Strict Regulatory Compliance
- ⇒ Capital-Intensive Service Model
- ⇒ Transportation & Materials Volatility
- ⇒ Complex Labor Relations
- ⇒ Clean, Cascading Data and Efficient Reporting Distribution
- ⇒ Seasonal Demand
- ⇒ Operating Cost Clarity
- ⇒ Technology Systems Integration
- ⇒ Tight Operational Control Parameters
- ⇒ Pro-Active Maintenance Plans
- ⇒ Robust Project Management Tools and Skills
- ⇒ Continuous Improvement Cultivation



shipment times, and transportation cost trends. In addition to developing the transportation master schedule and optimizing vendor negotiations, the Engagement Team simplified purchasing management workflow, further centralized purchasing authority, and designed a procurement-specific KPI performance report. The Team also developed a comprehensive contingency plan for supply disruptions — including vendor relationship management expectations, procurement cost vs. benefit analysis training modules, decision trees, and SOPs.

Employee Team Training — Updated, customized training is paramount when making any substantive changes to business. Existing employees and future team members rightfully expect to be supported with clear performance expectations and must understand all current business processes and tool sets at their disposal. Without question, training's importance grows when a firm has plans to increase capacity and open up new locations (like this Organization). The Engagement Team understood these necessary requirements and developed several multimedia training modules (classroom sessions, computer-based training, or CBT, virtual reality animation videos, and management decision simulation models) to empower current and future employees.

Partnered with department heads and the in-house Training Program Director, the Engagement Team designed, developed, and delivered key training modules to support visualization of processing control parameters and decisions, feedstock supply disruption contingency training, maintenance work instructions on key equipment, and a business acumen simulation model emphasizing how Management's day-to-day operational decisions were linked to financial results.

Project Management Office (PMO) — To help track the new processing location startup and future construction starts, the Engagement Team developed a versatile PMO. This system managed existing equipment start up & shut down processing, kaizen events, truck fleet rotation, and contractor management. The PMO was stood up with precise controls to keep lower-return projects from being greenlighted, navigate each project's inherent triple constraints (time, cost, and scope), flag milestone misses, marshal quick risk mitigation, and provide comprehensive visibility and oversight — all while keeping production flowing.

Leveraging in-house project management strengths within Engineering and Construction, the new PMO controlled operating expenses and capital expenditures. The Organization now had a clear project development roadmap, project analysis tools, agreed internal rate of return (IRR) parameters, standardized management tools & templates, change management techniques, and shared repository for all project artifacts to keep the well-earned knowledge base within the Organization. While the project analysis, governance structure, and project control templates were developed specifically for their needs, the Engagement Team integrated a favored software-as-a-service (SaaS) application for workflow and reporting needs. Future PMO contributors could get on board quickly after receiving the latest training and user rights to the subscription-based project management software application.

The Results

Through a 4-week analysis + 36-week implementation, the Organization generated a 21% increase in processing productivity, a 11% improvement in overall equipment effectiveness (OEE), and a 33% improvement in milestone achievement through their new PMO. Operational improvements drove a 12% reduction in operating expenses, a 20% reduction in overtime costs, and a 14% reduction in contractor labor costs.



Our Way of Collaborating

Identify



2-4 meetings at no cost

- Discussion of issues
- Alignment around probable causes
- Framing of analysis scope

Qualify



3-6 weeks at cost

- Qualify opportunities with Trapped Value Analysis (TVA)
- Quantify anticipated results
- Initial engagement design
- Key meetings: Launch, Opportunity Review, Solution Review, and Final Framing of analysis scope

Modify



4-8 months

- Final engagement design
- Execution of engagement design
- Realization & measurement of results
- Ownership & sustainability

Office Locations

NYC

One World Trade Center
Suite 8500
New York, NY 10007
212 220 3897

CHI

444 West Lake Street
Suite 1700
Chicago, IL 60606
312 260 9907

MIA

200 South Biscayne Blvd
Suite 2790
Miami, FL 33131
305 925 8112

SFO

101 California Street
Suite 2710
San Francisco, CA 94111
415 636 7999

TOR

20 Bay Street
11th Floor
Toronto, ON M5J 2N8
647 725 9662



Our Services



Enterprise Excellence

- Integrated Operational Performance
- Sales & Marketing
- Human Capital
- Margin Growth & Cash
- Information Technology Transformation



Operational Turnaround

- Cash Conservation & Liquidity Generation
- Contingency Planning
- Development, Review, & Implementation of Cost Reduction Initiatives
- Interim & Crisis Management
- Operational Reorganization



Organizational Analysis

- Mergers & Acquisitions
- Organizational Readiness Appraisal
- Trapped Value Analysis & Resolution Approach
- Our Commitment to Community — Pro Bono Advisory Services for Small Businesses & Education



Key Statistics

Clients' Historical Return On Investment (avg.)
4.8 to 1

Team's Collective Engagements (total)
1,496

Specialists: Years In Consulting (avg.)
21

Subject Matter Expertise (SME) Network (total)
900+

Team's Historical C-Suite Executives Roles (total)
39

Team's Career Training Sessions Delivered (total)
4,935+

Supply Chain Cost Savings (avg.)
19%

Working Capital Unlocked For Reinvestment (avg.)
21%

Tech-Enabled Productivity Increases (avg.)
27%