



The cost conundrum – a fitter, leaner Public Sector

Context for this Paper

Lean and systems thinking are both widely researched topics relating to the management and improvement of operations. There are countless case studies documented telling us of great success stories achieved through their application, resulting in them acquiring a large following in private sector industries, where in many organisations the methods have become the accepted way of working.

Whilst lean was born in the world of manufacturing, over more recent times the principles and thinking behind the approach have transferred into service sector organisations, with many reaping the benefits that have proven so fruitful in the manufacturing industry. The motivation for these service businesses has been clear – improve service and reduce costs in order to remain competitive and continue to deliver shareholder value.

Given the volatile economy of recent times, public sector organisations now face the same cost conundrum experienced by private sector organisations over recent times. Whilst there are no shareholders to report to, public sector organisations have a much tougher audience to please, the British taxpayer, who are increasingly expecting high quality public services without having to pay spiralling personal taxes.

This short whitepaper aims to explain why public sector organisations can no longer afford to ignore the use of this different way of thinking as the foundation for improving and managing their operations. It also aims to dissolve some of the myths associated with lean and systems thinking, including claims that they are fundamentally different approaches; claims that lean is about applying tools; and finally claims that these approaches are simply not suitable for use in the public sector.

The Lean or Systems Thinking Debate

There has been an ever increasing debate over recent times in the public sector as to whether lean or systems thinking is the best approach to use as the basis for operational improvement, with some going as far as aggressively condemning one approach in favour of the other. There is something fundamentally flawed in this debate however, because when you take the time to truly understand the roots of each approach, you will find that there can really be no debate about lean or systems thinking as they are fundamentally linked to the same principles – the lean approach *is* a systems thinking approach. Those that continue to debate this continue to miss the whole purpose of lean thinking.

Whilst there are undoubtedly a number of reasons why people choose to publically condemn an alternative approach (including ignorance), it appears that the core problem is a lack of true understanding, undoubtedly caused by the gradual dilution of the original principles of the respective approach. This is certainly the case with lean, which has led to some well documented cases of poor practice under the lean banner, where practitioners indiscriminately apply manufacturing tools to service processes. The results are of course disastrous to any service business as this type of approach always involves upsetting the two most important groups of people, your staff and your customers.

So are the approaches really the same? We want to spend the time to put the record straight and we can only begin to understand the answer to this question if we explore the fundamental principles of each approach, starting with systems thinking.

Systems thinking itself is a very broad subject with many different approaches documented, however they all share the same core principle. For the purpose of this paper, we will simply focus on this core underlying principle associated with all systems thinking approaches, the notion of connectivity and interrelated parts.

There are many claims as to the original origins of systems thinking, the most popular of which emerged from the world of science and a biologist called Ludwig von Bertalanffy, who strove to bring science and systems together, suggesting that we should generalise scientific thinking to refer to the whole, not just the parts¹. Historically, scientists would strive to understand complex organisms by breaking them down into smaller more

manageable parts. Von Bertalanffy studied plants and whilst doing so resisted common practice of scientists of the time. He instead recognised the need to study interactions in the plants as the only real means to understanding. This true understanding was only possible by studying the whole.

Your organisation is very much like the plants that von Bertalanffy studied, there are many individual parts, but they are all ultimately linked. An action in one area is ultimately felt in others, whether positive or negative.

Arnold Reisman offers a succinct definition of systems thinking in an organisational context that allows us to link this principle of interrelated parts back to the workplace:

“A system is a set of resources – personnel, materials, facilities, and / or information – organised to perform designated functions, in order to achieve desired results”².

Your organisation is made up of these same resources, each playing a role in the services that you provide. When improving your organisation, systems thinking asks that you consider the whole, rather than individual functions. When you do this you avoid the risk of sub optimising the whole in return for improving just one small part – the needs of the overall organisation are more important than the needs of one small area.

You may now wonder what this has to do with lean thinking. You may already have some preconceptions about what lean is and as such may see no link between the two approaches.

Like systems thinking, there are many claims to the origins of lean thinking. Most people accept that lean as we know it today really stems from the world of Japanese car manufacturing with Toyota. Indeed the term ‘lean’ was popularised by Womack and Jones through their series of seminal texts beginning in 1990. They brought us the ‘famous five’ lean principles and are also the first people documented to look past the world of manufacturing, and try to apply lean principles in any detail to service.

What has happened since their first text is somewhat remarkable. The use of lean has exploded, firstly into all known manufacturing industries, followed more recently into the service sector. This rapid expansion of lean thinking has led to insatiable demand for skilled

people who are able to help organisations to improve and ultimately reduce cost. We have observed however that this rapid growth has been detrimental to the lean movement, as the original thinking is becoming lost, replaced by an army of people with their toolkits.

Now let us turn the clock back to the early days at Toyota in post-war Japan. When we study the original Toyota Production System through the writings of some of its most influential contributors, Shigeo Shingo and Taiichi Ohno, we gain a true insight into what lean really is. Although a point missed by many, the clue really is in the name, Toyota operated a production 'system'.

In his reign as an early President of Toyota, Eiji Toyoda often talked to his top managers about creating better departmental co-operation, as he recognised the potential issues created by functional thinking³. It is believed that these are the early seeds of the lean-systems approach in Toyota.

When Taiicho Ohno (often referred to as the father figure of modern day lean) took over as a senior figure at Toyota, the lean-systems movement at Toyota really took strides forward as he set about transforming their operations. Ohno instinctively viewed Toyota as an evolving system, and appreciated that he had to consider the whole in order to become successful. Ohno said, *"only when the plant system is considered as a whole can standards for each production department become defect free and flexible"*⁴ – he viewed the business holistically. He also remarked that *"a business organisation is like the human body"*⁴ and of course the human body is a system that people have studied and improved (or tried to make better) for a long time.

What Ohno then began to do was to educate his people with the same mindset and upon doing so liberated them into improving their working practices, always with the overall system in mind. His people became skilled at problem solving, developing unique tools and techniques to help drive out waste from processes. Ironically, many of these tools and techniques developed to overcome problems in manufacturing are now causing the problems in service businesses. As remarked above, the notion that lean is a systems approach is being lost and being replaced by people that think lean is about applying tools. You must always remember that your business problems may be very different to those

experienced at Toyota, so the tools may not be fit for purpose.

John Bicheno, a renowned lean figure, offers a suitable summary in support of our conclusion when he describes *the "essence of lean is the systems approach"*⁶. We absolutely agree, lean is not about tools but is a philosophy that puts continuous improvement at the heart of your organisation, improvement that always strives to optimise your system for the benefit of your customers.

Why use lean thinking?

When defined literally, lean means 'without fat'. We all understand the term lean when used in the context of an individual's body composition or even a piece of meat for the dinner table, but when it comes to an organisation we find it difficult to understand what lean looks like. This is because that the fat in our organisations often remains hidden, so we often don't realise that it exists. To take this one step further, people often refute the fact that any fat exists at all. This misjudgement can usually be placed at the door of over familiarity. It often becomes incredibly difficult for someone to take a step back from what they have always known. Looking at your organisation with a different (often critical) perspective is especially tough for those who have worked for a long period of time in the same organisation.

In terms of lean thinking, this fat is known as waste. So how does this waste appear? In simple terms, waste can be described as the activities that are currently performed by your organisation that add no value to the end user of the service. This waste is the excess cost that exists within your organisation and this waste almost always worsens the service that you are able to provide to your customers. The removal of this waste is the answer to your cost conundrum and to your service improvement aspirations; you just need to learn how to see it and how to design it out.

Lean is not suitable for the public sector

We often hear that lean is not suitable for the public sector and this statement could not be further from the truth. The motivation for private sector businesses has been primarily about reducing costs to improve profit margins, which has in turn led to improvements in levels of

service as they naturally should with a customer-centric improvement philosophy. Profit is not the goal with public services, however providing high quality, value for money services certainly are, propped up by the need to fill huge funding deficits. This is why the public sector needs to embrace lean thinking sooner rather than later.

We asked Dr. Keivan Zokaei from the Lean Enterprise Research Centre, Cardiff Business School to comment on this subject. He said,

“the story of the past decade in the public sector has been one of lavish government spending and a culture of ‘management by targets’. Not surprisingly, the evidence published by the Office of National Statistics show that each extra pound spent has been working less hard than the previous one. Public services face a significant productivity challenge. In a recent study the CBI argues that if public service productivity had increased in line with productivity in the rest of the economy in the decade to 2007, spending on those services could have been £31bn a year lower by 2007-08 without loss of quality. This growing waste of resources can only to be tackled if the existing paradigm of ‘hands-off management’ or ‘management by targets’ is eradicated. Lean thinking presents an important alternative by taking public sector managers out of their offices to the front line and by putting quality before cost”.

Dr. Zokaei’s comments are wholly appropriate and emphasise the need for public sector organisations to embrace lean thinking in order to improve. Lean in the public sector is not without its challenges however. Of course there are similarities between public and private sector organisations and fundamentally the same principles apply, technically in terms of how we can improve services from a whole systems perspective.

However, there are key factors which commonly restrict the ease of adopting such an approach which are more prominent in public sector organisations. These include:

- **Grade Structuring**
Employee grade structures in the public sector are often very structured and hierarchical. It is not uncommon for this to restrict the flexibility of the workforce to move around the organisation to where the demand is at different times of the day, week, year etc. Often it restricts the use of a first-in, first-out (FIFO) system if some work needs to wait for

the required grade personnel.

- **Flexi-Time**
Flexible working hours can provide challenges when planning your resources to meet the rate of customer demand.
- **Government Measures & Targets**
Many public sector organisations are given measures and targets from a central body. These can conflict with local measures, which may relate more closely to the customer.
- **Industrial Relations**
Well-supported trade unions are prevalent in most public sector organisations and play an important part in employee communication. Of course it makes perfect sense to work with unions to help ensure a consistent and accurate message is portrayed regarding the benefits of adopting a lean approach to organisational improvement. Trade unions often have the power to restrict the pace and success of lean implementation if they strongly oppose the change. Their full engagement is vital.
- **Funding & Investment**
Public sector organisations usually are given a set budget in order to run the organisation, which is often incomparable to the investments made into some profit-making private businesses. Often the budgets are not related to whether demand increases or decreases but arbitrary figures are adopted year on year.
- **Understanding who the customers are and what they value**
It is often difficult for public sector organisations to understand who their customers are and what they value. This is a very important aspect to lean methodology as the philosophy is always to start by defining value in the customer’s eyes.

Whilst these characteristics may exist in your organisation in one way or another, their existence certainly does not spell the end of your improvement efforts. In any public or private sector organisation, the improvement approach used needs to be tailored to ensure that it is fit for purpose and relevant to the organisation using it. Only by tailoring the approach can you successfully account for individual characteristics that may exist within an organisation.

One size does not fit all

We believe this to be one of the most valid statements in the world of operational improvement. We have seen many different approaches come and go over the years using similar methodologies, albeit packaged slightly differently. Some provide rigid structures for improvement, whereas some offer more flexibility. Many of them come complete with documented manuals and training programmes. The problem that this has created is quite simple, but has a lasting effect - very few practitioners will allow their approach to be adapted from the trained standard. This becomes a big issue when you enter different organisational environments, such as moving from manufacturing into service, or from a local authority into the NHS. The right approach is a flexible one. The right approach should be designed and tailored around your specific organisation. The right approach is not a one size fits all approach.

This is why in the past some lean implementations in service businesses have received negative press. If you study these negative examples the problem is quite clear, the approach followed in the service environments has rigidly followed the approach used in a manufacturing plant, neglecting the characteristics that make the service environments so different to those of a factory. In many physical environments such as a factory or warehouse, the labelling and marking out of work areas is key to the flow of product. However, marking out a desk in an office of where stationery should be kept is highly unlikely to give the same benefits and likely to demoralise your staff.

Of course, there may be processes within a service environment that suit a traditional lean manufacturing approach. This is more likely where the process is highly repetitive, with very little variation in demand.

Similar examples can be given of performance measures from one business environment to another. Productivity is a measure heavily used in many businesses to assess how much output has been achieved for an input, it is a classic cost based measure. However, using a measure such as this in some call centres could mean operators are tasked with completing a set number of calls in a given period. Given the inherent levels of variation in the demand in terms of what different customers calling may require, and for a customer to be given the correct advice required, it may be necessary to spend a higher amount

of time in the first instance. A classic cost based productivity measure forces call centre agents to cut calls short, ultimately leading to them providing inadequate advice. The result? Quite simply higher costs and a worsened service – the customers will call back again to satisfy their initial request. The effect of productivity measure in place will not control or reduce costs as planned, the consequence is opposite.

The goal with any improvement programme in the service sector should always be to maximise customer value through the design and management of work. The tools, techniques and measurements etc used in each case are likely to require fresh thinking not a standard toolkit with a checklist.

Conclusion

The need for public services reform is clear, both from a cost perspective and a quality of services perspective. An understanding of lean thinking and how its core principles can be used to suit the improvement needs of your organisation is a vital first step. We hope that your eyes have been opened to this.

The true objective of this short whitepaper was to provoke thought in the readers mind about how any improvement approach, call it lean, systems thinking or something else, needs to be carefully considered and adapted to your individual organisation. Do not hold the illusion that you can pick up a magic toolkit and transform your organisation. You will experience more failures than successes by taking this approach.

Start by understanding your organisation from a systems perspective, through the eyes of your customers. Only then will you know what approach needs to be taken. This is the first step to solving your cost conundrum and to becoming a fitter, leaner service organisation.

References

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 5. Bicheno, J. (2008) *The lean toolbox for service systems*. p.8.
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About Reinvigoration

Reinvigoration are providers of operations improvement consulting and training services, all of which hold lean thinking at the heart. We were founded with the strong belief that when a service organisation requires help, the approach used should be highly relevant to their specific service sector. To achieve this, we work with our clients to develop a tailored approach that is unique to your business and your individual challenges.

Our consulting and training services

We believe that it is crucial to understand that lean manufacturing and lean service are very different. We have an intimate understanding of this and all of our consultants have exemplary records of delivering sustainable change across the whole spectrum of service sector industries. This deep understanding of service improvement techniques should not be underestimated. Our clients benefit from them having spent many years building up a picture on what will work for you. Our consultants will work with you to design solutions that will lower your costs and improve your services. The engagement of your people will also flourish as we help them to do what they love to do best – providing high quality services.

In terms of training, we are unique in the market place with our lean service offering. Our training is highly interactive and we teach using service simulations, not manufacturing ones. Delegates will not only learn about practical tools and techniques, but more importantly leave with a clear understanding about how the original lean principles might apply (or not) to your business, so they are ready to turn the learning into action.

Courses are offered at varying levels and are offered as both public and private courses. We also offer various levels of accreditation allowing delegates to gain a recognised qualification for their efforts.

Our commitment to public services

We are committed to helping public sector clients overcome their problems, which in turn will help to improve the standards of public service in the UK and ultimately aid our faltering economy. Our level of commitment for improving services for all UK taxpayers is firmly reflected in our consulting and training rates which are incredibly modest for the levels of expertise offered. We don't believe in profiting from the British taxpayer, we want to help, which is why our pricing structure is unique in the marketplace.

If you are interested in hearing how we can support your organisation with either training or consulting, please get in touch by visiting our [website](#), by sending us an [email](#) or by calling us on 0800 0286703.

