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ISBN: 9781259643613 **Authors:** Joseph A. De Feo

17.1. High Points of This Chapter

- 1. Innovation is key to the survival of all organizations. Innovation, like continuous improvement, is the result of a systematic approach, not a haphazard one.
- 2. Continuous innovation (CI) is different from product development. Continuous innovation must happen in all areas of an organization, from creating products, services, or processes used to meet internal and external customer needs to designing new facilities' or office environments.
- 3. There have been many improvements in the methods used to design and develop products and services in the past decade. Design for Manufacturing, Design for Assembly, Design for Lean, Design for Environment, and Six Sigma all have become models to meet critical to quality customer needs—and lead to innovative products.
- 4. Continuous innovation using the steps of Design for Six Sigma or DMADV, as it is often referred to, is similar to the Juran Quality by Design model (see Chap. 4, Quality Planning and Design of New Goods and Services) and has become the basis for what we call "continuous innovation of goods, services, and processes."
- 5. Creating the habit of innovation requires that management create an infrastructure similar to that of continuous improvement. Set goals, select projects, and educate teams to create innovative goods and services—project by project.
- 6. Continuous innovation using Design for Six Sigma consists of carrying out five steps:
 - 1. Define the goals and objectives for the new good, service, or process.
 - 2. Measure and discover hidden customer needs.
 - 3. Analyze the customer needs and determine the innovative features that will meet those needs.
 - 4. *Design* by combining the features, thereby creating new products, services, or processes that incorporate the features.
 - 5. Verify that the new innovation meets the customers' and organization's needs.