

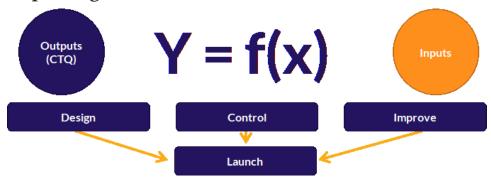
Notes:

# **Overview of Improvement Methods**

### **Key Learning Points**

- 1. Recognize the three improvement methodologies and explain when they should be used.
- 2. Describe when you should design and when you should improve.
- 3. Select the correct methodology for your project.

#### Improving the Y



### **Lean to Drive Out Process Waste**

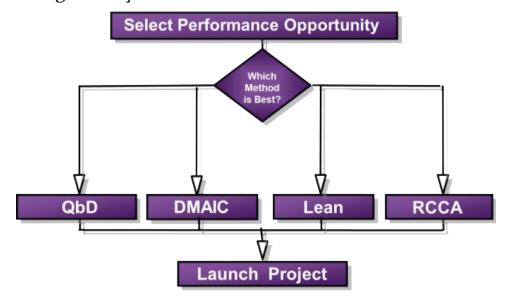
Lean is a methodology used to reduce lead time, increase throughput, and eliminate waste.





A COMMON METHODOLOGY TO DRIVE OUT WASTE

### **Categorize by Method and Charter**



### **DMAIC To Solve Problems and Reduce Variation**

- Disciplined and Rigorous Process
- Uses Projects
- Involves Multi-Functional Teams
- Begins by Understanding the Problem
- Uses Systematic Planning, Control, and Understanding





A COMMON METHODOLOGY TO IMPROVE

# Quality by Design To Design New Products, Services, and Processes

Quality by Design is a structured Process that address both dimensions of quality; Product Features and Freedom from Failures.





### Design vs. Improvement

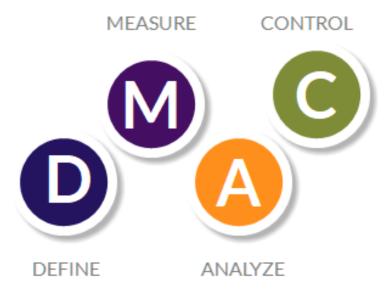
Different DMAIC teams looking at the same problem are likely to arrive at similar solutions.

In Design teams, since there are many customers, many needs, and lots of possible features, different teams trying to plan the same thing are highly likely to arrive at different designs.



### **DMAC To Maintain Daily Process Control**

DMAC is also known as Root Cause Corrective Action (RCCA). The purpose is to identify sporadic spikes in a process and find a way to bring the spike in performance into control.



## Lean Six Sigma





### **Control Methods to Hold the Gains**

