LEAN OFFICE EBOOK

Identifying waste at the office and how you can eliminate it

South Dakota
MANUFACTURING & TECHNOLOGY SOLUTIONS

WELCOME

Thank you for taking the time to read through this Lean Office e-book. We hope you find this information easy to digest and applicable to wherever you are on your lean journey.

By applying these practical lean concepts, you can shorten your lead time and increase your capacity for growth.

Special thanks to Laura Lee Rose from the Missouri Enterprise and Frank Groeteman from TMAC for contributing content ideas.

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What is Lean?

Lean is about creating **more value** for the customers **using fewer resources.**

It is shortening the time to do any process, in any industry.

Why is it important?

It helps streamline operations.

Benefits

- Reduce cycle time, inventory and work-in-process costs
- Increase productivity, profits and safety
- Save space
- Reduce stress

Lean in the Workplace

Waste is often hard to see in an office setting because it's spread out across many value streams and it is usually not measured. Let's take a moment to compare a typical office setting to one where lean concepts are implemented.

Traditional

- Unclear job
- Individual accountability
- Customer demands are unrealistic
- Introduction of IT to "automate" information
- Few cross functional relationships
- No continuous improvement methods

Lean

- Written and well-defined work
- Team accountability
- Customer satisfaction measures continually met
- Introduction of IT as appropriate
- Open communication and information flow
- Strong employee input, passion for continuous improvement
- Teams have clear understanding of company goals

Eliminating DOWNTIME

As we mentioned before, the goal of lean is to minimize waste. An easy acronym to help you remember the eight wastes is DOWNTIME.

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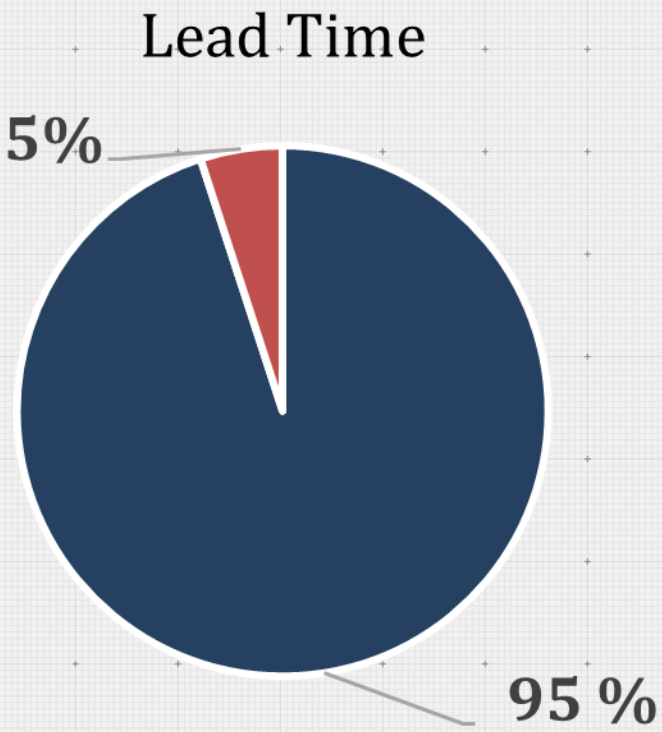


Non-Value Added

- **D**efects
- **O**verproduction
- **W**aiting
- **N**ot Utilizing Employees
- **T**ransportation
- **I**nventory
- **M**otion
- **E**xcess Processing

Typically 95% of all lead time is non-value-added.

Identifying Waste in the Workplace

DOWNTIME

Defects

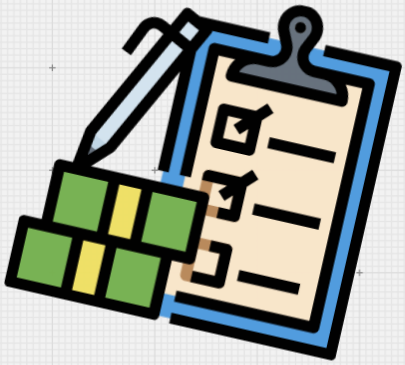
Inspection and correction of forms and information in inventory

Causes of defects

- Improperly trained/unskilled employees
- Lack of communication or information
- Individual methods of performing tasks
- Doing a process in a rush
- Poor design of forms
- Re-entering information
- Bad quality of supply material
- Environmental conditions
- Confusing procedures

Examples

- Forms filled out incorrectly
- Paperwork does not match
- Missing information
- Incompatible software
- Revision changes



Identifying Waste in the Workplace

DOWNTIME

Overproduction

Making **more than** what is required by the next process
Making **earlier than** is required by the next process
Making **faster than** is required by the next process

Causes of Overproduction

- Just-in-case logic
- Long process setup
- Unleveled scheduling
- Unbalanced workload
- Weak organizational structure
- Ineffective supervision
- Lack of communication

Examples

- Printing documents earlier in batches due to long changeover time
- Shotgun approach instead of a focused approach
- Memos to everyone with no clear purpose

Identifying Waste in the Workplace

DOWNTIME

Waiting Time

Idle time when you are waiting

Causes of Waiting Waste

- Unbalanced workload
- Redundant approval
- Unreliable equipment
- Improperly coordinated department
- Long equipment setup

Examples

- Waiting for printer or computer to warmup
- Equipment breakdown
- Mail delivery within the firm
- Different work schedule of team members
- Attendees late for meetings
- No meeting agenda
- Signatures/approval/decisions
- Proofs/specifications
- Not delegating responsibilities

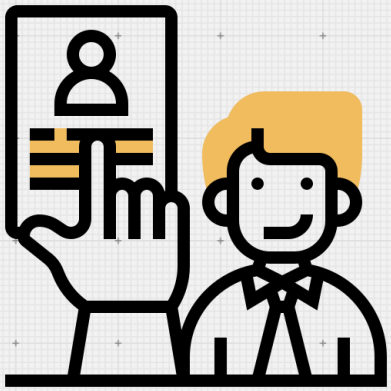
Identifying Waste in the Workplace

DOWNTIME

Not Utilizing Employee's Knowledge Skills, and Abilities
The waste of not using people's mental, creative, or physical abilities

Causes of People Waste
- Incompatible hiring practices
- Corporate culture
- Improperly trained employees
- Employees are not involved in process improvement
- Poor management

Examples
- Bypassing procedures to hire a favorite candidate
- Start using system software without prior training
- Not providing opportunity for growth
- Temporary workforce
- Flawed suggestion system



Identifying Waste in the Workplace

DOWNTIME

Transportation Waste

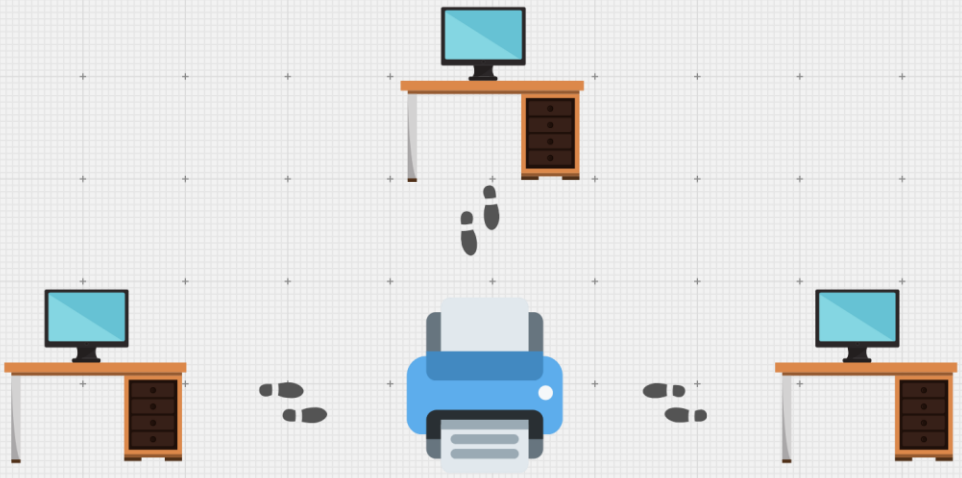
Transporting forms and information around the office

Causes of Transportation Waste

- Poor location of office equipment
- Multiple file storage areas
- Lack of signs
- Defects

Examples

- Sending overstocked inventory to another location
- Confusing end destinations for forms



Tip: consider centralizing your printer to reduce transportation time

Identifying Waste in the Workplace

DOWNTIME

Inventory

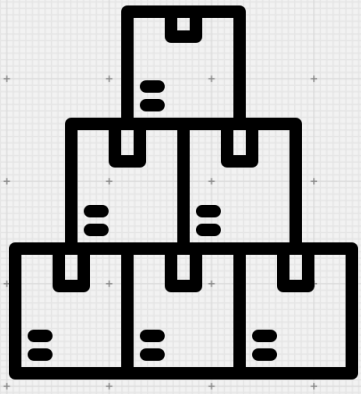
Any supply in excess of a one-piece flow through your office process

Causes of Excess Inventory

- Purchasing excessive supply material
- Unbalanced workload
- Existence of irrelevant data
- Reward system
- Inconsistent work speed

Examples

- Buying in bulk because of just-in-case logic
- Files pile up between work desks
- Documents are waiting to be matched or signed
- Storage space filled with items we don't need or use
- Saving files forever



Identifying Waste in the Workplace

DOWNTIME

Motion Waste

Any movement of people or equipment that does not add value to the service

Cause of Motion Waste

- Poor workplace organization
- Poor scheduling of work
- Nonstandard work method
- Redundant approval

Examples

- Keeping forms far from reach of employee
- Looking for items because they do not have a defined place
- Unfiled papers
- Not grouping similar orders
- Employee working by experience rather than by standard method

Identifying Waste in the Workplace

DOWNTIME

Excess Processing Waste

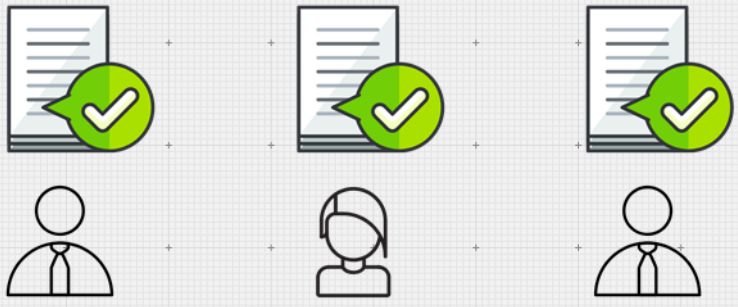
Effort that adds no value to the service from the customers' viewpoint. It is an outward sign indicating a poorly designed process.

Causes of Processing Waste

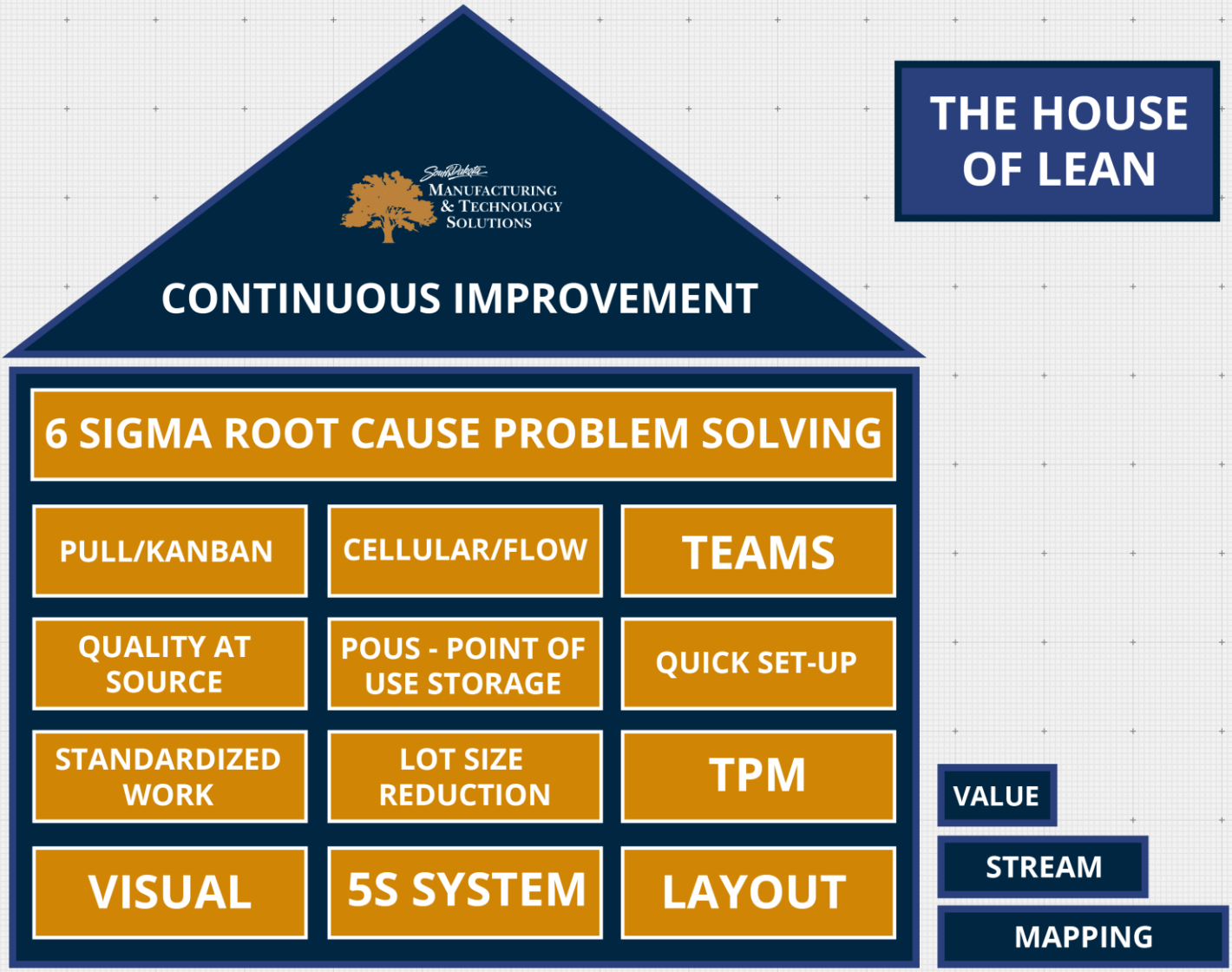
- Just-in-case logic
- Lack of communication
- Redundant approval
- Human error
- True requirements undefined
- Non-standard business process

Examples

- Repetition of same information on different forms
- Use of different software in different departments when processing an order
- Re-entering data



Lean Building Blocks



Eliminate Waste

With Lean Tools

Standardized Work
Operations safely carried out with all tasks organized in the best-known sequence and using the most effective combination of these resources:

- Man (people)
- Materials
- Methods
- Machines
- Money
- Mother Nature
- Management
- Momentum (time)

Minimize variation in the process and process result!

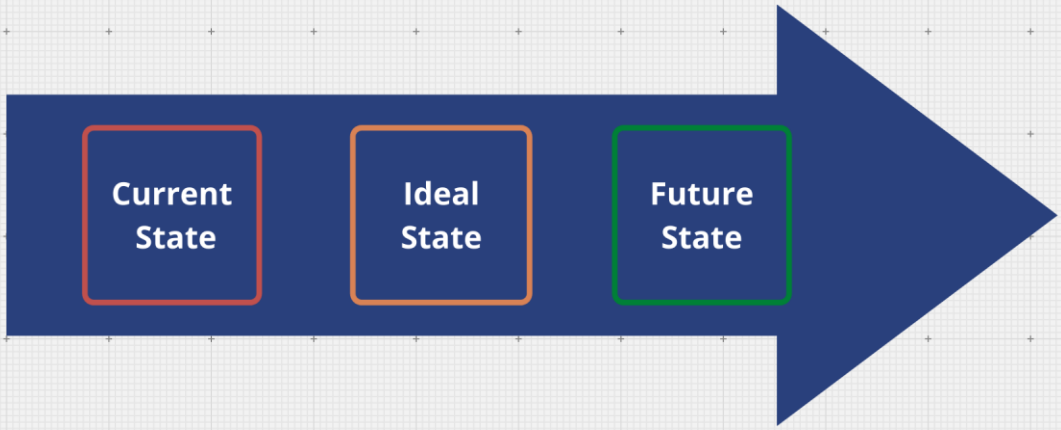
Eliminate Waste

With Lean Tools

Value Stream Mapping

A simple, visual approach which:

- Creates a clear picture of the current paperwork and information flow, called a "current state" map
- Focuses on one "product family" at a time
- Identifies lean tools and techniques that can improve flow and eliminate waste
- Incorporate those ideas in a new picture of how paperwork and information show flow in the "future state"
- Helps create an action plan that makes the new picture a reality



Eliminate Waste

With Lean Tools

Workplace Organization – 5S
A safe, clean, neat, arrangement of the workplace provides a specific location for everything, and eliminates anything not required.

Sort
- Red tag all unneeded items
- Motto: when it doubt, throw it out

Set in Order
- Identify best location for remaining items, organize
- Set inventory limits and temporary location indicators

Shine
- What is worth using is worth keeping in good condition
- Clean, paint, shield, sharpen, and polish

Standardize
- Incorporate visual means to stay organized
- Create rules and train people to follow them

Sustain
- Promote a culture of staying organized
- Institute processes to prevent backsliding

Eliminate Waste

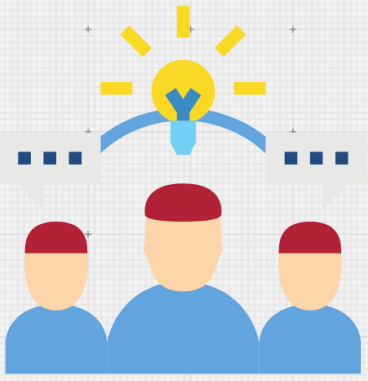
With Lean Tools

Total Productive Maintenance (TPM)
Systematic approach to the elimination of the six major equipment losses:

- Setup and adjustment
- Breakdowns
- Idling and minor stoppages
- Reduced speed
- Startup
- Defects and rework

Enlisting the participation of all employees to create an environment that fosters improvement efforts in safety, quality, cost, delivery, and creativity

Charting and analyzing equipment performance to identify root cause of problems, and implementing sustainable improvement

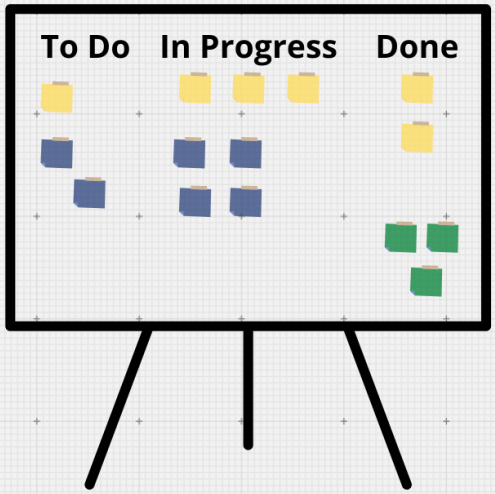


Eliminate Waste

With Lean Tools

Visual Controls
Simple signals that provide an immediate understanding of a situation or condition. They are efficient, self-regulating, and worker-managed.

Examples
- Decision-making tools
- Kanban cards (visual systems)
- Schedules, project boards
- Color-coded forms, equipment, trays
- Lines on the floor to delineate storage areas, walkways, work area, etc.



Eliminate Waste

With Lean Tools

Pull System

A pull system is a flexible and simple method of controlling the flow of resources

- Produce only what has been consumed
- Minimizes wastes of overproduction, inventory, transportation, defects, waiting
- Minimize “guessing” and forecasting

Kanban

- Visual Signal – simple and visual
- Management by sight
- Better communication

Eliminate Waste

With Lean Tools

Quick Changeover

The time between the last good output from the current task and the first good output from the next task at speed

Examples of changeover in the office

- One set of documents are put away and replaced by another set
- Office equipment has to be reset for the next job
- Computer files are closed down and others retrieved
- Associates go to the Boss for their next assignment
- Visits to the supply cabinet for needs
- Reconciliation of regulatory paperwork

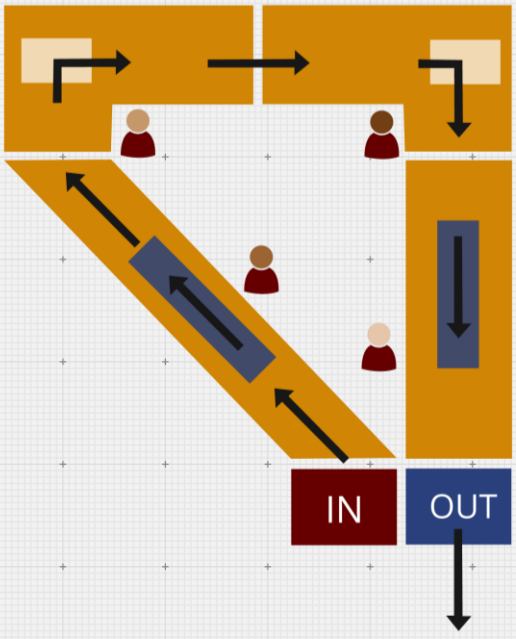
Eliminate Waste

With Lean Tools

Office Layout
Linking of people and processes into the most efficient combination to maximize value-added content while minimizing waste.

Examples:
- Multi-functional
- Co-located
- One piece flow
- Balanced-waste removed
- Cross-trained team
- Standard work
- Staffed to meet demand

Documentation flows in one direction in the office

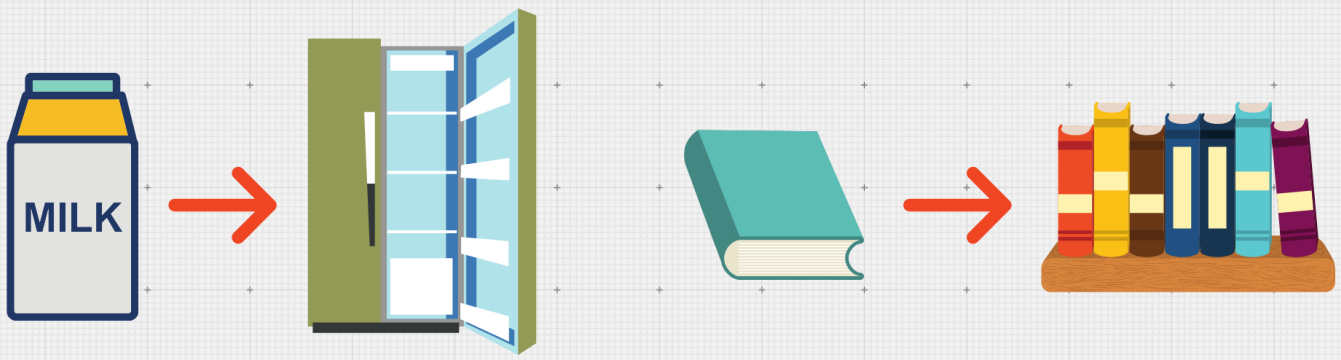


Eliminate Waste

With Lean Tools

Point of Use Storage

- Raw material is stored at workplace where used
- Works best if vendor relationship permits frequent, on-time, small shipments
- Simplifies physical inventory tracking, storage, and handling



Eliminate Waste

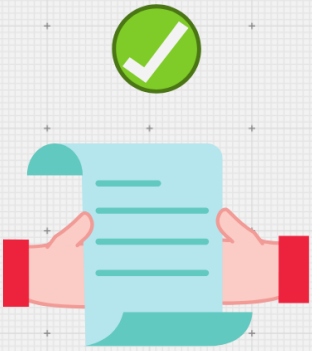
With Lean Tools

Quality at the Source

Source Inspection: Associates must be certain that the document they are passing to the next process step is of acceptable quality.

How to ensure:

- Associates must be given the means to perform inspection at the source, before they pass an item along
- Opportunities for mistake proofing the processes have been explored and implemented at the work station
- Process documentation defining quality inspection requirements for each work station may need to be developed



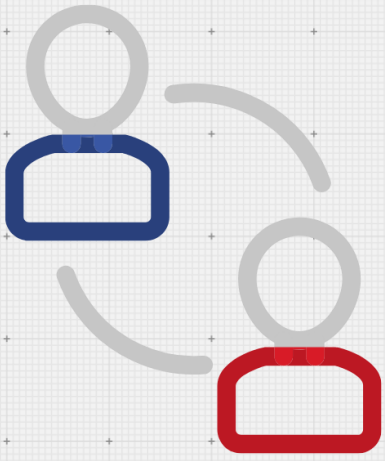
Eliminate Waste

With Lean Tools

Team Work and Cross-Training
Fully integrated, team-based, continual flow processes, value streams

Strong team-work and cross-training leads to:

- Better communication
- Faster feedback
- Support and assistance
- Same understanding
- Dealing with complexity
- Problem-solving



Methods of Improvement

Four Methods of Continuous Improvement

Quick Fix

- Know how to improve
- There's agreement
- Little investment
- Quick implementation
- Not team-based

Kaizen Event

- Based on Value Stream Map
- Gaps and action planning
- Small investment
- Team-based
- Area focused
- 3 to 5 days implementation

Projects

- Needs more agreement
- Lower knowledge of change tools required
- Higher investment
- Higher risk
- Multi-team based
- Multi-level
- Month + to implement

Improvement Kata

- Deployment of Strategy
- Thinking behavior
- PDSA based
- Adaptable
- Pattern of thinking
- Decrease fear
- Utilize workforce
- Scalable

THANKS FOR READING!

If there is anything we can help you with – whether it is answering questions or project work - please don't hesitate to reach out to our office. We look forward to connecting with you!

CONTACT US

South Dakota Manufacturing & Technology Solutions