

Utility Service Operations

CASE
STUDY

Electric & Gas Utilities

A “Knowledge Work Factory” for Lean Utilities Operations

Situation – Tackling challenges faced by utility companies with lean transformation

Several years of continuous improvement efforts within the Operations and Maintenance (O&M) organizations had paid off. Now the performance of the utilities holding company hovered near the top of its peer group. The CEO wanted the same lean principles across the enterprise.

Beyond O&M, the enterprise included common business organizations: customer service, finance, human resources and IT. The CEO felt the comparable productivity metrics should be drawn from unregulated, high performing, *Fortune* 500 peers. This meant that the internal operations consulting teams had to apply their kaizen methods to increase knowledge worker productivity in the organizations outside of O&M. Initial comparisons indicated that lean knowledge work offered a major cost cutting opportunity.

Client Description, Project Scope, Objectives

The *Fortune* 500 energy services holding company manages electric and natural gas utilities in the U.S. and internationally, employing roughly 20,000. Half are white-collar, or knowledge, workers who toil with their minds in organizations that fall outside of O&M.

The CEO learned of The Lab’s non-technology improvement templates for knowledge-based workers’ productivity and set a meeting to learn more. Management knew that process improvement in groups such as customer service and finance could increase productivity end-to-end, across the enterprise. But they learned how The Lab’s templates standardized these groups into “knowledge work factories,” making large-scale continuous improvement feasible.

A 7-week, Phase I effort analyzed all employees in a utilities division. This delivered a self-funding, guaranteed business case and work plan for a 6-month, Phase II implementation.

Utility Operations Improvement Implementation Examples

The Lab implemented 450 non-technology process improvements. Examples:

Standardized Lean Material Management Principles—Office, or knowledge, work issues reduced operational efficiency in the O&M field construction operations by 30 percent. The Lab helped “industrialize” knowledge work procedures in material management. Standardization and simplification of undocumented, one-off procedures reduced incorrect and late material field deliveries. Similar knowledge work industrialization efforts for site preparation and design engineering groups helped reclaim the lost time in field construction.

Lean Management for Field Administration—Administration dictated by office-based groups, squandered one-third of O&M field management’s time. A kaizen blitz evaluated all admin requests from office-based groups. The resulting lean administration process eliminated over 75 percent of the tasks performed by field management.

Standardized the Reporting Factory—Management reporting focused on cost control. The Lab added productivity metrics, quality stats and service levels to the reports. Then The Lab created similar reports for the reporting team—industrializing the reporting factory.

Fortune 500 Energy Services Holding Company

Electric Utilities

United States

Project Sponsor: Chief Executive Officer

Non-technology, self-funding operational improvement implementation:

- No new technology
- End-to-end utilities operations
- 6-month implementation

Project Objectives:

- Increased productivity
- Lean management routines
- Operational efficiency

Project Scope:

- Field construction
- Field administration
- Design engineering
- Customer service
- Reporting services

Implementation Results:

- Operating cost ↓ 30%
- Annual savings \$15M
- Productivity ↑ 25%
- Throughput ↑ 25%
- Break even point 3 mos.
- ROI (12 month) 13X

ATO4.SC06.170712

