

How can you work less, beat your competition and unlock greater profits in your business?

- Which parts of your business do you think are guilty of costing you time and money?
- Where do you see excess stock or people waiting around or people moving around unnecessarily?
- How do you systematically (every week or month) drive waste out and profits up?

CONTENTS:

1. **An inspiring story** – how a pathology lab in an NHS hospital saved more than £350,000 and improved their service by eliminating waste
2. **Avoid wasting profit exercise** – Get your team engaged to identify and eliminate profit-wasting processes – your step-by-step guide
3. **Do the maths** – how to put a value on eliminating the wastes you and your team identify on the ‘waste wall’
4. **Post-it note waste example** – analysis and ‘Act now’ solutions
5. **The Book** – Adventures in Leanland

STOP: being busy busy busy and have a closer look at any processes you complete regularly or often.

START: hunting out 1 or more of the 7 wastes so that you can become more competitive, reduce your costs and increase your profits

Appendix A: Waste wall posters – 8 templates for posters for the ‘waste wall’.

Appendix B: Do the maths templates – a table template to fill in and put a figure against the wastes you identify in your business

Appendix C: The ‘Avoid Wasting Profit’ workshop exercise



1. AN INSPIRING WASTE STORY: Lean health care...

Did you know that 70% of clinical decisions in hospitals depend on pathology (blood tests etc).

In a nutshell if pathology is running inefficiently it will have a negative impact on nearly every other department in the hospital for staff and patients alike.

A pathology lab within the Hereford Hospitals findings revealed that:

- Layout of department was not based on the sequence of the flow of work
- Courier routes were not planned to stagger the arrival times of specimens
- Specimens were put in buckets in unscheduled batches so it was not possible to see the order that the specimens had arrived in or the volume of waiting work
- Unnecessary duplication of activities and a lot of wasted movement, time spent searching for equipment and staff

After identifying and then eliminating the waste, delays and the non-value adding steps, the results speak for themselves.

Turnaround time: Down by 40%, saving 2 beds a day	£365,000 /year
Time for specimens to be picked up: Down by 93% saving	£10,000/year
Double Handling (labelling): Eliminated saving at least	£3,000
Time all work completed: Staff could go home earlier	45 minutes faster
Centrifuge productivity: Up by 252% saving	£5,000

Overall the result was a saving of more than £385,000/year.

These changes vastly increased productivity and reduced the workload on staff. As a result they really could work less, beat their previous production rates and make huge savings, just like this Business Bitesize headline suggests.

¹ *Reduced turnaround times in Pathology using Lean Thinking – Hereford Hospitals NHS Trust , Neil Westwood*



2. 'AVOID WASTING PROFIT' EXERCISE

Step by step waste reduction and profit improvement...

1. Set up two team meetings one week apart

Create the 'waste wall'

- a) Gather together the 8 waste wall posters featured in appendix A either as flipchart paper or printed out on A3.
- b) Put them up on a large blank wall in a communal space.
- c) Get an ample supply of Post-it notes ready – you need two or three colours (yellow - to do now; green – suggested solution; blue - to do next)
- d) Run this meeting in the work setting, not in a meeting room.

2. First meeting – Get started:

- a) Ask the question:
“What thing or process is making your job harder than it should be?”
- b) Ask your people to answer using the yellow Post-its you give them – at least one answer each.
- c) Ask them to stick their answers to the blank poster sheet on the wall.

Start the conversation – find the quick wins:

- d) Take the first yellow Post-it note you set eyes on and get your people to suggest 1 of the 7 waste types it best fits.
Use the guidelines on your wall posters to help determine which type of waste it is. Stick your yellow Post-it note on the cross-hairs of the relevant sheet.
- e) Now ask your team to suggest one or more solutions to this problem (green post-its can help).
Discuss the solutions and decide what your solution will be and when it will be implemented. Put the yellow Post – it note in the relevant quarter of that poster. STLC, STHC, LTLC or LTHC.
- f) Choose the STLC solution you can definitely implement by the next meeting in a weeks time – MAKE IT HAPPEN. Repeat steps d, e and f for 2 or 3 more yellow Post-it notes.
- g) Agree the date and time for a second meeting a week later. Give everyone blue Post-its and ask them to record any other wastes they see/experience during the week and add them to the blank flip chart sheet on your 'waste wall'.



In the first round of this exercise you are looking for quick low cost wins so focus on STLC suggestions. Capture any solutions that are not STLC and come back to them during a future 'avoid wasting profit' planning session.

3. Second meeting

Do the maths:

- a) Take a look at last week's yellow Post-it note 'wastes' and the 'solution' you have made happen.
- b) Work through the maths of the change you have made happen.

Use the 'do the maths' exercise from the next page to help you and the template in Appendix B.

This will demonstrate the value of the change you'll see in the next 12 months and prove the worth of the 'avoid wasting profit' process.

Have another go:

- c) Now look at the yellow and blue Post-it notes and choose the next 'waste' you all want to tackle and make it happen again.
- d) Agree the date for your next 'avoid wasting profit' meeting.

Weekly meetings give you 52 opportunities for change, monthly meetings give you 12 opportunities for change.

We suggest you run this weekly for at least a month and then choose weekly, fortnightly or monthly when you see the benefits starting to pay off.

IMPORTANT WARNING

Don't create a 'waste wall' unless you seriously intend to deal with what's put on it!

Ask your people to invest their time in coming up with 'wastes' and 'solutions' and fail to act and you'll undermine any faith your people have in you.

Fail to follow through on 'acting on' the wastes you discover here and you'll be creating the biggest waste of all, wasting everybody's time, energy and enthusiasm.

3. DO THE MATHS

This is the exciting bit where you and your people really see the money, time and resources saved by hunting down and eliminating the waste in your business.

See how easy it is to waste 1.3million sheets of paper, waste 155 trees and waste over £7,000...

Wasteful document templates:

The wasteful activity	What time or resources are being wasted	How often	Resource or time wasted every week	Resources or time wasted every year
Document template going over more pages than necessary	2 sheets of paper for statement	5000 times per day	25,000 sheets of paper	25,000 x 52 (weeks/year) = 1.3 million sheets of paper wasted per year. That's a lot of trees, cash and printer resources being used up unnecessarily.

Possible Solutions

- STLC:** Change to double-sided printing by default across the organisation if your printers support that.
- LTLC:** Investigate a design change to the template that reduces font size or layout to fit on a complete page.
- STHC:** Invest in a new set of printers that support double-sided printing.
- LTHC:** Make a commitment to replace printers on a rolling basis to spread cost..

Wasteful digital filing:

The wasteful activity	What time or resources are being wasted	How often?	Total per week?	Total per year?
Looking for digital files	5 mins	6 times a day	150 mins	150 x 46 (weeks/working year) = 6900 minutes or 14.4 working days wasted. You are paying someone for 14.4 days – to look for digital files.

Possible solutions

- STLC:** Agree on file naming and filing structure that holds all files in one place and accessible by all with relevant security permissions (such as dropbox). All new files to be stored from now on in this way.
- LTLC:** Set up a work process for an admin team member to work through historic and archived files so that over time the filing system becomes easier and easier to use.



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Wasteful waiting for sign off:

The wasteful activity	What time or resources are being wasted	How often	Resource or time wasted every week	Resources or time wasted every year
Delay in process due to waiting for a signature	3 days	3 times a week	9 days	9×46 (weeks / working year) = 414 days waiting time /delay per year. Would you want to be having your workflow processes stopped for 414 days next year?

Possible Solutions

- STLC:** Create a regular diary time for signature approvals at the beginning of every day (or whatever interval is going to work best for your people).
- LTLC:** Investigate if signatures are actually required in all cases. Can these be signed off by other team members that are more frequently available?

In Appendix B you will find a blank table for you to use as you come up with your own examples of the 7 wastes. Fill it in and start seeing the resources, money and time rack up.



4. POST-IT NOTE WASTE EXAMPLES

Here's an example Post-it note from our imaginary team member, Geoff.

How annoying is it to have to look for paper!

On the face of it – a small thing. Why get cheesed off because of that? Just go and get the paper Geoff and get on with your job.

BUT – chances are if Geoff is experiencing this problem... other people are too.

What kind of waste is it? Movement? Waiting? Both?

Is there a short-term low-cost solution to Geoff's problem?

How about this STLC solution:

- Keep the printer paper in one place that is close to the printer (Geoff doesn't have to go hunting for it)
- Keep a minimum number of reams of paper stored
- Create a system whereby the person that orders the paper is notified by WHOEVER opens the 'last-but-one' ream that more paper needs to be ordered. This could be as simple as writing on the paper packaging – "Let Jan know (Jan's phone number) when this is the last packet" – at Toyota this is called a 'Kan-Ban' process.

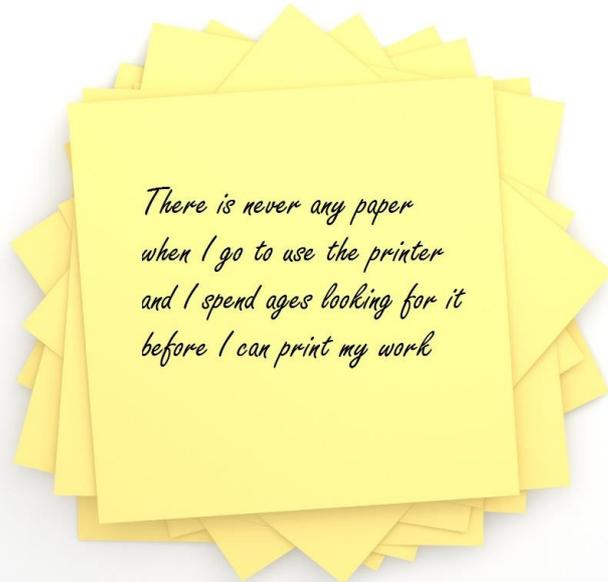
This costs no money to implement and can be put into action straight away – that day. This is a **short term low cost** solution to Geoff's Post-it.

Geoff is happy (and so is everyone else that has ever experienced the same problem).

Workflow for any one person who needs to print in that office is improved.

Time is saved on unproductive zero-value work (walking around looking for paper) and Geoff can get back to the work he was trying to do in the first place (improved workflow).

On the next page is a Post-it note from Sarah - an upholsterer in a furniture factory...





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Sarah's waiting time waste:

Hmm, this is a similar problem to Geoff in the office– not being able to get on with your job because the resource you need to do it isn't there. Or is it?

If an upholsterer is not able to deliver furniture to the timescales agreed in a furniture business ... this is very serious. In fact it could lead to unfulfilled orders and LOST CUSTOMERS.

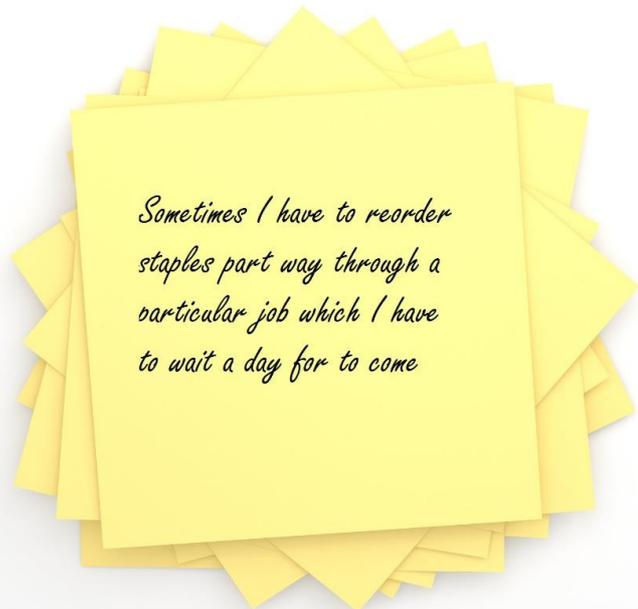
The general solution could be the same as for Geoff but the implications of solving it straightaway are likely to be far more significant to the business as a whole.

So solve the staple problem with keeping a ready stock of them in place – set up a process to make this happen consistently (similar to 'Kan-Ban' process overleaf).

Or it could be Sarah needs to have a supplier(s) that responds more rapidly.

Or it could be both!

That's why every single Post-it note must be considered. Until you investigate the wastes and the solutions you will not see the true value or benefit from driving that particular waste out.

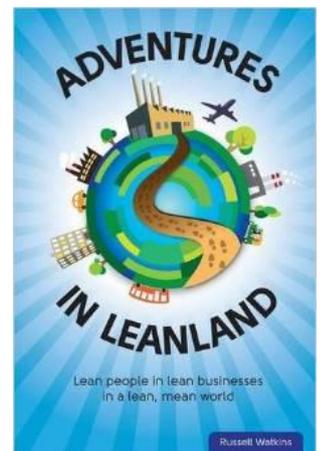


5. THE BOOK: Adventures in Leanland

Managing the '7 wastes' is only one way to achieve a 'lean' business.

Lean thinking has profoundly changed thousands of businesses, thanks to Toyota sharing their lean insights in many books. Russell Watkins has worked with Toyota, JCB and many other UK businesses.

His book 'Adventures in Leanland' provides some brilliant examples and brilliant insights into making your business a lean and profitable business. You can [find out more about it here](#)





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Appendix A: Waste Wall Posters

On the following 9 pages are the waste posters that you can print out on A3, or replicate with flip-chart paper for best impact

- I. 8 waste wall posters to help you run the 'avoid wasting profit' exercise.
- II. What your waste wall will look like when you use the waste wall posters.



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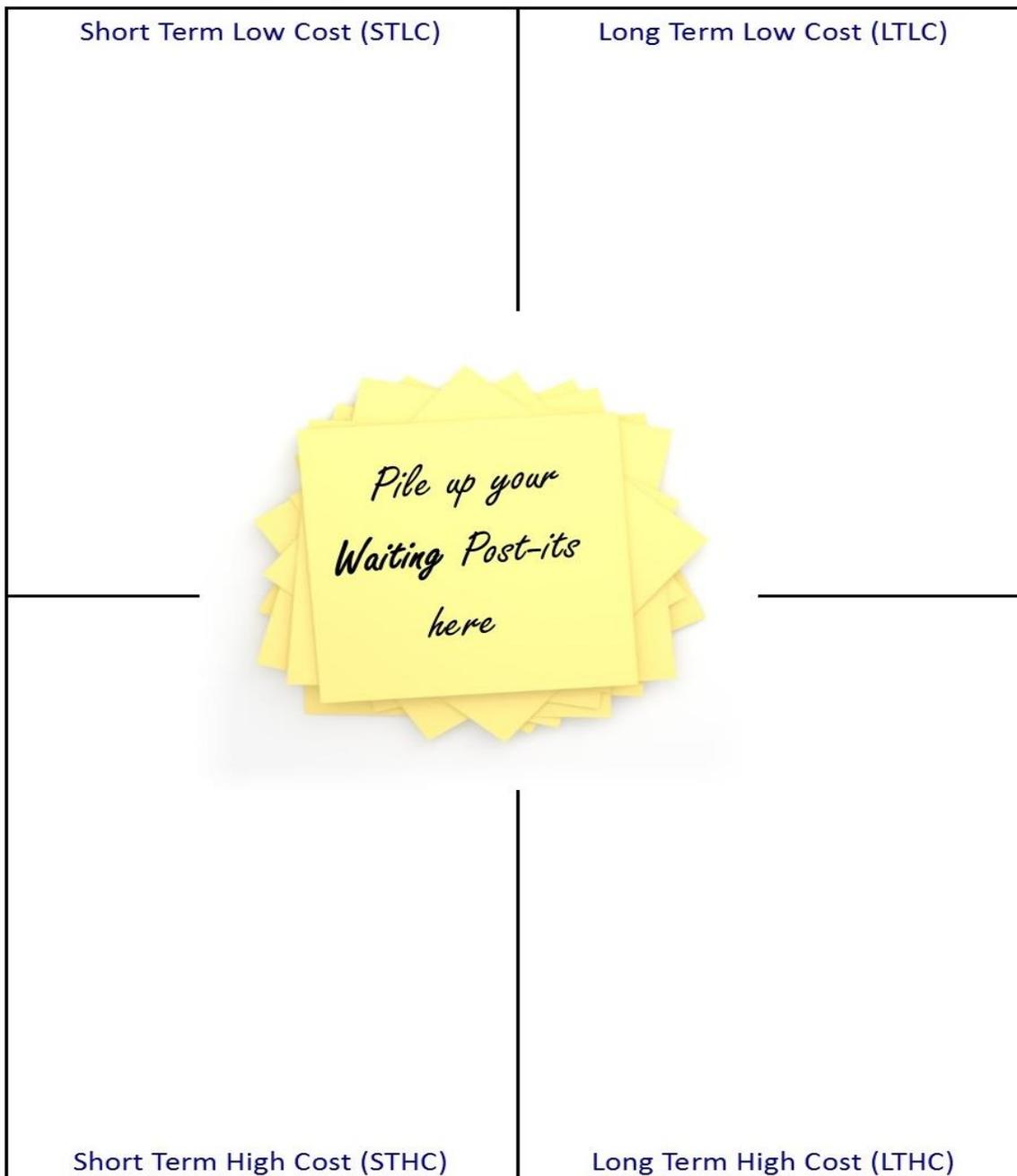
BLANK POSTER FOR COLLECTING POST-ITS

What one thing is making your job harder than it should be?



WASTE #1 - Waiting

People stop working, or interrupt their flow of work on a particular task because they are **waiting** for something – this could be waiting to use a printer or photocopier, the loo, access to a room (waiting for a key holder), a document (you need someone else to do a task before you can complete yours), other team members to arrive for a meeting ...





WASTE #2 – Over-Production

Producing more (or faster) than required. It results in tying up your capital in stock, raw materials, work in progress (expended time not ultimately utilised) and finished goods. This could be a bulk production of products for which you do not have an order, writing a long and detailed process description which will never be looked at. Where can you see over production during your day at work?

Short Term Low Cost (STLC)	Long Term Low Cost (LTLC)
A stack of several yellow sticky notes with a scalloped edge. The top note has the text "Pile up your Over-Production Post-its here" written in a cursive font.	
Short Term High Cost (STHC)	Long Term High Cost (LTHC)



WASTE #3 – Transportation

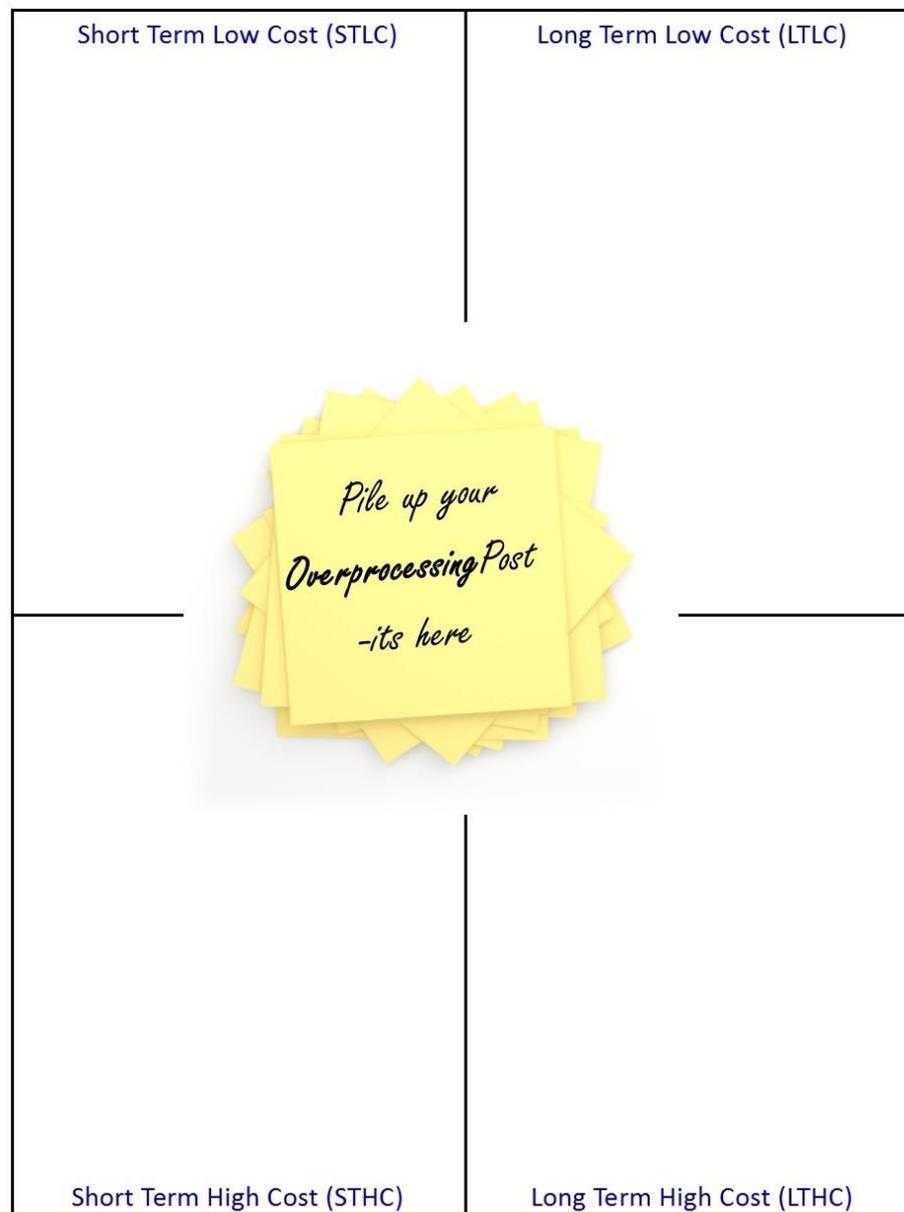
Relating to **movement of the work** or product itself. This could be handoffs where the work is transferred from one person to another. Unnecessary movement of electronic files around between people which could be held centrally. Movement of printed materials from storage which could have come about because of over production. What are you moving around in your work day that could be avoided or simplified?

Short Term Low Cost (STLC)	Long Term Low Cost (LTLC)
A stack of several yellow sticky notes is centered in the middle of the 2x2 grid. The top note is clearly visible and contains the handwritten text: "Pile up your Transportation Post-its here".	
Short Term High Cost (STHC)	Long Term High Cost (LTHC)



WASTE #4 – Over-Processing

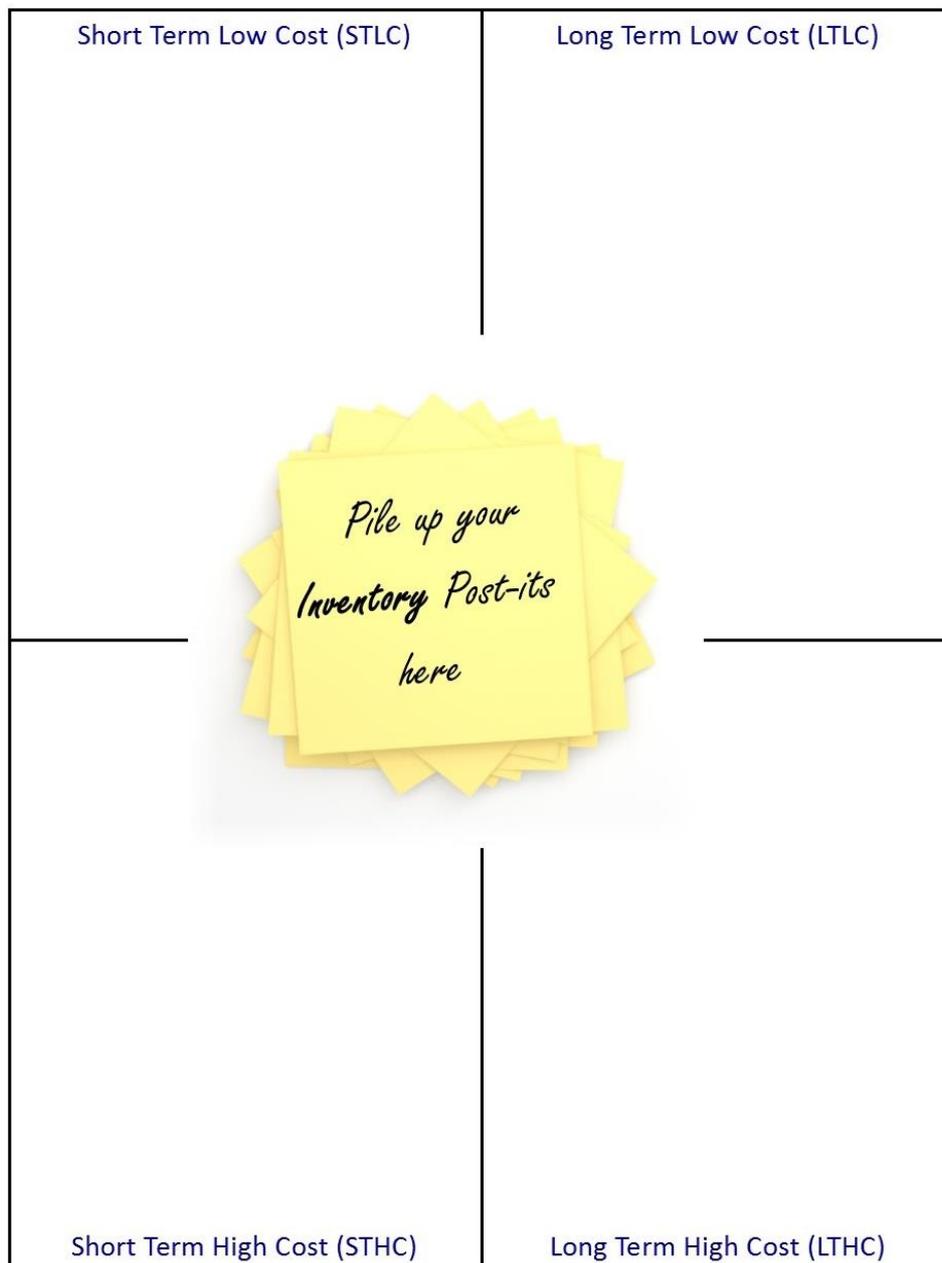
Using unnecessary effort to get the work completed. Additional signature approvals, data entry or data format changes, frequently revising documents or information, or complex forms or databases that require information to be entered repeatedly. It could also be finishing work to a standard far higher than that that is actually required because of unclear standard and specifications. Can you see any overprocessing taking place in your work day?





WASTE #5 – Inventory

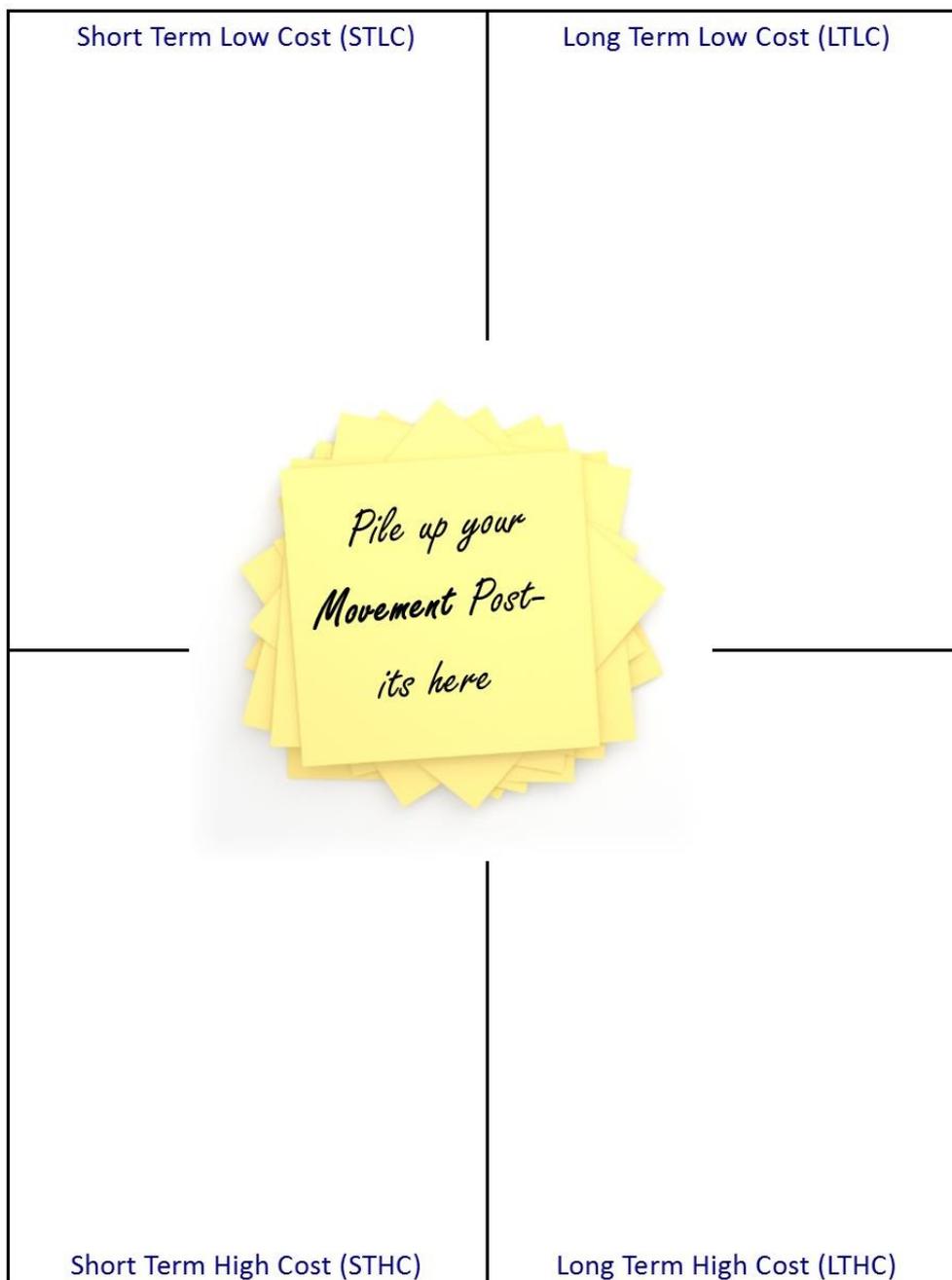
Work that is waiting to be processed. Inventory in an office is a common result of multi-tasking and otherwise un-balanced workloads. Inventory can be found in e-mail or work order in-boxes, to-do lists, product development pipelines, and resource assignment charts. It is more obvious in a physical production situation where one can see parts, components and work in progress stood around. What elements of your work do you have in your work pipeline that are static?





WASTE #6 – Motion

People moving or working without producing. Motion shows up as people search for files they can't find, in phone calls to track down information, or from unnecessary button clicks to get to the bottom of a work order to update the to-do list. It could also be retrieving a tool frequently from a location that is not close to where the tool is actually used. Can you see repeated movement in your workplace that could be avoided?





WASTE #7– Defect / Re-work

Work that did not accomplish its purpose or was not correct the first time. Defects include late work, incorrect information, conflicting information, instructions that must be clarified, insufficient information, partially complete work or information, mis-named files, lost files or information, and anything that must be re-worked. Re-work is the pain that results from defects. Where do you see re-work taking place during your day at work?

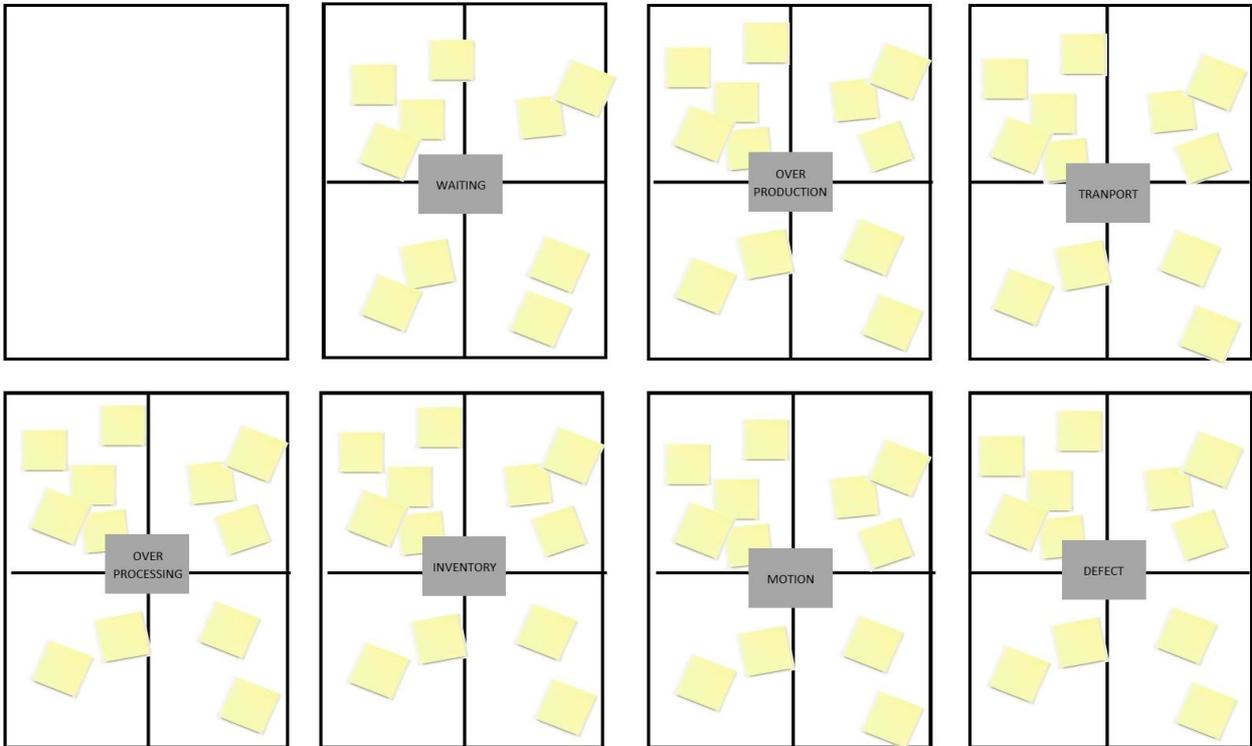
Short Term Low Cost (STLC)	Long Term Low Cost (LTLC)
	
Short Term High Cost (STHC)	Long Term High Cost (LTHC)

Example Waste Wall

This is how your waste wall may look at the end of your first meeting.

All Post-its categorized and allocated by waste and time-cost.

The STLC Post-its in the top left quarter of each poster are the places to look for the immediate and low cost solutions to driving out waste.





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Appendix B: 'Do The Maths' template

Here's a blank sample 'Do the maths table' for you to fill in with your team when you are considering the benefits of addressing each Post-it note.

The wasteful activity	What time or resources are being wasted	How often	Resource or time wasted every week	Resources or time wasted every year

Possible Solutions

STLC:

LTLC:

STHC:

LTHC:

Appendix C: Introducing the ‘Avoid Wasting Profit’ workshop

Work with your workshop delegates as individuals, or pairs or tables using this example to get a healthy discussion going. When you’ve done this exercise you could ask one of your delegates to describe a working situation that you could all brainstorm using the same process below.

Your ‘avoid waste’ scenario:

- You can see your neighbour trimming the hedge that is on three sides of his garden.
- It looks like the hedge is going to be uneven because of the blunt manual shears he is using.
- The trimmed leaves and branches fall onto his lawn.
- After each section you watch him cut the trimmings into smaller pieces, put the shears down and bend over to pick the leaves and branches up and put them in a bin bag.
- You see him walk to the green wheelie bin at the side of the house with the bag to get rid of it.
- He then starts the next section and goes through the same process.
- He stands back at the end of the three sections and goes back to trim the uneven parts.

Movement waste is the unnecessary movement of a worker that does not add value

Where’s the movement waste in the hedge-cutting example?

The repeated walking back and forth to the bin – the bin could be brought to the hedge.
Or...

Over-processing waste is the repeated action that adds no value to a product or service for the end customer

Where’s the process waste in the hedge-cutting example?



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Transport waste is the repeated moving of products or equipment around unnecessarily.

Where's the transport waste in the hedge-cutting example?

Defect waste is the production of a 'not-fit-for-purpose' or flawed end result.

Where's the defect waste in this example?

Ask each group to consider what changes to the above example would create inventory, over production and waiting waste as well?

Inventory waste: Unnecessary levels of stock or work in progress (WIP).

Where could there be inventory waste in the hedge-cutting example?

Over-production waste: Doing more or making more than is needed.

Where could there be over-production waste in the hedge-cutting example?

Unnecessary waiting waste: People stop working because they are waiting for something.

Where could there be waiting waste in the hedge-cutting example?



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Cost Time Analysis

In teams look at each of the 7 wastes.

Come up with four solutions (one for each quarter of the cost time grid) that would drive out each waste from the hedge cutting example.

<p>Short Term Low Cost (STLC)</p> <ol style="list-style-type: none"> 1.Waiting 2.Over-Production 3.Transportation 4.Over-Processing 5.Inventory 6.Motion - 7.Defect – Sharpen the shears 	<p>Short Term High Cost (STHC)</p> <ol style="list-style-type: none"> 1.Waiting 2.Over-Production 3.Transportation 4.Over-Processing 5.Inventory 6.Motion 7.Defect – Purchase a hedge trimmer
<p>Long Term Low Cost (LTLC)</p> <ol style="list-style-type: none"> 1.Waiting 2.Over-Production 3.Transportation 4.Over-Processing 5.Inventory 6.Motion 7.Defect – Borrow a hedge trimmer 	<p>Long Term High Cost (LTHC)</p> <ol style="list-style-type: none"> 1.Waiting 2.Over-Production 3.Transportation 4.Over-Processing 5.Inventory 6.Motion 7.Defect - Purchase a hedge trimmer