SLIDE 1 – Introduction: Module 1 “Understanding Value”

Voiceover: Welcome to the Certified Lean Practitioner Module 1,

UnderstandingValue

GRAPHICS/LAYOUT: TPG logo

SLIDE 2 – Objectives

Voiceover: In this module, you will learn:

- The definition of “value” and “waste”
- The difference between a “value-added” activity and a “non value-added” activity
- The history of Continuous Improvement/Lean/Six Sigma
- About Lean and Six Sigma
- To analyze and plan better work processes / 5S
- How to do a Kaizen project

GRAPHICS/LAYOUT: animated bulleted text to match VO

SLIDE 3 – Project Objectives

Voiceover: As a part of this Module, you will also be involved in a *Kaizen project*. This project will involve:

- Finding a subject matter for you project
- Getting approval from your manager for the project
- Define the work involved
- Determining the *value* and *non-value* activities that are a part of the work
- Choosing the non-value areas to improve
- Making recommendations for change
- Implement those recommendations
- Measuring the improvements for ROI
- Getting a sign-off from manager of successful completion of the project using principles learned in this module

As you advance through this module, think about how you will construct your own Kaizen event in your workplace.

GRAPHICS/LAYOUT: animated bulleted text to match VO

SLIDE 4 – Section 1: Value and Waste

Voiceover: In this section of the Module, we will discuss *Value* and *Waste.* We will:

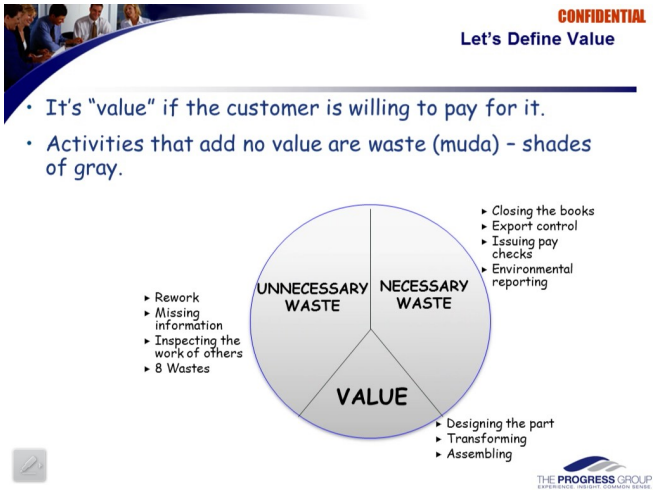
- Define Value and Waste
- Describe their distinctions
- And give examples of value and waste

GRAPHICS/LAYOUT: animated bulleted text to match VO; image of dollar signs/money, and trash or trashcan

SLIDE 5 – Defining Value (based on Slide 10)

Voiceover: In order to understand value, we must first define it. One way to define value would be to say:

Value is any part of your product, service, or process that the customer is willing to pay for



GRAPHICS/LAYOUT: animated bulleted text to match VO; image of pie chart

SLIDE 6 – Defining Necessary Waste

Voiceover: There are also things that the customer is not willing to pay for. We could call this waste. There are two types of waste: necessary waste and unnecessary waste. Examples of "necessary waste" are:

- closing the books
- export control
- issuing paychecks
- environmental reporting

GRAPHICS/LAYOUT: animated bulleted text to match VO; image of pie chart

SLIDE 7 – Defining Unnecessary Waste

Voiceover: Examples of unnecessary waste would be:

- Reworking a product
- Missing information
- Inspecting the work of others
- The 8 Wastes (DOTWIMPC), which will be discussed in greater depth later in this module

GRAPHICS/LAYOUT: animated bulleted text to match VO; image of pie chart

SLIDE 8 – Value Activities (based on Slide 4)

Voiceover: To that end, every product has *activities* involved in its production process before it reaches the customer. These activities are broken into:

Value-Added Activities

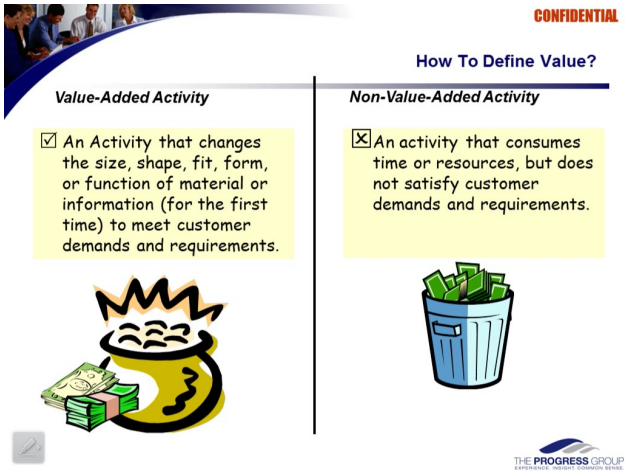
and

Non Value-Added Activities

Value-Added Activity – An Activity that changes the size, shape, fit, form, or function of material or information (for the first time) to meet customer demands and requirements.

Non Value-Added Activity – An activity that consumes time or resources, but does not satisfy customer demands and requirements.

GRAPHICS/LAYOUT: photo of someone paying money for something; photo of someone throwing something in the trash; VO matches text

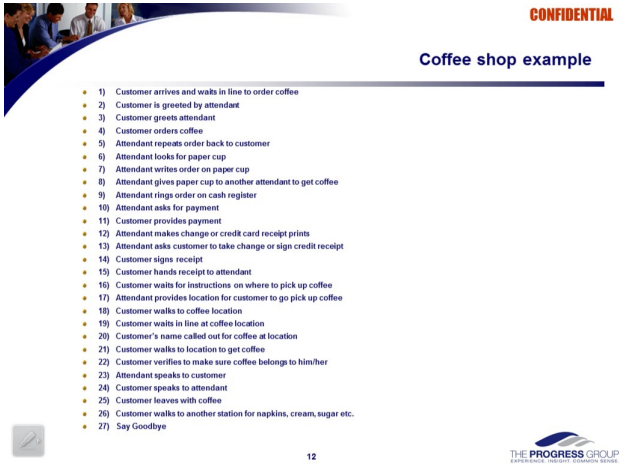


SLIDE 9 – Activity: What are the value activities / non-value activities in the example below? (based on Slide 12)

- Let'slook at an example of some value activities.
- Suppose you walk into a coffee shop to order a cup of coffee. Below is a breakdown of every behavior and interaction involved in ordering a cup of coffee.

  Which of the following are value activities, and which are non-value activities?

  - Customer arrives and waits in line to order coffee
  - Customer is greeted by attendant
  - Customer greets attendant
  - Customer orders coffee
  - Attendant repeats order back to customer
  - Attendant looks for paper cup
  - Attendant writes order on paper cup
  - Attendant gives paper cup to another attendant to get coffee
  - Attendant rings order on cash register
  - Attendant asks for payment
  - Customer provides payment
  - Attendant makes change or credit card receipt prints
  - Attendant asks customer to take change or sign credit receipt
  - Customer signs receipt
  - Customer hands receipt to attendant
  - Customer waits for instructions on where to pick up coffee
  - Attendant provides location for customer to go pick up coffee
  - Customer walks to coffee location
  - Customer waits in line at coffee location
  - Customer's name called out for coffee at location
  - Customer walks to location to get coffee
  - Customer verifies to make sure coffee belongs to him/her
  - Attendant speaks to customer
  - Customer speaks to attendant
  - Customer leaves with coffee
  - Customer walks to another station for napkins, cream, sugar etc.
  - Say Goodbye



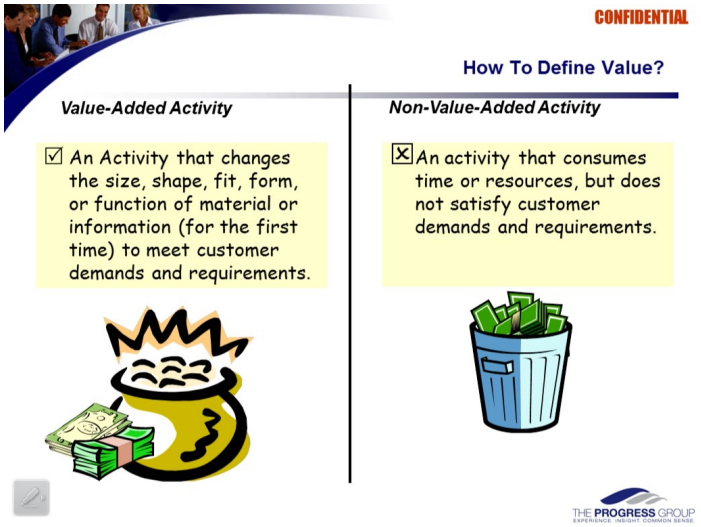
SLIDE 10 – Defining Waste (based on Slide 4)

Voiceover: Now that we've defined value, and have seen an example of what a value activity is, let's define waste.

Waste (or 'muda' in Japanese) can be thought of as a *non value-added activity,* or as stated earlier:

An activity that consumes time or resources, but does not satisfy customer demands and requirements.

GRAPHICS/LAYOUT: animated text/bullet points with corresponding VO

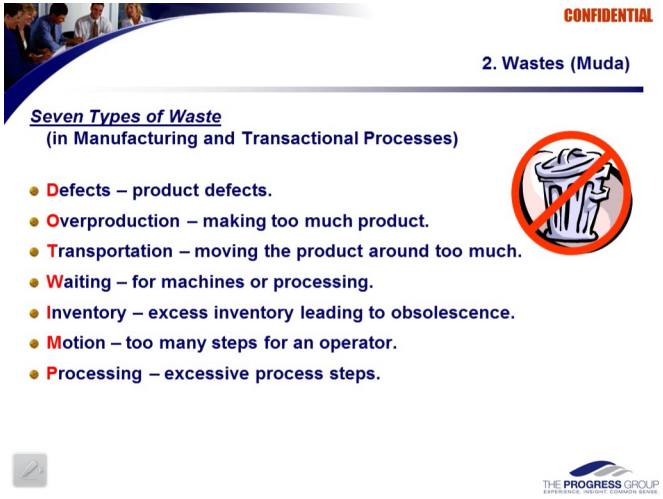


SLIDE 11 – Examples of Waste (based on Slides 8 and 9)

Voiceover: Below are some examples of the seven types of waste in the manufacturing/transactional process). These can be represented by the acronym DOTWIMP(C).

- Defects – product defects.
- Overproduction – making too much product.
- Transportation – moving the product around too much.
- Waiting – for machines or processing.
- Inventory – excess inventory leading to obsolescence.
- Motion – too many steps for an operator.
- Processing – excessive process steps.
- Un-used Creativity

GRAPHICS/LAYOUT: animated text/bullet points with corresponding VO



SLIDE 12 – Video – Demonstration of Wasteful Process (conveyor belt/scales)(based on Slide 11)

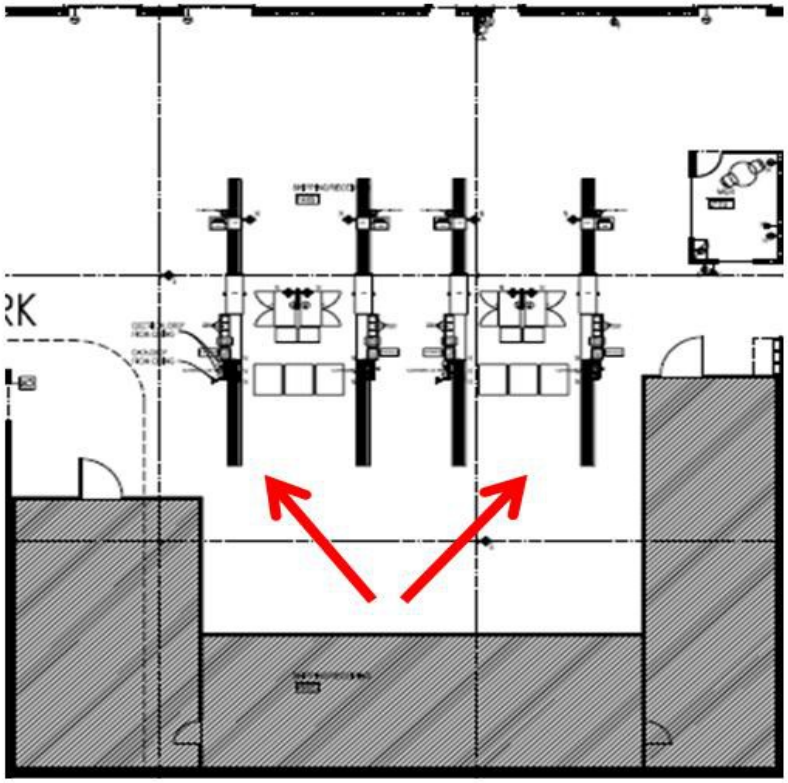
Voiceover: Watch the video below to see an example of a wasteful production process.

GRAPHICS/LAYOUT: video

SLIDE – Layout-Picking

Before

After



Prior layout required significant time walking around the warehouse to obtain product and packing material. Product was double and triple handled.

Employees who pack and manifest orders are assigned to stationary workstations. Employees who pick orders are within a 10 ft work radius. Lean Methodology allows for product to be handled only once.

SLIDE 13 – Activity: Identify waste in your workplace

Voiceover: Can you think of some wasteful or non value-added activities in your work environment? Take a moment to write down three different activities or processes that you could change in your workplace that would add value to your product.

GRAPHICS/LAYOUT: animated text/bullet points with corresponding VO; assessment slide: have user type in answers

SLIDE 14 – Section 2: Continuous Improvements

Voiceover: Can you think of some wasteful or non value-added activities in your work environment? Take a moment to write down three different activities or processes that you could change in your workplace that would add value to your product.

GRAPHICS/LAYOUT: animated text/bullet points with corresponding VO; assessment slide: have user type in answers

SLIDE 15 – Methods for Continuous Improvement

Voiceover: Now that we understand value and value-added activities, and waste and non value-added activities, we need to answer this questions:

How can we institute procedures in our workplaces to ensure that we have:

more value-added activities and *less* waste?

GRAPHICS/LAYOUT: animated text/bullet points with corresponding VO; graphic: worker with questioning look/shrugging shoulders

SLIDE 16 – Continuous Improvement is a Processes (from Slide 6)

The answer is to put in place *processes* that ensure success.

Quotes from Executive at Toyota Motor Manufacturing

"Brilliant *process* Management is our Strategy"

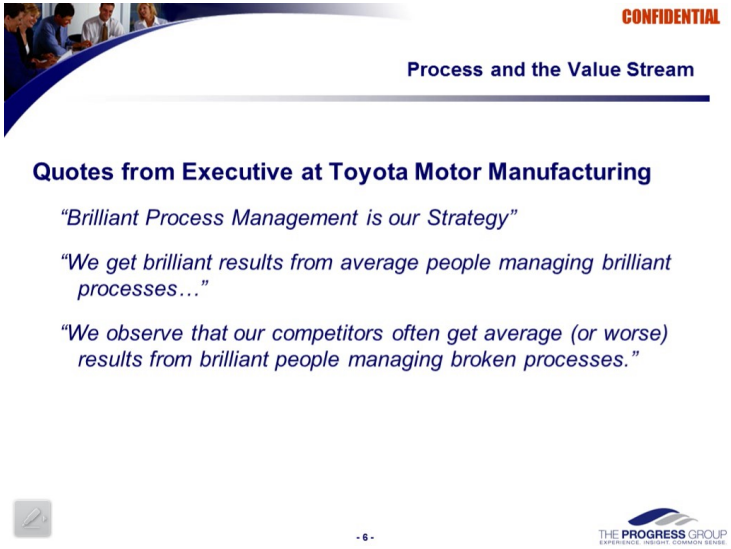
"We get brilliant results from average people managing brilliant *processes*…"

"We observe that our competitors often get average (or worse) results from brilliant people managing broken *processes*."

We call these processes *Continuous Improvement*

GRAPHICS/LAYOUT:

animated text/bullet points with corresponding VO



SLIDE 14 – Methods for Continuous Improvement

Voiceover: Continuous improvement (CI) is simply any effort whereby products, services, or processes are subject to an ongoing effort to improve. There are many approaches to this. One common CI approach is what is called:

Kaizen

GRAPHICS/LAYOUT: animated text/bullet points with corresponding VO; graphic of Japanese character for "Kaizen"

SLIDE 15 – Defining Kaizen and Kaizen Event

Kaizen

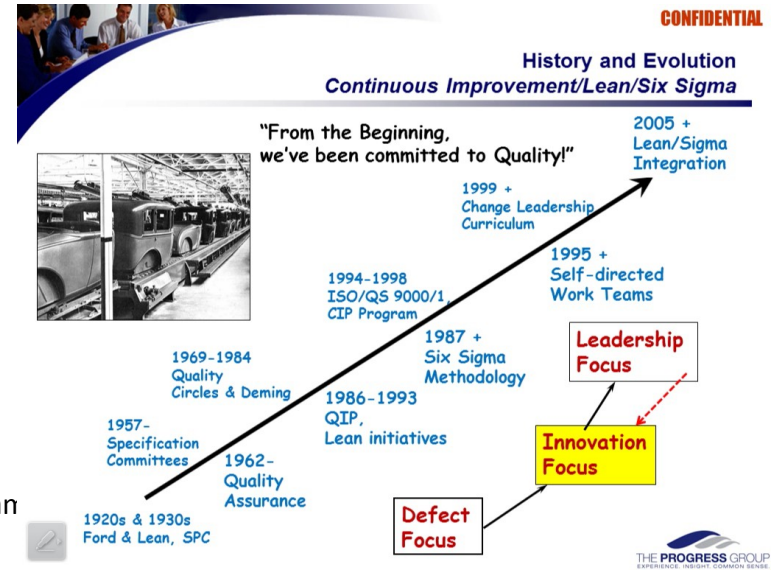
Voiceover: Kaizen, which is Japanese for “improvement” or “change for the best,” refers to practices that focus upon continuous improvement. A “Kaizen Event” is a team-based rapid improvement event that utilizes *lean* and *Six Sigma* tools and techniques.

Your project will involve you instituting a Kaizen event in your own working environment.

GRAPHICS/LAYOUT: animated text/bullet points with corresponding VO; photo of workers

SLIDE 16 – History/Evolution of Continuous Improvement

(based on Slide 3)



The history of continuous imp begins with Henry Ford in 1920.

- 1920 Henry Ford and the Model-T
- 1957 Specification Committees
- 1962 Quality Assurance
- 1969 Quality Circles and Deming
- 1986 Quality Improvement Process (QIP), Lean Initiatives
- 1987 Motorola and Six Sigma Methodology
- 1994 International Organization for Standardization (ISO)/QS 9000/1, CIP Program
- 1995 Self-directed Work Teams
- 1999 Change Leadership Curriculum
- 2005 Lean/Sigma Integration

Over the course of time, much of the manufacturing process has evolved from being *defect focused* to being *innovation focused* and now even being *leadership focused.*

Defect Focus -------> Innovation Focus <-------> Leadership Focus

GRAPHICS/LAYOUT: animated timeline w/graphics (Model-T from Yoel's PPT), maybe VO from Yoel?; *** Need more info to flesh out VO for this slide.*

SLIDE 17 – Lean and Six Sigma (based on Slide 13)

*Voiceover:*So how does a Kaizen event *do* all of this?

When a Kaizen is implemented, techniques and concepts are borrowed from other Continuous Improvement methodologies, such as *lean* and *Six Sigma.*Simply put...

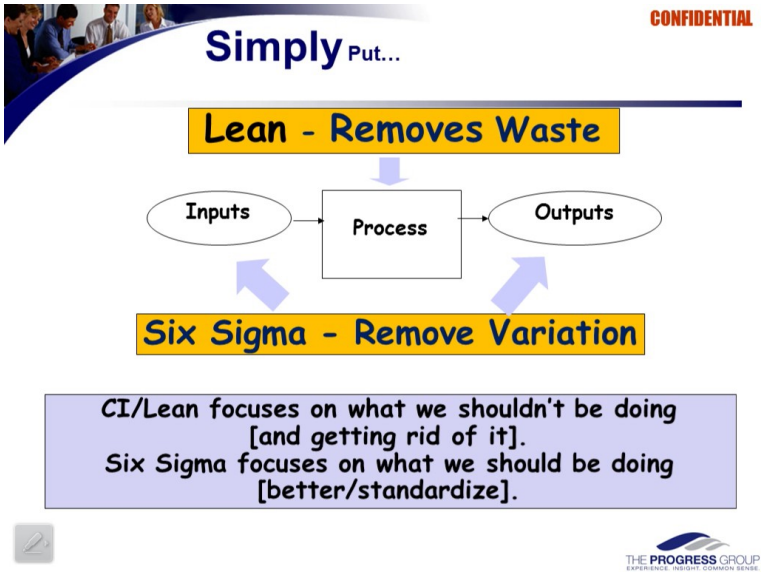
Lean, which centers on preserving value with less work, seeks to *remove waste*

Six Sigma, which centers on identifying and eliminating errors,*removes variation*

In other words, Lean focuses on *what we shouldn't be doing* and *getting rid of it.*Six Sigma focuses on *what we should be doing* and how we can *make it better and standardize it.*These concepts are critical in instituting a successful Kaizen event.

GRAPHICS/LAYOUT: animated text/bullet points; graphics of:

Inputs >> Process >> Outputs (from slide 13)



SLIDE 18 – Analyze and Plan Better Work Processes/5S (based on 5S .XLS)

*Voiceover:*5S is the name of a workplace organization method. It describes how to organize a work space for efficiency and effectiveness by identifying and storing the items used, maintaining the area and items, and sustaining the new order. 5S stands for:

Sort: distinguish between what is needed and not needed.....sort through and discard unused items

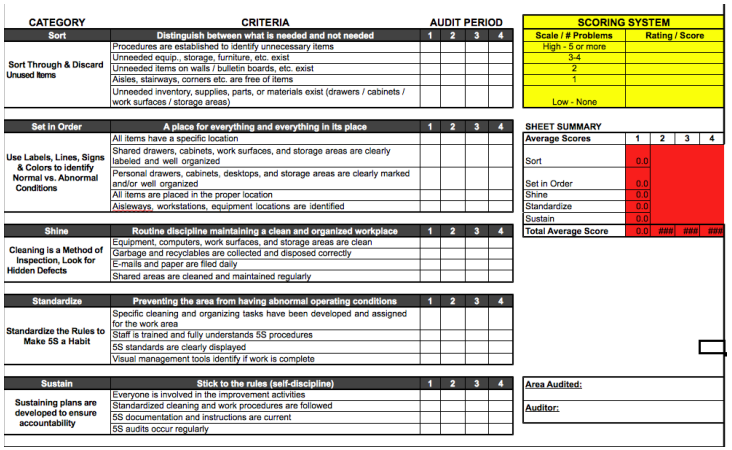
Set in order: a place for everything and everything in it's place.....use labels, lines, signs, and colors to identify normal vs. abnormal conditions

Shine: routine discipline maintaining a clean and organized workplace.....cleaning is a method of inspection; look for hidden defects

Standardize: preventing the area from having abnormal operating conditions.....standardize the rules to make 5S a habit

Sustain: stick to the rules (and use self-discipline).....sustaining plans are developed to ensure accountability

GRAPHICS/LAYOUT: animated text of points coming in with VO (bullet points)



CATEGORY	CRITERIA	AUDIT PERIOD 1	2	3	4
Sort	**Distinguish between what is needed and not needed**				
Sort Through & Discard Unused Items	Procedures are established to identify unnecessary items				
	Unneeded equip., storage, furniture, etc. exist				
	Unneeded items on walls / bulletin boards, etc. exist				
	Aisles, stairways, corners etc. are free of items				
	Unneeded inventory, supplies, parts, or materials exist (drawers / cabinets / work surfaces / storage areas)				
Set in Order	**A place for everything and everything in its place**				
Use Labels, Lines, Signs & Colors to identify Normal vs. Abnormal Conditions	All items have a specific location				
	Shared drawers, cabinets, work surfaces, and storage areas are clearly labeled and well organized				
	Personal drawers, cabinets, desktops, and storage areas are clearly marked and/or well organized				
	All items are placed in the proper location				
	Aisleways, workstations, equipment locations are identified				
Shine	**Routine discipline maintaining a clean and organized workplace**				
Cleaning is a Method of Inspection, Look for Hidden Defects	Equipment, computers, work surfaces, and storage areas are clean				
	Garbage and recyclables are collected and disposed correctly				
	E-mails and paper are filed daily				
	Shared areas are cleaned and maintained regularly				
Standardize	**Preventing the area from having abnormal operating conditions**				
Standardize the Rules to Make 5S a Habit	Specific cleaning and organizing tasks have been developed and assigned for the work area				
	Staff is trained and fully understands 5S procedures				
	5S standards are clearly displayed				
	Visual management tools identify if work is complete				
Sustain	**Stick to the rules (self-discipline)**				
Sustaining plans are developed to ensure accountability	Everyone is involved in the improvement activities				
	Standardized cleaning and work procedures are followed				
	5S documentation and instructions are current				
	5S audits occur regularly				

SCORING SYSTEM	
Scale / # Problems	Rating / Score
High - 5 or more	
3-4	
2	
1	
Low - None	

SHEET SUMMARY

Average Scores	1	2	3	4
Sort	0.0			
Set in Order	0.0			
Shine	0.0			
Standardize	0.0			
Sustain	0.0			
Total Average Score	0.0	###	###	###

Area Audited:

Auditor:

SLIDE 19 – The Objectives of a Kaizen Event

(based on Slide 2)

*Voiceover:*The primary objectives of a Kaizen event are to:

Target a product, service, or process

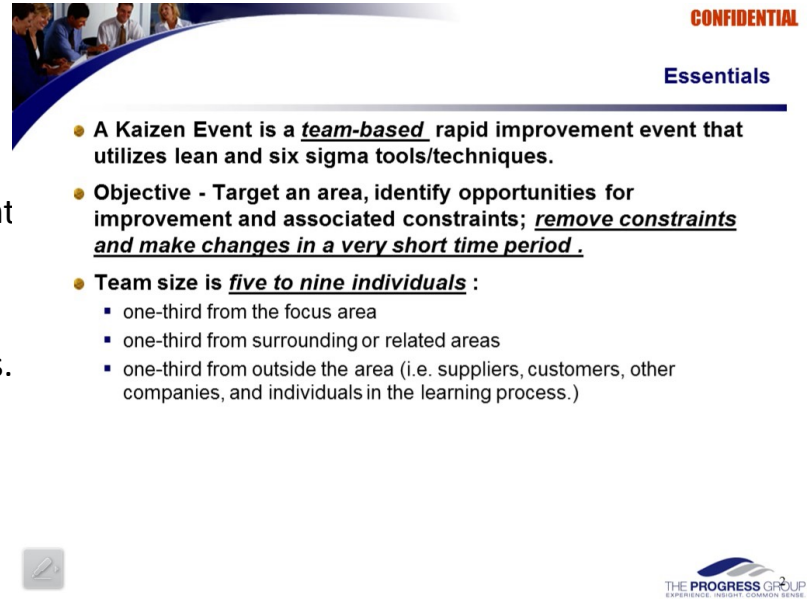
Identify opportunities for improvements and associated constraint

Make changes in a very short period of time

The team size for a Kaizen Event should be *five to nine* individuals.

- 1/3 from the *focus area*
- 1/3 from *surrounding* or related areas
- 1/3 from *outside* the area (i.e. suppliers, customers, other companies, and individuals in the learning process)

GRAPHICS/LAYOUT: animated text of points coming in with VO (bullet points); photos to illustrate products/service, image of a stopwatch; photos of groups of people to illustrate team size



SLIDE 20 – The Objectives of a Kaizen Event (continued)

(based on Slide 7)

Voiceover: A Kaizen event:

Focuses on the *elimination of waste* and *implementing control*

Maximizes benefits (i.e. yields and cost returns) from *existing equipment and systems* before "buying a solutions" (i.e. implementing an expensive new computer system)

Optimizes manual, low-tech systems *before automating*

Helps you to *comprehensively understand your processes* before making changes.

GRAPHICS/LAYOUT: animated text of points coming in with VO (bullet points); graphics of trashcan with red line; fancy new computer system with red line; illustrate low-tech; picture of someone with a "eureka" expression, illustrating understanding

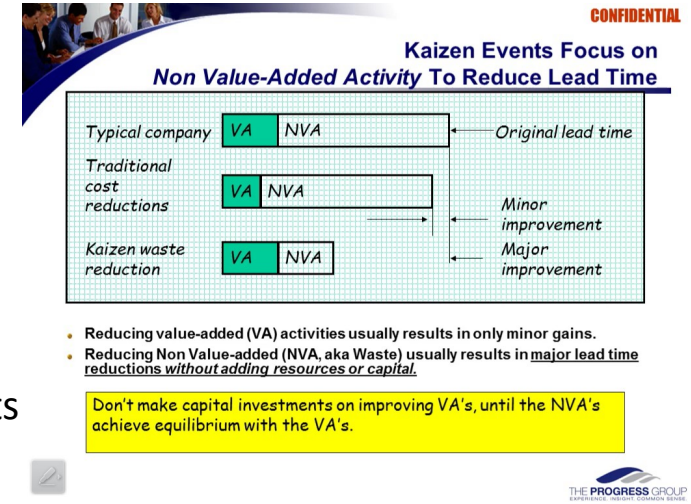
SLIDE 21 – Focus/Purpose of a Kaizen Event (based on Slide 17)

Voiceover: A Kaizen event focuses on:

Non value-added activity that reduces lead time

Reducing Value-Added (VA) activities that usually result in only *minor gains*

Reducing Non Value-Added (NVA), or *waste*, that usually results in *major lead time reductions ...without adding resources or capital*



Don't make capital investments on improving Value-Added activities ... until the Non Value-Added activities achieve *equilibrium* with the Value-Added activities.

GRAPHICS/LAYOUT: animated text/bullet points; rework existing graphic

SLIDE 22 – Summary (based on Slide 20)

*Voiceover:*To summarize:

Kaizen is a team approach for sustained improvement efforts.

Focus is on:

Activities that add cost but add nothing to productivity – non value added.

Implementation of Control (sustainability) mechanisms.

*Uses data*to drive the team to change the appropriate process.

Majority of actions take place over a very short period of time.

The people that know the process best make the changes.

Planning is the key/critical to success of any project or initiative.

The process of planning begins in earnest at least four weeks prior to the start date for the event.

The event lead must make sure the right people are involved early in the planning to ensure a smooth and successful event.

GRAPHICS/LAYOUT: animated text/bullet points w/VO

QUIZ Question 1

Voiceover: Based on what you've learned in this module, answer the following questions:

1. Continuous improvement is:

a. any effort whereby products or services are subject to an ongoing effort to improve

b. a value-added activity

c. something the customer is not willing to pay for

d. a form of necessary wasteful

QUIZ Question 2

2. A Kaizen event focuses on the elimination of _____ and implementing _____.

a. non-value activities, technology

b. waste, control

c. control, capital

d. waste, productivity

QUIZ Question 3

3. Value is anything the customer is willing to pay for, including some necessary waste.

a. True

b. False

QUIZ Question 4

4. The focus of Six Sigma is to remove _____.

a. necessary waste

b. non-value activities

c. muda

d. variation

QUIZ Question 5

5. Lean focuses on what we_____be doing and _____.Six Sigma focuses on what we *should be doing* and how we can make it better and standardize it.

a. can, trying to improve it

b. shouldn't, not think about it

c. shouldn't, getting rid of it

d. should, trying to capitalize on it

SLIDE 24 – Section 3: Project

*Voiceover:*In this section, we will discuss how to apply the concepts from this module into your own Kaizen project. We will also discuss:

SIPOC

DMAIC

GRAPHICS/LAYOUT: animated text/bullet points

SLIDE 25 – Kaizen Project

Voiceover: Now that you've completed this module, please take the time to answer the following questions:

- What is the subject matter of your Kaizen project?
- Have you gotten approval from your manager for the project?
- Define the work involved
- What are the *value* and *non-value* activities that are a part of the work?
- What are the non-value areas that you need to improve?
- What recommendations for change do you have?
- Implement those recommendations
- Measuring the improvements for ROI
- Getting a sign-off from manager of successful completion of the project using principles learned in this module

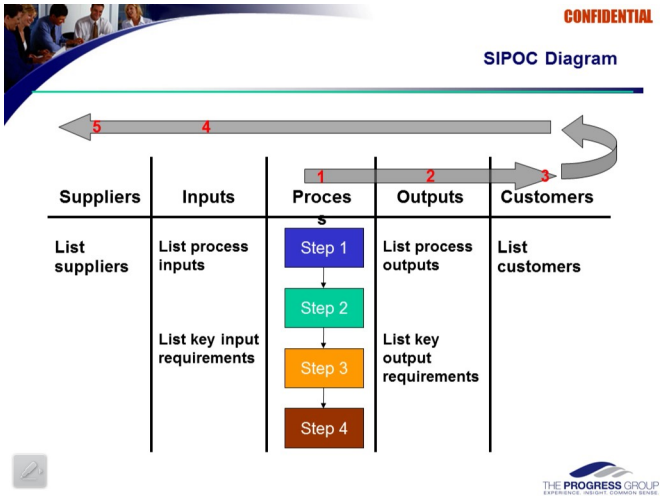
GRAPHICS/LAYOUT: animated text/bullet points w/VO

SLIDE 26 – SIPOC (based on Slide 16)

Voiceover: One tool used frequently in Lean/Six Sigma manufacturing is *SIPOC.* SIPOC is a chart that illustrates the various inputs and outputs involved in the production process. It is meant to show what happens to a product as it goes from the *supplier* to the *customer*. It is an acronym that stands for:

Supplier Input Process Output Customer

GRAPHICS/LAYOUT: animated text/bullet points w/graphic



Current State

Future State

SLIDE 27 – DMAIC (based Slide 19)

Voiceover: Another useful tool is *DMAIC.* DMAIC, which stands for Define, Measure, Analyze, Improve, and Control, is a quality improvement process also closely related to Lean/Six Sigma practices. The DMAIC cycle involves:

Define:

- Initiate the Project
- Define the Process
- Determine Customer Requirements
- Define Key Process Output Variables

Measure:

- Understand the Process
- Evaluate Risks on Process Inputs
- Develop and Evaluate Measurement Systems
- Measure Current Process Performance

Analyze:

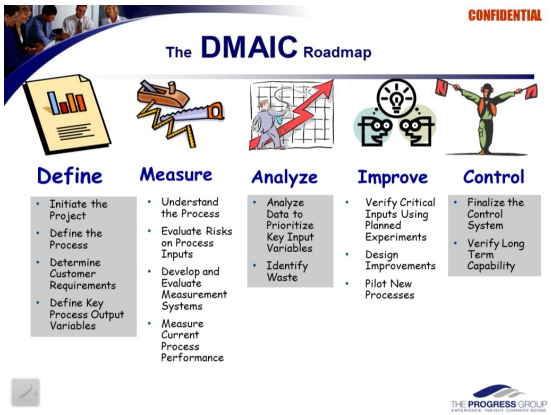
- Analyze Data to Prioritize Key Input Variables
- Identify Waste

Improve:

- Verify Critical Inputs Using Planned Experiments
- Design Improvements
- Pilot New Processes

Control:

- Finalize the Control System
- Verify Long Term Capability



GRAPHICS/LAYOUT: animated text/bullet points w/VO and graphics (from slide 19) provided there is space on the slide

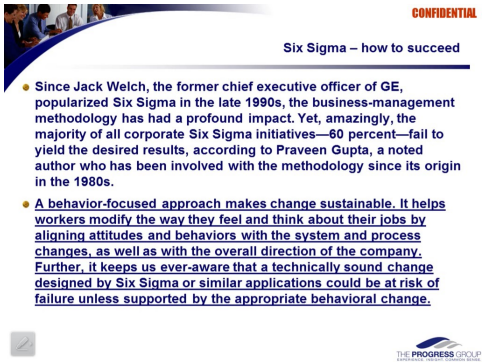
SLIDE 28: How to Succeed (from Slide 14):

Since Jack Welch, the former chief executive officer of GE, popularized Six Sigma in the late 1990s, the business-management methodology has had a profound impact. Yet, amazingly, the majority of all corporateSix Sigma initiatives—60 percent—fail to yield the desired results, according to Praveen Gupta, a noted author who has been involved with the methodology since its origin in the 1980s.

<u>TPG's behavior-focused approach makes change sustainable.</u>

It helps workers modify the way they feel and think about their jobs by aligning attitudes and behaviors with the system and process changes, as well as with the overall direction of the company.

Further, it keeps us ever-aware that a technically sound change designed by Six Sigma or similar applications could be at risk of failure unless supported by the appropriate behavioral change.



GRAPHICS/LAYOUT: animated text/bullet points w/VO

SLIDE 29: What do we do to improve? ACG (Accelerated Change for the Good)

(from Slide 15):*part of Kaizen at end of module*

Voiceover: What do we do to improve our work processes? Accelerated change for good involves the following steps:

Your Process Today (or "As Is"):

Define the scope/goals for waste reduction and process improvements

Map your current ("as is") process: perform a "value-added" analysis, identify root cause/effects, put forth a vision and define your desired end-state

Your Process According to Procedures (or "Should Be"):

Procedures may be used as reference point (usually outdated, out of touch w/real work)

Your Ideal State (or "Could Be):

Ideal state in generally unattainable within defined Kaizen period, may take years

Usually requires heavy capital outlay

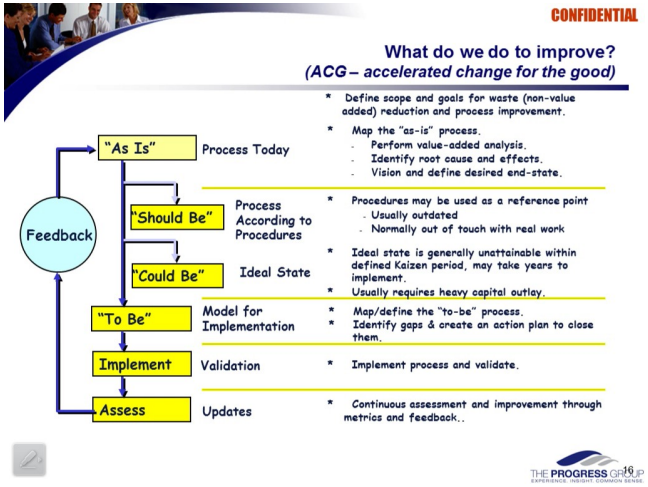
Your Model for Implementation (or "To Be"):

Map/define the "to-be" processes

Identify gaps and create an action plan to close them

<u>Validation (Implement):</u>implement process and validate it's success

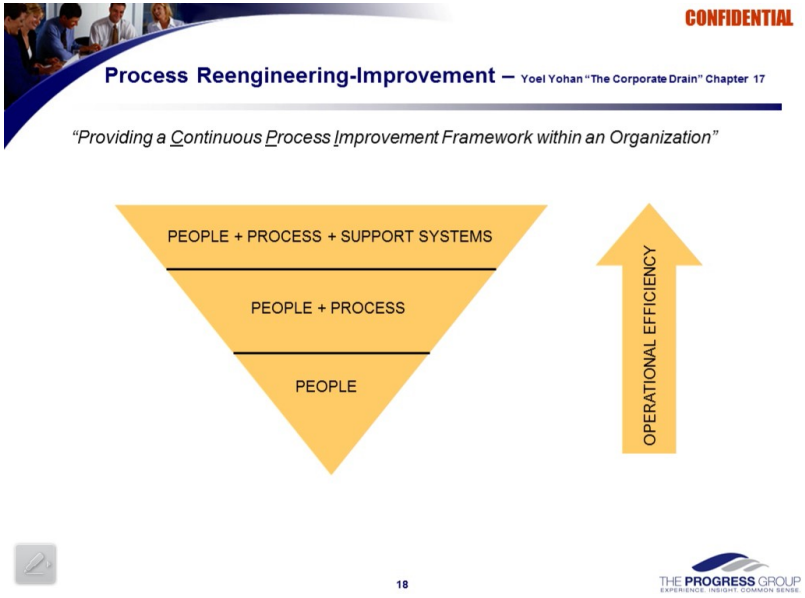
<u>Updates (Assess):</u>continuous assessment/improvement through metrics and feedback



GRAPHICS/LAYOUT: animated text/bullet points w/VO; ACG chart graphic w/animated text

SLIDE 30: Process Re-engineering Improvement

(from Slide 18):*add at end of the module*



GRAPHICS/LAYOUT: animated text/bullet points w/VO; chart graphic w/animated text

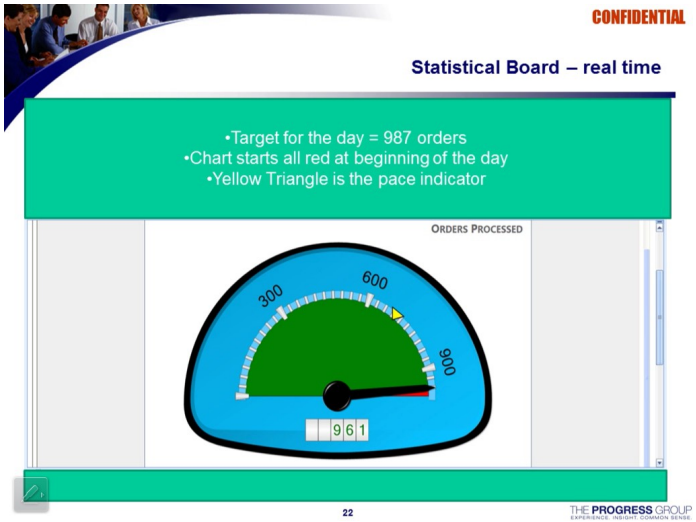
SLIDE 31: Statistical Board – Real Time (from Slide 22)

Voiceover: Having a real-time indicator of your productivity is an important part of Continuous Improvement.

The meter below shows:

- The target for the day (in this case, 987 orders)
- A Yellow Triangle, which indicates the current pace of production

At the start of the day, the chart will be red, showing that no production has occurred yet.



GRAPHICS/LAYOUT: animated text/bullet points w/VO; chart graphic w/animated text

SLIDE 32: WERC –

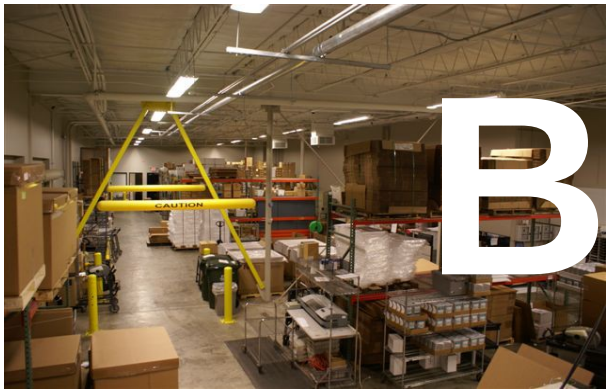
(Info taken from PPT file “WERC Presentation May 7-2012 It's all in the blood-Naji & Yoel.ppt”

.....emphasis on BEFORE/AFTER photos at the end)

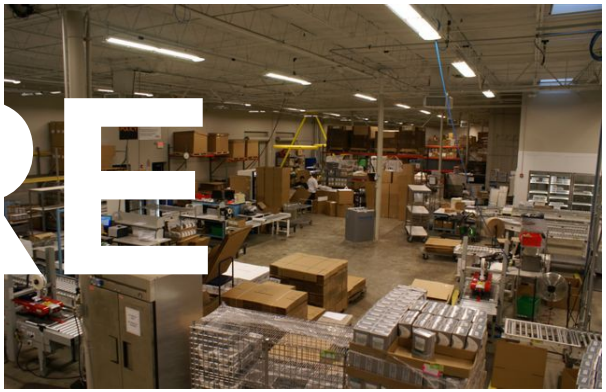
Voiceover: Implementing these processes can have amazing results on productivity and the work environment.

Below are some before and after pictures of Immucor Gamma's shipping facility, showing how Continuous Improvement processes and Kaizen events helped to shape their workplace, and eliminate waste.

GRAPHICS/LAYOUT: animated text/bullet points w/VO; before/after photos



BEFORE



AFTER

SLIDE 33: Summary

Voiceover: As you embark upon your Kaizen project, be sure to remember the following tools and processes:

- SIPOC Diagram (Suppliers, Input, Process, Outputs, Customers)
- DMAIC (Define, Measure, Analyze, Improve, Control)
- Accelerated Change for Good (ACG)
- Process Reengineering-Improvement
- Statistical Board

GRAPHICS/LAYOUT: animated text/bullet points w/VO

SLIDE 34: Conclusion

Voiceover: This concludes Certified Lean Practitioner Module 1, “Understanding Value”

Notes: