

# **Corrective Action and Preventive Action**

Magpie Consulting



## Corrective Action and Preventive Action

ISO 9000 and other quality management systems require a documented procedure for dealing with corrective actions and preventive actions. ISO allows them to be dealt with by the same (CPAR) system, but they are different mind sets. Preventive action is reading the manual before you open the box, corrective action is looking at the manual when there is a problem. Routine maintenance for your car is preventive, taking it to the shop when there is an ominous rattle is corrective.

A columnist for the American Society for Quality explains it this way:

On closer reading, however, section 8.5.2 says corrective action eliminates the cause of nonconformities to *prevent recurrence*, and section 8.5.3 says preventive action determines and eliminates the causes of potential nonconformities ... *to prevent occurrence*. See, there is a difference!<sup>1</sup>

### Corrective Action

Corrective action requests are the usual system companies use to fix problems when they are found, whether they are discovered on the production line or by a customer. The goal is to eliminate defective product and to take appropriate action to prevent the same problem from recurring.

Most companies with quality management systems are pretty good with corrective action. They have a system in place that tracks corrective actions needed, who is in charge of them, and the deadline for action, and documents to track all of this. They have a system for doing root cause analysis in place to get to the bottom of problems and truly solve them rather than doing corrections on an ongoing basis.

Root cause analysis is what separates corrective actions from corrections (rework, refunds to a dissatisfied customer, etc). Auditors will say that if your identified root cause is that an employee needs more training, you probably haven't found the root of the problem. Why didn't they have the training? What procedure or lay-out needs to be changed to prevent that problem from occurring again? Done well, root cause analysis prevents more of the same problems from recurring in the future, improving quality.

One place companies can have trouble with corrective action is in verification of effectiveness. A corrective action doesn't actually correct the problem unless it is effective, and there is no way to know this without checking on it later, usually 1-4 months after the change is implemented. A problem corrected on the spot is not a closed corrective action because there is no time to verify effectiveness.

---

<sup>1</sup> Russ Westcott, <http://asq.org/quality-progress/2005/03/problem-solving/corrective-vs-preventive-action.html>



## Preventive Action

Corrective action is easy in some ways because it is a reaction to a known problem. Preventive action is harder because there isn't a problem yet. Preventive action is hunting down the problems before they occur, before anyone notices. It isn't finding a method for catch out-of-tolerance errors during final inspection, it is a procedure for checking machine tolerances during production and catching them before they are out of spec.

Preventive action is related to risk analysis. It is asking, What could go wrong? And how do we prevent it? Preventive actions can come from analyzing data or from line worker suggestions. Customer comments that aren't really complaints are another useful source of information. Analyze warranty data and look for trends. Analyze root causes of nonconformances and look for trends. Do customer complaints seem to cluster around some underlying issue? If so, then preventive action can be used to address the problem.

Some kinds of preventive action:

- Disaster recovery planning and contingency plans
- Risk analysis, FMEA
- New-hire training
- Improved employee training
- Procedures updated regularly
- Safety planning (because a safety problem often reflects a potential quality problem)
- Alarms to warn if a process is drifting toward instability
- Review of problems in similar companies or processes to see what has worked
- Lean systems
- Preventive maintenance and calibrations systems

Once the need for preventive action has been decided on, and the benefit is analyzed to be sure it is worth the effort and cost of making the fix, the actions can go through the same kind of system (frequently the same system) as corrective actions, including a review of the effectiveness of the actions. Both corrective actions and preventive actions may require an iterated process to finally resolve the problems.

Corrective action is usually more urgent for companies, and is a good place to start. But ignoring the potential for improvements driven by preventive action keeps a company from having the highest quality it can achieve.

