Management and Strategy Institute, LLC. Certified Continuous Improvement Manager (CCIM)™ Course of Study

Introduction

A Continuous Improvement Manager is responsible for driving significant improvement in operational processes and to drive productivity and quality. They are accountable for the development, evaluation, documentation and improvement of different processes within the business.

A Certified Continuous Improvement Manager must champion the lean organizations continuous improvement journey through application of lean principles to rapidly improve Quality, Reduce Lead Time, Improve On-Time Delivery and Reduce Overall Costs.

The goal of the Management and Strategy Institute is to teach you the key competencies required to function as a Continuous Improvement Manager. As you go through the training material you will learn the competencies listed below.

The CCIM exam is a timed (120 minute), online exam. It has a required passing score of 65%.

Competencies

This course of study covers the following competencies:

Lean Management

- What is Lean Management.
 - o <u>Learning Outcome</u>: Have an understanding of Lean Management principles.

The Lean Idea

- Creating value without waste.
 - <u>Learning Outcome</u>: Have an understanding of Customer Focus & Needs, Waste, Organizations, and Application.

8 Types of Waste

- What is waste.
 - <u>Learning Outcome</u>: Have an understanding of Overproduction, Waiting Times,
 Transport, Inefficient Processes, Motion, Rework, Inventory and Skill Gaps.

Lean Implementation & Realization

- How is Lean implemented and what tools are used.
 - <u>Learning Outcome</u>: Have an understanding of how Lean in implemented. What obstacles may be presented and what tools (classic & new) are used.

History of Six Sigma

- What is Six Sigma.
 - <u>Learning Outcome</u>: Have an understanding of what Six Sigma is and where it comes from.

The Sigma Level

- Six Sigma Measuring Method
 - <u>Learning Outcome</u>: Have an understanding of measuring method to determine process performance. Defects per million at the Six Sigma level.

DMAIC Process

- What is the DMAIC process
 - <u>Learning Outcome</u>: Have an understanding of DMAIC, an acronym made up from the first letters of each element – Define, Measure, Analyze, Improve, Control.

Six Sigma Roles & Belts

- What are the different roles and "belts" within Six Sigma.
 - <u>Learning Outcome</u>: Have an understanding of the leading positions and roles within the Six Sigma Project.

Total Quality Management

- What is Total Quality Management
 - o Learning Outcome: Have an understanding of Total Quality Management

Importance of Good Quality

- Good Quality leads to higher customer satisfaction and is rewarded by increased profits.
 - <u>Learning Outcome</u>: Have an understanding of quality management and good quality products & processes.

Determinants of Service Quality (Servqual)

- A system approach of the customer satisfaction through the different attributes of service quality.
 - o <u>Learning Outcome</u>: Have an understanding of Servqual.

The TQM System Model

- Total quality management (TQM) is a constant pursuit of quality that involves everyone in an organization.
 - <u>Learning Outcome</u>: Have an understanding of the seven basic elements of TQM.

Tools of Quality

- The most common Quality Tools.
 - <u>Learning Outcome</u>: Have an understanding of Pareto Charts, Scatter Diagram,
 Control Chart, Flow Chart, Cause-Effect, Histogram, CheckSheets.

Definition of 5S

- What is 5S and why is it used.
 - Learning Outcome: The Student will be able to define 5S

5S Breakdown

- In Japanese, 5S is represented by Seiri, Seiton, Seiso, Seiketsu, Shitsuke.
 - <u>Learning Outcome</u>: Understand the basic description of Sort, Straighten, Shine,
 Standardize, and Sustain.

Reasons to Introduce 5S

- Why should a company introduce 5S in the workplace.
 - <u>Learning Outcome</u>: understand the initial situations that lead to the implementation of 5S in the workplace.

Waste in the Production Sector

- Transport, Inventory, Motion, Waiting, Overproduction, Overprocessing, Defects, Intellect.
 - <u>Learning Outcome</u>: Understanding the waste within each section of the production sector.

Waste in the Administration Sector

- Lacking Information, Extra Information, Information Transport, Mistakes, Waiting, Inventory, Communication.
 - <u>Learning Outcome</u>: Understanding the waste within each section of the administration sector.

Direct Benefits of 5S

- 5S has many benefits which can be quickly implemented.
 - Learning Outcome: Understand some of the direct benefits of 5S.

Indirect Benefits of 5S

- Beyond the "5S", there are many indirect benefits of implementing 5S in the workplace.
 - <u>Learning Outcome</u>: The student understands some of the indirect benefits of implementing 5S in the workplace.

Phase 1 - Sort

- Implementing the Sort phase starts with one basic question "Is this item necessary for this work station and is it regularly used?"
 - <u>Learning Outcome</u>: Understand how the Sort phase is started. This section also includes understanding how to "Red Tag" and when to use it.

Phase 2 – Set In Order (Straighten)

- Work area is organized in such a way that every item can be easily found.
 - o Learning Outcome: Understand the basics of Set In Order.

Phase 3 - Shine

- Thorough cleaning of the entire work area, machines and facilities, plains and floors.
 - <u>Learning Outcome</u>: Understand the basics of Shine.

Phase 4 - Standardize

- Development of guidelines that support and organize the cooperation of departments.
 - <u>Learning Outcome</u>: Understand the basics of Standardize. Includes a 1-pagestandard example. Results of this phase are standardized (trans-divisional) solutions based on 5 questions.

Phase 5 - Sustain

- Established level of order and cleanliness is verified.
 - o <u>Learning Outcome</u>: Understand the basics of Sustain.

Implementation of 5S

- Duration and Binding Components. Consequent realization of the 5S phases.
 - <u>Learning Outcome</u>: Understand compliance with the correct order of the phases and overall project.

Planning Levels

- Lists all measures that are necessary for a successful and sustained implementation of 5S.
 - <u>Learning Outcome</u>: Understands a basic project plan for implementing 5S in the workplace.

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 learn to pass the exam. 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 <u>not</u> required; however, it will assist you in becoming a Continuous Improvement Manager.

- Joakim Ahlstrom (Nov 13, 2014), How to Succeed with Continuous Improvement: A Primer for Becoming the Best in the World, ISBN-13: 978-0071835237
- Jeffrey K. Liker & James K. Franz (May 10 2011), The Toyota Way to Continuous Improvement: Linking Strategy and Operational Excellence to Achieve Superior Performance, ISBN-13: 978-0071477468

Preparing for Success

In order to successfully complete the CCIM exam, 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.
- Take study notes while going through the training.
- When you are ready to take the exam, you should allot 120-minutes of time.

Frequently Asked Questions

What happens if I fail the exam?

You are given two additional attempts to pass the exam at no additional cost.

Will I receive a physical certificate in the mail?

Yes, MSI will mail you a certificate suitable for framing as well as transcripts.