

Chapter 2 Questions

2.1 Why is an organizational philosophy focusing on delighting customers key to organizational success?

Customers are the reason an organization is in business. An organization is always seeking to keep the customers they have and gain new customers. In order to do this consistently, effective organizations must focus on creating successful, satisfied customers each time an interaction occurs.

2.2 Use Dr. Feigenbaum's definition of quality as a guide and describe an experience you have had with a product or service.

For example:

Customer determination: replacement muffler is new, not used, that it is needed.

Actual experience: does the muffler muffle? Service?

Requirements: Service at time of replacement? On time? As promised?

Technically operational: does the muffler fit the car?

Entirely subjective: cleanliness of shop? Courtesy of service people?

Or

Customer determination: clean clothing from dry cleaner meets the expectations of customer?

Actual experience: Does the clothing feel, smell, look clean before wearing?

Requirements: clean, pressed clothing

Technically operational: clean, pressed, no damage

Entirely subjective: does the clothing look, smell, feel good?

2.3 Describe in your own words, the two types of variation that Shewhart identified.

Controlled variation (common causes) is variation present in a process due to the very nature of the process. This type of variation can be removed from the process only by changing the process. For example, consider a person who has driven the same route to work dozens of times and determined that it takes about 20 minutes to get from home to work regardless of minor changes in weather or traffic conditions. If this is the case, then the only way the person can improve upon this time is to change the process by finding a new route.

Uncontrolled variation (special or assignable causes) comes from sources external to the process. This type of variation is not normally part of the process. It can be identified and isolated as the cause of the change in the behavior of the process. For instance, the commuter describe above would experience

uncontrolled variation if a major traffic accident stopped traffic or a blizzard made traveling nearly impossible.

2.6 How do Dr. Deming's 14 points interact with each other?

Deming's fourteen points describe an overall change in management and organizational philosophy. Each of the points focuses on a weakness in companies that needs to be overcome in order to improve organizational effectiveness. The points support overall systems improvement, the creation of non-faulty systems.

2.7 How are the teachings of each of the people in this chapter similar? Where do they agree?

Deming, Feigenbaum, and Shewhart encourage organizations to:

- determine who their customers are
- determine the key critical success factors for meeting their customers' needs, requirements and expectations
- establish effective processes that enable them to provide products and services that meet their customers' needs, requirements and expectations
- focus on process measurement and improvement
- provide the management involvement and commitment required for organizational success.

2.8 How are the teachings of each of the people in this chapter different? Where do they disagree?

Deming, Feigenbaum, and Shewhart discuss different ways of reaching the goals. Deming focuses primarily on leadership efforts and management commitment and involvement. Deming provides management with his 14 points to use as guides. Shewhart concentrated on quality improvement through reduction in variation. Their definitions of quality are different too. Feigenbaum's definition is more complete (see text). Like Feigenbaum, Shewhart focuses on two aspects of quality: subjective and objective. Deming focuses on non-faulty systems.

2.9 Describe Taguchi's Loss Function. What was he trying to get company leaders to think about?

Taguchi tried to get company leaders to think about finding ways to improve the performance consistency of processes. Process improvements can be made by reducing variation through defining key process variables and experimenting with their levels. His loss function introduces the concept that quality, or the lack of it, is a loss to society. Any deviation from target specifications causes loss, even if the variation is within specifications.

2.10 How do the teachings of the people in this chapter relate to Six Sigma?

Six Sigma is a philosophy that an organization implements in order to be able to produce more products and services with its existing resources through an improved customer focus and streamlined work processes. The men in this chapter encourage organizations to increase their awareness of its internal and external customers. They all encourage a greater focus on what really needs to be accomplished in order to meet their customers' needs and expectations, therefore increasing their profitability through increased customer retention. They also stress that management involvement is critical to the success of any improvement projects. All men realize that process improvement comes through the reduction of variation through study of key process variables. The use of statistical process control techniques is critical to support process improvement.