

## Check Sheets

Check Sheets “record data on a form that readily allows interpretation of results from the form itself” (Hodgetts 89). As one of Ishikawa’s basic quality tools, Check Sheets are an effective means of gathering data in a helpful, meaningful way.

Kaoru Ishikawa is often credited with “democratizing statistics.” This relates to his desire to spread quality control ideas throughout the workplace. His tools make it easier to comprehend raw data, making quality improvements simpler. Check Sheets are a perfect example of this. Although they can vary a good deal depending on the type of data being collected, the purpose of the check sheet is always the same.

“The Check Sheet is used to facilitate the collection and analysis of data. ‘Garbage in, Garbage out’ is an old cliché, but it is true. Therefore, the purpose for which data is being collected must be clear. Data reflects facts, but only if they are properly collected. The number of defects and where they are found can be recorded and analyzed for causes” (Soin 297).

There are a few steps for constructing a check sheet. Since they are used for “determining the occurrence of events such as non-conformities, including the position in which they appear on the non-conforming item”(Bunney), the first step is to identify what

problems, or “non-conforming items” occur often. The next step is to construct the table, which will become the actual sheet. Usually the defects/problems/”non-conforming items” are the titles of the different rows on the left side. The top of the sheet contains columns that usually are the time periods in which the problems may occur. Once all of the rows are ready, the only thing left to do is implement the check sheet in the workplace. This means checking off the type of defect that occurs when it happens. This data can then be analyzed for trends using histograms, Pareto analysis, or in obvious cases just by eye.

Check sheets do not always need to be in this grid form. Pictures and diagrams are also useful variations on the check sheet. For example, ABC Corporation has invented a machine that automatically paints fences. However, some customers have been complaining that the machine missed certain spots or splattered paint in some places.

This form of the check sheet would consist of a picture of the standard fence. Then the places where the machine missed a spot, or splattered the paint would actually be printed right on the sheet. Other information would go on the top of the form such as date, customer information, the person filling out the form, etc. Once a group of them was completed, they could be analyzed for trends that can then be used to fix the process. If the machine is missing spots on the very bottom left side of all the fences then obviously an adjustment could be made to fix this and improve quality and customer satisfaction. This painting machine is a very random example, but this type of check sheet could apply to a wide variety of fields such as TV repair, car inspection, etc. Basically, any form of inspection or study is a good candidate for check sheets.

“Check sheets are used to determine the occurrence of breakdowns of machinery and/or associated equipment, non-value adding activity or, indeed anything untoward which may occur within a process. They are prepared in advance of recording the data, by the operatives and staff being affected by the problem. The data from a check sheet provides the factual basis for subsequent analysis and corrective action.”

Check Sheets are a very handy, data-gathering tool. They make data much easier to understand and thus easier to use effectively. Combined with some of the other basic tools of Ishikawa, Check Sheets can help almost any business improve quality where defects have been occurring.

## **Bibliography**

Bunney, Heather and Barrie Dale. TQM blueprint. Blackwell Publishers: Oxford, 1999.

Foster, Thomas. Managing Quality, An Integrative Approach. Upper Saddle River:  
Prentice Hall, 2001.

Hodgetts, Richard M. Measures of Quality and High Performance. Amacom publishing:  
New York, 1998. Pages 89-91.

Soin, Sarv Singh. TQC essentials. McGraw-Hill, Inc: New York, 1992. Page 297.