
5S FOR SERVICE
ORGANIZATIONS
AND OFFICES

5S FOR SERVICE ORGANIZATIONS AND OFFICES

A LEAN LOOK AT IMPROVEMENTS

DEBASHIS SARKAR

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Dedicated to two great leaders who have spent their lives pursuing excellence:

*K. V. Kamath
Managing Director and CEO of ICICI Bank
and
Sanjiv Kerkar
Senior General Manager at ICICI Bank.*

Thanks for allowing me to develop and implement my ideas on quality.

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Preface

Traditionally used in manufacturing companies, the latent power of 5S has yet to be leveraged by service companies. After witnessing first-hand the benefits of 5S, I am convinced that it is not just another house-keeping technique, but an innovative management practice that can transform service organizations.

I can state this with great confidence as I have had the opportunity to lead an enterprise-wide 5S implementation in India's largest private-sector bank. The organization is spread across 700 locations, not only in India, but also in places such as Canada, Singapore, Dubai, and London.

The initiative that I led touched more than 20,000 people across a variety of business units—retail branches, process shops, call centers, and corporate and regional offices. This clearly validates that 5S can be successfully implemented in all types of businesses in the service sector. Intelligent tweaking and customization of the principles of 5S is all that is required.

This book is based on what I applied and learned during this massive rollout. The best thing about this book is that it is completely backed up by solid implementation experience.

I have kept the book as free of jargon as possible so that it can be understood by anyone, not just quality professionals. Though the book is based on implementation experience in a service organization, the concepts can be applied to any office or administrative setup.

Writing this book required a lot of effort and time away from home. I am grateful to my mother Malabika, my wife Sudeshna, and my little one Trisha for their unstinting patience and support.

I welcome feedback from readers. Please feel free to e-mail me at debashissarkar4@yahoo.com.

Introduction

5S is an approach to quality improvement that can take an organization to new heights when implemented effectively. Simple and immensely practical, this methodology can transform the fabric of a company.

Surprised?

My proclamation comes from leading a major change program through the implementation of 5S in a large financial services conglomerate. I have seen for myself how an organization can be transformed using this simple methodology consisting of five steps.

I know a few of you with knowledge of 5S may not believe this. You may wonder how 5S can become an enterprise movement. The answer is that nobody has implemented 5S the way I have in a large services company.

Traditionally, 5S has been seen as a methodology that cannot do much beyond housekeeping. But what I have realized is that with a bit of tweaking, it can be converted to a management practice that can engage the attention of all hierarchies of the organization, from the CEO to the process operator.

This is exactly what I have done. I have tried to combine the basic philosophies of workplace management with 5S. As you will see for yourself in the book, the endeavor is to convert 5S into a practice that can stand on its own. We now have a full-blown quality practice that has the power to take an organization to a new level. However, it is not easy. Like all improvement methodologies, it is something that needs to be driven by none other than the CEO.

So far, the application of 5S has been minimal in service companies. Wherever it has been applied, it has been done in conjunction with Lean projects as a way of organizing workplaces that impact process flow.

Can 5S really be implemented in a service organization on such a large scale? Yes, it can, and this book will provide detailed instructions for doing so. What this book promises is a stepwise approach to the application of 5S in a service company. It provides a blueprint for transforming a simple methodology into an enterprise-wide movement.

This book targets an area of quality improvement that is only very briefly mentioned in other books and training courses. This book provides the details necessary for implementing a 5S methodology and sustaining it.

The following are the unique features of this book:

- It is the first book in the world to focus on the application of 5S in service organizations and offices.
- It is a how-to guide on implementing 5S in a transactional, service, or office environment.
- It is based not just on theory but on hands-on implementation experience.
- It takes on obvious and not-so-obvious implementation issues that can only be explained by someone with hands-on experience.

The way I look at 5S is that it is a change initiative that can alter a company's outlook on quality. Approach it not as just a methodology, but as an intervention that will change the hearts and minds of your employees.

5S methodology is effective whether an organization is commencing its quality journey or whether it has reached reasonable maturity in its processes.

All you need to do is to commence implementation according to the road map outlined in this book and put the organizational might behind it to make it happen.

Notes to Readers

- The terms "office," "workplace," "service organization," and "service setup" are used synonymously. "Workplace" can also refer to a part of an office in which 5S implementation is under way. The use of the word is contextual in a few places.
- The words "technique," "methodology," and "framework" are used synonymously.
- The words "deployment" and "implementation" do not mean the same thing in this book. Deployment refers to 5S training in con-

junction with actual deployment, while implementation includes training, deployment, enabler installation, and sustentation.

- The book is interspersed with boxes titled “5S Tactic” and “5S Learning.” 5S Tactic boxes deal with specific techniques adopted during implementation. 5S Learning boxes delve into the not-so-obvious intricacies of 5S methodology.

Chapter 1

5S Demystified

Chapter Topics

- What Is 5S?
- Why Should You Implement 5S?
- The First Step
- Benefits of 5S
- 5S and Participation

WHAT IS 5S?

5S is a Japanese methodology for workplace organization. As the name implies, it is a five-step technique for changing the mindsets of the staff and involving the entire organization in improvements. To some, this methodology may appear to be a housekeeping approach, but it actually delivers much more.

A simple yet powerful quality practice, 5S helps identify and eliminate waste in a workplace. It also helps establish and maintain a productive and quality environment in an organization. It forces service companies to look at issues that are often overlooked.

The 5S concept was popularized by Taiichi Ohno, who designed the Toyota Production System, and Shigeo Shingo, the Japanese practitioner who put forward the concept of poka-yoke. When Japanese organizations embark on a quality journey, typically they commence with 5S deployment and then move on to higher methodologies. In the manufacturing world, 5S is used as a housekeeping tool while deploying Total

Productive Maintenance (TPM). The idea behind 5S is that if a workplace is clean and well laid out, the identification of waste is much easier.

Traditionally 5S methodology has been used in manufacturing companies, but service organizations such as banks, hotels, courier services, and IT-enabled services are now leveraging its power.

WHY SHOULD YOU IMPLEMENT 5S?

Implementing 5S across the organization will:

- Change the mindset of employees and facilitate continuous improvement
- Improve the efficiency of employees and make them more productive
- Eliminate time spent on non-value-added work affecting individual and workplace efficiency
- Create a robust foundation for future work in the quality arena

As a matter of fact, before implementing any other quality methodology, organizations should implement and institutionalize 5S.

THE FIRST STEP

Let us begin 5S learning with an exercise. Fill out the checklist in Table 1.1 by analyzing what actually happens in your workplace on a regular basis. If you answer “yes” to any of the checklist questions, then your company is an ideal organization for 5S deployment.

BENEFITS OF 5S

So, what value does 5S bring to a service organization? Implementation of 5S in a service company can:

- Create organized workplaces
- Radically improve the retrieval time of documents
- Create a sense of belonging among employees
- Improve employee productivity and efficiency
- Reduce turnaround time to serve customers and address questions
- Help identify and eliminate waste

Table 1.1 Checklist for assessment of workplace organization.

Question	Yes/No
Do people in your workplace struggle to locate pens, paper, files, keys, and so forth?	
Are there items in your workplace such as files, documents, and equipment that do not have an owner?	
Do you or your colleagues hoard things such as pens, staplers, and old magazines?	
Are there old magazines or telephone directories in your workplace that are not used and are gathering dust?	
Is there any safety equipment, such as fire extinguishers, lying around that is past its expiration date?	
Are there loose hanging naked electrical wires in the workplace?	
Are there files in the workplace that are old, unlabeled, and torn?	
Do visitors and customers struggle to reach the right person or workstation in your organization?	
Do you observe overflowing wastepaper baskets in workstations?	
Are there instances of running out of stationery, consumables, and other items?	
Do you observe clutter in your office or workplace?	
Do you observe valuable space being occupied by useless and unwanted items?	
Do you observe documents, files, papers, brochures, and so forth getting mixed up?	
Do you find dust, dirt, and cobwebs in nooks and corners in your workplace?	

- Eliminate orphans and force ownership of all items, equipment, and work spaces
- Ensure that items that are not required in the workplace are removed
- Help put an inventory management system in place
- Free up a lot of valuable space
- Improve interaction between teams and build team spirit
- Reduce stationery consumption
- Bring up ideas for improvement
- Build a quality culture
- Create a mindset for problem prevention

- Ensure participation of all employees regardless of hierarchy, work level, and qualifications
- Build an excellent foundation for future quality work

Additionally, 5S creates the basis for Lean thinking.

5S AND PARTICIPATION

5S deployment can be done today. One need not hire an astrologer to predict when 5S should be launched in an organization. 5S does not require the involvement of people with specific skill sets; anyone in the organization, regardless of hierarchy and qualifications, can do it. Each member of the organization, from the CEO to the janitor, should practice 5S. In some organizations, the CEO spends at least 10 to 15 minutes every day doing 5S-related activities to ensure that workplace organization is sustained. Remember, it is essential to involve even temporary or outsourced employees (people who work at your company but are on the payroll of an outside agency) in the transformation.

The four actuals associated with 5S deployment are:

- Go to the Actual Workplace
- Involve Actual People who own workplaces
- See the Actual Process
- See the Actual Improvements

5S deployment cannot be delegated and managed by remote control. In order for this exercise to be successful, each and every employee must be involved in the process.

Chapter 2

Prerequisites for Deployment

Chapter Topics

- Begin with the End in Mind
- Are You Clear on Why You Are Implementing 5S?
- Leadership Commitment
- The Big Picture

BEGIN WITH THE END IN MIND

As Stephen Covey says in his book *Seven Habits of Highly Effective People*, “Begin with the end in mind.” Before setting out on a journey of 5S deployment, one needs to be clear on the objectives. Do not implement 5S if the objectives are unclear. It is important to know what 5S will deliver and what 5S will not deliver. It is essential to clearly define the deliverables to avoid disappointments later.

While the list can be longer, the following are a few things that 5S will *not* do:

- Resolve sporadic quality problems
- Resolve chronic quality problems
- Eliminate defect levels in a process
- Bring in the voice of the customer
- Equip employees with quality improvement tools

ARE YOU CLEAR ON WHY YOU ARE IMPLEMENTING 5S?

Organizations often begin workplace improvements without knowing the objectives they will meet. It is imperative that all the objectives be defined before setting out to implement 5S. 5S should not be implemented just because a competitor is practicing it or because it is a criterion for winning an award. 5S should be adopted and practiced because there is power in it, because the organization believes it can deliver value, and because senior leaders have committed to spend time on it.

Before commencing the implementation, list the reasons for selecting 5S as a methodology that will drive improvement in the workplace. The reasons often cited for adopting 5S in a service organization or an office are:

- To remove workplace clutter
- To build a quality culture
- To create a sense of belonging among employees
- To eliminate waste
- To create an efficient and productive office
- To commence a quality journey
- To create a prevention mindset
- To involve the entire organization in quality
- To improve customer service
- To facilitate faster information retrieval

Before setting out on a 5S implementation, fill out exhibits 2.1 and 2.2 to ensure that you are clear on what will and will not be achieved through 5S.

In Exhibit 2.1, list the objectives you intend to achieve through 5S implementation. In Exhibit 2.2, list objectives that will not be achieved through 5S implementation.

LEADERSHIP COMMITMENT

Top management—the CEO and the team directly reporting to the CEO—must be committed to 5S. Without their commitment the initiative will not be sustained for long. By commitment, we mean commitment

Objectives of 5S deployment in my organization

Exhibit 2.1 Objectives of 5S deployment.

Objectives that will not be achieved through 5S deployment in my organization

Exhibit 2.2 Objectives that will not be achieved through 5S deployment.

with involvement; without involvement, the commitment will just be cosmetic.

We are all aware that seeking the commitment of top management is easier said than done. Unless they are convinced of the benefits of 5S, the chance of them getting involved is minimal. So how do you get the support of senior management? Here are a few ideas:

- Do a pilot and demonstrate the benefits.
- Do a series of pilots across the organization so that the change is visible. This will not only get people talking about it, but it will also help them to adopt the practice.
- Clearly define Measures of Performance that directly impact the workplace and the business and explain how you expect them to trend after the project.
- Quantify the benefits from 5S. Enumerating the benefits in dollar amounts will immediately grab the attention of the senior management team. Get the benefits validated by the accounting department.
- Before doing the pilot, let the senior management team know that a prototype is in the works.

THE BIG PICTURE

Before initiating 5S, the quality strategy of the organization must be laid out. This is vital because a quality road map will reveal the bigger picture and where 5S fits in the larger scheme of things. It is also imperative that the CEO or the Quality Council endorse the quality road map and agree to review progress on an ongoing basis.

It is important to note that 5S is not the be-all and end-all of quality frameworks. If other quality methodologies are being practiced in the organization, before beginning 5S, ascertain how well it would integrate with the other methodologies. If your organization is just commencing its quality journey, script a detailed road map and ascertain how 5S dovetails with other methodologies that may be planned for implementation. The organization should not be struggling to find out what needs to be done after 5S implementation is complete.

All quality methodologies have their life cycles and uses. It is important to understand the life cycle of 5S and define its deliverables.

Chapter 3

Deployment Steps

Chapter Topics

- Step 1: Sorting
- Step 2: Systematic Arrangement
- Step 3: Spick-and-Span
- Step 4: Standardization
- Step 5: Self-Discipline

5S implementation consists of five simple steps: sorting, systematic arrangement, spick-and-span, standardization, and self-discipline. Let us now delve into each of the steps.

STEP 1: SORTING

In the first step, all items in a workplace are sorted based on needs and wants. But before sorting, we need to understand the specific procedures involved in this step.

Select a Workplace

This step requires identifying a place where the deployment can be done. Selection of a workplace is essentially about scoping. It clearly tells you where the project has to be done and demarcates the workplace's start and end points.

What sort of area should be chosen for the first project? There is no set formula for this. The size of the workplace will depend on the complexity and size of the team and the time available for implementation. The recommendations that follow are based on my experiences with 5S implementation.

For an office space of 10,000 square feet, an area of 250 to 300 square feet containing around 8 to 10 workstations and five or six filing cabinets would be ideal for a 5S project. This would require a team of three people who would need to spend around 16 hours on implementation immediately following a basic training session on 5S.

Another approach to area selection is identifying the area using the office layout. This helps you keep the overall office space in mind as you select the project.

5S Learning *The Word “Workplace” Demystified*

A workplace is a location in which activities benefiting the organization are carried out. It can be an office, bank branch, process shop, call center, and so on. The word “workplace” as used in this book could refer to any such location. It could also refer to a part of the office. The use of this word is contextual, so when it is used please read the sentence carefully.

5S Tactic

Where Should You Start the First 5S Project?

For the first 5S project, choose the dirtiest and most disorganized area in your office. This is essential in order to:

- Explicitly showcase the benefits that can be reaped from a 5S intervention. In a relatively organized area, the changes may not be visible.

- Get buy-in from individuals who might doubt the power of 5S methodology.
- Demonstrate the type of involvement required for implementing 5S.

Office storerooms are typically good places to start because they are often disorganized and are not owned by anybody. If storerooms are not available, you can select a few cluttered workstations that are interspersed with storage cupboards.

Define the Purpose of the Selected Workplace

After the workplace has been selected, its purpose should be defined. This is the key step in 5S implementation, but it is often overlooked by implementers. While this step may not be relevant for 5S implementation in a manufacturing setup, it is a must when applying the 5S principles in a service or office setup.

Defining the purpose of the selected workplace helps to:

- Demarcate the center around which 5S deployment has to be done
- Identify the needs and wants in the workplace
- Define the Measures of Performance that will be tracked after the implementation is complete

Do not begin 5S implementation without defining the purpose of the workplace.

5S Tactic

Examples of Purpose Statements

Selected Workplace: Front Office in a Bank

If the selected workplace for 5S implementation is a front office in a bank's retail branch, the purpose statement could be:

The purpose of this workplace is to facilitate quick customer service.

Hence, the entire 5S implementation will be done with the customer in mind to ensure quick customer service. It should result in quick information and document retrieval that leads to fast responses to customer requests.

Selected Workplace: Storeroom

If 5S implementation is being done in a storeroom, the purpose statement could be:

The purpose of this workplace is to ensure effective storage of the right things in the right place in the right quantities.

The entire 5S implementation will be done to ensure effective storage. Hence, the inventory management system will be designed with this objective in mind.

Define the Measures of Performance (MOPs)

Define the Measures of Performance based on the type of the workplace that has been selected. This helps you to ascertain the benefits of 5S implementation. Defining the MOPs prior to implementation is important because it gives an indication of what to look for immediately after implementation and of what should be tracked later.

5S Learning

The Measures of Performance selected for a 5S project in a workplace will have to be integrated with the MOPs selected later on for 5S implementation in the office as a whole.

After 5S is implemented in the entire office, you need to track a few vital 5S MOPs to ascertain the strength of the implementation and enablers.

MOPs and enablers are discussed in detail in Chapter 4.

Form Teams and Allot Responsibility

Selection of the right team is critical for effective 5S implementation. Inadequate team composition can derail 5S deployment.

A team of three or four people is adequate for a work area of 250 to 300 square feet comprised of workstations and storage cabinets. A larger team is not recommended because it becomes more difficult to focus and harness the efforts of the members in the stipulated work area.

It is critical to ascertain whether a 5S team has what it takes to deliver the desired results. You may have the brightest people on the 5S project, but if they are unwilling to work and their energies are not channeled effectively, they will get exhausted and will not deliver the required results. Mere knowledge of the best tools is not adequate; what is essential is a team that can keep the project moving.

Proactively ascertain the effectiveness of 5S teams. The following are the traits of an effective team:

- The team has a clearly defined objective.
- Each team member is trained in 5S methodology.
- Each team member understands how 5S fits into the larger quality strategy of the organization.
- Each team member is aware of the rationale behind the 5S implementation.
- The team includes the workplace owner.
- The team has a project leader who regularly reviews progress.
- There is open communication among the team members.
- Members take criticism and feedback positively.
- Each team member is aware of his or her specific role.
- Team members have the authority to identify blue tag items. (Blue tag items are items that are not needed in the workplace.)
- Team members are familiar with the operations of the workplace and hence can decide on the Measures of Performance with ease.

5S Learning

Never do a 5S project implementation without the involvement of the workplace owner. This is essential because the identification of needs and wants is impossible without the involvement and presence of the owner. Also, the implementation team may not be able to dispose of items without the consent of the owner.

If for some reason a project is done without the involvement of the workplace owner, inform him or her before disposing of unwanted items. It is also vital that you later communicate the principles that have been used while deploying 5S to the individual.

5S Tactic

5S and Psychological Inertia

5S breaks the psychological inertia caused by the belief that workplace organization is someone else's job. Initially when a person is pushed to 5S deployment, he or she has reservations. But after a day or two of hard work, the individual starts seeing the value addition and the skepticism vanishes. The person then starts looking positively at the exercise of working with his or her hands.

Determine Needs and Wants

In this step, the team decides what the needs and wants are in the workplace. Identification of needs and wants is usually done in two steps: (1) decision rule-based needs and wants and (2) detailed needs and wants analysis.

Decision Rule-Based Needs and Wants

When you just get down to 5S implementation, a decision rule may be used to determine what is needed in a workplace and what is wanted. A typical rule is, All items that have gone unused for more than a year will be considered "wants" and will be removed from the workplace. This will help team members to immediately separate the items that are needed from those that are wanted. However, for sustenance and subsequent arrangement, this crude segregation is not adequate, so a detailed analysis of needs and wants is a must.

5S Tactic

The Difference between Needs and Wants with Respect to 5S Implementation

Needs

All items needed for effective functioning of a workplace are needs. They should be present in the right quantities and should not exceed requirements.

Wants

Items that are not needed in a workplace are wants. Often these are items that are stored with the thought that they may be needed in the future, but they are never actually used. Wants are also accumulated with a hoarding mindset. These items are excess in number and have become redundant in the workplace.

Examples of wants are:

- Twenty pens stored in a drawer when only two are required
- A number of pens stored in a pen stand, most of which do not write
- Old magazines stored with the idea that they may be required in future but are never used
- An old, unused computer sitting at a workstation
- A new server sitting unused in an office when it could be used by some other location or office site

If wants are removed from an office, one will not feel their absence. All wants are wastes and an organization should declare war on them.

5S Learning *The Six-Month Test*

To ascertain whether an item is a need or a want, apply the Six-Month Test. If an item in your workplace is not used for six months, in all likelihood it is a want. This does not include documents required to meet statutory or regulatory requirements.

Remove All Items from the Workplace and Begin Sorting

Once the needs and wants analysis is complete, remove all items from the workstations and storage cabinets in the workplace and segregate them into five buckets as follows:

- Bucket 1 : Items needed regularly
- Bucket 2 : Items needed but not regularly
- Bucket 3 : Items needed but not in such large quantities
- Bucket 4: Items wanted but not needed
- Bucket 5: Items for disposal

Defining each of these categories is critical to effective sorting.

1. *Items needed regularly.* Items that are needed on a regular basis in a workplace—daily, weekly, monthly, and so on.
2. *Items needed but not regularly.* Items that must be kept in a workplace but are not needed on a regular basis. These include items such as files that are needed only once a year.
3. *Items needed but not in such large quantities.* Items that are required but are currently in excess of the required inventory levels. These can be items such as files, brochures, pens, and so forth. Before making a decision on what is excessive, work out the required inventory levels.
4. *Items wanted but not needed.* Items that are not required in the workplace but are currently occupying space, such as old cell phones, CDs, fax machines, CD burners, and so forth. These items are often cabinet castaways and are never touched. Items in this category are often stored with a hoarding mindset. They should be moved to a workplace that needs them. Because these items are company assets, throwing them away may require approval from management.
5. *Items for disposal.* Items that can be thrown away, such as old telephone directories and old magazines. These items are not needed in this workplace or in any other workplace.

5S Learning *The Hoarding Mindset*

The hoarding mindset is a common affliction. Many of us love to keep a large number of pens in our desk when we need only two. Some of us have three staplers when we could keep just one, and even share it with our coworkers. Some even see collecting office supplies as a hobby.

I have seen people store extra computers, servers, copy machines, and so forth in their workplace “just in case.” The rationale is that if something breaks down, a standby will be readily available. The approach here should be to remove all these extra items, then identify the potential reasons (root causes) for a breakdown and focus on preventing them. Remember, the goal is to keep the office lean and efficient. By keeping standbys, we hide problems instead of bringing them out. When a machine breaks down and there are no standbys, there is sufficient pressure to ensure that it is repaired fast. It also ensures that proactive steps are taken to prevent such occurrences in the future.

Table 3.2 shows an example of a partial needs and wants matrix used during the initial sorting exercise.

Use of Blue Tag as a Tool to Enhance the Sorting Process

What Are Blue Tags?

Blue tags are self-adhesive labels used to identify all items in buckets 4 and 5—items that are not needed in the workplace and items to be thrown away.

Blue tags have two sections: One section goes on the target item and the other section goes in the blue tag register. Each blue tag should have a unique number to facilitate tracking.

The format shown in Exhibit 3.1 may be used for blue tags.

Table 3.2 Template for needs and wants to be used during initial sorting.

No.	Item	Needed regularly (daily/ weekly/ monthly)	Needed but not regularly (quarterly/ semiannually)	Needed but not in such large quantities	Wanted but not needed	For disposal
	Cat Report file	X				
	Cat Return file	X				
	Change Authorized Signature file	X				
	Checks Returned file	X				
	Concurrent Audit file	X				
	Credit Card file	X				
	Customer Instruction file	X				
	Day Book file		X			
	DD Check Purchase file		X			
	Complaint file	X				
	Leave file	X				
	Internal Audit file		X			
	Regulatory Compliance file					
	Mutual Fund file					
	Mortgage file					
	Training records					
	Attendance register					
	Old telephone directory					X
	Old printer, not in working condition					X
	Torn files					X
	Envelopes, more than the required quantity			X		

Blue Tag—5S	No.:	Blue Tag—5S	No.:
What _____		What _____	
Where _____		Where _____	
Who _____		Who _____	
When _____		When _____	
Why _____		Why _____	
How _____		How _____	
Register Copy		Target Item Copy (Item to be removed from the workplace)	

Exhibit 3.1 Blue tag.

5S Learning *Blue Tags Should Be Blue*

Blue tags are blue to attract the attention of the people who have to take action. While implementing 5S, action on some items will be taken immediately. However, there may be a few items that must be dealt with later (for example, they may require approval). Blue tags act as reminders that are hard to ignore.

How Should Blue Tags Be Used?

During 5S project implementation, one section of the blue tag is put on the problem items so that action can be taken on them after the project is complete. The other part of the blue tag is affixed to the blue tag register.

5S Tactic

What Is the Blue Tag Register?

The blue tag register is used to keep track of the items that have to be removed from the workplace or disposed of. The blue tag register uses the following format:

Blue tag no.	What	Where	Who is responsible for taking action	Why	When	How
1	Dot matrix printer no. cpc0456	Cubicle S3, north tower, 7th floor (Ted's workstation in Liability Business Group)	Robert Bush (staff no. 10768)	Printer needs to be removed because it belonged to former Retail Operations Group, which has moved. Not in working condition.	11/30/2005	By getting approval from department manager and moving printer to storage area in basement.

The blue tag register should be reviewed by the workplace owner on a regular basis and the review schedule should clearly be stated on the register. The blue tag register should also have an owner. It is the owner's responsibility to ensure that the register is maintained and is reviewed by the workplace supervisor or manager.

The process of blue-tagging has a few rules:

- Do not use blue-tagging as a way of postponing action.
- Use one blue tag per item. If there is a set of similar items, one tag can be placed on the box containing those items.
- If the status of an item is unknown, blue-tag it.
- Blue tags should also be used to identify observed abnormalities.
- Blue tags can be applied by all workplace and office occupants.
- Blue tags can be placed by people not directly associated with an item or a workplace. For example, if your colleague finds an abnormality in your workstation, he or she can blue-tag it.
- Have a schedule for proactively making the rounds in the workplace or office to identify blue tag items.

5S Learning *Blue Tags and Abnormalities*

While blue tags are usually used for identifying unneeded items, they can also be used to call attention to observed abnormalities in a workplace. Abnormalities can be things such as screeching printers, cracked walls, leaking faucets, photocopiers getting hot, and so forth. These issues are often overlooked in a workplace until they finally result in a problem.

For example, there are two ways to deal with a screeching printer: (1) wait for it to break down and then get it repaired, and (2) immediately investigate the screeching sound.

The former approach is *reactive* while the latter is *proactive*. We should endeavor to follow the latter. We should not wait for problems to happen; we should act when symptoms arise.

The tacit intent of this approach is to push for a culture of problem prevention. Remember, all troubles are preceded by signs, which clearly indicate that problems are on the horizon and that actions must be taken to prevent them.

5S Tactic

Blue Tags Can Also Be Placed by a Person Who Is Not a Part of Your Office and Is Not Directly Associated with It

Blue tags can be placed by a person who is not a part of your office only if he or she understands 5S and is part of the movement in the organization.

For example, a person from the corporate office can blue-tag an item in the regional office, but only if he or she understands 5S and the blue-tagging principles. Also, he or she should coordinate with and inform the item's owner or the supervisor of that regional office. Never blue-tag an item owned by somebody else without informing the owner of the item.

5S Learning *Blue Tag Schedule*

The following template can be used for proactively making the rounds in the workplace and identifying blue tag items. The schedule should be attached to the register.

Blue Tag Schedule

For the period: Jan. 2005–Dec. 2005

To be reviewed: On the first working day of each month¹

Date: Dec. 31, 2004²

No.	Where	When	Who	
			Primary responsibility	Stand-in ³
1	Front office	Every Friday afternoon (2:00–2:30 p.m.)	Debbie	Cooper
2	Locker room	Every Saturday morning (10:00–10:30 a.m.)	Bill	John
3	Back office	Every Monday evening (5:00–5:30 p.m.)	Jay	Mona
4	Restroom	Every Monday evening (5:00–5:30 p.m.)	Samuel	Molly
5	Storage room	Every Thursday afternoon (4:00–4:30 p.m.)	Jim	Tim

¹ The schedule should be reviewed every month by the supervisor (a) for adherence and (b) to see if any responsibility needs to undergo a change.

² Every document should be dated to show its relevance on a particular date.

³ The stand-in pitches in when the person with primary responsibility is out.

5S Learning *Can a Blue Tag Register Be Electronic?*

It is possible to have an electronic blue tag register, but there is an inherent risk in it. The register needs to be visible in order for the occupants of the workplace to take action, but it may not be visible on a computer. Oftentimes blue tag registers are not reviewed because of their lack of visibility. However, if the office or workplace supervisor believes in 5S and religiously reviews the blue tag items, the register can also be maintained in electronic form.

But during the initial days of 5S implementation, it is advisable to use paper registers. Once the movement is institutionalized, the register can be converted to electronic form.

Work out a Plan to Dispose of Items

The objective of this step is to plan the disposal of items in bucket 4 (wanted but not needed) and bucket 5 (to be thrown away).

Items in bucket 4 are not required in the workplace but are still usable. The following are some possible ways to dispose of them:

- Transfer the item to an office that needs it (this is possible in a large organization with multiple offices).
- Transfer the item to a 5S common place, an area in the workplace or office used to store excess inventory and movable blue tag items.
- Determine if the item could be used after repair (like a refrigerator that is not being used because of a minor problem with the compressor).
- Look into whether the item can be sold or returned (for example, a new server that is not useful to the workplace/office or to the organization could be sold or sent back to the supplier).

Items in bucket 5 are those that have to be thrown away. However, in some organizations it is difficult to dispose of trash, so a process needs to be followed. Items from a workplace can be disposed of using the following methods:

- Items that have no book value and could not be sold (torn files, old pens, wastepaper, and so forth) should be disposed of as garbage.
- Items that have no book value but would bring in money if sold should be sold to the right scrap dealer immediately or through a bidding process.
- Items that have value should be disposed of after getting any required approvals.

5S Learning

Items in bucket 5 whose disposal would bring in money or would require approval should be kept on the radar. People often forget to act on these types of items after 5S deployment.

It is the responsibility of the 5S supervisor to ensure that action is taken.

I have come across offices where the initial deployment of 5S happened with a lot of enthusiasm, but after the blitz (discussed in Chapter 4) was over, actions on bucket 5 items were forgotten.

STEP 2: SYSTEMATIC ARRANGEMENT

In this step, all the items that have been sorted are arranged and placed in preassigned places so that they can facilitate efficient working. This section describes the steps to be followed while doing systematic arrangement.

Make a Layout of the Workplace

This is an important step often overlooked by 5S practitioners. Drawing the layout is a must because it gives an overview of the workplace and helps in deciding what should be kept where. The layout should be a plan, or a top view of the office. You don't need to hire an architect; you just need someone who can draw the entire office layout on a piece of paper for everyone to view. The layout should account for all areas and

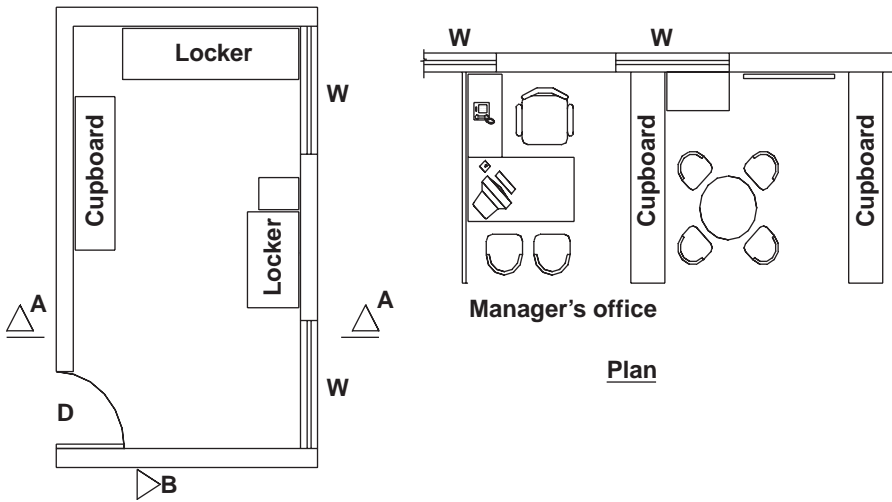


Figure 3.1 Layout of an office.

corners and should detail what is kept where and how space can be utilized. An example of a plan is shown in Figure 3.1.

5S Tactic

Types of Layouts in 5S

There are two types of layouts that are required in 5S: the plan and the elevation.

Plan

The plan is a top view of a workplace—all engineers know it. It has two uses in 5S: during and after deployment. Examples of this type of layout are shown in figures 3.2 through 3.4.

During 5S Deployment

The purpose of a plan layout during 5S implementation is to give the implementation team an idea as to what can be stored where. A

bird's-eye view allows team members to clearly see how space can be utilized judiciously without losing workplace efficiency. Sometimes this may even lead to the restructuring of the existing layout.

After 5S Deployment

After the 5S deployment is complete, a plan layout is used to determine who sits where. It can be placed by the door so that anyone entering the office can view it. One of the tacit objectives of 5S is to get to the point where a stranger can locate an employee without anyone's help. This is useful in customer-facing areas such as bank branches, customer waiting areas, reception areas, offices, and so forth.

Elevation

Elevation refers to the front view of the workplace. It is used in workstations to show what is stored where. It should clearly serve the purpose of indicating the storage areas. An elevation layout should only be drawn up if it will be useful and relevant in the workplace. An alternative to elevation is a location index. Some people also use an isometric view instead of elevation, as shown in figures 3.5 and 3.6.

5S Learning

One of the clear expectations of effective 5S implementation is that an outsider should be able to locate anyone in the office without assistance. This is useful in offices that have a lot of outside interaction and frequent visits from customers, vendors, and so forth. This goal is possible when there are adequate aids such as signs and layouts that help in locating a certain person.

Location: Back office of a retail branch

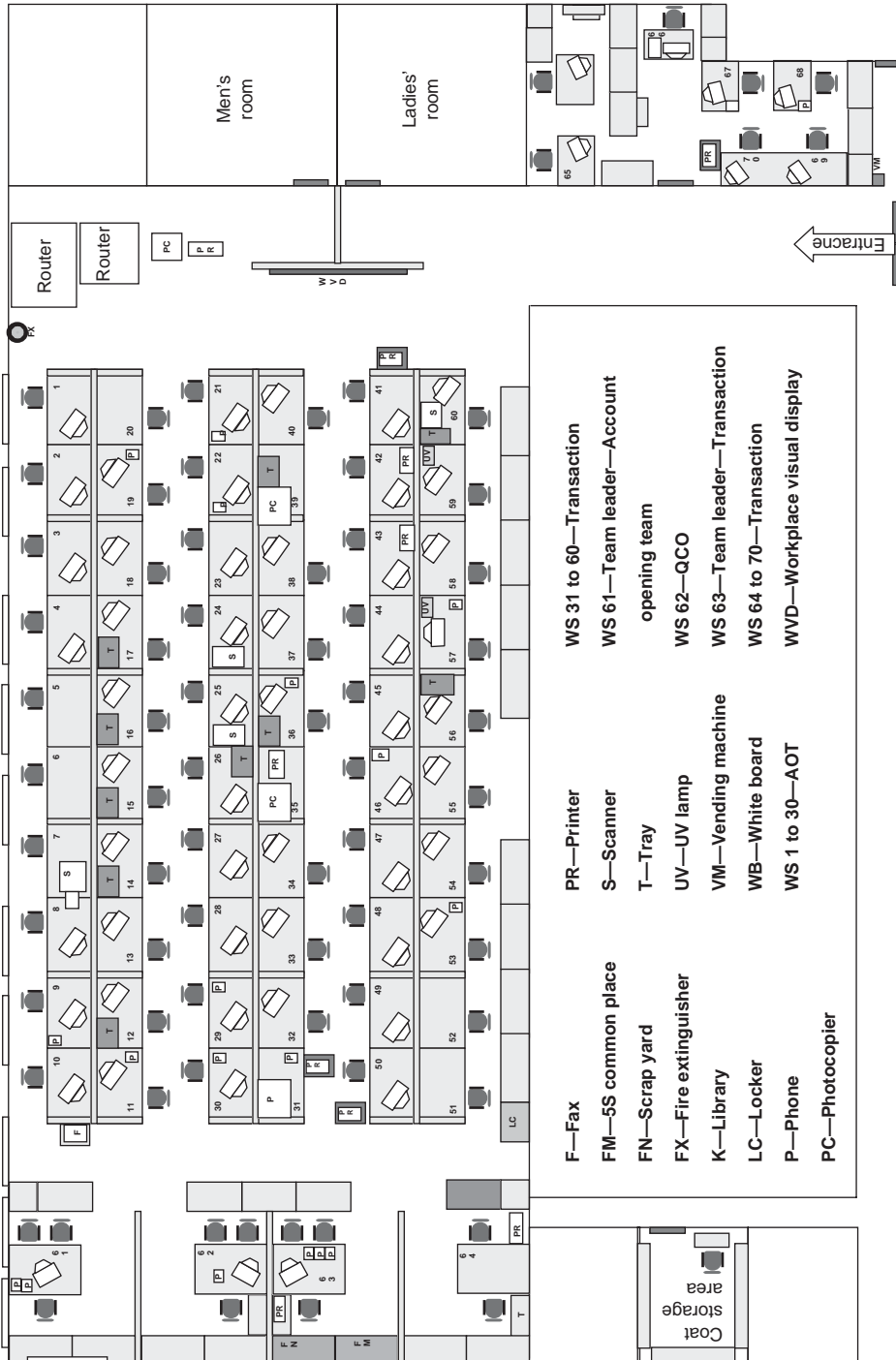


Figure 3.2 Back office of retail branch (Asset Products Process Shop).

Location: Back office of a retail banking branch

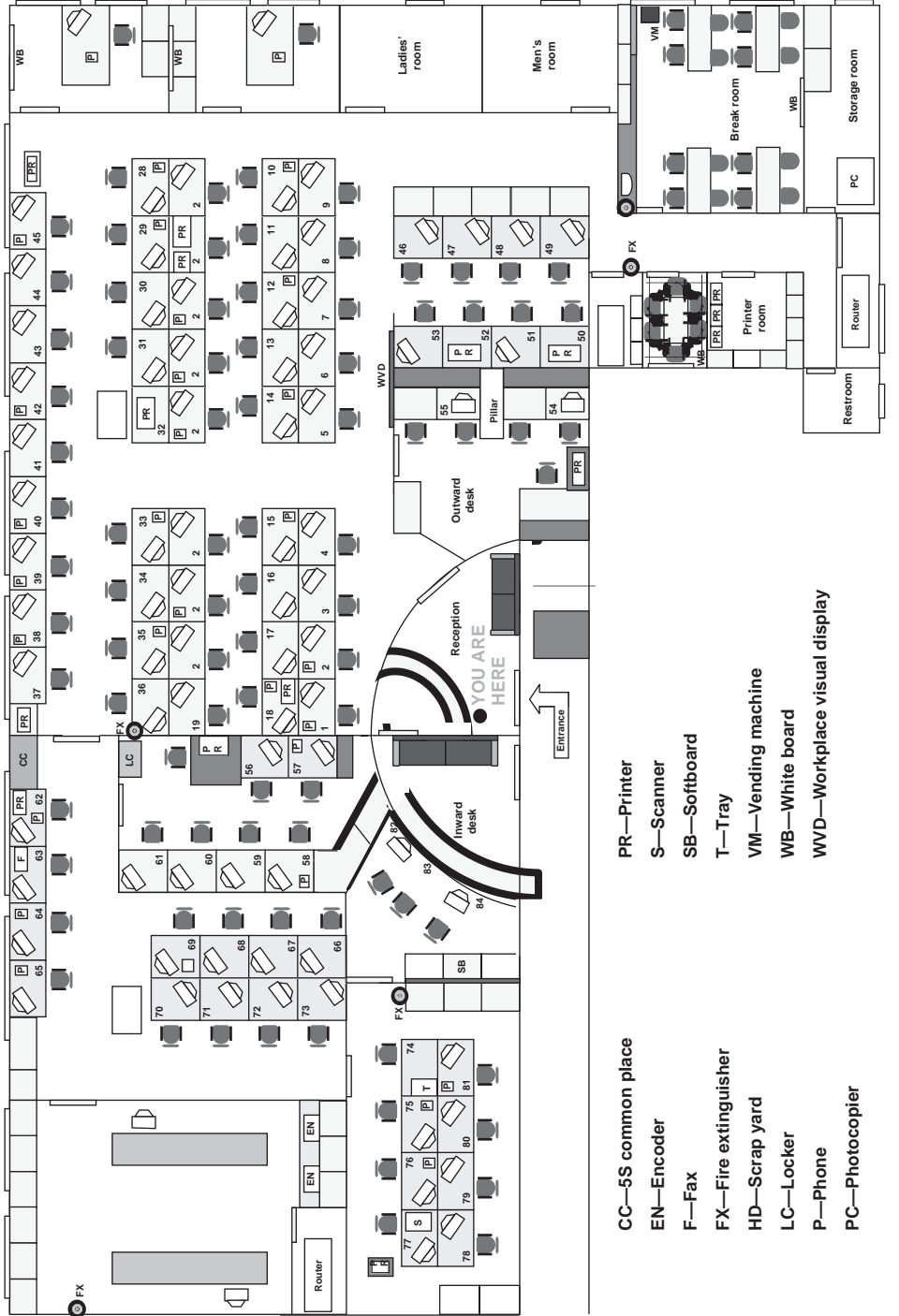


Figure 3.3 Back office of retail branch (Liability Products Process Shop).

5S Tactic

The Plan Should Always Be as Simple as Possible

This will allow everyone to easily reach the right location. Remember, the plan is not designed for engineers. Keep it simple enough for everyone to understand it. Do not indulge in creating a classical engineering drawing as the plan.

5S Tactic

The "You Are Here" Point

Please note that all posted layouts should include a clearly marked "you are here" point. This is often overlooked, but without it, the layout is of no use.

5S Tactic

Do Not Show Secured Areas in Your Layout

Although they are shown in Figure 3.5, for security purposes it is best not to show secured and sensitive areas (vaults and locker rooms, for example) in layouts intended for customer use.

Indicate Areas That Can Be Used to Store Items That Have Been Removed

Once the rough layout is drawn up, the 5S deployment team should brainstorm on the areas that could be used for storage. The layout (top view) gives a bird's-eye view of all the areas and how they have been used so far. The complete picture may reveal areas that have not been used adequately and could be used for storing wants or the unneeded items in the office or workplace.

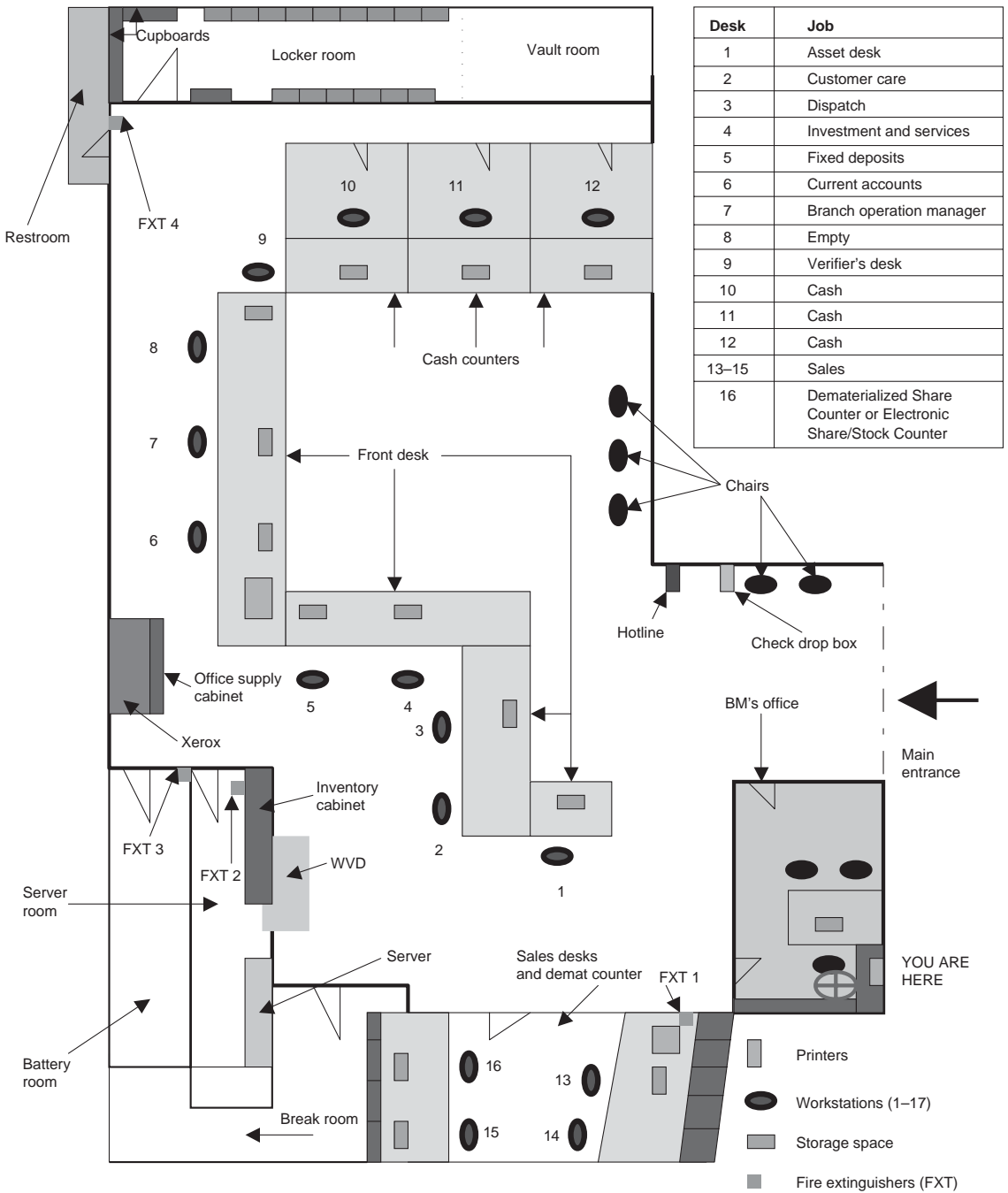
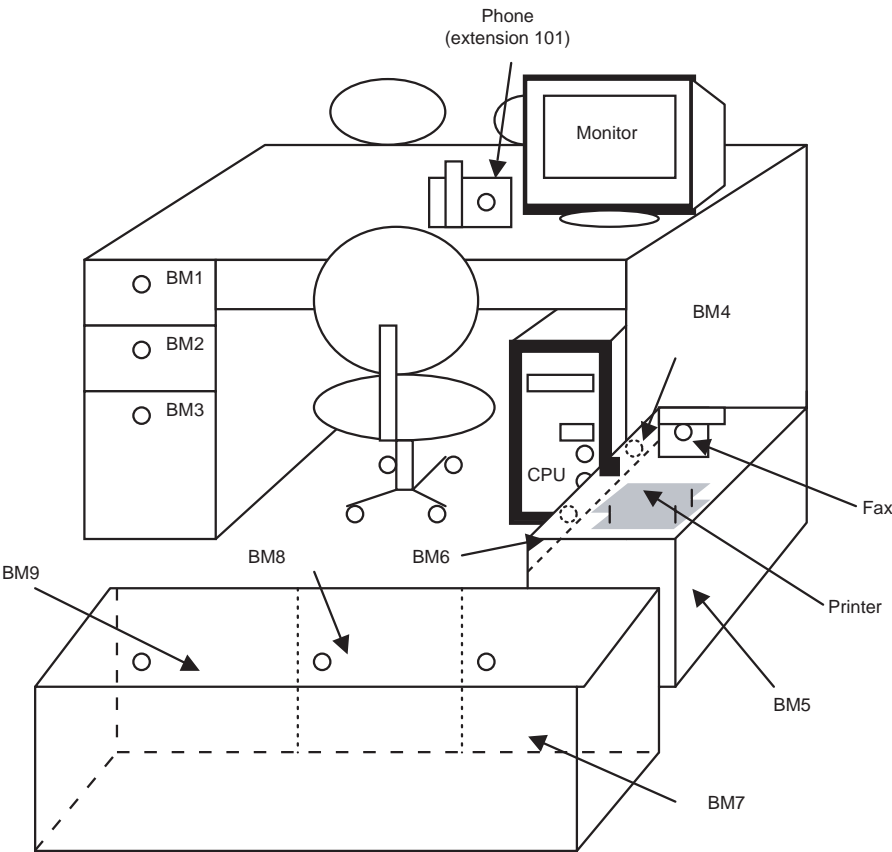
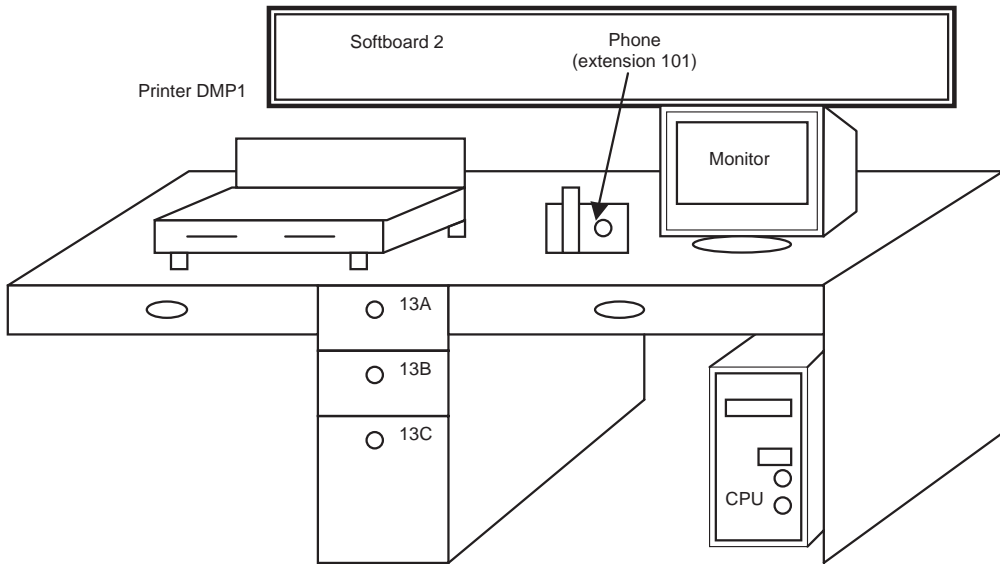


Figure 3.4 Layout of a bank branch.



Drawer BM1	Customer-related
Drawer BM2	Office supplies
Drawer BM3	Empty
Drawer BM4	Personal
Drawer BM5	Empty
Drawer BM6	Gift items
Drawer BM7	Manuals
Drawer BM8	Empty
Drawer BM9	Empty

Figure 3.5 Workstation 1—branch manager (isometric view).



Drawer 13A	PBG database, PBG brochures and documents, PBG items, MIS items, business cards
Drawer 13B	Card holders, client investment documents, global deposit details, PBG stickers and forms, writing pad, business cards
Drawer 13C	PBG gift items
Softboard 2	Extension numbers, workplace layout

Figure 3.6 Workstation (isometric view).

5S Learning *The Layout Used During Deployment Clearly Indicates What Has Been Stored So Far*

It is an excellent practice to clearly mark on the deployment layout what is stored in various areas of the office. This exercise is generally an eye opener. A lot of unneeded things are suddenly discovered. It may also reveal that a lot of useful space is being consumed by wants or items not needed in the workplace.

The layout may result in the creation of new storage areas. It may also bring about the reconfiguration of seating areas (workstations) and shared services (shredding machine, printer, fax machine, copier). While layout change should not be a part of the 5S deployment, it could be a trigger for making the relevant changes later. The entire objective should be better utilization of space.

Work out an Inventory Management System

An inventory management system should be developed for all storage items in your office, and an inventory management policy should be put in place and followed like any other policy. This step is a must for service or office 5S. While inventory management systems are an integral part of manufacturing locations, they are often not considered in offices. The result is considerable waste and unnecessary items stocked for the future.

The inventory management system entails calculating the following:

- Lot size
- Lead time—the time gap between order placement and receipt
- Safety stock—the minimum level of inventory required to cover unforeseen circumstances
- Reorder level/point—lead time demand plus safety stock

5S Tactic

Reorder Levels Should Be Reviewed on a Regular Basis

Consumption patterns and supply situations are often dynamic. Therefore, reorder levels, safety stock, and reorder quantities should be reviewed on a regular basis. The same numbers should not be used for long periods of time.

Stipulate a review schedule and clearly mention it on the calculation sheet.

All items slated for storage—those required for the effective functioning of the office—should be kept in a storeroom. Items in excess quantity should be kept in a 5S common place.

All items in the storeroom should carry a kanban card. See Appendix C for a kanban card template.

5S Learning *What Is Kanban?*

Kanban means visual signals. There are two basic types of kanban. Process kanban is used to pace the flow of products in a manufacturing process. Material kanban is used to replenish materials consumed in a production process. Service 5S uses material kanban.

5S Learning *Inventory Is a Necessary Evil*

Storing more than the required inventory levels is detrimental to the organization. Inventory not only occupies space but also blocks capital. There are organizations that store an extra photocopier for backup in case things go awry. Remember, stored items in an office should be confined to things such as office supplies, consumables, and so forth. Storage of capital items should be strongly discouraged.

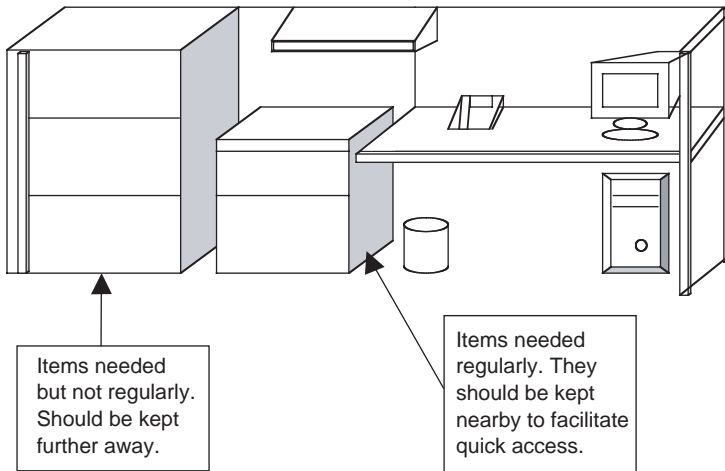
Going by classical Lean philosophy, inventory in any form is waste. The ideal situation is when items are made available by the vendors when required. This, however, requires a just-in-time system, which is not easy to implement in an office setup.

Store and Arrange Items Logically

When deciding on storage locations, logic must be followed. Table 3.3 and Figure 3.7 detail the logic that could be followed for storing items that have been removed from the workplace.

Table 3.3 Locations for items according to category.

No.	Item type	Where they should be moved
1	Items needed regularly	Near workstations
2	Items needed but not regularly	A short distance from workstations
3	Items needed but not in such large quantities	5S common place
4	Items wanted but not needed	5S common place
5	Items to be disposed of	Disposed of

**Figure 3.7** Locations for items needed regularly and items not needed regularly.

5S Tactic

A 5S Common Place Is a Must in All Workplaces

A 5S common place is an area in the workplace or office used for storing the following items:

- Excess inventory
- Movable blue tag items

The tacit purpose of a 5S common place is to make excess inventory visible so that it is on the radar for action.

The items in the 5S common place should be inventoried and monitored on a regular basis. However, the items in the 5S common place will not have kanban cards.

The location of a 5S common place is chosen based on the workplace, type of blue tag items generated, and quantity of excess inventory. Keep the size of the 5S common place flexible so that it can be increased or reduced as required. Typically a few racks on a shelf or a small cubicle can serve as a good 5S common place.

It is often a good idea to put bin cards next to the stored items in the 5S common place so that items and their quantity (excess) are both clearly visible.

Bin Card

Location: _____

Bin Card No.: _____

Material: _____

Code No.: _____

Date	Receipts			Issue			Balance		
	Qty.	Price	Value	Qty.	Price	Value	Qty.	Price	Value

Note: The Price and Value columns are optional.

5S Learning *Inventory Items Should First Move to the Storeroom and Then to the 5S Common Place*

There is often confusion as to which items should be stored in the storeroom and which should go in the 5S common place.

The storeroom should be used for keeping inventory items in the appropriate quantities as specified by the inventory management

system. The 5S common place should be used for excess inventory and movable blue tag items.

When inventory items first come into the office, they are received in the storeroom. If the quantity received exceeds requirements, either the items should be returned or the requisite quantity should be kept in the storeroom and the excess moved to the 5S common place. The reason for keeping excess inventory in the 5S common place is to ensure it is visible to those responsible for taking action.

When an item reaches the reorder point in the storeroom, check the 5S common place to see if it is available there before placing an order. Once 5S systems start getting institutionalized in the office, the size of the 5S common place will diminish as excess inventory is reduced.

Develop Retention Periods

List all documents that are going to be a part of the office after the unwanted documents and files have been removed. Determine the retention period—the amount of time the document can remain in the office—for each document and file. A comprehensive record retention policy should be made in Step 4, Standardization.

Label All Files

One of the reasons documents might not be easily accessible is improper labeling. Labeling entails clearly providing all the relevant information for the maintenance and disposal of files. Even in the best of offices, file labels are often missing.

Generally, the labeling of files requires including the following information on the file cover:

- File no.
- Date
 - From
 - To
- Retention period
- Disposal date
- Subject
- Owner

To ensure that filing happens on a regular basis, a process must be put in place and a schedule with responsibilities clearly laid out.

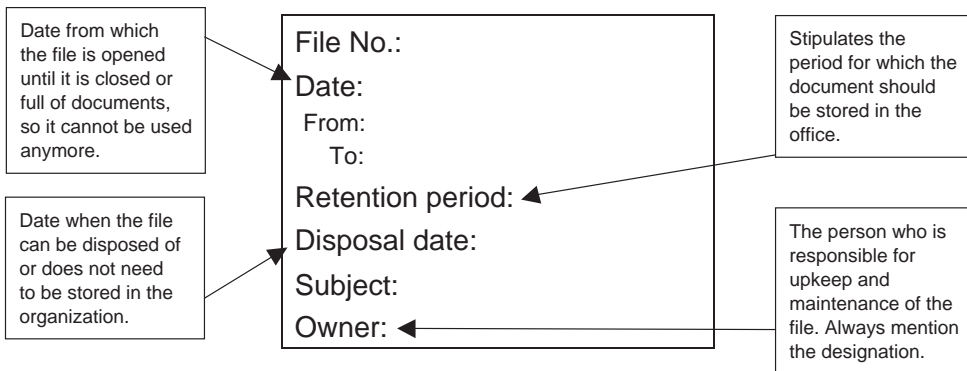
5S Tactic

Files Should Be Labeled According to Their Type

There are three types of files in an office: definite life files, moving files, and perpetual files.

Definite Life Files

Definite life files have a predefined life span after which they are either disposed of or sent to an outside storage vendor. An example of a type of file that might be sent to an outside storage vendor is statutory documents, which need to be kept for a certain number of years but which do not need to be stored in the office. Definite life file labels should include the following information:



Moving Files

Moving files are files that are mobile in nature, such as mortgage or loan files in a bank. They are processed, reviewed, and immediately moved to an outside storage vendor. These files spend only a few days in the office. Moving file labels should include the following information:

Retention Period is not relevant on these files because they will leave the office in a few days.

File No.:
 Date:
 From:
 To:
 Disposal date:
 Review date:
 Subject:
 Owner:

Permanent Files

Permanent files are files that are always required in the office. Once the file folder is full, its contents are removed and either moved to another location or discarded. The same file folder continues to be used after a few things on the label are modified. An example of a permanent file is a correspondence file. Permanent file labels should include the following information:

The date when someone in the office will determine whether the file is full.

File No.:
 Date:
 From:
 To:
 Retention period:
 Review date:
 Subject:
 Owner:

On the Retention period line, put "Permanent."

5S Learning *Disposal Date and Retention Period May Not Be the Same*

The disposal date is the day on which the file will be physically disposed of, as it will no longer be required by the organization. The disposal can take place in the office or in the storage agency outside the office.

Retention period refers to the period during which the file must be stored in the office. It is quite possible that the retention period will end much earlier than the disposal date because the file may leave the office and be stored in an outside storage area.

In other words, the disposal date refers to the life of the file, while the retention period refers to how long the file will stay in the office.

5S Learning *Labeling of Files Containing a Variety of Documents*

If a file contains similar types of documents, they can all have similar retention periods. However, if the documents in a file pertain to various subjects, each document should have a separate sticker indicating its retention period. This can be a Herculean task if not practiced on a regular basis. This situation can be avoided altogether by separating the documents into various subject files.

Define Ownership

One of the objectives of 5S is to define ownership. Each item in an office should have a clearly defined owner and a stand-in. The owner is responsible for the upkeep of the item, and the stand-in takes responsibility when the owner is out. Many offices are full of orphans; as a result, items are not maintained, which leads to breakdowns and other problems.

During 5S deployment, list all office areas and items and allocate responsibility to a set of two people for each item. The list should be very detailed; all items and areas of the office should be accounted for. An example of a partial ownership matrix is shown in Table 3.4.

Allocate Suitable Color to Files for Separation

In addition to the labels, a color scheme can be used to facilitate visual management of files. For example, one company used colored stickers to indicate the department to which a file belonged (see Table 3.5). This helped employees to identify the subject of the file even from a distance. The colored stickers also prevented employees from picking up the wrong files.

Table 3.4 Partial ownership matrix.

Item	Owner	Stand-in
Workstations		
WS-1 (Process manager's office)	Tim Agnew	Lisa James
WS-2 (New workstation)	Lisa James	Lydia Burns
WS-3 (Inward clearing)	Jessica Kim	John Davidson
WS-4 (Inward clearing)	Matt Cole	Craig Knight
WS-5 (Inward clearing)	Andrea Connelly	Matt Cole
WS-6 (Outward clearing)	Richard Jenkins	Mary Woods
HR (RMR)	Harold Smith	Kim Darling
WS-7 (Inward clearing)	Victor Manning	Harold Smith
WS-8 (Inward clearing)	Joseph Starr	James Kristee
WS-9 (Transactions)	Diana Rehnquist	Penelope Mentzer
WS-10 (Transactions)	Vicki O'Malley	Paul Cohen
Shared services		
Fax machine—Cash Management Services	Joseph Starr	James Kristee
Fax machine—Taxation	Lydia Burns	Josh Hebert
Copy machine—Outward	Richard Jenkins	Barbara Erickson
Copy machine—Account Opening	Lisa James	Cathy Reed
Account Opening	Cynthia Blasberg	Shari Stevens
Standing Desk Near Door	Cynthia Blasberg	Shari Stevens
Restrooms		
Men's Room—1	Jessica Kim	Victor Manning
Men's Room—2	Lydia Burns	Paul Cohen
Ladies' Room—1	Jason Barrett	Diana Rehnquist
Ladies' Room—2	Jason Barrett	Diana Rehnquist
Air conditioners		
AC 1	Joseph Starr	Victor Manning
AC 2	Kristen Moore	Richard Jenkins
AC 3	Andrew Lang	Paul Cohen
AC 4	Lisa James	Josh Hebert
AC 5	Joseph Starr	James Nielsen

Table 3.5 Color coding for files.

Color	Department
Brown	Human Resources
Blue	Accounting
Green	Sales
Violet	Marketing
Yellow	Production
Magenta	Maintenance

Place Files in Cabinets

Find a place for the files according to the general placement instructions in Table 3.3. The files should be arranged according to usage sequence. This is further explained in Figure 3.8.

Other items can be put in their agreed-upon place based on review of the layout.

Mistake-Proof Files Stored in the Filing Cabinet

After the files have been stored, mistake-proof them by sticking a diagonal ribbon across the files. The advantage of this is that you can tell at a glance if a file is missing or is in the wrong place (see Figure 3.9).

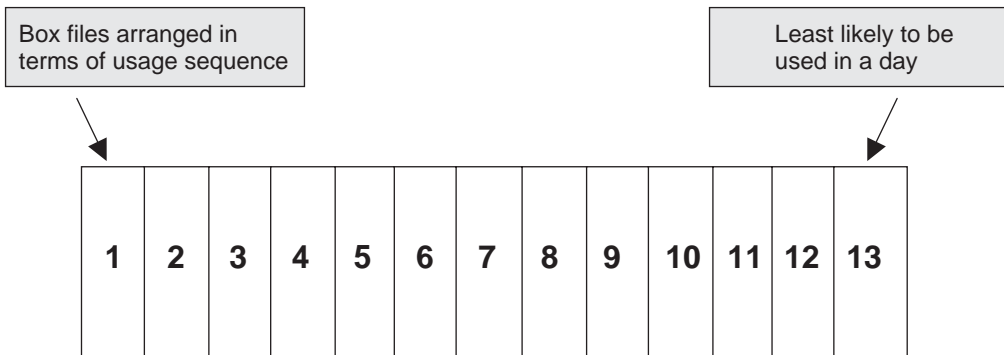


Figure 3.8 Logic for file arrangement.

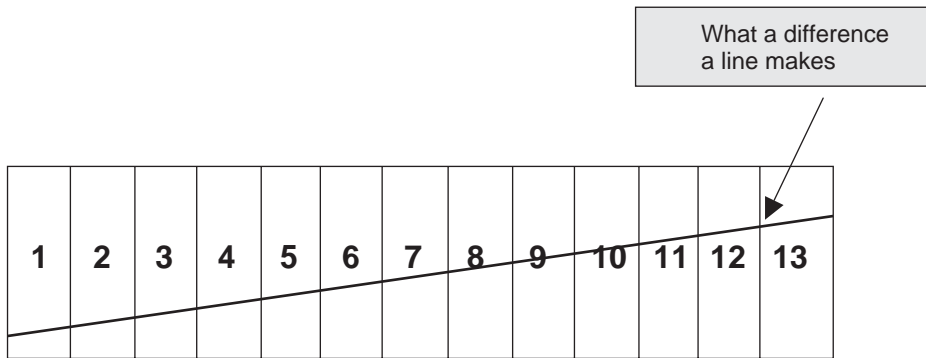


Figure 3.9 Mistake-proofing of files.

5S Learning

The concept of mistake proofing comes from the Japanese philosophy of *poka-yoke*. *Poka-yoke* translates to “mistake-proofing.” It refers to a failsafing device or a procedure that prevents mistakes. The diagonal line used on files is *poka-yoke*.

Creation of Indexes

Indexes allow for easy retrieval of documents and files. In all indexes, items should be listed both by category and alphabetically.

Two types of indexes are generally required: the master index and the location index.

Master Index

The master index is a complete listing of all documents and records in the office and their location. It should be placed centrally so that it is accessible to everyone. The objective of the master index is to facilitate the retrieval of documents by anyone within 30 seconds.

Location Index

The location index lists all the documents and records in each of the areas in the office. So, in a bank office, there will be location indexes in store-rooms, customer service areas, teller stations, and so on. The location index gives the exact location of a document using descriptions such as cabinet number and the exact position of the document in the cabinet.

5S Tactic

Key Difference between Master Index and Location Index

The master index indicates the area in which a document is stored; the location index gives the exact coordinates of the document—that is, where exactly it is stored in the area.

To retrieve documents, employees will go to the master index and look up the area where the document is stored. Once they reach the destination, they should look at the location index to get the exact location of the document.

The broad retrieval process that should be followed is shown in Figure 3.10.

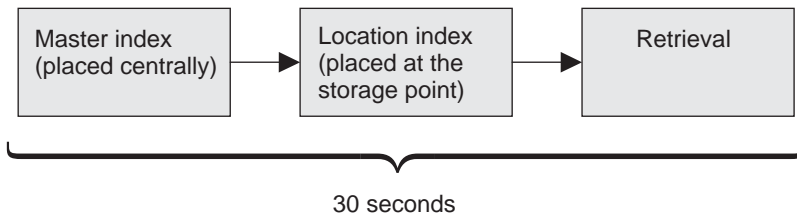


Figure 3.10 Retrieval process.

5S Learning *Retrieval Time of 30 Seconds*

After effective 5S deployment, retrieval of documents should happen within 30 seconds. Anything slower indicates ineffective 5S deployment.

I know from experience that a retrieval time of 30 seconds is possible. As a matter of fact, retrieval time reduces further once the systems and processes stabilize.

A tacit intent of this objective is to move from being person-dependent to being process-dependent. When you set a target of 30 seconds, teams will work to hit that target, and that is possible only through processes.

5S Tactic***Arrangement of Keys***

Something that is often overlooked in 5S implementation is the way keys are stored. This may sound mundane, but improper key management can result in keys being unavailable or in unusable condition.

As a part of 5S implementation, you must bring orderliness to keys. There should be a key box, and all keys should be adequately labeled and indexed so that they can be easily retrieved when needed.

STEP 3: SPICK-AND-SPAN

The third step of 5S has two basic intents: cleaning and inspection.

Cleaning

After 5S implementation is over, cleaning needs to be done on a regular basis to remove dirt and dust from the workplace. This does not mean picking up a broom and sweeping the floor. It means regularly removing files and documents from storage areas and dusting them. Also, any cobwebs or bugs should be removed from storage areas immediately (ideally bugs will not be an issue).

The idea behind cleaning is that if there are documents in your office, they cannot remain unattended. Employees need to take responsibility for their upkeep.

Inspection

Inspection entails regularly flipping through files looking for:

- Missing pages
- Files or documents nearing their expiration date (those whose retention period is almost over)
- Files or documents whose retention period is over
- Updated inventory levels on the kanban card (in the case of storage areas)

Table 3.6 Autonomous maintenance calendar.

No.	What	Where	Who		When
			Prime responsibility	Stand-in	
1	HR files	Cupboard 10 in HR department	John	Jim	Every Monday, 5:00–5:30 p.m.
2	Office supplies	Rack 5 in storage room	Jack	Rebecca	Every Thursday, 10:00–10:30 p.m.
3	Training material	Cupboard 11 in HR department	Rubin	John	10th, 20th, and 30th of every month, 1–2 p.m.
4	Vouchers	Cupboard 12 in Finance department	Ram	Jim	Every Thursday, 9:00–9:30 a.m.
5	Statutory documents	Cupboard 1 in branch manager's office	Tim	Hari	15th and 30th of every month, 1–2 p.m.

Remember, cleaning and inspection should happen on a regular basis at a predetermined frequency. This can be accomplished by using an autonomous maintenance calendar (see Table 3.6).

5S Tactic

Step 3 of 5S Is Not Done During Initial Deployment

Cleaning and inspection are done after 5S deployment is complete, not during the initial blitz. Initial 5S deployment begins with Step 1 (Sorting), which is followed by cleaning. This means that after all items have been removed from the cupboard, they are cleaned—that is, dust is removed from cupboard and files. Also, after Step 2 (Systematic Arrangement), the team works on developing an autonomous maintenance calendar, which is part of Step 3.

So, during the initial blitz, we do not formally do Step 3. It is done after deployment is complete for the purpose of regular upkeep and maintenance.

STEP 4: STANDARDIZATION

The objective of this step is to install all the elements that facilitate standardization to the deployment that has happened in Step 1 (Sorting) and Step 2 (Systematic Arrangement). This step involves coming up with the following:

- Policies
- Procedures
- Workplace rules
- Standards
- Autonomous maintenance calendar

Policies

Policies are the boundaries within which an organization operates. They guide the employees' actions and help in fulfilling company objectives. Policies are made by management in order for employees to function without intervention.

Policies required for office 5S are the following:

- Policy for document retention
- Policy for inventory management
- Policy for disposal (of unneeded, blue tag, and scrap items)

All policies should be backed by procedures.

Procedures

A procedure is a sequence of steps that, when performed, executes a task. Procedures detail how one should go about doing something and they help bring consistency to operations. Procedures can only work in tasks where judgment is not required. In the 5S context, procedures encourage maintenance, identifying to employees specific tasks that need to be carried out on an ongoing basis. Some procedures required for 5S (other than the ones for policies) are:

- Filing
- Determining reorder levels

- Kanban cards
- Scrap disposal
- Document retention period
- Blue tag item disposal

5S Learning *Procedures Should Be Designed for the Uninitiated*

Procedures should be written in such a manner that even new employees can understand them easily. Procedures should be written in plain English and should also serve as training material.

5S Learning *Ensure Adequate Procedures Exist When Initiating a 5S Deployment*

At the beginning of the 5S journey, it makes sense to have procedures for all tasks that require guidance. Even if a task is mundane, it doesn't hurt to write a procedure for it. However, once a task becomes habit, the procedure can be done away with.

Procedures should not be written just for the sake of having procedures; they should be useful and should add value to the business.

Remember, employees do not work for policies but work according to procedures.

Workplace Rules

Workplace rules are essentially the dos and don'ts of a workplace. Whereas policies are set forth by management, workplace rules should be written by employees. Workplace rules should be designed for the purpose of sustaining the 5S movement. The best way to devise rules for a workplace is to brainstorm with the entire team and come up with actions that would benefit the organization. An example of 5S workplace rules is shown in Exhibit 3.2.

5S Rules—Rev: 1, Dated: 5/12/2005
Loan Processing Workstations
<ol style="list-style-type: none"> 1. Switch off your computer before going to lunch. 2. Put chairs back in their places when you leave your workstation. 3. Spend five minutes every day on physical 5S. 4. Spend five minutes every day organizing your computer files. 5. If there are more than five files in your workstation, inform the team leader.

Exhibit 3.2 Example of 5S workplace rules.

Standards

There are two types of standards in 5S: performance standards and physical standards.

Performance Standards

Performance standards are targets for the established Measures of Performance, which are discussed in detail in Chapter 4.

Physical Standards

Physical standards are initiatives taken to ensure standardization in the physical space with respect to 5S implementation.

An example of physical standardization is ensuring that all offices in an organization have the same filing labels. While this may seem obvious, it is often overlooked in organizations.

Physical items used in 5S are called “5S wherewithals.” The following are the types of wherewithals used in 5S implementation:

Look and feel wherewithals. Items required in 5S deployment that impact the look and feel of the workplace. They include items like labels, stickers, master indexes, and so forth.

Sustentation wherewithals. These are items that help in sustaining 5S at a workplace. They include such items as blue tag registers, FIST (5S implementation sheets), and so forth.

You should also standardize the content of wherewithals. For example, fields of information on kanban cards, file labels, blue tags, and so forth should be the same across the organization.

Physical standards may seem trivial, but physical nonstandardization can become a real problem during 5S implementation in large organizations.

Autonomous Maintenance Calendar

An autonomous maintenance calendar is a schedule of cleaning and inspection activities that need to be done on an ongoing basis as required by Step 3 of 5S, for the purpose of regular upkeep and maintenance.

STEP 5: SELF-DISCIPLINE

This step is all about working 5S into daily routines and ensuring that it becomes an integral part of the workplace fabric. Habits are not easy to form. Leaders need to take time out for the cause of 5S and should demand ownership from the employees.

The following are a few approaches that, when followed, help 5S become an integral part of everyday life in the office:

- Train everyone in 5S.
- Ascertain the effectiveness of learning by conducting a test after the 5S training program.
- Install a process to train all new hires in 5S.
- Have employees take turns training others (make sure they have the minimum skills required for conducting a successful training program).
- Ensure that best practices are shared among employees.
- Leverage the knowledge management platform to archive all the practices.
- Repeatedly communicate the purpose and benefit of workplace organization.
- Adhere to the enablers (discussed in detail in Chapter 4).
- Make sure performance in 5S is threaded to the performance management system, the organization's employee performance appraisal process. During the early days of implementation, it helps to thread the performance of individuals in 5S to their yearly performance targets. This may be necessary in organizations where the behavior of teams is driven by such mechanisms.

During the initial days of the 5S journey, leaders have to take ownership of the movement. They should not only practice it, but also influence their teams to adopt it. If they find employees not adapting to this change process, they should counsel and even reprimand them if required. Once the movement starts taking hold and teams start adopting and adapting 5S on an ongoing basis, the intervention of leaders can gradually reduced.

Chapter 4

Enablers for Sustentation, Measures of Performance, and Approach to Deployment

Chapter Topics

- Structures
- People
- Processes
- Infrastructure
- Practices
- 5S Implementation

Deployment of 5S is just the beginning. It has to be supported further by putting in place a framework that will facilitate continuity. Without this, the entire initiative will quietly fade away without even the employees coming to know of it.

The framework for sustaining 5S is made up of what are referred to as enablers. Enablers are what the organization has to act on to facilitate the sustainability of the 5S movement. These can be pooled together and put in the following categories:

- Structures
- People
- Processes
- Infrastructure
- Practices

Table 4.1 describes the various elements within each of these categories.

Table 4.1 Enablers for 5S.

Structures	People	Processes	Infrastructure	Practices
5S council	5S Champion	Daily meeting	Workplace visual board	Policies
5S office	5S Evangelist	5S charter		Procedures
5S help desk		5S implementation sheets (FIST)		Workplace rules
		Ground zero walks		
		Rewards and recognition		
		Audits		

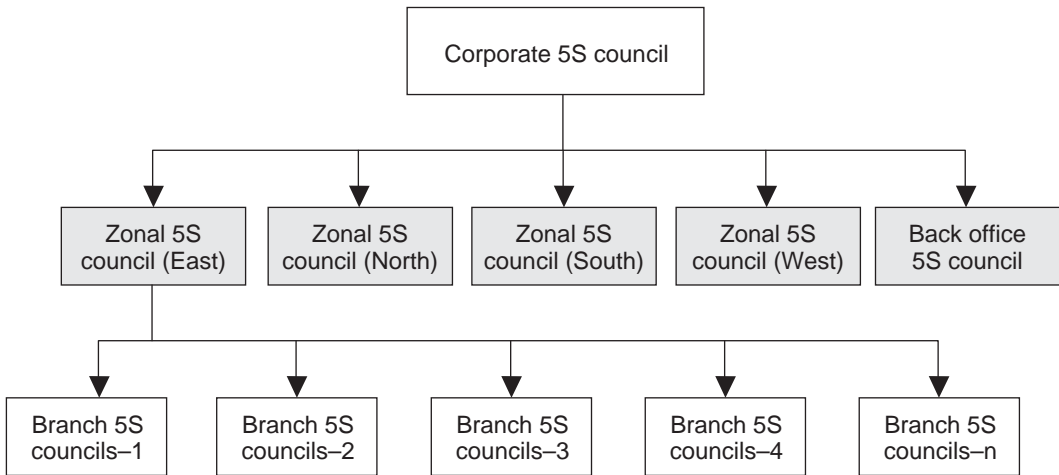
STRUCTURES

5S Council

The 5S council is the apex body that oversees 5S implementation within an office. It should be chaired by the most senior person in the office; his or her direct reports should be its members. The 5S Champion should also be a member of the council. The 5S council does the following:

- Oversees 5S deployment
- Draws up the implementation roadmap
- Reviews progress
- Sets Measures of Performance
- Removes barriers to implementation
- Appoints 5S Champions and Evangelists
- Approves policies and practices
- Makes decisions on blue tag items
- Makes decisions on elements of change
- Builds capability of 5S within offices

In a large multi-locational organization, the councils should be present at all levels of the organization. Figure 4.1 outlines a 5S council structure for a large service organization scattered across regions with a number of customer outlets and branches. Table 4.2 lists the composition of the various councils.



(Each zone has a set of branches under it and each branch has a 5S Council. Branches are the retail outlets.)

Figure 4.1 5S council structure for a large service organization.

Table 4.2 Composition of 5S councils.

Council	Composition
Corporate 5S council	CEO, Executive Directors, Business Heads, 5S Champions
Zonal 5S council	Zonal Heads, direct reports of the Zonal Head, Zonal 5S Evangelist
Branch 5S council	Branch Manager, direct reports of the Branch Manager, Branch 5S Evangelist

5S Office

The 5S office is an administrative subset within the organization that monitors implementation. It is occupied by the 5S Champion and a team of administrative assistants. The office has the following duties:

- Reports progress to the 5S council
- Monitors 5S implementation
- Prepares training and promotion material
- Devises policies and practices related to 5S
- Champions 5S as concept to the organization

- Establishes a communication plan
- Communicates how 5S can be a lever for workplace improvement
- Shares success stories
- Creates awareness of 5S
- Identifies influential people and engages with them

5S Help Desk

During 5S implementation, it is a good idea to set up a help desk that can support and answer the 5S teams' implementation-related questions. A help desk is especially useful in a large organization where 5S implementation happens simultaneously at multiple locations and offices. A help desk can be manned by one or two people answering questions by e-mail and by phone. The help desk should have a dedicated e-mail address and phone line.

PEOPLE

5S Champion

The Champion is the in-house 5S expert. He or she not only is adept in 5S methodology but also understands the philosophy of improvement. He or she should possess all the leadership skills needed to push the agenda of a people movement like 5S. The Champion trains, coaches, facilitates, consults with, and mentors 5S Evangelists. The Champion will ideally be a quality or process practitioner who has had a rich experience in improvements. The quality head of the organization is an ideal candidate for 5S Champion. Typically a 5S Champion is someone at the corporate level, responsible for creating the implementation roadmap (which is later validated by the corporate 5S council) and for enterprise-wide implementation.

5S Evangelist

Evangelists support the Champion on 5S implementation and sustainability. Evangelists have a part-time role in 5S. They hold regular positions and spend 50 percent of their time on 5S facilitation. Evangelists are trained by the 5S Champion and act as resources within the zones (in a multilocation setup) and local offices. They help local offices with 5S facilitation and

work with the teams to fine-tune their charter. They assist teams by coordinating with other managers behind the scenes and removing hurdles.

PROCESSES

Daily Meeting

The daily meeting should be institutionalized in workplaces after 5S implementation is complete. Daily meetings provide an opportunity for teams to discuss 5S and other workplace-related issues on a regular basis. These should be stand-up (as opposed to sit-down) meetings and should be held once every day at a fixed time. The following topics can be discussed during daily meetings:

- Workplace issues
- 5S implementation hurdles
- Introduction of new people
- Observed abnormalities in the workplace
- Review of Measures of Performance
- Previous day's quality issues
- Housekeeping and workplace organization reminders
- 5S implementation sheets
- Safety issues
- Customer complaints/process issues

Some of these issues will be discussed daily, while others might come up once every week or two. It is recommended that a schedule for agenda items be established. Exhibit 4.1 shows the format you can follow to create such a schedule.

Daily meetings should always be conducted by the most senior person in the office. This sends the signal that the meeting is important and everyone has to be a part of it.

I have found that the daily meeting has the tacit benefit of disciplining employees. In one office in Singapore where I was facilitating 5S implementation, the daily meeting started at 9 a.m., the start of the work day. This forced all habitual latecomers to be punctual in order to avoid embarrassment.

Topics discussed daily	Topics discussed less often

Exhibit 4.1 Agenda schedule format for daily meeting.

5S Tactic

Use Daily Meetings to Discuss Things Beyond 5S

Once 5S becomes an integral part of the workplace, there will be very few issues for discussion during the daily meeting. The daily meeting should then be used as a forum for the discussion of other issues in the workplace, such as customer complaints, process bottlenecks, process metrics, and so forth. Widen the scope, but keep the discussion focused on issues related to customers, quality, and improvement. Do not go beyond the domain of quality and improvement, as these are the issues that are most often neglected.

5S Learning *Daily Meetings Should Be Stand-Up Meetings*

The daily meeting should be a stand-up meeting. Nobody likes to stand for long, so stand-up meetings have the advantage of being very brief, usually no longer than 10 minutes. Also, when employees meet while standing, it becomes difficult for them to deny that they are part of the team.

5S Charter

The 5S charter is a roadmap for implementation and an expression of the office’s commitment to 5S. It lists all the activities that need to be accomplished during 5S implementation. The charter should be finalized immediately after the first 5S blitz. Implementation often gets derailed because the charter is not scripted well. The format of a 5S charter is shown in Exhibit 4.2.

5S Charter																					
Workplace/Office:	Date:																				
Scope:	Workplace Owner:																				
	Team Involvement:																				
Business Case for Implementing 5S:																					
 Teams Affected:																					
 Action Plan for 5S Implementation (List all actions that need to be completed as part of 5S implementation. Make the action plan as detailed as possible.)																					
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">What</th> <th style="padding: 5px;">When</th> <th style="padding: 5px;">Who</th> <th style="padding: 5px;">How</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 20px;"></td><td></td><td></td><td></td></tr> </tbody> </table>		What	When	Who	How																
What	When	Who	How																		
Measures of Performance:																					
Expected Benefits:																					
Critical Success Factors:																					
Expected Risks:																					

Exhibit 4.2 5S charter.

5S Tactic

Install a Robust Project Management Mechanism to Manage Project 5S

It may sound strange to say 5S implementation should be treated as a project when it should really be an integral part of the organization. Yes, 5S is a movement that should become a habit for all employees of an organization. But until that happens, and especially during implementation, it is imperative that 5S be treated as a project or a series of projects.

5S Implementation Sheets (FIST)

5S implementation sheets (FIST) are a mechanism to seek suggestions from employees for improvements. The idea behind 5S implementation sheets is that when employees see their ideas being implemented by the organization, their sense of ownership increases and they feel motivated and empowered. Improvement ideas need not be related only to the workplace. They can also focus on customers, processes, and quality issues. When effectively applied, FIST increases participation in 5S.

The 5S implementation sheet should be targeted toward getting low-cost, below-the-radar ideas that are not normally considered. When this process is first launched, the workplace will be brimming with a whole lot of ideas that would require heavy expenditure. It should be clearly conveyed to the team that expensive ideas are welcome only if they involve fixing a problem that has a negative impact on customers or threatens workers' safety. The format for a 5S implementation sheet is shown in Exhibit 4.3.

Sustaining the FIST process is not easy. It requires unstinted leadership and a drive to sustain the movement. A FIST process must be backed up with a solid reward and recognition architecture. The FIST process should clearly stipulate the timeframe within which a response to a suggestion is given. Typically this should not take more than 48 to 72 hours and should be done during the daily meeting.

5S Implementation Sheet		
Employee Name:	Location/Office:	Date:
Employee ID:		
State the problem:		
Solution recommended:		
Impact of the solution:		
Accepted:	Rejected:	
Evaluated by:		

Exhibit 4.3 Example of a 5S implementation sheet.

Ground Zero Walks

Ground zero walks involve leaders walking around the offices and workplaces to get a feel for what is happening. These workplaces or offices are called “ground zero” because that is where the action is. It is imperative that top management stay connected with the happenings of the workplace. Business leaders, managers, and the office supervisor should walk out of their offices and go to the places where 5S implementation is happening or has happened. They should understand the pulse of the workplace and listen to what people are saying. They can also use this opportunity to convey the company’s values, and they should be prepared to give people on-the-spot help. During the rounds they should

even look at things beyond the obvious, such as drawers, cupboards, restrooms, and corners (clutter often hides in these places). This not only makes the staff more alert, but it also lets them know that top management walks the walk and does not just do lip service to 5S or practice remote-control management. The following are a few guidelines that should be followed during ground zero walks:

- Reserve some time every day to walk through every department.
- Have 5S meetings and reviews in the workplace.
- Start randomly popping into the offices of the senior management team and ask the inhabitants why they aren't out.
- Appear relaxed as you make your rounds. Employees will reflect your feelings and actions. Remain open and responsive to questions and concerns.
- Look for symptoms of potential problems and try to look beyond the obvious.
- Try to find out whether actual information is being passed on by operating managers about workplace organization, process, and quality.
- Talk with employees about their interests—family, hobbies, vacations, or sports.

Convey the image of a coach, not an inspector, and encourage your employees to open up. Try to detect the intent behind what they say.

Rewards and Recognition (R&R)

In a journey toward 5S implementation, it is imperative that a reward and recognition plan be put in place to accelerate implementation. R&R not only gives the required push to the 5S movement but also rewards behaviors that positively impact the implementation. When employees know their efforts are appreciated, it increases their self-esteem and satisfaction.

Rewards for 5S should preferably be nonmonetary. They should offer the feeling of accomplishment and self-worth an employee derives from doing a good job. These nonmonetary rewards are important motivators for improvement and could be any of the following.

Publicity

The most common form of recognition is publicizing achievements. Examples are:

- Bulletin boards
- Newsletters
- Formal presentations

Tokens

Tokens are the most common gifts used to spontaneously recognize specific acts. Examples are:

- Pins/buttons
- Key rings
- Mugs
- Restaurant gift certificates

CEO Award

This is given to those individuals who exemplify the values that build 5S—leadership, involvement, teamwork, commitment, continuous improvement, and customer orientation—and significantly contribute to the 5S movement every day. These awards are generally given once a year and nomination is through an open process. Any employee may nominate upward, downward, or horizontally another employee who demonstrates a sustained commitment to 5S implementation.

Team Award/Best Office/Best Business Unit

This award is given to a team that has successfully carried out a 5S implementation that has not only yielded major financial benefits but has also led to a substantial increase in customer satisfaction. This award is ideal when an organization is setting out on a 5S journey and has the task of making workplace organization a way of life. The award can be given on a quarterly basis.

Supplier/Vendor Awards

These awards are targeted to suppliers and vendors who have successfully deployed and used 5S for improvement. Remember, 5S implementation should not be confined to the organization; it should also touch vendors and suppliers.

The Invisible Champion

This award is given to individuals who represent a strong yet unseen force that has a profound effect on the 5S movement. The award recognizes individuals who contribute solidly and consistently to the job and the team with their behind-the-scenes efforts.

Award for Maximum Improvement

This award is given to a team, department, or business that has achieved maximum improvement using 5S methodology.

Lunch/Dinner with CEO/Board Member

This is awarded when a person has championed a 5S implementation across multiple locations, wading through the organizational structure. Such an award not only reinforces the importance of the person's contributions, but also allows him or her to reminisce about the hurdles he or she overcame to facilitate 5S institutionalization.

Quality-Based Promotions

Here the promotion is based primarily on the achievement of 5S goals. It could mean giving greater responsibilities in the domain of improvements.

Wherever awards are instituted, they should be open, and the criteria and selection process should be designed in a manner that employees perceive as fair.

Audits

Audits are an integral part of 5S sustentation. Building robust audit architecture is a vital element in the 5S journey. This is one of the most effective tools to ascertain the status of sustentation, after 5S deployment is complete and improvements have been made. Audits are a proactive process to identify whether enablers are being followed as intended and installed. When an office is continually audited for conformance to 5S

requirements, disorganized areas are identified. Members can then take corrective action on issues they would have overlooked during day-to-day operations.

Other than ascertaining the health of the 5S implementation, auditing yields the following benefits:

- Increases management's confidence that the benefits of 5S are being sustained
- Helps identify workplace and process deficiencies
- Calls attention to symptoms of potential problems
- Helps in taking corrective action before something becomes a consumer issue
- Proactively unearths noncompliance vis-à-vis the 5S requirements
- Helps identify the training requirements of the people associated with workplace disorganization, process bottlenecks, and customer issues
- Facilitates sharing of ideas—the experience and expertise of auditors can be used to resolve chronic workplace problems

Audits can be either internal or external.

Internal Audits

Internal 5S audits are assessments carried out by the workplace or office to determine the health of their 5S implementation. They identify the deficiencies or shortcomings in 5S sustenance. A few employees should be trained as 5S auditors, and they should audit regularly on an ongoing basis. However, internal 5S auditors should not audit their own departments. If effectively managed, these internal audits can be a powerful tool for preventing and stopping problems. The findings of internal audits are shared with the most senior person or the office supervisor.

External Audits

External audits are independent assessments of 5S implementation done by someone outside the office being audited—typically someone from the corporate 5S office. In organizations with multiple locations, the external 5S auditors are a part of the corporate team that audits various offices on an ongoing basis. External audits can be done for the following reasons:

- Certification
- Surveillance
- Providing assurance to senior management

Auditors are the guardians of 5S. The following is a list of some of the points that auditors focus on:

- Deployment
- Installation of enablers
- Measures of Performance
- Documentation
- Observations
- Ownership
- Process ownership
- Reviews
- Lessons from implementation

5S Auditors

All 5S auditors should be experts in 5S implementation. They should have not only hands-on experience but also demonstrated auditing skills. It is recommended that the organization launch a 5S auditor certification program. All auditors should pass the certification test and perform a few audits as juniors before embarking on actual audit assignments.

The 5S auditor certification examination should have the following content:

- Concept of improvement
- Why 5S?
- Principles of 5S
- Actual steps in implementation
- Benefits of 5S
- Leadership elements for 5S
- Change dimensions
- Signs of 5S derailment
- Symptoms, apparent causes, root causes

Exhibit 4.4 gives an example of a 5S auditor certification examination.

1. Define the methodology of 5S in a single sentence.
2. What are the three important policies required for sustaining 5S in a workplace?
3. What are the three reasons that enablers are required for 5S?
4. What is the tacit value addition of 5S implementation sheets?
5. What is the purpose of a 5S common place?
6. While implementing 5S, someone tells you that he will first liquidate the inventory levels of the 5S common place and then move toward liquidating the stocks in the storeroom. How do you respond?
7. When do you think the needs and wants matrix is required during 5S blitz?
8. What is the purpose of an ownership matrix in a workplace?
9. What are the key attributes of a 5S blitz?
10. What is the intent behind blue-tagging an abnormality?
11. What exactly is a blue tag?
12. Under what circumstances can a blue tag be attached by a person who has no direct relationship to a workplace?
13. What is the purpose of having a Plan in a workplace?
14. Name three things other than policies that are established in Step 4—Standardization.
15. What is the difference between an apparent cause and a root cause?
16. List four Measures of Performance that may see a positive trend due to 5S deployment.
17. Once 5S is deployed in a workplace, list any six indicators that would indicate derailment.
18. List any six pieces of information that should be included on a kanban card.
19. All workplace rules should be devised by the corporate office. Comment on this statement.
20. All policies should be accompanied by _____. (Fill in the blank.)
21. Workplace transformation is essentially about creating a hierarchy of systems. Comment on this statement.
22. What are the three steps in a change process like 5S? Define each step in one line.
23. How would you manage negative reactions to 5S? List four strategies.
24. What are the two ways one can monitor the progress of 5S?
25. What is the purpose of having a charter for a workplace?
26. What is the main intent behind the workplace visual board?
27. Why should the daily workplace meeting be a stand-up meeting?
28. What are the five key duties of a 5S council?
29. A supervisor tells you that ground zero walks are utopian. What is your response?
30. How would you ascertain the awareness levels of 5S in a workplace?

Exhibit 4.4 Auditor certification examination.

(continued)

(continued)

31. While conducting a 5S audit, the workplace owner asks you to spend one hour giving feedback on the work that they have done in the domain of Six Sigma implementation. How do you then structure the audit, given the fact that you now have an opportunity to contribute toward bettering the Six Sigma practice of the workplace?
32. While conducting an audit, an auditee claims that the sigma levels of a process have gone up due to 5S. How do you respond as an auditor?
33. List the qualifying criteria that a workplace should possess before a Level 2 audit is conducted.
34. What precautions should be taken while auditing a state-of-the-art branch?
35. How will you ascertain the Measures of Performance during an audit?
36. What things will you look for while reviewing the roadmap for 5S implementation?
37. A senior business leader calls during an audit to tell you that things are all hunky-dory in the workplace and that you will not find any problems with 5S implementation. He asks if the audit can be done quickly in light of this. How do you react?
38. An auditee tells you during an audit that she has followed the instructions of a 5S Evangelist and hence should not be penalized. How do you react?
39. As an auditor, what would you look for when ascertaining closure of blue tag items?
40. How would you assess leadership commitment during an audit? List four pieces of evidence to support your response.
41. List five qualities that a 5S auditor should have.
42. What are typical time wasters that you should avoid during 5S audits? List five.
43. You see a positive trending of retrieval time on a workplace visual board. What additional information do you need in order to make a final judgment?
44. How would you ascertain whether an inventory management system has been functioning successfully?
45. What key visual management tools and techniques might demonstrate effective 5S implementation?

Exhibit 4.4 Auditor certification examination.

INFRASTRUCTURE

Workplace Visual Board

A workplace visual board should be installed wherever 5S has been deployed. It should be about 4 by 8 feet or 3 by 6 feet—large enough to be visible to everyone in the workplace or office.

A workplace visual board allows teams to showcase the results they have achieved through 5S deployment. The visual board is also used to display before-and-after photographs, which remind teams of the transformation they have brought about through 5S. The Measures of Performance trends are also displayed on the visual board. This helps teams to see clearly how they are performing against the targets.

The following items can be displayed on a workplace visual board:

- Before-and-after photos
- 5S road map
- Measures of Performance trends
- Customer complaints
- Workplace rules
- Photograph of Best 5S
- 5S audit findings
- Master index
- Ownership matrix
- Needs and wants matrix
- Process improvement metrics

Though the workplace visual board is a simple thing, it delivers a huge value if leveraged well. Make a responsible person accountable for the workplace visual board. This person should update the board on a regular basis with information that not only is relevant but also enthruses team members. The workplace visual board can also be used for displaying all quality, process, and customer-related issues impacting the workplace.

5S Tactic

The Workplace Visual Board Has Both Dynamic and Static Portions

About 25 percent of the workplace visual board should contain static information; the rest of the board should be devoted to dynamic information. Come up with a schedule for updating the visual board on an ongoing basis. The information on the workplace visual board should be contextual and interesting. Oftentimes a scarcity of dynamic information can completely derail the utility of a workplace visual board. Every inch should be used judiciously and in a manner that continually sustains interest. When there is a struggle to get information for display on the workplace visual board, it is an indication that there may be an issue with the 5S implementation.

PRACTICES

Policies, procedures, and workplace rules are discussed in Chapter 3. These are enablers in that they facilitate in sustaining the 5S movement on an ongoing basis.

Measures of Performance (MOPs)

Measures of Performance are an integral part of 5S implementation. Without MOPs, it may not be easy to push the agenda of 5S in service organizations. MOPs act as North Stars in the 5S journey.

There are two types of MOPs: one-time and recurring.

One-Time MOPs

One-time MOPs are tracked only once. They are typically done after 5S implementation has been completed. The most common one-time MOPs are:

- Square footage freed up
- Number of workstations added
- Quantity of scrap and unwanted material sold
- Value of scrap disposed of
- Number of cabinets and shelves freed up

Recurring MOPs

Recurring MOPs are tracked on an ongoing basis to ascertain the health of workplace organization. The most common recurring MOPs are:

- Document retrieval time
- Customer inquiry turnaround times
- Customer satisfaction scores
- Productivity improvement
- Number of suggestions received per month
- Number of suggestions implemented

Recurring MOPs can be categorized as shown in Table 4.3.

Table 4.3 Recurring Measures of Performance.

Quality	Cost	Customer	People/Morale
Document retrieval time	Office supply costs	Customer inquiry response times	Productivity
Error levels		Customer satisfaction scores	Suggestions received or implemented
Reduction in visible wastes		Reduction in turnaround/processing times	Motivation index
Rating of the workplace/office			Manpower utilization levels
Certification of the workplace			

Table 4.4 Lag versus lead indicators.

Lag indicators	Lead indicators
Rating of the workplace/office	Document retrieval time
Certification of the workplace	Error levels*
Reduction in visible wastes*	Productivity*
Customer satisfaction scores	Reduction in turnaround/processing times*
Manpower utilization levels	

* Some of the indicators can be used interchangeably.

It is important that a mix of lead and lag MOPs be established. Lead indicators help in predicting the outcome of 5S implementation, while lag indicators measure the results and outcome of 5S implementation. Table 4.4 indicates the lead and lag indicators in 5S implementation.

5S Tactic

Do Not Have Too Many Measures of Performance

The following are guidelines for choosing MOPs for 5S:

- Do not have more than three or four MOPs. More than that will make it difficult for the organization to keep track.
- A mix of lead and lag MOPs is required to make an overall assessment of 5S implementation in an office.

- Keep the MOPs simple.
- Do not hide the MOPs in the computer terminal. Make them visible. Showcase them on the workplace visual board so that employees can see how they are performing against the targets.
- Involve the employees in choosing the MOPs.

Figure 4.2 shows the hierarchy of 5S implementation in a financial services organization. It is important that 5S measures be threaded at all

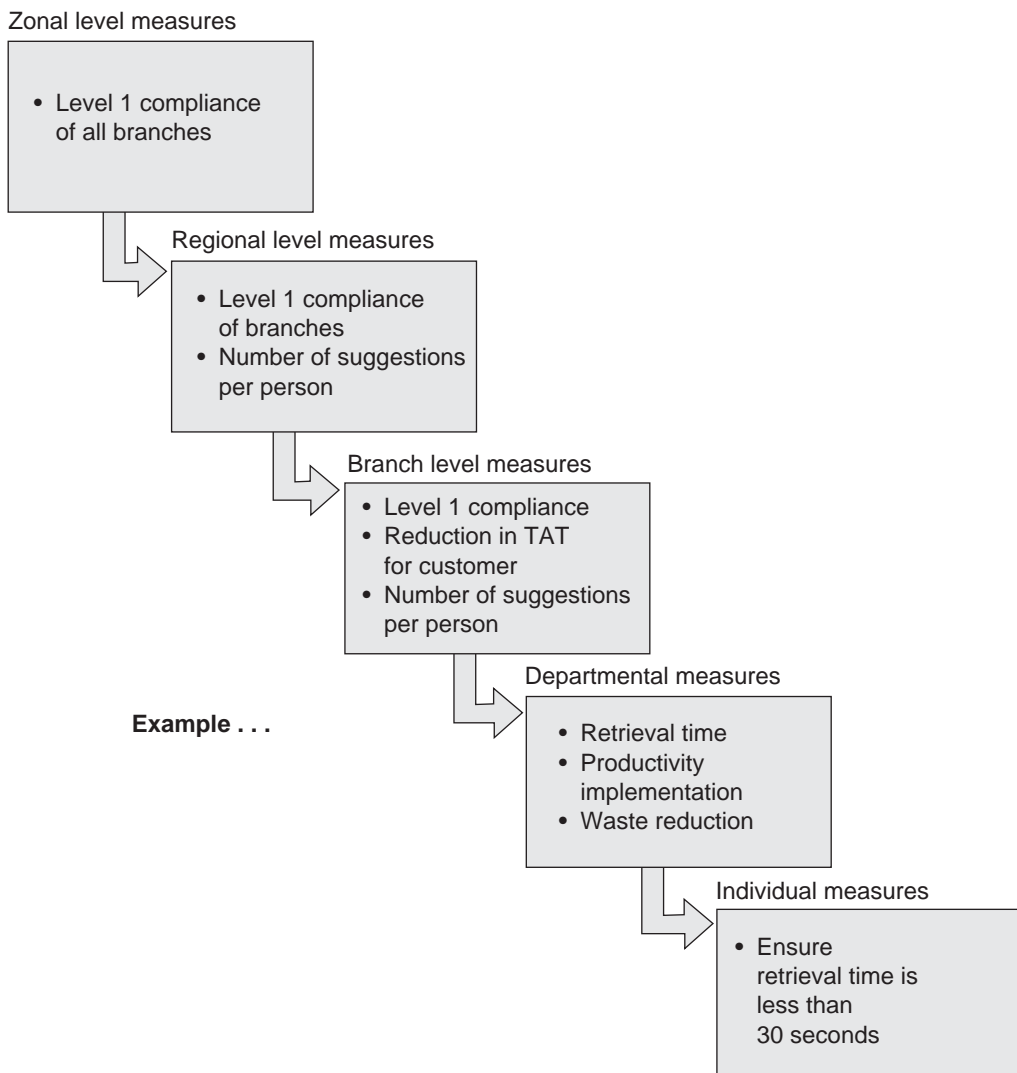


Figure 4.2 Hierarchy of 5S measures at a financial services organization.

levels of the organization. This should further be integrated with the performance management system of individuals. This way, the 5S implementation gets tracked at all levels of the organization; otherwise it can just get confined to one level without having enterprise impact and ownership of all individuals.

5S IMPLEMENTATION

A critical success factor in any 5S initiative is the implementation approach. Experience shows that an inept approach derails implementation and does not deliver the expected results. As a result, the movement does not take off as desired, and there is a tendency to blame either the methodology or the people involved.

A 5S journey must begin with a well thought-out road map. While there are many possible approaches, the one that has been designed and used by the author is discussed here.

Figure 4.3 outlines the steps involved in 5S implementation.

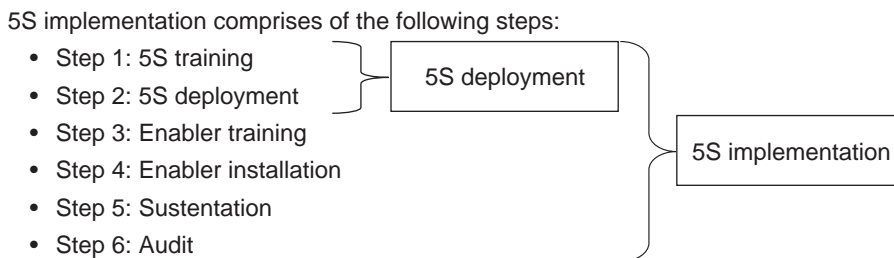


Figure 4.3 5S implementation steps.

5S Learning *5S Deployment versus 5S Implementation*

Deployment includes training and subsequent deployment. This is best delivered through 5S blitz. Implementation includes training on 5S, deployment, training on enablers, installation of enablers, and sustentation. In this book, the term “implementation” refers to all these steps.

5S Tactic

Precede the 5S Initiative with a Detailed Implementation Plan

Before commencing 5S implementation, ensure that a detailed implementation plan is laid out. The plan should be quite tight in terms of timelines to ensure the tempo is not lost. Organizations often fail because the desired pace is not in the implementation plan. For example, the complete implementation of 5S should not take too long. Also, enabler training should immediately follow the 100 percent deployment of 5S. Any laxity in timelines can affect the tempo of 5S.

Step 1: 5S Training

5S training takes the form of a classroom session done before the start of 5S implementation. This can take anywhere from half a day to one day. Training should not extend beyond a full day, because a good deal of material will be explained during the subsequent step of deployment.

The purpose of this session is to provide sufficient examples so that participants can relate the concept of 5S to their work.

Step 2: 5S Deployment

Deployment refers to the actual organization that happens immediately after training. Deployment entails ensuring that the offices are organized according to the principles of 5S. During this step, the concepts taught in training are applied in the workplace. This step should always be done under the guidance and supervision of a facilitator, preferably the person who taught the training sessions.

Steps 1 and 2 together are called 5S blitz.

5S Tactic

Facilitate 5S Deployment through a Project-Based Approach

5S implementation should be broken into a number of small areas, with each of them being treated as a project. Implementation of 5S in each of these areas should be carried out by way of 5S blitzes.

Steps 1 and 2 should be tightly managed and should be completed in three to four days (see Table 4.5). This ensures that there is a visible change in the workplace.

The duration of the deployment can be varied based on the area taken up. However, it is recommended that a uniform duration be followed throughout the organization based on the business type.

Table 4.6 outlines the 5S blitz durations the author has used in a financial services conglomerate. As Table 4.6 shows, the duration of the 5S training session must be at least half a day.

Table 4.5 Duration of training sessions.

Step	Duration
Training session	1/2 to 1 day
Deployment	1 1/2 to 2 1/2 days

Table 4.6 Duration of blitz in a financial conglomerate.

Business Type	Training Session	Deployment
Retail branch	1/2 day	2 1/2 days
Processing back office	1/2 day	2 1/2 days
Corporate office	1/2 day	1 1/2 days

5S Learning *5S Blitz Demystified*

Blitz refers to the deployment of 5S in a focused area with an objective to transform the workplace. This is achieved by 100 percent involvement of teams with a clear mandate to deliver major results. A 5S blitz is comprised of classroom training followed by implementation. The advantage of this approach is that what has been learned is subsequently implemented; as a result, learning is more powerful. This approach to deployment delivers the best value in an office setup within a short period of time.

Blitzes are about spectacular transformation of a focused area in an office. During a blitz, there is cent percent involvement of the team members; they should focus on the project and not get into day-to-day work.

Key features of 5S blitz are:

- It is about learning by doing (all that is learned in training is immediately implemented, so the learning is strengthened)
- It ensures remarkable improvement in a short time
- It ensures complete involvement of the team

Step 3: Enabler Training

After the deployment of 5S is completed in the entire office, an enabler training program must be conducted to familiarize teams with what needs to be done for sustentation. The enabler training program should be combined with a leadership program that teaches leaders how to sustain change through a movement like 5S.

An enabler training program should be structured as detailed in Table 4.7.

Table 4.7 Structure of enabler training program.

Content	Duration
Leadership elements for 5S	1/2 day
Enablers for 5S	1/2 day

5S Tactic

Content for the Leadership Elements for 5S Program

The leadership program should address the following:

- Concept of improvements
- Concept of PDCA (Plan, Do, Check, Act)
- Why 5S?
- How 5S fits into the larger quality/improvement road map
- Elements of changes
- Managing resistance to change through 5S

- Principles of measurements
- Concept of 5S
- Culture of root cause analysis through 5S
- Symptoms, apparent cause, and root cause
- Symptoms of 5S derailment

Chapter 5

Certification

Chapter Topics

- Difference between Level 1 and Level 2 Certified Workplaces
- Sustentation Prerequisites to Be Met Prior to Audits
- 5S Audit Criteria

Certification is not a must for 5S implementation, but it can be leveraged as a mechanism to provide assurance to management on the health of the implementation. A brief mention of this was made in Chapter 4. Audits can lead to certification. However, certification as a concept is relevant only in large organizations with multiple locations. I used it successfully in a large financial services organization in India that had more than 500 customer locations.

The certification program should be run by an independent unit, preferably the corporate 5S office. The 5S office should have a pool of qualified 5S auditors who can conduct audits on an ongoing basis.

The road map in Figure 5.1 shows an audit plan that can be followed by organizations undergoing enterprise-wide deployment of 5S across multiple locations.

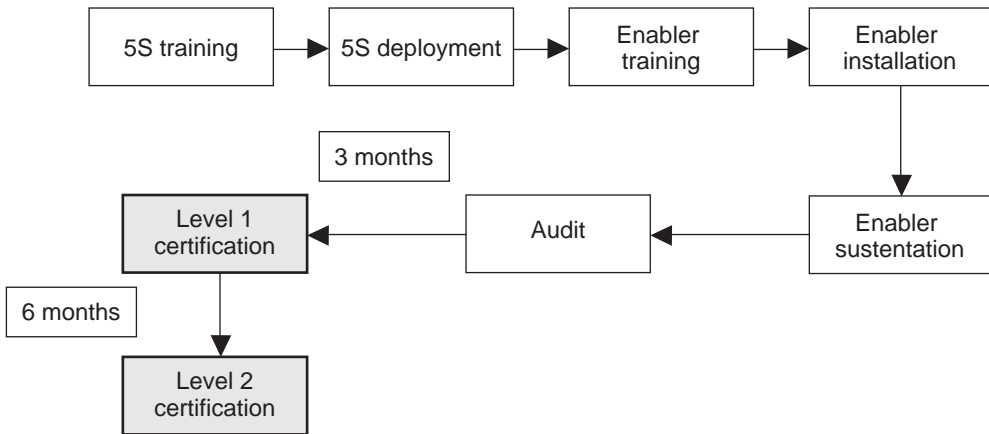


Figure 5.1 Certification road map.

DIFFERENCE BETWEEN LEVEL 1 AND LEVEL 2 CERTIFIED WORKPLACES

Level 1

A Level 1 certified workplace is one in which awareness of 5S has been established and small first steps have been taken to sustain the improvements. Key characteristics of a Level 1 workplace are:

- The workplace is organized and free of clutter.
- Needs, wants, and ownership are well defined.
- An inventory management system is in place.
- Measures of Performance, policies, practices, standards, and workplace rules have been defined.
- All enablers have been installed.

Level 2

A Level 2 workplace is one in which a system for workplace organization is functional with the active participation of employees. The workplace is visually managed and promotes efficient working. Key attributes of a Level 2 workplace are:

- Documents can be retrieved within 30 seconds.
- Root causes for disorganization have been identified and efforts taken to prevent them.

- Visible leadership to sustain 5S exists on an ongoing basis.
- Teams actively participate in FIST (5S implementation sheets) and daily meetings.
- Policies, practices, and workplace rules are followed.
- Enablers have started delivering value.
- Techniques for root cause analysis (such as the why-why analysis) are used regularly.

The gradation of Level 1 and Level 2 essentially tries to identify the two grades of 5S implementation. It has been found that this provides an excellent framework for pushing the 5S agenda within the organization.

SUSTENTATION PREREQUISITES TO BE MET PRIOR TO AUDITS

In order for an organization to achieve a Level 1 rating, the following conditions must be met:

- Sustentation for a period of three months after the installation of enablers
- Data, observations, and other evidence kept for a period of three months (the certification auditors will scrutinize these)

In order for an organization to achieve a Level 2 rating, the following conditions must be met:

- Sustentation for a period of nine months after the installation of enablers
- Data, observations, and evidence kept for a period of nine months (the certification auditors will scrutinize these)

5S AUDIT CRITERIA

The assessment of 5S implementation is done against a comprehensive checklist that endeavors to demonstrate the application of 5S principles.

The audit criteria are given in the form of checklists in exhibits 5.1–5.3. These checklists have been designed and used by me in a large financial services company. They can be customized and used in any service or office setup.

There are three checklists:

- Prerequisites (Exhibit 5.1)
- Level 1 checkpoints (Exhibit 5.2)
- Level 2 checkpoints (Exhibit 5.3)

Guidelines for Audits

The following are the guidelines that auditors should follow for 5S certification audits.

Criteria to Be Met Before the Audit

1. Before a workplace can be audited for Level 1, it must:
 - Fulfill all prerequisites
2. Before a workplace can be audited for Level 2, it must:
 - Meet criteria for Level 1
 - Achieve document retrieval within 30 seconds

Criteria to Be Met During the Audit

1. For Level 1 certification:
 - 100 percent compliance with prerequisites
 - 100 percent compliance with Level 1 checklist
2. For Level 2 certification:
 - 100 percent compliance with prerequisites
 - 100 percent compliance with Level 1 checklist
 - Document retrieval within 30 seconds
 - 100 percent compliance with Level 2 checklist

Prerequisites				
No.	Checkpoints	Yes/No	Where/Who Sampled	Remarks
1	Do employees understand 5S methodology? How has each individual deployed it in the workplace? It is expected that 100 percent of the people in the workplace meet this criterion. (New employees who joined the organization in the last 30 days are exempt from the sample.)			
2	Is there a 5S council that oversees deployment?			
3	Does the 5S council meet on a regular basis?			
4	Are 5S council members aware of their roles?			
5	Is there a workplace visual board in the workplace that is visible to all?			
6	Is the workplace visual board live and current?			
7	Is the content and language of the workplace visual board understood by all?			
8	Have the Measures of Performance (MOPs) for 5S been established?			
9	Do the employees understand how the MOPs are affected by them or affect them?			
10	Are the MOPs displayed on the workplace visual board so that employees know how they are performing in relation to the stated goals and standards?			
11	Does the workplace have a detailed road map for 5S implementation?			
12	Is 5S reviewed on a regular basis by the workplace head?			
13	Are the actions originating from the reviews being documented?			
14	Are action points from reviews getting closed on time?			
15	Are daily 5S meetings being held on a regular basis?			

Exhibit 5.1 5S audit prerequisites checklist.

(continued)

(continued)

Prerequisites				
No.	Checkpoints	Yes/No	Where/Who Sampled	Remarks
16	Are the daily meetings being attended by everyone on the shift?			
17	Are day-to-day workplace, process, and customer issues discussed during daily meetings?			
18	Is there a mechanism to enlist the participation of teams by offering opportunities to give suggestions for improvement (under FIST)?			
19	Are there procedures that facilitate timely resolution of suggestions (under FIST)?			
20	Are individuals informed when their suggestions are rejected for implementation?			
21	Is there a visible effort to improve participation in FIST?			
22	Are there inventories of all suggestions that are proposed, implemented, and rejected?			
23	Is there an effort to capture what is learned during implementation?			
24	Does the workplace have a 5S Champion and a stand-in (around whom deployment is anchored and who acts as an in-house expert)?			
25	Are before and after photographs of all 5S blitzes displayed on the workplace visual board?			
26	Is why-why analysis being used in the workplace to get to the root causes of problems?			
27	Does each employee know how to apply why-why analysis?			
28	Is a 5S MIS (management information system) or 5S comprehensive report generated on a regular basis? Are the data then passed on to the relevant person in regional/corporate office at scheduled intervals?			
29	Is 5S deployment threaded to the performance management/appraisal system of the members?			

Exhibit 5.1 5S audit prerequisites checklist.

Fulfillment of all prerequisites is a must before a workplace can be audited for Level 1.

Level 1 Checkpoints				
No.	Checkpoints	Yes/No	Where/Who Sampled	Remarks
1	Is the workplace clean and free of dirt, paper, and loose objects?			
2	Are the restrooms clean and tidy?			
3	Do all workstations have clear ownership?			
4	Do all workplaces have a clear purpose?			
5	Do all objects and work areas in the workplace have clear ownership? (Objects refer to computers, files, fans, air conditioners, 5S commonplace, storage rooms, etc.)			
6	Are there stand-ins for all ownerships?			
7	Does the workplace have clear criteria for needs and wants?			
8	Is there a needs and wants matrix in the workplace that identifies (a) items needed regularly, (b) items needed, but not regularly, and (c) items needed once a year or less (frequency to be based on what is relevant to the workplace)?			
9	Does the workplace have a blue tag register for tracking unwanted items and observed abnormalities?			
10	Is there a person responsible for maintaining the blue tag register?			
11	Is the blue tag register reviewed on a regular basis?			
12	Are all blue tag issues closed on time?			
13	Is there a mechanism to direct the pending blue tag items to the supervisor of the item owner?			
14	Do the blue tags have unique numbers for traceability?			
15	Is the blue tag register being filled out properly using the 5W1H (what, who, when, where, why, how) format?			
16	Is the concept of blue tags known to all the employees in the workplace?			

Exhibit 5.2 5S audit Level 1 checklist.

(continued)

Level 1 Checkpoints				
No.	Checkpoints	Yes/No	Where/Who Sampled	Remarks
17	Have all unneeded or wanted items been removed or blue-tagged?			
18	In cases where blue tag items have not been closed, has action been taken?			
19	Does the workplace have a proper inventory management system?			
20	Have the consumption patterns and reorder levels been worked for all items to facilitate better inventory management?			
21	Are there kanban cards in place that provide the required information, such as consumption levels, reorder levels, etc.?			
22	Are items ordered according to the stipulated reorder levels and frequency?			
23	Are office supplies stored in such a way that they are easy to find?			
24	Is there a 5S common place?			
25	Is the concept of a 5S common place known to all?			
26	Is the location of the 5S common place known and accessible to all?			
27	Have all items that are needed but are in excess quantities been identified?			
28	Have all items in excess quantity been moved to the 5S common place?			
29	Are movable blue tag items kept in the 5S common place?			
30	Is PEEP (a place for everything, everything in its place) evident in the 5S common place?			
31	Is there a plan to get rid of the items that are in excess quantity?			
32	Have the items in the 5S common place been inventoried?			
33	Are 5S commonplace items being disposed of according to the stipulated schedule?			

Exhibit 5.2 5S audit Level 1 checklist.

(continued)

(continued)

Level 1 Checkpoints				
No.	Checkpoints	Yes/No	Where/Who Sampled	Remarks
34	Are 5S common place items being moved to the storage area and not vice versa?			
35	Are there policies for disposal, inventory management, and retention of documents?			
36	Have workplace rules been established?			
37	Are there relevant procedures or work instructions that facilitate sustentation of workplace organization/5S?			
38	Are rules understood and followed by the employees?			
39	Are the tops of cabinets clear?			
40	Are there any hanging or loose wires?			
41	Are there any dead or unneeded electrical connections?			
42	Are employees aware of the purpose of the files that they own?			
43	Is there a clear separation between files that are needed regularly, needed but not regularly, and needed once a year or less?			
44	Have all old or torn files been replaced with new ones?			
45	Are all files labeled with the file number, starting date, closing date, owner, subject, etc.?			
46	Are period stickers on all files?			
47	Are files and papers disposed of according to the period stickers?			
48	Have all potential unsafe points been eliminated from the workplace?			
49	Is there a schedule for pest control and vermin elimination?			
50	Does the workplace have functional emergency equipment?			
51	Are emergency equipment (including fire extinguishers) and the emergency door easily accessible?			
52	Does the emergency equipment have stickers showing the replacement/refill date?			

Exhibit 5.2 5S audit Level 1 checklist.

Every document (including files, papers within files, and brochures) should be retrievable within 30 seconds. Without this condition being met, a workplace cannot qualify for a Level 2 Assessment.

Level 2 Checkpoints				
No.	Checkpoints	Yes/No	Where/Who Sampled	Remarks
1	Is PEEP being done as often as scheduled?			
2	Is the “go vertical” philosophy evident?			
3	Is there a mechanism (such as a layout plan) to clearly indicate who sits where and what is kept where?			
4	Is there a mechanism (such as elevation or index) in workstations to indicate what is kept where?			
5	Are people aware of intent behind the usage of plan and elevation in a workplace?			
6	Do the layout plans have “you are here” points?			
7	Are there signs or layouts to help customers reach a location without anyone’s help?			
8	Are customers able to reach the relevant workplace without anyone’s help (applies to a customer-facing workplace)?			
9	Are there visual indicators/directional signboards for the various areas in the workplace, such as the bathroom, break room, emergency exit, copy room, and kitchen?			
10	Do items in the workstations meet requirements and are they in the desired quantities?			
11	Are files color-coded by subject?			
12	Is there a master index to clearly indicate the storage areas of documents, files, records, and other items?			
13	Does everyone in the workplace know how to use the master index?			
14	Do employees know where the master index is kept?			

Exhibit 5.3 5S audit Level 2 checklist.

(continued)

Level 2 Checkpoints				
No.	Checkpoints	Yes/No	Where/Who Sampled	Remarks
15	Are there location indexes to support the master index and facilitate quick retrieval?			
16	Is the indexing effective enough to allow an individual to work in someone else's workstation?			
17	Have files been stored according to priority of use?			
18	Have all storage areas in the workplace been numbered to facilitate quick search and retrieval?			
19	Does the filing system allow individuals to retrieve any document without help (this does not include confidential documents)?			
20	Have the documents within files been arranged in a logical fashion (chronologically, by subject, etc.)?			
21	Have all files in the workplace been ordered and organized to facilitate quick retrieval?			
22	Are mistake-proofing devices such as poka-yoke bands used to facilitate the organization of files?			
23	Are individuals in the workplace aware of the intent behind mistake-proofing devices such as poka-yoke?			
24	Is root cause analysis being done to find out the causes for blue tag items?			
25	Are danger zones such as electrical control centers clearly marked?			
26	Is a list of required telephone numbers posted near the phones?			
27	Is there a PEEP (place for everything, everything in its place) for keys in the workplace?			
28	Has the owner of original and duplicate keys been identified?			
29	Are keys retrievable in 30 seconds?			

Exhibit 5.3 5S audit Level 2 checklist.

(continued)

(continued)

Level 2 Checkpoints				
No.	Checkpoints	Yes/No	Where/Who Sampled	Remarks
30	Have all CDs (compact discs) and floppy disks been properly numbered, labeled, and stored?			
31	Can CDs and floppy disks be retrieved within 30 seconds?			
32	Do all CDs and floppy disks have clear ownership and purpose?			
33	Do CDs and floppy disks have period stickers?			
34	Are there kanban cards for all items such as office supplies, forms, files, etc.? (This applies to workplaces such as storage areas and front offices.)			
35	Are the policies for retention, disposal, and inventory management followed?			
36	Are the workplace rules followed?			
37	Are procedures and work instructions followed?			

Exhibit 5.3 5S audit Level 2 checklist.

Chapter 6

Challenges in Deployment and Root Causes of Workplace Disorganization

Chapter Topics

- Managing Implementation Milestones
- Managing Resistance to Deployment
- Signs of 5S Derailment
- Root Cause of Workplace Disorganization
- 5S and Process Bottleneck
- The Next Wave of 5S Blitz
- Beyond 5S Implementation

MANAGING IMPLEMENTATION MILESTONES

It is important to realize that implementation may not be as simple as it appears. The deployment of 5S must be thought through and should be treated with care. It is recommended that the organization establish a solid project tracking mechanism that can help to track progress on a regular basis. Often organizations fail in implementation because they do not track important milestones. This is partly due to the mindset that 5S is simple and does not require a project management architecture. It is imperative that all relevant information be captured for managing 5S implementation.

The following are the fields of information that need to be tracked during a 5S implementation, especially when it is being rolled out across multiple locations:

- Name of the location
- Address of the location
- Area of the location
- Number of projects (to be done, pending, completed)
- Number of people at the location (employees, contract/outsourced)
- Number of people trained (employees, contract/outsourced)
- Days spent (on 5S training, deployment, and enabler training)
- Date of completion of deployment and enabler installation

Though there is a time dimension, it is recommended that the following traffic signals be used:

- Green indicates progress
- Yellow indicates delay
- Red indicates derailment or no progress

MANAGING RESISTANCE TO DEPLOYMENT

Implementation of 5S is not going to be easy. Be prepared to encounter resistance. It is the responsibility of the leadership team and the 5S Champions to look for potential resistance to change. Let us not forget the fact that we all love to keep our existing habits and practices. When it comes to change, not all team members are going to adopt 5S practices easily. Leaders should proactively look for resistance and address it. If not managed well, 5S will be adopted, adapted, and then rejected by team members.

There are two types of resistance that may be encountered during a 5S implementation: passive resistance and active resistance.

Passive Resistance

Passive resistance is silent opposition to 5S implementation. It is invisible and therefore difficult to detect. The following are examples of passive resistance that I have seen during 5S implementation:

- Showing indifference to 5S implementation
- Not participating in the 5S blitz

- Showing indifference during 5S meetings
- Not carrying out assigned 5S work
- Repeatedly missing daily meetings
- Silently influencing people not to get involved in the 5S movement
- Deliberately making mistakes

Active Resistance

Active resistance is vociferous opposition to 5S implementation. It is very easy to detect because the employee openly voices his or her opinions. The following are examples of active resistance that I have encountered during 5S implementation:

- Claiming not to have time for 5S due to work pressures
- Sending angry e-mails
- Complaining in meetings and labeling 5S as a huge burden
- Refusing to get involved in 5S deployment
- Outright arguing with Champions that 5S is not applicable in a service company
- Trying to disrupt 5S meetings with irrelevant questions

5S Learning *Passive Resistance Is More Difficult to Find Than Active Resistance*

Leaders have to be careful when looking for resistance. Passive resistance is more difficult to find. If not addressed, passive resistance can derail the entire 5S implementation. It is the responsibility of the leaders, office supervisors, quality head, and 5S Champions to proactively unearth this type of resistance.

SIGNS OF 5S DERAILMENT

Implementation of 5S is just the beginning. Leaders have to be watchful and should look for signs of potential derailment. When leaders do not

recognize or understand the symptoms of 5S derailment, it is a sure recipe for failure.

The following is a list of symptoms that indicate potential 5S derailment:

- Document retrieval time of more than 30 seconds
- Visible wastes at workplace
- Workplace appears cluttered
- Measures of Performance not defined
- Excess inventory not visible
- Stockouts of inventory items
- Customers not able to reach their desired locations
- Increase in customer inquiry response time
- Mix-up of items at the workplace
- Increase in office supply buying and requisition
- Items or areas without ownership
- Overflowing boxes and stacks of folders or files
- Higher noise levels than normal
- Loose electrical wires
- Significantly lower number of suggestions through FIST
- Pests and rodents in the workplace

ROOT CAUSE OF WORKPLACE DISORGANIZATION

Simply deploying 5S is not sufficient. It is important to realize that as 5S gets implemented, teams need to actively seek out reasons for their disorganization. Without unearthing the causes, an organization will never be able to institutionalize this movement. I have seen first-hand that when 5S implementation is not supported with root-cause analysis, it fails.

Remember, institutionalization of 5S is about effecting behavioral changes in the teams. When teams analyze why they behave the way they do, they not only address the right reasons, they also can put in place corrective actions to eliminate these occurrences in the future.

So, when teams deploy 5S in their workplaces, they should find out why they remain disorganized. The most useful tool for this is the why-why analysis.

The Why-Why Analysis

The why-why analysis is probably one of the most powerful tools for getting at a problem's root cause. It is so simple that anybody can use it, from the company president to the janitor. It does not require any special skills and involves only a few alignment sessions on how to apply it. The why-why analysis also helps the team to recognize the broad network of problem causes and the relationships among these causes.

A why-why analysis begins with stating the problem and asking why it exists. This question should evoke possible causes of the problem. The causes are effects of deeper causes, evoked again by asking "why?" This iterative process of evoking a cause that is used to evoke deeper causes continues until all causal chains terminate with root causes, factors that cannot be explained by anything else.

The following are the steps that you could follow to do a why-why analysis:

1. Write down a statement of the specific problem to be solved.
2. Ask why this problem does or could occur. List all causes in a box immediately to the right of the problem or below the problem.
3. Each of these statements now becomes a new problem statement. Again, ask "why?"
4. Create another box of cause statements. Draw arrows to the first box of causes to indicate relationships.
5. Continue to turn each cause into a problem and ask "why?" Do not stop until you reach an answer that is *fundamental* (company policy, procedure, systems, training needs, and so forth).

Root Cause Analysis for the Clutter in Tom's Workstation

In the example shown in Figure 6.1, the root cause for clutter in Tom's workstation is his not being able to differentiate between tasks that are urgent and those that are important. This reason would never have come to light under normal circumstances; it would have been concluded that Tom's workstation is cluttered because he does not put files back after he's done with them. This is clear evidence that 5S implementation is never going to be sustained and become a habit of the employees without training them to look at root causes.

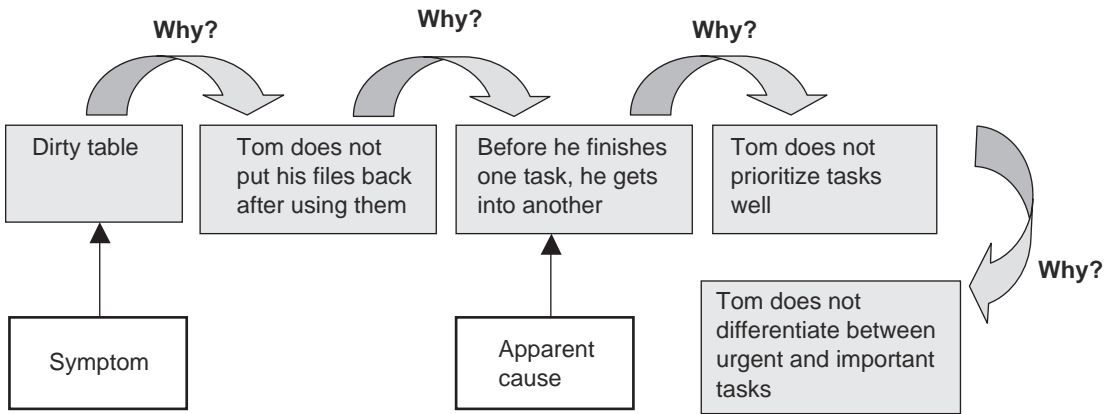


Figure 6.1 Root cause analysis to find workplace clutter.

Root Cause Analysis for the Clutter around the Photocopy Work Area

In the example shown in Figure 6.2, the reasons for clutter are reasons that no one would have imagined otherwise. While the manifestation of the problem is workplace clutter, the real issues are (1) operator training

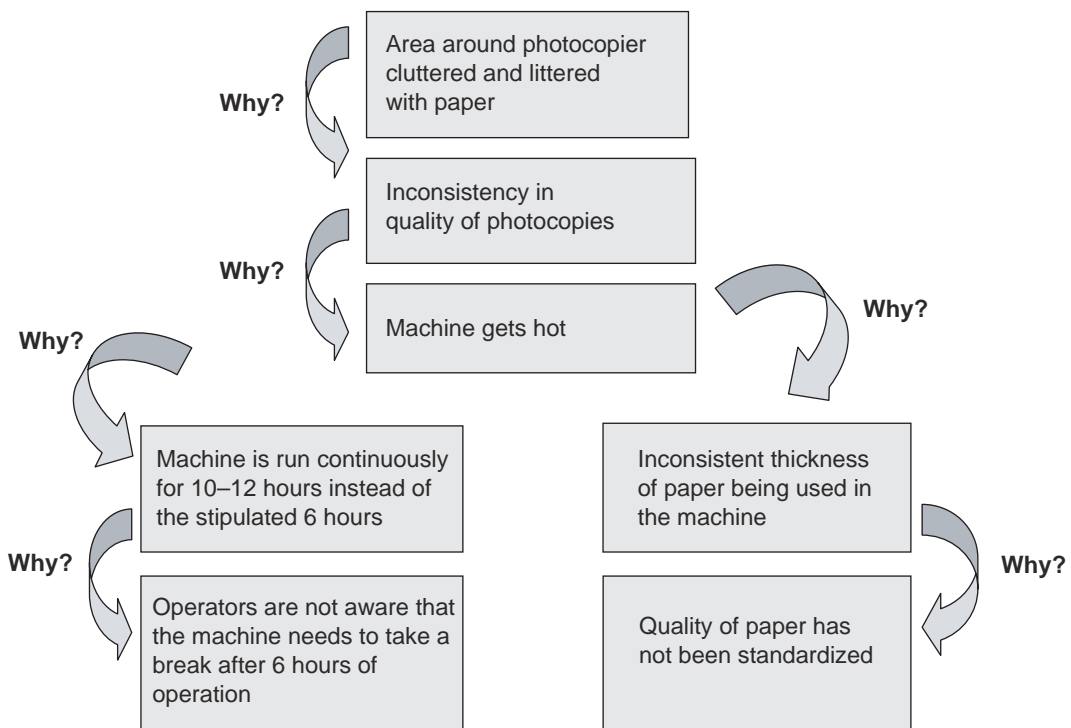


Figure 6.2 Root cause analysis to find clutter in a shared services area.

(not knowing the operating requirements of a photocopying machine) and (2) standardization of paper quality. Witness the power of a simple tool called why-why analysis!

5S AND PROCESS BOTTLENECK

Many times it may be found that workplace clutter is due to process bottlenecks. In these cases, just applying the principles of 5S will not solve the problem.

Take, for example, the loan processing workstations in the mortgage department of a bank I worked for. When 5S was being implemented in this department, it was found by why-why analysis that clutter in the process associates' workstations was caused by bottlenecks in the process. Upon further investigation, it was found that inept load balancing among the process associates was the main reason for mortgage files piling up in the workstations. In this case, simple application of 5S principles was not sufficient to resolve this problem. To address the problem I facilitated a Lean project, which finally removed the disparity in processing loads among the processing associates.

The message here is simple: Sometimes a Lean project may be required to address issues related to workplace clutter.

THE NEXT WAVE OF 5S BLITZ

The application of 5S blitzes does not come to an end with the completion of the first enterprise-wide deployment and installation of enablers.

Together with sustaining the enablers and 5S systems, the workplace needs to have a plan for the next wave of 5S blitz. This should be done after a period of one year or so. It might be argued that once 5S practices and enablers are institutionalized, another wave of blitz is not required. But because we live in a dynamic business environment, it is quite possible that the office may undergo a change. Also, things may have gone downhill since the first wave of blitz. The next wave helps to correct these aberrations and reinstalls the required 5S system. However, the next wave of blitz should only be done after a reasonable amount of time has passed. Remember, blitzes are not a substitute for sustaining 5S practices.

BEYOND 5S IMPLEMENTATION

5S is not the be-all and end-all of quality implementation in a service company. As mentioned earlier, 5S is not a panacea for quality problems

in an organization. 5S is extremely powerful but has its own limitations. Leaders need to remember that 5S implementation is a milestone in a service organization's quality journey, not the destination.

Organizations need to appreciate that like all quality methodologies, 5S has a lifecycle. It has its uses, which should be extracted to the fullest, but organizations should clearly plan for what needs to be done beyond 5S. This does not mean that the organization should jettison 5S practice after it has been implemented company-wide. It only means that they should sustain the benefits, make 5S an integral part of the organizational fabric, and move on to reap benefits from other quality methodologies that will propel the company up the improvement spiral. I have seen organizations struggle to figure out what to do after the power of one methodology has been realized to the fullest. This is because they have not thought through the larger picture and what a methodology can and cannot deliver. It should be noted that some of these methodologies take years to seep deep and wide into the organization. So there will never be a point when organizations have a lack of improvement frameworks. If anything is lacking it will be a well thought-out improvement road map.

The following are a few dos and don'ts for service companies that decide to adopt 5S:

- Before setting out on 5S implementation, firm up a quality/improvement road map that clearly states the larger objective and what comes after 5S. Ensure that this road map is signed by the CEO and, if possible, by the company's board.
- 5S implementation should be enterprise-wide. Do not confine 5S to a few pockets of the organization. The real value addition to business is visible when 5S is implemented simultaneously in all workplaces of the organization, engaging all its employees.
- For service organizations that have not begun their quality work, 5S can be an excellent methodology for launching their improvement journey. It not only creates a quality mindset but also engages the entire organization in improvements.
- If quality practices are already in place in the organization, make sure 5S is threaded to them effectively. The worst thing an organization can do is position two improvement approaches at cross-purposes. Conceptually all quality frameworks have synergies. The edge is in being able to mesh them in such a manner that they become complementary.

- Do not adopt 5S because it is being done by your competition. Launch 5S when your CEO sees value in it and has agreed to spend time on it. Do not get into an enterprise-wide implementation of 5S without your CEO's support. If you do, the implementation has a high risk of failure.
- Completing 5S deployment is just the beginning of sustention challenges. Leaders have to have to take sustention as seriously as deployment. This must be done until 5S practices become a part of the organizational culture. This does not happen easily and takes a lot of time.

Appendices

In the interest of standardization, it is recommended that these templates be generated centrally and used by all departments in the organization.

Appendix A

File Label—Box Files

Place these on the sides of box files for easy identification.

The diagram shows a rectangular file label with a height of 9.5 inches and a width of 2.75 inches. The label contains the following fields:

- File no.:
- Date:
- From:
- To:
- Retention period:
- Disposal date:
- Subject:
- Owner:

Version 1.1

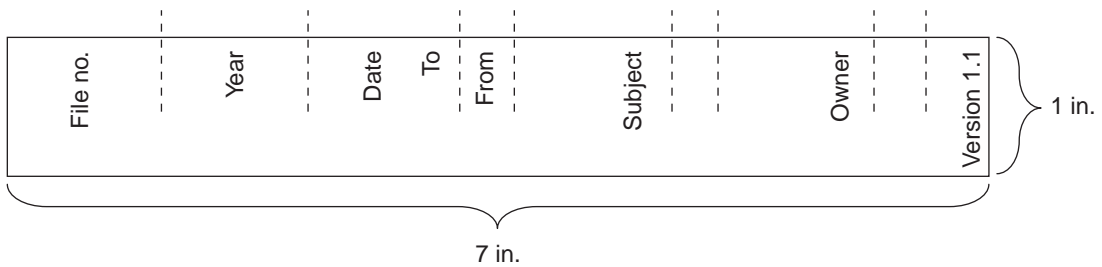
9.5 in.

2.75 in.

Appendix B

File Label—Flat Files and Registers

Use these for labeling flat files and registers. Flat files require different types of labeling because they are generally not hardbound.

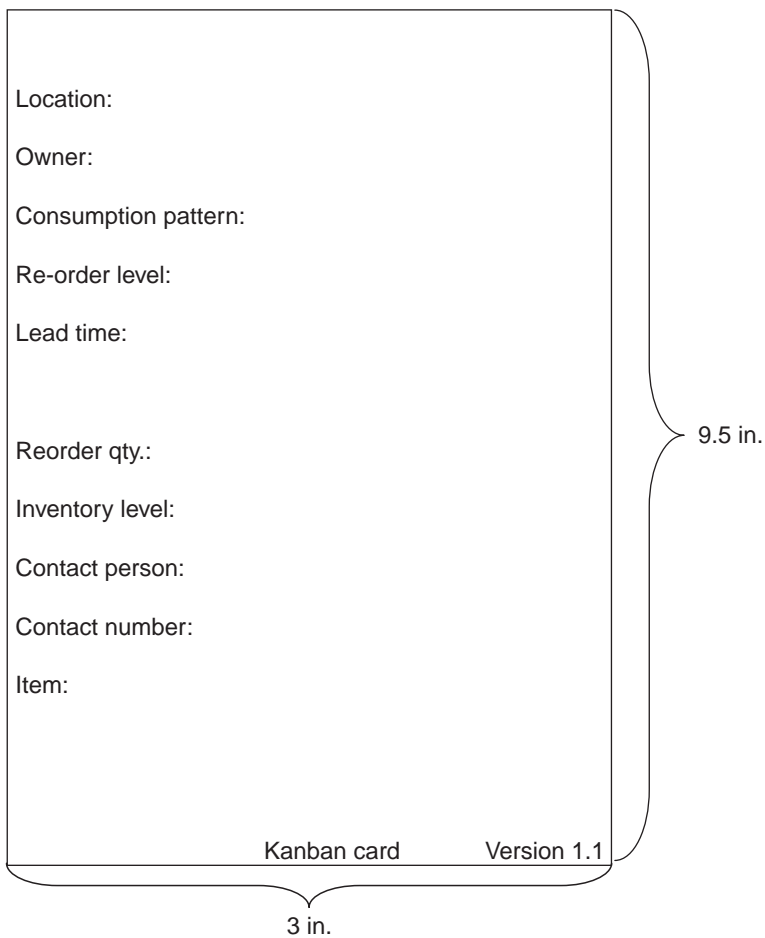


Notes:

- The paper should be white and the text should be black.
- The label should have self-adhesive backing.

Appendix C

Kanban Card



Note:
The card should be white and the text should be black.

Appendix D

Period Sticker

Version 1.1	
Period sticker	
File no.	
Subject	
Starting date	
Closure date	

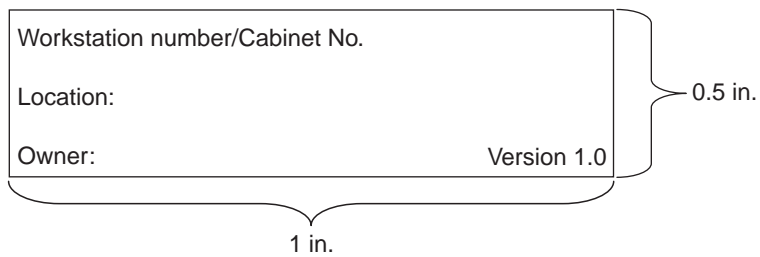
3.5 in.

2 in.

Note:
The paper should be white and the text should be black.

Appendix E

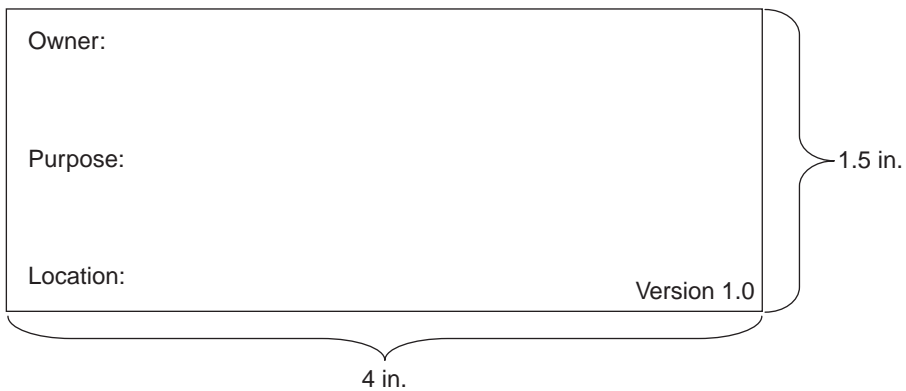
Key Label



Note:
The font should be Zurich BT 8.

Appendix F

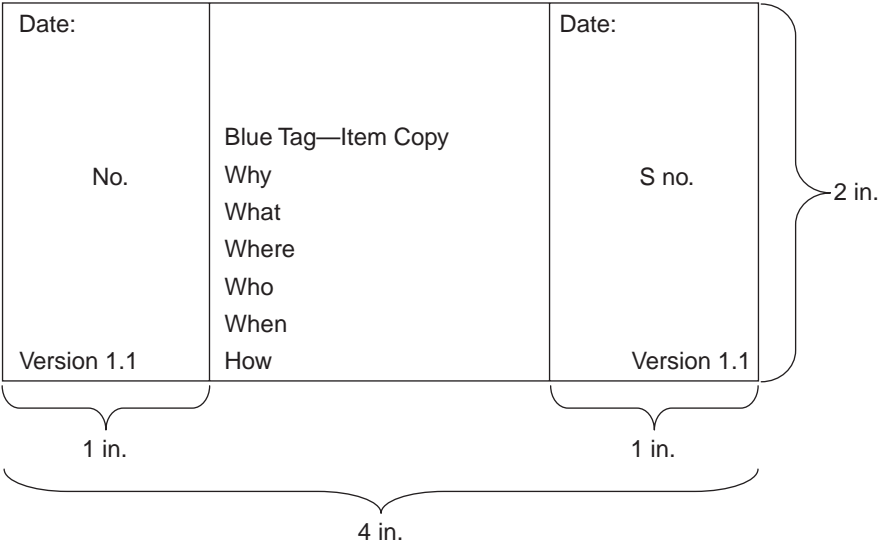
Tray Label



Notes:
Type: Self-adhesive
The text on the tray label should be black. The font should be Zurich BT 11.

Appendix G

Blue Tag




Notes:
The blue tag should be blue in color.
The text on the blue tag should be black.
The blue tag should have self-adhesive backing.
The font should be Zurich BT 11.


Appendix H

Blue Tag Register—Review Format

Blue Tag Register Review Schedule					
					Version 1.1
No.	Reviewer's name	Planned date	Actual date	Remarks	Signature



7 in.



9.5 in.

Notes:
This register has to be a hardbound register. All the details should be filled in by hand.
This schedule should be made on the first page of the blue tag register.

Appendix I

Blue Tag Register

Blue Tag Register								Version 1.1	
Blue tag no.	Date of blue tagging	What	Where	Who is responsible for taking action	Why	When	How	Actual closing date	Remarks

8.5 in.

11 in.

Notes:
 This register has to be a hardbound register. All the details should be filled in by hand.
 The blue tag register could also be maintained electronically. However, the above template should be used.

Appendix J

Master Index

Master index Updated on:		Version 1.1
No.	Item name	Location

Notes:
The master index should be printed on 8½ × 11 or A4 size paper.
The paper should be white and the text should be black.
The font should be Zurich BT 11.

Appendix K

Location Index

The location index is linked to the master index.

Filing cabinet index Updated on:			
Index for cupboard no.			
File no.	Item/File name	Owner	Location

Notes:
The index should be printed on 8½ × 11 or A4 size paper.
The paper should be white and the text should be black.
The font should be Zurich BT 11.

Appendix L

Ownership Matrix

Use this template to help define the ownership of items.

Ownership matrix Updated on:			
No.	Item name	Owner	Stand-in

Notes:
The index should be printed on 8½ × 11 or A4 size paper.
The font should be Zurich BT 11.

Appendix M

Need-Want Matrix—Deployment

Use this template for a need-want matrix during deployment.

Need-Want Matrix—During Deployment							Version 1.1
Updated on:							
No.	Item name	Needed regularly	Needed but not regularly	Needed but not in large quantities	Wanted but not needed	Scrap	Action to be taken

Notes:
 The index should be printed on 8½ × 11 or A4 size paper.
 The paper should be white and the text should be black.
 The font should be Zurich BT 11.

Appendix N

Need-Want Matrix

Use this template once 5S deployment has been completed.

Need-Want Matrix—After Deployment								Version 1.1
Updated on:								
No.	Item name	Needed daily	Needed weekly	Needed monthly	Needed once per quarter	Needed semi-annually	Needed once a year	Wanted

Notes:
 The index should be printed on 8½ × 11 or A4 size paper.
 The paper should be white and the text should be black.
 The font should be Zurich BT 11.

Appendix O

Autonomous Maintenance Calendar

Autonomous Maintenance Calendar						Page no.
Updated on:						Version 1.1
No.	What	Who	When	At what frequency	Signature	Remarks

8.5 in.

11 in.

Notes:
The register should be maintained for the AMC.
The paper should be white and the text should be black.
The font should be Zurich BT 11.

Appendix P

Bin Card

Use bin cards to track inventory levels in a 5S common place. (In storage areas, use kanban cards.)

Bin Card Page no.:

					Version 1.0
Item	Date	Opening balance	Stock in	Stock out	Closing balance

8.5 in.

11 in.

Notes:
The paper should be white and the text should be black.
The font should be Zurich BT 11.

Glossary

- 5S**—A methodology designed to create an organized and efficient workplace with an underlying theme of waste elimination through involvement of people.
- 5S blitz**—Spectacular and rapid improvement in a focused area carried out in a short period of time.
- 5S Champion**—The in-house 5S expert. He or she not only is adept in the 5S methodology but also understands the philosophy of improvement.
- 5S charter**—A road map that a workplace establishes for implementation. The charter is the commitment that an office makes to the organization on 5S.
- 5S common place**—An area in the workplace/office used for storing excess inventory and movable blue tag items.
- 5S council**—The leadership team of an organization that leads 5S and other quality implementation. The council should be chaired by the CEO. The council oversees the implementation and reviews progress on an ongoing basis.
- 5S Evangelist**—An employee who supports the Champion on 5S implementation and sustainability.
- 5S help desk**—A resource set up during 5S implementation that supports the teams and answers questions related to implementation.
- 5S implementation sheet (FIST)**—The mechanism for gathering employee suggestions for improvements. The idea behind the implementation sheet is that when employees see their ideas being implemented, their sense of ownership increases and they feel motivated and empowered.
- 5S office**—An administrative subset within the organization that monitors implementation.
- autonomous maintenance calendar**—A matrix that outlines the cleaning and inspection schedule.
- blue tag**—A self-adhesive label used to identify items that are not needed in the workplace. Blue tags serve as reminders to take action in future. They have two parts. One part is placed on the target item and the other part goes in the blue tag register.
- blue tag register**—A register to track the status of blue tags.

- enablers**—Things that the organization has to act on to facilitate the sustainability of the 5S movement. These can be pooled together and put in the following categories: structures, people, processes, infrastructure, and policies.
- ground zero walks**—Leaders walking around the offices and workplaces to get a feel for what is happening.
- just-in-time production**—A methodology that focuses on producing and delivering the right items at the right time in the right amounts.
- kaizen**—An improvement philosophy that focuses on small incremental improvements with the objective of creating more value and eliminating waste.
- kanban**—“Visual signals.” Kanban is a tool for managing and assuring just-in-time production. It is an important pillar of the Toyota Production System.
- Lean thinking**—The approach propounded by James Womack and Daniel Jones in their book *Lean Thinking*, published in 1996, to guide an organization on its journey toward Lean transformation. The five principles of Lean thinking are (1) Specify value, (2) Identify the value stream, (3) Make value flow without interruptions, (4) Let customers pull value, and (5) Pursue perfection.
- location index**—A list of all the documents and records in each of the areas in the office.
- master index**—A complete listing of all documents and records in the office and their locations.
- Measures of Performance**—Metrics tracked to ascertain the quality of 5S implementation.
- need**—An item needed for effective functioning of a workplace. Needs should be present in the right quantity and should not exceed requirements.
- non-value-added work**—Any activity for which the customer is not willing to pay and that adds cost or time.
- orphan**—Any item in a workplace that does not have an owner. Ownership of an item helps ensure its upkeep and maintenance.
- ownership**—The principle that if someone is made responsible for an item, it will be better taken care of.
- ownership matrix**—A listing of ownership of all items in a workplace. It lists the items with their primary owner and stand-in.
- poka-yoke**—A mistake-proofing device for the prevention of defects popularized by Shigeo Shingo. He differentiated “mistakes” from “defects.” The former are inevitable, while the latter result when a mistake reaches a customer. The focus of poka-yoke is to design devices that prevent mistakes from becoming defects. A common example of a poka-yoke is the debit card that cannot be inserted upside down in an ATM.
- policies**—Boundary conditions within which employees should operate. Policies lay down the rules to be followed to ensure that actions and decisions are within the stated boundaries.
- problem**—The gap between the current state and the desired state. According to Gerald F. Smith, problems fall into the following categories: conformance problems, unstructured performance problems, efficiency problems, product design problems, and process design problems.

- problem prevention**—The steps taken to prevent the occurrence of a problem. The focus is to anticipate problems, determine their likely causes, and implement preventive measures. Build a culture in which people look for signs that problems will occur shortly.
- procedure**—A sequence of steps to execute a routine task. It details the steps to be taken to produce a desired output. Policies are generally backed by procedures.
- purpose**—The reason why a workplace exists. The purpose helps to focus 5S implementation on delivering direct benefit to the workplace owner.
- retrieval time**—The time taken to retrieve a document from storage.
- six-month test**—A test used to ascertain the utility of an item in a workplace. If an item in your workplace is not used for six months, it is probably a want, not a need.
- standards**—The acceptance criteria for judging the quality of a product or service.
- total predictive maintenance**—A methodology that aims to maintain flawless machines in a workplace with the objectives of achieving zero breakdowns and zero defects. Though it evolved out of the principles of preventive maintenance, it focuses beyond machines on people, process, systems, and environment.
- Toyota Production System**—The production system developed by Toyota Motor Company that focuses on providing impeccable quality at the lowest cost in the shortest lead time by eliminating waste. Taiichi Ohno is credited for developing this model and subsequently implementing it at Toyota in the 1950s, 1960s, and 1970s. In the United States, its dissemination began with the creation of a joint venture with General Motors in 1984. The principles of the Toyota Production System have universal applications across industries in the manufacturing and services sectors.
- wants**—Items that are not needed in a workplace. They are stored with the thought that they might be required in the future, but they are never actually used.
- waste**—Activities that consume resources and for which the customer is not willing to pay. These activities add cost or time. As proposed by Taiichi Ohno, wastes can be of seven types: waste of overproduction, waste of waiting, waste of transportation, waste of processing, waste of inventory, waste of motion, and waste of defects.
- why-why analysis**—A technique propagated by Taiichi Ohno wherein repeatedly asking “why” helps get to the root cause of a problem.
- workplace**—Locations where activities benefiting the organization are carried out.
- workplace owner**—The person responsible for a workplace.
- workplace rules**—The rules that state the dos and don’ts of a workplace.

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