A case for Developing Lean leadership (DLL) model for long-term organisational sustainability: Helping organisations move from strategic intent to operational action

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Abstract

The role of leadership in building an effective organisation cannot be overstated. Within the different leadership approaches, Lean leadership has acquired a niche of its own. The reasons are quite clear for organisations preferring Lean leadership and management approaches. Organisations are constantly subject to fluidity and uncertainty that emerge from continuously changing internal dynamics and the sudden and unexpected shifts in the external environment. Lean leadership emphasises organisational agility and nimbleness through continuous improvement, respect for people, and a focus on delivering customer value. Despite obvious advantages for organisations in adopting Lean leadership and management practices, several studies indicate the less than 10 percent of all Lean interventions sustain beyond three years. This paper makes the case that the overarching reason why many such interventions don't sustain is the lack of a clear and specific operationalisation of Lean leadership strategies. Further, and within that larger case, the paper looks at how the lack of specific organisational processes that turn the two Lean principles of *Respect for People (RFP)* and *Continuous Improvement (CI)* into leadership styles cause Lean leadership and management strategies to fail within organisations in the longer run. Additionally, the paper will make the case that three fundamental behaviour shifts of asking the right questions, digging for root causes, and aligning organisational goals to an individual's work are the keys to converting lean leadership and management strategies into long-term operational successes.

Keywords: **Leadership; Organisational Strategy; Operations Management; Processes, Sustainability**

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1. Introduction

The origins of Lean can be traced back to Toyota Production System (TPS) (Liker, 2004). For more than 50 years Toyota has been profitable becoming the largest motor vehicle manufacturer in the world. It is a guide to excellence for organisations. TPS developed into 'The Toyota Way' and Lean with its two principles of *Continuous improvement* (CI) and *Respect for people* (RFP).

The increasing demand for the concept and tools to implement Lean has led to the sale of millions of Lean-focused books and toolkits. Research shows that Lean works to an extent in the short term (Scerrer-Rathje et al., 2009). Research, however, also shows that most of the organisations are failing in the Lean implementation in the longer run (Dombrowski and Mielke, 2013) and no company in any industry has attained the same level of consistent operational excellence as Toyota (Liker, 2004). It is estimated that less than 10 percent of all Lean interventions sustain three years after they are implemented. (Cochran et al., 2017) and numbers as low as 2-4 per cent have been reported (Belhadi et al., 2019; Loh & Yusof, 2020). After over 20 years of companies adopting and adapting TPS, it is hard to find one organisation except Toyota Corporation that has improved their quality, reduced their costs, and increased competitiveness (Rother, 2013). What is Toyota's Lean secret?

Lean is an employee-driven philosophy designed as an integrated socio-technical system to find and eliminate waste (Pakdil and Leonard, 2017). This approach contributes to successful behavioural outcomes that have a significant impact on Lean company management and leadership of employees (Schwagerman and Ulmer, 2013). Yet, it seems easier said than done to succeed in the Lean implementation. Most literature states that the lack of the principle *RFP* is one of the biggest reasons for the failure of Lean implementations (Coetzee et al., 2019a; Emiliani 2008; Yadav et al., 2017). Ljungblom and Lennerfors (2021) presented a literature study that showed that 61 percent of the articles about Lean implementation failures are due to lack of *RFP*. It is remarkable that this missing *RFP* principle has been known for more than a decade. (Belhadi et al. 2019; Cochran et al. 2012; Loh and Yusof 2020). Bäckström and Ingelsson (2016) state if the two core principles are permeated across the organisation it is *Real Lean,* as opposed to *Fake Lean* where there is an overemphasis on *CI*. Without a proper Lean culture, in which *RFP* plays the key role, Lean tools are just tools.

Emiliani (1998) also pinpointed the importance of understanding of real Lean with a focus on leadership, which is important to achieve organisational success (Grigg et al., 2020). According to Emiliani (1998), there are two different types of waste - *process waste* and *behavioural waste* - where both are equally important. He stated there were methods and systems to make the process waste visible, but the same was lacking on the behavioural side. Emiliani took Womack and Jones (2003) product value stream concept to improve production processes in organisations from a behavioural context and called the concept Lean Leadership Behaviours (LLB). The LLB concept is developed to support the *RFP* principle and to facilitate the development of a Lean culture.

The Lean culture is characterised by an atmosphere of trust and respect, empowerment, consensus, effective communication, sense of realism, problem-solving, equal opportunity for excellence, participative decision making, team approach and a culture of employee engagement (Schwagerman & Ulmer, 2013; Yadav et al., 2017). In a survey from 2009, 20 percent of the 515 respondents recognised changing the organisational culture as the biggest challenge companies face while trying to implement Lean (Traylor, 2011). Mann (2009) stated that 80 percent of the effort in Lean implementation is expended on changing people's practices and behaviours and, ultimately, their mind-sets.

The purpose of this paper is to examine Lean leadership from the perspective of three questions:
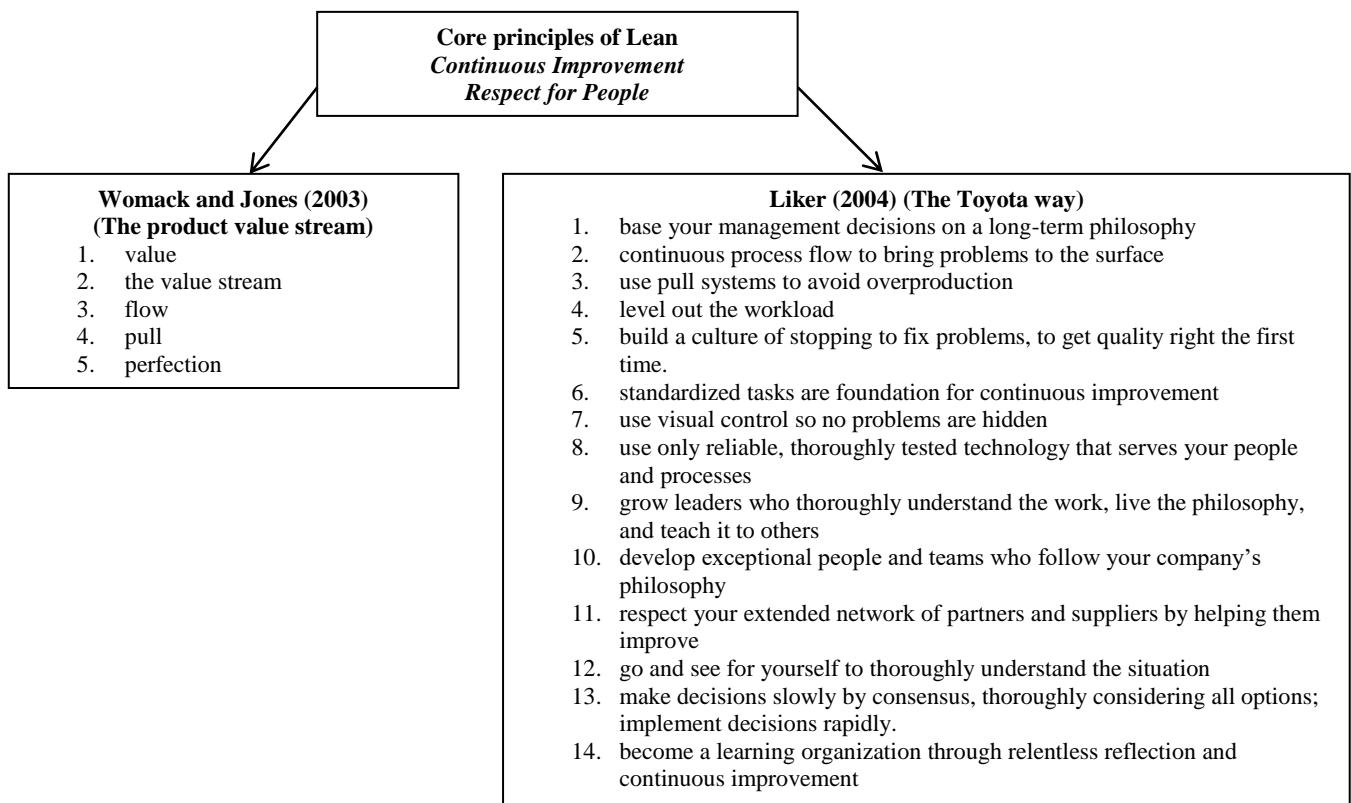
1. In the implementation of 4Ps model of *Philosophy*, *Process*, *People & Partners*, and *Problem Solving*, how does the excessive focus on *Process* affect Lean leadership strategies?
2. How do fundamental shifts of behaviour within an organisation contribute to Lean leadership?
3. Is special Lean leadership necessary, and if so, what does it look like?

2. Theoretical framework

2.1 Lean

Lean is a philosophy of guiding principles and overarching goals together with a set of management practices, tools and techniques that seeks to eliminate waste and add value to customers and stakeholders (Liker, 2004). Researchers all over the word have studied and developed Toyota's winning concept. Two of the most famous ones are Womack and Jones (2003) and Liker (2004). Based on the two core principles of *CI* and *RFP*, they have extended the core thoughts to more principles (figure 1). The product value stream, which stems from Womack and Jones (2003), describes a five-step process to improve organisations and achieve improved results and The Toyota way (Liker, 2004) increased it to 14 principles.

Figure 1: Different models of Lean

Core principles of Lean
Continuous Improvement
Respect for People

Womack and Jones (2003)
(The product value stream)
1. value
2. the value stream
3. flow
4. pull
5. perfection

Liker (2004) (The Toyota way)
1. base your management decisions on a long-term philosophy
2. continuous process flow to bring problems to the surface
3. use pull systems to avoid overproduction
4. level out the workload
5. build a culture of stopping to fix problems, to get quality right the first time.
6. standardized tasks are foundation for continuous improvement
7. use visual control so no problems are hidden
8. use only reliable, thoroughly tested technology that serves your people and processes
9. grow leaders who thoroughly understand the work, live the philosophy, and teach it to others
10. develop exceptional people and teams who follow your company's philosophy
11. respect your extended network of partners and suppliers by helping them improve
12. go and see for yourself to thoroughly understand the situation
13. make decisions slowly by consensus, thoroughly considering all options; implement decisions rapidly.
14. become a learning organization through relentless reflection and continuous improvement

Source: Womack and Jones (2003) and Liker (2004)

For ease of understanding, Liker (2004) divided his principles into four categories, also called the 4P model - Philosophy, Process, People/Partners and Problem solving.

2.2 RFP

CI focussed on methods and tools often takes over in the implementation phase of Lean because they are visible and easy to grasp (Rother, 2013). The other key principle of *RFP* is more on the invisible side (figure 2). Rother (2013) describes *RFP* as hard for the employees to tell about and explain associated thoughts and routines. It only normalises if it is within the Toyota culture. Toyota's methods do not work without a link to Toyota's underlying logic. Without the proper Lean culture, in which *RFP* plays the lead role, Lean tools are just tools.

Figure 3*: Toyotas visible tools and methods are built on invisible thoughts and acts.*

| Methods   Tools   Principles | (visible) |

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| Thoughts and Routines | (invisible) |
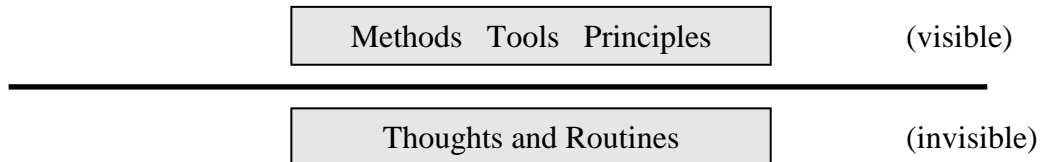
Source: Rother (2013, p30).

Lean is still an *add-on* tool, where the managerial culture and the employee's engagement are missing (Kusy et al., 2015). One answer may be that there are no direct definitions of *RFP*. The definitions of *RFP* are diverse and point in different directions. Overall, the definitions can be sorted using different metaphors. In one corner is the tagline '*First We Build People, Then We Build Cars*'. Here, *RFP* is the underlying organisational atmosphere that allows for effective problem solving and increasing organisational performance (Oppenheim et al, 2009; Womack, 2008). In the other corner, as a contrast, is another tagline '*Toyota Build Cars, Using People'*. This statement is closer to enhancing the involvement of workers and to draw out their full capacity (Bodek, 2008; Sartal et al., 2018). However, there are researchers who have seen difficulties of an absence in definition and therefore have conducted a systematic literature review to find the *true* meaning of *RFP* (Coetzee et al., 2019b). By reviewing key references, they found that *RFP* meant:

- Implementing teamwork as the foundation of the organisation
- Developing and challenging people
- Motivating people
- Developing people as problem-solvers
- Assessing people's safety in their daily tasks
- Removing waste from people's daily tasks
- Displaying people's capabilities by entrusting them with greater responsibility and authority.

In another study Coetzee et al. (2019a) merged their findings on *RFP* into a framework and integrated it with the product value stream (see figure 1) and the people value stream (Likert, 2004), which you can see in Table 1.

Table 1: The people value stream connected to the product value stream

People value stream		Product value stream	Notes
1) Define the people values	*Determine the desired people attribute; team-minded, competent, motivated, willing and able to solve problems, aware of safety, efficient, and*		

	capable of being trusted with greater responsibility and authority		
2) Identify the people value stream	*A process that will ensure everyone can be developed according to the determined attributes. Key actions are:* *- Implement teamwork as the foundation of the organization* *- Develop and challenge people* *- Motivate people* *- Develop people as problem-solvers*		
		3) Define customer value	*Once the people value stream has been developed and the attributes developed in people, you can start with the first step in the product value stream and define customer value.*
5) Create flow in the people value stream	*To create flow in the people value stream, you can:* *Take care of people's safety – reducing or eliminating tasks that are dangerous, injurious to their health, and physically strenuous.* *Take away non value-adding tasks such as overproduction, over-processing, waiting*	**4) Identify the product value stream**	Step number 4) and 5) should be worked simultaneously
		6) Create flow in the product value stream	
		7) Pull from the customer	
8) Pull people's capabilities	*In this phase, people are developed accordingly. Therefore, people's capabilities can be displayed by entrusting them with more responsibility and authority. Actions can include:* *- Involving workers in managing and improving their workplaces* *- Giving workers the right to stop the production line when necessary* *- More knowledge about how to prioritize orders and the production schedule*		
9) Strive for excellent people	*A process where people are continually developed, challenged, motivated, teams are continually strengthened, people are*	**10) Strive for an excellent product**	Also step number 9) and 10) should be worked simultaneously

Source: Coetzee et al. 2019a

RFP is respect for all stakeholders – employees, suppliers, customers, investors, communities, and competitors – and by extension the entire humanity (Emiliani, 2008). The human being, the people, is the base for all success. Dibia and Onuh (2010) stated that employees play a central role in socio-technical systems that are considered the most important to Lean transformation. The authors believe that Lean is an interlocking set of three underlying elements: philosophical underpinnings, managerial culture, and technical tools—a triangle in which human development is at the core.

The degree to which the three-interlocking elements seamlessly connect to each other depends on trust, which acts as a mediator between leadership engagement in organisational transformation and work engagement of the employees during periods of organisational shifts (Islam et al., 2020). There is also empirical evidence that trust in leadership improves an employee's level of engagement with work during periods of change, which can often prove to be the difference between success and failure of organisational change and improvement strategies. (Agarwal, 2014; Li et al., 2019). Additionally, trust is also an intangible asset that is a critical enabler for creating a virtuous cycle of predictable processes and transparent systems. The relationship between trust in an organisation's management and the degree of engagement of employees in their work is best understood using the psychological contract theory, which provides the framework for measuring the strength of bonding between an

organisation and its employees in the form of a psychological contract (Rousseau and McAllister, 1995).

Trust can be defined as the extent to which a person is confident in and willing to act on the words, actions, and decisions of another (McAllister, 1995), and also in a more nuanced way as "the willingness of a party to be vulnerable to the actions of another party" (Mayer et al., 1995, p712). As a set of metrics, it has been measured using dimensions such as ability, benevolence, integrity, and predictability (Dietz and Den Hartog, 2006).

Trust is also an equally important enabler for *CI*. A trusting organisational environment has been shown to contribute to high levels of cooperation and knowledge sharing (Käser and Miles, 2002). *CI* depends heavily in establishing a continuous flow of work, which the Lean method offers in several forms.

Establishing a 'continuous flow of work' is vital for the successful implementation of a Lean strategy in any organisation, which will create the capability to deliver value to customers precisely when they need it without a piled-up inventory. The Lean method is a four-step process that "empowers an organisation to stop the process when a problem appears and allow systems to deal with it for good by identifying the root cause" (Ballé et al., 2017, p38). 'Continuous flow of work' relies on four principles: 1) Discover an abnormality, 2) Stop the process, 3) Fix the immediate problem, and 4) Investigate and solve the root cause.

An organisational culture that fosters continuous improvement, by default, requires an environment where everyone trusts everyone else enough to point out systemic failures and process gaps without any fear or favour. Three essential, fundamental behavioural shifts (table 2) illustrate the challenge of building everyday leadership, with each represents a cultural shift needing leaders to change how they lead (KPMG, 2020).

Table 2: Three fundamental behaviour are essential for leaders

From	To
Providing the right answer	Asking the right questions
Looking for immediate fixes	Digging for root causes
Setting general goals to everyone to follow	Connecting the organisation's goals to individuals' work

Source: KPMG, 2020, p61

Yet trust is genuinely lacking, and this lack of trust has been referenced in management literature as the growing "trust deficit in the world today" (Crosby, 2016, p143). Lean provides the answer for replacing trust deficit in an organisation with a *trust surplus* through the pathways of *RFP* and *CI* requiring an internalisation that "…no more than 30 percent to 40 percent of a successful Lean transformation are coming from the tools, 60 percent to 70 percent are coming from people" (Durin, 2018)[1].

2.3 Lean Leadership Behaviours

While Lean became more familiar in West, and the problems accrued, researchers started to find out what was missing. One researcher was Emiliani (1998) who studied the leadership in Lean. According to Emiliani, there are two different types of waste - *process waste* and *behavioural waste* - where both are equally important. Emiliani found that there were methods and systems to make the process waste visible, but that it was lacking on the behavioural side. Therefore, he took Womack and Jones (2003) product value stream concept into a behavioural context and called it Lean Leadership Behaviours (LLB). The LLB concept is developed to support the RFP principle and facilitate the development towards a

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[1] Please see: https://www.kaizen.com/blog/post/2018/07/05/why-are-most-companies-failing-with-lean-implementation.html [Retrieved on 17-07-2021]

Lean culture. LLB is;

- *Specify value* is to understand the wants and expectations of the people we work with. Expectations in terms of what the leader should be what the people want to hear, see, say or do. It is the behaviours that others judge to be acceptable in certain environments.
- *Identify the value stream* is to understand what people do and why they do it. Look for behaviours that add value and try to catch them and try to avoid wrong behaviours that are wasteful. Waste appears in the value stream when people do not talk to each other, for example, is considered a wrong behaviour.
- *Flow* is about behaving in a manner that minimises delays in work performance. Any inconsistent behaviour will create queues that will threaten responsiveness to changing conditions. The leader's inability to *walk the talk* is the most obvious form of waste in this concept.
- *Pull* means to recognise that people operate under many different mental models, which requires the leader to adjust the leading style often to meet the expectations from workers and stakeholders.
- *Perfection* is to take the advantages provided by the transparency brought about by the four first concepts (steps) to easily identify and eliminate behaviours that do not create value. In a transparent organisation the leader (and workers as well) deliver more immediate feedback, for example.
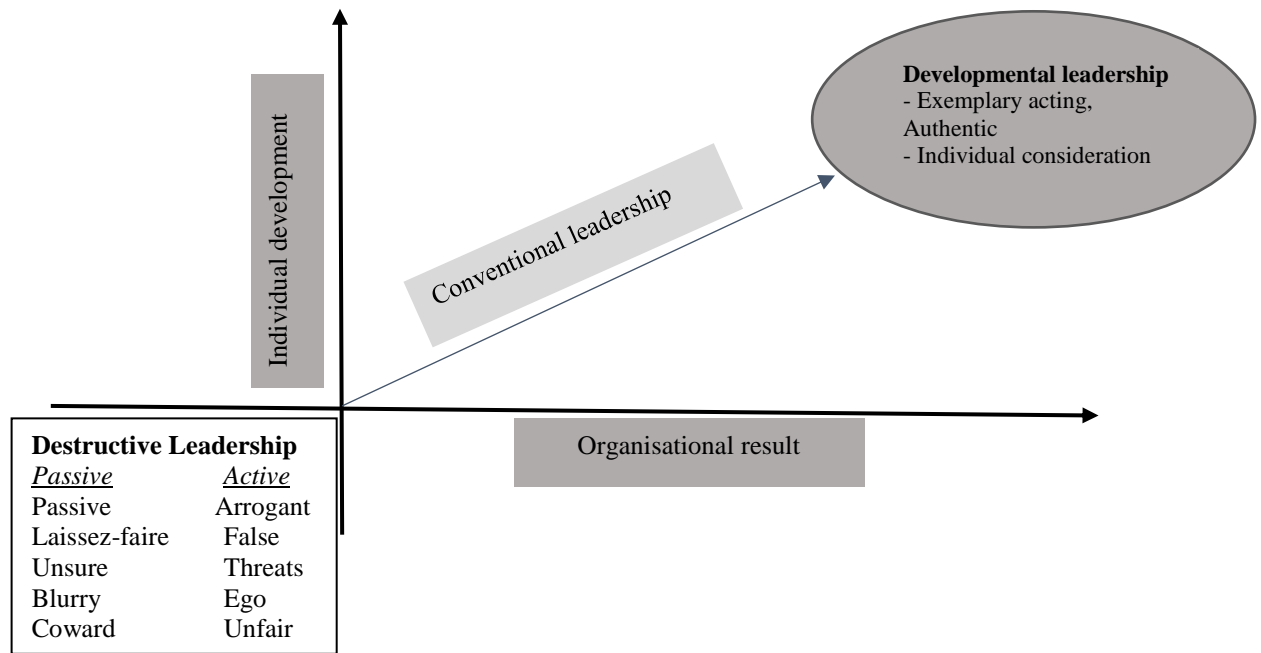
Together with the concept of improving interpersonal processes behaviours become increasingly aligned to Lean principals in common and defined "simply as behaviours that add or create value" (Emiliani, 1998, p619). Emiliani (2008) argues that successful Lean leaders know that they need to be consistent and be role models. If the leader tells employees to eliminate process waste, then the leader must *behave* in the same way. They cannot behave in a wasteful manner, and if they do, it sends a contradictory, de-motivating message that workers can identify. Emiliani categorises behaviours in three different parts – *Waste (*also called fat behaviours); ego, inaction, blame, revenge, demeaning demeanour, elitism), *behaviours that add no value but cannot be avoided (*biases, negativity, and gossip), and *behaviours that add/create value (*trust, generosity, patience, objectivity, discipline, and reflection).

2.4 Developmental Leadership

Developmental leadership (DL) is characterised by the leader acting as a *role model* and raising questions of morals and ethics whilst observing perceptible core values (Zander, 2011). It is a mental approach (a state of mind) and is consequently related to behaviours (Fors Brandebo et al, 2018). The model places different leading styles in a coordinate system with two axes of organisational results and individual development. The model describes a relationship between the different leader behaviours where the difference between the behavioural styles of leaders are shown through *frequencies of behaviours over time* All leaders use different styles, and what the model shows is that the situation and context matters.

DL is characterised by an ability to achieve a balanced control, make demands through agreements, reward, and act as role models. The leader is then seen to display a good set of values, further is perceived as is acting with authenticity, and is considered caring, providing support, inspiring and inviting participation. These characteristic behaviours form the components of DL– *Exemplary acting* and *Authentic, Individual consideration,* and Inspiration *and motivation* (see figure 4)

Figure 4: Developmental Leadership

Individual development

Developmental leadership
- Exemplary acting, Authentic
- Individual consideration

Conventional leadership

Organisational result

Destructive Leadership

Passive	Active
Passive	Arrogant
Laissez-faire	False
Unsure	Threats
Blurry	Ego
Coward	Unfair

Source: Fors Brandebo et al. 2018

Leaders who act *exemplary and authentic*, as the first component, gain the respect and approval of their co-workers Furthermore, the acts of the leader are characterised by trust and create trust in the co-workers. *Exemplary acting* is another word for a role model that include behaviours where the leader shows humanistic values, demanding behaviours by co-workers that exhibits loyalty, morality and ethical actions, and also acts to back it up by showing the courage to lead and take responsibility for the group even in difficult situations. *Authentic* means not only showing exemplary behaviours but also being deeply rooted to them to become trustworthy. The second component of *individual consideration* means *emotional* and practical support to the co-worker. It also means that the leader shows interest in both *privacy* and work conditions and must be able to confront co-workers who have underachieved, handle and communicate so that result is part of a positive learning curve rather than being counter-productive and demotivational for the workers and the group. The third component of *inspiration and motivation* consists of handling engagements in a pro-active manner and creating a concrete future vision that gives clear responsibilities to co-workers. It is also about encouraging co-workers for new ideas, to promote different ways to understand and analyse problems and to challenge processes and behaviours that are in current use. The three components of DL exist alongside the components *conventional leadership* that contains leadership behaviours which recognise both the principles of rewards and control. The first can be summarized as *I am kind to you, if you are kind to me*, and the second as *The rules must be followed to make sure that there will be no mistakes*.

Then there is the destructive part. Research in behavioural science shows that *bad is stronger than good*, which means that bad things can have bigger and more lasting effects than positive things can have (Fors Brandebo et al., 2018). Some studies point out that the psychological experience of something positive must be five times the negative the positive to outweigh the negative. This can be explained by knowledge about how our brain has been historically shaped by different environmental factors faced by our ancestors on the Savannah. At the time, for the sake of our survival, we had to become more sensitive to the

threats than to anything else. For that reason, there are five times more circuits in our nervous system to deal with threats than to deal with rewards (Tebelius Bodin, 2020).

Even today, we interpret all impressions from our surroundings as a slight threat or reward (Tebelius Bodin, 2020). Since everything is interpreted as threats or rewards, it means that everything is communicated (or not communicated) in a relationship (private or at work) either breaks down or strengthens the relationship. The brain deals with threats in three ways: *fight*, *flee* or *freeze*. Fighting can mean hating the threat for the purpose of confronting or challenging it (issues, new routines) while fleeing means avoiding and behaving defensively (encounters, situations, or tasks). Freeze, in a modern environment can roughly be translated as *I cannot stand it anymore*. All three are our biological defence mechanisms against the threats that limits our rational thought processes. To reduce the feeling of threat and to help deal with that feeling, there are various methods (Tebelius Bodin, 2020). One of the foremost is to get the brain to release oxytocin. The hormone is released when we trust others. In trusting others, we lower our mental guard and become inclined to take in new information, gain insights and at the same time care about the others around.

Bad is stronger than good applies in leadership, as it shows that destructive leadership behaviours create more harm than successful leadership behaviours. Bad leadership behaviours have stronger and more lasting impact. A destructive leader is often described as a unbalanced psychopath, an abuser of power with a need for control. It can certainly be so, but also the most popular and decent leader can be destructive. Destructive behaviour can partly be the result of active action (arrogant, false, unfair, ego), but could also constitute failure to act, which is passive behaviour (passive, laissez-faire, unsure, blurry).It is the result of the leader's behaviour that is the key, not the intention. Destructive leadership is not about making mistakes now and then. Even a good leader makes mistakes, but not the same mistakes repeatedly. It is precisely the repetition of destructive behaviour over time that characterises a destructive leadership likely as in developmental leadership. Destructive leadership can have a negative impact on, for example, on job satisfaction, motivation, and confidence, and further can create problems such as stress and emotional fatigue. It turns out that the nearest manager's behaviour affects not only her or his relationship with the employee, but further creates a negative attitude in the employee towards the organisation in general. A destructive manager could have major consequences for the entire business.

3. Discussion

Many organisations are still failing in the Lean implementation. It is hard to find one organisation outside of Toyota Corporation that has managed to improve their quality, reduce their costs and increased competitiveness. Does the excessive focus on *Process* in the 4P model affect leadership strategies, and by extension also Lean implementation? Most literature states that the lack of the principle of *RFP* is one of the biggest reasons for the failure of Lean implementations, in fact 61 percent of the studied articles in a research conducted by the lead author. The almost exclusive focus on process in Lean strategies results in a lot of effort in refining methods and tools, which is the visible side of Lean that has been brought out sharply by Rother (2011). It is obvious that leaders are trying to succeed with picking the low hanging fruits – *fake Lean* where there is an overemphasis on *CI*. Without proper Lean culture, in which *RFP* plays the lead role, Lean tools are just tools.

RFP may seem tough to quantify. Respect is both a value and a quality and taken together and located within the complex systems of a multi-layered and a globalised organisation it is easy to get lost in the various cultural norms, definitions, and perspectives. However, *RFP* within Lean is also a clearly articulated set of two principle sets for change management and service delivery respectively. From a perspective of operationalising these two principles into

a concrete methodology, it is possible for the leader to use KPMG's (2020) three fundamental changes of behaviour of *asking the right questions, digging for root causes, and connecting the organisation's goals to individuals' work.* These behaviours, together in the form a methodology, have the potential to inculcate *RFP* into daily work processes. *Connecting the organisation's goals to individuals' work*, for instance, is typically seen as an efficiency metric. However, it is also includes 'limiting work in progress', which prevents overloading of employees helping them focus on single tasking. Through the years, it proved to be the key to protecting the physical, mental, and emotional limits of employees and helping each employee respect the others and their limits. Respecting people also enables them to learn and improve on a regular basis. In many ways, *RFP* and *CI* are circular and interconnected and can lead to a virtuous cycle of overall organisational wellbeing and health. The Lean principles interconnection are visualised in Coetzee et al. (2019a) *RFP framework* where the importance of human processes and *RFP* are highlighted as the most important ground to start with in a Lean implementation.

These human processes are also highlighted by Emiliani (2008) who emphasises both *process waste* and *behavioural waste* and maintains that behavioural side of leadership needs to improve and needs a clearer focus from the leaders. LLB have been productively and successfully used according to Emiliani, but the organisational success seems absent when research studies have been examined. Changing the organisational culture using a special focus on the human processes (changing people's practices, behaviours and mind-sets) is still one of the biggest challenges that companies face while trying to implement Lean (Traylor, 2011; Mann, 2009). The impact of methods and tools are just 20 percent of what a mammoth task of an organisational change requires on an ongoing basis. The culture change to a Lean culture needs leadership. Within the context of Lean leadership strategies, and particularly from the point of implementing Lean successfully and sustainably, trust is one of the key behaviours in LLB that create value within an organisation. It reflects directly as a belief that the organisation's top leadership will be able to deliver a set of positive outcomes that benefits everyone equitably. (Mayer et. al., 1995). Trust in leadership depends heavily on employees' belief in the leadership's honesty and the way a leader treats and considers employees (Dirks & Ferrin, 2002). Trust in leaders or a collective leadership is often the difference between success and failure in organisational change strategies (McLain and Hackman, 1999).

A key indicator for whether the *CI* principle is delivering positive outcomes or not is the increase in organisational innovation and creativity. Both have been empirically shown to have direct correlation to a *trusting relationship* within an organisation and between its leadership and employees (Gong et al., 2009; Gundersen et al., 2012). Moreover, in times of uncertainty, such as during periods of organisational change, trust in leadership plays a key role in alleviating the insecurities and fears of employees (Judge et al., 2006). While *CI* may not be as difficult to quantify and concretise as *RFP*, it can nonetheless be prone to multiple interpretations within an organisation. How well *RFP* and *CI* are infused within an organisation depend a lot on leadership. *RFP* requires a leadership that is able to connect, assess and leverage the invisible aspects of a work culture, and at the level of thoughts and routines, while the *CI* requires the same leadership to make visible aspects of a work culture, namely methods and tools, to become more effective and efficient. Both *RFP* and *CI*, requires, to be connected to an organisational vision, and that is where the key messaging from leadership becomes critical. Which lead to the last research question, *Is special Lean leadership necessary, if so what does it look like.*

As previously mentioned, we know that leadership is crucial for a successful Lean implementation. It has also arisen that it is important for the leader to pay attention to co-workers and create trust, good communication and remove waste in the organisation. The

lack of management attitude, commitment and involvement were identified as the most critical failure factors in implementation and 80 percent of the effort in Lean transformation is expended on changing the practices of leaders, behaviours and mind-sets. As a Lean leader you need to have a passion for Lean, together with a disciplined adherence to processes, a project management orientation, ability to take ownership and maintain effective relationships with support groups (Mann, 2009). An effective Lean leader also has to amalgamate into her or his leadership style beliefs, behaviours, and competencies that demonstrate respect for people, motivate them, improve business conditions, ensure effective utilisation of resources, and eliminates confusion and rework (Emiliani, 2008). A Lean leadership is a mixture of management (function, planning, budgeting, evaluating, facilitating - the organisational perspective) and leadership (relationship, selecting talent, motivating, coaching, building trust - the human perspective). None of this is possible without building the environment for a mindset shift to build Lean cultures based on shared value for people and continuous improvement (Grigg et al., 2020).

Within this context, it seems reasonable to start with some form of leadership model that can be helpful in a Lean implementation. Ljungblom (2012) compared two different leadership models: LLB and DL, and they were quite similar. Overall, in terms of purpose, it can be said that both models strive to find a leadership that supports development, whether it is leadership and employee development or organisational development. Words that promote such development are words like trust and faith. Ljungblom's proposed a merger of the two models to one common model for a Lean leader, calling it Developing Lean Leadership (DLL).

Figure 5: DLL. The *Italics* are the new, added from LLB
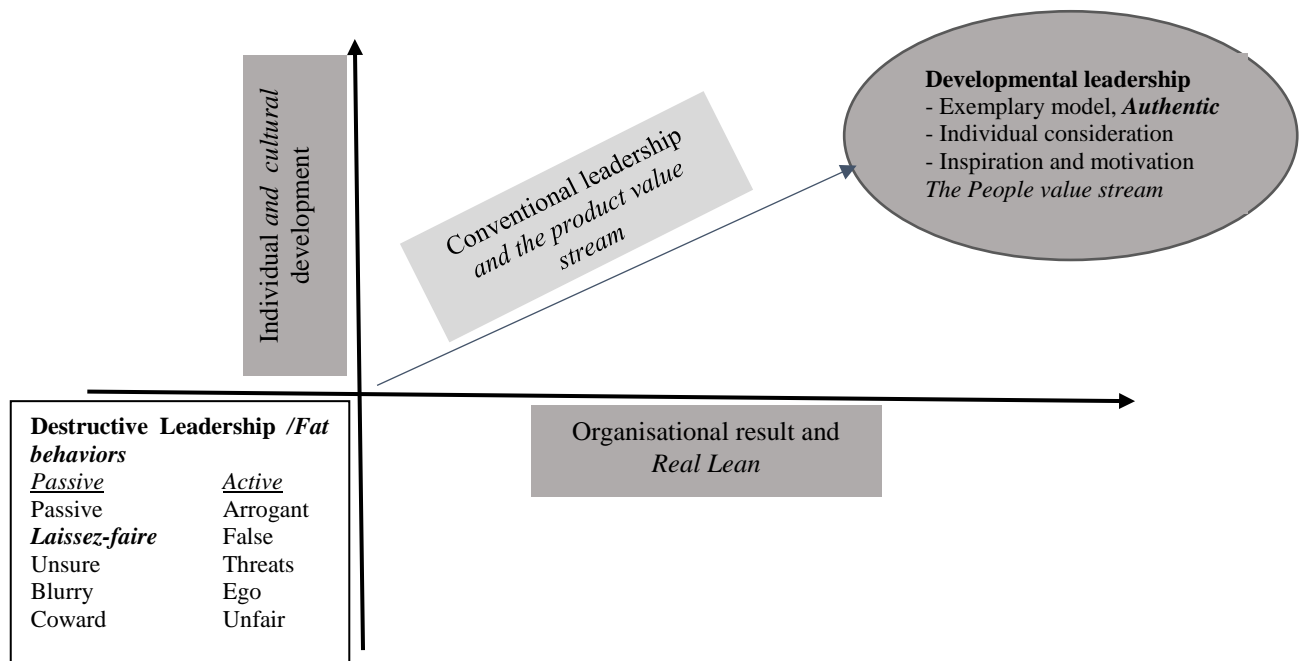
The first step of merging the two models starts with studying at the basic, overarching foundations of the two models. DL is characterised by 1) the leader acting as a *role model*, and 2) raising questions of morals and ethics whilst observing perceptible core values. DL is seen as mental approach (a state of mind) and consequently related to behaviours (Zander, 2011). The LLB concept is developed to support the *RFP* principle and facilitate the development towards a Lean culture (Emiliani, 2008). In other words show mutual trust respect for others and roles of each other, solve problems, make work more satisfying and

take organisational performance to an even higher level (Womack, 2008). While comparing the two characteristics with LLB you can see that.

DL 1): In LLB the role model behaviours are called *behaviours that create value* instead of developmental, as in DL. However, the meaning is the same – behaviours that make people grow, work more effectively, and make them feel content. DL 2) LLB are the behaviours that add or create value like; trust, generosity, patience, and more of them, for better overall results. So, there is a relationship between ethical behaviour of leaders and its frequencies over time, which is also visible in the developed model DLL that becomes one its characteristics. The basis in the two models are similar, and there will be no difficulty in mixing them in that aspect.

The second step is to study the coordinate system DL uses. DL uses two axes - *organisational results*, and *individual development* - and places different leadership styles between them. In DLL the coordinate system with two axes is used, but with another angle, that also affects the content between the axes. In Lean implementation cultural development and change becomes crucial. To change the culture, one also needs to change the people within the culture, which is why the axis named *individual development* gets another component called *cultural development*. The other axis is handling the *organisational results*. From studying Toyota one can reach the conclusion that you need both key principles (*CI* and *RFP*) to achieve successful *Real Lean*. Therefore, *Real Lean* is complementing the axes with *organisational results*.

The third step merging the two models is studying the Destructive Leadership in the DL model. Destructive Leadership is comparable to LLB when it comes to fat behaviours, i.e. the behaviours that do not create value in the organisation. Fat behaviours, as mentioned earlier in the paper, are for example ego, inaction, blame, revenge, demeaning demeanour, and elitism. Fat behaviours can also be recognised as a lot of talk but no action, not acknowledging creativity or new ideas, underutilising the talent of workers, or not recognising the potential of people (Emiliani, 2008). There are a lot of similarities with destructive behaviours, and if we do not eliminate these kind of behaviours, the organisation risks to "block the flow of information, undermines teamwork, causes delay and re-work, focus people's attention on problem avoidance and obfuscation, lowers job satisfaction, and makes it much more difficult to satisfy customers" (Emiliani, 2008, p40). Both DL and LLB states that it can be ruinous for the leader who displays destructive (fat) behaviours.

The fourth step is to study the content of the space between the axes called the developmental part in the DL model, and then merge it with LLB.

DL's *conventional leadership* is a top-down centralised control focussed approach, and it is extremely useful, for instance, in crisis and emergency situations. Such leadership, however, neither develops the potential of an individual or contributes anything positive to a culture or an organisation. LLB have a purpose that clearly overrides the behavioural one, while *CI* focuses on eliminating waste. Emiliani (2008) stated that conventional management practices do not recognise the existence of behavioural waste. In a Lean context the leader must handle that waste, so therefore the *Conventional Leadership* is developed with Womack and Jones (2003) *Product Value stream* concept; specify value, identify the value stream, flow, pull, and perfection.

DL is characterised by the leader acting as a role model focussing on morals and ethics all the while adhering to core values and providing all round support. This type of leader also provides inspiration and motivation to promote participation and creativity. These characteristic behaviours from the DL support people and the organisation to reach higher performance. The three components in DL are still the base in the DLL model. *1) Exemplary model, Authentic, 2) Individual consideration 3) Inspiration and motivation.* In a Lean context, DL characteristic behaviours for achieving goals can be seen recognisable in the

People value stream (see table 1). In summary, that's the rationale for adding the people value stream to the model.

A leader can, hopefully, with the help of DLL increase the chances of success with his Lean implementation. It is possible to expand the model in later research and place it in a framework for leaders that can be utilised in developing the organisation, leaders and employees in all dimensions and aspects.

Conclusions

The purpose of this paper was to examine Lean leadership from the perspective of three questions.

1. In the implementation of 4Ps model of *Philosophy*, *Process*, *People & Partners*, and *Problem Solving*, how does the excessive focus on *Process* affect Lean leadership strategies?
2. How do fundamental shifts of behaviour within an organisation contribute to Lean leadership?
3. Is special Lean leadership necessary and if so, what does it look like?

What has emerged from the paper is that all the three questions can be answered with a qualified yes. The qualification is from the perspective of cautioning Lean practitioners and organisations against using DLL, or any other model for that, as a fix-it-all silver bullet. Understanding the context, the different scenarios and the existing organisational culture and the capabilities and capacities of people is as critical, if not more, for the successful implementation and use of DLL.

The paper also reinforces, and quite strongly at that, the initial thought that one of the reasons for the failure of Lean strategies is the excessive focus on processes in the 4P model causing a *Fake Lean* to take roots resulting in the rapid withering away of the key principles of *RFP* and *CI* characteristic of *Real Lean*. The paper also makes a case for more focus on people, partners, and stakeholders as a foundation for a long-term internal and external effectiveness of an organisation for sustainable success.

The DLL model provides a leader with a potential overarching framework to use in Lean implementation strategies. DLL model allows for a leader to handle in a structured way orientation, ownership and effective relationship building with support groups while giving due credit and credence to beliefs, behaviours, and competencies that demonstrate *RFP*, motivate them, improve business conditions, ensure effective utilisation of resources, and eliminates confusion and rework. With DLL it is possible to have leaders who act *exemplary and authentic* and who also act like they talk and gain the respect and approval of their co-workers and create trust.

A DLL also shows *individual consideration* to the co-worker and interest in both *privacy* and work conditions. The management, handling and communication towards co-workers who have underachieved is pegged to a learning curve making it part of a learning continuum rather than to a set of prescriptive instructions.

Inspiration and motivation in a DLL provide for pro-active engagements and the platform to evolve a future vision that gives ownership and responsibility to co-workers. It also allows for co-workers ideate, create, and bring in new approaches, methods and tools without any fear or favour and with the clear intention of solve pressing problems and challenges.

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