

# 5S

Seeing Problems

# Introduction

Our strategy challenges us to increase productivity, reduce waste, and increase our margins and by doing so we will gain advantage over our rivals. The question becomes 'what tool can we use, throughout the corporation, that provides us advantage?'

If implemented correctly and followed diligently, 6S will lead to:

- Lower costs
- Better quality
- Improved safety
- Increased productivity
- Higher team member satisfaction

# Definition



# Definition

5S is not only about cleaning our toolboxes and workstations; it is a systematic approach to workplace organization that is so deceptively simple that few can maintain the practice. But, for those who can, they will remove chaos and unproductivity from their organization.

# Improvement

## Efficiency?

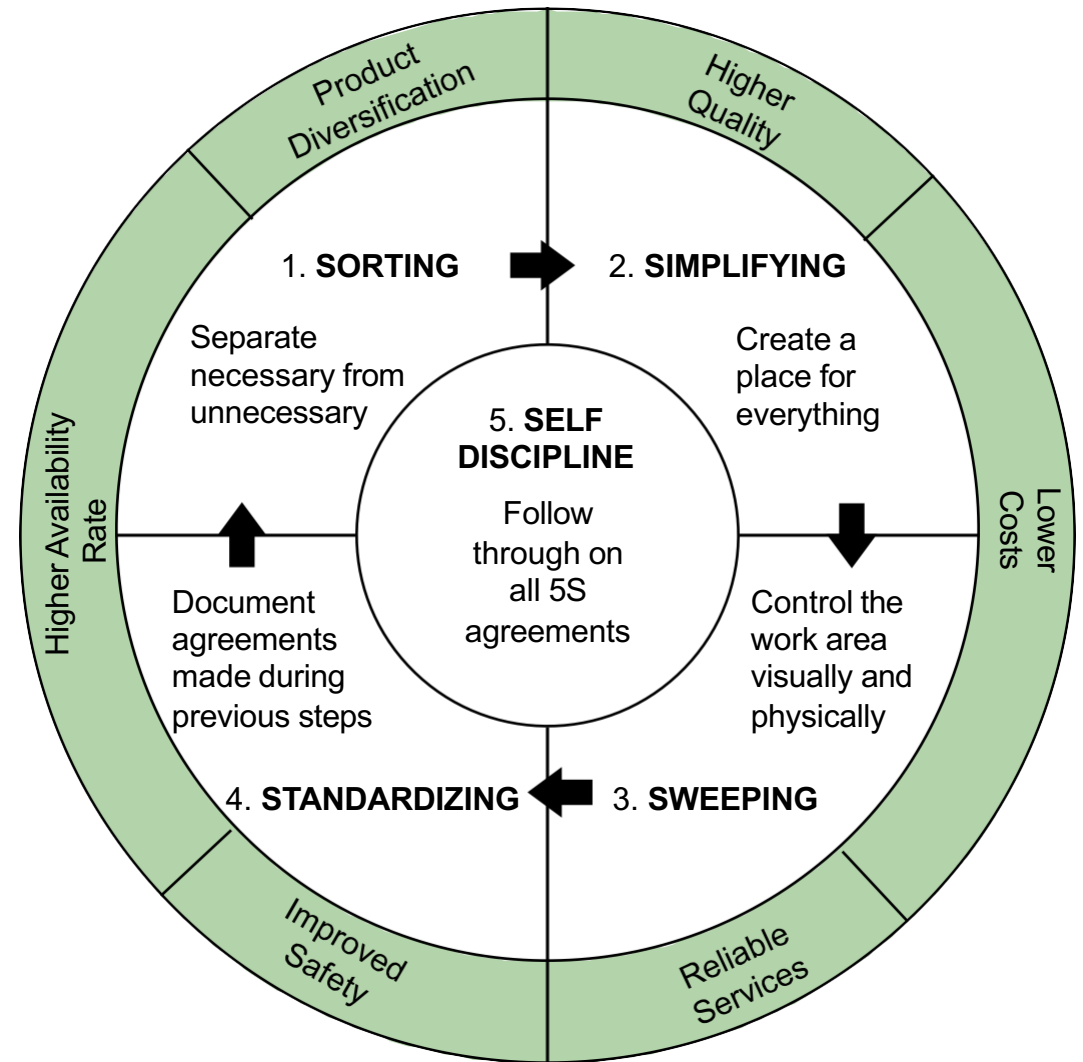
Operational Efficiency is a measurement of resource allocation and can be defined as the ratio between an output gained from the business and an input to run a business operation. (e.g. PPLH)

# The Tools

Developed by Hiroyuki Hirano in his book '5 Pillars of the Visual Workplace'

Mr. Hirano developed the 5S tools and methods known today as:

- Sort | Seiri | 整理
- Set in order | Seiton | 整頓
- Shine | Seiso | 清
- Standardize | Seiketsu | 清潔
- Sustain | Shitsuke | しつけ



# Sort | Seiri | 整理

Sort is the process of removing all the items not needed for current production from the workspace.

5S begins with Sort, which is the cornerstone of 5S, and will help get rid of problems such as:

- Tools and materials impeding workflow
- Wasted time looking for parts, tools and products
- Stockpiling unnecessary and expensive inventory
- Safety hazards resulting from clutter

Sort Rule – if you do not use ‘it’ daily, remove it from the workspace. Keep only the ‘stuff’ you absolutely need to get the job done. Remove ‘stuff’ such as tools, materials, and machinery that are not required. When performing this step, be vigilant and ruthless. Identifying ‘stuff’ is not easy, we get used to chaos and learn to ignore it.

# Sort | Seiri | 整理

5S has an effective tool that will help with the sort process, the tool is Red Tags.

Red tags help identify objects that need to be removed from the workplace. When you see something that you believe should be removed, put a red tag on it. This lets everyone know this item needs to be evaluated.

On the tag, indicate the item, date, person, the reason for the Red Tag and action to be taken:

1. Discard
2. Move to Red Tag area
3. Move to storage location

*Back*

**RED TAG**

**Action to Take**

Return to: \_\_\_\_\_

Discard

Move to Red Tag Storage Area

Move to Storage Site: \_\_\_\_\_

Other: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Additional Comments:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Log No.

*Front*

**RED TAG**

**General Information**

Date: \_\_\_\_\_ Tagged By: \_\_\_\_\_

Item Name: \_\_\_\_\_

Location: \_\_\_\_\_

\_\_\_\_\_

**Category**

Equipment  Raw Materials

Tools & Jigs  Work-in-Progress

Finished Goods  Stationary, etc.

Instruments  Machine Parts

Consumable Materials  Misc.

Other: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Reason for Red Tag**

Not Required  Aged/Obsolete

Defect  Scrap

Other: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Red Tag Examples



# Set in Order | Seiton | 整頓

Set in Order is the process of putting everything in a place that is easy to get to. All items should be clearly marked so anyone can easily find its proper home.

This process starts after the Sort process is completed. The goal is to create a standardized and consistent way to store and retrieve tools and materials - the key is standardization. A system must be developed that evaluates tool and material usage and accessibility.

## Guidelines:

- If items are used together, store them together
- Store frequently used items closest to the user
- If possible, devise a “let-go” system
- Place items so the user doesn't need to bend or twist much to access them
- Arrange tools and materials in order of use.

# Set in Order | Seiton | 整頓

## Strategies

- Labels and Signs – critical for quick identification
- Line marking – marking work areas and locations
- Tool foam – tool cutouts for quick identification of missing tools
- Shadow Board – visually displays locations for returning things to their proper location



# Shine | Seiso | 清

Shine means removing all dirt and grime and keeping the workplace clean.  
Mantra: Get it clean - keep it clean.

Implementation of this step will cause two things to happen:

1. We will look forward to coming to work in a clean environment
2. We will have fewer injuries and fewer equipment breakdowns

Cleaning is everyone's responsibility; it must be understood that dirt and grime is an intolerable situation.

We must standardize our cleaning program, train our team members, make sure they have the required tools and utilize checklists.

# Shine | Seiso | 清 – Part II

## Inspection and Maintenance

Cleaning is not the only facet of Shine; Shine is also a method for identifying abnormalities. The daily Shine ritual includes inspection and routine maintenance.

As we perform our daily routines, we are inspecting tools, machinery and equipment for damage. Our inspections include periodic routine maintenance such as inspecting oil levels.

The goal for Shine is to keep everything in great working order.

# Shine | Seiso | 清



# Shine | Seiso | 清

Is this equipment in good working condition?



How could checklists improve the condition of this equipment?

# Standardize | Seiketsu | 清潔

Standardize creates a system of tasks and procedures that ensure the principles of 5S are maintained.

Individualism makes our personal lives more interesting but creates an unproductive workplace. If we do things 'our way', things will get missed and conditions will slowly deteriorate.

Standardize utilizes schedules and checklists to improve and maintain our work areas by:

1. Making sure each employee knows their responsibilities
2. Making sure 5S is part of our daily routine



# Sustain | Shitsuke | 保つ

Sustain gives our staff the commitment and motivation to follow each step, day in and day out.

Once we start the 5S method, we will quickly see improvements. The key for maintaining these improvement is simple - diligence!

Just like a diet, we start out loosing weight and we think to ourselves “I’m doing good, this one piece of pie won’t hurt anything” and before you know it, we are back to our previous state.

The following steps are designed to maintain our 5S program.

# Sustain | Shitsuke | 保つ

**Assign time to do 5S** – give your team time to do the steps correctly. For example, designate 15 minutes at the end of shift as Shine time.

**Start from the top** – our whole organization must be on board, which includes leads, supervisors and managers.

**Create a reward system** – have friendly competitions between departments each month and reward the winner with lunch (for example).

**Get everyone involved** – form a committee made up of team members and supervisors from different departments who oversee implementation for a fixed period.

**Let them see it** – posters, banners and newsletters can be a constant reminder.

# Safety | Anzen | 安全

Many companies include 'Safety' as the '6<sup>th</sup> S.' Companies performing 5S by default improve safety as safety is supported by nearly all elements of the 5S process.

Safety plays a critical role in our company, so it makes sense to highlight it at the same time implement 5S. In fact, implementing 5S is a huge first step in creating a safe work environment.

