



## Lean 101 - A Hands-On Introduction to Lean Principles

For those seeking a solid foundation and a clear understanding of Lean principles, this one-day, interactive, hands-on, simplicity-driven workshop makes Lean Thinking easy to understand and apply. Through the use of a day long learn by-doing simulation, participants become team members in the Sky-View Aircraft Company, a manufacturing operation that has to adopt Lean/World Class thinking to increase productivity to improve its competitive position to secure a large contract.

The process is based on the premise it is people who make processes, and ultimately, companies successful. They (the employees) do it by threading lean thinking, common sense, Value Stream Mapping, operations layout, quick setup, visual approaches, and more throughout a very busy one-day experience. This one-day program provides the 20% of the broad training that provides 80% of the value.

The first half of the day is spent discussing what Lean/Continuous Improvement is and cover the basic concepts Lean/ Continuous Improvement encompass. Real, relatable examples are used to further explain the concepts. The basic concepts covered in the morning portion are:

- The 5 Principles of “Lean Thinking”.
- What a “Value – Added” and “Non Value-Added” activity is within your own facility.
- What “Waste” is defined as in relationship to Lean.
- What the P.D.C.A. cycle is and how to implement it in your facility.
- The 7 forms of “Waste” and briefly describe each as it relates to his or her facility or environment.
- Value Stream Mapping and how the concept is applied.
- Use simple Value Stream Mapping to clarify a present operation (Current State Map).
- “Pull System,” (versus a “Push System) and its characteristics, and its typical effect on customers and quality.
- “Takt Time” and know how to calculate it and how Takt Time can aid in the decision making process.
- Generate a “Future State Map” for a given product or process.
- Know how to create a visual factory using charts and visual indicators that show and monitor the status of key indicators/measures quickly, simply and effectively.

The afternoon portion consists of a “Lean Simulation” where all attendees work and learn together in a “Lego” plane facility. In a four-step assembly process, team member’s work and learn together. Team members (participants) gather the data they need to understand the concepts as they assist their team in making the company successful. As they proceed, their results are captured visually. The participants become directly involved, as they use the data they generate by working side by side in the “Lego” facility - not data given to them from a textbook.

Specific Objectives of The Lean Simulation:

- Learn and apply the concept of “Brainstorming”.
- What a “Spaghetti Diagram” is and where and when to use it.
- What “Cycle Time” is and when and how to measure it.
- What “Lead Time” is and when and how to measure it.
- Learn how to gather, interpret and act upon “Metrics”.