

Lean Thinking in offices – does it really fit?



Produced by Keith Bissett, Bourton Group – September 2007

Lean has been around for sometime and practitioners have struggled in various sectors to apply the Toyota Way. Keith Bissett outlines some of the questions and answers to make Lean fit ... once you have decided to embrace the philosophy.

1. BACKGROUND AND CONTEXT – “But we don’t make cars!”

Lean Thinking has its roots in the Toyota Production System and was developed for the manufacturing sector during the 80s and 90s. Over the past decade Lean Thinking has been applied in the office environment, first in manufacturing, subsequently in financial institutions and latterly in the Public Sector.

The first obstacle most organisations have to overcome is comments such as “Lean is all very interesting, but we don’t make cars and I don’t see why we should change to working like robots on an assembly line.” This natural reaction normally starts by misunderstanding the Toyota philosophy and its holistic approach.

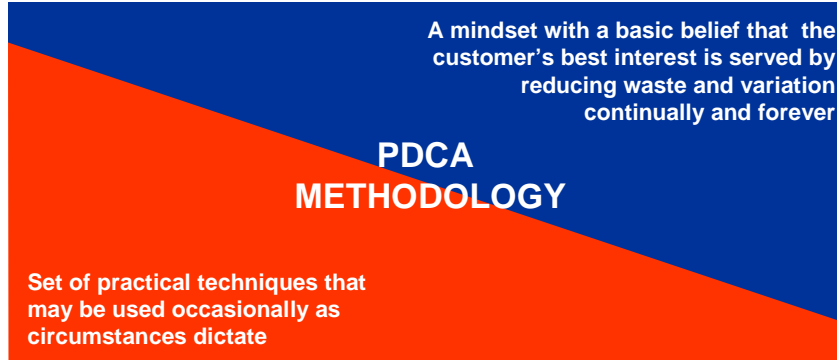
Womack and Jones (1996) highlight five core principles to define Lean Thinking as a means for understanding value (Womack 2002):

1. Specify the **value** desired by the customer
2. Identify the **value stream** for each product or service providing that value and challenge all of the wasted steps
3. Make the produce or service **flow** continuously
4. Introduce **pull** between all steps when continuous flow is impossible
5. Manage towards **perfection** so that the number of steps and the amount of time and information needed to serve the customer continually falls

You cannot use traditional management thinking and then apply Lean like an emulsion across the organisation. In order to be successful you have to decide whether you want to view Lean as a toolbox, a methodology or a philosophy. Understanding where you are and where you want to be is important before you embark on the Lean journey. Why is it important? Because the benefits you can derive and the resource you will need to commit will depend on the approach you take when you apply lean.

Is Lean a tool or a philosophy?

Philosophy?



Tool?

Lean is a tool, a methodology and a philosophy all wrapped into one.

It is the application of the approach that is important, whether you work in Healthcare, financial services, maintenance and repair, a call centre or a back office anywhere in the world, Lean can be applied intelligently to your environment. Once you understand the need you can customise the approach.

It is also important to see the differences between classic Lean principles and the characteristics that need to be taken into account when implementing Lean in an office environment.

Classic Lean principles		Lean in Offices
Specify the value desired by the customer	Value	Multiple customers and often customer is also the supplier
Identify the value stream for each product or service providing that value and challenge all of the wasted steps	Value Stream	Understanding of transactional and discretionary processes
Make the produce or service flow continuously	Flow	Often highly variable demand with multiple handoffs
Introduce pull between all steps when continuous flow is impossible	Pull	Making the process responsive to providing service only when the customer needs it
Continuing to attack waste (kaizen)	Perfection	Continuing to attack waste (kaizen) especially using front line staff

The overriding principle is to focus on adding value and removing waste.

Some definitions

The differences may appear subtle, but they help the application in an office environment easier to explain to both managers and their teams.

Value

In classic Lean processes the customer is seen as part of a linear relationship usually ending up as a tangible product that performs a function. In the service and office environment, there may be multiple customers of the service each with a view of the value that they derive from the provider. It is also common for the customer to also be the supplier, for example, someone asking HR for 'some Excel training'. HR then needs to ask their customer to supply them with more information in order to supply them with the appropriate level of training. You may ask why is this any different than any business needing to understand what its customer wants before addressing the process to deliver it? And in the perfect world you would expect there to be a seamless, transparent flow of information, needs and wants between customer and supplier. This is however rarely the case as both sides may take for granted assumptions of each other's requirements, the implications of which usually aren't clear until the product or service is delivered, by which time its too late! Lean thinking (and six sigma) puts the emphasis on the Plan or Define phase before moving to action.

Value Stream

Classic value streams are a series of steps to bring a product or service to the customer. Most value streams in large offices are transactional in nature. However, many office processes require levels of judgement and interpretation that do not easily follow a transactional flow. We call these 'Considerative Processes' as the quality of the output is determined by the quality of the input and the knowledge of the individual to interpret these multiple inputs to provide the customer with a 'best fit' answer. 'Considerative steps' in processes have to be defined at both input and output phases otherwise we are admitting to 'black art' activity – something we know that both Lean and six sigma practitioners decry because it is a cop out for understanding your processes from the perspectives of inputs, outputs and customer requirements.

Flow

Classic flow means make one, move one, rather than old style batch and queue methods that tend to extend lead times. In an office environment the demand can be highly variable, sometimes by the hour or minute and flow is difficult when work is organised with multiple hand offs (anyone who has lost time at the end of a phone trying to talk to a contact centre will understand this). Designing flow in offices takes the same type of change in mindset as when Just-In-Time first came into manufacturing and many sacred cows over what best manufacturing practice stood for were put to the sword.

If you put customers at the heart of the process (i.e. the recipient of the output of the process) then organising to provide their Critical To Quality (CTQs) will determine what process you need to put in place – for example, runners, repeaters, strangers.

Pull

Classic pull means don't make one until the downstream customer wants it. Staff in offices normally struggle with this concept as the work is less tangible than a product – for example they might send a request by email for information and they don't know how busy the recipient of the email is. Busy is a concept driven by demand and resource balance. It is also impossible for a contact centre to get ahead of itself if no-one phones them - (but you wouldn't want them to anyway – it's called inventory!). You can't over produce in that environment, which is a good thing, because that is one of the 8 wastes. The key to pull is to design a process that is responsive when the customer demand occurs and in offices that may mean looking more at hours of work and skill flexibility.

Perfection

The quest for perfection should be the same in offices as in factories. Learning to see and eliminate waste and errors in offices requires viewing work in a different way. Once your staff understands there is a different way to see value and waste you have begun the journey. One advantage that many office roles have over factory staff is their direct contact with the customer. Engaging front line staff in Lean can bring them and you tangible improvements in the customers' experience of your service offering. Some organisations get themselves in huge knots over who is the 'customer' especially between the internal or external ones – the simplest way is to say that the customer is the recipient of the output of the process – that way there is no single customer as each step in a process will have a range of customers to please.

2. WHERE TO START - Should Lean be applied top down or bottom up?

Starting the Lean journey to some organisations appears easy – “Let's do some Kaizen blitzes to get some benefits. ABC company did it so let's try it here. The staff seem to like it so it's got to be doing some good.”

This 'gung ho' approach has the same effectiveness of a crash diet - some immediate signs of improvement, followed by a gradual return to our old habits...and weight gain.

Most research points to two models of Lean implementation –

- Full implementation of the philosophy
- The use of Kaizen Blitz Events

Most case studies show that organisations start with the Kaizen Blitz Event approach. This approach was preferred by line managers as it provided a faster return for effort, was more visible and did not challenge existing management control styles to the same extent as full implementation. Staff also liked it as they felt engaged in the process that quickly demonstrated potential results where they had some input. The disadvantage is that the 'quick wins' may be difficult to sustain when they are not easily integrated into the overall strategy of the organisation.

The full implementation model has the advantage of linking improvement to the overall strategy which leads to a more sustainable outcome. Understanding where you want to be defined in Lean parlance as the 'Future State' is a question that needs top level understanding and buy-in for sustainable continuous improvement and blends both top down and bottom up approaches.

Deployment approach – what is our view?

There are 3 key questions to creating the Lean Enterprise:

1. Where are we today? (**The Current State**)
2. Where do we want to be? (**The Future State**)
3. How do we get there? (**Many initiatives jump straight in here and don't deliver the benefits**)

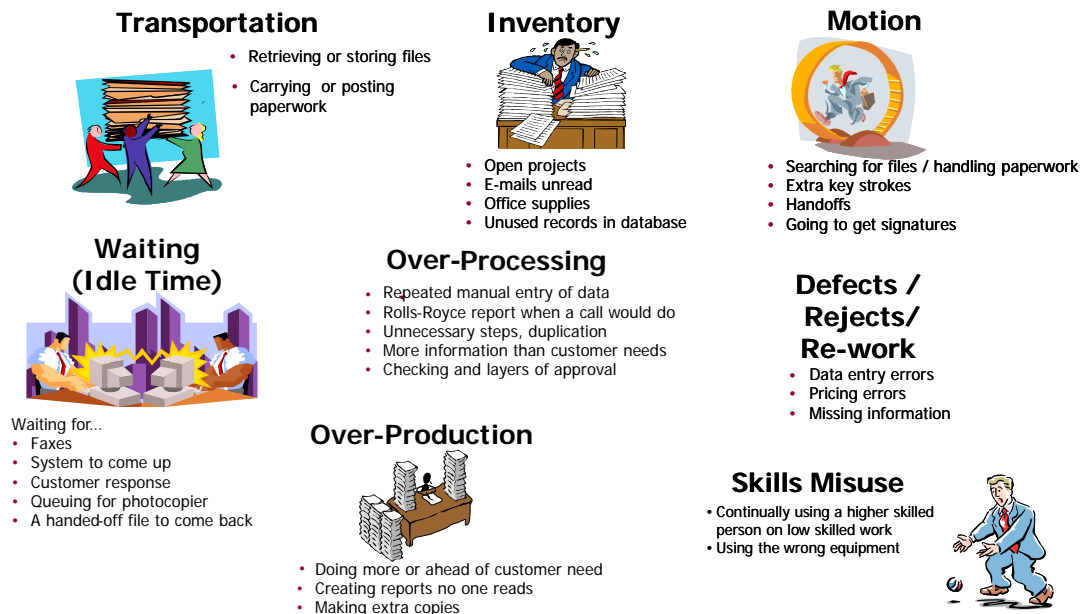
3. WASTE IS EVERYWHERE - The Eight Wastes and the hidden Leadership Wastes (or why wastes in offices are difficult to get excited about)

“The greatest waste is the waste we do not see.”

Shingo

Most people who have learnt about Lean understand that the elimination of waste is a key outcome of Lean. In offices the waste is more insidious than in a factory; you can see piles of inventory, or machines broken down or staff waiting for parts. In the office environment the waste exists but usually it doesn't manifest itself in a physical form.

The figure below represents how the eight wastes associated with Lean Thinking are found in the office environment - they tend to be the easy to spot or as we call them the 'Surface Wastes'.



These surface wastes are the obvious ones that people can relate to and are fine when you are undertaking the Kaizen Blitzes - people feel good when they attack them – no one cries when the waste goes away! However if you want to follow the full implementation model then you need to understand the impact of the four Leadership wastes that live in most organisations. Attacking surface waste without addressing leadership waste will not maximise or sustain improvement.

The four Leadership Wastes:**1. Focus**

The application of energy and attention to critical objectives.

2. Structure

Helps to direct the focus, provide guidance to what employees should do and how they should do it in ways that reduce surface waste.

3. Discipline

The checks and balances, rewards, compulsions and daily behaviours (both managers and employees) that maintain the processes of sustainability

4. Ownership

Employees owning the processes and outputs is the final key to sustainability.

The role of managers needs to change if they are to reduce Leadership wastes in their organisation.

The following outlines some of the opportunities that managers should drive forward and are the key to creating a culture of continuous improvement.

FOCUS

- Translating business goals into operational objectives and targets
- Co-ordinated planning and scheduling
- Allocating resources to operations and improvement priorities

DISCIPLINE

- Behaviours that support the vision and values
- Consistent adherence to processes
- Managers “being the change they want to see”

STRUCTURE

- Clear roles for leaders and teams
- Common ways of working
- Processes for operational and project management
- Common tools and techniques

OWNERSHIP

- Working as a team
- Role modelling new behaviours
- Cascading the leadership style to the rest of the business

4. TRANSACTIONAL AND CONSIDERATIVE PROCESSES (or how can Lean work when the thinking process is the key value add?)

Our experience of applying Lean in offices over the past decade has led us to deconstruct the processes that staff in offices undertakes into two clear and different archetypes. The figure below describes the characteristics and differences between the two:

The Lean Office environment

Repeatable/Transactional processes - focus on efficiency	Tailored/Considerative processes - focus on effectiveness
Characteristics: <ul style="list-style-type: none"> • Customer/stakeholder requirements easier to define • Inputs and outputs clearly definable • Clear performance measures • Process can be standardised 	Characteristics: <ul style="list-style-type: none"> • High levels of discretionary effort • Need for tailored response • Complexity of stakeholder environment • Performance measurement difficult
<i>Process Drives People</i>	<i>People Generate & Drive Process</i>
Success Factors: <ul style="list-style-type: none"> • Standard operating procedures • Continuous improvement – empowered teams • Clear targets – visual measurement 	Success Factors: <ul style="list-style-type: none"> • Individual goal clarity important • Prioritisation of resource allocation • Clarity of customer and requirements and role of team • Managing interfaces

This approach of separating transactional from considerative processes has several advantages -

- It becomes clear to staff that Lean does not mean they are being turned into automatons
- It recognises their job has a degree of skill and judgement that requires tailoring the response depending on the inputs they receive
- It makes clear those parts of the end to end process that can be standardised and those that need discretionary guidelines

Case workers for example need good inputs to provide the level of service that their customer demands. Once you are clear what inputs you need you can help your customer through intelligent processing provide a superior answer in the shortest time possible.

5. THE TOOLS (give me the Lean toolkit and we can do the rest ourselves)

Most Lean practitioners are aware of the core tools within the Lean environment. Tools such as Value Stream Mapping, 5S, 5 Whys, Kanban and SMED are well understood within the manufacturing environment. When office staff are first presented with them, many practitioners leave them cold because they fail to see the tools through the eyes of their customers and explain the tools using manufacturing examples. At Bourton Group we have customised both our hard and soft skills toolkits to be more accessible to office staff.

It is quite normal at the start of the Lean journey to become obsessed by the tools themselves and forget that they are a means to an end, not an end in themselves. Our experience in office environments is that the Value Stream Mapping process is one of the most powerful ways for staff and their leaders to learn to see the waste from an end to end perspective (from factory to foxhole in MOD speak). Slavishly learning the whole toolkit however is counter productive in most office environments (where can we apply SMED, or do I really want an Andon light on my desk?).

In our experience, the tools need to be used on an 'on demand basis, either during the work groups' problem-solving activities and explained as they go through the Plan, Do, Check, Act cycle, be it on a small local problem or a full blown diagnostic and fix it phase programme. Bourton has created a set of templates and toolmaps to help leaders and teams to navigate their way through the PDCA methodology.

6. SUSTAINABLE PERFORMANCE IMPROVEMENT – THE LEADERSHIP CHALLENGE

The tools and approaches are well known and understood. Toyota has never made a secret of them. So how does the end result remain so elusive? Perhaps this quote from 1979 underlines the problem

“We are going to win and the industrial West is going to lose; there is nothing much you can do about it, because the reasons for your failure are within yourselves.

Your firms are built on the Taylor model; even worse, so are your heads. With your bosses doing the thinking while the workers yield the screwdrivers, you're convinced deep down that this is the right way to run a business.”

Konosuke Matsushita, Tokyo, 1979

The Leadership challenge is to understand that there is a better way than the one that has made you successful for the last 20 years which is ingrained into the values and beliefs of the organisation. Unless the management team from top to bottom 'gets it' then Lean will be consigned to another one of the many failed initiatives that the organisation has flirted with.

In a Public Sector report the evidence uncovered the following as the factors related to the successful implementation of Lean. These are:

- Organisational culture and ownership
- Developing organisational readiness
- Management commitment and capability
- Providing adequate resources to support change

- External support from consultants in the first instance
- Effective communication and engagement through the organisation
- Strategic approach to improvements
- Teamwork and joined-up whole systems thinking
- Timing to set realistic timescales for change and to make effective use of commitments and enthusiasm for change

With the majority of these success factors being people related, it is hard to see how a similar result would not be drawn from a sample of private sector companies (see John Kotter's HBR paper 'Why Transformation Efforts Fail' for comparison).

Without doubt most organisations that embark on the Lean journey fail to transform themselves because the management thinking doesn't change from a command and control approach to a more Socratic style of managing through questioning – Socrates' goal was to compel his students to reflect and learn, by challenging the clarity and completeness of their thinking. This questioning approach is fundamental to Lean Thinking - as one Sensei put it when one of his pupils leapt to an answer – “Good solution, what's the problem?”

Western managers love solutions (and solution providers!). The Lean Plan Do Check Act cycle provides the discipline to truly eliminate waste from all activities whether they are in the factory, the office or in the mind. If you want to understand how the PDCA cycle can be diffused throughout an enterprise and how it can help to run your business from top to bottom and, by taking a holistic approach to Lean, from operating systems right through to changing mindsets and behaviours to truly delighting your customers then contact us:

For further information on any of the points raised please contact keith.bissett@bourton.co.uk or telephone 01926 633333.

Further reading:

- **Getting The Right Things Done** (a leaders guide to planning and execution)
Author: Pascal Dennis
Published by: Lean Enterprise Institute
- **Decoding the DNA of the Toyota Production System**
Authors: H. Kent Bowen and Steven Spear
Published by: The Harvard Business Review 1999 Reprint 99509
- **The Toyota Way**
Author: Jeffrey K Liker 2004
- **Why Transformation Efforts Fail**
Author: John P Kotter
Published by: Harvard Business Review 1996
- **Evaluation of the Lean Approach to Business Management and Its Use in the Public Sector**
Published by: Office of Chief Researcher, Scottish Executive Social Research 2006