

# About Beacon Quality

Founded in 1986, Beacon Quality is the leading provider of layered process audit (LPA) software and process performance solutions for automotive and aerospace manufacturing.

With decades of experience helping companies improve visibility and control at every stage of production, our tools promote company-wide engagement and operational excellence. Our mission: improve quality for our customers through innovative technology that empowers people to communicate, measure, learn and improve.



- iOS and Android Apps
- Cloud-based
- No Wifi needed
- Up and running in 1 hour
- 8+ languages
- Email reminders
- Attach photos and documents
- Drill-down reporting

Ready to cut quality costs?  
To learn more or request a free trial of  
Beacon Quality visit [BeaconQuality.com](http://BeaconQuality.com)

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## Case Study

# Top 50 Automotive Supplier Reduces PPM by 73% with Beacon Quality



A leading automotive supplier facing strict internal requirements to reduce defects needed a new approach to its burdensome paper-based layered process audit (LPA) program.

The company tested an automated, web-based LPA platform to conduct mobile audits and quickly address non-conformances with corrective action while monitoring dashboard metrics for a high volume of process audits. The result: more audits completed, fewer defects, and higher than ever customer quality ratings.

### > BACKGROUND

The customer is a Fortune 500 company and tier 1 supplier with 60+ plants globally and billions in annual revenue. The company employs tens of thousands worldwide, manufacturing drivetrains and transmissions for leading automotive OEMs.

The organization has conducted LPAs since General Motors (GM) first made them a requirement several years ago, adding multiple checks to known risks and problems. Like many automotive suppliers, the organization originally relied on paper checklists and spreadsheets to conduct LPAs.

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> CHALLENGE

According to the division’s head of quality for North America, the paper-based LPA process wasn’t delivering its intended results.

“One of our large plants had a full-time employee who did nothing but compile and analyze data,” he says. “So you had stacks of paper that someone had to sit there and sort through, and we also needed to track whether or not people were completing their audits.”

Other problems associated with manual LPA administration included:

- Overly general questions due to the difficulty of distributing and updating multiple versions of paper checklists
- Audit completion rates of about 50%, decreasing LPA effectiveness
- Lack of accountability around timeliness of corrective actions
- Low visibility into whether operators were following standardized processes, a primary cause of defects

The division as a whole was facing new internal requirements to reduce defects, calling into question whether the paper-based LPA program was up to the job.

> SOLUTION

In Q1 2016, the company piloted Beacon Quality’s web-based platform at one of its facilities. During the free pilot, it was the automatic notifications and instant reporting that impressed the head of quality the most.

“It’s not hard to pull up the data and see when 80% of problems are coming off of a specific line or shift, or even pinpoint the specific process,” he says, adding that email alerts with online checklists helped keep the team on track.

The success of the pilot led to a rollout of Beacon Quality across the entire North American division, representing over a dozen plants, as well as more than 20 European sites.

Implementation took just four weeks at most facilities, allowing them to:

- **Schedule audits** for the entire plant in under ten minutes
- **Send automated email reminders** with links to electronic checklists
- **Notify team leaders** of missed audits
- **Complete audits on mobile devices** and sync results automatically
- **Address non-conformances** with on-the-spot mitigation or corrective actions
- **Monitor real-time dashboards** and get instant reports on key metrics

“The software more than pays for itself.”

– Head of Quality for North America

“Customer quality ratings are as high as I’ve ever seen them.”

– Head of Quality for North America

> RESULTS

Overall, Beacon Quality has made a big impact on reducing defects and overdue corrective actions, while also improving quality culture and customer satisfaction.

One fabrication and final assembly plant in particular that had struggled with defects was able to achieve significant results in just six months, including:

- **73% reduction in internal PPM**
- **94% reduction in corrective action requests past due ≥ 45 days**

From a big-picture perspective, Beacon Quality has helped the division:

- **Reduce defects** to just 18 PPM, below its 20 PPM target
- **Increase audit completion rates**, which closely correlate with quality, to 85% or more at all plants
- **Bring down scrap costs** as a proportion of sales
- **Minimize IATF non-conformities** on the plant floor

Figure 1. Division-Wide Improvement in Audit Completion Rate

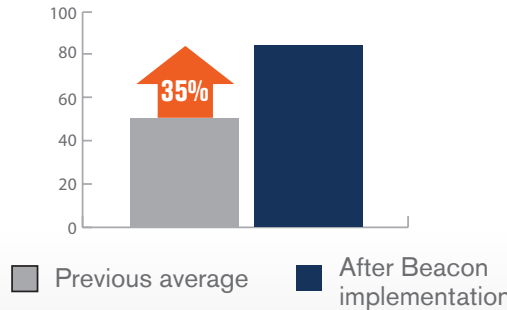
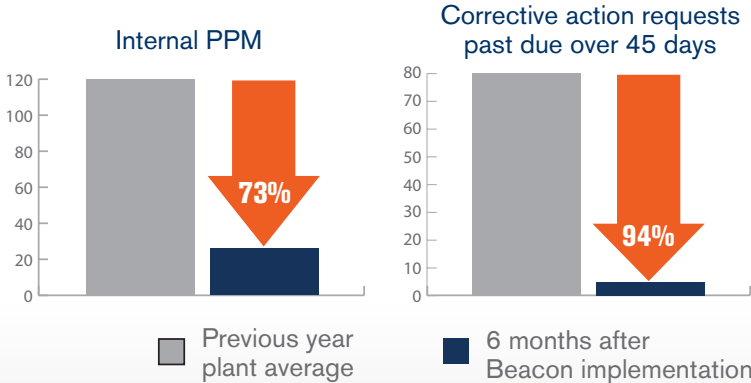


Figure 2. Reduction in PPM and ISCARs past due >45 days



“Beacon has allowed us to hold or improve our numbers, even with orders skyrocketing” says the division’s head of quality. “The software more than pays for itself.”

The supplier’s performance has also impressed OEMs.

“Toyota, Nissan, Ford, GM, Chrysler—they’re all happy with us,” the head of quality says. “In terms of quality, customer ratings are as high as I’ve ever seen them. **One of our plants has even won the GM and Ford quality award two years in a row.**”

He adds that Beacon Quality reinforces quality culture by keeping management involved on the plant floor and generating more conversations around quality.

“People see leaders out there doing audits daily, and when someone points out an issue, management makes sure it’s fixed,” he says, highlighting Beacon Quality’s closed-loop corrective action tools. “Seeing their feedback matters and that we’re solving problems they bring up makes all the difference.”