

Top Tips for Implementing 5S into Your Organisation



Presenters

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About Us

Many Cap Consulting Ltd is a Christchurch NZ based Consultancy Company specializing in Operational Excellence, Quality Management Systems & Organisational Health.

We help organisations with

- Lean / 6 Sigma / Continuous Improvement Programs
- Productivity / Throughput Improvement / TOC
- ISO9001 Quality Systems
- Business Strategy & implementation

We are also a NZTE Regional Business Partner



Overview of the Session

- Very Brief summary of what 5s is and where it came from
- How does it fit with the larger LEAN / C I Framework
- Where to Start 5s / how to Launch it or Sell It
- Step through each of the stages of 5s and highlight some tips for success
- Q&A

Why 5s & it's Origins

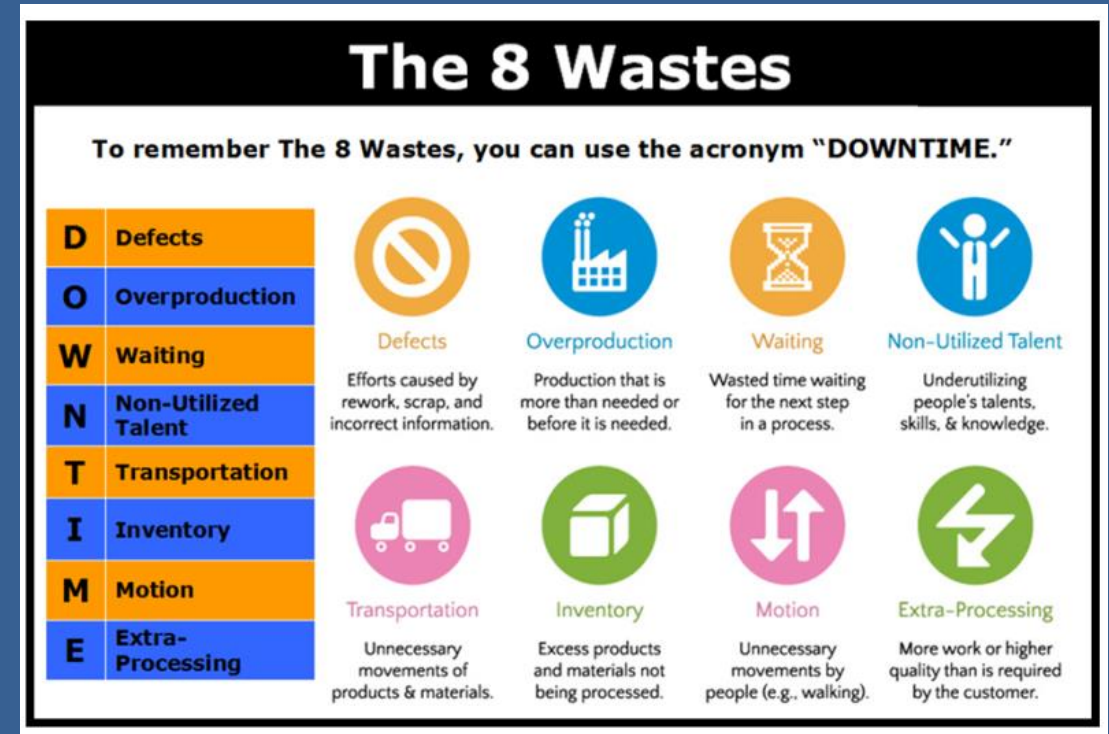
- 5s is one of the many tools in the LEAN toolbox and the 1st one you should use.
- 5s's focus is about eliminating waste & is a great way of introducing the thinking around waste.
- It's simple(ish) to put in and quick to do
- It's an incredibly visual process
- It will improve quality, delivery, safety, machine maintenance and staff moral!*
- 5s is actually just basic Industrial Engineering!

5s Origin

It was originally started in the US by Henry Ford as **CANDO** (*Cleaning up, Arranging, Neatness, Discipline and Ongoing improvement*) before being adopted as Japanese 5s by Hiroyuki Hirano.

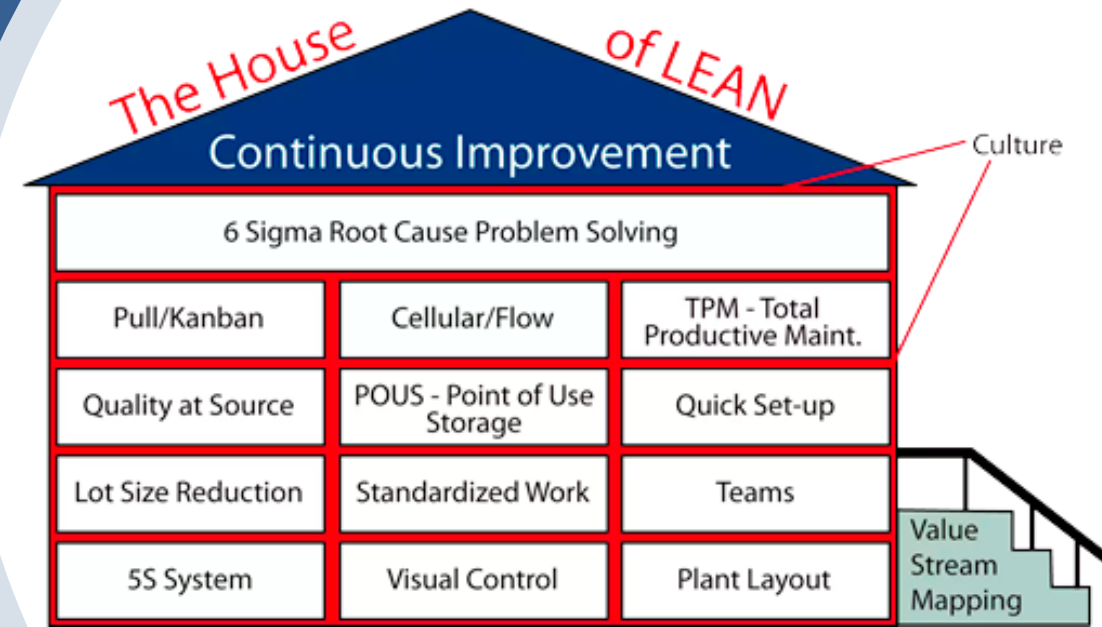
5s is about Removing Waste!

- With 5s you can
 1. Reduce space for WIP = less WIP = Less DEFECTS
 2. You can't store as much so no Over production
 3. Things are where you need them = less (no waiting)
 4. Everyone is involved
 5. Since everything has a place you have less transportation
 6. Now everything is moving faster you need less inventory
 7. Because you did the sort you don't have as much motion because again, things are where you need them.
 8. Since you now have room to ensure the standards are clear on what is required you have less extra processing



How Does It Fit With LEAN

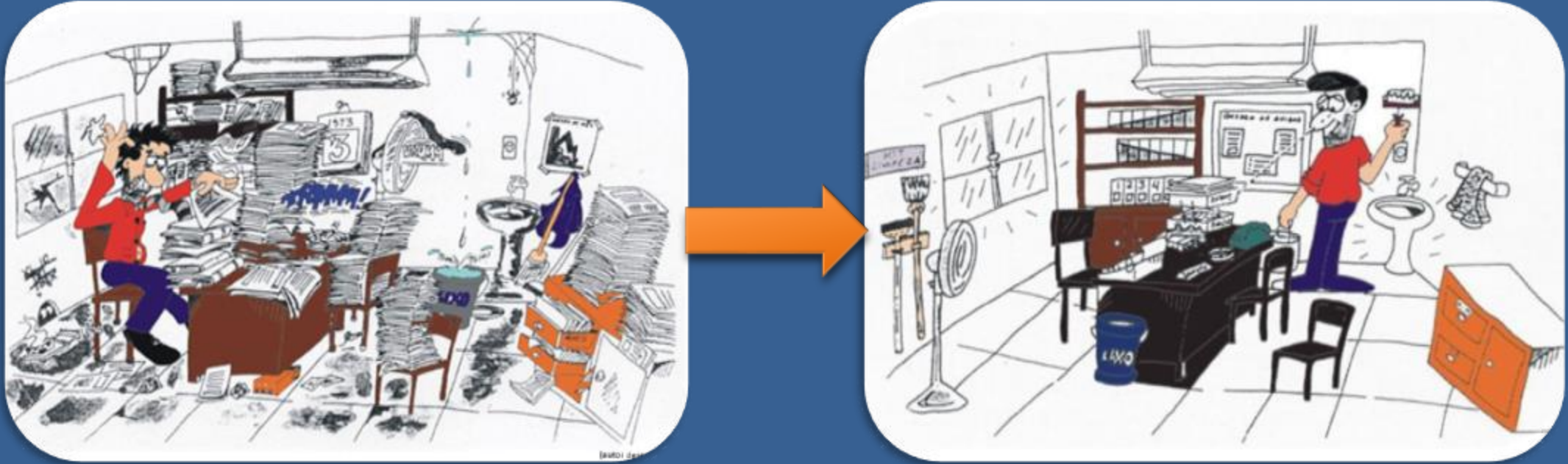
- Hopefully it's clear here, it's a foundational element of LEAN.
- We encourage any organisation who wants to become LEAN to start with 5s.
- It builds the new thinking and tests the organisations real desire to go LEAN without injecting too much time or cost.
- It is 100% aligned to PDCA



The Mythical 6th S - Safety

- There is no 6th S... only 5
- Safety should never be split out from your thinking
- If you intend to have a safety culture then it needs to be part of everything you do by default.





Hints for Implementation

Selling to the Organisation

- You are going to have to sell why you are doing this so at every level base your pitch on WIIFM – **W**hat's **I**n **I**t **F**or **M**e
- Make it clear you can only move forward with the Snr Mgt involved
- Design a communication plan for the project – who needs to know what, when, why and what outcome do you need

Only Move Forward If...

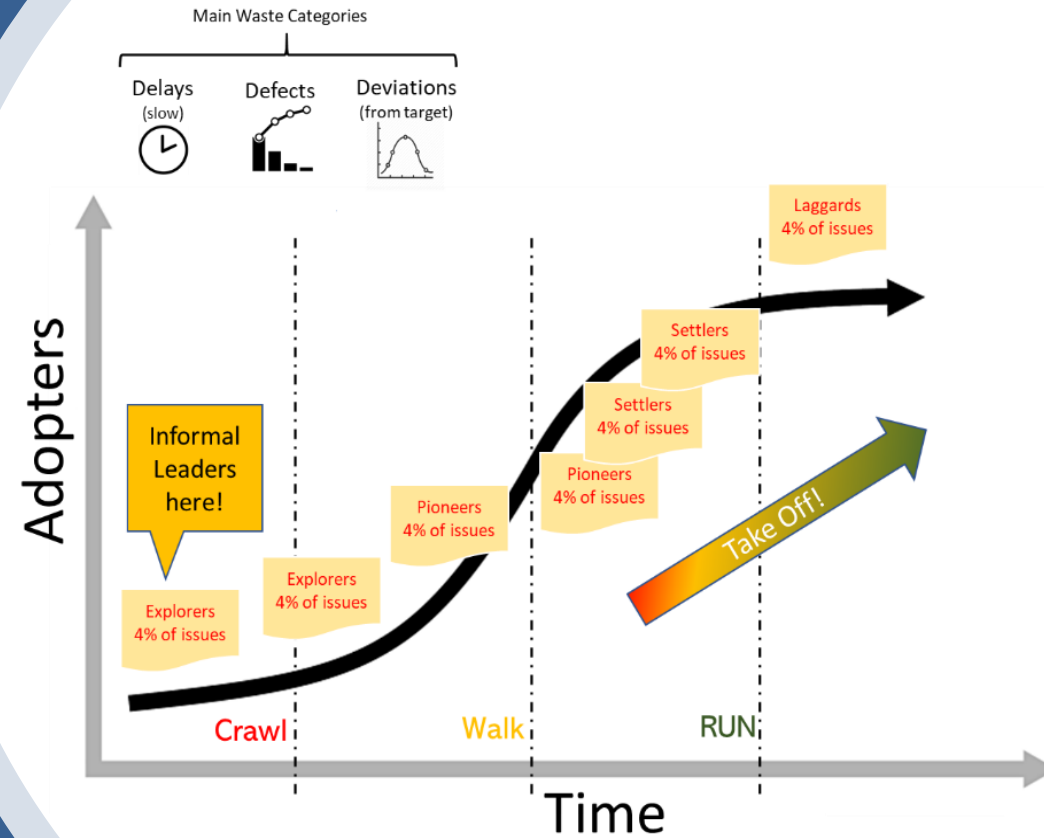
- You have Snr Mgt On board & involved!
- You have a budget
- You have agreed resources

Examples of Benefits

- Reduction in Safety incidents – slips, trips, falls, cuts, MTI / LTI
- Increase in throughput within the process
- Reduction of WIP (this is a big driver of throughput increase)
- Reduced Maintenance costs
- Improved accountability
- Improved Visual Factory
- Improved Morale

Think Crawl, Walk then Run

- Start small, not as a big bang
- You should pick only 2 areas to start the project
 - 1 in the Office (ideally of the sponsor)
 - 1 in the factory / main work space.
- Be picky about who you involve in the pilot program
- If they don't know each other have a pizza launch



Before You Start – make a plan!

- 5s is a step by step not all at once! you need to work through each of the 5 steps fully before moving on to the next.
- Expect to spend a longer time than you think in the 1st 3 steps
- Go for the *Goldilocks Approach* – i.e. do not pick the worst area or the best area to start the improvement, find somewhere that is about average.
- Ensure you have Space, Floor Marking Tape (a range of sizes), a Laminator, a label maker and a company Colour Scheme

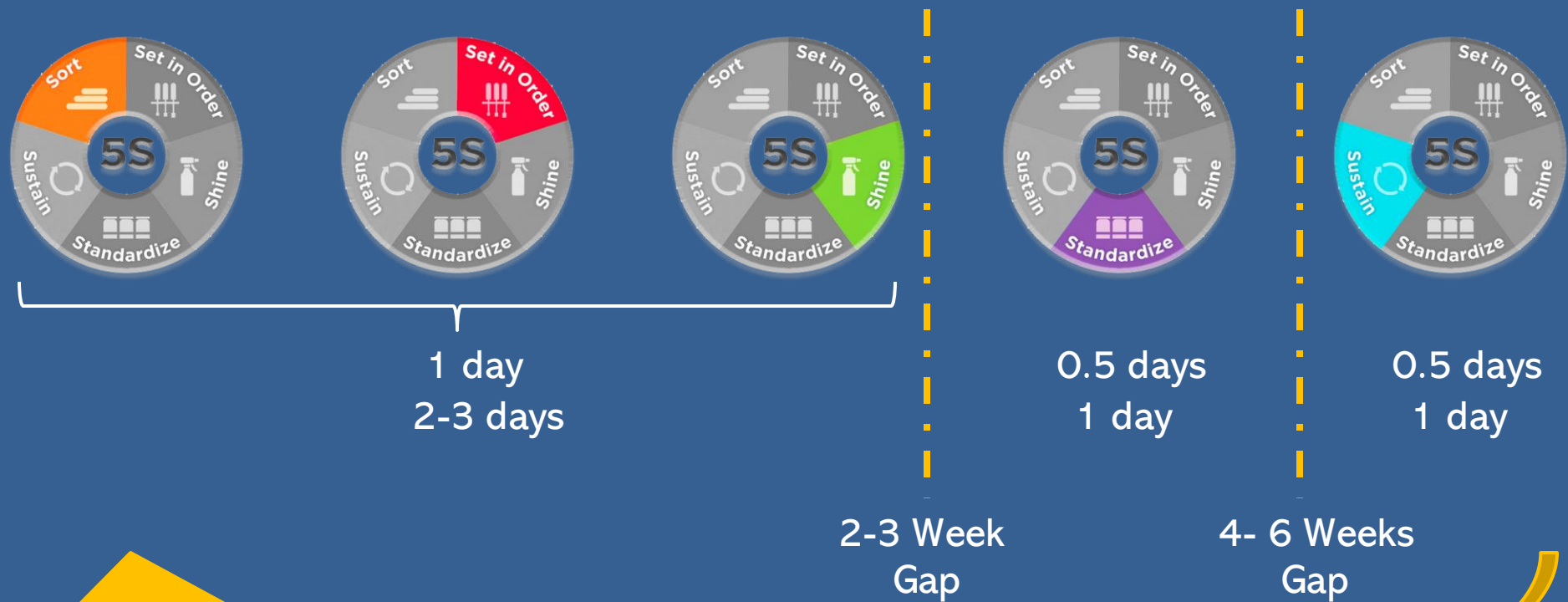


Colour Schemes

- Use tape to make clear what area's are for
 - Plan what your colours will indicate and publish that.
- Here is a typical example of a colour scheme for floor / area marking
- The idea is to be able to look and know what something is within 3 seconds!

YELLOW	Aisle ways & Traffic Lanes; Paths of egress & work cells
WHITE	Racks Carts & Benches
RED	Defect / Scrap; Red Tag Areas
GREEN / WHITE	Material or Product Inspection (QA)
GREEN	Finished Goods
BLUE	Raw Materials
BLACK/YELLOW	Areas which present a physical or health risk to employees
RED/WHITE	Areas to be kept clear for safety reasons
BLACK/WHITE	Areas to be kept clear for Operational Purposes

Timeframe – it's not a 1 day thing



Turn Training into Games To Sell & Learn

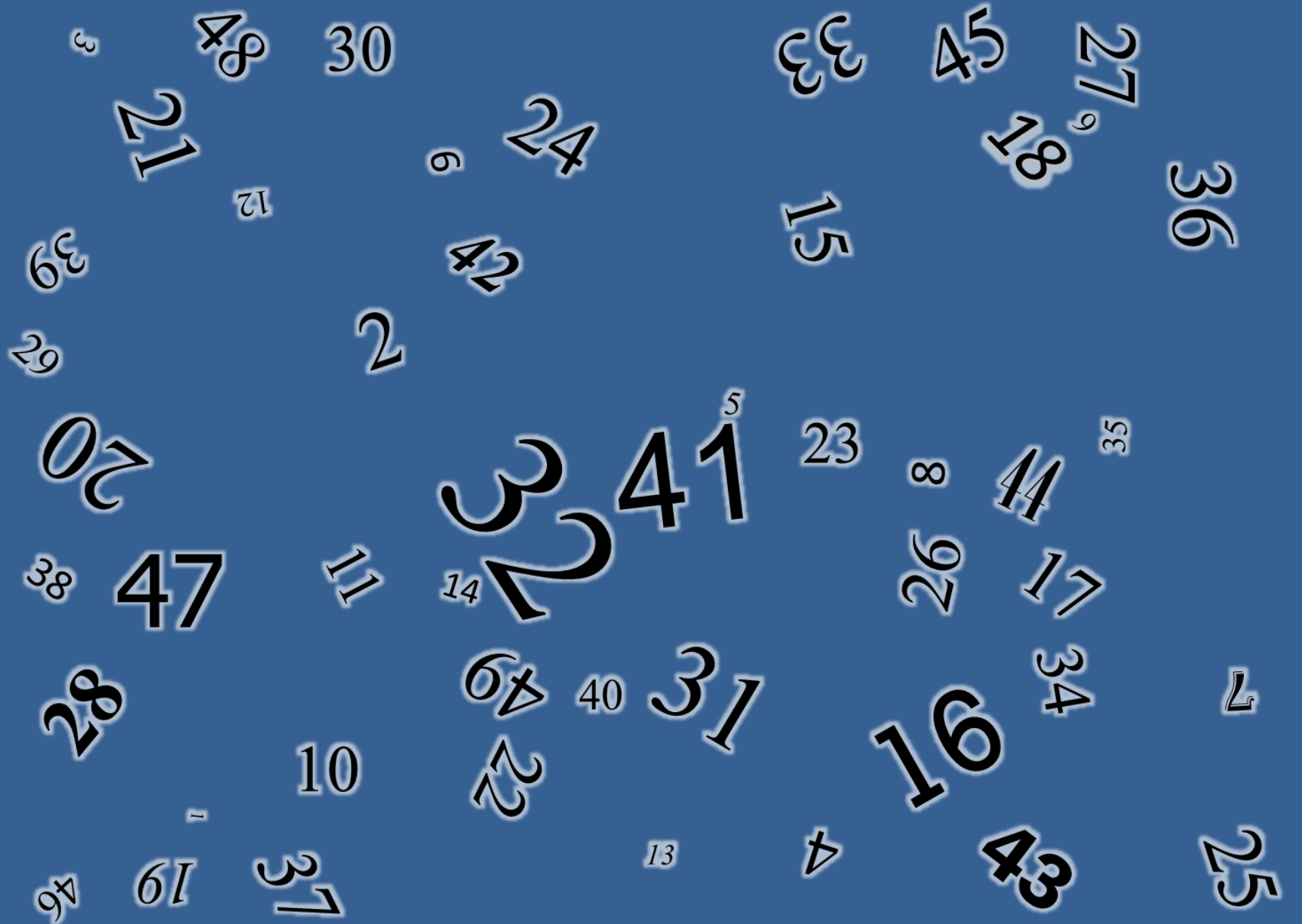
- Gamification - There is a whole heap of research that tells us people learn faster if they are actively engaged and quicker still if it's a game.
- Games don't have to be really expensive.
- Example... Put these numbers in order..



15 4 TIMES UP 16



15
4
TIMES
8
4
2
1



15 4 TIMES UP 2 1 6

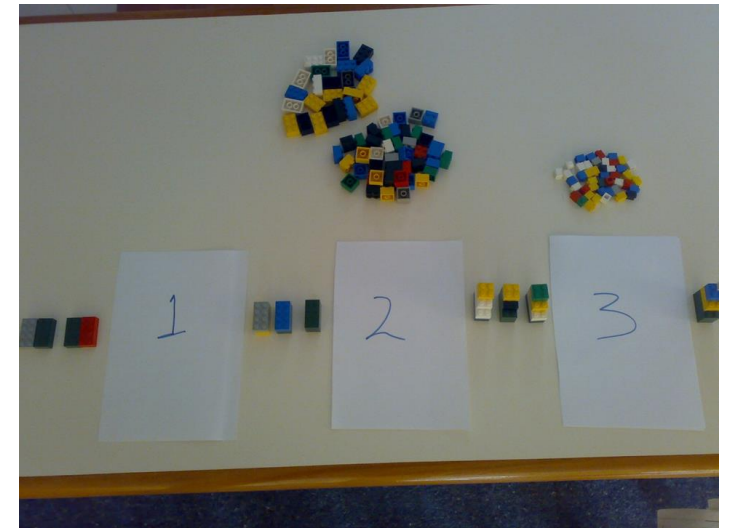


15
4
TIMES
8
UP
2
6
1

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	

Why The Game Works

- Starts off really really messy but all the information you need is right there.
- As you step through you each of the 5s steps you get quicker & the result gets easier to achieve.
- People are interacting with each other & joking, how many did you get etc.. There is competition
- If you can dish out chocolate fish for the winner at the end even better.



Sort – Get Rid of what Isn't needed

- This is a challenging step you are asking people to move out their **comfort zone**.. be patient (ish)
- Photograph the area before you start!!!
- Don't start until you are ready to do the entire SORT step in one go!
 - Have LOTS of red Tags & Red Tag Area ready
- Ideally Empty everything out the area you are Sorting and have it justify it's way back in.



Red Tag Area

- Make the Red Tag Area Highly Visible & Smaller than you think you need!
- Set the Criteria on what gets red tagged and how it gets assessed
- Keep a log of what you are putting in there (just in case it escapes!)

RED TAG

General Information

Dept./Unit: _____ Tag#: _____

Date: _____ Tagged By: _____

Item Name: _____ Serial: _____

Asset Code: _____ Value: _____

Quantity: _____

Category

☐ Instruments/Gauges ☐ Equipment

☐ WIP/Raw ☐ Medication

☐ Finished Goods ☐ Patient Items

☐ Docs/Tools ☐ Office Materials

☐ Supplies ☐ Furniture

☐ Other: _____

Reason for Red Tag

☐ Not Needed ☐ Used Unknown

☐ Beyond Expiry Date ☐ Not used 16 mo.

☐ Borrowed ☐ Defect

Other: _____

RED TAG

Classification

☐ Hazardous ☐ Non Hazardous

Disposition

By: _____ Dept: _____

Action to Take

☐ Discard ☐ Move to Storage

☐ Return to Owner ☐ Use

☐ Repair ☐ Replace

☐ Move to Red Tag Holding Area

☐ Other: _____

Additional Comments

BRN/A Log No.

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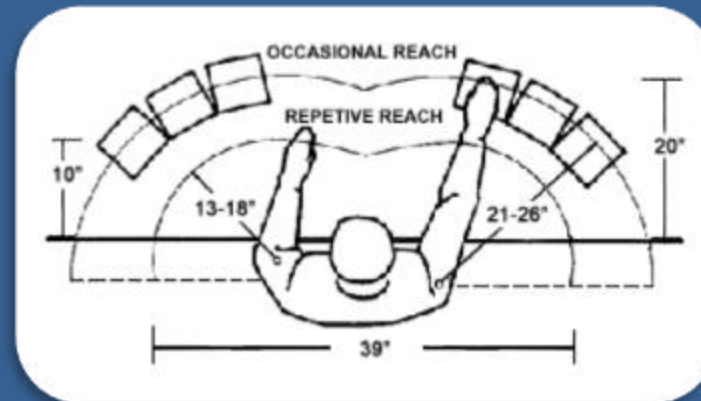
Evaluate the Actions To Be Taken

- For each tagged item record the decision that has been taken.
 - Keep – find a new location close by, in storage
 - Disposal (Sell or Scrap)
- Always do this by agreement with both the team & other interested parties.
- Allow 2-3 days for people to review the proposed actions & sign off on them before executing the action
- Update your Log!



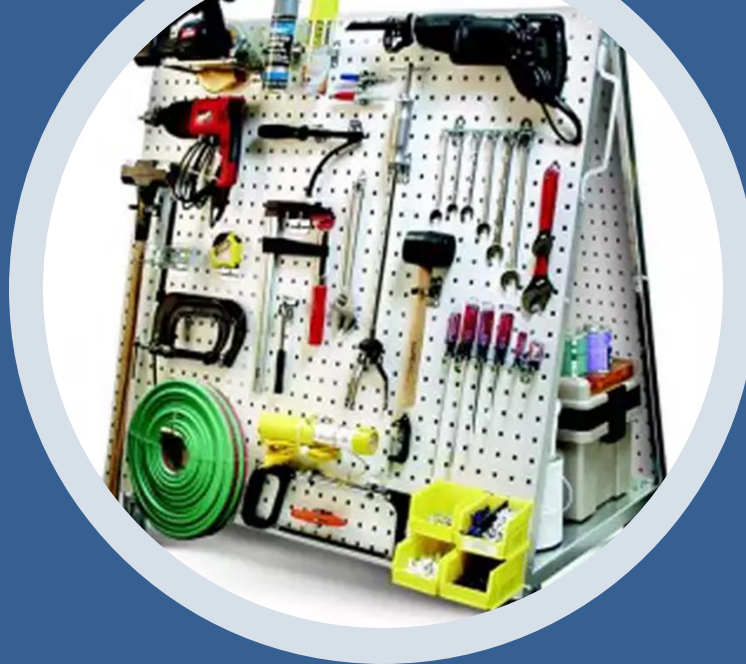
Set In Order – Arrange carefully and productively

- If it's not in the green zone don't let it in the area!
- Group things in a sensible order in size!
- The rest should be placed further away in zones as shown.
- Think about ergonomics as you put stuff back.
- For parts think about how many parts per day are needed.. That's your max qty at the work place, ideally do half a day or less!





Cleaning Options



Mobile Tools Solution



Work Area Tools

Shadow Boards

Office Space

- Don't go silly... putting tape around the keyboard and phone and mouse is too far!
- Run tape diagonally across files – this ensures they are in order
- Use foam to create a drawer tidy that only holds what you need
- Arrange the cabinets so everything has a place.



Shine

- Clean and inspect

- Now that all the clutter has gone you can see where needs to be cleaned.
- Again grab the camera and photograph the area, look for every hidden bit of dirt, oil spill the works.. Get down on your knees and find it! Now you have a before image.
- Clean everything, where there were oil spills either draw round that area with chalk or paint or place paper there – this lets you see if it comes back. If it does Maintenance needs to find & fix the source – Tag it and record it.
- Identify what is driving the dirt and try to eliminate it, if you can't how often do you need to clean ?
- Set up a cleaning routine and some base Operator Level Maintenance (OLM) you actively need to plan time into the peoples day to carry out the cleaning.

Capture what you have achieved!

- Again Go Photograph the area that you **HAVE** improved!
- This gives you a record of where you are now and sets the benchmark for the next stage.
- It lets you check if anything has snuck back in!! Or if cleaning has deteriorated.
- Use it as part of your Sales Pitch for the next area.

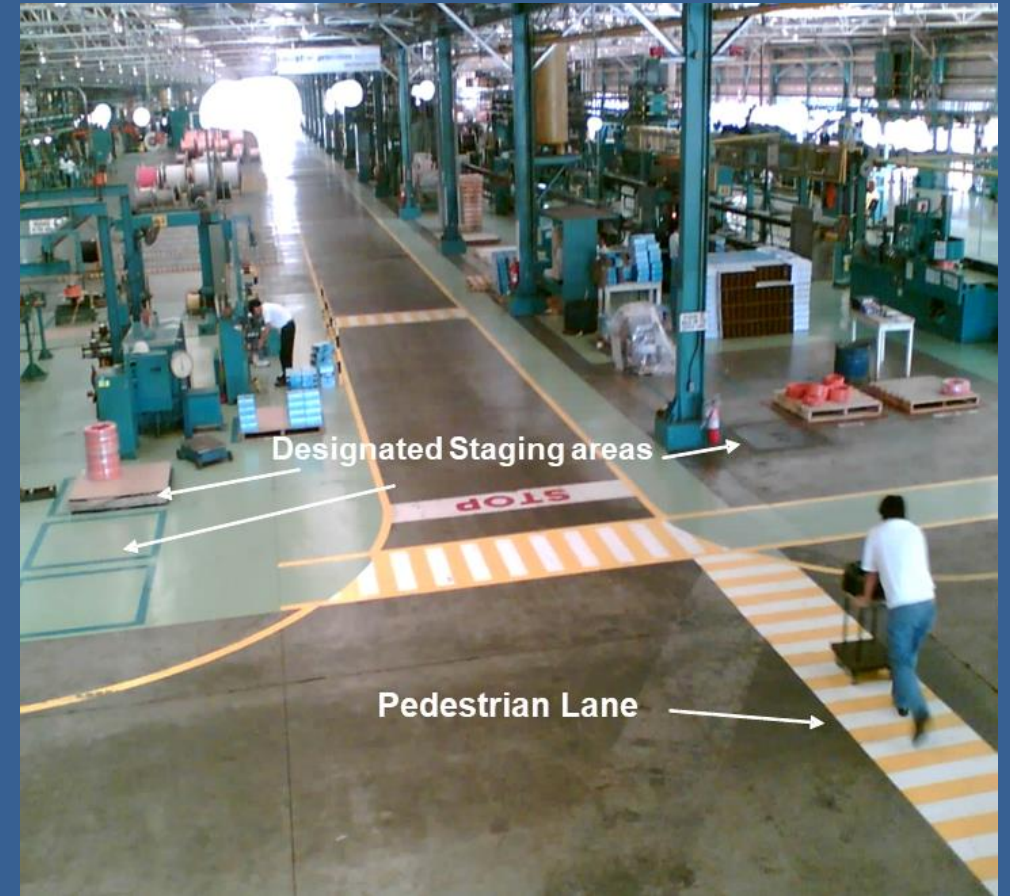


Standardise

- Turning Your Good Practices into Great Habits
- The Hardest of the 5 steps! But this is the real goal of the 5s program, it's the prize, without it you are just tidying up.
- Your aim is to create conditions that make it obvious when something is out of place and make it easy to stick to the agreement with the operator for the cleaning & OLM.
- Use visual aids to make clear what is expected



A Cable Plant Example



Before & After for Wood Storage



Operator Level Maintenance

- Get the maintenance team involved to help design Operator Level Maintenance that they team can do with basic level training
- Get them the tools to do it safely.
- Have it visually displayed at the work place and something that can be ticked off and audited!
- This helps build a sense of ownership in the area and improved reliability in equipment – less downtime!
- Speeds up time to repair as the operators start to be able to do minor fixes themselves. = more up time

Company Identification

YOUR LOGO HERE

4 mH COIL LEAN CELL TAMPER & CONTINUITY TESTER DEPARTMENT # 2003 MAINTENANCE # 205-4475-TC2

JANUARY 2004

Visual Presentation

Procedure Information

Procedure Verification Checklist

RESPONSIBILITY	NO.	TASK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
OPERATOR	1	REMOVE GUARD AND CLEAN WITH CLEANER																															
OPERATOR	2	Wipe off SURFACE OIL, BRUISES & FINGER MARKS																															
OPERATOR	3	CHECK SAFETY DEVICES AND PHOTOGRAPHS																															
OPERATOR	4	CHECK FOR LEAKS																															
OPERATOR	5	CHECK FOR OIL LEAKS																															
OPERATOR	6	CHECK FOR OIL LEAKS																															
OPERATOR	7	CLEAN AND LUBRICATE WHEELS																															
HOUSEKEEPING	8	CHECK AND CLEAN THE COILS																															
HOUSEKEEPING	9	CLEAN AND LUBRICATE WHEELS																															
HOUSEKEEPING	10	CHECK AND CLEAN THE COILS																															
HOUSEKEEPING	11	CHECK FOR SAFETY LOCKOUT PLACING PRESSURE																															
HOUSEKEEPING	12	WIPER AREA AND EQUIPMENT																															
HOUSEKEEPING	13	CHECK LUBRICATION EQUIPMENT ON TOP OF LUBRICATOR																															
TOOLMAKER	14	REPLACE THE COIL BUSHES WITH NEW BUSHES																															
TOOLMAKER	15	REPLACE TAMPER SPRING WITH NEW SPRING																															

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Sustain (rhymes with TRAIN!)

- This is all about embedding the new culture.
- You need to put in formal systems that helps you compare against the now accepted Std.
 - Task routines
 - Audits
 - Regular Training & Coaching
- Make all results of audits public!!!!
 - Put charts up on your 5S wall to show how each area is doing.. Don't hide anything!



Auditing

- Auditing needs to be done and scores published.
- Decide on the frequency of the audit based on how embedded the process is in THAT area.
- Have people outside the area do the audit
- Audit against the std that you have set & captured images for.
- Raise non conformance / improvement notices, near misses etc as part of as a result of the audit.
- You can do this on paper or if you have MANGO actually do it on there on your Mobile!

5S Area Check sheet

Instructions:

1. Scribe reads each statement out loud and records team member's response in appropriate box. A consensus of the team members is needed for each response.
2. If team members respond "yes" place a check mark in the "yes" column for that statement.
3. Team members respond "no" place a check mark in the "no" column for that statement.

NOTE: The team can add or delete items from the checklist as appropriate for their area.

	Sorting	Yes	No
Do employees know why these 5S activities are taking place?			
Has criteria been established to distinguish necessary from unnecessary items?			
Have all unnecessary items been removed from the area? Examples: Excess materials, infrequently used tools, defective materials, personal items			
Do employees understand the procedure?			
Do employees understand the benefits?			
Has a reliable method been developed?			
Is there a process for employees to put away items?			
Is there a visually marked specified place?			
Is everything in its specified place?			
Is storage well organized and items easy to find?			
Are items like tools, materials, and supplies stored properly?			
Do employees know where items belong?			
Has a process been developed to determine what to keep and what to discard?			
Is it easy to see (with visual sweep) if items are in place?			
Are visual aids in use? (For example: signs, floor markings, etc.)			
Are work/break areas, offices and conference rooms clean?			
Are floors/carpets swept and free of oil and grease?			



Key Hints



- Empty the Area
- Control red Tag Area
- Do 2 Zones
- Mix The Teams

- Be Ruthless!
- Ergonomics!!!
- Limit WIP
- Dispose!!

- Set Routines
- Allocate Time
- Train on Basic Maint

- Document
- Be Visual
- Lots of Discussion

- Audit
- Be Visual
- Be Firm

Always remember you are IMPLEMENTING not INFLICTING 5s!

Questions

