

## Management and Strategy Institute, LLC.

### Six Sigma Project Simulation – Information Technology

#### Course of Study

#### Introduction

The Six Sigma Project Simulation in Information Technology is designed to guide you through the development of a Six Sigma project. To do this, you'll create a Six Sigma project case study that examines a fictional Information Technology company. What is a case study? It's a descriptive research paper that looks at a subject then completes an analysis of that subject. You'll collect data about the supplied company and their processes, then analyze that data. You'll start by defining the overall case study, then provide a brief but detailed history and background of the company and its problems. Using the DMAIC method you'll collect, measure, and analyze the problems and develop an improvement plan and a control method for that improvement.

This scenario will allow you to review and write a Case Study regarding the use of Lean and Six Sigma Tools in the realm of Information Technology. The Information Technology industry has its own intricacies which provide opportunity for Six Sigma and Lean projects.

The **Six Sigma Project Simulation – Information Technology** is not a pass/fail program. Student will write a Case Study and Project Charter regarding the simulated company and submit the Case Study for review. Case Study will be reviewed by MSI and either accepted or returned to the student for refinement.

# Competencies

This program covers the following competencies:

## Introduction

- This scenario will allow you to review and write a Case Study regarding the use of Lean and Six Sigma Tools in the realm of Information Technology.
  - Outcome: The Information Technology industry has its own intricacies and intrinsic issues which provide opportunity for Six Sigma and Lean projects.

## Define

- In this scenario you will define the problem, agree on the goals, and listen to the voice of the customer. You will have Required Activities & Recommended Activities.
  - Outcome: Review the define stage material and complete the Six Sigma Project Charter.

## Measure

- For the Measure phase you will determine the baseline measurements for your processes. We will look at the impact of several measurements which may have an affect.
  - Outcome: In your Case Study, be sure to include which tools you feel would be most appropriate for someone completing this project.

## Analyze

- In this scenario for the Analyze phase you analyze the data developed in the measurement phase and determine the causes for variation and root causes of problems.
  - Outcome: Review the information in the analyze stage for the Case Study.

## Improve

- In this scenario for the Improve phase you will choose solutions for improvement based on your analysis information.
  - Outcome: Review the information in the improve stage for the Case Study.

## Control

- This Information Technology project has taken you through each phase of a six sigma project - Define, Measure, Analyze, Improve, and Control. The tools provided in each section are for your use and are designed to help you formulate your Six Sigma project.
  - Outcome: Review the information in each stage and create your Case Study.

## Learning Resources

### Recommended:

Material included with your purchase is recommended reading.

- Free online training material provided by MSI. The material includes everything you will need to write your case study. This material is included for free with the purchase of your exam. It is in digital form, and available immediately after payment.

### Optional:

This material is not required, however it will assist you in completing your project.

- The Black Belt Core Concepts Guide, available exclusively through The Management and Strategy Institute: [Order Here](#)
- Thomas Pyzdek (March 2003), The Six Sigma Project Planner : A Step-by-Step Guide to Leading a Six Sigma Project Through DMAIC, ISBN-13: 978-0071411837
- McGraw-Hill; 1 edition (2004) The Six Sigma Black Belt Handbook (Six SIGMA Operational Methods), ISBN-13: 978-0071443296

## Preparing for Success

In order to successfully complete the case study, you will need to make sure you have the appropriate resources to support your learning.

- A quiet location, free from distraction.
- Internet access.
- Current (newest) version of Internet Explorer, Firefox, or Chrome browser.
- Six Sigma Black Belt certification from MSI or another organization.
- Strong writing skills
- Strong critical-thinking skills