

Process Improvement for All Industries

Cherye Morgan LLC and team have over thirty years of experience in helping organizations improve their performance. Studying under Dr. W. Edwards Deming from 1988 – 1993 and presenting healthcare applications with him at Deming conferences across the country, Cherye Morgan acquired a deep level of knowledge in these areas for all industries.

Background on Improvement History and Model for Improvement

Acquiring knowledge is essential for improvement activities, whether it is a simple problem to solve, a work process to improve, a design or redesign of a product or service, or an improvement to a complex system. When one considers what type of knowledge will allow us to develop, test and implement changes that result in improvement, the most obvious answer is subject matter knowledge acquired through formal and informal learning, and reinforced experiences.

Subject matter knowledge is vital for developing changes that result in improvement. However, there is another kind of knowledge useful for developing effective change. W. Edwards Deming proposed a body of knowledge called a “*System of Profound Knowledge*”. He defined the System of Profound Knowledge as the interplay of the theories of systems, variation, knowledge, and psychology. The ability to make improvements is enhanced by combining subject matter knowledge and profound knowledge in creative ways.

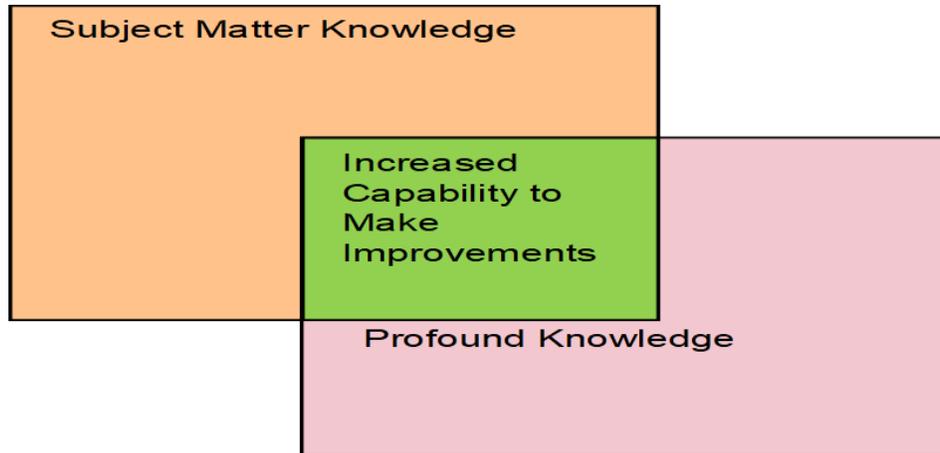


Figure 1: Increasing Capability to Make Improvements

During his conferences and seminars, Dr. Deming was often asked for his recommended steps to transformation. In a sense, he was being asked for his “*recipe*” for achieving organizational success. Deming would respond with certainty, “there is no knowledge without theory”. This response pointed to the System of Profound Knowledge, illustrated in **Figure 2** below, which is described here in four parts,

all of which are related to each other.

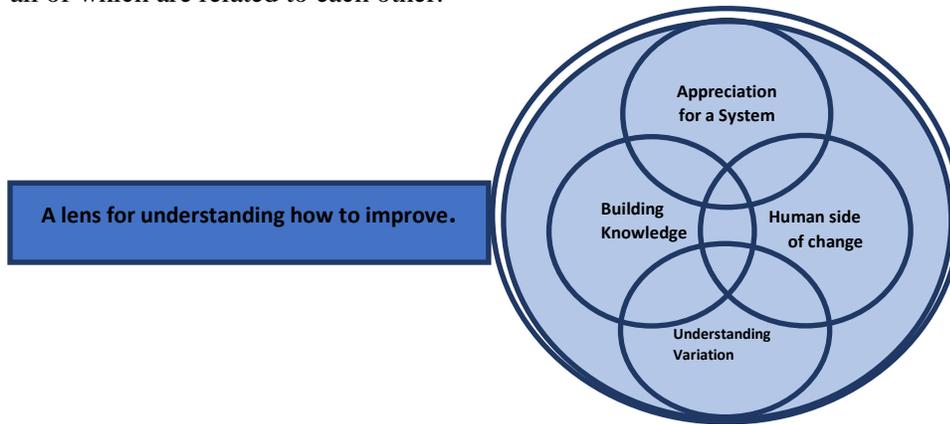


Figure 2: Deming's System of Profound Knowledge

- A. Understanding of a system and the theory necessary for optimization;
- B. Knowledge of statistical theory or variation;
- C. Theory of Knowledge; and
- D. Knowledge of Psychology, or the human side of change.

The System of Profound Knowledge helps us to understand that all management in any form is prediction. A thorough understanding of these concepts and their application provides a “roadmap” for organizational transformation. There are six (6) foundational principles necessary if one wants to gain a deep understanding of Deming’s teachings.

1. Customer needs and expectations (present and future) must drive the entire process for improvement.
2. Customer needs will be satisfied or dissatisfied depending upon the design or capability of systems/processes.
3. All systems exhibit variability and it is necessary to understand the causes of system variation/variability to understand how to improve systems/processes.
4. Studying the causes of variation for the systems we work within provides us with new knowledge for how to improve existing systems/processes. Once systems/processes are stable (*possessing only common cause variation*), knowledge of variation provides the knowledge necessary for predicting how systems will perform now and in the future. This is synonymous with understanding the capability of systems/processes. This knowledge of prediction is what is necessary for managing change and maximizing position within all industries.
5. Continuous improvements can only occur through planned change. Successful change requires knowledge of the psychology of change. This refers to how people react to change; how they interact with others in a climate of change; and how people are motivated to change.
6. People must drive the change process. Their motivation must be intrinsic in nature, not extrinsic. They must understand the purpose of the organization and how the work in their department impacts other departments as well as the whole system (organization).

Leaders must create a vision for change, communicate this vision to others in the organization, and motivate people to accomplish the change. Nevertheless, there is a limit to the rate of change an organization can tolerate. We can refer to this limit as the threshold of corporate change. Beyond the threshold, organizations may become dysfunctional. The leader’s goal must be to learn to make improvements as rapidly as possible, without exceeding the threshold of corporate change.