Lean Six Sigma is a process improvement methodology focused on:

- Reducing waste/increasing speed (Lean)
- Reducing variation/increasing quality (Six Sigma)
BELT LEVELS

• Black Belt
• Green Belt
• Yellow Belt
• White Belt

White Belts Understand:
1. Basic LSS Terminology
2. Identify process issues
3. LSS Concepts
BASIC LSS CONCEPTS

Everything we do is a process.

Always focus on the customer and where value is added.

All processes have variation and waste – no process is perfect!

All variation, defects, and waste have a cause.

Known causes can be eliminated, reduced or controlled.

View improvements in a systemic way.

Is there no easier way of plowing?
Challenge: Round 1

RULES
1. You are one big team
2. Ball must have air-time
3. No ball to your direct neighbor
4. Start Point = End Point
5. Iteration = 2 min
THE 5 LEAN PRINCIPLES

**Voice of Customer (VOC):** The process of capturing customer expectations, preferences and aversions through reactive (i.e. complaints, returns, service calls) and proactive (i.e. interviews, surveys, focus groups) feedback channels.

**Value Stream Map (VSM):** Lean-management method of mapping a process in order to promote awareness of the current state and to identify possible improvement opportunities.

**Perfection:** Iterative and continuous nature of process improvement

**Push vs Pull:** Pushing out products/services before there is an established demand versus production upon customer demand.

**Continuous Flow:** The optimal flow of value-add steps within a process (i.e. no stopping, one in-one out).
VALUE ADDED DEFINED

- The activity physically changes the product (or adds important information).
- The activity must be done right the first time (must not be rework).
- The customer must be willing to pay for it.
Challenge: Round 2

RULES

1. Recap Round 1 Rules
2. As a group, decide which two improvements will have the most impact on the process
8 WASTES: DOWNTIME

- **Defects**: Efforts caused by rework, scrap, and incorrect information.
- **Overproduction**: Production that is more than needed or before it is needed.
- **Waiting**: Wasted time waiting for the next step in a process.
- **Non-Utilized Talent**: Underutilizing people’s talents, skills, & knowledge.
- **Transportation**: Unnecessary movements of products & materials.
- **Inventory**: Excess products and materials not being processed.
- **Motion**: Unnecessary movements by people (e.g., walking).
- **Extra-Processing**: More work or higher quality than is required by the customer.
Once Waste Is Identified

- What do you do?
- How can you:
  - Eliminate?
  - Simplify?
  - Streamline?
  - Minimize?

**Process Before Lean Six Sigma:**

1 - 6 - 3 - 4 - 5 - 2

**Process After Lean Six Sigma:**

1 → 2 → 3 → 4
To achieve Six Sigma, the process variation must fit into the customer specification limits 99.9997% of the time.
CHALLENGE: ROUND 3

RULES
1. You are one big team
2. Ball must have air-time
3. No ball to your direct neighbor
4. Start Point = End Point
5. Iteration = 2 min
# Traditional Applications vs. Higher Ed Applications

<table>
<thead>
<tr>
<th>Traditional Applications</th>
<th>Higher Ed Applications</th>
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<tbody>
<tr>
<td>Improved delivery of manufactured products</td>
<td>Reduce contract processing cycle time</td>
</tr>
<tr>
<td>Increased capacity of expensive equipment</td>
<td>Reduce systems downtime</td>
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<tr>
<td>Improved safety</td>
<td>Improve safety compliance</td>
</tr>
<tr>
<td>Better inventory record accuracy</td>
<td>Improve processes for tracking, measuring and billing</td>
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<tr>
<td>Quality Improvement</td>
<td>Improve customer satisfaction</td>
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<tr>
<td>Productivity Improvement</td>
<td>Reduce delivery time for lab paperwork</td>
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<tr>
<td>Improved report delivery time and accuracy</td>
<td>Improve turn-around time for facility reports</td>
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<tr>
<td>Faster delivery/approval process</td>
<td>Improve onboarding process</td>
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THANK YOU!
PLEASE STAY INVOLVED!

YELLOW BELT TRAININGS

GREEN BELT SCHOLARSHIPS