INTRODUCTION
This article addresses the key issues that relate to implementing organisational change and in particular ‘Lean manufacturing’. The author uses ‘Lean’ and variants of ‘continuous improvement’ as examples to illustrate the inability for most organisations to create the culture that will sustain ‘lean’ and any other programme of organisational improvement. Failing to plan for change equates to planning to fail. Currently, too much attention is focused wrongly on the technical aspects and tools and techniques rather than the ability to create a self-sustaining culture where change is seen as the norm and where resistance to change is never an option.

Just imagine what you could achieve if your organisational culture welcomed change. Consider how easy it would be to install the training, the techniques, the methodologies and the common language that accompanies any Lean strategy, if the staff at all levels chose to perceive the change as an aid to their work rather than as a hindrance and distraction from their daily, weekly and monthly targets? I’ll make a bold statement “most organisations stand little chance of implementing ‘Lean’ unless they have paid at least equal attention to creating the right culture, the circumstances, the foundation for implementing change”.

START WITH THE END IN MIND
It matters little how much energy, time, detail and analysis goes into the technical methodologies and tools of Lean, or any other change initiative, if you fail to prepare the corporate culture for change. It’s best to ask the question – “what do we want the business to look like after we have implemented Lean? How many layers of managers will exist? Which key processes will be critical to operating across the organisation? How will we be focusing all our attention on the ‘vital’ processes and cutting through red tape, duplication, rework and non-value-added activities? What development is required to support managers in working in the new organisation? How can we ensure that cross-functional working is valued as highly as a technical proficiency? How can we destroy the ‘silo mentality’? What mechanisms can we use to reinforce the importance of working across boundaries?”

These are all questions I put to a MSc research student who is working in a number of manufacturing businesses who is looking specifically at the implementation of ‘Lean manufacturing’. He had originally contacted me after reading an article on ‘Implementing Lean’. He was concerned that many of his studies demonstrated that Lean did not actually work. From our discussion we distilled the following:

- Lean as a methodology does work if it is allowed to evolve and is shaped to the organisational culture.
- Lean is often perceived as a ‘toolbox’ of concepts and methodologies that are forced on rather than tailored to, an organisation.
- Lean often does not go beyond the manufacturing facility.
- Lean does not frequently permeate the processes and functions that support or actually precede the production process. For instance, Lean tools are not often viewed as aiding the sales process?

- Lean often does not actually influence the design and innovation process.
- Lean too frequently is sold as a Japanese technique for improvement – surrounded by all the Japanese terminology that quite frankly, is irrelevant to making it work within European businesses.
- Lean requires a culture of continuous improvement.
- Lean cannot create the culture – Lean has to grow from it.

Although unscientific and based upon a random sample of participating companies, this discussion helped the student and myself develop testable hypotheses for change management scenarios which are to be published shortly.

READY, FIRE, AIM – SHOULDN’T CULTURAL CHANGE PRECEDE IMPLEMENTATION?
We are highlighting the importance of culture in determining the success of Lean or any other change initiative – the following example illustrates the point. Some years ago I worked with a business in North America who were intent on trying to install TPM (Total Preventative Maintenance). Major benefits would accrue to the business if they could plan maintenance and avoid extremely costly downtime leading to unfilled customer orders. The biggest problems facing implementation had nothing to do with the tools, the scheduling process to support TPM, but rather the style of management in the corporation’s key facilities.
No amount of effort expended on the technical aspects of the issue would resolve the problem. The issue resided with Plant Managers who had failed to prioritise the importance of adhering to a TPM schedule rather than adjusting priorities and actualities at the production process at the ‘drop of a hat’. Even in the early stages of implementation, people were being withdrawn, due to existing bottlenecks and problems in production, from training events designed to deliver TPM as a strategic competence. TPM was destined not to work in the way the culture operated. The culture portrayed a ‘ready, fire, aim’ mode in operation. Simply, we need to create an investment in prevention in the mindsets of the management team running the corporation rather than thinking they could just implement a ‘quick fix’. Much of this ‘quick fix’ thinking comes from the closed loop, analytical thinking associated with the solution of technical problems. Most change requires a very different kind of thinking.

DON’T WORRY, IT’S NOT TREE HUGGING! – MANAGING TRANSITIONS

This goes beyond the straight line thinking associated with resolving simple scientific or technical problems. Organisations are social systems made up of conflicting interests all apparently focused on working towards a particular goal. Effective change management is about ensuring that goals are achieved. It does not involve ‘being nice to people’, ‘training for training’s sake’, ‘encounter groups’, ‘tree hugging’ and other associated apologies for organisational change strategies. It requires four very important issues:

- Focusing on finding a direction and communicating tangible goals.
- Creating energy through people to achieve that goal.
- Aligning all interests.
- Establishing cause effect relationships that translate into a culture of continuous improvement reflected in how people lead and behave.

This addresses the core issue, what culture and behaviours should we encourage and reward that take us closer to our objective? It all depends on how we focus our energy and align our resources to that.

What most of us forget is that change is not a technical-rational process. It is however, a political-emotional process. In too many instances in organisational change we tend to have adopted a technical-rational process. This has resulted because most problems in manufacturing in the early days may have been perceived as purely technical in nature. This approach permeated early attempts at production and project management when focus lay in production possibilities, cost efficiencies, scheduling, charting etc. Everything had to do with ‘things and logic’ not ‘people and relationships’. It was all to do with the manipulation of tangible assets of production and the relative measurement of their achievement. Few people talked about change as a political process, which in fact is exactly what it is!

CHANGE IS A POLITICAL & EMOTIONAL PROCESS

The effectiveness of change is based upon people, their motives and how these are played out in their ability to work in teams in conflict situations. The reality of change is the delicate world of managing scarce resources, managers and interest groups ego’s, resulting ‘turf wars’ and accepting that ‘conflict is endemic’ in most social or business situations. The reason that change does not work in many organisations is that managers fail to focus upon the management of resistance. Our goal when confronting change is to prevent conflict arising, by finding every conceivable way to manage any potential resistance to change. If I come across resistance in an organisation it is because the management group have failed to manage the resistance. Change happens when those wanting the change to take place – the ‘sponsors’ are in rapport with the ‘targets’ – those who have to live with and implement the change. The success is down to how well the ‘change agent’ manages the relationship between ‘sponsor’ and ‘target’. I use the term ‘change agent’ loosely. In many cases there is no change agent to facilitate this process. To me, every organisation should have a group, an elite of managers whose role is to drive and implement change. But this elite should not be part of HR or any other function – they should be line managers. You see, I believe that change resides in line management not a separate function run by an academic. Many organisations are lucky if they have someone trained in a project management methodology.

Organisations do not really equip themselves well for implementing Lean. To do so requires a culture where change is the norm and driven by internal managers, not expensive consultants. I would contend the point that change can be managed well. You can have both the culture and the change agents. Change can be managed extremely well by developing a change implementation strategy focused upon identifying ‘cause-effect’ relationships in building a self-sustaining culture. However, in reality, very few organisations create and shape the culture the way they would prefer.

DESIGNING THE RIGHT CULTURE

Most corporate cultures exist by accident. The original owners or organisational architects that created the business ensured that their values of doing and transacting business were central to ‘how things get done around here.’ But, over time and with key players and new actors entering the scene, acquisitions, mergers and suchlike, the organisational culture has been blown about – often being very different to how things should be. Culture change requires an assessment of the strategic focus of the business and shaping the behaviour of all participants in the process to that goal. This is a simple
method of building a variant of the balanced scorecard approach where strict cause-effect relationships are clearly demonstrated and acted upon within the culture. This is where, simply stated the culture and processes of the business cause profitability, growth and long term success by retaining existing and winning new customers and penetrating new markets. Energy expended other than on improving processes and shaping the culture to achieve these end goals is a waste of time. To create a self-sustaining culture there is every reason to prove a ROI on every dollar spent on generating specific outcomes. The relationship with inputs and outputs must be the guiding principle to getting better. At the start of the process, the culture really should be designed, mapped, measured and central and being fundamental to improvement and implementation in ‘Lean’ or any other initiative. Culture change is a process that can be controlled. Leading conglomerate, General Electric is a case in point. Driven by a desire to be the ‘Number 1 or 2’ in any industry and market, GE have modelled and shaped their way to become an incredibly successful business with earnings of $130 billion in 2003 and double digit profit for the last 18 years. Jack Welch, the now retired CEO, was architect of this culture and much can be found on shaping their culture through the concepts of work-out and adherence to the ‘change acceleration process’ [1]. It proves it can be done and is done in many corporate settings. The big issue is “can you afford not to do it?” What happens if you don’t commit to create a powerful culture to nurture and grow Lean? More importantly, what won’t happen to the business because you failed to develop that self-sustaining culture?

What is Lean?
‘Lean’ is a commitment, a process of continuous improvement that can significantly impact upon an organisation’s competitiveness. ‘Lean’ can be a strategic tool for resolving severe organisational problems. It also can unite several change initiatives that are running currently in a business. The eagerness to implement Lean can soon be threatening because the research and case studies of ‘Lean’ implementation is so vast. Research into ‘lean strategies and methodologies’ can be literally overwhelming in terms of the sheer range and scale of information available, case studies and journal articles. At this point it should be realised there is no one best way to introduce lean. Lean must grow from the culture – not be imposed upon it. Lean strategies’ have evolved from the initial work undertaken with the Toyota Production System, and its evolving variants founded initially in the Japanese Automotive Industry. Any reference to the literature of the time will highlight a plethora of texts, many of which are captured in the cardinal work “The machine that Changed the World” and more recently “Lean Thinking” by Womack and Jones [2]. It is not my intention to review their extensive work but rather to examine the following issues. Reference to many articles in Control would highlight that Lean has many outstanding authors and practitioners. What they may lack is a perspective on building the culture to support Lean.

Creating a ‘Lean’ Culture
‘Lean’ can be a major strategic initiative focused on major cost efficiencies managed from the top of the business, or it can evolve in smaller discrete initiatives lower down in the organisation. The preferred route of a ‘top down’ approach will have a major impact. If managed effectively, ‘Lean’ can be the major philosophy that literally can unite the organisation in a relentless drive for improvement.

Lean is not a cost reduction exercise – although many see it that way, simply as an attempt to take unnecessary costs out of an organisation. If this is the only objective, then ‘Lean’ will never take its rightful role as a strategy of competitive advantage. If those committed to severe cost reduction use the tools and techniques (of Lean) purely for cost reduction purposes, it will never become the culture.

A culture of Relentless Improvement
We were told by a manager of the Toyoda Plant about their culture for improvement "..........."Toyota implemented various strategies for continuous improvement including what we understand as ‘Lean’. Staff contributed ideas for improvement. This generated 180 ideas per employee each year, of which 98% were implemented – a workforce worldwide of 60,000 meant almost 11 million ideas for continuous improvement were being implemented each year. With a 250 day working year that means from dawn to dusk each day Toyota are working through 44,000 ideas for being even more competitive.

Now, how many ideas or suggestions are encouraged from staff that work in your business? More importantly, how many are implemented. Even more important, do you have a process for capturing ideas?
CREATING THE CULTURE TO MAKE LEAN WORK

In an organisation producing agricultural vehicles, we coined the term ‘rapid improvement’ as being the key ‘Lean’ thrust. We wanted to establish in the minds of those assembling the product the importance of doing things better, faster, more effectively and at economical cost. This focused on two issues: the teams that built and delivered the end products, and the processes that supported them. Getting the processes right was critical in delivering another ‘Lean’ project. Processes which transcend silo thinking and focus on service delivery across the organisation are fundamental. Make no mistake, this requires a key change in culture and behaviour. Instead of focusing on lean techniques we decided to get the culture right first. Strict application of the 5S’s or employing JIT is not Lean – merely a tool in the arsenal of improvement. And perhaps this is a major stumbling block in implementing change – belief that an over reliance on the use of a tool will compensate for the culture not being right. These tools cannot be overlaid as a template on a silo based culture. Culture precedes toolboxes. Lean thinking can exist only when we install a listening and learning culture where process design is created by those who deliver the product or service, not by a business analyst in an ivory tower who never sees the product.

Genetics

Working with a genetics business we highlighted that the production people were driven and measured by technologists who were brilliant scientists but with little idea of operational issues. We re-engineered the core processes by involving both groups in re-designing the process – not listening just to the scientists which would have been the case previously. This resulted in tighter process driven by all parties involved in delivering the process.

PROCESS IS A KEY DRIVER OF THE CULTURE

We need to constantly review processes, and introduce ‘process mapping’ as a key tool for continuous improvement. We argue strongly that teams should focus on designing the ‘perfect process’, cutting out any unnecessary stages, questioning time delays and over-inspection, and replacing unnecessary control with trust. Designing the perfect process has many advantages and looking at what we do currently enhances capabilities. A Lean organisation is one where, at any time, those who work the process can apply ‘Process Mapping’ or variants of this to their core work activities. All businesses are driven by hundreds of processes – but focusing on the core six or eight processes, whether in a manufacturing or service organisation, will create a Lean culture.

WHAT ABOUT THOSE AREAS THAT SUPPORT MANUFACTURING OR OPERATIONS?

Don’t forget about those parts of the organisation which never touch the product. They require exactly the same culture to support what you are doing at the sharp end. It is pointless having slow and bureaucratic IT and Finance functions or out of date personal or welfare functions contributing less than is best practice.

The ‘Lean’ concept has an incredible opportunity for improvement in most service organisations. In the early 1980’s TQM research estimated that as much as 40% of staff operating costs of businesses can be wasted. Working with a provider of financial services our research identifies over 200 activities of work associated with unnecessary reworking or errors and tasks together with unnecessary appraisal, inspection and over checking. This work was in eight functions in a 1200 person business and highlights the importance of starting Lean type initiatives in the service or support areas first.

Lean Thinking in Motor Finance

Process improvement can be critical in getting Lean established. Working with a provider of Motor Finance, a team of specially selected staff formed across five functional boundaries, Credit, Risk, Finance, IT and Customer Service, met to discuss how to streamline the credit approval process to provide better service to their motor dealerships and the eventual consumer of their product (the car buyer).

From their investigation, they discovered that too many steps existed in the process. Many of the steps were designed because managers did not trust their staff, so an unnecessary element of inspection and approval had been added. When the team designed the perfect process, they eliminated 14 unnecessary steps, devised a training plan to prevent people inputting and compounding errors, and set up self-inspection audits, thereby reducing time taken to complete the process by 60%. Further work resulted in this process being automated, resulting in spectacular results in the car showroom – that is, 98% of online applications being responded to within four minutes of the data being entered. This has had a significant impact on customer service for customers waiting for a response to raising finance for a car, this company can respond in minutes to credit applications, whereas many competitors still take days to respond.

For introducing ‘Lean’ as a positive force, the following five step approach can work well.

1. Create the Culture: Senior Management Team

The culture of any business will either evolve by accident or be designed and shaped by the senior management team. The focus of
senior management commitment is critical and the only activity worth pursuing is winning the heart and mind of a major sponsor or sponsors of the top team. Better to work with a firmly committed individual than a team of 'fence sitters'. Winning a strong psychological commitment to implementation is key and must be tied in with deliverables, which is related to the next point.

In order to create a culture to support Lean or any variant of continuous improvement we have to better understand the culture in which we already operate. Before we can shape the culture we have to see what works and what does not. This requires a speedy audit focusing on cross-functional working. Various diagnostic tools will complete this process quickly. Any supporting tool has to be delivered speedily otherwise it goes against the spirit of continuous improvement.

People are Boss Watchers
Like it or not leadership is critical in shaping the culture. Leadership does not reside with the CEO or the senior management team, but resides at all levels when people have direct reports or are part of the critical supply chain with other key players. There is no sitting on the fence. Research from Edgar Schien [4] tells us that the dominant factors that shape culture are “to what leaders pay most attention” and “how they respond to critical incidents”. Make no mistake, people are Boss watchers! Those in senior positions dictate how others respond to change. There are no excuses. Either the leadership group supports the culture or it does not. Breaking the silo mentality is critical to making the culture work. Egos are challenged, conflicts are won heroes praised and those not committed to the process are encouraged to go work for the competition. If people are not supporting the business in the front line – they better be supporting those who do.

(Further details of shaping the culture will be published in a separate article supporting this piece of work.)

2. Change Agents
The best people to deliver any culture change and a process for Lean or continuous improvement are internal staff. This may require some support of an external consultant – but the whole emphasis should be on developing an army of internal change agents. With a client [5] in the USA I wrote a book that focused completely on this process. The culture must reside in the hands, hearts and minds of the staff of the business. Forget giving this responsibility to an expensive army of externals. Find a trusted advisor and work on developing internal capability.

3. Roll Out and Design of Projects
This requires people at all levels to commit to take ownership. They have to commit to create performance standards and monitor metrics which they own. We find to get Lean started it is best to be discrete and work on a specific project, rather than commit to a global or strategic thrust without having control – seeing what works and what does not. All events and activities associated with Lean have to be closely led and facilitated. Ideally, Lean should occupy a high profile and the project should involve all significant players involved in the project or process. Sometimes, working on what is wrong, and creating a short-term ‘fix’ is the right thing to do. People see the good results quickly and you can trade on this success provided a long term solution is soon arrived at.

Projects for Lean and continuous improvement can range from manufacturing problems to customer service, cross-functional working on product development, creating new sales channels, quality improvement as well as typical manufacturing, logistics, supply chain problems. There is no reason why they could not start in a support function and get HR, Finance, Marketing and IT people thinking differently.

4. Focus on Implementation
Success in implementation depends on the relationship between the external consultant, internal change agents and the sponsor of the Lean or continuous improvement project, and not forgetting those who work the processes. Prior to the commencement of the process, those who commit to drive a solution to a corporate or business problem focus upon agreeing resource to achieve results. People who are critical as ‘knowledge resource’ in resolving the issues are quickly identified to become part of the team to drive and, more importantly, implement results of the event. No steering groups are formed instead a team of enthusiastic activists set a business plan in operation to cover all constituencies, like ‘who does what’ and ‘how this fits in’ with shaping the culture to accommodate the changes.

5. Timing, Results and Reinforcement – Measures
It is best to agree the duration of a project prior to its commencement. People lose interest if projects last more than six weeks. Change can be sustained over this short period. If a solution takes too much longer then the problem was probably not defined closely enough or the project was too big to defeat with a six-week burst of energy. My recent interventions include a six week delivery on designing an assembly process for a new agricultural vehicle being assembled in the UK. Through close cross-functional working and because of the six-week time span many issues can be driven at the same time. As more issues are clarified and loops closed, more and more people are trained in the process.

The best way to implement Lean or variants of continuous improvement to full capability is to communicate the benefits of real projects. Demonstrate how the new culture, together with the techniques, have impacted on a major problem.

SUMMARY
This article has used Lean or continuous improvement as vehicles to communicate the importance of creating the right corporate culture
first. Cultures can evolve and become the driver of organisational change very quickly. By focusing upon discrete variables, it is possible to shape the culture of the business very quickly. Lean or any other form of change cannot stand alone. It cannot exist in an organisation where the culture is against it. Lean requires such a high degree of cross-functional working that any culture which counters this will fail in its implementation. Readers of this Journal may well have more experience of Lean practices in novel and challenging businesses. I would challenge any of them to concede that the culture must come first, though I have yet to see it in this literature.

Consider now the culture that would equip your business with the ability to succeed. It has to be a culture where change is the norm, where resistance is experienced but quickly won over to support and in which going to work is a joy. Given the choice whether to build that culture or not, what would you do?

REFERENCES

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Philip is a member of various training consortia organisations, and has recently focused on creating innovative business simulations through Learning Strategies Ltd. He consults in the UK, Europe and US, has written seven business books and published many articles, speaks at conferences and runs workshop sessions.