About the QC Story

The QC Story is the name for a specific way of documenting and communicating the results of Quality Circles activities. Each QC Story shows how the circle members addressed a specific problem.

Those of us familiar with other problem-solving steps such as A3 thinking, Toyota Kata, DMAIC and 8D problem solving will no doubt see the similarities. This is because the QC Story was the original pattern that was the foundation for all of these.

The Two Types of QC Stories

There are two types of QC Stories. The first is a problem-solving story. This is used when the quality circle works on closing a performance gap by finding and addressing the causes of the problem.

The second type is a challenge achievement story. While problem-solving attempts to close the gap between an existing standard and the actual performance, a challenge aims to achieve a new and higher level of performance. This is often used for entering new areas of business, launching new products, or redesigning a delivery operation.

The problem-solving story is the most common type. Many organizations begin there and adapt the process to new challenges after mastering the basic QC Story approach.

The 10 Steps of the QC Story

QC Stories have a standard flow of information, allowing quality circle members to summarize their work, highlight insights gained, and raise open issues. The reader should be able to easily follow the details of a specific QC Story. A good QC Story is also a teaching tool for others to learn the thinking and process of problem-solving for their own use.

The QC Story is often summarized in ten steps. Some organizations prefer to combine them to make seven or eight steps, but the content is standard. Let's review the ten steps of the QC Story and their related activities.

QC Story Step 1: Select Theme

In the first step, the Quality Circle members select a theme from among the problems in their workplace. The aim is to set a clear purpose for the quality circle's activity.

Members ask themselves, "What kinds of problems do we have?" and "Which is the most important to us?" as well as "Which one do we want to address next?"

The process of clarifying the problem and selecting a theme for the quality circle activity often involves several attempts to write and revise the problem statement. Team members describe the background situation, the specific losses or undesirable conditions, and previous efforts to correct them.

The problem statement or theme description should not include causes or proposed solutions. The aim of the QC Story is to investigate causes and discover countermeasures, so these can't be known when first selecting the theme.

Team members also consider whether the selected theme is of the right size. A theme that is too large to handle in three months or less must be broken down into smaller sub-themes.

On the other hand, a theme that is too small or too focused may not address the real issue. As the saying goes, it's important not to miss the forest for the trees. Even for smaller themes, team members should connect it to the overall process and how it affects the customer.

QC Story Step 2: Grasp the Current Situation

In the second step of the QC Story, the circle members work to understand the current situation of the problem for their selected theme. First, they identify the concerns and issues related to their theme. Then, they use observation and data collection to check whether the perceived issues are real problems.

The purpose of these activities is for team members to understand the actual problem deeply enough to establish more detailed goals and estimated timelines. A team with an initial goal to reduce design errors to zero may realize as they study the current situation that this would take too long. This gives them an opportunity to focus their activity on only the top two largest types of error for the first stage.

QC Story Step 3: Set a Target

The third step is to set an initial target with a proposed completion date. Although quality circle members are free to select the themes to work on and set their own targets and completion dates, there are several key guidelines.

Often the leadership will ask quality circle members to work on specific business performance gaps that are important to the customer. In this case, the selection of the theme and improvement targets is already narrowed down. However, it's still important for the team

members to understand the current situation and propose their initial targets toward these top-down business goals.

When setting targets, organizations should avoid across-the-board numbers such as "10% improvement". In some advanced areas, a ten percent improvement may present large technical challenges. In other areas where there are many easy gains, ten percent improvement may offer limited opportunities to practice and learn problem-solving. In other words, numerical targets must be context specific.

In terms of sizing the project, the team members should set improvement targets that they think they can achieve within about three months.

When starting out with quality circles, a manager, trainer, or coach may propose a theme mainly for the purpose of learning and motivation. In such cases, improvement targets and completion dates may be defined more loosely.

Finally, quality circles should not spend time debating the target or trying to get it exactly right. There are many things that will be known only after analyzing root causes and doing many experiments. A quality circle's theme and targets often evolve as they experiment and learn.

QC Story Step 4: Draft Action Plan

The fourth step of the QC Story is to draft the overall activity plan. This is often a visual timeline such as a Gantt chart, describing details of who, what, when, where, how and why as needed. Team members discuss the sequence of activities, the time needed, and dependencies between tasks and resources. Although plans often change as the team investigates, experiments, and learns, it's an important exercise for teams to think through assumptions, risks and avoidable delays.

QC Story Step 5: Investigate Root Causes

The fifth step of the QC Story details the investigation into the problem's causes. Quality circle members use a variety of tools to identify potential causes, observe processes and collect data, and visualize the cause-and-effect relationships between factors and phenomena. The purpose of this section is to show how team members identified the root causes which led to their selection of countermeasures.

QC Story Step 6: Select Countermeasures

The sixth step of the QC Story describes how the team members examined, evaluated, and selected countermeasures based on their understanding of the root causes. This is often a

visual summary of the options the team considered, comparing their pros and cons such as effectiveness, cost, restrictions, and impacts on other factors.

QC Story Step 7: Put Countermeasures in Place

The seventh step involves members taking action to implement countermeasures in daily work and monitoring the results, based on their analysis of the root causes.

QC Story Step 8: Evaluate the Results of Actions

The eighth step summarizes the team's evaluation of the effect of implementing the countermeasures. The quality circle members identify the tangible and intangible results, using data. Solving a problem often requires many experiments and some trial-and-error. This section of the QC Story should summarize both successful experiments and what the team learned from surprise results and failed experiments.

QC Story Step 9: Standardize Successful Changes

In the ninth step, team members standardize their successful changes, update documents, and conduct training in the new standards as needed. The purpose is to make the improvements a permanent part of daily operations.

QC Story Step 10: Make Future Plans

In the tenth step, as part of the Plan-Do-Check-Act cycle, team members decide what problem or challenge to address next. This may come from the issues list of the initial QC Story, from a need to address another part of the original theme, or new issues uncovered by the team.

The Problem-Solving Story Is a Practice Pattern

Quality circles often prepare and present their problem-solving stories on large QC Storyboards. The standard QC Story format makes it easier both to plan and to communicate the problem-solving process in a way that's understandable to everyone involved. However, the QC Story is not a template of a fill-in-the-blank exercise. The QC Story is both a guide for the problem-solving process and for communicating the activity to others.

It's important to note that these ten steps are not intended to describe exactly how teams solve a problem every time. Problem solving rarely happens in a straight line. Instead, it often requires going back to a previous step, revising plans based on new data, and iterating through a series of experiments.

It also serves as a visual roadmap for those who are not familiar with structured problem-solving. The QC Story format also makes it easier to deploy quality circles horizontally across the organization. We can see that the QC Story is a way to practice and develop valuable skills for thinking through potential problems and how to solve them.