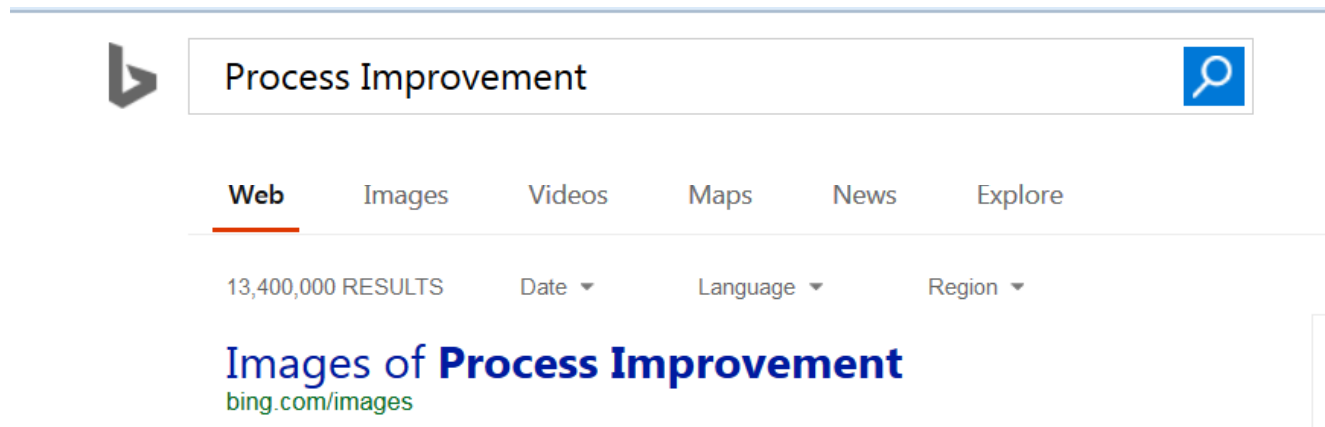


# Process Improvement

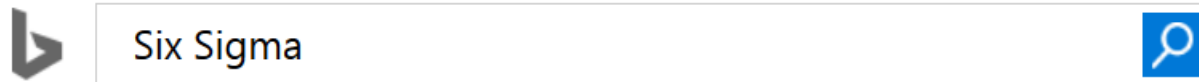


# Introduction

Search for Process Improvement, Six Sigma or Lean Management.  
How much information would you find ??




# Introduction



**Web** Images Videos Maps News Explore

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**Six Sigma Certification - Six Sigma Certification 100% Online** ⓘ  
Ad - [www.VillanovaU.com/SixSigmaCert](http://www.VillanovaU.com/SixSigmaCert)



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**Online Lean Training - We wrote the book on Six Sigma.** ⓘ  
Ad - [sixsigmatraining.com/lean](http://sixsigmatraining.com/lean)

# Agenda

- What is it ???
- Terms & Tools
- Next Steps
- Wrap Up
- Discussion

# What is it ??

## Process Improvement

- the job of examining the processes used in a company, department, project, etc. to see how they can be made more effective

Cambridge Business English Dictionary

<http://dictionary.cambridge.org/dictionary/english/process-improvement>

# What is it ??

## Six Sigma

- a methodology and toolset that will enable you to analyze processes and achieve breakthrough improvement

<http://www.sixsigma.com/>

# What is it ??

## Lean

- Is not a tactic or cost reduction program, but a way of thinking and acting for an entire organization
- Lean means creating more value for customers with fewer resources

<https://www.lean.org/WhatsLean/>

# Terms

- **Root Cause Analysis**
  - Solve the problem, not a consequence
- **Five Why's**
  - Ask it 5 times, have genuine curiosity - not a pre-determined answer
- **5S**
  - A method for simplifying and de-cluttering a work area
- **Flow**
  - the progression through a series of steps or processes to achieve an end product or result



# Terms

- **Gemba**
  - Where the work gets done
- **Kaizen**
  - Gradual, unending improvement
- **Lean Manufacturing**
  - A production system focused on eliminating waste and increasing value-added work
- **Mistake Proofing**
  - Building defect-prevention into a process

# Terms

- **Muda (Waste)**
  - Any activity that consumes resources but adds no value
  - There are seven types of waste to watch for
- **Work**
  - Any activity that adds value
- **PDCA Cycle**
  - A continuous series of steps needed for improvement
- **Standard Work**
  - A consistent, repeatable series of steps to perform a task or activity

# Terms

- **Value**
  - something a customer wants, provided at the right time
- **Value Stream**
  - the end-to-end process of creating an output for a customer
- **Value Stream Map**
  - a visual tool to understand the end-to-end process and help identify waste
- **Visual Control**
  - a tool to understand what happens in a process, makes abnormalities visible and allows corrective action to occur quickly

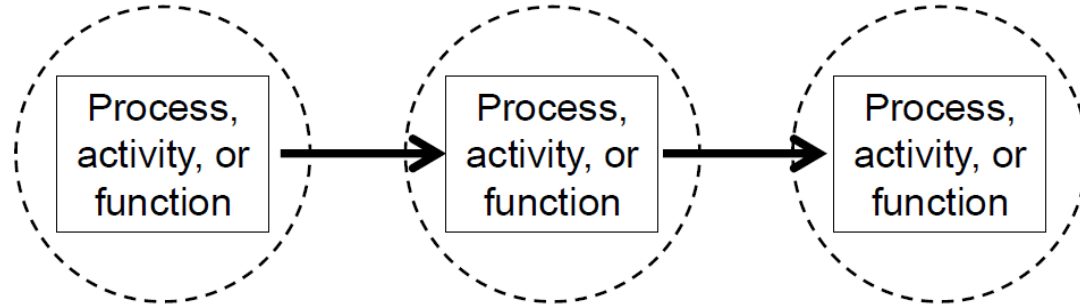
# Tools

- Root Cause Analysis
  - If you don't know what the problem is, you can't solve it
  - Don't act on opinions, feelings, hunches or intuition
  - Talk to the people who actually do the work
  - Use the Five Why's
  - Washington Monument

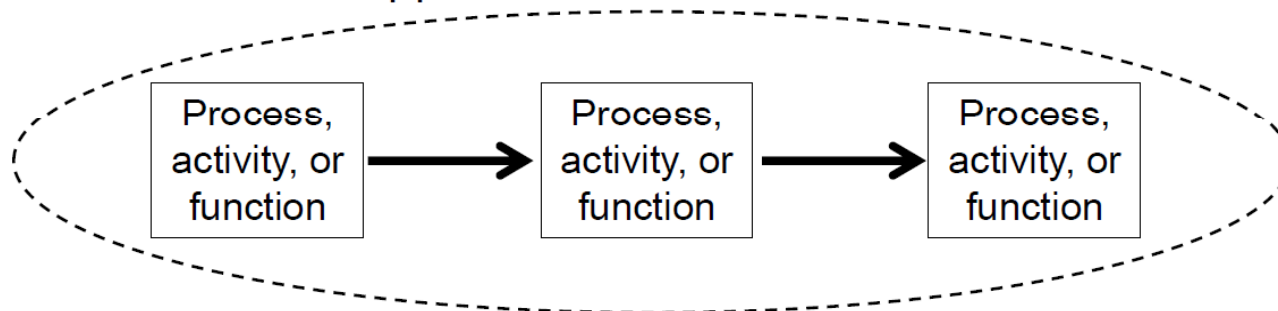
# Tools

- Value Stream

Business as usual:



Value Stream Approach:



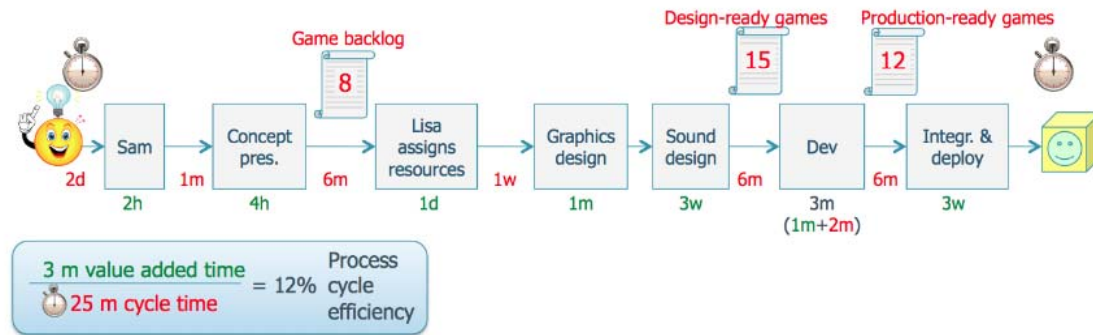
# Tools

- **Value Stream Map**

- look at the flow of information from the time a process is triggered until the total task is completed
- draw out the steps in a process as they actually occur, not as you think they are
- identify inputs to the process, periods of activity or waiting
- the purpose is not to draw a map, but to gain a real understanding of the flow of information through the process
- helps identify waste and improvement opportunities

# Tools

## Value Stream Mapping

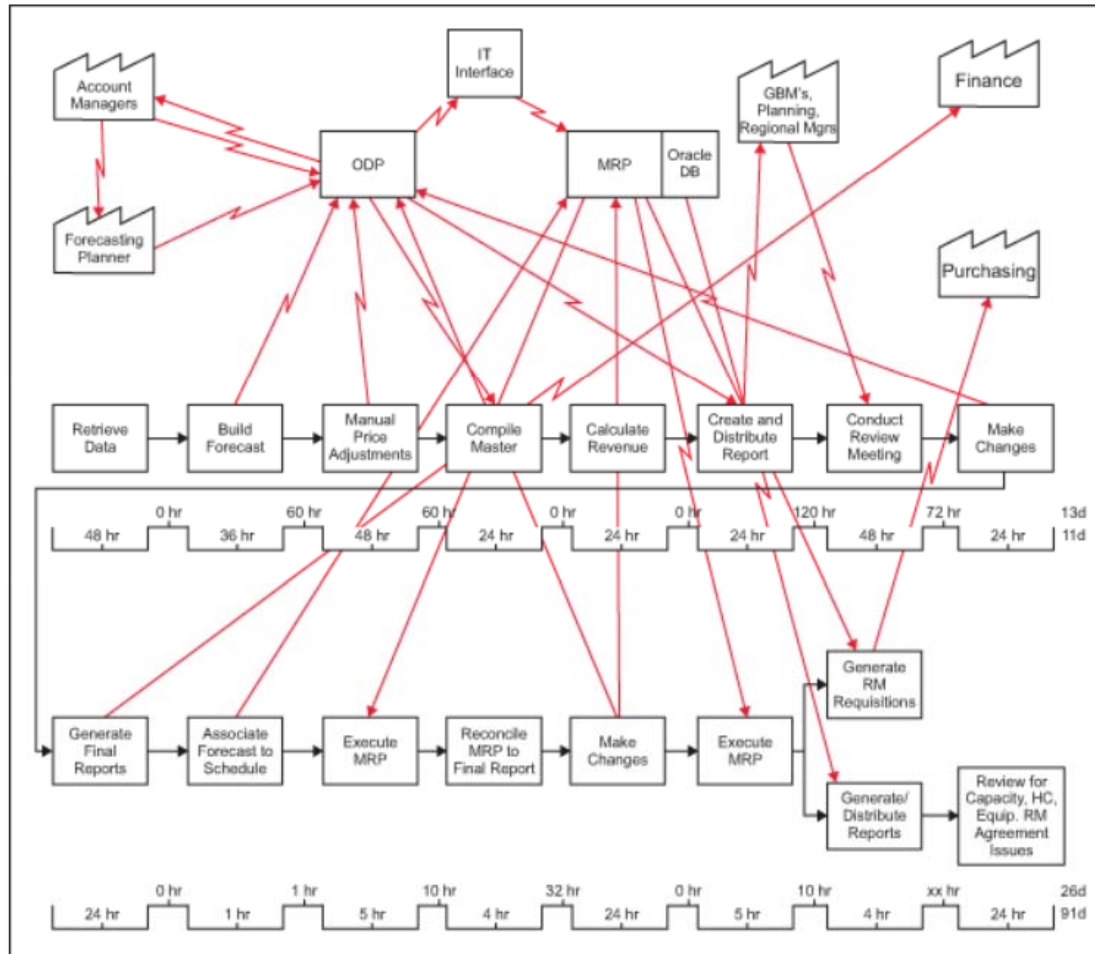


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[http://docs.ilean.be/Sessions/20110412\\_VSMIntro/IntroductionToValueStreamMapping.pdf](http://docs.ilean.be/Sessions/20110412_VSMIntro/IntroductionToValueStreamMapping.pdf)

# Tools



<http://sigmap.co.uk/six-sigmas-applicability-to-business-forecasting/>



# Tools

- The seven forms of Muda (Waste)
  - Over-Production
  - Waiting
  - Transportation
  - Processing
  - Inventory
  - Movement
  - Defective Products

# Tools

- **Standardized Work**

- a defined, repeatable sequence of instructions that allow a process to be completed in a consistent, timely and repeatable way

- helps to eliminate waste by controlling inconsistencies

- if there is no standard set for performing a certain task, different people doing the same job may end up with different results

- don't wait to start until you have a perfect standard, focus on consistency first.

# Tools

- Standardized Work

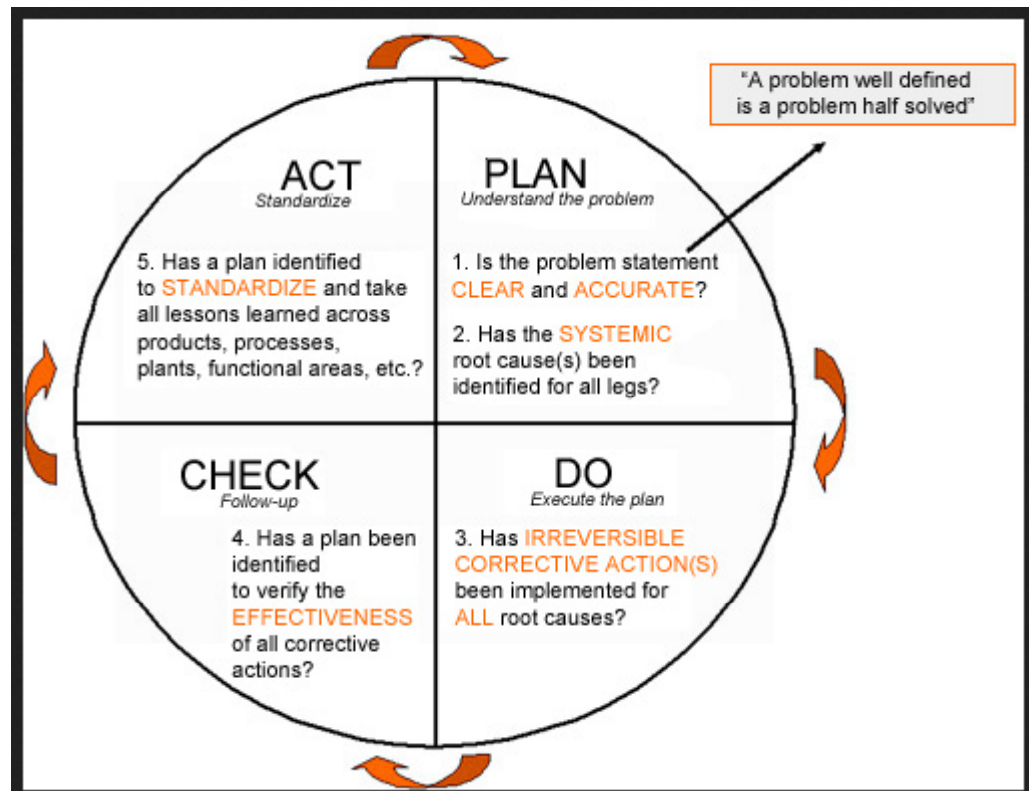
- PDCA cycle:

Plan

Do

Check

Act



[http://www.chartitnow.com/Images2/PDCA\\_Circle.jpg](http://www.chartitnow.com/Images2/PDCA_Circle.jpg)

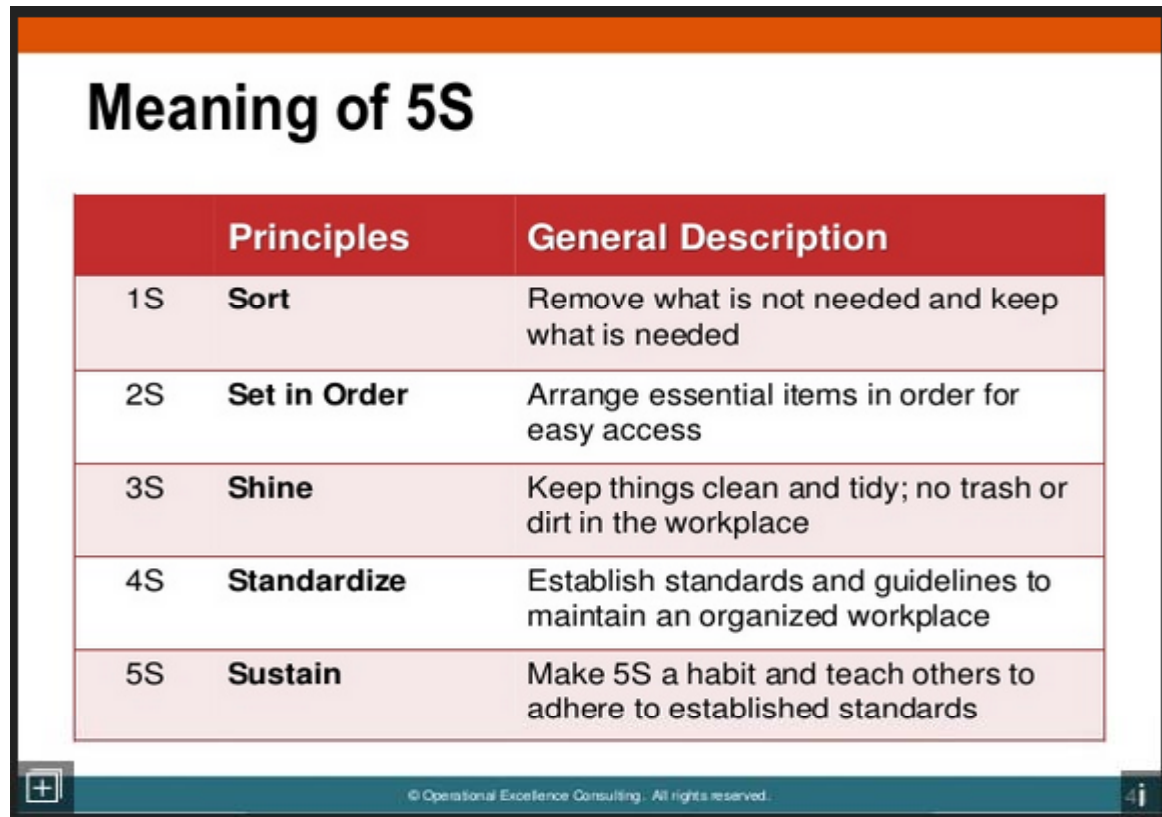
# Tools

- **Mistake Proofing**

- Error – something done incorrectly through a misunderstanding or as a result of an unreliable/unstable process
- Defect – an uncorrected error that reaches the customer
- the goal is to prevent errors before they become defects
- do a root cause analysis
- use the PDCA cycle
- this reduces rework, reduces cost and improves efficiency

# Tools

- Visual Controls
  - use a production board
  - use a gemba wall
  - 5S



### Meaning of 5S

	Principles	General Description
1S	<b>Sort</b>	Remove what is not needed and keep what is needed
2S	<b>Set in Order</b>	Arrange essential items in order for easy access
3S	<b>Shine</b>	Keep things clean and tidy; no trash or dirt in the workplace
4S	<b>Standardize</b>	Establish standards and guidelines to maintain an organized workplace
5S	<b>Sustain</b>	Make 5S a habit and teach others to adhere to established standards

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<http://www.slideshare.net/oeconsulting/5s-for-the-office-by-operational-excellence-consulting>

# Next Steps

- **Information**
  - you need it – so ask for it
- **Identification**
  - what process do you start with?
- **People**
  - don't overlook the most important ingredient in any kind of change

# Wrap Up

1. Use tools, be methodical, include lots of people
2. Observe the process, get information from the people who do it
3. Communicate with people
4. Monitor how it is working (PDCA)

# Wrap Up

- The business of making change is hard work. But it is worth it.
- Don't try to solve all the problems at once. Start small and gain momentum
- Two basic concepts in Lean (widely applicable):
  - Respect for people, and
  - Continuous improvement
- Quick & Imperfect vs Neat & Pretty
- Steal Shamelessly



# Additional Resources

Lean for Dummies Cheat Sheet

<http://www.dummies.com/business/management/lean-for-dummies-cheat-sheet/>

All About Lean

<http://www.allaboutlean.com/lean-administration/>

The Why and How of deploying 'Lean in Finance'

<http://www.everyangle.com/the-why-and-how-of-deploying-lean-in-finance/>

- <http://mncconsultinggroup.com/free-resources/white-papers/how-organizations-can-identify-areas-for-improvement/>
- <http://www.wmep.org/wp-content/uploads/2015/02/LeanOfficeArticle.pdf>
- <http://thekaizone.com/wp-content/uploads/2014/08/Root-Cause-Analysis-with-the-5-Whys-A-Monumental-Mystery.pdf>
- <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/toward-a-leaner-finance-department>

# Discussion

- Do you have an example of a change in process?
- Was it successful? Why?
- Was it unsuccessful? Why?
- Questions?