

6 major benefits of a quality-focused approach



Organizations that focus on quality at the core of their manufacturing ecosystem can dramatically improve other business operations in ways that extend beyond simply making a better product. The benefits of a quality-focused approach for any manufacturing organization include:

- · reducing scrap
- · minimizing time spent on corrective actions
- · reducing production and warranty costs
- increasing customer satisfaction
- providing data-driven insight to drive informed and improved decision-making
- Understanding the benefits of a quality-focused approach using a QMS
- Let's look at the six major benefits of a quality- approach.

1. Reduced scrap

With a quality management system (QMS) that gives employees a more quality-focused mindset, it's possible to reduce scrap by 3%, which helps cut costs. Scrap reduction techniques include root cause analysis, audits, and data-driven analysis to provide deeper insights into where a process might need improvement.

In reducing scrap and waste, a business can reduce the costs of poor quality. This increases profits while improving efficiency within the business as a whole. An advanced quality management system can also capture accurate data from the production floor to measure the amount of scrap generated and, at the same time, monitor production equipment condition to see if an out-of-calibration or poorly performing device is contributing to the scrap created.

This information can help with plant optimization. This helps to further improve the manufacturing process to reduce waste and downtime. Quality professionals can create specific workflows to automate manufacturing processes further to improve efficiency.



2. Reduced field failure costs

A quality-focused approach can reduce the number of interventions needed to lower field failure costs by as much as 10%. A QMS can identify whether something is a quality failure, with something going wrong in the wider workflow, or a reliability issue where machine failure is to blame. Understanding this enables quality managers to take the appropriate action to prevent it from happening in the future.

With an efficient manufacturing process, machines will operate more efficiently, which increases their lifespan and reduces maintenance. Predictive analysis can also help an organization understand the best maintenance schedule to keep the machine running optimally without downtime.

3. Faster new product development timelines

A quality-focused approach can also help speed up the development of new products — improving time to market by up to 40%. With a comprehensive quality management system, quality managers and product teams can collaborate to create a virtual simulation of the product to reduce physical prototyping. This reduces waste, speeds up the time to launch, and helps meet corporate sustainability goals.

Using clear workflows, the product can go through the release, issue, tracking, and change processes. All involved teams have access to this information from a central point, making it easier to collaborate and look for ways to improve efficiency.

Finally, a QMS can leverage product information and historical data to provide further insights to improve decision-making and speed up development. Using machine learning, this information can support quality and product managers in creating new virtual prototypes based on previous products, quality events, and customer feedback.

4. Reduction in time spent on document review and approvals

Ensuring there's a central source of truth for all documents is key to a quality-focused approach. Using a QMS as a central hub for all quality documentation, ensures everything is kept up to date without duplication. This enables employees working across different locations or out in the field to access the most accurate information. An advanced QMS can also integrate with other platforms to ensure a central place for all documentation for all business areas.

Even when a document does need to be updated, it's a simple process of making the necessary changes in a single system. With the correct workflows in place, it's clear who needs to take action on changes, reviews, and approvals — drastically speeding up the time it takes to update a document. The average business could save 15% of its time on the document review and approval process compared to a manual, decentralized document control system.

6. Reduction in time spent managing supplier corrective actions

As well as reducing time spent on nonconforming materials instances, a quality-focused approach and the right technology can also help reduce the time spent on managing supplier corrective actions by up to 25%. With an integrated QMS, quality pros can automate the process of sending corrective action requests to suppliers. This can trigger the corrective action and resolvent process without requiring manual intervention.

A comprehensive enterprise quality management solution (eQMS) can help an organization take an automated quality-focused approach to production and operations. This helps reduce costs, improve efficiency, and free up employees for more pressing tasks. If you'd like to find out more about how ETQ can support your quality goals, talk to a QMS expert today.

Less time spent managing nonconforming materials

You can use a QMS to trigger automated procedures in the event of a nonconformance issue. This enables quality professionals to quickly see what went wrong, the corrective action that should be taken, and what the impact of the nonconformance could be on other parts of the manufacturing process or supply chain.

With all of this happening automatically in the QMS, quality teams can spend less time managing nonconforming materials events — saving approximately 20% of their time that could be used elsewhere in the business. Over time, machine learning can begin to predict potential nonconformance events, increasing quality overall while freeing up yet more time for employees.





ETQ, part of Hexagon, is a global leader in integrated quality management, health, safety, and environmental solutions for manufacturers. Learn more at etq.com.

Hexagon is a global leader in digital reality solutions. Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.