Adding Kaizens to your Kanban

A Visual Facilitation Approach to Create Prioritized Project Pipelines

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ProcessZen Consulting
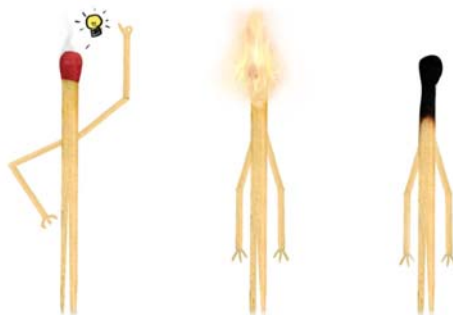
ASQ World Conference – Session M12

What Do You Do Every day?

Would you like to impact an entire organizations?

Why Do Project Based Programs Fail?

1. Poor Project Selection

2. Lack of Facilitation Skills

3. Failure to Sustain

Learning Objectives

In this session you will:

1. Leverage a "Faster and Better" visual facilitation approach to Identify opportunities for improvements

2. Learn the difference between Kaizen types

3. Discover how a Kanban can be used to prioritize projects

Faster and Better Visual Facilitation

- Complements existing quality initiatives

- Combines various existing toolboxes

- Leverages the experience of all participants

- Compiles and prioritizes improvement opportunities

- Links improvement initiatives to key business objectives

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Objectives 1

What is a Kaizen?

改善

kai
"change"

zen
"good"

Team event to quickly break apart & rebuild
a process to function better

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Kaizen Types

| Point Kaizen	Mini Kaizen	Kaizen Blitz	Flow Kaizen	Supply Chain Kaizen
Individual Workstation	**Work cell or Line**	**Complex Local Issue**	**Dock to Dock Value Stream**	**Multiple Companies**
• Waste • Tool location • Ergonomics • Poke Yoke	• Workflow • Cell Layout • Line balancing • 5S	• Team forms for the specific purpose of the event	• Cross Functional Teams • Process Issues • System Issues • Organizational Issues	• Part-time representatives from participating companies

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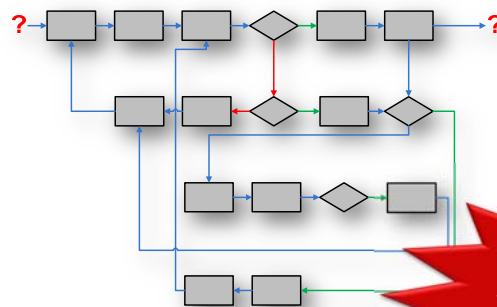Objective 2

What is a Traditional Kanban?

Kanbans signal to workers
what to build next or what parts to retrieve
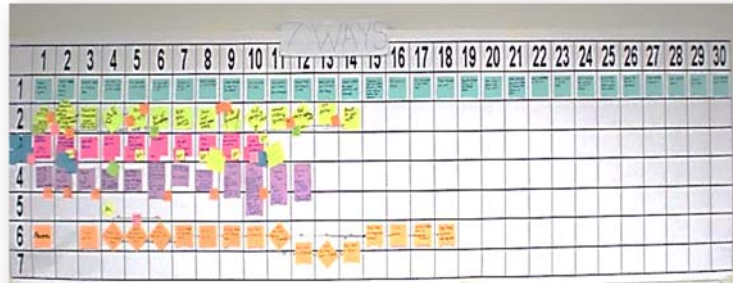
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Our roadmap
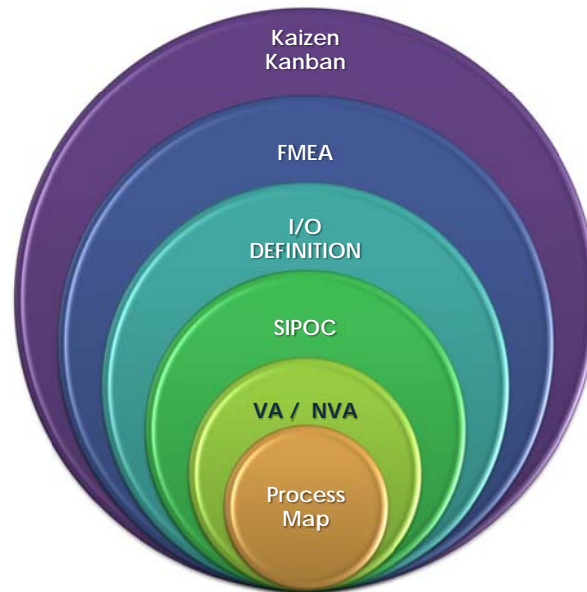
What is a Process Map?

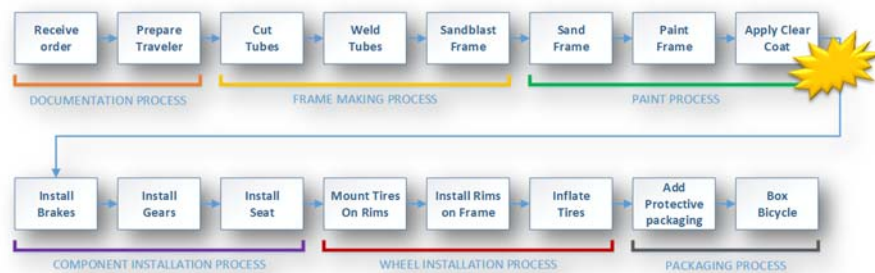**Each step should be written in the verb noun format**

A process map is a visual representation of the steps required to complete a task
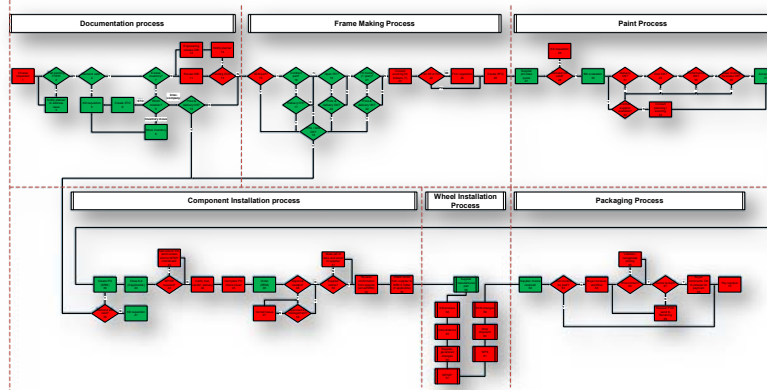
7 Ways

Applying the 7 Ways to Process Mapping

A Process Map provides the medium to display
Opportunities **F**or **I**mprovement (OFI)

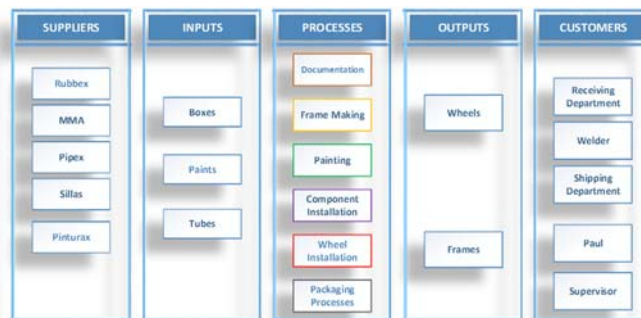# Process Map Exercise

Value Added / Non Value Added Analysis

🟢 **Value Adding Step (VA)**

🔴 **Non-value Adding Step (NVA)**
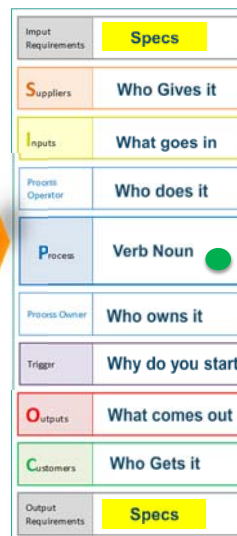
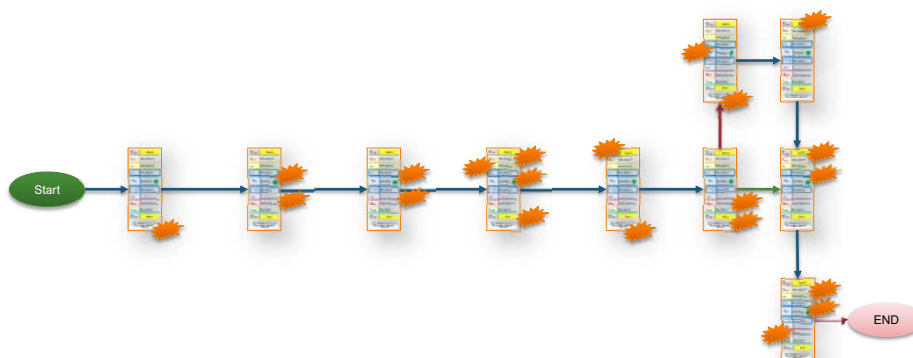## Value Added / Non Value Added Exercise

Traditional SIPOC Diagram

SUPPLIERS	INPUTS	PROCESSES	OUTPUTS	CUSTOMERS
Rubbex		Documentation		Receiving Department
MMA	Boxes	Frame Making	Wheels	Welder
Pipex	Paints	Painting		Shipping Department
Sillas		Component Installation		
Pinturax	Tubes	Wheel Installation	Frames	Paul
		Packaging Processes		Supervisor

Traditional SIPOCs don't clearly show all linkages

Enhanced SIPOC Box (ESB)

Process Map enhanced with ESBs

Enhanced SIPOC Example

Enhanced SIPOC Exercise

Failure Mode and Effect Analysis (FMEA)

Failure Mode and Effect Analysis (FMEA) is a proactive tool used to assess, manage, and reduce risk associated with the failure or potential failure of products, processes, services, and other systems before they occur.

Traditional approach to FMEA

FMEA sessions can be time consuming and frustrating

Failure Box (F-Box)

Process Map enhanced with F-Boxes
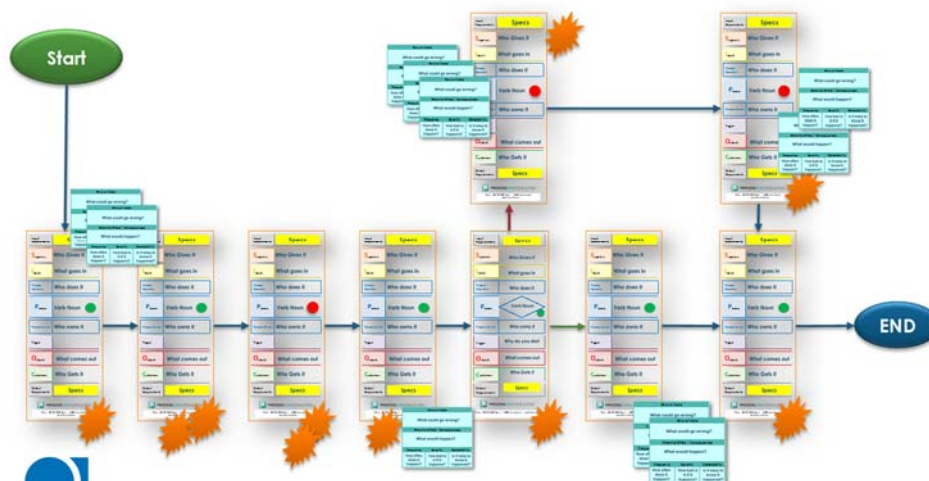
Risk Priority Number Calculation

Potential Failure Mode and Effect Analysis (Process FMEA) & VA/NVA Analysis

Process Name:	Bicycle Assembly	Department:	Mountain Bikes	FMEA #:	FMEA 2010 - 002
Prepared By:	Julia Tran	Process Owner:	Leandro Garve	FMEA Date:	May 18 2016
Core Team:	Mike - Jessica - Harris - Cammy - Jorge - Donald - Pedro - Naila - Conrad - Kiera - Michelle				

Sub-Processes	Step #	Process Step	Potential Failure Mode(s)	Potential Effect(s) of Failure	Frequency	Severity	Detectability	RPN
Frame making Process	3	Cut Tubes	Tubes too long	Rework and delay	3	2	1	6
Frame making Process	5	Cut Tubes	Tubes cut at wrong angle	Scrap	5	4	5	100
Frame making Process	4	Cut Tubes	Tubes cut too short	Scrap	3	6	1	18

**Risk Priority Number =
Frequency x Severity x Detectability**

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Failure Mode and Effect Analysis Exercise

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80 / 20

| Few OFIs 20% of time | → | 80% of IMPACT |
| Many OFIs 80% of Time | → | 20% of IMPACT |

Sort the FMEA by RPN and focus on top 20% of Failure Modes

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Write Problem Statements for Selected OFIs

- **Who** is affected by the issue OR who discovered the issue/trend?
- **What** is the problem
- **When** did it occur (date, time, etc.)?
- **Where** the problem took place (room, location, etc.)
- **Extent or magnitude** of the situation?

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Leverage Sponsors and Stakeholders

Sponsors and stakeholders recommend path forward

Kaizen Kanban Cards

What is a Kaizen Kanban?

| POINT Kaizen | MINI Kaizen | Kaizen BLITZ | FLOW Kaizen | SUPPLY CHAIN Kaizen |

Kaizen Kanbans are communication boards
to display prioritized project pipelines

Objective 3

Characteristics of Kaizen Kanbans?

- Visual communication tools

- Based on traditional Kanbans principles

- Visible to all levels of employees within the organization

- Used by improvement teams to coordinate project selection and execution based on complexity and return on investment

Kaizen Kanban Exercise

Poll Question # 1:

Do you think a Kaizen Kanban could help your organization focus on the right projects?

Poll 1 - ...

Poll Question # 2:

How many kaizen Kanbans should be used in a company at any time?

Poll 2 - ...

Poll Question # 3:

How often should a company update the kaizen Kanban?

Poll 3 - : ...

Learning Objectives Recap

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Contact us

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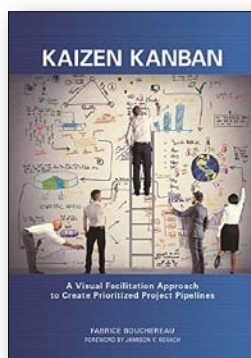
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- Phone: 305.761.6600
- Find his book, "***Kaizen Kanban, A Visual Facilitation Approach To Create Prioritized Project Pipelines***" in the ASQ Bookstore at www.asq.org/quality-press/

About the topic:
- Search ASQ's Knowledge Center @ www.asq.org/knowledge-center/

Now that you have a spark…

…go start a fire with your team