

Identifying and Removing Process Waste



The first step - and sometimes the most difficult - is seeing the waste!

Defects

The effort involved in inspecting for and fixing defects, errors, and mistakes.

Examples

- Data errors, typos & lost records
- Delivering information or materials to the wrong location
- Missing or incomplete information on forms



Typical Causes

- Missing and incorrect information
- Unclear or complex process
- Unclear roles and responsibilities
- Confusing instructions or req.
- Voice of the customer absent
- Poor or inappropriate equipment, materials or supplies

Solutions

- Apply problem solving tools
- Verify customer requirements
- Create standard work
- Error proof (poka-yoke)
- Apply "Plain Language"
- Automate forms - put in hard stops that don't allow partial information
- Require all information up front
- Track & share accuracy measures

Overproduction

Producing more products or services than the customer needs or downstream process can use right away.

Examples

- More staff working or attending meetings than is needed
- Doing work not required
- Sending unnecessary emails
- Batching and bottlenecks



Typical Causes

- Unclear customer requirements
- Uneven work flow
- Poor workflow process
- Poor worker distribution
- Different staff skills, productivity, or work difficulty

Solutions

- Verify customer requirements and align process with req.
- Use one step process flow
- Use "Effective Meetings" tool
- Apply "Plain Language"
- Revise process schedule to even out workload
- Assign more staff or shift roles and responsibilities at peak times

Waiting

Idle time created when material, information, people, or equipment is not ready.

Examples

- Approval queues
- Waiting for decisions or services
- Waiting for customer information, supplies or copies



Typical Causes

- Missing and incorrect information
- Unclear or confusing process
- Unclear roles and responsibilities
- "System" downtime
- Signature requirements
- Not leveraging technology
- Lack of workers/service providers

Solutions

- Require all information up front
- Combine tasks or functions to eliminate handoffs and waits
- Use concurrent process
- Apply 5S
- Co-locate work to minimize wait due to transportation/motion
- Eliminate non-value added steps
- Maintain equipment and machinery

Non-utilized Staff Talent

Not adequately leveraging peoples' skills, creativity and talents.

Examples

- Staff hired to do "x", but spending time on "y"
- Lack of innovation
- Not involving staff in solving problems and ensuring CI



Typical Causes

- Lack of awareness of CI principles, approaches, and tools
- Unclear or confusing process
- Not delegating work
- Unclear or inappropriate job descriptions or duties

Solutions

- Set clear performance expectations
- Coach and train employees
- Provide tools and resources
- Ask staff "What can I do to support your work and remove barriers to improvement?"
- Engage staff in a CI project
- See where the work is done, ask questions, & learn (go to Gemba)

Transportation

Moving products, equipment, materials, information, or people from one place to another.

Examples

- Routing documents
- Paperwork hand-offs
- Carrying or retrieving files
- Transporting patients
- Site inspections



Typical Causes

- Transportation not viewed as a waste
- Distance and physical structure
- Staff turnover/relocation
- New or replaced equipment
- Poor planning and communication

Solutions

- Leverage technology (allow staff to telecommute)
- Only order what you will use
- Collect data to understand transportation problems (spaghetti map)
- Analyze data to determine root causes before defining solutions

Inventory/Storage

Unnecessary storage of information and materials or more information and materials than is needed.

Examples

- Storing the same document in many places
- Backlog (work in process)
- Obsolete databases/files/folders
- Unread or undeleted emails
- Supplies you do not use



Typical Causes

- Batching work
- Not using one-process flow
- Technology systems that take time to access
- Not leveraging technology
- Over-ordering

Solutions

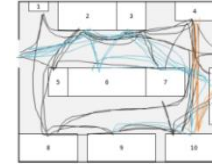
- Use one-step process flow
- Revise process steps and schedule to even out workload
- Assign more staff or shift roles and responsibilities at peak times
- Don't over order
- Investigate variations in the time it takes employees to perform the same task (takt time)

Motion

Unnecessary movement of workers and tools that takes time, uses energy, and may create health and safety issues.

Examples

- Trips to copier
- Looking through cabinets for needed supplies
- Walking to find people
- Extra computer clicks



Typical Causes

- Manual process – not leveraging technology
- Non-ergonomic work area
- Poor visual management
- Linear (consecutive) process
- Distance and physical structure
- Information silos

Solutions

- Leverage technology
- Use concurrent process
- Apply 5S
- Co-locate work
- Clarify process requirements for those upstream and downstream
- Move people closer together to enhance communication and collaboration

Extra Processing

Process steps that do not add value to the product or service, including doing work beyond a customer's specifications.

Examples

- Signatures
- Preparing an elaborate report when a data table will do
- Forms with unused data fields
- Bureaucratic language
- Re-entering or checking data



Typical Causes

- Past practices; culture does not question the status quo
- Standard work is not aligned with the voice of the customer
- Lack of trust/ control issues
- Poor communication
- Not leveraging technology

Solutions

- Identify customer requirements and align work with req.
- Delete or automate signature requirements
- Know which process steps add value and eliminate non-value added steps (Quick Hits)
- Apply "Plain Language"
- Automate where appropriate