The 5 Minute Talk on Reducing Variation

By Timothy J. Clark

In 1924, Dr. Walter Shewhart discovered an innovative yet simple way to manage variation.

His breakthrough is similar to the discovery that the earth was not flat, in that it is so revolutionary, that it too will take over a century to be considered common knowledge.

Shewart’s methods help determine when change to a system or process is needed, the type of action needed and how to determine if the change resulted in an improvement.

Dr. W. Edwards Deming, who has been recognized for his contributions in expanding upon Shewhart’s concepts and promoting application of the methods worldwide, remarked that if he had to reduce his message to just a few words, it all had to do with reducing variation…

…which begs the question “Reduce variation from what?”

Variation

Variation is a law of nature that states that everyone and everything is unique—one of a kind.

It is the difference between an ideal situation and the actual situation. An ideal situation represents a standard of perfection as defined by yourself and others. You can strive for but never achieve that ideal situation—a fact that makes continuous improvement and progress possible.

Expanded Description of Variation

Typically, the term variation has been defined in statistical and scientific terms, which has limited its applicability and understanding on a broader basis.

To relate the concept on an individual level, consider the example of personal health and fitness.

For purposes of discussion, let’s presume that if we do everything under our control regarding our diet and exercise habits, we will live longer and have a quality of life that benefits ourselves and others (including family, friends and the community).

Given the variation principle, it’s a fact that you will never have the ideal quantity and quality of exercise, vitamins and nutrients required for perfect health. There
will always be a _difference_ between the ideal and the actual. In other words, there will always be “imperfection”.

Now this difference is often thought of as a problem. But considering the variation principle, a problem represents a judgment that the variation is unacceptable.

For example, hunger is a problem, but it also represents an unacceptable degree of variation. When you eat something to satisfy the hunger, you now have an acceptable degree of variation. Variation always exists and either gets better or gets worse.

In other words, you are either making progress in implementing and sustaining a healthier diet and exercise program or _you are risking an earlier death and a poorer quality of life by sustaining the status quo._

Using the health and fitness metaphor, consider the health and fitness within your organization, community or country. In embracing the new perspective, the immediate steps are to identify the ideals and implement solutions that will result in making progress toward those ideals. To help make the case for change, it also helps to identify the cost and risk of doing nothing.

What you may not know how to do is to apply the methods and tools developed by Shewart and Deming for establishing common ground, identifying and implementing solutions, and determining whether the implemented solutions resulted in improvement.

**Simple Actions, Powerful Results**

Sometimes, simple actions can be taken that can have immediate and significant impacts.

Imagine a time in history when it was an accepted belief that the earth was flat. Learning that it was not flat would have been as easy as getting on a ship to discover new worlds.

Another example of an immediate change that would have a significant impact on your life would be if you just won millions of dollars in a lottery and everyone in the world knew it.

I am going to propose a simple challenge that will take you only a few minutes to do but has the potential to change your perspective and improve the quality of your problem-solving and decision-making skills.

Among the best ways to understand variation is to develop a trend chart. An easy way to get started is for you to weigh yourself 24 times and record the data by date and time. When you have the 24 data points, calculate the average and plot the weight and average on a trend chart.
The final step in the exercise is to determine if you lost weight, gained weight or stayed about the same. To answer this question, I provide one of the simpler standards I refer to as the rule of 7 for interpreting trends. I introduce this standard in the article “Managing Variability in Thrift Savings Plans (TSP)”.

This simple exercise will provide the basic knowledge for assessing the results of any system or process, no matter whether it is in your organization, community, country or TSP. Put another way, this simple exercise will help you assess whether things are getting better, getting worse or staying about the same.

I hope you choose to take the challenge to learn more about variation. I also hope that you will apply what you learn with the aim of helping to improve your organization and your country. The result may be a “healthier” quality of life for us all.

More Info:  [Assess your current knowledge of variation?](#)