



Supplier Quality Management in Manufacturing Industry

The global manufacturing industry has become a web of suppliers and customers linked together in a complex supply and demand chain. A critical aspect of a manufacturer's business strategy is collaborating with suppliers across the globe in real-time to meet its product delivery schedules and design and quality commitments to its own customers. Ensuring conformance to product and process quality specifications and standards becomes a challenging task when the interacting manufacturers have disparate IT systems, different production schedules and dissimilar process metrics.

MetricStream's web-based supplier quality management solution helps manufacturers connect with their suppliers and constantly receive, send and analyze quality metrics from various entities in its supply chain and implement standardized quality programs across its global supplier base.

Challenges

Manufacturing has become increasingly reliant on outsourcing and globalization over the past decade. While the advantages of lower costs are well established, the trend has also drawn a flood of issues including long supply chains, inefficient change management, lower quality standards and increased risk of non-compliance. Common challenges in maintaining quality of incoming parts and components from suppliers include:

- **Poor Visibility and Traceability:** Unpredictable and unreliable process data and quality records from hundreds of suppliers stored in different formats restrict the manufacturer from making business-critical decisions. Supplier Corrective Action Reports (CARs) and Preventive Action Reports (PARs) created in response to quality issues are lost in the maze of the supply chain and varied IT systems, resulting in stagnant processes with unrealized potential for continuous improvement.
- **Delayed Identification of Errors:** Pressure of getting the product to market makes identification and resolution unreliable and erratic due to lack of systematic process and systems to support them. Manufacturers rely on ad hoc resolution of issues, resulting in decreased productivity levels and inconsistent response times.
- **Inflexible and Delayed Reporting:** In a competitive environment where continuous innovation is critical, top management needs to make fast decisions based on data. However, spreadsheets and paper-based processes do not empower the management with timely, actionable information. Analysis of quality-related information is generally put on the backburner as excessive time and effort has to be spent in aggregating and compiling data into meaningful reports and recommendations.
- **Nonconformance, Noncompliance:** Unorganized tracking methods lead to recording of inaccurate supplier non-conformance and disposition-related information. The absence of systematic quality audits to assess suppliers' compliance levels with set standards severely limits compliance programs. Manufacturers suffer high cost-of-poor-supply-quality (COPQ) percentages due to poor accountability and lack of business discipline.

Best Practices

Some of the best practices being employed by leading global manufacturers for streamlined supplier quality management include:

- **Supplier Access:** Deploying quality management systems with web-based access for suppliers enabling them to easily access and rapidly adopt a web-based supplier quality management system.
- **Real-time Quality Analysis:** Automating review and approval workflows for quality data in real-time by following a systematic process for collecting, plotting and analyzing inspection data to identify material nonconformance before lots are shipped.
- **Issue Tracking:** Tracking supplier nonconformance issues in real-time by establishing consistent procedures for components and lots that do not conform to specifications.

MetricStream Solution

MetricStream offers the most advanced and comprehensive solution for supplier quality management in the industry today. Leading companies are replacing their point solutions and paper-based systems with MetricStream solution to achieve complete automation of supplier quality management and gain real-time visibility into their suppliers' quality processes resulting in significantly lower cost of poor quality.

Solution Highlights

- Complete visibility into suppliers' quality processes for driving continuous improvement
- Powerful supplier scorecards and reporting for monitoring quality metrics and supplier performance
- Transparent environment for suppliers and manufactures to collaborate and coordinate in real-time
- Web-based architecture with an easy-to-learn and easy-to-use user interface
- Flexibility to meet specific requirements and adapt to changing business processes

- **Streamlined Corrective Actions:** Implementing a proactive approach to supplier corrective action requests (SCARs) or corrective/preventive action requests (CAPAs) across the supply-base by following a common methodology for performing root cause analysis, assigning follow up actions while effectively tracking and routing cases from initiation to closure.
- **Supplier Charge-backs:** Charging cost of poor quality back to the supplier for the costs incurred by a manufacturer due to nonconforming components, materials, and late deliveries in order to introduce business discipline and accountability into the supply chain.
- **Supplier Scorecards:** Monitoring supplier performance on scorecards to proactively identify and implement timely corrective actions improves supplier performance. Scorecards measure key performance indicators (KPI) in real-time and track improvements over time supporting sound decision-making based on data.
- **Supplier Audits:** Conducting supplier audits to ensure that suppliers meet the established product and process quality requirements and the audit process drives continuous improvement.

Case Study - TaylorMade Golf

TaylorMade Golf is a subsidiary of Adidas-Salomon A.G. and one of the largest golf club manufacturers in the world. It has facilities in Carlsbad, CA and Togane, Japan and sources components and clubs from suppliers in the Far East. The company constantly collaborates with hundreds of suppliers spread across various continents.



TaylorMade has a complex supply chain. Suppliers from various countries collaborate in manufacturing the thousands of variations of lie, loft, face angle and other crucial attributes that give the professional and amateur golfer the control they seek. Not surprisingly, the key to TaylorMade superior quality is accurately managing hundreds of process attributes on each club - measurements taken at different times and locations, to ensure minimal variance and maximal adherence to standards.

Before MetricStream supplier quality management solution was implemented at Taylormade, quality control was excessively time-consuming and inefficient – engineers calculated process metrics for individual suppliers on a monthly basis using spreadsheets. The results that reached the top management were generally outdated and lacked value.

The MetricStream solution was chosen to implement the stringent quality control standards and processes by TaylorMade. While evaluating various system, TaylorMade realized the need for an enterprise-wide footprint for supplier quality - a solution that was capable of proactively managing hundreds of suppliers, thousands of SKUs and millions of inspections daily - and aggregating, analyzing and reporting that information to key business owners, as well as forming a platform for collaborating on various design, manufacturing and process management issues to fix any quality problems and glitches.

Today, MetricStream solution automatically tracks and inspects SKUs, calculates performance metrics every 2 hours and generates full time and context-sensitive reports. This process capability information is published to engineers, managers and suppliers over the web – either over the dashboard or in reports sent via e-mail, improving employee productivity and decision-making capabilities.

Additionally, the solution sends timely alerts to concerned engineers when the indices cross the threshold. Timely information provided by the solution means engineers can now address issues and take corrective action even before the lots reach the warehouse.

Ruben Inofuentes, the Chief Information Systems Architect at TaylorMade, explains the success – “A few months back, we were collecting the information from suppliers in Excel sheets, and faxing them corrective action requests and documentation. In the old days, we were merely trying to track quality, not really control it. MetricStream has truly given us the ability to manage the quality of our supply base - we do not waste time faxing and receiving documents, we have the information we need at our fingertips, and we can proactively measure and improve quality even prior to doing a single inspection ourselves. We are looking forward to leveraging the MetricStream platform to consolidate our position as the best performance golf brand in the world. The core message to all of this is Quality. And core to our quality initiative is MetricStream.”

"We have done much more than just implementing software for TaylorMade. We have studied their processes and given them a top-down solution that will grow with their business. Years from now, the MetricStream solution will still be relevant and will be driving them to far more stringent quality control standards. We are proud to partner with a leader such as TaylorMade Golf. And we love their company store, where we picked up the best woods and irons in the world," says the MetricStream solution manager.

For More Information

about MetricStream GRC and Quality Management Solutions please visit www.metricstream.com

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