CONTINUAL PROCESS IMPROVEMENT

Presented by :

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AGENDA:

- ✧ Project Selection
- ✧ What is Kaizen?
- ✧ What a Kaizen Event Look Like?
- ✧ Kaizen's Pillars
- ✧ Kaizen Targets
- ✧ Ground Rules & Guidelines

Declaration on IP (Intellectual Property) Right:

- This presentation as well as related Excel file have been developed based on Six Sigma and other quality materials collected from different sources online.
- I tried to keep the original sources but often it was not possible due to lack of info of creator.
- Under 'FAIR' use policy of IP we ONLY can use this presentation for our individual or group learning purpose but not for commercial usages!
- Purpose of this presentation to provide awareness and encourage 'jump start' on process improvement event.

Read Me 1st

- There are two parts of this presentation – Slides (pdf) and Excel file (XLS - Continual Process Improvement with Kaizen - Tools v1)
- PDF deals with conceptual parts while XLS deals with tools that are discussed in concept and practice areas
- As a core of Process improvement mechanism Kaizen is discussed and utilized.
- Kaizen is implemented by using PDCA
- There 4 different colors have been used in 4 different stages of PDCA as well as in XLS tabs for your convenience.

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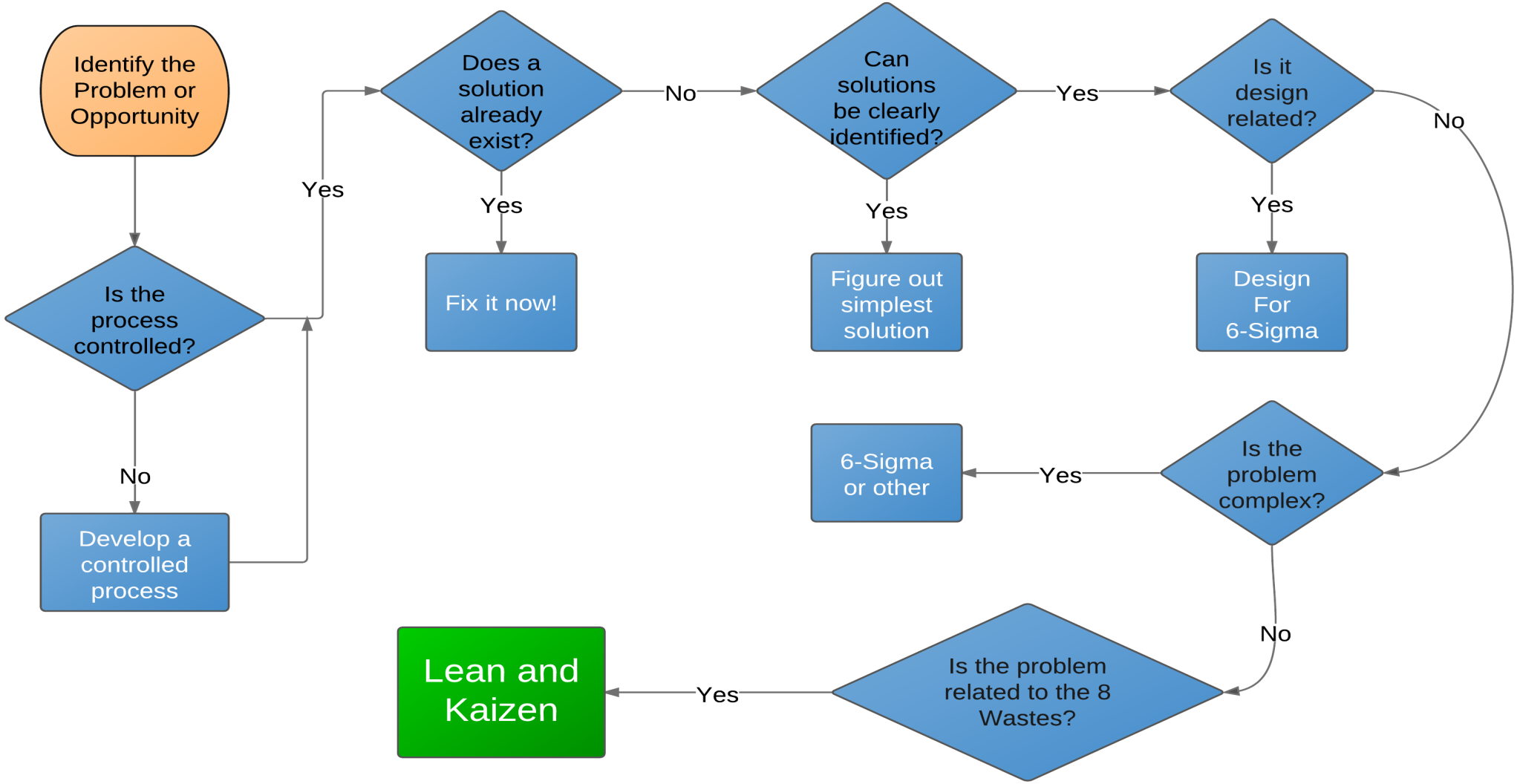
Project Selection Flowchart



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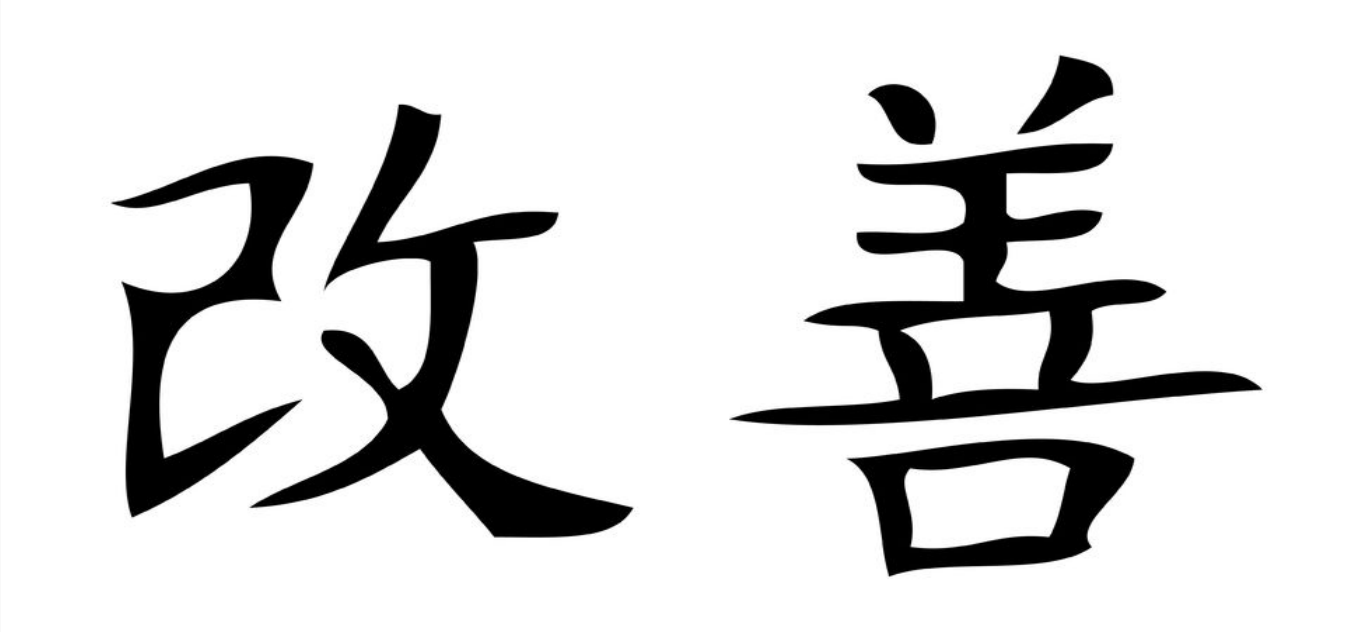
What is Kaizen?



What is Kaizen?

- Kai = Change; Zen = Good
- Kaizen = Good Change = Change for the Better = Continuous Improvement
- Small, incremental changes; break apart and put back together better
- Focus on small, quick changes for long-term success
- Elimination of the 8 Wastes

What is Kaizen?

- Kaizen is:
  - Rapid improvement in a particular work cell, work station, small process, factory location, office area, etc.
- Kaizen is not:
  - Improvements in complex cross-functional or systemic problems where DFSS Projects or 6-Sigma or Lean or Lean Six Sigma are required
- Kaizen Event is:
  - Any action by using Kaizen for process improvement within 5-10 days

What is Kaizen?

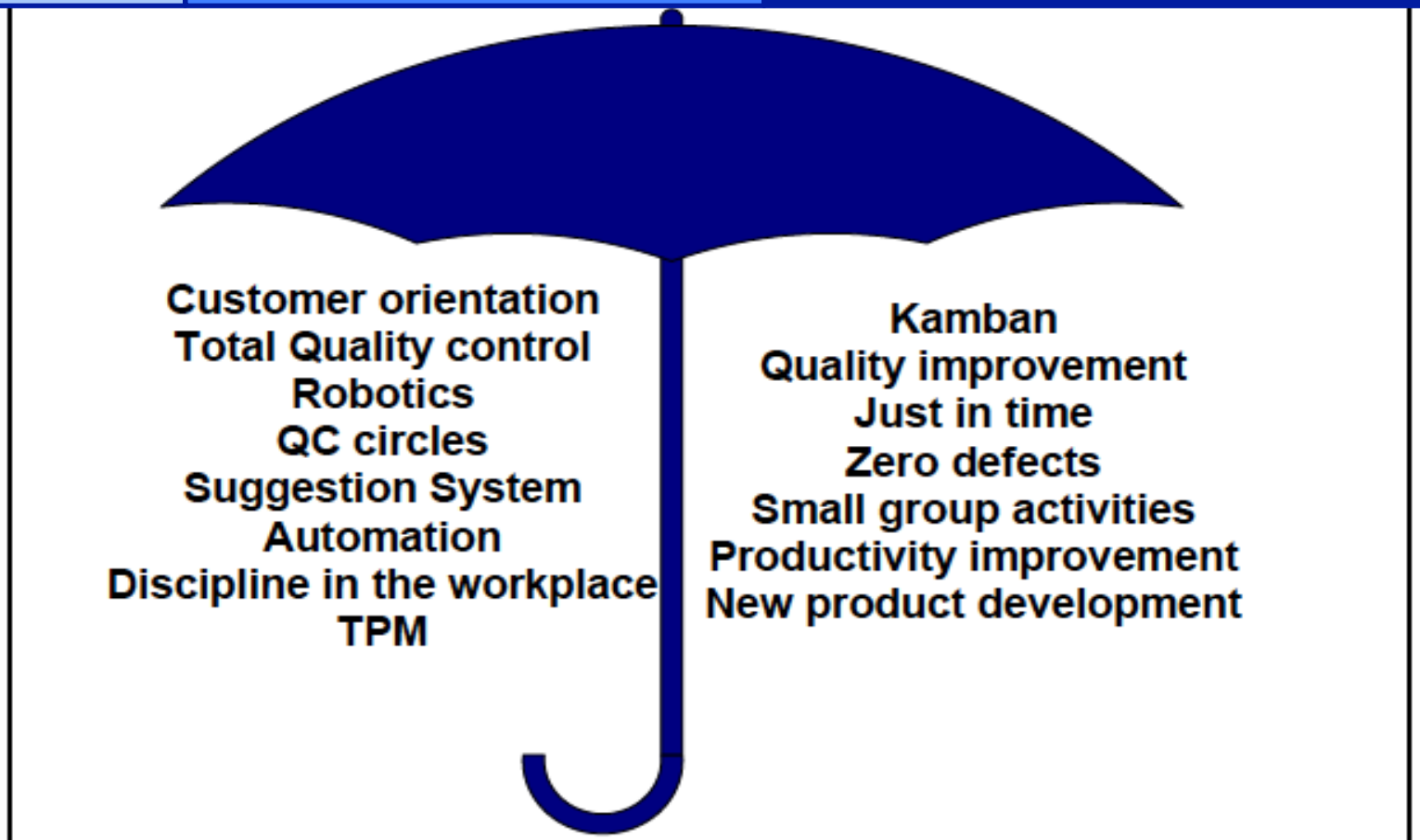


Figure 1:Kaizen umbrella-concept

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What does a Kaizen Event look like?

Analyze the current PROCESS!

What does a Kaizen Event look like?

Understand TOGETHER!

What does a Kaizen Event look like?

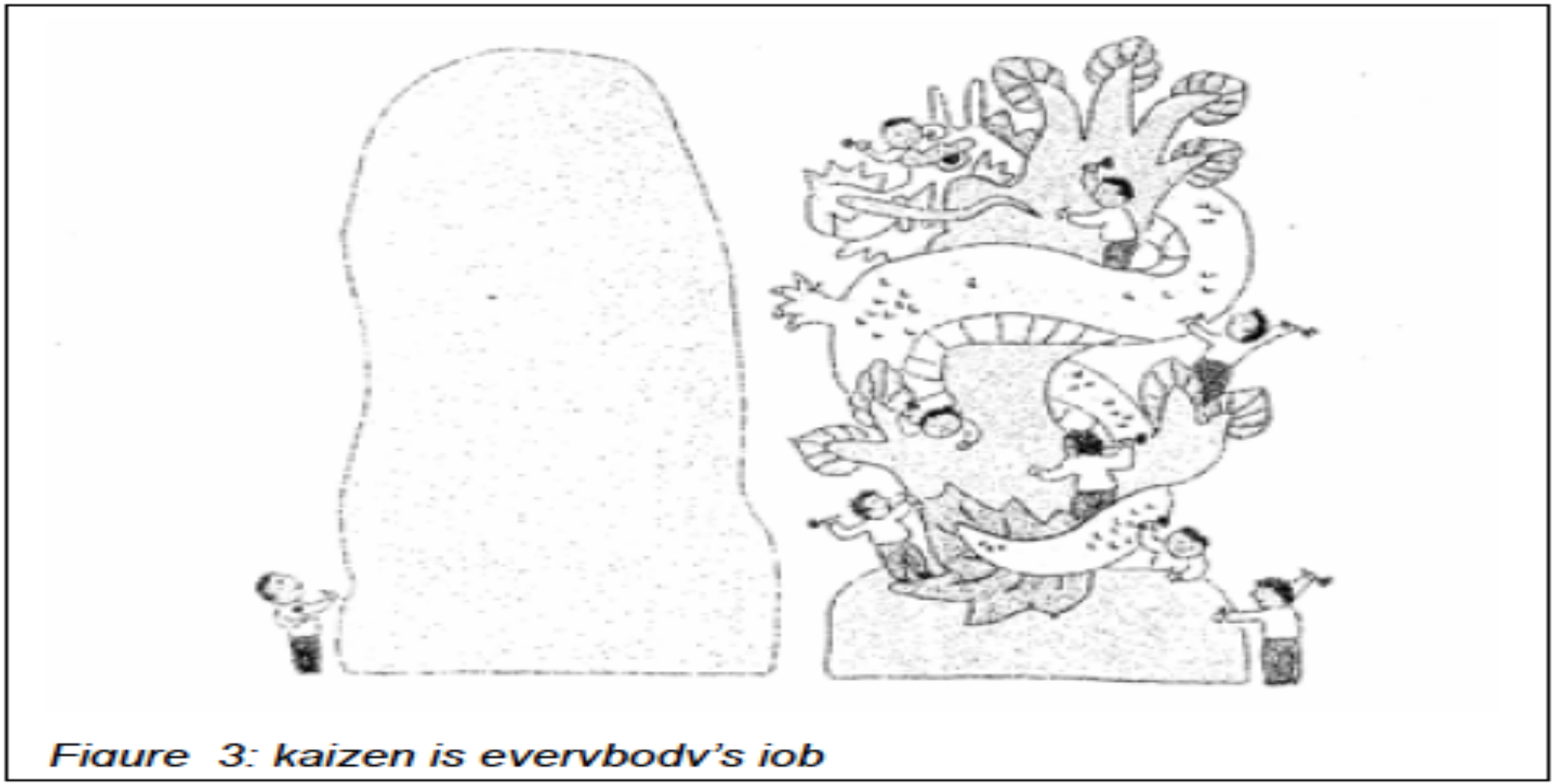

Figure 3: kaizen is everybody's job

http://erico.phanfare.com/5946850

What a Kaizen event look like?

Team Sponsor

- High level *champion* of the cause
- Upper management *advisor* to the team
- Breaks through *road blocks*
- Arranges *support* for the team during the event
- Ensures *coverage* so that team members are not interrupted during the event

What a Kaizen event look like?

Team Leader

- Determines session objectives and process to be followed
- Meets with facilitator to review session objectives and process
- Sends agenda to team members in advance
- Is the leader, not the boss

What a Kaizen event look like?

Traits of Good Team Leaders

- Previous success as a leader (church, scouts, military, civic, etc.)
- Has experienced a kaizen event
- Good knowledge of lean manufacturing (if production area event)
- Good knowledge of waste elimination techniques
- Not dictatorial - understands participative management
- Comfortable working in the target area
- Good people skills

What a Kaizen event look like?

Team Facilitator

- Manages how people work together during team activities
- Keeps activities moving along the process and time schedule set by the team leader

What a Kaizen event look like?

Recorder

- Records important results, actions, & decisions
- Promptly distributes minutes to participants
- Usually a team member

What a Kaizen event look like?

Identify Other Members

- **Insiders – who work in or around the process**
  - Machine Operator
  - Buyer
  - Assembler
  - Planner
- **Outsiders**
  - Provides non-tainted viewpoint & new ideas
  - Can be inside or outside of the company

What a Kaizen event look like?

Traits of Good Participants

- **Understands the target area**
  - May work in area
  - Can learn the area
- **Open to doing things differently**
- **Will get involved**
- **Good communicators**
- **Brings knowledge (technical or procedural) that will help the team succeed**

What a Kaizen event look like?
Quality Circle (QC)

- Quality Circle is a Quality Improvement Team/ Process Improvement Team
- A team of 3-9 people - who meet regularly to discuss quality related work problems so that they may examine and generate solutions to these
- There must be commitment from senior management, unit management and supervision, other staff and of course the circle members
- Open-mindedness and a desire to avoid blocking is essential.

What a Kaizen event look like?
Quality Circle (QC)

Quality Circles, in the 1970's, was the first big push to mimic Japan's success with a team based work culture.

Although there were success stories, and some organizations still use them, most saw them as a failure!!!

Some of the reasons for failure included:

- Inadequate measurements of results.
- Management understanding of process.
- Team members not right for the problem.
- Management dominated the process.
- Lack of training with problem solving tools.

What a Kaizen event look like?
Quality Circle (QC)

- Reward and recognition (R&R) have various functions and can be valuable tool for QC. R&R can be provided if
- 1. QC improves the reinforcement of quality-related behavior and achievements.
- 2. QC shows organizational values, and they show how the organization appreciates efforts .
- 3. QC indicates achievement, which is an element of continuous improvement (Kaizen).

Recognition is also a form of feedback about the result of individual or team efforts.

What a Kaizen event look like?
Quality Circle

- Suggestions or proposals start from a problem perception and recognizing the need to solve it
- The problems inside an organization are the sources of any kind of proposal systems.
- But employees inside the organization do not perceive problems on the same way .
- There are considered 5 levels of problems perceiving from employees in an organization:

What a Kaizen event look like?
Quality Circle

- Level 1: People deny that are problems or don't want to see them
- Level 2: People admit that there are problems but find excuses not being able to solve them
- Level 3: People accept the fact that there are problems but unable to solve them because they don't know how attack them
- Level 4: People want to see potential problems for this try to visualize them. They will attack them by learning proper methods
- Level 5: People know their problems, methods to solve them and how to involve all the people to attack them. They are ready to attack any problem and to change their organization if needed after solving the problem.

What a Kaizen event look like?
Quality Circle

QC can have some matric as:

- Number of meetings
- Participate rate
- Number of intermediate reports
- Use of 7 tools
- The extent that company policy was used in selecting projects
- Standardization and prevention of a problem's recurrence

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- ✧ What is Kaizen?
- ✧ What a Kaizen Event Look Like?
- ✧ Kaizen's Pillars
  1. Housekeeping
  2. Waste elimination
  3. Standardization
- ✧ Kaizen Targets
- ✧ Ground Rules & Guidelines

Kaizen's Pillars

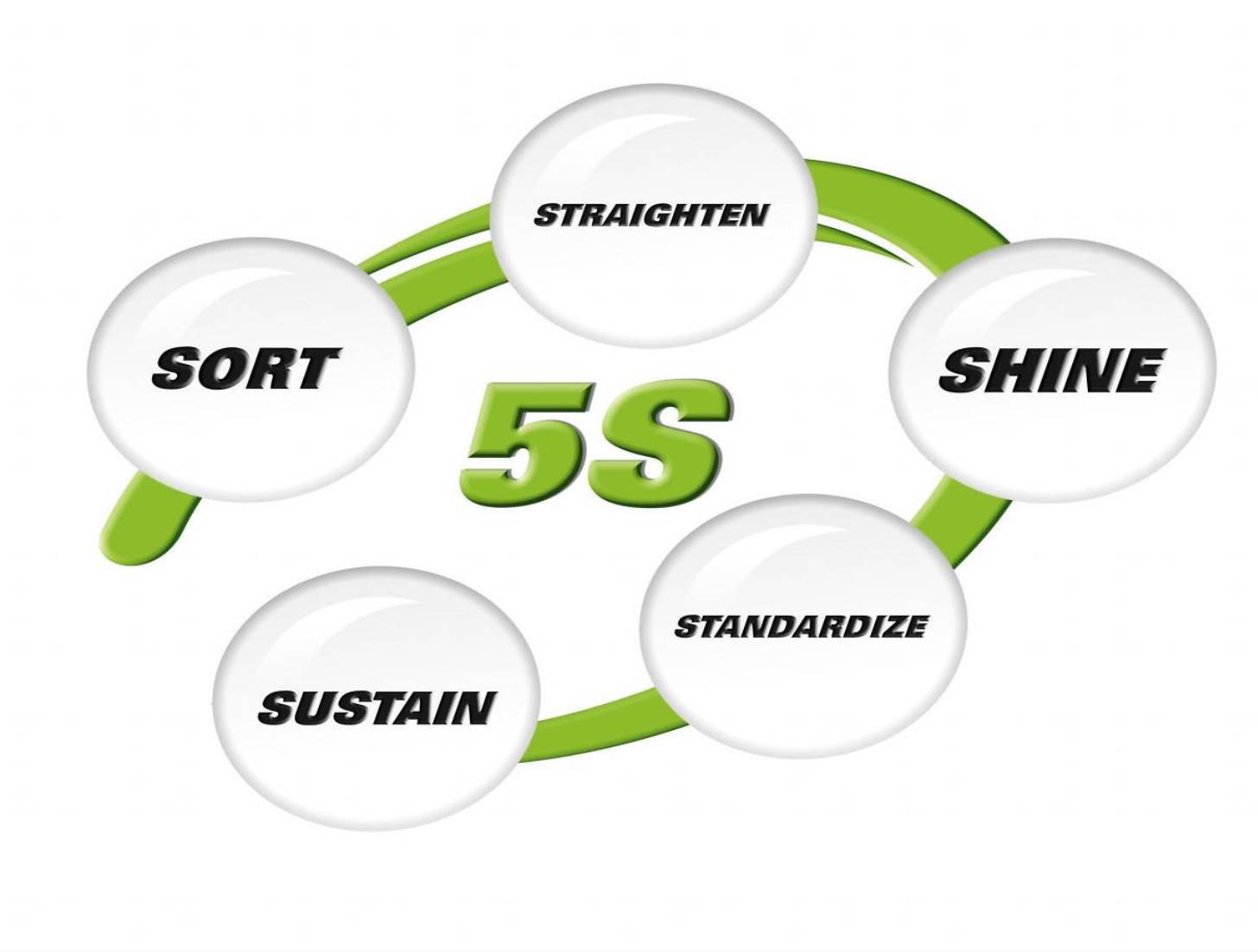
Kaizen -The three pillars

1. **Housekeeping**
2. **Waste elimination**
3. **Standardization**

To be ensured success on activities on those three pillars three factors have also to be taken account:

1. visual management
2. Role of the supervisor,
3. Importance of training and creating a learning organization.

Kaizen's Pillars – 1. Housekeeping with 5S



Kaizen's Pillars – 1. Housekeeping with 5S

What is 5S?

- 5S is a process for implementing and maintaining a clean, safe, and organized work area.
- 5S provides a way for organizations to operate efficiently and effectively.
- 5S is a Lean Organization tool that helps build a foundation for continuous improvement.

Kaizen's Pillars – 1. Housekeeping with 5S

What are the 5S's?

Japanese 5S's	English Translation	American 5S Standard
Seiri	Put Things in Order	**S**ort
Seiton	Proper Arrangement	**S**traighten Set in Order, Simplify
Seiso	Clean	**S**hine Scrub, Sweep
Seiketsu	Purity	**S**tandardize
Shitsuke	Commitment	**S**ustain Discipline

Kaizen's Pillars – 1. Housekeeping with 5S

Definition of the 5S's

- **Sort -** Define what is and isn't needed in the area to do the job. Remove items not needed: tools, books, instructions – prioritize essential items
- **Set in Order -** Organize the work area based on 'A place for everything and everything in its place.' Designate locations for files, tools, equipment, supplies, etc. and label properly
- **Shine -** Clean, sweep, scrub, etc.
- **Standardize -** Identify "Best Practices" and document them so they can be followed by everyone. Use same tools, processes, and documentation where applicable.
- **Sustain –** Maintain and review with everyone involved. Continual reinforcement of the importance of 5S; Audits, Culture change – make it a habit.

Kaizen's Pillars – 1. Housekeeping with 5S

Why 5S?

- A cleaner & more organized work area results in higher employee morale.
- Improved output and quality from knowing exactly where to find files, drawings, manuals, supplies, etc.
- Reduced cost from not having to re-purchase lost or damaged items.
- Streamlined processes through elimination of waste.
- More organized and efficient workplace can lead to potential increase in orders, growing profitability
- The Visual Workplace affects everyone!

Kaizen's Pillars – 1. Housekeeping with 5S

Sort

- Remove non-essential items from work area
- Sort through desk drawers, file cabinets, carts, tables, office supplies, materials, paper work, and discard unneeded items
- Remove hardcopy items where not needed
- Sort computer files the same as hardcopy files – remove outdated and unused folders

Kaizen's Pillars – 1. Housekeeping with 5S

Set in Order

- Replace files and folders in a more organized manner
- Organize by removing waste in the processes; reduce movement and transportation
- Label files, drawers, cabinets, shelves, etc. Label office equipment in common areas.
- When labeling, ask the question "Could someone find these items if I'm not here?" If not, label it.
- Use color coding to make it easier to locate and store similar information.

Kaizen's Pillars – 1. Housekeeping with 5S

Shine

- Clean, dust, and mop to show off your work area
- Dirt, dust and clutter can have an adverse effect on quality, safety, and morale - clean everything.
- Clean work environments leave customers with a comfortable feeling about your quality.
- Any necessary repairs should be noted and fixed on the spot

Kaizen's Pillars – 1. Housekeeping with 5S

Standardize

- **Standardize**
  - Define and document best practices for accomplishing the tasks in the area. Eliminate waste in tasks and processes.
  - Train everyone to the best practices

Kaizen's Pillars – 1. Housekeeping with 5S

Sustain

- **Sustain**
  - Make 5S a daily part of standard work
  - Define tasks needed to maintain 5S. Implement daily and weekly assignment sheets to insure tasks are completed.
  - Set up auditing to ensure ongoing use

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Kaizen's Pillars – 2. Waste Elimination

Waste 1 - Transportation

Definition

- Unnecessary movement of items between processes

Causes

- Poor layout and/or process Design & Planning
- Unstructured or not understood Value Stream
- Complex Material flow

Problems

- Increased Time & Cost to transport & search
- Increased Defects due to accidents

Kaizen's Pillars – 2. Waste Elimination

Waste 2 - Inventory

Definition

- Any raw material, Work in Progress (WIP) or finished goods which are being stored

Causes

- Overproduction causes inventory build up between processes

Problems

- Adds cost
- Requires space
- Hides process defects
- Can become a defect

Waste 3 - Motion

Definition

- Unnecessary movement within a Process

Causes

- Poor workplace layout
- Poor process planning
- Poor Housekeeping
- No Standard Operating Procedures

Problems

- Adds time & cost
- Can be a safety issue

Waste 4 - Waiting

Definition

- People or Parts that are waiting for a work cycle to be completed

Causes

- Unreliable Supply Chain
- Bottlenecks
- Down Time

Problems

- Excessive Lead Time
- Causes Bottle Necks
- Additional Time & Cost

Kaizen's Pillars – 2. Waste Elimination

Waste 5 – Over processing

Definition

- Processing beyond the value required by the Customer

Causes

- Lack of Customer Focus
- *"Always done it this way"*
- Lack of understanding
- Scheduled work time is longer than needed

Problems

- Increases Time & Cost

Waste 6 – Over production

Definition

- To produce items sooner or in greater quantities than required for customer demand

Causes

- Poor planning
- Incorrect bottleneck assumptions

Problems

- Overproduction discourages a smooth flow of production
- Leads to excessive work in process inventory

Waste 7 – Underutilized People

Definition

- Underutilization of people's Abilities, Knowledge, and Skills

Causes

- Constant management turnover unaware of talent pool
- Employee not happy in current position

Problems

- Great ideas might be missed
- Dominant personalities may force focus in wrong direction

Waste 8 - DEFECTS

Definition

- A defect is when the Customer believes they did not get what they paid for

Causes

- Process Variation
- Customer requirements not understood

Problems

- Additional Time & Cost
- Reduces Customer Confidence

Kaizen's Pillars – 2. Waste Elimination Examples

Muda in Manufacturing	Muda inOffice
Shipping defective parts	Passing on work that contains errors
Waiting for inspection	Signature approvals, bureaucracy
Walking and transporting parts	Walking or routing documents
Overproduction	Copies, files, a lot of papers
Excess inventory which hides	Excess documentation

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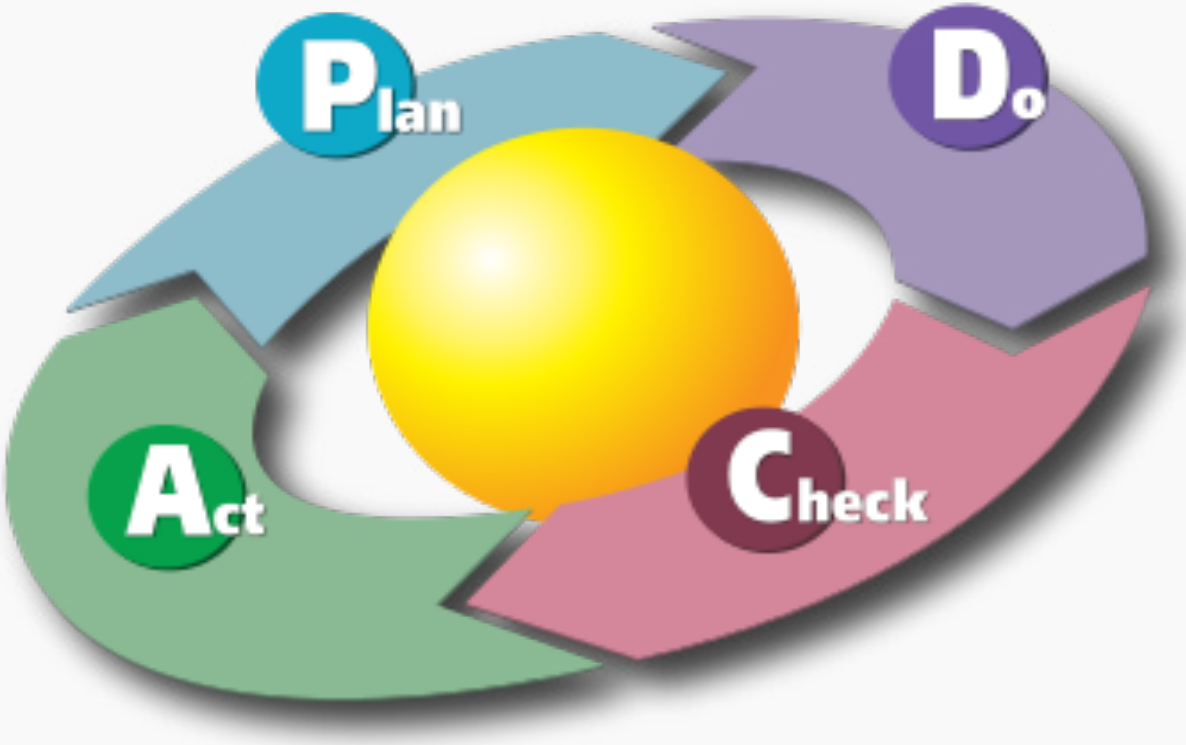
Kaizen's Pillars – 3. Standardization

- It helps to reduce variation
- It is set by management but able to change when the environment changes.
- It is a never-ending process and is better explained and presented by the PDCA
- It is a repeated process followed by team!!!

Kaizen's Pillars – 3. Standardization

- Continuous improvement is an ongoing effort to improve products, services or processes.
- These efforts can seek "incremental" improvement over time or "breakthrough" improvement all at once.
- Among the most widely used tools for continuous improvement is a four-step quality model—the plan-do-check-act (PDCA) cycle, also known as Deming Cycle or Shewhart Cycle

Kaizen's Pillars – 3. Standardization



P – Plan
D – Do
C – Check
A – Act/ Adjust

Note: "A" is also referred as "Adjust". This helps trainees to understand that the 4th step is more about adjusting/correcting

Kaizen's Pillars – 3. Standardization

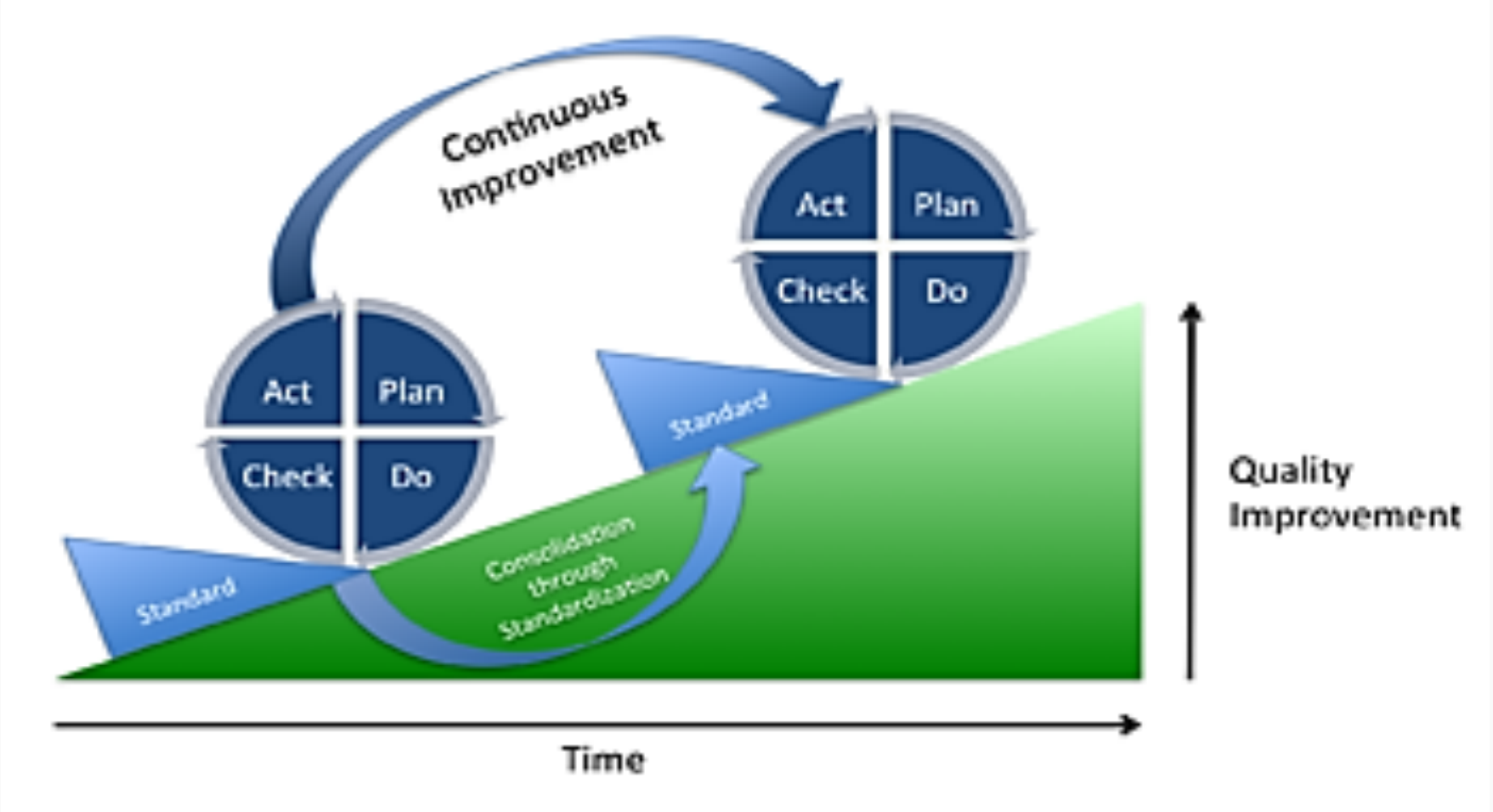
P – Plan - Establish a plan to change whatever needs to be improved

D – Do - Carry out changes on a small scale,

C – Check -Observe the results,

A – Act/ Adjust - Evaluate the results and the process. Then determine what has been learned .

Kaizen's Pillars – 3. Standardization



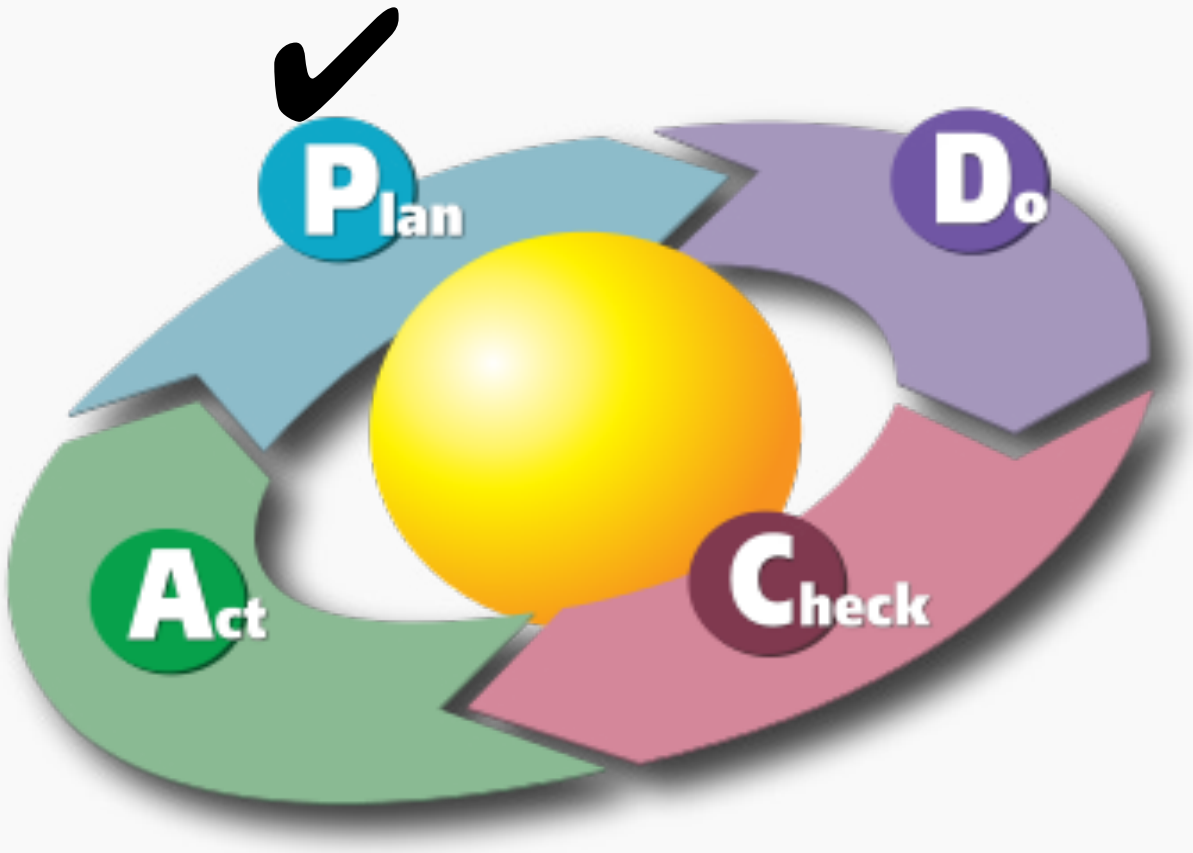
Kaizen's Pillars – 3. Standardization

Continuous or Continual?

Continual improvement: a broader term preferred by W. Edwards Deming to refer to general processes of improvement and encompassing "discontinuous" improvements—that is, many different approaches, covering different areas.

Continuous improvement: a subset of continual improvement, with a more specific focus on linear, incremental improvement within an existing process. Some practitioners also associate continuous improvement more closely with techniques of statistical process control.

Kaizen's Pillars – 3. Standardization



Kaizen's Pillars – 3. Standardization

PHASE 1: PLAN

Plan: Identify an opportunity and plan for change Establish the objectives and processes necessary to deliver results in accordance with the expected output (the target or goals).

STEPS

- **Select team**
- **Identify problem / opportunity by Brainstorm**
- **Evaluate current state**
- **Define future state**
- **Develop weekly plan**

TOOLS

- **Event Charter**
- **Affinity + MoM**
- **VSM** 'as is'
- **VSM** new
- **Weekly Plan**

Affinity Diagrams

- Organizes a large amount of verbal data related to a broad problem or subject
  - Ideas, opinions, facts
- Usage example: Establishing a new QC policy
- Steps:
  - Gather a large number of ideas
  - Put individual ideas on cards or sticky notes
  - As a team, group the ideas according to natural "affinity" or relationship to each other
  - These natural groups become "strategic factors"

Kaizen's Pillars – 3. Standardization

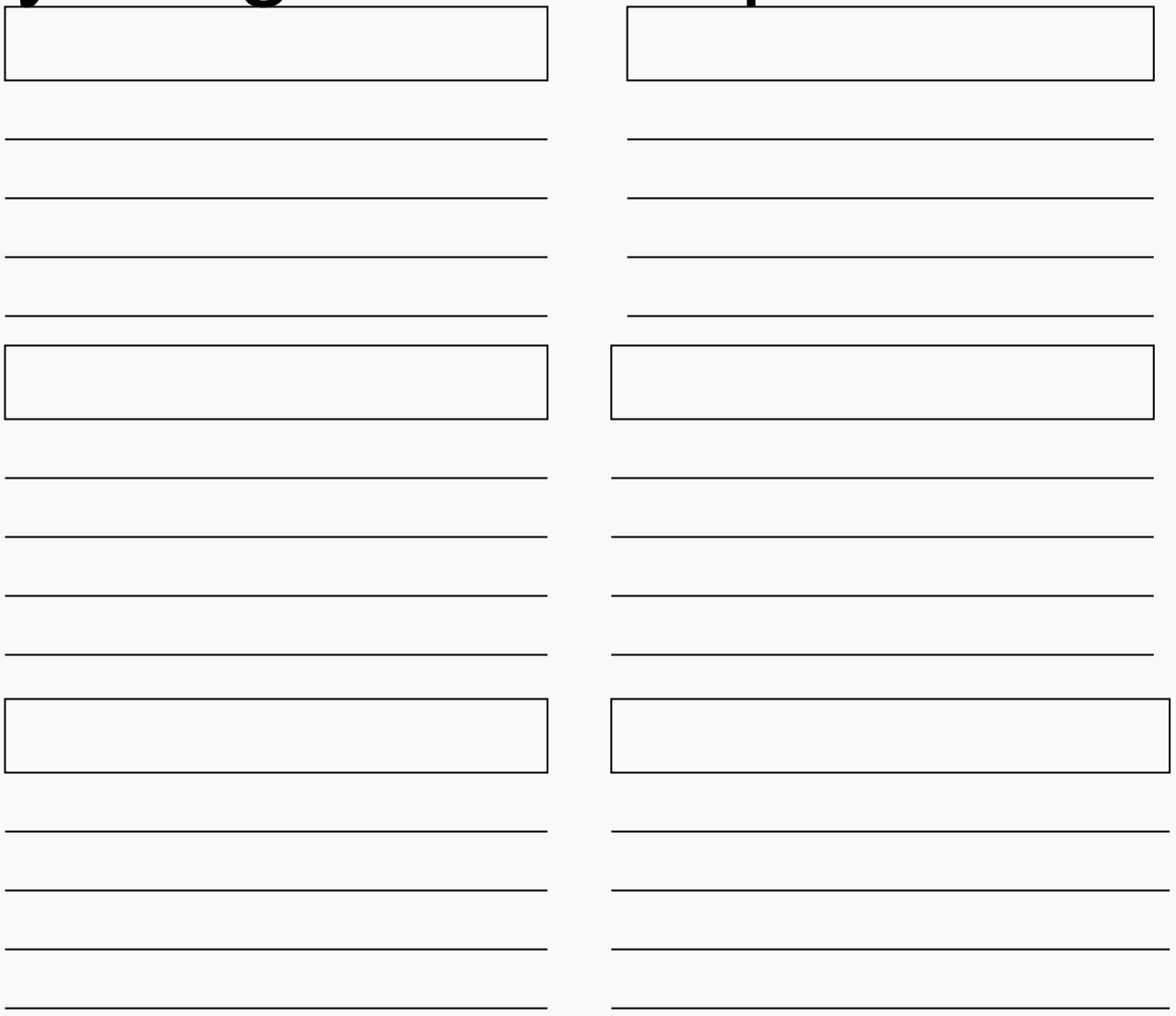
Affinity Diagram Example

Your team has been brainstorming to develop a list of ideas to incorporate into the vision. They have come up with the following list. Develop an affinity diagram and name each strategic factor.

- Low product maintenance
- Satisfied employees
- Courteous order entry
- Low prices
- Quick delivery
- Growth in shareholder value
- Teamwork
- Responsive technical support
- Personal employee growth
- Low production costs
- Innovative product features
- High return on investment
- Constant technology innovation
- High quality
- Motivated employees
- Unique products
- Small, lightweight designs

Kaizen's Pillars – 3. Standardization

Affinity Diagram Example Cont.

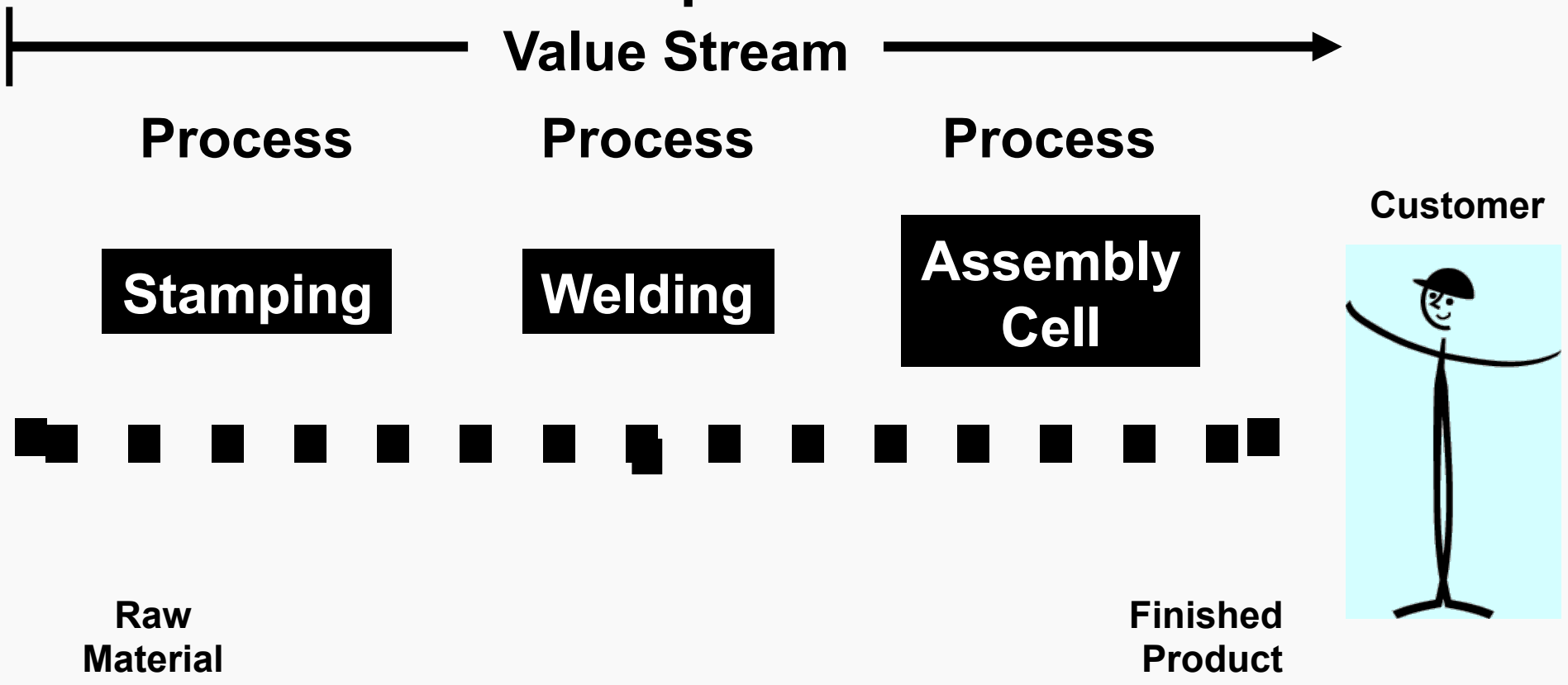


Kaizen's Pillars – 3. Standardization

- **A Value Stream** is the set of all actions (both value added and non value added) required to bring a specific product or service from raw material through to the customer.

Kaizen's Pillars – 3. Standardization

Value Stream Improvement vs. Process Improvement



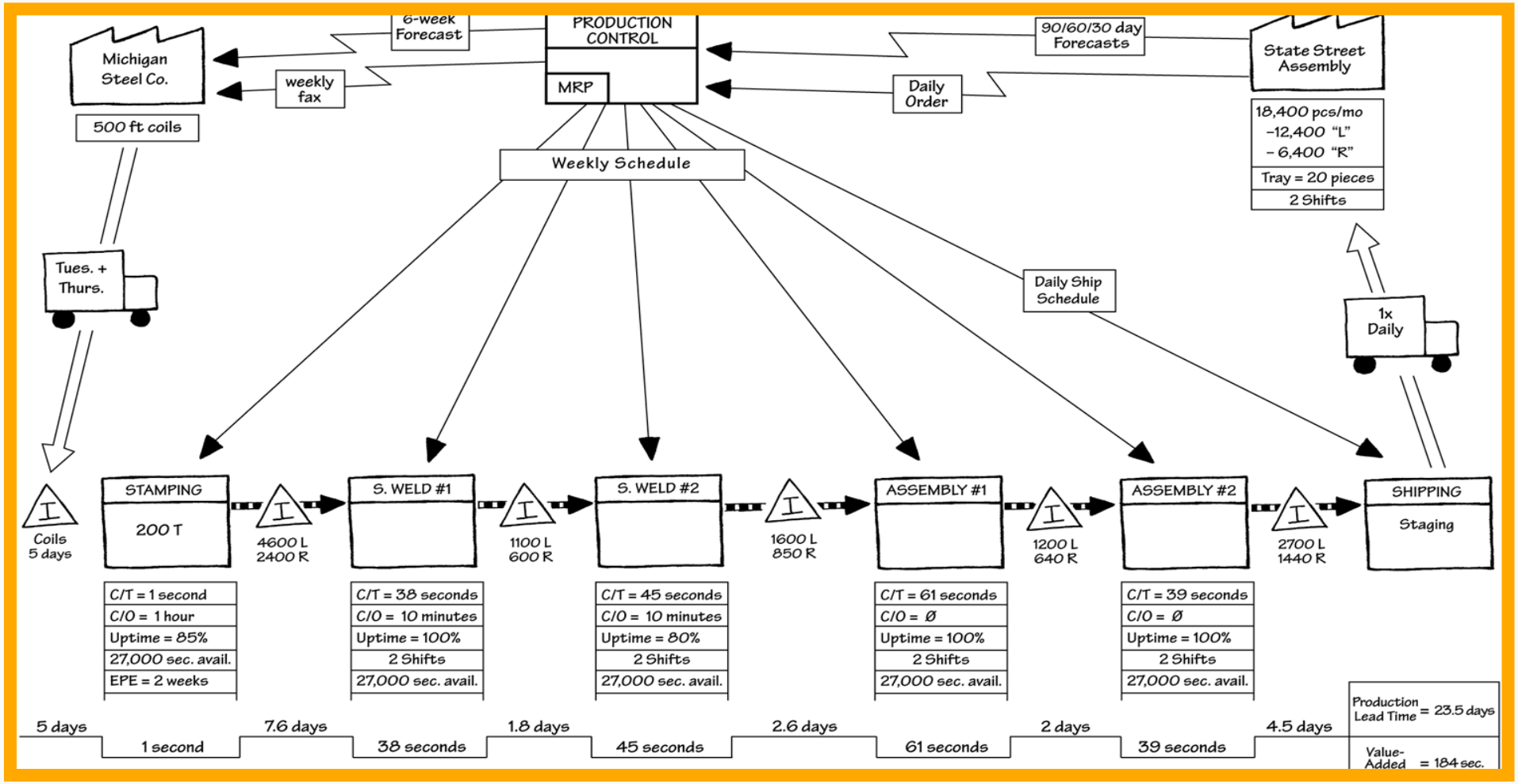
Kaizen's Pillars – 3. Standardization

Value Stream Mapping

- Follow a "product" or "service" from beginning to end, and draw a visual representation of every process in the material & information flow

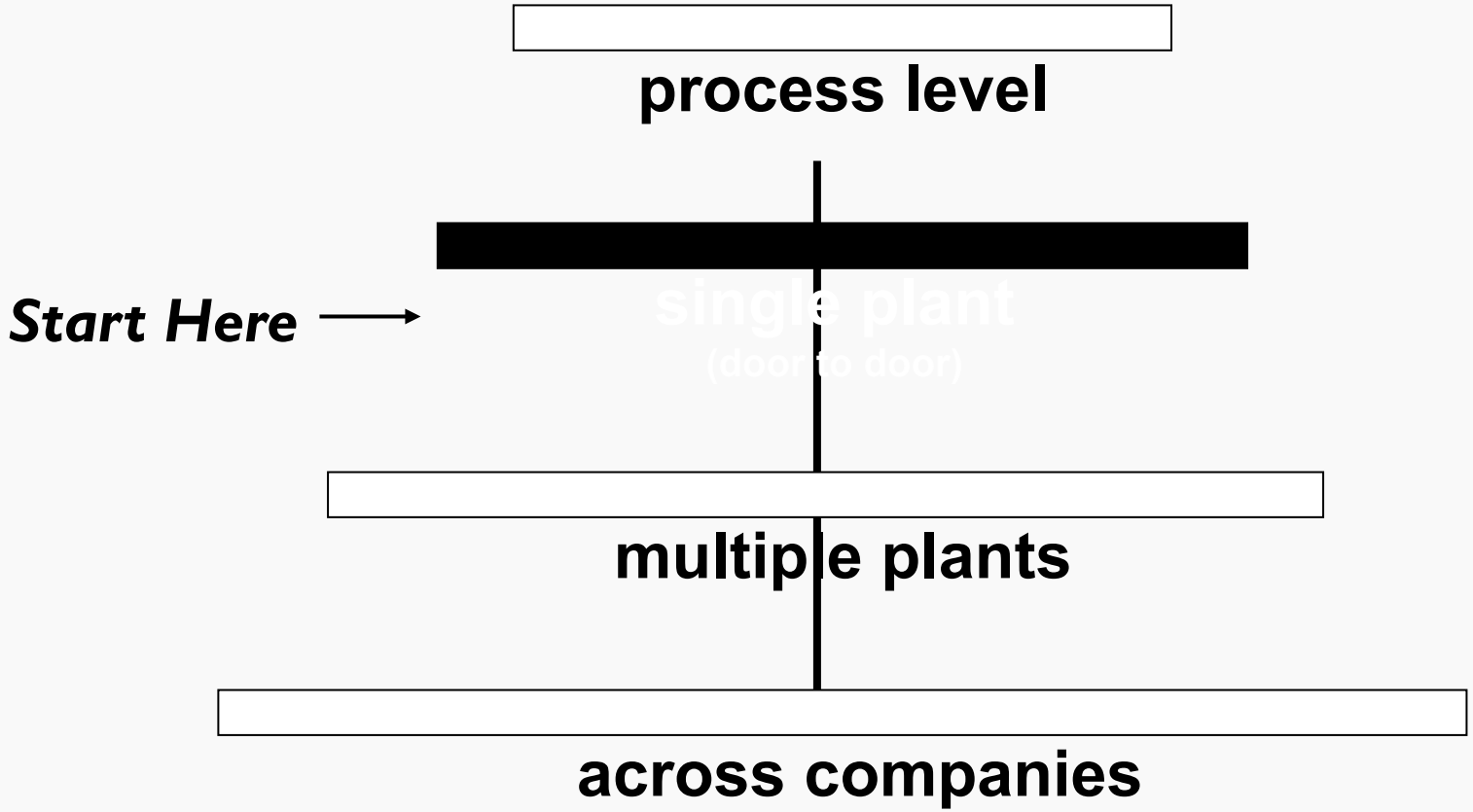
- Then, draw (using icons) a "future state" map of how value should flow

Kaizen's Pillars – 3. Standardization



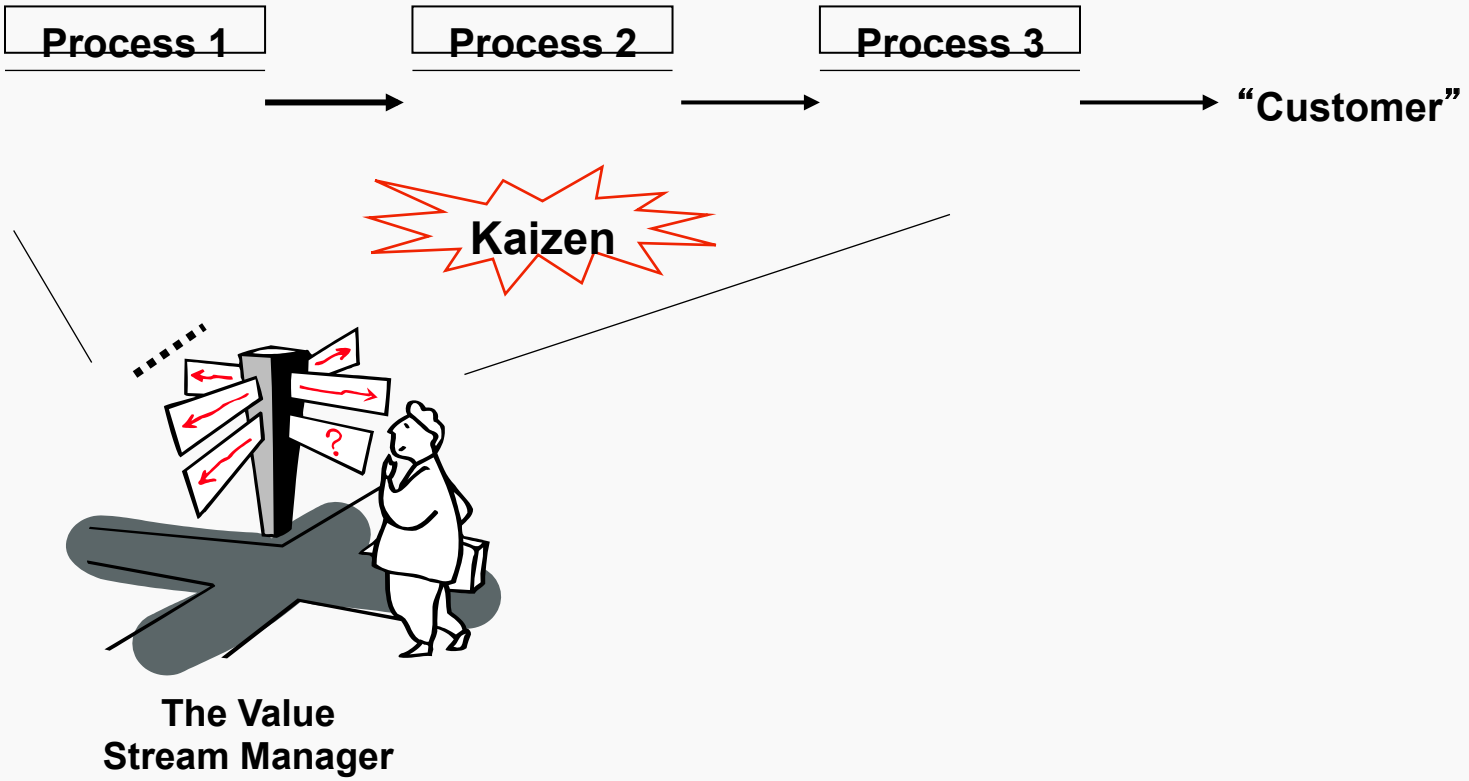
Kaizen's Pillars – 3. Standardization

Levels of a Value Stream



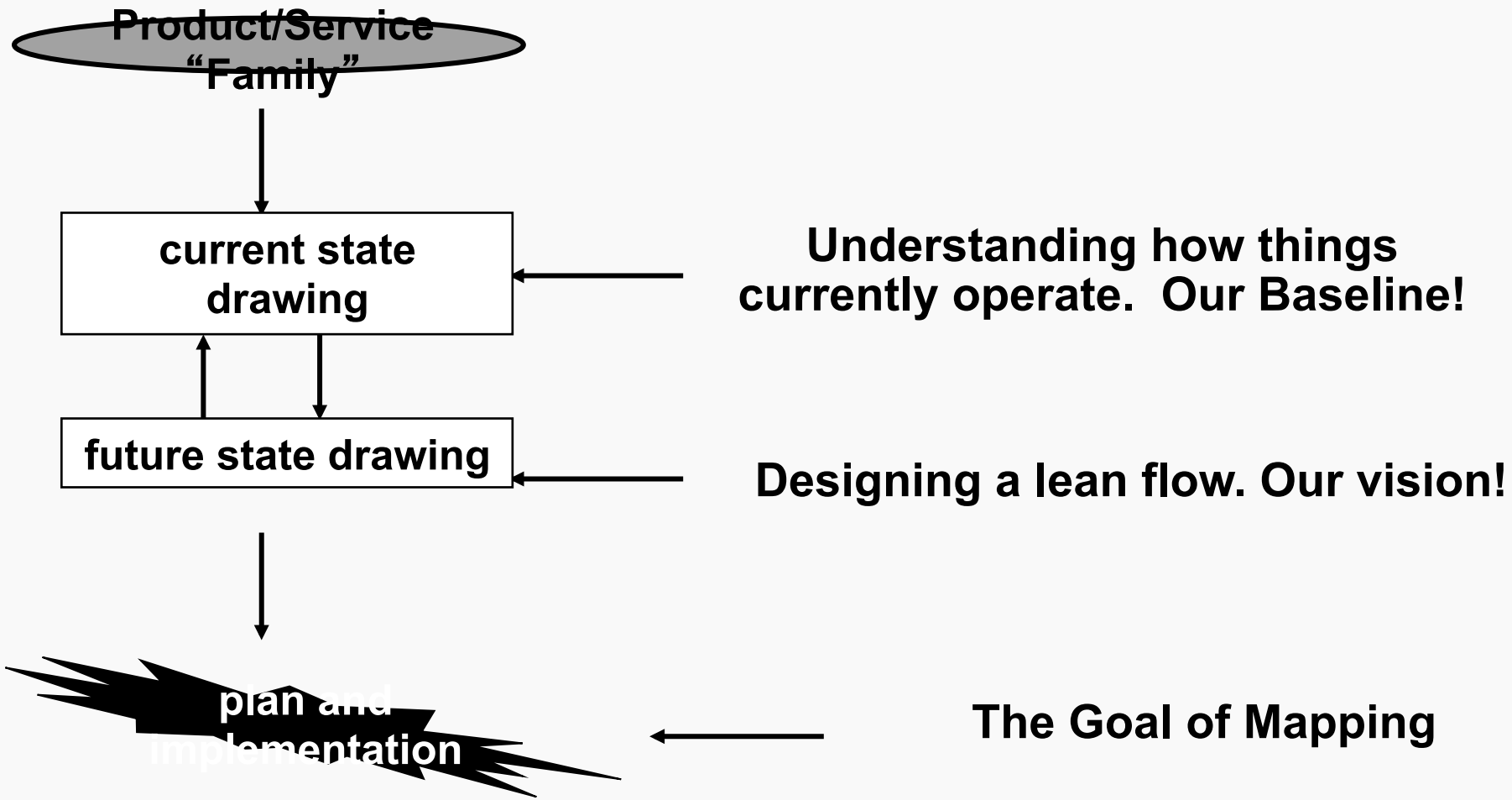
Kaizen's Pillars – 3. Standardization

Value Stream Managers



Kaizen's Pillars – 3. Standardization

Using the Value Stream Mapping Tool



Kaizen's Pillars – 3. Standardization

Current State Mapping

- Completed in a day
- Performed by a cross functional team of middle managers responsible for implementing new ideas
- Resulting in a picture (and team observations) of what we "see" when following the product

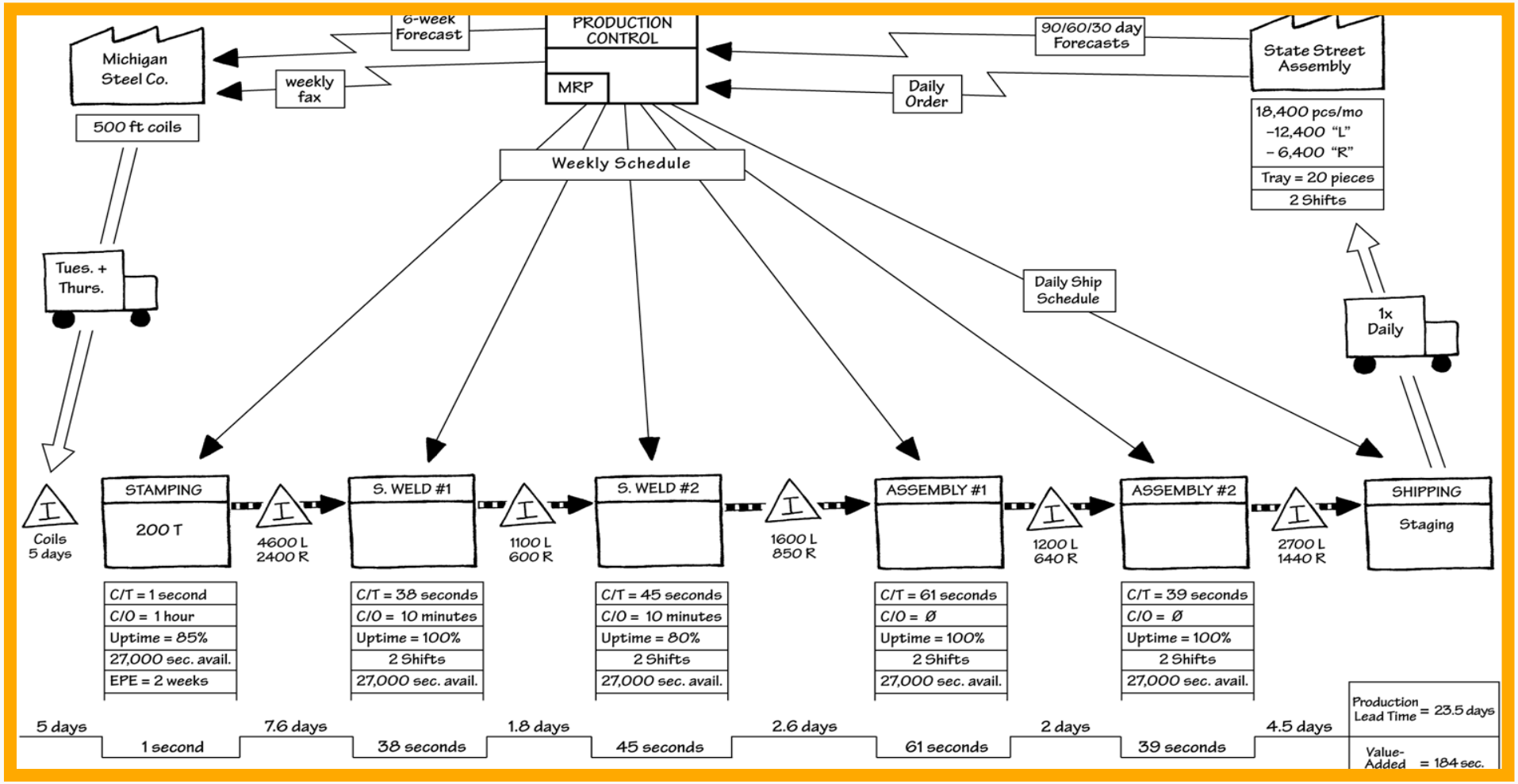
Kaizen's Pillars – 3. Standardization

Future State Mapping

- Completed in a day with the same team
- Focused on:
  - Creating a flexible, reactive system that quickly adapts to changing customer needs
  - Eliminating waste
  - Creating flow
  - Producing on demand

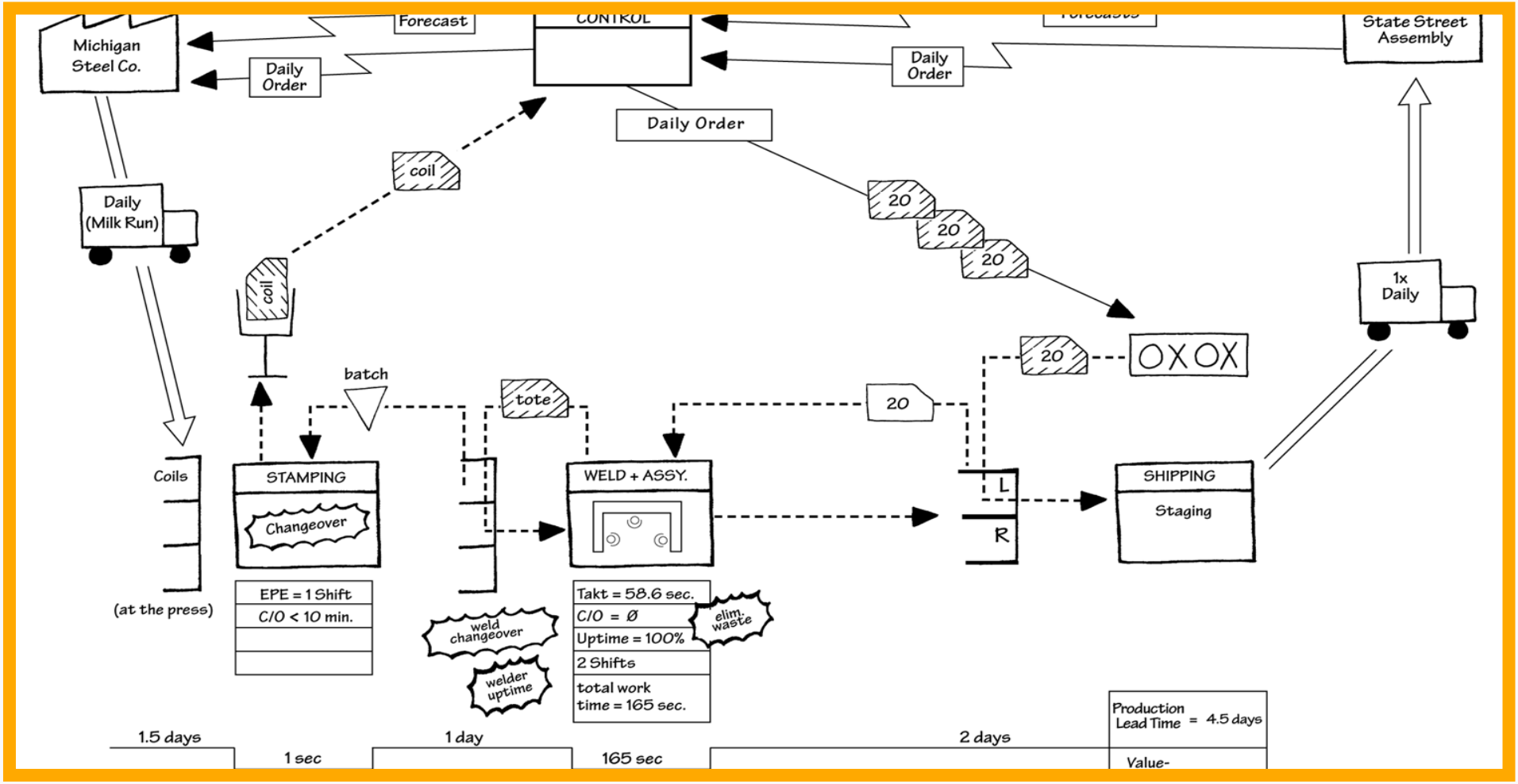
Kaizen's Pillars – 3. Standardization

Current State Value Stream Map



Kaizen's Pillars – 3. Standardization

Future State Value Stream Map



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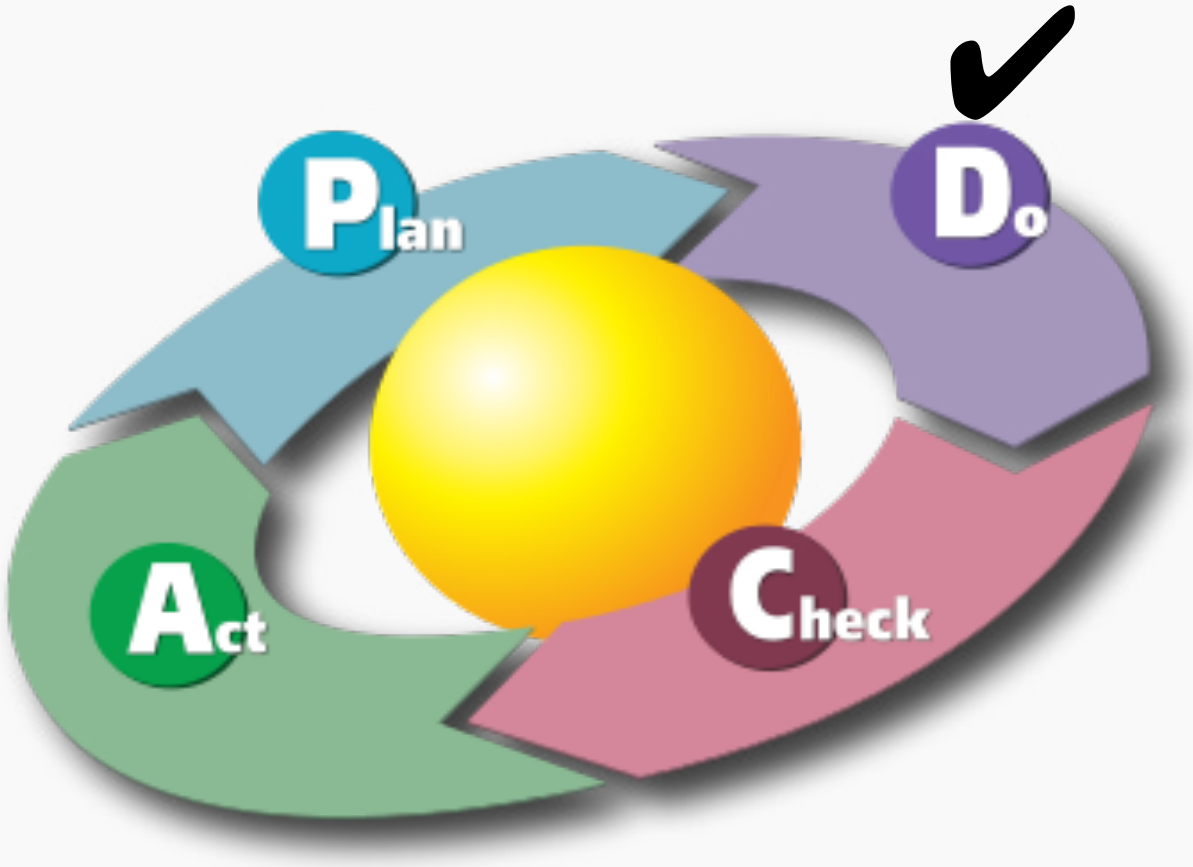


Kaizen's Pillars – 3. Standardization

PHASE 2: DO

Do: Implement the change on a small scale. Collect data for charting and analysis in the following "CHECK" and "ACT" steps.

STEPS

- **Prioritize opportunities**
- **Execute plan**

TOOLS

- **Pareto**
- **VSM New + Flow Chart New**

Kaizen's Pillars – 3. Standardization

Pareto Charts

Kaizen's Pillars – 3. Standardization

Pareto Charts

Purpose:

Prioritize problems.

How is it done?

- Create a preliminary list of problem classifications.
- Tally the occurrences in each problem classification.
- Arrange each classification in order from highest to lowest
- Construct the bar chart

Type of Defect	Tally	Total
Crack	𝍸 𝍸	10
Scratch	𝍸 𝍸 𝍸 𝍸 ..... 𝍸 II	42
Stain	𝍸 I	6
Dent	𝍸 𝍸 𝍸 𝍸 ..... 𝍸 IIII	104
Gap	IIII	4
Hole	𝍸 𝍸 𝍸 𝍸	20
Others	𝍸 𝍸 IIII	14
Total		200

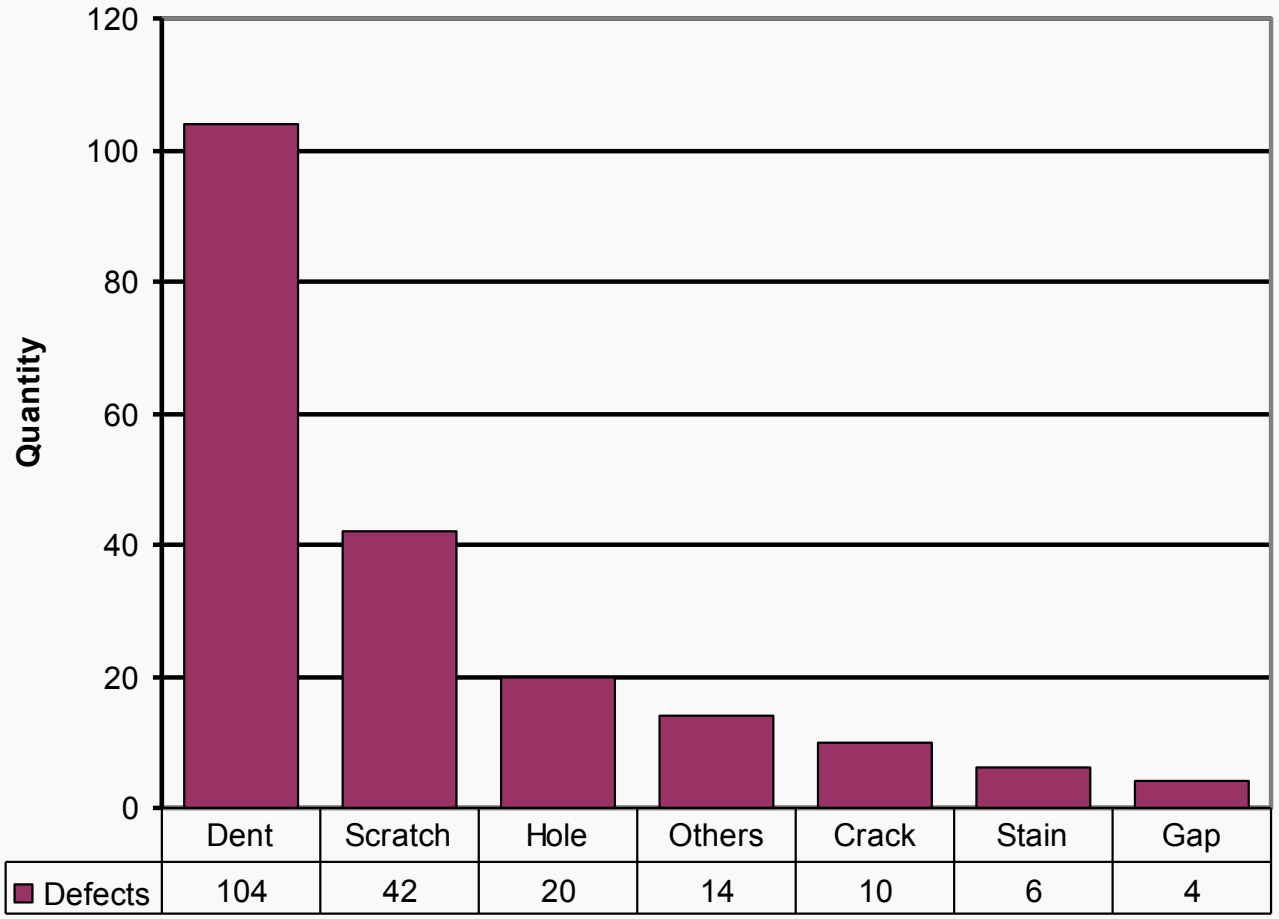
Example of a data tally sheet

Kaizen's Pillars – 3. Standardization

Pareto Charts

Benefits:

- Pareto analysis helps graphically display results so the significant few problems emerge from the general background
- It tells you what to work on first

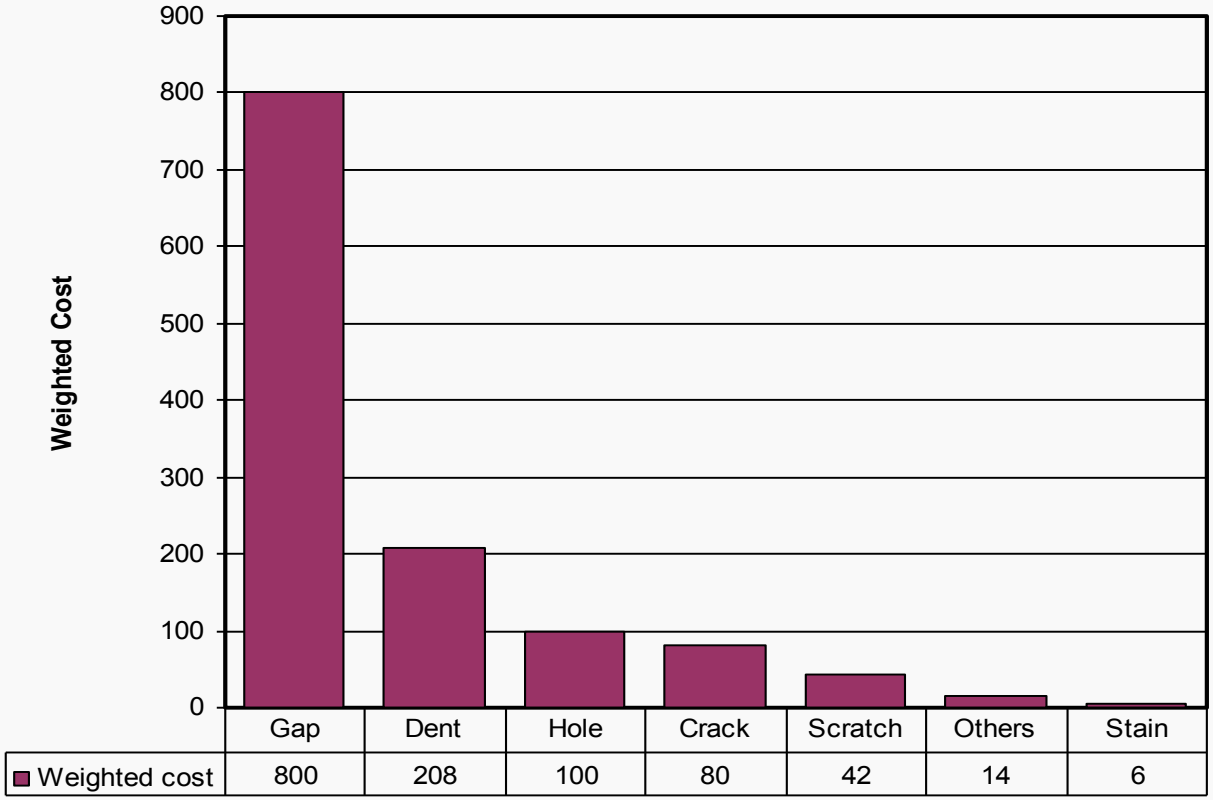


Kaizen's Pillars – 3. Standardization

Pareto Charts Weighted Pareto

- Weighted Pareto charts use the quantity of defects multiplied by their cost to determine the order.

Defect	Total	Cost	Weighted cost
Gap	4	200	800
Dent	104	2	208
Hole	20	5	100
Crack	10	8	80
Scratch	42	1	42
Others	14	1	14
Stain	6	1	6



Kaizen's Pillars – 3. Standardization

Flow Charts

Kaizen's Pillars – 3. Standardization

Flow Charts

Purpose:

Visual illustration of the sequence of operations required to complete a task

- ✓ Schematic drawing of the process to measure or improve.
- ✓ Starting point for process improvement
- ✓ Potential weakness in the process are made visual.
- ✓ Picture of process as it *should* be.

Benefits:

- ✓ Identify process improvements
- ✓ Understand the process
- ✓ Shows duplicated effort and other non-value-added steps
- ✓ Clarify working relationships between people and organizations
- ✓ Target specific steps in the process for improvement.

Kaizen's Pillars – 3. Standardization

Benefits

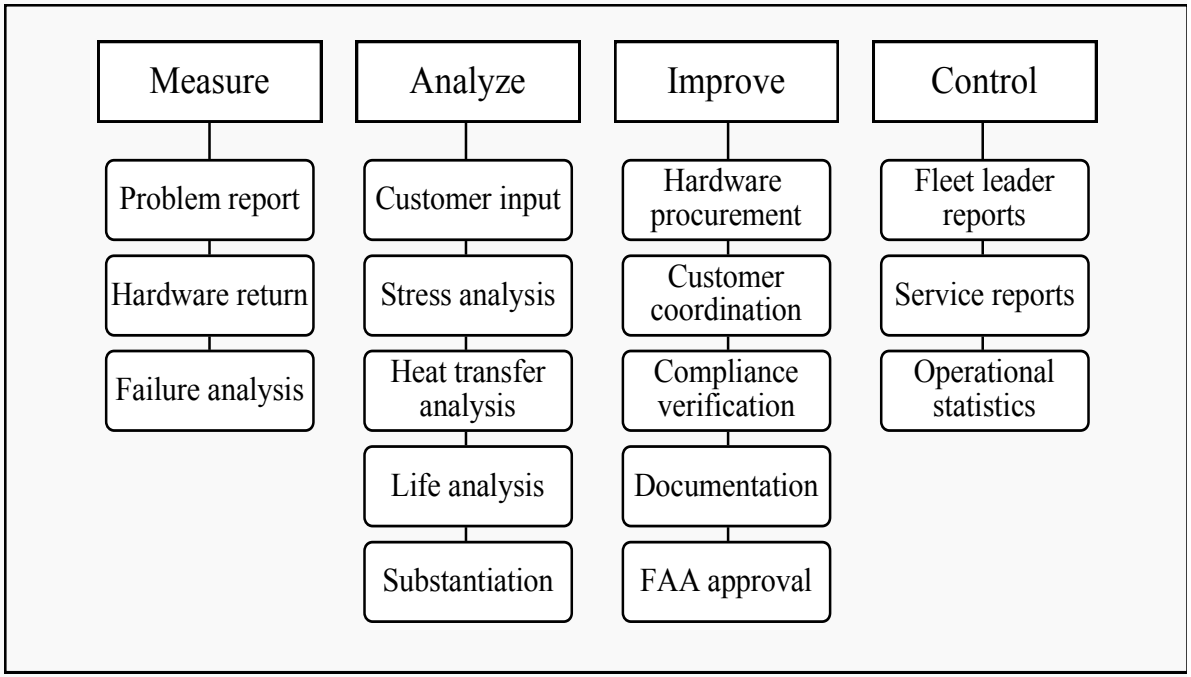
- Simplest of all flowcharts
- Used for planning new processes or examining existing one
- Keep people focused on the whole process

How is it done?

- List major steps
- Write them across top of the chart
- List sub-steps under each in order they occur

Flow Charts

Top Down



Kaizen's Pillars – 3. Standardization

Benefits

- Show what actually happens at each step in the process
- Show what happens when non-standard events occur
- Graphically display processes to identify redundancies and other wasted effort

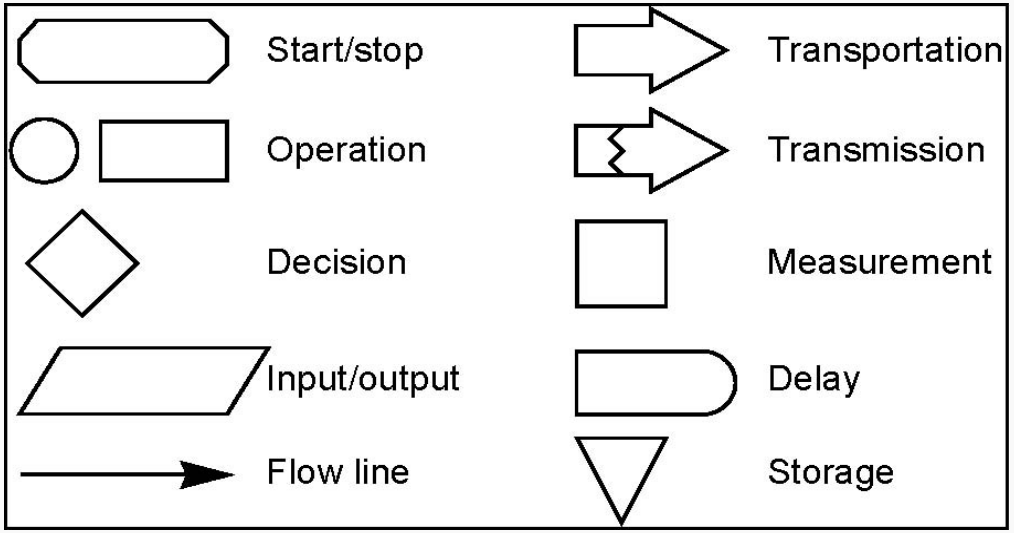
How is it done?

- Write the process step inside each symbol
- Connect the Symbols with arrows showing the direction of flow

Flow charts

Linear

Toolbox



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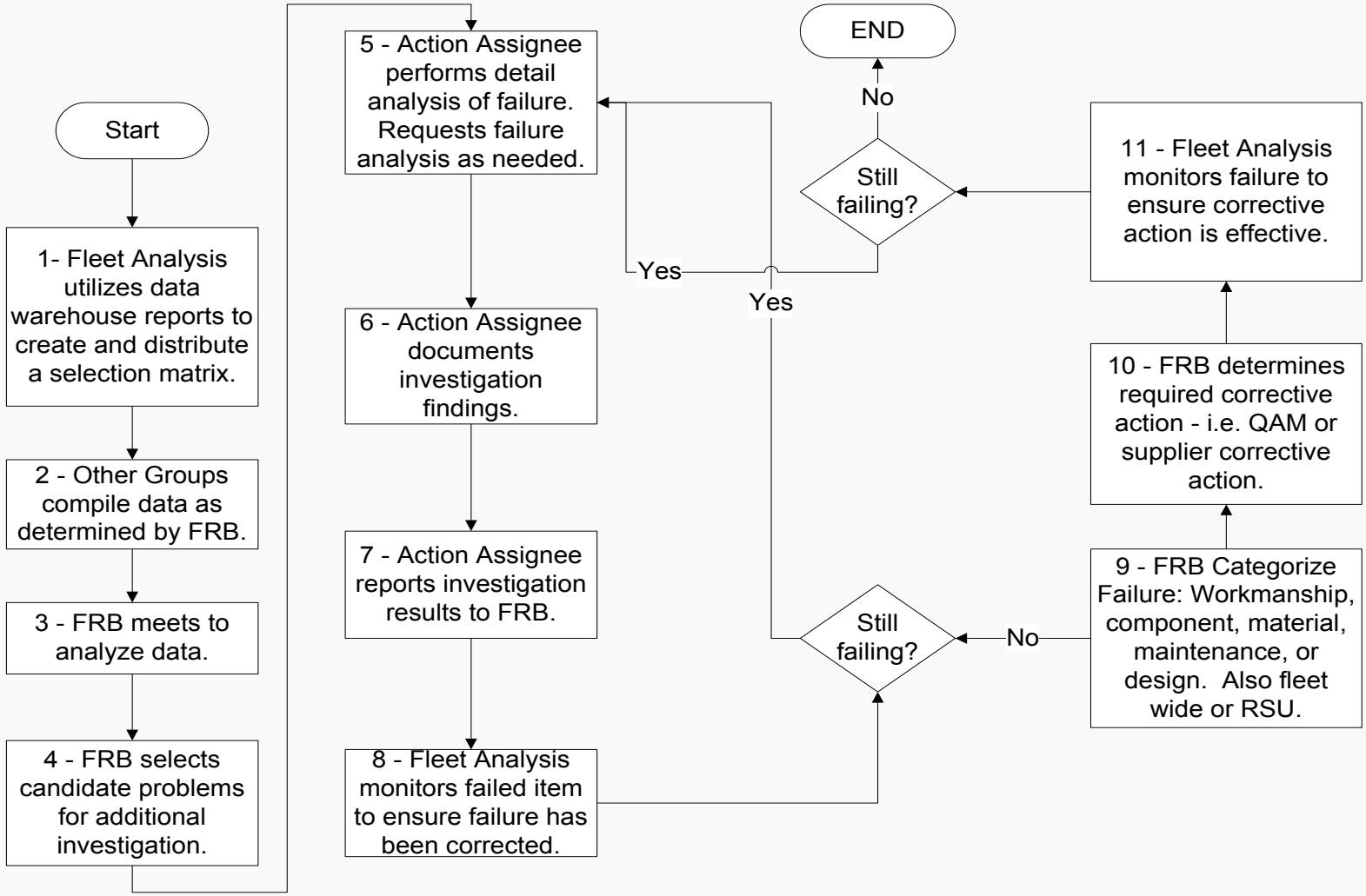
Sample Linear Flow



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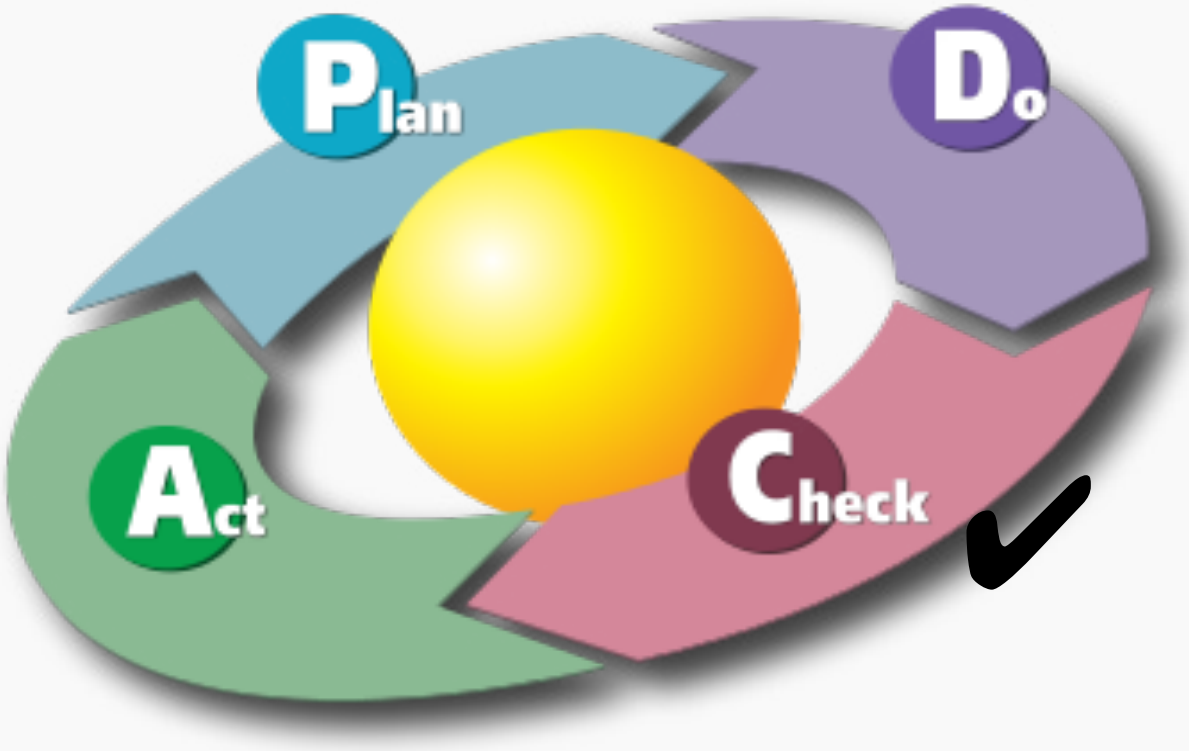

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PHASE 3: CHECK

Check: Use data to analyze the results (measured and collected in "DO" above) of the change and determine whether it made a difference

STEPS

- Review collected data
- Tweak process
- Look for deeper root cause
- Confirm result

TOOLS

- Histogram
- Fishbone + Pareto + SIPOC (Creative Combination: If Fishbone cannot provide a clear RCA, then combination of Fishbone, SIPOC and Perato is required)

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Histograms

Kaizen's Pillars – 3. Standardization

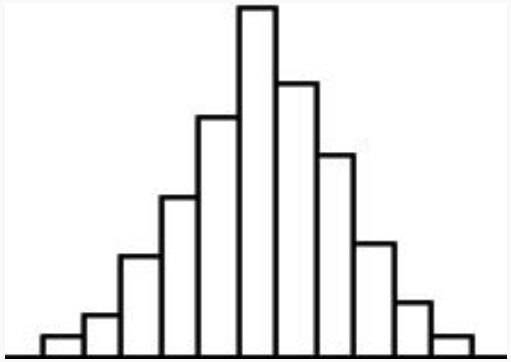
Purpose:

To determine the spread or variation of a set of data points in a graphical form

Histograms

How is it done?:

- Collect data, 50-100 data point
- Determine the range of the data
- Calculate the size of the class interval
- Divide data points into classes Determine the class boundary
- Count # of data points in each class
- Draw the histogram



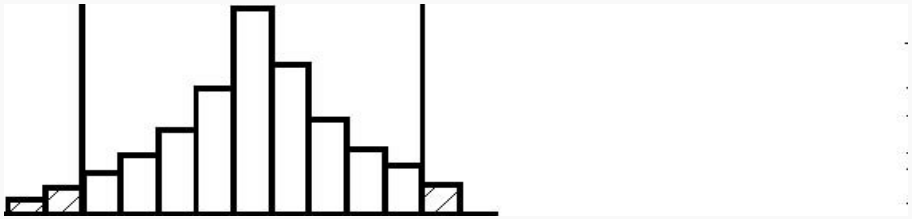
Stable process, exhibiting bell shape

Kaizen's Pillars – 3. Standardization

Histograms

Benefits:

- Allows you to understand at a glance the variation that exists in a process
- The shape of the histogram will show process behavior
- Often, it will tell you to dig deeper for otherwise unseen causes of variation.
- The shape and size of the dispersion will help identify otherwise hidden sources of variation
- Used to determine the capability of a process
- Starting point for the improvement process



Kaizen's Pillars – 3. Standardization

Cause and Effect Diagrams/ Fishbone Diagram/ Eshikawa Diagram

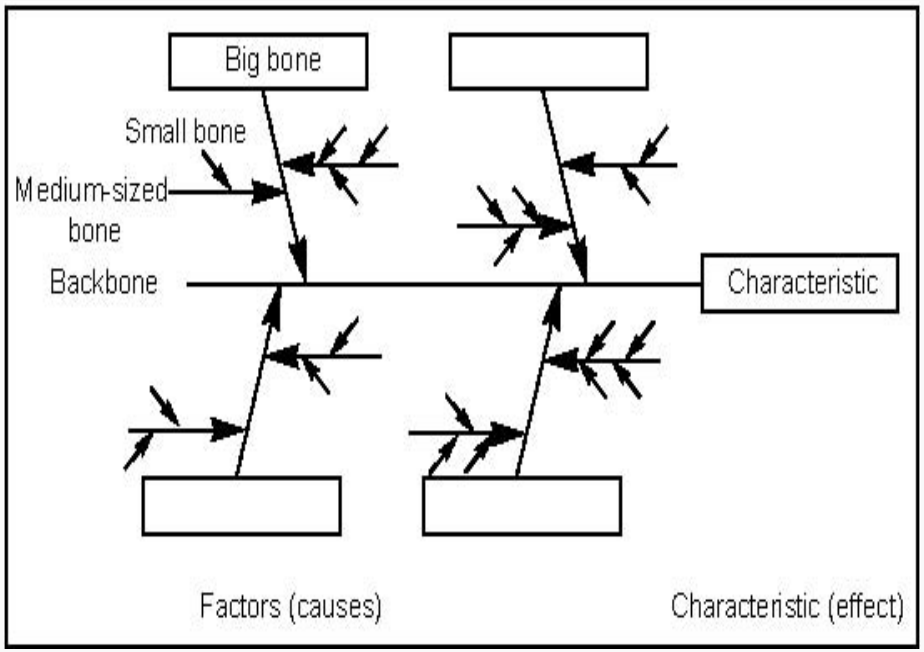
Kaizen's Pillars – 3. Standardization

Fishbone Diagram

Purpose: Graphical representation of the trail leading to the root cause of a problem

How is it done?

- Decide which quality characteristic, outcome or effect you want to examine (may use Pareto chart)
- Backbone –draw straight line
- Ribs – categories
- Medium size bones –secondary causes
- Small bones – root causes



Cause & Effect Diagrams

Benefits:

- Breaks problems down into bite-size pieces to find root cause
- Fosters team work
- Common understanding of factors causing the problem
- Road map to verify picture of the process
- Follows brainstorming relationship

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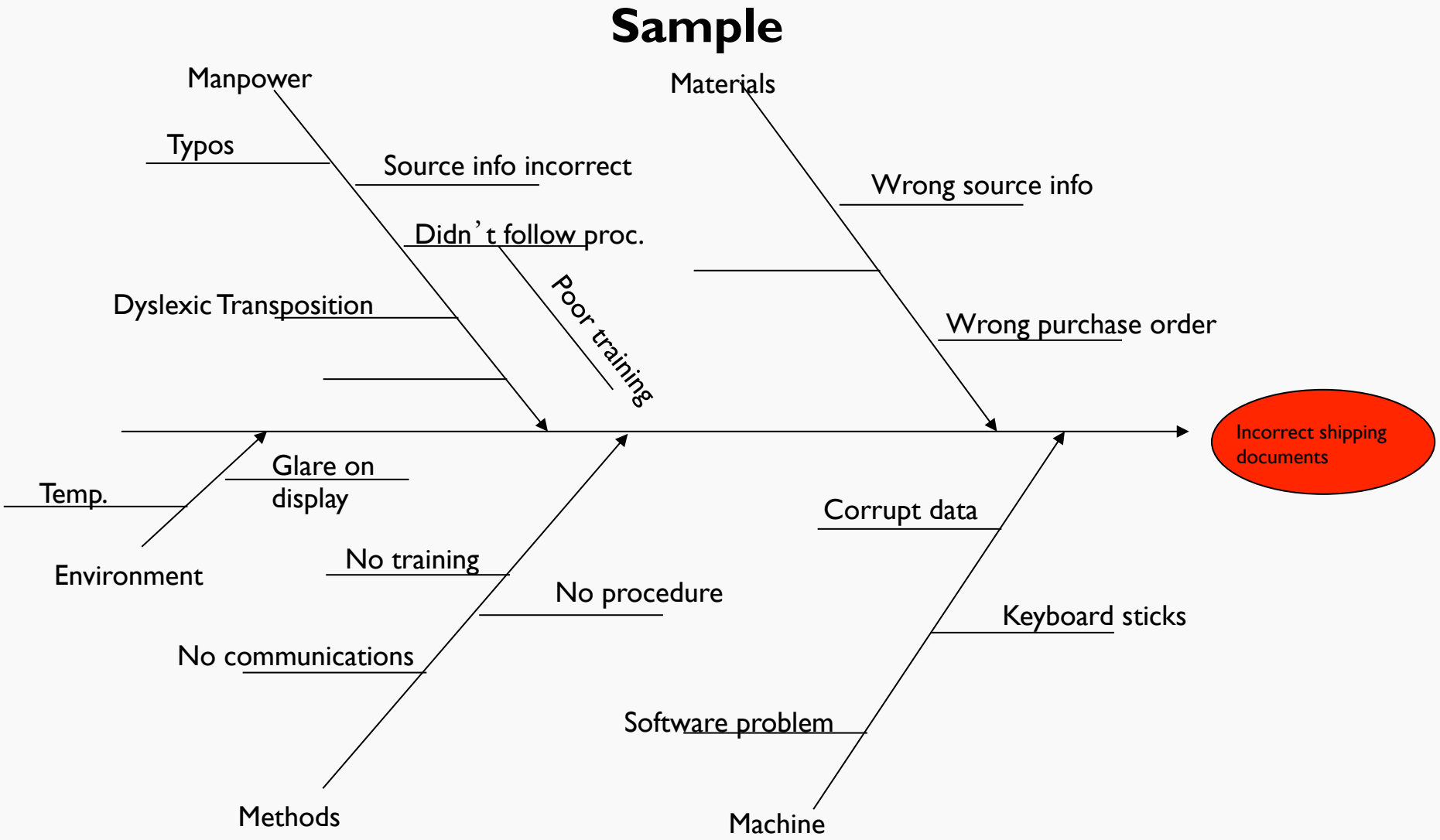
Cause & Effect Diagrams



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SIPOC Defined

SIPOC is an acronym standing for

1. S = Supplier(s)
2. I = Input(s) & key requirements
3. P = Process
4. O = Output(s) & key requirements
5. C = Customer(s)

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SIPOC Diagram Defined

- A SIPOC Diagram is a visual representation of a high-level process map; including suppliers & inputs into the process and outputs & customers of the process

- Visually communicates the scope of a project

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How can SIPOC be used?

- SIPOC Diagrams help a team and its sponsor(s) agree on project boundaries and scope
- A SIPOC helps teams verify that
  - inputs match outputs of upstream processes
  - outputs match inputs of downstream processes

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Brainstorming Exercise

How can SIPOC be used in your organization?

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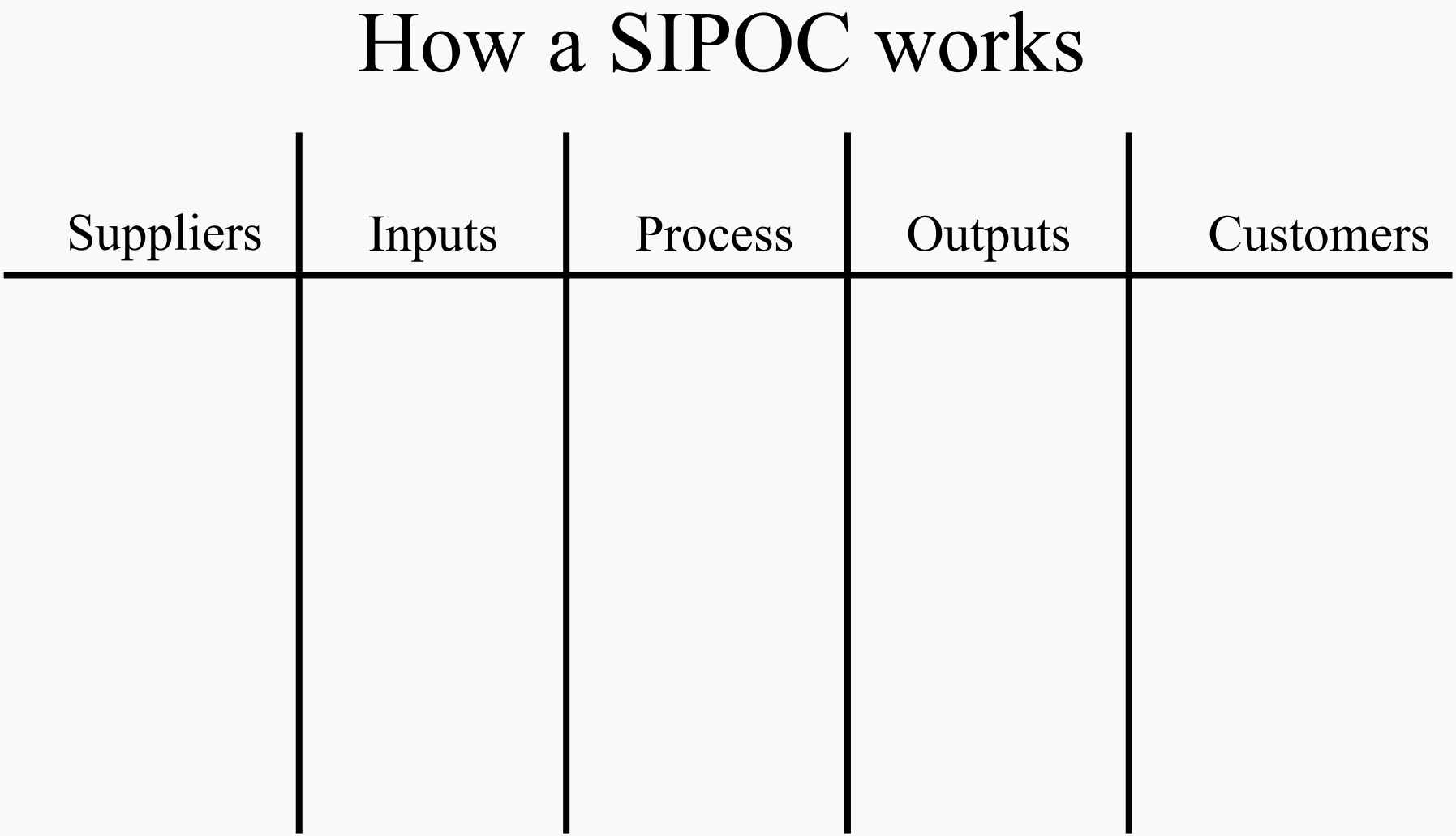
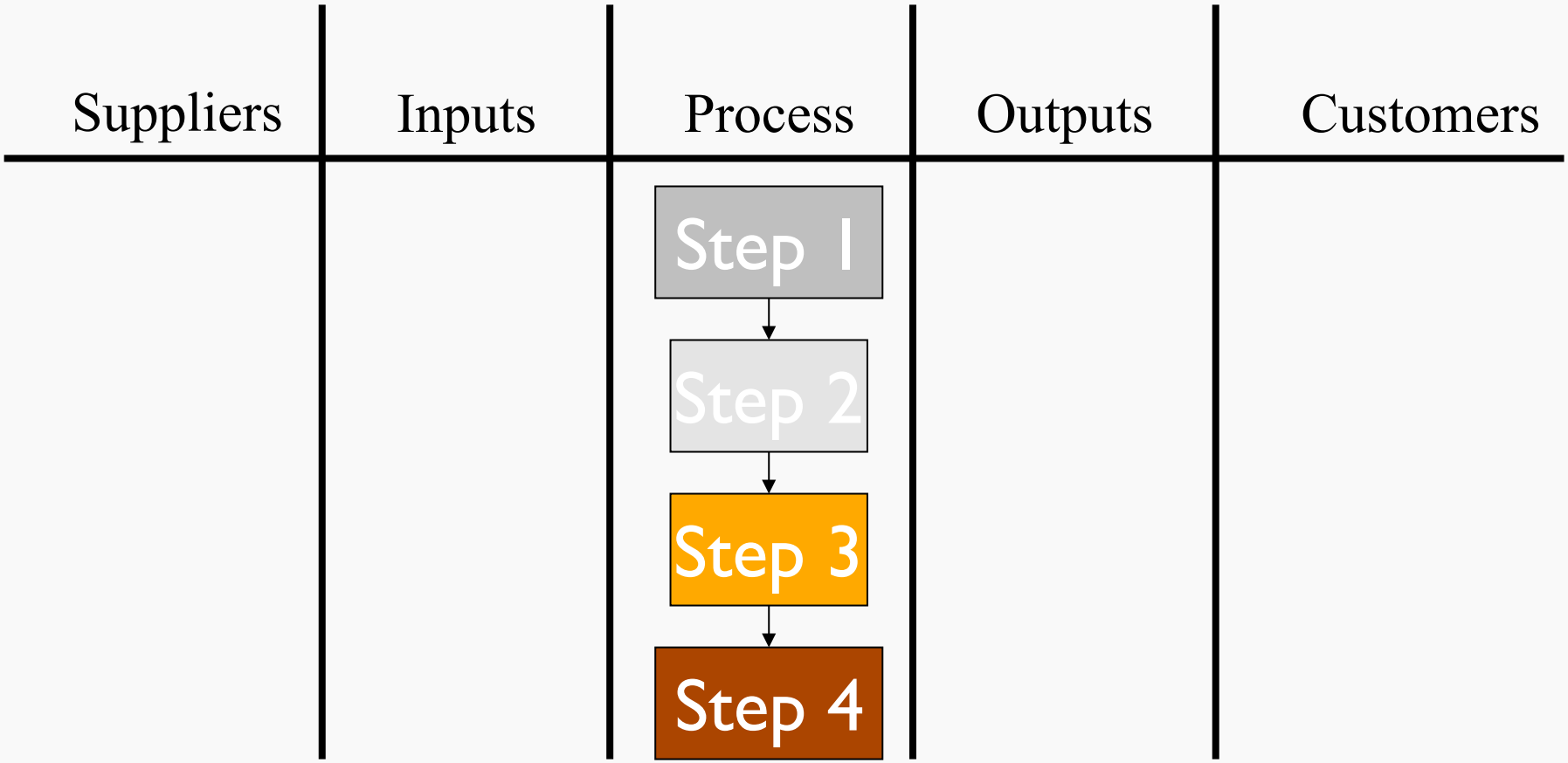


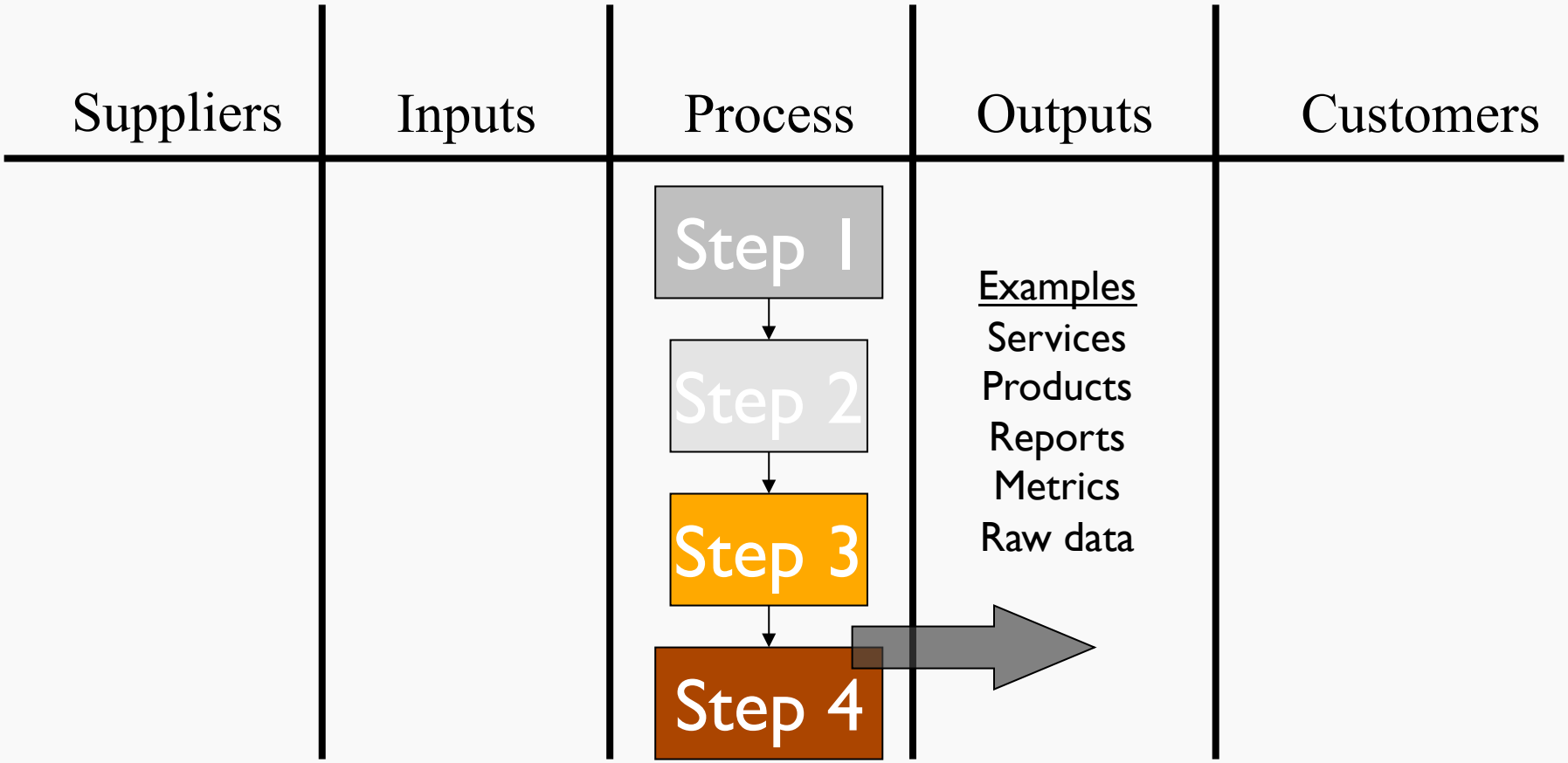
Kaizen's Pillars – 3. Standardization

Step 1: Begin with the high-level process map



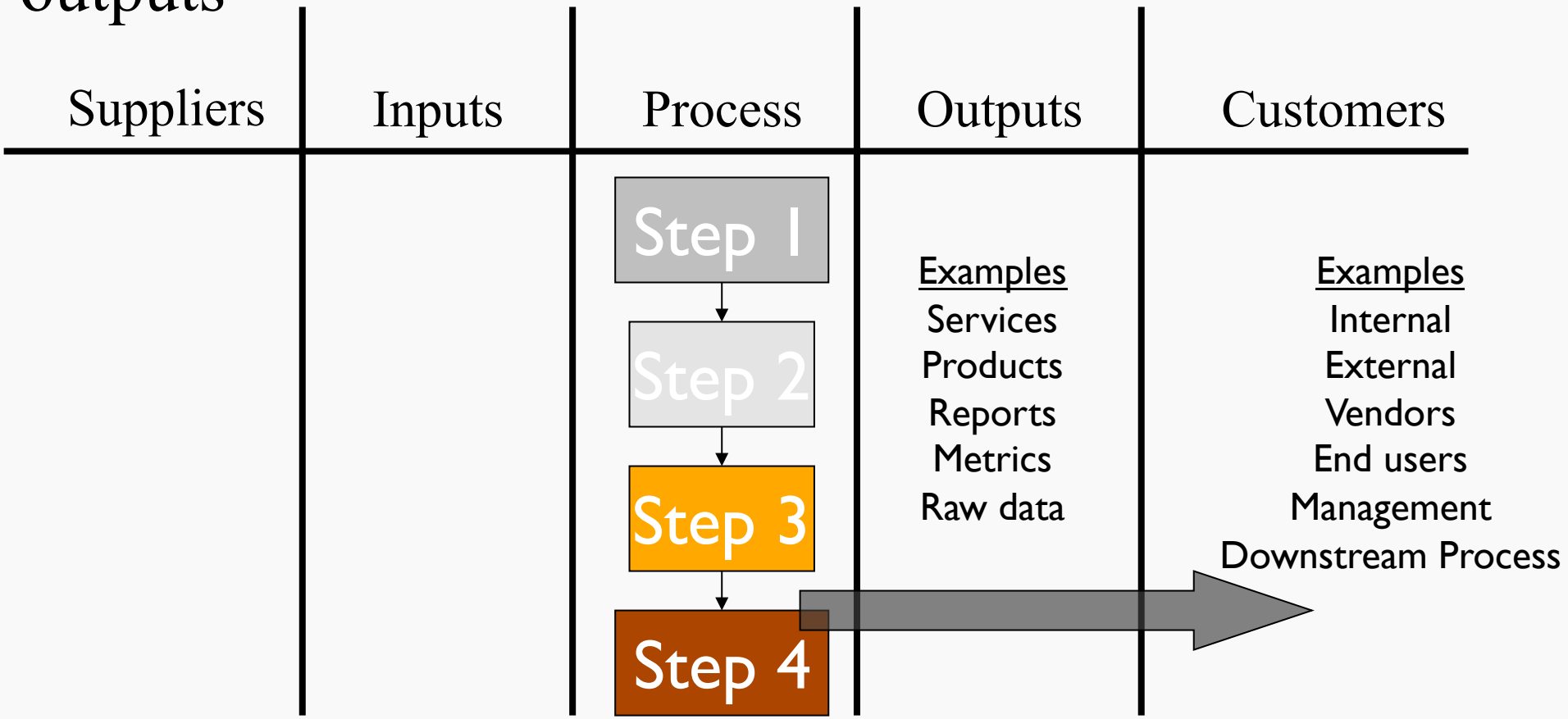
Kaizen's Pillars – 3. Standardization

Step 2: List all of the outputs from the process



Kaizen's Pillars – 3. Standardization

Step 3: Identify the customers receiving the outputs



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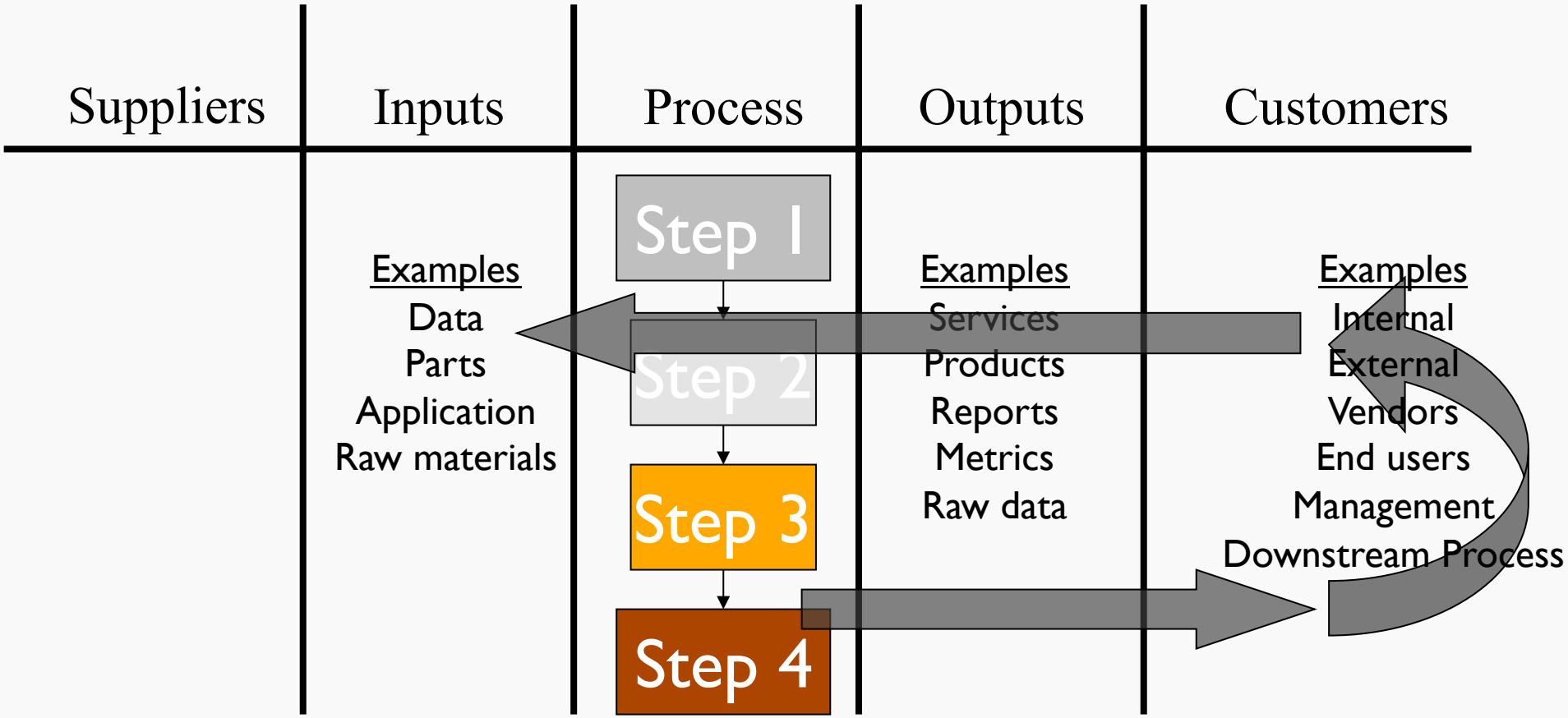
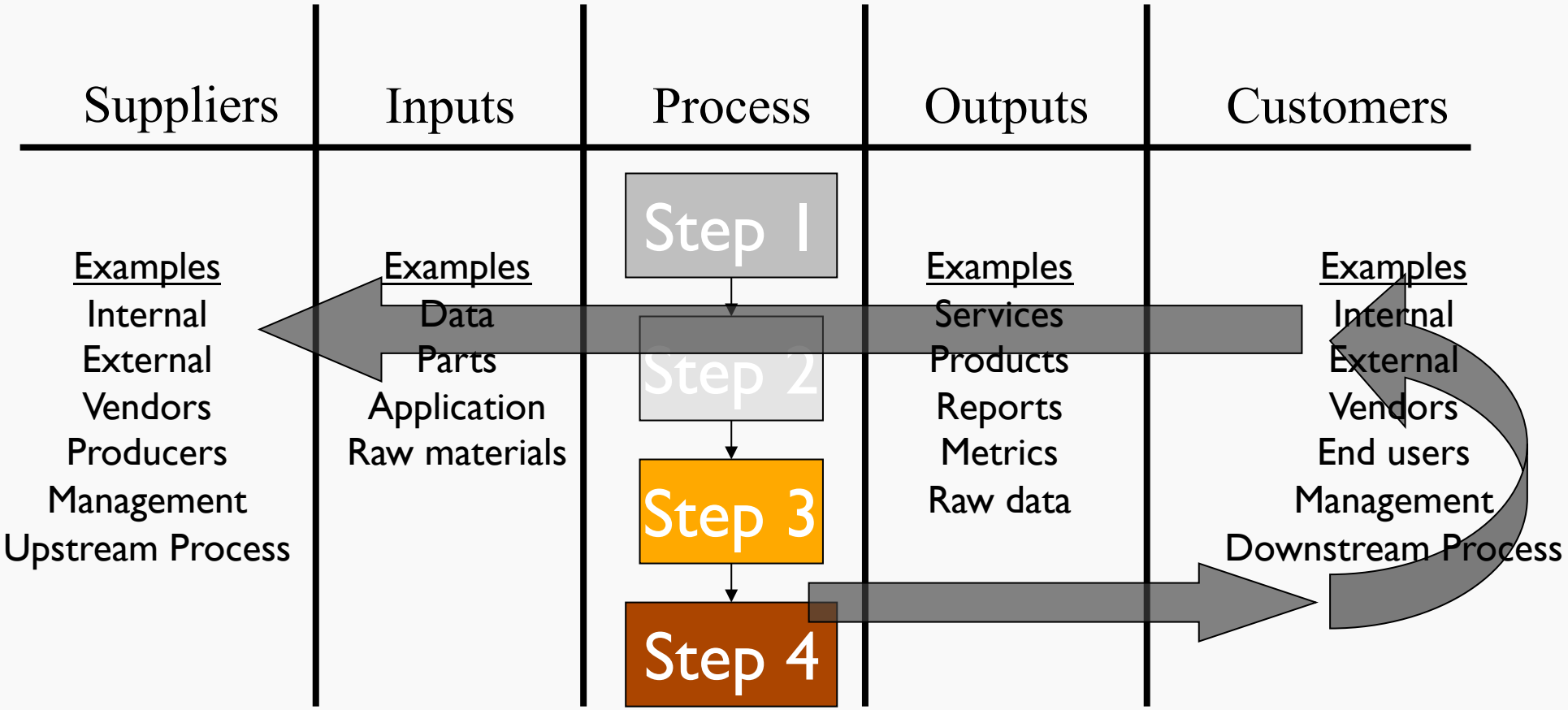
Step 4: List all of the inputs into the process



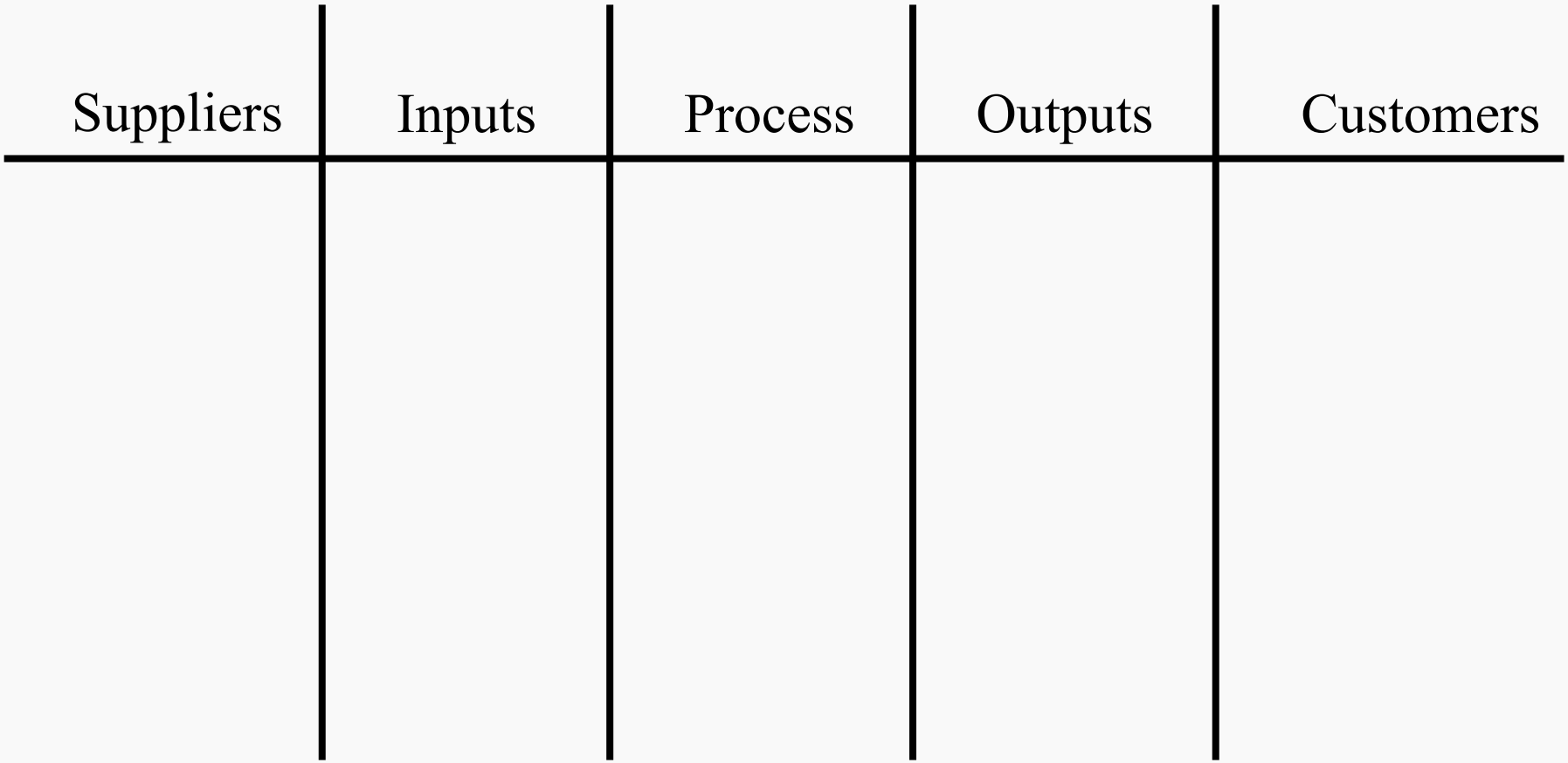
Kaizen's Pillars – 3. Standardization

Step 5: Identify the suppliers of the process inputs



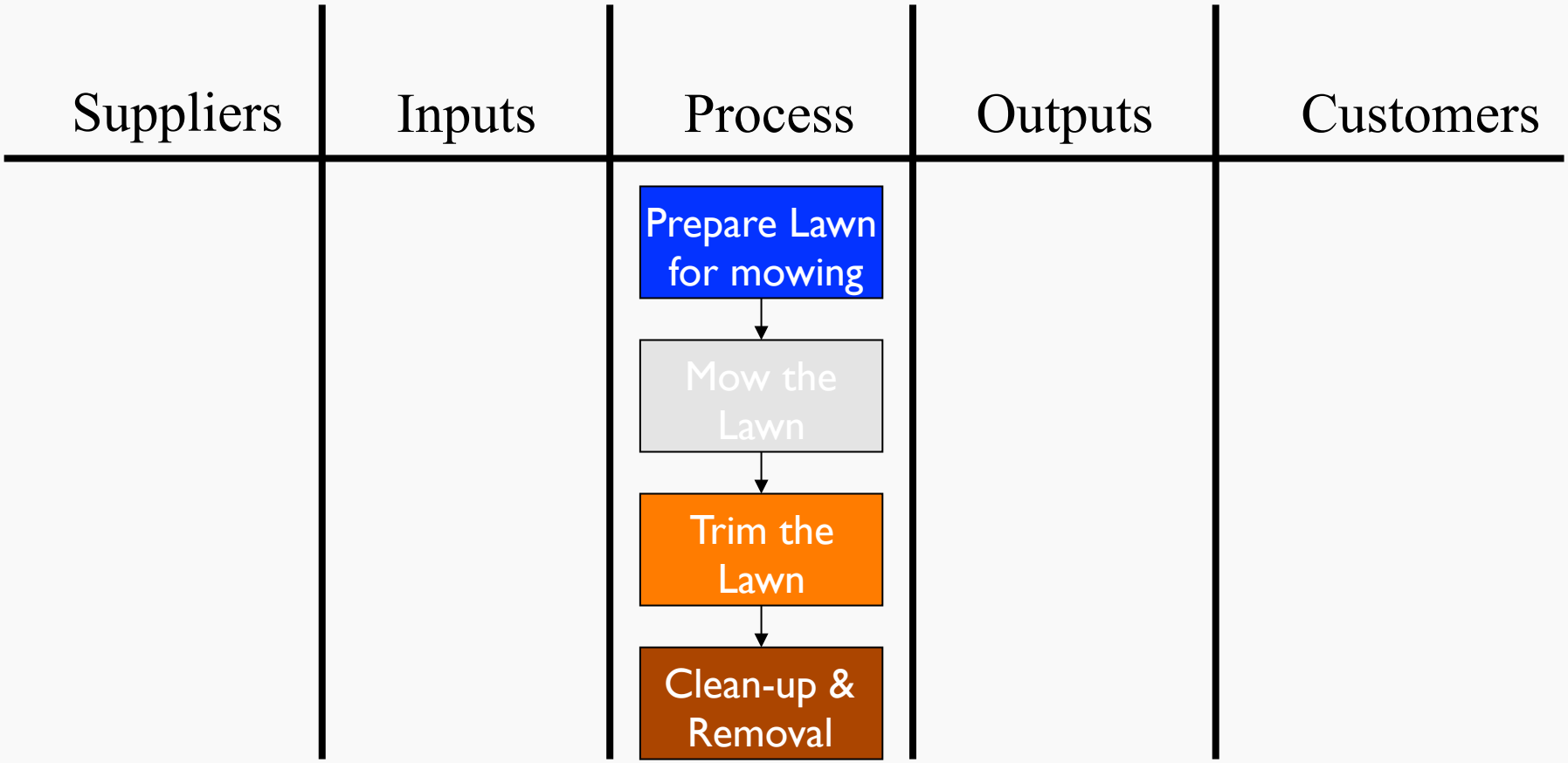
Kaizen's Pillars – 3. Standardization

An Example: Mowing the Lawn



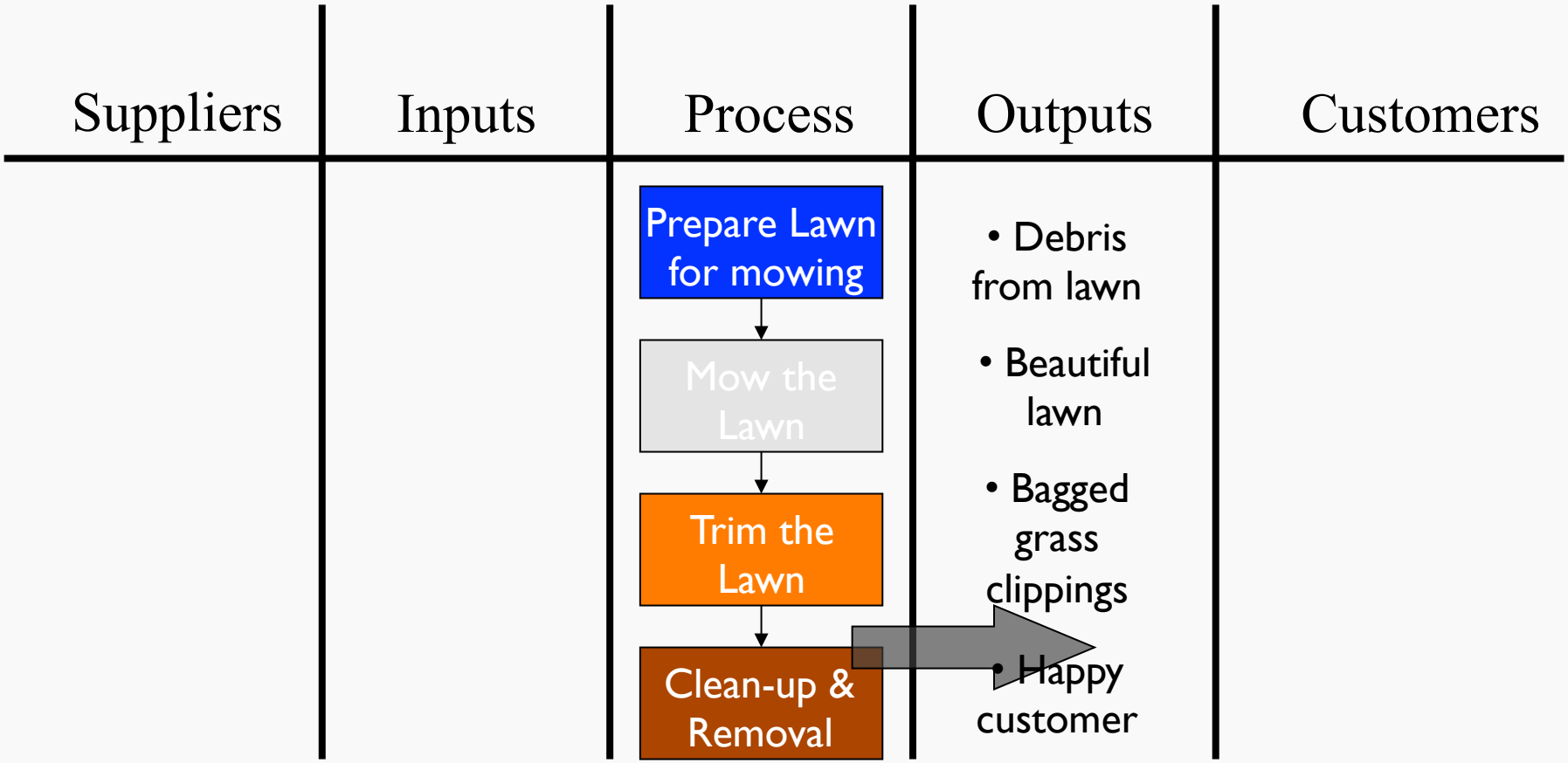
Kaizen's Pillars – 3. Standardization

Step 1: Begin with the high-level process map



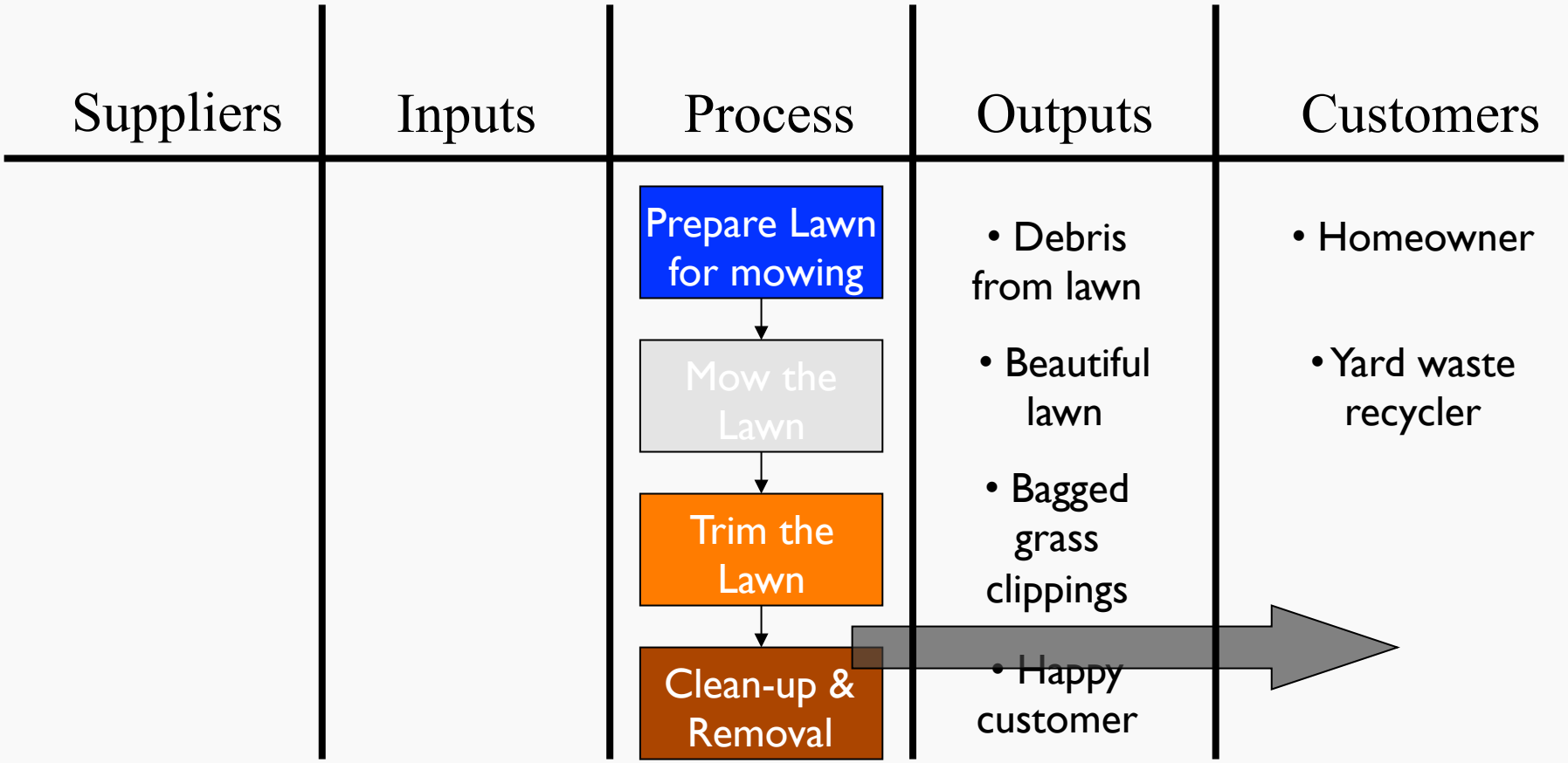
Kaizen's Pillars – 3. Standardization

Step 2: List all of the outputs from the process



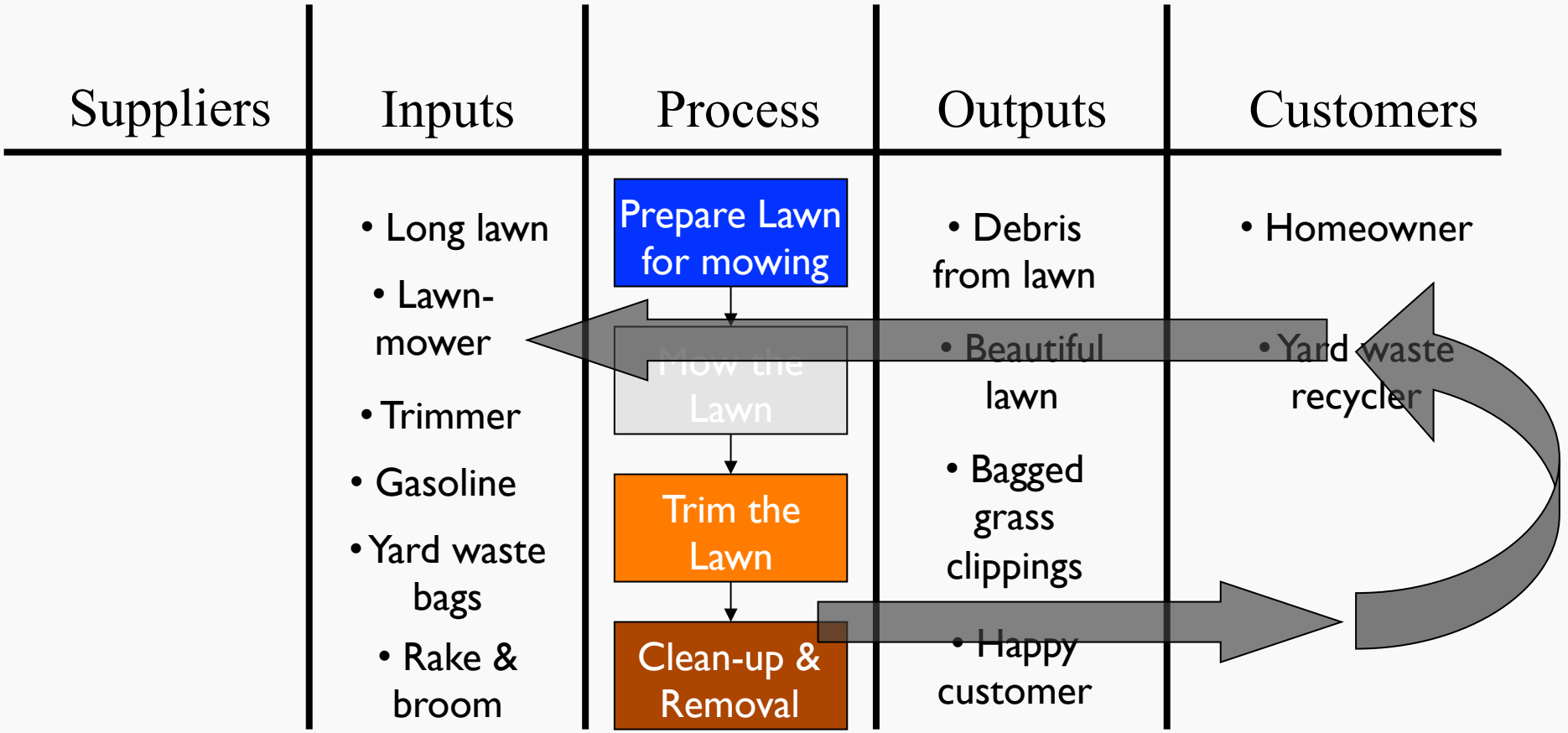
Kaizen's Pillars – 3. Standardization

Step 3: Identify the customers receiving the output



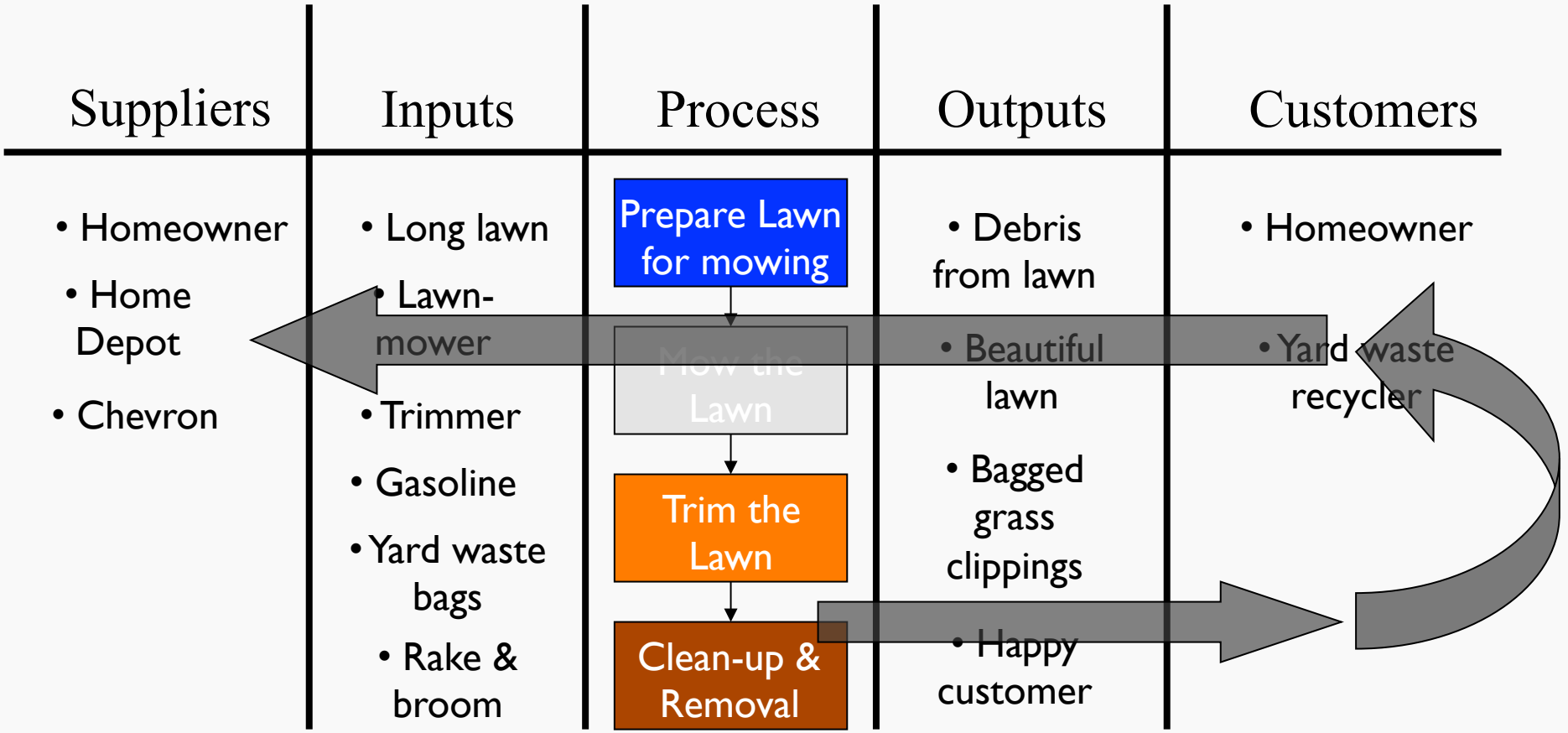
Kaizen's Pillars – 3. Standardization

Step 4: List all of the inputs into the process

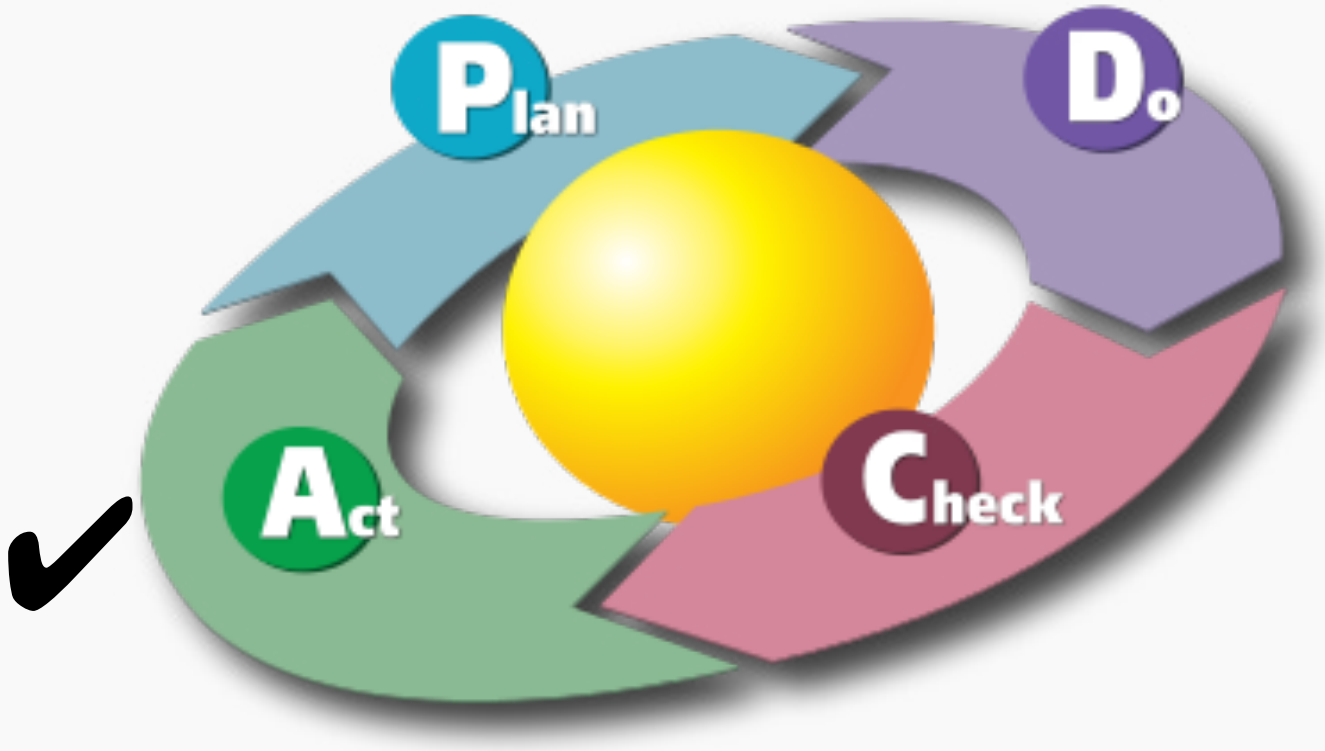


Kaizen's Pillars – 3. Standardization

Step 5: Identify the suppliers of the process inputs



Kaizen's Pillars – 3. Standardization



Kaizen's Pillars – 3. Standardization

PHASE 4: ACT

Act: If the change was successful, implement it on a wider scale and continuously assess your results. If the change did not work, begin the cycle again.

STEPS

- Train team on new process
- Refine solution
- Test and verity
- Implement new process

TOOLS

- Train up
- Review and adjust Flow Chart + VSM new
- New Flow Chart and VSM New

AGENDA:

- ✧ Project Selection
- ✧ What is Kaizen?
- ✧ What a Kaizen Event Look Like?
- ✧ Kaizen's Pillars
  1. Housekeeping
  2. Waste elimination
  3. Standardization
- ✧ Kaizen Targets
- ✧ Ground Rules & Guidelines

Kaizen Targets

- **Eliminate waste (non value added activities)**
- **Increase productivity / output**
- Reduce inventory (less material and labor)
- **Reduce cycle time (less time to produce specific part)**
- Reduce space (work cell, office area)
- **Improve On-Time Delivery (OTD)**
- Improve quality of product and process
- **Improve housekeeping, 5S and visual management**
- **Reduce downtime (setup time, maintenance)**
- Reduce transport time and distance
- **Standardize the process (less variation)**
- Reduce operating costs

Kaizen Targets:

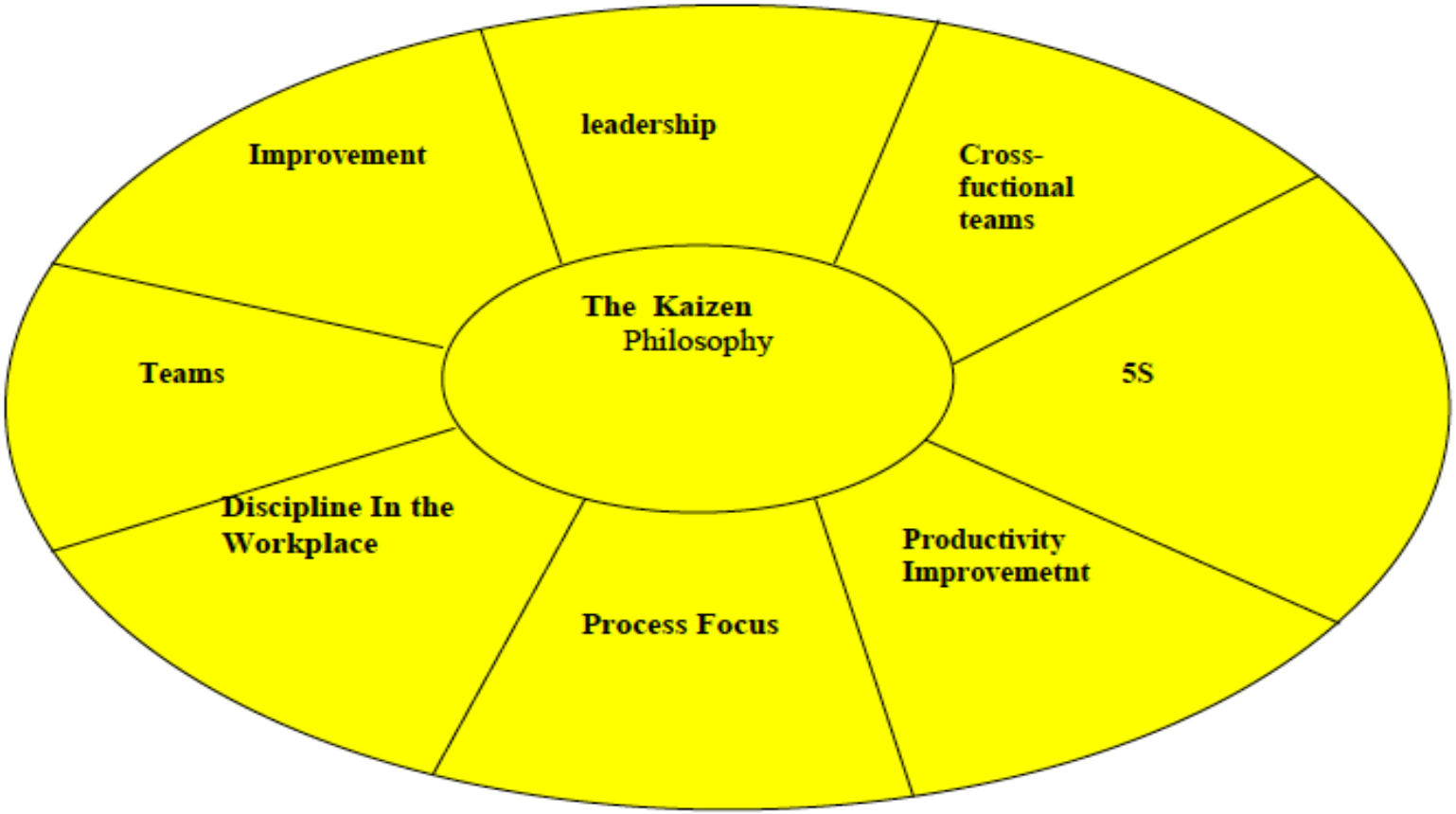


Figure2: The kaizen constituents

AGENDA:

- ✧ Project Selection
- ✧ What is Kaizen?
- ✧ What a Kaizen Event Look Like?
- ✧ Kaizen's Pillars
  1. Housekeeping
  2. Waste elimination
  3. Standardization
- ✧ Kaizen Targets
- ✧ Ground Rules & Guidelines

Ground Rules & Guidelines

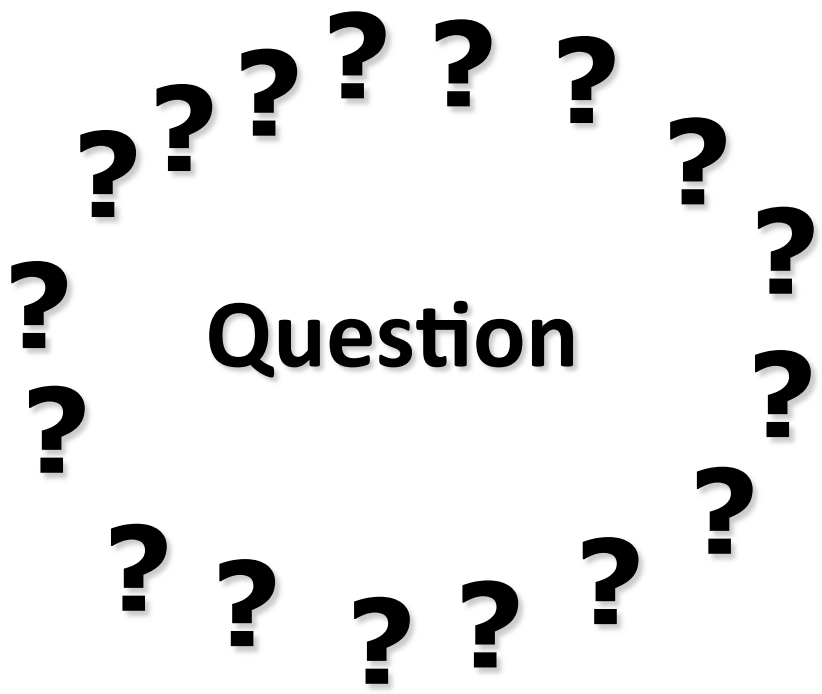
- Try to make all improvements within the event area. Avoid blame on suppliers (internal or external)
- Don't accept excuses. Just **say no** to "we've always done it that way" and the status quo. Keep an open mind to change
- Think of how it can be done, not why it won't work. Don't make excuses-just make improvement happen
- **Ask "why" five times until you get to the root cause of the problem (The 5 Why's)**
- **The Team solution is usually the best solution**
- Don't over-analyze. Understand the process, then "just do it," and see if it works
- Don't seek perfection the first time. Do something now – a 20% improvement is better than nothing

Ground Rules & Guidelines

- "Fast and crude" is better than "slow and elegant" or "maybe never".
- In the worst case, the original process can be restored
- Never leave in silent disagreement; Silence is agreement = 'I can live with it'
- Every person has a voice and there is no such thing as a dumb question
- Keep a positive attitude and have fun. The possibilities for improvements are unlimited
- Everyone respect everyone else
- Change 'paradigm' from conventional to process-emphasis approach

Ground Rules & Guidelines

Conventional approach	Process-emphasis approach
Employees are the problem	The process is the problem
Doing my job	Helping to get things done
Understanding my job	Knowing how my job fits in the process
Measuring individuals	Measuring performance
Change the person	Change the process
Correct errors	Reduce variation
Who made the error?	What allowed tile error to occur?



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☺ Thank You ☺