Process automation – reimagined

Business goals

- Create single source for monitoring quality inspection responsibilities and results
- Expedite issue resolution and countermeasures
- Improve monitoring of quality process compliance
- Increase supplier quality accountability

Results

- 73% saved in application development time (14 weeks vs. 52 weeks)
- Five-year, $6.6 million savings – 300%+ ROI over five years

- 14 manufacturing sites in North America
- Thousands of workers using Line Call app

- Inspection Control Function app, monitoring each auto part

> *"I had high expectations for Pega, and they have been met."*

Quality Division, Vice President, Leading Global Auto Manufacturer

Challenge and vision:

Industry giant embraces automation

This auto industry powerhouse has manufacturing facilities located throughout North America. Quality management at these facilities, and those of its parts suppliers, though well-defined, was still largely manual. The established quality processes were memorialized in a series of binders of documented processes used for training and reference.

The manufacturer wanted to automate key quality processes to improve controls, provide an audit history, and support compliance reporting.

The solution was to create a quality information management system supported by two initial applications – one for automating quality inspection responsibilities and another for assembly line workers to identify and report issues.

How Pega helped:

Powerful applications improve quality management

The auto manufacturer went live with its first deployment of an integrated quality information management system on the Pega Cloud® in 2015. The quality application improves the company's ability to track quality processes with its suppliers, expedite issue resolution, and report quality assurance and compliance.

The first phase of the app supports inspection control, which assigns quality inspection responsibility for all parts used, and line call, which allows line workers to identify and report quality issues as they encounter them via an iPad app.

Inspection Control uses Pega business rules to identify and assign appropriate inspection responsibility. Inspection Control function assignments, notifications, overrides, and reassignments are managed with the Pega Cloud application.

The Line Call app manages notifications to external suppliers as well as internal quality engineering. It applies Pega business rules to categorize each non-conformance. SLAs are used to ensure timely responses from parties, and to track process durations.

Outcome:

Rapid application development saves time and money

This was the manufacturer's first project with Pega, so Pega held a Methodology Alignment Workshop at the outset. The company used Lean and Agile methodologies to drive rapid, iterative development. The Pega-led and Cognizant-powered project team used directly capture objectives (DCO) to quickly route requirements and design input to the development team.

The project team developed two production applications in parallel over 14 weeks. For the manufacturer, this represented a major savings in application development time, as previous system development projects typically took over a year.

On the strength of this initial project's success, the company developed a roadmap of 18 additional Pega projects that will achieve their ultimate goal of an integrated, end-to-end quality management system spanning all suppliers and manufacturing locations.

Leading global auto manufacturer

This auto industry giant has designed, engineered, and assembled over 36 million cars and trucks in North America, where it operates 14 manufacturing plants. Its 1,800 North American dealerships sold more than 2.7 million cars and trucks in 2017 – and about 87 percent of all vehicles sold over the past 15 years are still on the road today.