



Case Study

Oil & Gas: Streamlining Pipeline Inspections Spurs Personnel Productivity

At a Glance:

Pipeline inspection and maintenance companies monitor, inspect, and fix pipelines for oil and gas, chemicals, water, sewage and other companies. These companies must mitigate risk to ensure environmental and regulatory compliance.

Industry

- Oil & Gas
- Pipeline inspections

Challenges

- Growing without incurring additional overhead
- Missing information
- Inadequate visibility into job status and employee productivity

Key Benefits:

- Eliminates data integrity issues
- Allows managers to track status and optimize resource allocation
- Provides visibility to throughput, status, and quality
- Enables performance-based compensation and incentives
- Channels feedback and encourages collaboration

The Challenge: Doubling Productivity without Adding Overhead

Pipelines for oil and gas, chemicals, water, and sewage must be inspected regularly to avoid shutdowns that can cause major supply shortages and environmental damage. Energy companies and other pipeline owners use pipeline inspection gauges, or 'pigs,' to inspect their pipelines to determine if repairs and maintenance must be conducted.

Pipeline inspection companies monitor thousands of job requests stemming from corroding, broken, and clogged pipelines. With energy companies focused on safety, the environment, and avoiding large lawsuits, pipeline inspection companies are growing quickly and need to streamline operations and greatly improve productivity.

Pipeline evaluation is a multi-step process. After data is gathered by the pig equipment it must be analyzed and interpreted. Field technicians pass the data recorded by the pig to engineers for data analysis and recommendations. With the data in hand, engineers can run sophisticated calculations pinpointing pipeline problems. The data itself must be precise, however, in order for the analysis to work.

One of the world's largest pipeline inspection companies found that incoming data often had holes. As a result, time was lost passing data back to the field to ensure data accuracy. With analysts spending more than half their time correcting flaws in the data, the business operations calculated that it would need to double headcount to handle the growth in customer requests. Management gathered to address alternatives.

After additional analysis, executive management realized that it could double productivity by eliminating data integrity issues and streamlining other aspects of the pipeline inspection process. Furthermore, the team learned that if it could increase visibility and traceability internally, the company could share job status information with customers, creating a unique differentiator in customer service.

Moving forward on its plans to streamline operations, project management sought after business process management vendors to help it meet the following objectives:

- Ensure up-front data validation and correction
- Automate workflow
- Provide complete visibility into job status
- Reduce job complexity
- Provide mechanism for analyst feedback



Pipeline Inspection Gauge

Quote:

"We're pleased to help oil and gas companies expand their business in testing and maintaining valuable pipeline assets. Here we have another proof point that BPM works. Companies can use BizFlow to double productivity while avoiding the hassles of manual, error-prone, paper-based processes. Our objective is to continue providing software and best practices that enable organizations to boost productivity and increase profitability."

- Jim Worley, COO,
HandySoft Global

About HandySoft Global:

Since 1991 HandySoft Global has provided BizFlow® Business Process Management software and solutions to hundreds of organizations worldwide. Proven to reduce costs while improving quality and productivity, BizFlow® is an award-winning BPM suite of tools used to model, analyze, automate, monitor and optimize business processes.

HandySoft Global Corporation

1952 Gallows Road, Suite 200
Vienna, VA 22182 USA |
Telephone: 1.800.753.9343 or
703.442.5600

www.handysoft.com

The Solution: Data One Online Workflow Management Solution

The company selected BizFlow from HandySoft to create the Data One Online Workflow Management Solution.

During the process modeling phase, the company took several steps to streamline workflow. First it put gatekeepers, aka Data Cops, up front in the process to ensure that data gathered was appropriately validated before moving to issue diagnostics. Adding data traffickers between field technicians and engineers has virtually eliminated superfluous communications and re-work. Furthermore, core analysts must complete all form requirements before forwarding work to refinement analysts. BizFlow recognizes incomplete work, further eliminating downstream data integrity issues.



As data passes from one group to the other, each person and their respective manager has

full visibility into run status. Analysts log into Data One to see the runs they have been assigned, the runs they are currently working on, and the progress that they have made.

Each step in the Data One workflow creates data for determining operational improvements. Core Analysts check requirements as completed, automatically updating the database with a time stamp and a signature stamp. With the BizFlow notes feature, analysts and auditors can write down ideas that are logged to the database for further review. There are also built in feedback channels at every step.

With this data in hand, management knows employee throughput, work quality, and run status. They can track runs to see which sub-steps are taking the most time and which analysts are consistently faster or slower. Management can thus conduct analyst reviews in real-time, not at the end of project or end of month. They can use analyst feedback for future coaching and process improvements. And they can track rejects so that corrective action can take place.

Increased process visibility allows managers to better harness team skills and resources. If an analyst is out of town or simply too slow, supervisors can move jobs to another analyst – a boon for resource optimization. And with the apples-to-apples productivity comparisons, management has been able to create incentives based on miles analyzed. More productivity leads to higher bonuses.

Another real enhancement to process workflow has been the creation of real-time contextual learning. The company has linked help guides to BizFlow. If analysts have any questions during the process, they can click a link to documentation explaining it. They don't have to conduct external searches. The company also took care not to hardcode user groups. In this way if a refinement analyst is promoted, BizFlow automatically recognizes her in the new group.

Executive management sees increased visibility not only as a benefit to internal operations, but also as a differentiator for customer service. Every customer wants something done. They have their own specs. Analysts can pull up what is required for each customer via BizFlow links. The company can also grant customers their own access. With this functionality in place, the company has reduced call volume while improving customer satisfaction.

Ultimately, executive management has been able to respond to the market's increasing need for pipeline inspections. With BizFlow, the company is doubling revenue growth and throughput without increasing resource costs, leading to a significant earnings boost.