

**Gordon Institute
of Business Science**
University of Pretoria

The impact of Lean Leadership on Lean transformation in South Africa

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A research project submitted to the Gordon Institute of Business Science,
University of Pretoria, in partial fulfillment of the requirements for the
degree of Master of Business Administration

7 November 2016

Abstract

In South Africa there is a desperate need to be more competitive and create efficiencies. Lean promises the improvement of quality and capacity while containing and reducing costs and therefore offers a competitive advantage. However, Lean transformation is not possible without appropriate Lean leadership practices.

The objective of this research was to explore the factors that impact on Lean Leadership during a Lean transformation process. Eight qualitative, semi-structured interviews were conducted by using a case study approach.. The respondents represented two groups consisting of an Operational Group involved in the day to day management of the business and a Transformation Group that was responsible for the Lean implementation process.

The study found that Leadership provides the foundation for process improvement. Communication and culture of the organisation are however fundamental aspects for the successful implementation processes. A simplistic model is proposed. Suggestions for future research and limitations of the study are presented.

Keywords

Lean, leadership, culture, continuous improvement, Lean implementation, communication

Declaration

I declare that this research project is my own work. It is submitted in partial fulfillment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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7 November 2016

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1. Chapter 1: Introduction

South Africa needs to implement programs to improve its competitiveness (*Competitiveness: Catching the next wave africa*.2015). Lean promises the improvement of quality and capacity while containing and reducing costs (Goodridge, Westhorp, Rotter, Dobson, & Bath, 2015) and therefore offers a competitive advantage(Byrne, 2015). Lean transformation is not possible without appropriate Lean leadership practices (Mann, 2009).

Figure 1.1 – Interdependencies of Lean Transformation



Figure 1 – Competitive Transformation

According to the World Economic Forum, South Africa is ranked 49th in the 2015/2016 Global Competitiveness Report (2016). High unemployment and comparatively low labour rates should make South Africa a country of choice to set up manufacturing and investment in production plants. A few key players are still investing in South Africa in specific sectors such as Ford South Africa that are to invest R2.5 Billion(IOL, 2016). Based on this information it seems like South Africa is only competitive and lucrative in certain areas and aspects. South Africa has a

highly unskilled population that requires development and up-skilling. Lean Production addresses these challenges.

Lean Production Systems is part of most modern international manufacturing environments. According to an international survey, 80% of the participants claim to utilize principles of Lean Production Systems (Dombrowski & Mielke, 2013) it is therefore not surprising that Lean is posed as a quick solution to most businesses leaders' problems. The full utilization of Lean Production Systems in South Africa is unknown, yet various courses are being offered in Lean as interest is increasing.

An array of books is available that offers quick Lean adaptation in organisations became best-sellers such as "The Machine that Changed the World" selling close to two million copies (Salesrankexpress.2016). The basics of Lean is easily understandable and therefore extremely enticing to business leaders. It is within this background that the challenge exists to effectively transform an organisation, as various Lean tools exist that are simple to comprehend but tough to integrate into to the day to day management of an organisation. Lean tools are applied as systematic problem-solving tools that are enforced upon a company's workforce (Lorden, Zhang, Szu-Hsuan, & Cote, 2014) creating resistance and negativity. It is, therefore, that very few leaders have introduced Lean as an overarching strategy and management design to transform the organisation performance and culture(Goodridge et al., 2015).

The key success to successful Lean implementation is leadership(Dombrowski & Mielke, 2013). Effective Lean leadership is required based on Lean Leadership practices to transform an organisation to a competitive, continuous improving organisation(Mann, 2009).Lean Leaders are the facilitators and coaches in problem solving and therefore do not solve problems themselves but rather encourage staff to think through problems amongst themselves (Poksinska, Swartling, & Drotz, 2013). The effect is skills development, up-skilling and the inclusion of staff into the day to day business. Talent is quickly identified based on the interactions of management creating a further development of previously overlooked potential.

Lean Leadership is in contradiction to the traditional management style of various businesses in South Africa, where a divide is created between management and so called blue collar workers. Management is only there to intervene when a problem arises. The staff is therefore not encouraged and trusted to find solutions and over time loses the ability to contribute to improvement. As no improvement is made by the staff, all improvement is the onus of

management which is not achievable resulting in the deteriorating competitiveness of the organisation. The result in such an organisation is the closure of the business resulting in job losses, missed opportunities, and poverty. Lean Leaders are aware that they do not add value to the product but only the floor workers (Dombrowski & Mielke, 2013). In the fast pace, ever-changing, global environment, agility is the key to survival. It is therefore in the interest of all South African businesses to transform into Lean organisations by adopting Lean Leadership practices.

The study of leaders and Leadership concepts are seldom the focus of Operations Management (Gelei, Losonci, & Matyusz, 2015). Therefore, there is a theoretical need for this study.

2. Chapter 2: Literature review

2.1. Introduction to Lean

The term Lean production was named by Krafcik (1988) and popularised by the book *The Machine that Changed the World* (Womack, Jones, & Roos, 1990). The authors described the differences between Western automakers and Japanese automakers and referred to the term Lean Production to clarify and explain the advantage of the Toyota Production System. Details are given to reduction in human resources, floor space, capital, material, inventory and the overall production time to make a greater and growing variety of products with fewer defects (Womack et al., 1990).

Although Lean was initially associated with production in manufacturing environments such as the motor industry, Lean has been expanded to various industries especially in the services sector. According to Alsmadi, Almani & Jerisat (2012) there are potentially greater benefits to be achieved in service firms. Lean should be utilized as a “thinking system” to identify and solve problems in the process where they occur (Ross, 2014) and therefore, can be adapted to any organisation.

The definition of Lean has evolved over the past years. Different authors have different definitions and opinions on the characteristics of Lean production and therefore there is no single concise definition of Lean (Dahlgard-Park & Pettersen, 2009). Based on the literature review the following definition is the most comprehensive and descriptive to capture the essence of Lean: Lean is a customer focused, multi-faceted approach, to organise and deliver maximum value by implementing a set of operating philosophies, management activities, and tools. The Lean philosophy is based on empowerment with structured methods to provide the highest quality at the lowest possible cost. Lean tools aim to improve productivity and eliminate waste through adapting the organisational processes (Goodridge et al., 2015). Lewis (2000) noticed that every Lean journey is unique for every practitioner and therefore tools should be carefully selected.

2.2. Lean Principles

According to Womack and Jones (1996), there are five fundamental principles of Lean. The principles are interdependent and Lean transformation is not possible without a combined contribution.

- Identify value from a customer perspective. Identifying the customers' needs and expectations that include quality, cost, and service (Goetsch & Davis, 2014).
- Identify the value stream for each product and eliminate wastes. According to Rother & Shook (2003), a value stream is all the various actions required to bring a product to its current end state. Every step is classified as value adding or non-value adding
- Create flow. According to Dager (2014), flow is the accomplishment of steps within a process from the beginning of the value stream to the customer without waste with the use of Lean tools, such as Value Stream Mapping, One-Piece Flow Cells, Reduce Inventory and create Standard Work.
- Respond to customer demand. A simple principle that holds various complexities in the standard business world whereby standard cost and economies of scale are often used to increase production regardless of customer demand. The aim is to produce to a pull system that produces products only when customers order them (Kilpatrick, 2003).
- Pursue perfection. Perfection in Lean is not achievable. The aim is to pursue perfection, a never ending process of continuous improvement by creating a virtuous circle with steps one to four (Womack & Jones, 1996).

2.3. Failure of Lean

The most important aspects of Lean production are easy to comprehend and implement, yet many organisations are not able to transform in order become a Lean enterprise (Lorden et al., 2014; Poksinska et al., 2013). Failure of Lean implementation is common as only two percent of companies achieve their full objective.(Goodridge et al., 2015). The United Kingdom government's Lean program, "Pacesetter" has been named "Lean and Mean" due to the adverse effects it has had on the employees, their working lives and the service provided to the public(Seddon & O'Donovan, 2014). In certain organisations, initial results do not meet the

expectations, and therefore, the Lean transformation is abandoned (Dombrowski & Mielke, 2013). Koenigsaecker(2005) states that Lean is challenging to incorporate as part of the daily management behavior of an organisation.

Contributing factors to these failures are broad and range from a lack of commitment by senior management; unwillingness to change the cultural for Lean to be a success or a fundamental misunderstanding of the Toyota Production System (Goodridge et al., 2015).

As Lean has its roots in high volume/low variety industrial system such as motor manufacturing, skepticism, therefore, exists for the application to low volume high variety environments (Goodridge et al., 2015) creating doubt from the onset contributing to the failure.

According to Mann (Mann, 2009), 80 percent of the success lies with the ability to change leadership practices and behaviours and ultimately their mind-set. The remaining 20 percent is with Lean tools. Womack (2006) stated “I think of the period from the early 1990s up to the present as the Tool Age of the Lean movement,” reiterating that Lean tools are the fundamentals but not critical success driver.

2.4. Lean Leadership

The focus is therefore with Leadership practices that can ultimately result in a successful Lean implementation. These practices include the governance arrangements that cross divisional boundaries, supporting a thorough, long-term strategy of the organisations' value-producing processes, and ensuring accountability on all staff on meeting the Lean objectives (Mann, 2009). Changing leadership behavior is the most difficult process to change as it counterintuitive to traditional management (Koenigsaecker, 2005).

The complexity of leadership requires different strategies that combine different leadership strategies that simultaneously and sequentially combine various elements.(Fullan,).Many leadership behaviors exhibited by Lean Leadership can be classified as Transformation Leadership (Poksinska et al., 2013). The most important management task is the ability to influence people which are a requirement transformational leadership skills and behaviors (Poksinska et al., 2013). Servant leaders expand on their influence by inspiring other people to find their voice increase the ability to solve challenges and serve human needs and resulting in leadership becoming a choice rather than a position (Covey, 2006).

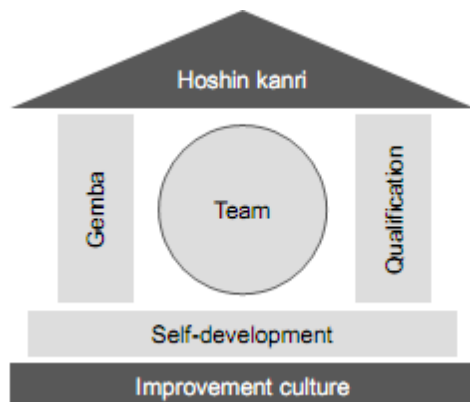
The key factor in creating and changing a culture is Leadership (Schein, 2010). According to The Shingo Guiding Principles™ (The shingo model™.2016), it identifies culture as the critical center component to achieve continued success. Cultures form over time that can have far-reaching adverse effects if ignored. A culture built on “firefighting” honors and promotes “firefighters” rather than fixing the root cause (The shingo model™.2016).

Respect for every individual must be felt by every person in the organisation; this includes respect for customers, suppliers, the community and society in general(The shingo model™.2016). Respect for customers is common as business understands that the clients generate cash flow, it is, however, uncommon to treat business suppliers and every person in the organisation with the same level of respect. Leading with humility is a common trait among leading practitioners of enterprise excellence. A leader’s willingness to seek input, listen carefully and contentiously learn creates an environment where employees feel respected and encouraged to contribute to creative solutions(The shingo model™.2016).

2.5. Lean Leadership Model

The Lean leadership model (Dombrowski & Mielke, 2013) encapsulates the five critical Lean Leadership principles comprehensively. The figure has been constructed in the form of a house to symbolise depict different fundamentals such as the foundation, roof and inside.

Figure 2.1 – The Lean Leadership Model. Source: (Dombrowski & Mielke, 2013)



2.5.1. Improvement Culture

According to Dombrowski & Mielke(2013), the foundation of Leadership according to the model is an improvement culture that involves the attitudes and behaviours to aim for continuous improvement. A focus is made on all staff to ensure inclusion and to support the centralised team focus. Lean Leadership is in contradiction to mainstream business, especially regarding failure as it adopts a no-blame culture. In Lean, the focus of failure is not the person who caused the failure but rather to identify the root cause of the failure. In South Africa, businesses are quick to replace staff due to an oversupply of low-cost labour, yet the true costs of replacement are not calculated such as placement fee, training, and admin.

The question was raised why so many American and Western organisations have failed when they tried to adopt Japanese Management techniques and tools. According to (Dahlgard-Park, 2011) the answer is at a deeper level as Japan started the quality Movement as a result of a collective awareness of a need to learn, and strong leadership for the sense of urgency. Japan also had a willingness to change, and by taking a more holistic managerial approach by adding humans aspects into their framework, Japan outperformed theories initially developed by Western theoreticians.

Western companies also believe that measurement can cover all aspects of Organisational improvement. Western companies tend to focus more on the rational aspects rather the softer issues such as organisational culture, values, people motivation, training and education (Dahlgard-Park, 2011). In South Africa, we are in a unique situation whereby training and upskilling is enforced with BEE.

2.5.2. Self-development

Dombrowski & Mielke (2013) states that the conversion to Lean leadership depends on the leader's personality. The Lean Leader's focus is on obtaining new skills and competencies, not only for themselves but also for other employees. In South Africa Broad-based black economic empowerment has been implemented, to ensure companies to spend a percentage of their salary expense on skills development. In Lean Leadership, this is not seen as an enforced law but rather meant to ensure staff is educated to achieve maximum performance.

The mastery art of leadership comes with the mastery of self and therefore leadership development is a process of self-development (Kouzes & Posner, 2002). Self-awareness and self-output yields outputs such as better self-control, self-esteem, and self-confidence (Karp, 2012).

Individuals are able to influence their own cognition, motivation and behavior to activate their motivation and actions that is required to meet organisational success (Stashevsky, Burke, Carmeli, Meitar, & Weisberg, 2006). Empowering leaders can motivate others to take the initiative to manage and control their own behavior which leads to self-leadership (Zapalska, Kelley, & Zieser, 2015).

It can, therefore, be summarized that leaders need to develop their ability to develop themselves as well as their capacity to interact with other people and the environment they operate in (Karp, 2012).

Developing self-efficacy and awareness of others is crucial in leadership development. People with high social and personal intelligence have better self-awareness and is orientated to self-improvement (Karp, 2012). Leaders are required to focus on the way they handle themselves and their relationships.

2.5.3. Gemba

The word Gemba is Japanese and stands for at the real workplace. This principle is aimed at leaders to go to the actual workplace to grasp the true situation (The shingo model™.2016) and to look for further improvement opportunities(Mann, 2009). In South Africa, it is not common for senior management to get on the shop floor and to interact with staff. There is usually a divide created between management and floor workers. Lean Leadership creates inclusion, respect and belonging to a greater team.

Gemba is the process taking the time to understand a knowledge set outside of a persons' immediate area of concern and to apply a unique perspective to a challenge at hand (Gesinger, 2016).

The emphasis of Gemba walks is the concept of understanding. In order to understand, it requires an investment of time to grasp the full concept or process. This means that an outside person will take an interest in what an employee will be doing. It creates a change in attitude

towards the person observing and learning from the employee. Interactive discussions take place to create an openness, creating substantive feedback.

2.5.4. Qualification

Employees' training takes place on the shop floor on a daily basis, and they are deemed "qualified" on the PDCA (Plan Do Check Act) method (Dombrowski & Mielke, 2013). PDCA starts with an implemented plan that produces feedback that suggests refinements which are designed and applied that lead to further experience, feedback, and improvement (Mann, 2009). Benefits are that mistakes with procedures are discovered before it becomes a crisis. The long term effect is that there is less crisis management required; therefore, management can focus on more important aspects and continuous improvement of procedures.

2.5.5. Hoshin Kanri

Hoshin kanri is also known as target management or policy deployment. (Hutchins, 2012) defines Hoshin Kanri as a process of developing plans, targets, controls and areas of improvements based on the previous level's policy and on assessment of prior year's performance. Target and plans are discussed and debated at each level until a consensus is achieved along with the methods of attaining the goals. Hoshin Kanri, therefore, includes everyone in the company by connecting shop-floor improvements to business goals (Nicholas, 2016).

Having a robust and definite vision equips the workforce to adapt and to learn tasks effectively.(Alavi, Abd. Wahab, Muhamad, & Arbab Shirani, 2014)

As continuous improvement is occurring in a decentralised manner, a superior overall system is required to guide and direct to a strategic goal (Dombrowski & Mielke, 2013). According to (Koenigsaecker, 2005), Hoshin Kanri is the most important link between improvement practices and the overall business strategy.

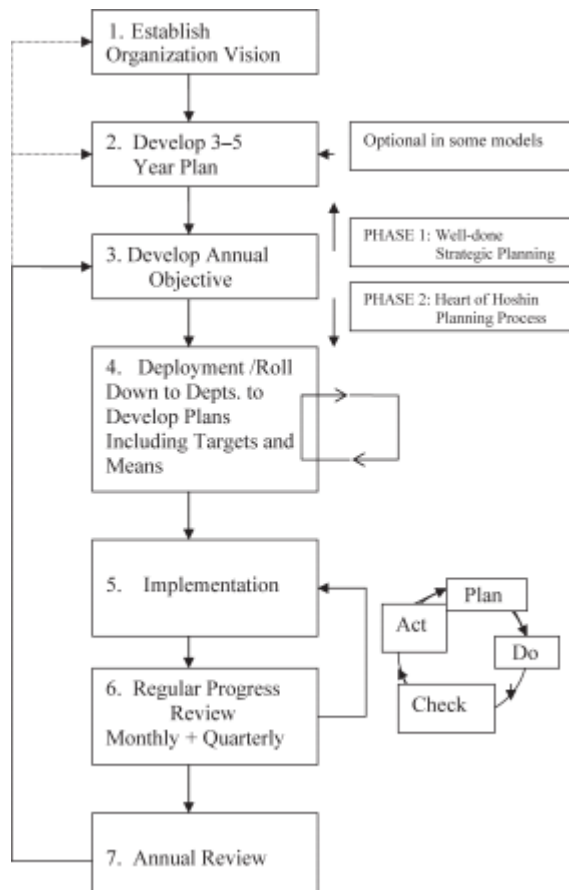
According to Nicholas (Nicholas, 2016), only two studies were found to associate the use Hoshin Kanri to Lean policy deployment success. Elements of Hoshin Kanri are found in business excellence models even though not specifically stated. Referral is made to employee participation through effective communication and involvement in the company's goal,

strategies, and objectives as well as process understanding, management, measurement and improvement (Nicholas, 2016).

2.5.6. Creating the vision

The term Hoshin Kanri have four components that consist of direction, focus, alignment and reason. Hoshin Kanri evolved from the Japanese Business Management culture which has no direct translation in the English language. The term embraces four key elements namely: Vision, Policy development, Policy Deployment, policy control and fifth element Total Quality Management. Total Quality Management is the measurement of progress based on the goals set in Hoshin Kanri.(Hutchins, 2012)

Figure 2.2 – Hoshin Kanri seven step process



The Hoshin Kanri process, therefore, creates inclusion from all levels within the cooperation. It is often the case that management creates a vision in isolation and then hands it over to operational staff to achieve. In order to gain consensus on the deployments of Hoshin targets and measures, a process called “catch ball” is implemented. Derived from the children's ball game, it ensures that ideas are thrown around from person to person. It is a critical factor element that requires ongoing communication to ensure the development of appropriate targets and means, and their deployment at all levels within the organisation. The interactive process of discussion and debating plans and objectives at each level provide feedback in multi-directional horizons which ensures the whole organisation is committed to the same goal. (Tennant & Roberts, 2001)

2.6. Plan Do Check Act

Plan Do Check Act (PDCA) is a well-known fundamental concept of continuous improvement (Ref PDCA Sports) and problem-solving model in quality management (Matsuo & Nakahara, 2013) (Deming, 2000). It is also referred to as the Deming Circle or Shewhart cycle. Originally the cycle was developed in manufacturing. However its application has not been limited to quality control issues but also recognised as a learning method. The cycle is ongoing and therefore the processes are continuously improved over time (Pietrzak & Paliszkievicz, 2015).

According to (Pietrzak & Paliszkievicz, 2015) it consists of these four elements.

Plan what you want to achieve and define how you will know once you reach your objective. These objectives should be measurable and the methods to achieve the plan should be clear.

Do base in the planning by implementing the methods

Check if you are on track based on the initial expectations by observing the effects. Review the results and identify and deviations from the original planning. Test the plan based on the information gathered during the cycle. Ensure that the plan is still valid based on the underlying reasoning.

Act or adjust based on any new information and lessons learned from the cycle. Adopt those methods that were successful in reaching objectives. For all lesson learned or

where the plan was not achieved, determine the root causes and correct the implementation.

By using the PDCA methodology in terms of Hoshin Kanri, the Leadership can identify if the company is on track and act quickly if any change is required.

2.7. Servant leadership

Servant leadership refers to a style of leadership in which leaders went beyond their own self-interest and concerned with serving followers with the enterprise of allowing them to grow and prosper. There is a similarity between transformational leadership and Servant leadership as both encourages leaders and followers to raise one another to higher levels of motivation and morality (Sendjaya, Sarros, & Santora, 2008).

Servant leaders are likely to set their leadership priorities as follow; followers first, organisation second and own needs third. Servant leaders have a natural inclination to serve marginalised people (Sendjaya et al., 2008)

In summary servant leaders' strength is the ability to encourage follower learning, growth, and autonomy and is a key ingredient in a learning organisation.

A willingness to take up prospects to serve others whenever there is a requirement notwithstanding the nature of the service, the person served or the frame of mind of the servant

2.8. Value stream Mapping

Value stream mapping (VSM) is a Lean practice to create improved flow by mapping steps called the current state map, identifying value-adding activities, non-value adding activities, steps, and is followed by a shared action plan for an improved future state map (Ali, Petersen, & Schneider, 2016). The outcome of a VSM chart is a chart presenting the value flow across the whole company (Rohac & Januska, 2014).

Value stream mapping is an integral part of major companies around the world and is included in many process optimisation initiatives due to straightforwardness (Schmidtke, Heiser, & Hinrichsen, 2014). VSM method was introduced by Toyota Motor Company and quickly became one of the fundamental tools of Lean Management (Rohac & Januska, 2014).

The approach proposed by Toyota to improve the processes involves the identification of a repeatable process that can be improved on, applying the VSM tool to identify the wastes, implementing the changes and celebrating success (Helleno et al., 2015).

VSM is also referred to as A3 as an A3 paper is typically used to visualise on the paper and map the different processes from raw material to final product and includes all information flow in the process.

Managing the value stream involves a practice of understanding, measuring and improving the flow of various materials and information the interconnectedness of all tasks, to maintain a company's costs, services and quality products as competitive as possible (Forno, Pereira, Forcellini, & Kipper, 2014).

VSM is one of the valuable tools for understanding the actual process status and identifying opportunities to make improvements (Forno et al., 2014).

There are however certain gaps with VSM that include a lack of detail, the feasibility of future states, conflicting cost factors (Schmidtke et al., 2014). When VSM is not applied correctly, it can lead to further complications to identify waste, result in misinterpretations and assessment mistakes and undermine the implementation of future improvements. (Forno et al., 2014)

2.9. Failure

Failure is an integral part of the innovation process. However learning from failures is challenging due to the psychological and organisational process that is attached to the negative meaning of failure (Khanna, Guler, & Nerkar, 2016). Failure experiences are believed to initiate further development of critical skills and knowledge that can be utilised in future ventures (Mueller & Shepherd, 2016). Failures may lead to future improvement, increase in reliability, reduce rates of future failure and decrease failure-related costs.

Small failures encourage learning by doing root cause analysis without threatening the management or the company itself. It allows an objective analysis of the outcome. As businesses actively participate in experimentation they are likely to experience more failures which in return could lead to more innovation and successful outcomes.

If a project has failed that had a high importance, it will attract greater attention from decision makers within the company. The tendency is to focus on successful projects and therefore not discuss smaller failures. In smaller projects where failure occur information is made available that might not challenge decision makers' core beliefs.

According to (Mueller & Shepherd, 2016) failure often shocks individuals into a conscious mode of information processing where cognitive processing is characterised by attention, awareness, and reflection. It is during this period that individuals invest significant time and effort to understand the challenges they are facing more fully.

According to some studies find that the performance can improve as companies accumulate repeated experiences with certain activities since the findings generated by documenting outcomes over various different trials of a particular activity can be used to refine related procedures and the results of subsequent exercises(Desai, 2015).

Failures reveal rich information in underlying flaws in the organisational process.(Desai, 2015)

2.10. Training/ Organisational learning

Organisational learning is the method by which new knowledge is created, and insights are gained through experiences of employees in an organisation (Alavi et al., 2014).(Gunasekaran, 2001) emphasised the vital importance of training and developing workforce agility, as an ongoing learning process because employee learning never ceases.

A learning environment within a company encourages staff to be more open and innovative in finding new ideas. Employees are considered to be more proactive and develop flexible solutions to existing problems and challenges that might occur in the future (Alavi et al., 2014).

Companies committed to learning to develop employees and managers that can adapt to changes will result in a workforce that is comfortable in performing new and proactive behaviors (Gunasekaran, 2001).

Learning new things improves adaptability, and the ability to meet new challenges with confidence (Sherehiy, 2008).Knowledge sharing throughout the organisation is an aspect of training that develops knowledgeable employees who are crucial to the development of an agile organisation. The quality and scope of this knowledge base affect workforce creativity and the

awareness of the benefits of exchanging ideas (Alavi et al., 2014). In a South African context, this knowledge sharing practice is the key to the upskilling of a largely unskilled workforce.

2.11. Conclusion

Based on the literature review Lean can improve an organisation to become more competitive. To create a continuous improving entity, the leadership behaviours and principles are the key factors for sustained improvement, agility, and competitiveness that deliver value to customers.

3. Chapter 3: Research Questions

The aim of the proposed research is to assess the impact of Lean leadership on Lean transformation.

Figure 3.1 – Model for questioning on Lean Leadership



Research questions

3.1. What are the characteristics of Lean Leadership?

The proposed question is to identify the key features and abilities of Lean Leaders in a Lean organisation.

3.2. What are the required changes in Leadership practices?

The literature in chapter two states that 80 percent of the success of Lean transformation is based on changes in leadership practices. It is, therefore, essential to understanding the impact of Leadership practices on the Lean transformation.

3.3. What is the effect on company culture during Lean transformation?

As per the literature in chapter two, culture is a critical success factor and changing the organisation's culture is therefore required to transform a business into a Lean organisation.

3.4. How is Lean implementation done in a South African context?

The aim of this question is to get a practical understanding of the approach followed in a Lean transformation journey

3.5. How do Lean Leaders manage Lean organisations?

This question is aimed to understand the functional structures, tools, systems and procedures to manage Lean organisations.

4. Chapter 4: Research methodology and design

4.1. Research design

4.1.1. Method: qualitative, exploratory

The central aim of the research is to advance and extend the existing knowledge base. Explanatory research is research by investigating the reasons behind a particular occurrence through the recognition of causal connotations between variables (Saunders & Lewis, 2012). (Creswell & Miller, 2000) states that exploratory studies are used where little has been written about a population and the researcher looks to obtain evidence from participants to build an understanding.

It was established in Chapter 2 that various tools and models exist on Lean Leadership. These studies have focused on western, and eastern companies, and therefore studies from a South African perspective are lacking. It is also evident that culture plays a pivotal role in the Lean transformation journey. South Africa has a unique heritage and a collage of culture, and therefore, positions itself for a unique lens in the world of Lean transformation.

According to Yin's (2003) definition, a case study is "an empirical inquiry that investigates contemporary phenomenon within its real-life context especially when the boundaries between the object of study and context not clearly evident. It comes with the technically distinctive situation in which there will be many more variables of interest than data points, and as on result relies on various sources of evidence, with data needing to congregate in a triangulating fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis".

A case study draws conclusions on the basis of a qualitative analysis of scores from one single instance or a small number of instances based on a non-manipulated real case context (Dul & Hak, 2007). The case-study in the research was conducted on a single organisation. The two groups identified as part of the research, therefore, provides a diversified perspective of the same process.

There is a distinction made between practice orientated case studies and theory orientated case studies. Practice-orientated case studies are most commonly used as it is used to describe the

design, implementation, and evaluation of some interventions (Dul & Hak, 2007). As the research was based on the intervention of Leadership the case study method was deemed appropriate to contribute further to the knowledge base.

The goal is the generalisability to show that the findings can apply to a larger population.

4.1.2. Data collection and measurement: Semi-structured interviews

As the need for exploratory research based on a case-study was established the suitable means of data collection for the research was identified as individual semi-structured, in-depth interviews. Semi-structured interviews are used when the researcher is unsure of the answer the participant will give when the order of the questions will need to vary based on the respondent's answer, or where the questions are complex (Saunders & Lewis, 2012). This allows the interviewer to fully explore a topic or theme that is raised by the respondent that might not have been identified during the initial literature review or to exclude some aspects that are not relevant to the particular respondents context (Potter, 2016).

4.2. Universe

According to O'Leary (2004), credibility is the key in researching populations and involves two distinct steps. Striving for validity within the sample's findings and secondly, to apply to larger populations, researchers need to consider in what way findings might be applicable outside their immediate frame of reference.

The population will thus be to all companies in South Africa that have implemented a Lean system.

Limited information was publicly available on businesses that implemented Lean and the researcher had to rely on alternative measures in order to obtain a suitable case study. The researcher contacted different consulting companies with a view to obtain a list of suitable case studies. LinkedIn was also used to search for Lean practitioners within larger organisations. These Lean practitioners were approached whereby the research was explained and the need for to use their respective company as case-study.

Various companies were approached during this process. The researcher applied simultaneously due to the likelihood of approval not being granted. At two companies a formal

process were started, however, approval was not granted by their board. The case-study upon which this research is conducted came highly recommended by various consultants due to the fact they have made excellent progress in the Lean process compared to other companies within South Africa.

4.3. Sampling

4.3.1. Sampling method

Once an appropriate company was selected as a case-study, non-probability, purposive sampling was applied, as this sampling technique is used to make valid generalizations (Saunders & Lewis, 2012). The researcher looked for individuals that were in a leadership position in the organisation, and that was exposed and experienced in the Lean transformation process

4.3.2. Sampling unit

The sample unit under study is the individual respondent and their insight of the Lean transformation process

4.3.3. Sample size

An appropriate sample size for a qualitative study is one that answers the research question, and for detailed studies, this might be single figures (Sandelowski, 1995). (Saunders & Lewis, 2012) suggest establishing the number of interviews inductively, or until data saturation has been reached.

Therefore an initial sample size of eight was identified as sufficient for the study. This is confirmed by (McCracken, 1988) whereby eight interviews should be sufficient. Therefore the researcher conducted eight interviews, and by the end of the eighth interview, no new information came forth. Therefore the researcher concluded that data saturation was reached.

As this case study was conducted with senior management within the case study, each respondent had numerous years of service within the organisation. The seniority of the participants was confirmed as most appointments were organised with the personal assistant.

4.4. Unit of analysis

(Saunders & Lewis, 2012) suggests that unit of data needs to be decided on that is appropriate to the analysis and to which all other categories should be attached. The unit of analysis will be the Leaders in the organisation that is part of the Lean production system

4.5. Data Analysis

4.5.1. Analysis Tool

A qualitative analysis tool ATLAS.ti was used to analyse the transcripts.

4.5.2. Transcript preparation

All the interviews were transcribed by an independent transcriber. Certain interviews were validated against the audio recordings to ensure their accuracy.

All transcripts were prepared in the same manner in order to have consistency during analysis.

The respondents have been anonymised by the use of their positions. References to her or his have been altered with a view to ensure anonymity. All quotes that have been sanitised reflect asterisks. For example John Doe has been modified to the *The CEO.

Information that deemed to be irrelevant was not recorded such as gender, education, age, and race.

4.5.3. Method of analysis

Data analysis is of vital importance as it has a major influence on the results of the research (Flick, 2014). There are three components to qualitative data analysis (Punch & Oancea, 2014), consisting of data reduction, data display, and drawing and verifying conclusions.

The researcher decided on a thematic analysis approach. Thematic analysis is a technique for identifying, analysing and reporting patterns within data to obtain a rich data set (Braun & Clarke, 2006). The authors are of the opinion that thematic analysis differs from other analytical methods due to the fact that it is best suited to describe patterns in qualitative data.

There are three steps to identify patterns according to (Saunders & Lewis, 2012). These steps include, 1) developing meaningful categories, 2) unit of data and lastly, 3) attach the relevant category to units of your data.

An inductive approach was selected by the researcher based on the South African lens applied for categories to emerge from the data. Various literature exists on general cases but not from a South African perspective, and therefore a root cause approach was adopted to obtain an understanding. “Inductive reasoning is a theory building process, starting with observations of specific instances, and seeking to establish generalisations about the phenomenon under investigation”(Hyde, 2000)

4.6. Research validity

(Saunders & Lewis, 2012) defines validity as the concern on whether the findings are reflective of what the actual facts are. The authors advise that all factors that threaten the validity of the research should be removed. Therefore the aim is to deem research as credible.

(Creswell & Miller, 2000) advise that there are nine viewpoints or “lenses” that can be used in order to establish the validity of the research. The researcher has chosen four lenses to apply; they are researcher reflexivity, thick rich description, audit trail and the lens of the researcher.

Researcher reflexivity according to (Creswell & Miller, 2000), is whereby the researcher discloses their personal assumptions, beliefs and biases that may shape their inquiry. The authors further state that the validity procedure uses the lens of the researcher, but is clearly positioned within the critical paradigm where individuals reflect on their own social, cultural, and historical forces that shape their interpretation. The researcher disclosed all biases under section 4.7.1

Thick, rich description lens is a credibility tool to describe the setting, the participants and the themes of the study in rich detail (Creswell & Miller, 2000). Chapter 5 begins with the details of how the respondents were interviewed, where the interviews were conducted and what the participation levels were as well as the background of the participants in the organisation

The Audit trail lens is to satisfy examiners of the study that credibility has been maintained by clear documentation of all the research decisions and activities (Creswell & Miller, 2000). The researcher has applied this approach in by providing details of the process followed in Chapter 5. Furthermore, all the original recordings and the copies of the interview transcripts have been retained as well as all the hermetic units from ATLAS.ti consisting of notes, memos, and

comments made by the researcher have been included in the documentation that was submitted along with this document.

The lens of the researcher requires judgment in order to determine if data saturation has been reached with a view to establish themes and categories and how the data evolves into a persuasive narrative (Creswell & Miller, 2000).

4.7. Research limitations

4.7.1. Researcher Bias

Researcher bias can be divided between two sources, 1) the tendency for the researcher to see what is anticipated and 2) the research may also be value-laden if we expect a situation to have particular characteristics (Morse, 2015).

Therefore it must be stated that the researcher has experienced a Lean transformation implementation in a global company. The researcher was tasked to change the South African operations without any support from Leadership. The organisation that the researcher is employed by has certain cultural challenges that could pose as a bias.

4.7.2. Sampling bias

According to (Saunders & Lewis, 2012) the use of purposive sampling is the most frequently used form of non-probability sampling and because the researcher is required to use his judgment a bias towards certain individuals might have applied. In obtaining approval, the researcher liaised with two of the respondents. As this was a case study of a single company in a specific industry, it might limit to transferability of the research to South Africa as a whole.

4.7.3. Respondents bias

The respondents can be divided into operational and transformation teams. The transformation team is directly involved in driving Lean implementation. The operational team participates in the day to day operations where Lean was deemed to be evident.

Although the research is on Lean Leadership, the researcher did not focus on the leadership aspect during the start of the interviews. It must, however, be noted that even though

confidentiality was granted the respondents might have been hesitant to criticise their leaders negatively.

As the research was based on a case-study, the respondents might also have a bias towards their employer, to not reflect the facts, due to the consequences they deem they might suffer.

The transformation team could also be biased on towards the success stories of Lean as this is their core function in the organisation. A negative reflection on themselves will not be perceived in a positive light.

4.8. Ethical considerations

Ethical considerations relate to the respondents and the method in which their confidentiality was protected.

Each respondent was sent an approval letter from the company as well as an individual consent form on the initial invite. Consent forms were handed out and signed before the start of the interview.

A template of the consent forms is included under section 10.

The interview transcripts have been anonymised to maintain the confidentiality of the respondent. The respondents are referred to by their job function or title.

5. Chapter 5: Results

5.1. Introduction

The objective of this section is to present the result of the analysis. The interviews conducted provided some valuable findings on the role of leadership and how the Lean implementation journey was introduced in the case study.

This chapter starts with a summary of the interviews conducted,

5.2. Summary of interviews conducted and the interview method

The researcher planned to conduct interviews, until a point where data saturation was met (Saunders & Lewis, 2012).

Of the 35 interview requests made to employees of the case study, nine replied with interview acceptance. Each person was sent a consent form and approval form from the organisation. Eight interviews were performed as one interview was cancelled by the interviewee due to overseas travel commitments.

This resulted in a response rate of 22.85%. The Interviewees for this research consisted of a diversified group of employees from various different departments. The respondents were divided into two groups based on the job functions.

Of the eight interviews that were conducted, six interviews were done at the premises of the company, and two interviews have been carried out over the phone.

The average times of interviews were 30 minutes. Due to the nature of the respondent's profile in the organisation, time was limited and therefore the time was strictly monitored by the researcher.

Table 5.1 – Respondents position and job function – ordered by function

Respondent	Position	Job Function
OC	Chief Operations Officer	Operations
OHOD	Head of Operations Department	Operations
OIM	Operations Integration Manager	Operations
OM	Senior Operations Manager	Operations
THOD	Head of Transformation	Transformation
TM A	Transformation Manager	Transformation
TM B	Transformation Manager	Transformation
TS	Transformation Specialist	Transformation

The interviews were conducted over a period of three weeks using the questions based on the work of (Poksinska et al., 2013) as a guide. See Appendix 9 for the detail of the questions used. A pilot interview was also conducted with an international Lean implementation coordinator that is a colleague of the researcher.

Notes were made during the interviews to ensure focus by the researcher. Notes were used to pose further questions on the information provided by the interviewee.

None of the respondents were known to the researcher prior to the approach for research approval. All of the interviewees were alone during the interviews and were forthcoming with their views and information relating to the study. They gave the researcher in-depth knowledge which created a rich source of data to analyse.

The first interview was scheduled with the Transformation specialist with whom the researcher met before in person while obtaining approval from the company. The researcher also liaised with Transformation manager A telephonically, prior to the interview as it was the Transformation Manager A that granted approval of the research on behalf of the organisation.

Six interviews were conducted at the company's offices in Johannesburg, five at the head office and one interview at a local office.

5.3. Interview transcription and verification

All interviews were transcribed by an external transcribing service. Each transcript was reviewed by the researcher and any spelling mistake or transcribing errors were corrected. All transcripts were prepared in the same manner in order to have consistency during analysis.

The respondents have been anonymised by the use of their positions. References to her or his have been altered in a view to ensure anonymity. All quotes that have been sanitised reflect asterisks. For example John Doe has been modified to the *The CEO.

5.4. Details of the respondents interviewed

Prior to each meeting a review of the respondents, LinkedIn profile was done. The aim of reviewing the file was to get an understanding of the person's working career, years of service at the organisation and education level.

In certain cases, this info was used as a conversation starter by the researcher in order to show the respondent that the researcher has done research and to create a sense of professionalism

5.5. Transcript coding and analysis in ATLAS.ti

All transcripts were analysed using ATLAS.ti a computer-aided qualitative data analysis program.

(Friese, 2014) advises that layers of codes should be developed that can be isolated to identify content and attributes. The researcher adopted the approach whereby codes were manually created as the researcher progressed through the transcripts.

After the data was analysed a total of 305 codes have been set up during the process. Codes with a similar meaning were merged into a single code. A total of 160 consolidated codes remained. These codes were grouped into eleven different code families. The eleven different code families were merged into six superfamilies

Figure 5.1 – Coding pyramid depicting the consolidation of codes

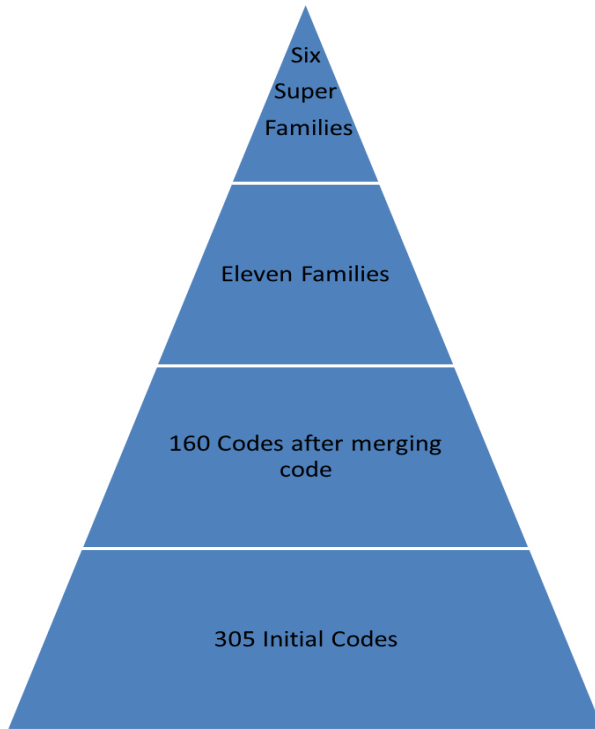


Table 5.2 – Super Family codes in ascending order

Super Family Codes	Occurrence
Creating Change	196
Vision	454
Company Culture	398
Improvement Tools	303
Leadership	386
Implementation	559

5.5.1. Transcript analysis through word counts

A word count analysis was done on all the transcripts after the coding had been completed to get a sense of which words occurred the most during the interviews. The codes were compared to the coding table developed by the researcher. The word counts consisted of the full interview, including the questions asked by the researcher.

The ATLAS.ti Word cruncher function was used to compile a list of all the words that occurred in the transcripts. The full list of a words consisting of 2772 words were exported to Excel.

Words were sorted in alphabetical order, and words that represented the same meaning but used in a different tense or as singular or plural were merged as a single word, for example, culture; cultural; cultures were merged as a single word, culture. The list was reviewed, and all common words were ignored such as and, then, this and to. Based on these words a “Top 21” list was compiled.

Table 5.3 – Word count per respondent descending order

Words	OC	OHOD	OIM	OM	THOD	TM A	TM B	TS	Total Count
people	18	40	38	50	31	30	24	51	282
Lean	33	31	41	64	22	29	18	23	261
think	31	7	26	65	8	16	6	29	188
work	22	6	4	31	10	32	18	13	136
know	11	14	9	32	11	11	11	8	107
started	5	6	22	6	6	42	2	12	101
change	14	3	8	20	18	16	12	10	101
doing	20	19	16	16	4	10	12	3	100
teams	11	14	3	22	15	15	5	11	96
see	17	4	6	13	6	13	20	13	92
well	9	10	16	20	6	11	12	8	92
time	12	10	15	22	7	15	3	8	92
actual	18	2	15	15	5	10	12	9	86
talk	8	9	12	13	4	5	18	11	80
agile	9	0	14	1	16	22	5	9	76
culture	5	11	16	11	13	1	1	6	64
process	12	9	8	12	8	7	1	5	62
organisation	5	2	11	8	12	7	4	11	60
management	9	3	2	15	4	5	0	17	55
value	13	6	1	7	1	17	4	3	52
journey	2	5	22	9	0	3	2	8	51

Overall the word “people” was used the most during the interviews. This is evident on the focus on the staff in the organisation and the Lean is centred on people. Lean was the second most used word, this congruent with the research focus of Lean as a concept.

Think and know can be interpreted as a level of understanding that is required.

In order to check for different views from individuals and groups the words per interviewee were compared to overall top 21 word list and then presented as a percentage of correlation. The table was divided into the two groups Operations and Transformation in order to get the view of each group.

The top 21 words reflected a 63% similarity across both groups. Comparing the groups amongst its team members showed that the Operational group reflected 65% and the Transformation group 60%

Table 5.4 – Top word occurrence per respondent for Operational Group

Word	OC	Word	OHOD	Word	OIM	Word	OM
Lean	33	people	40	Lean	41	think	65
think	31	Lean	31	people	38	Lean	64
work	22	doing	19	problem	27	people	50
doing	20	waste	15	think	26	know	32
people	18	know	14	started	22	work	31
actual	18	teams	14	journey	22	whiteboard	26
see	17	understand	13	culture	16	time	22
change	14	Ref to CIO	13	well	16	teams	22
value	13	once	12	doing	16	well	20
time	12	culture	11	approach	16	change	20
process	12	well	10	time	15	doing	16
improvement	12	time	10	actual	15	white	16
know	11	talk	9	agile	14	actual	15
teams	11	process	9	metrics	13	could	15
well	9	years	9	talk	12	management	15
management	9	whiteboard	9	organisation	11	who	15
agile	9	term	9	bank	10	stand	14
talk	8	year	8	different	10	focus	14
place	8	continuous	8	whatever	10	talk	13
fact	8	failure	8	literally	10	see	13
continuous	7	million	8	know	9	cool	13
In	17	In	10	In	14	In	14
Out	4	Out	11	Out	7	Out	7
Percentage	81%	Percentage	48%	Percentage	67%	Percentage	67%

Table 5.5 – Top word occurrence per respondent for Transformation Group

Word	THOD	Word	TM A	Word	TM B	Word	TS
people	31	started	42	people	24	people	51
Lean	22	work	32	mind	24	think	29
change	18	people	30	see	20	Lean	23
agile	16	Lean	29	work	18	management	17
teams	15	agile	22	Lean	18	see	13
culture	13	value	17	talk	18	work	13
organisation	12	think	16	set	17	Consultant	13
know	11	change	16	tell	15	Ref to CIO	13
work	10	time	15	different	15	started	12
bank	10	teams	15	change	12	talk	11
transform	9	training	14	well	12	teams	11
think	8	see	13	doing	12	organisation	11
process	8	space	13	actual	12	starting	11
years	8	Ref to CIO	13	know	12	change	10
time	7	everything	13	understand	11	senior	10
used	7	build	13	looking	11	actual	10
within	7	everybody	13	am	11	agile	10
leadership	7	whole	12	help	11	well	10
cultural	7	know	11	working	11	know	9
Consultant	7	well	11	behaviour	10	first	9
ago	7	year	11	focus	8	time	8
In	12	In	13	In	11	In	14
Out	9	Out	8	Out	10	Out	7
Percentage	57%	Percentage	62%	Percentage	52%	Percentage	67%

Overall the OC had the lowest word count yet scored the highest inclusion rate at 81% of all the respondents. The OHOD achieved the lowest inclusion rate of 48%. During the interviews the focus of the OHOD team shifted towards operational aspects which were reflected in the word count as “waste”, “failure”, and “continuous”. The OHOD however had the highest count amongst the operational group on “team”.

The OIM third highest word count was “problem” which is relevant to his role as Integration Manager.

OHOD and OM both had a higher word count on “Whiteboards” compared to the other members in the Operational Group as these

It was interesting to the note that the group can be further divided as two respondents each had the same top two codes. For OC and OM these were “Lean” and Thinking” and for OHOD and OIM “Lean” and “People”.

The Transformation group showed similar findings, the top code for THOD was “Lean” and “People” and for TS it was “Lean” and “Thinking”. It can therefore be concluded there is alignment between the two groups concerning the staff.

IT was also found that the word “doing” that is the term for action, features highly from the operational team yet only in one of the Transformation team’s respondents, TM B.

“Culture” did appear in the top 21 list, however both the Transformation Managers only used the word once, compared to the COO who used the word 11 times. It was the OIM referred to culture 16 times the most between all the correspondents.

The top 10 words reflected 81% comparability. The OHOD included “waste” and “understanding”, while TMB focused on “mind-set” and “communication”.

Table 5.6 – Top 10 words inclusion per respondent

Respondent	Inclusion
OHOD	60%
TM B	60%
OIM	80%
OIM	80%
TS	80%
THOD	90%
OC	100%
TM A	100%
Average	81%

The Top 21 list from the word count was compared to the codes generated by the researcher, and each was matched to ensure that all aspects have been included by the researcher.

Table 5.7 – Top 21 words compared to researcher coding by ascending order

Ranking	Word	Family Coding
1	people	Staff
2	Lean	Implementation
3	think	Understanding
4	work	Implementation
5	know	Understanding
6	started	Implementation
7	change	Change
8	doing	Implementation
9	teams	Staff
10	see	Visual
11	well	Implementation
12	time	Implementation
13	actual	Understanding
14	talk	Staff
15	agile	Tools
16	culture	Culture
17	process	Understanding
18	organisation	Culture
19	management	Leadership
20	value	Goal
21	journey	Implementation

It can, therefore, be concluded that the coding applied reflects the views of the interviewees.

5.5.2. Co-occurring codes

To extract the most co-occurring codes all codes were compared to each other using ATLAS.ti co-occurring Table.

Based on a large number of codes these were filtered to reflect codes that only reflect codes co-occurring more than five instances.

The extract below is the coocurance.

These were deemed as the top co-occurring codes.

Table 5.8 – Top co-occurring codes

Instances	Different codes	Detail of codes
5	5	(Implementation, Change) (Staff, Culture) (Understanding, Change) (Understanding, Training) (Understanding, VSM)
6	1	(Leadership, Culture)
7	1	(Resistance, Change)
8	1	(Implementation, Understanding)
9	1	(Culture, Change)
11	1	(Implementation, Failure)

Implementation and failure co-occurred the most at 11 times. Of the codes in the co-occurring table Change, Understanding, Culture featured with other codes as well.

Resistance, change, implementation, understanding, culture and failure, summarised the top co-occurring codes and the link between each is evident.

Culture is linked to implementation, staff, change and resistance therefore the importance of the underlying culture is clearly evident.

5.6. Research Questions

Introduction based on interviews

Of the five interviews that occurred at the companies head office, the researcher only had one meeting in the client meeting rooms, the interview with the Chief Operating Officer (OC). The entrance to the meetings rooms had soft background music, thick carpets, solid wood doors and tables and an abundance of drinks, biscuits, and other refreshments. The electronic display at each door showed the scheduled meetings. It reflected that the company had aspects of the latest technology.

The meeting with the OC is was however in contrast to other four meetings the researcher had at the head office. The other meetings occurred in smaller meeting rooms on the 3rd and 4th floor. Walking through the offices, I realised the contrast between old and new. The company had white and grey marble walls throughout the building and speaks to a period of abundance in the organisation's rich history. The architecture is met with the firm contrast of colourful visual boards reflecting Kaizen events, VSM and other team building events. Various photographs also appeared on the boards showing participating team members.

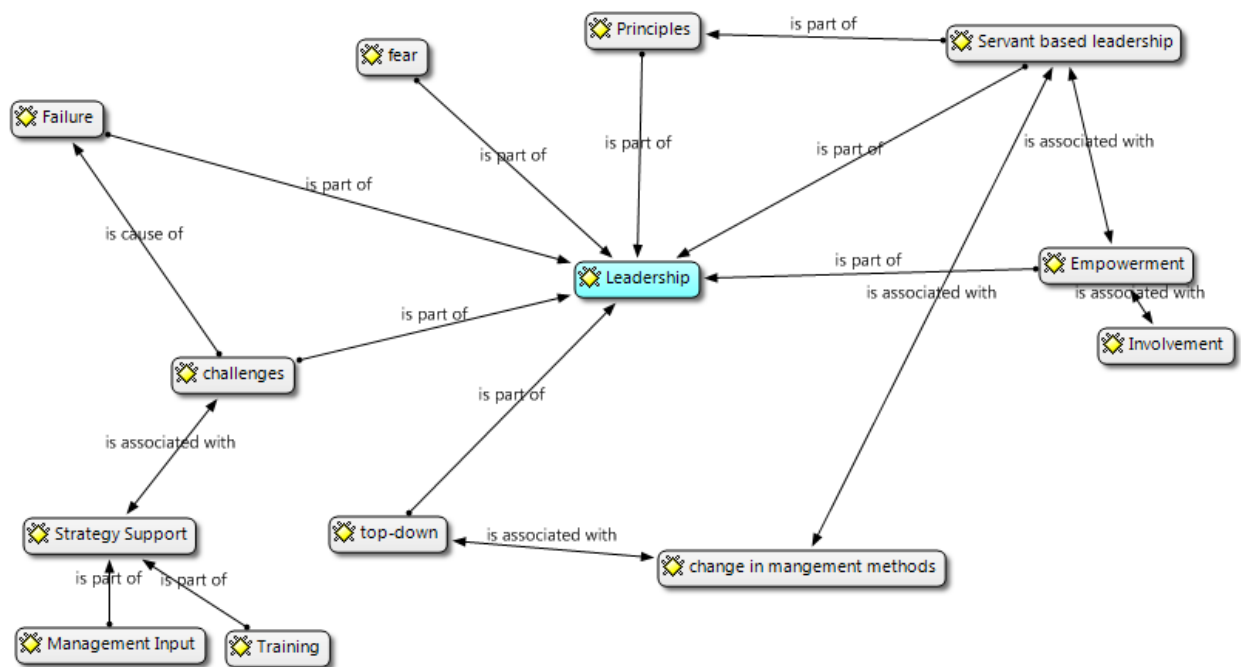
The quote below highlights the complexity of interactions a modern business society. The aim of the research is to understand the complexities of a Lean transformation process.

“In this day and age - never again in history will you ever know the answer immediately. Life is not a one plus one mathematical question. There are so many things, thing is so complicated, especially in large organisations, and that constantly shifting environment.”
 (Operations Integration Manager, emphasis added)

The reason why the particular company was selected a case study by the researcher is because of the perception by Lean Consultants in the industry that the company has achieved success in their transformation journey.

5.6.1. Research Question 1 – What are the characteristics of Lean Leadership

Table 5.6.1 – A network view of Leadership using ATLAS.ti



The aim of the research question was to understand the characteristics of Lean Leadership to ensure the successful Lean implementation.

During the analysis of the transcripts, the following codes were used to identify elements relevant to and in the context of Leadership.

5.6.1.1. Introduction

The Leadership characteristics required for a Lean transformation revealed various themes. Both the COO and two members from the transformation team referred to the leadership required as servant leadership.

*“They have total culture change, the manager has become **servant leader**.” (Operations Head of Department, emphasis added)*

*So we have something that we call **servant- leadership**. Which is actually all about what this is.” (Transformation Manager B, emphasis added)*

*“I think the minute management acknowledges that they are there **to clear the path, to make life easier for the guys** who are doing the real work at the coalface, then I think you’re going to start seeing a change.” (Operations Chief, emphasis added)*

The role of Leadership is shifting and requires constant energy to enable the changes needed.

*“You know, that kind of contagion is missing. And I think it’s around the energy levels. There’s only so **much energy** I think.” (Operations Manager, emphasis added)*

These required changes occur over a period where the normal duties of the leader still continuous.

*“I think the guys really struggled to get some of the areas to change **because life is happening, things are important, we haven’t got time for this nonsense kind of thing**.” (Operations Chief, emphasis added)*

*“*The CEO has done it, I mean he hasn’t done it that often but **the guy is quite busy**. I haven’t done it that often either because I’m also quite busy”. (Operations Integration Manager, emphasis added)*

The role of the Leader is to involve staff in the reason for the required changes, to create a vision for the future and a path to follow.

*“So the leadership role is also to create the context **around why we’re doing this**. It’s for productivity reasons, it’s for improvement reasons, it’s for empowerment reasons.” (Operations Integration Manager, emphasis added)*

Leaders should lead by example, to be the change they require in the organisation.

*“The role of a leader, we’ve discussed it a lot. A lot of it is actually about being a **change champion, a culture champion actually.**” (Operations Integration Manager, emphasis added)*

5.6.1.2. Communication

Communication in the case study can be divided into two different categories, Communication on the vision of the company and enabling others to communicate between them.

Communicating the vision of the enterprise - Communicating upfront on what the future plans are, allows the staff, a level of understanding, direction and clarifies their role within the future plan.

Based on the respondents the researcher concluded that employees were unaware of the vision of the company and the objectives of implementing Lean initially.

*“So you have to before you start the process, **say**, what will be your measures of success at the other side.” (Operations Head of Department, emphasis added)*

*You need to **explain** to them, what it is we’re trying to achieve. So what’s the purpose, why are we doing it, and **start having conversations.**” (Transformation Manager B, emphasis added)*

*“The leaders have a strong role in helping change the culture, helping **set the context of why** we’re doing all these changes.” (Operations Integration Manager, emphasis added)*

*“**Tell me** what you’re trying to achieve from that, and I’ll make it work.” (Transformation Manager B, emphasis added)*

The quote below from Transformation manager is reflective that there was a desperate need to create an understanding and a vision for the future. The word “tried” can be interpreted that limited success was achieved. He also concludes that there was limited focus on creating the understanding.

*“I **tried** to put a lot of people through this Lean Primer which we, myself and another guy, we believe that we need to **get the guys to understand why; Why** do you want to do this? **What** is the problem? **Why** do we need to change it? And **what** needs to change? **How** does it all fit together? The why, what- the how, we didn’t focus much on it. (Transformation Manager A, emphasis added)*

A lack of communication can create fear, especially during the implementation phase. From the respondents, fear was mentioned as a negative factor during the change process that leads to cases where employees resigned.

*“I think the biggest **fear** in the organisation at the team level was after this exercise, they’re going to fire somebody.” (Operations Head of Department, emphasis added)*

The leadership did not know how to deal with the problems they faced. They, therefore, started communicating in order to get an understanding.

*“... we did designs and **talking to everybody**, trying to figure it out..” (Transformation Manager A, emphasis added)*

There is a distinct difference between where the organisation finds themselves and where they aim to be.

“.....there’s lots of fear in the organisation regarding what is going to happen if things go wrong. Because the way it’s been dealt with, is if it goes wrong, they hammer the guys.” (Transformation Manager A, emphasis added)

Enabling communication within the organisation was lacking based on the respondents below.

*“What I liked about the whiteboard was, **it forced people to talk**, it gave us some visible means of **communication**, and it introduced this concept of pure accountability.” (Operations Manager, emphasis added)*

*“So every Tuesday and Thursday they’ve got a stand-up and that I think is working because it’s forcing people to **actually get together**, and **talk** and **do stuff**.” (Operations Manager, emphasis added)*

*“So also at that stage, we had to learn what kind of **communication** is required, how do you **communicate** with people.” (Transformation Manager B, emphasis added)*

*“And the reason for the visual management is trying to get people to start interacting more. So to get people to have a value stand up, **to talk to one another**.” (Transformation Specialist, emphasis added)*

The COO made a comment on the difficulty of communication in a large organisation.

*“When you sit in a room like this, and there is 12 of us here, and we’re all covering inventions, suddenly things happen, because you’re just **talking** to the oke, you’re not trying to find him in another building, on another floor.” (Operations Chief, emphasis added)*

The following quote was set as a goal on how to communicate and the tone of the communication between participants.

*“So if you think about the culture we’re trying to build, we’re trying to build a culture of transparency, of problem-solving, of **logic dialoguing as opposed to emotional***

dialoguing, we are trying to talk to a collaborative culture.” (Operations Integration Manager, emphasis added)

Communication on negative results and outcomes are absent.

“So where things go wrong, people **won’t voluntarily admit** that things stalled or whatever so you tend only to see the good things.” (Operations Chief, emphasis added)

“What’s not ok, is being a victim, not being able to tackle the problem head on and **discuss it, not putting your hand up with information** because you feel you’re going to be victimised, etc. and certainly what’s not ok, is ignoring it.” (Operations Integration Manager, emphasis added) –

If there are negative results, negative communication is described by the respondent.

“And the one thing that, and the measurements, and there’s lots of fear in the organisation regarding what is going to happen if things go wrong. Because the way it’s been dealt with, is if it goes wrong, **they hammer the guys**” (Transformation Manager A, emphasis added)

Having an open mind-set was mentioned as a key leadership characteristic. The researcher grouped this as part of communication due to active listening that is required.

“I have **an open mind**. I would say that’s the first thing. And with that, we typically have pre-conceived ideas- put it away. Put it in a box. Even if I have a pre-conceived idea, still have an open mind. Do not assume something.” (Transformation Manager B, emphasis added)

5.6.1.3. Creates motivation, support, and involvement

The motivation from the leadership referred to by the respondents was mostly focused to after the fact events. The motivation was also limited to success stories. In the initial coding the term motivation was used, but in retrospect, the researcher realised that *appreciation* would have been more appropriate in certain cases.

“By publishing it, **encourages** the other teams to see that my name is not on there. Therefore, I would like my name on there, therefore I better go do something.” (Operations Head of Department, emphasis added)

“...I get to see some progress and every now and then we get to send them down to the COO and say hey you’ve done some awesome, cool stuff, which is a really good **morale booster** for the team.” (Operations Manager, emphasis added)

*“The CEO sent a personal note from a personal email to each and every one of those people, to say thank you, and this is the **most wonderful thing to see and keep up the good work and have fun.**” (Transformation Specialist, emphasis added)*

A sense of excitement was revealed by the respondent when changes were introduced. The researcher found that these were certain isolated pockets where the motivation of staff took place

*“What that did for us was a **great ignition, it ignited stuff, it got stuff going, it got people motivated.**” (Transformation Head of Department, emphasis added)*

The effect of keeping the motivation up is important as there will be various changes that need constant energy

*“And the perception of the team is, we’re not going to fill those vacancies now because we’re cutting down on head count and we’re just going to have to plough on and just go with it. **So morale is going down as a result.**” (Operations Manager, emphasis added)*

Rewarding staff for improvements made is a method to motivate staff.

*“...The continuous improvement forum, where the teams come and present what they’ve done, and they **get rewarded for what they do.**” (Operations Head of Department, emphasis added)*

*“Our initiative with *our operation is called *Innovation, which is where people can put ideas up **and win money for it**, and then go implement the ideas, and it’s all to create a culture of innovation.” (Transformation Head of Department, emphasis added)*

The researcher obtained no evidence on how to motivate non-participating staff.

Support and involvement link closely to the section on commitment. Managers need to lead by example. Leaders need to show that this is important. In order to show the staff the importance of this project, active participation is required.

In the feedback, it seems that there were instructions given without any support. No mention was made if the managers understood the process.

*“If management spent more time going to the work, going to the stand ups, **going to see what was going on, being actively involved, I think we would have had more traction and possibly this thing would’ve been better than we did.**”- (Operations Chief, emphasis added)*

This manager is aware of his required participation in the whiteboards.

*“So for me, it’s participation. So you can’t sit there and tell people without doing. So **I wish I could be at every whiteboard every day.**” (Operations Head of Department, emphasis added)*

Based on these two comments it can be summarised that involvement and support are required for success.

Of the respondents, there was a lack of management listening to employees

“Ok guys, now we need to do x, because of y. Not- hey guys, what do you think of doing this? Don’t you think that’s a cool idea? Maybe we should try this? None of that. so I think from senior management, it’s all very – it’s a reactive thing, and we spend a lot of, so a lot of management’s time has become very focused on, I think because of all the burning pressures” (Operations Manager, emphasis added)

“And nobody listens to us, they just shoot us down.” (Transformation Specialist, emphasis added)

Based on the comment there is a distinct disconnect between staff and the employees. Surveys have a purpose but being close to you staff, will remove the need to perform surveys as there will be a relationship with the staff.

Performing staff survey is a method to listen to comments of your staff

*“...we also had our **staff happiness survey**.” (Transformation Head of Department, emphasis added)*

5.6.1.4. Focus on Empowerment

From the respondents, the emphasis on the necessity for empowerment was evident.

*“So coming back to the point, I don’t know that we did enough to install out of Lean, the concept that people **are empowered to make changes** and to activate the change.” (Operations Manager, emphasis added)*

*“So you find the coalface guys want to be empowered and they’re quite excited about the concepts and the ideas because **they’ve only got stuff to gain, they not going to lose their jobs, because they’re being empowered**.” (Operations Integration Manager, emphasis added)*

*“Yes and that’s why the fires aren’t burning like they used to. Because people now, instead of saying, I can’t do anything about it because I don’t have the money; nobody listens; that’s not my area of expertise; **they now feel that they can do something about it, they can say something about it, they can influence it**(Operations Head of Department, emphasis added)*

*“And I think you get a **sense of pride attached to that, and they see the value**, not only to the process but to them and their own brand and their own marketing and their own profile.” (Operations Chief, emphasis added)*

*“But continuous improvement needs to come with an acknowledgment that the teams are **autonomous enough and empowered enough** to actually continue and make all those small changes.” (Operations Chief, emphasis added)-*

*“I think that has really kind of generated the enthusiasm, and the interest and the design because people who are at work start **seeing that they can make a difference.**” (Operations Chief, emphasis added)*

*“The guys right at the bottom, you treat them differently, and you actually allow them to make a **commitment, and they understand what they need to do, and they can work based on their capacity and make their commitments.**” (Transformation Manager A, emphasis added)*

The respondent noted the middle management as a stumbling block in the organisation in terms of empowerment. The term referred to by the respondents is the marshmallow layer as they revert back to their old shape and habits.

*“I picked up, they **didn’t really worry much about building up skills** and things like that, but there was line management career development, skills development. (Transformation Manager A, emphasis added)*

Under the theme of Empowerment, there were various comments made by speaking up or challenging management.

It was clear that the current culture of the organisation do not allow staff to challenge their management.

*(Operations Integration Manager, emphasis added) – “So a leader in that context, you need to **encourage people speaking up and owning their spaces**, being more empowered, you need to give a sense of it’s ok for mistakes to happen because life is big and complicated and scary and things will happen, mistakes will always happen.”*

5.6.1.5. Commitment and focus

The researcher found that the initial commitment to Lean was limited. The journey of improvement was initiated by implementing Lean, and other improvement concepts such as Agile, followed.

*“So although it started at the top, within I’d say six months, that guy left the company and **the focus there died**, because it wasn’t anybody else’s idea except his” (Operations Head of Department, emphasis added) -*

*“And when a guy sees that his manager **is not interested-** so what are we doing this thing for?” (Operations Chief, emphasis added)*

*“So Lean was very topical with execs, senior management, for some time, but subsequent to that, every discussion really appears to be **a reactive discussion rather than a proactive one.**” (Operations Manager, emphasis added)*

*“He had his whole ex-co that were **supposed to drive and help with these things.**” (Transformation Manager A, emphasis added)*

One respondent referred to the different initiatives as a flavour of the month idea.

*“That was categorically **a flavour of the month**. Because what happened to A3 training? One of the other things that came out of Lean was that we had, we were going to have what was called the LMO. The Lean Management Office. Which was going to be our on-going coaches and rah-rah guys, and doing what needed to be done, they would come and join our stand-ups, they would see how it’s going, they would advise ...”(Operations Manager, emphasis added)*

A loss in focus of the initial goal set by the organisation occurred according to the respondent below

*“So for example, the whiteboards, the CIs, all those types of things, you continue to do, but **very quickly people forget the intent of Lean-** and the intent of Lean is to remove waste.” (Operations Head of Department, emphasis added)*

5.6.1.6. Trustworthy

During the interview, certain direct referrals to the trust relationship between the staff were made. Building a trust relationship with the staff was set as an objective for the organisation.

The majority of the comments made on trust came from the Transformation team and in the particular interviewees that have dealt with the implementation of Lean.

*“As soon as you have a level of understanding, I can empathize with you, and then we **build trust in the relationship**.” (Transformation Manager B, emphasis added)*

*“And we’ve done a lot of work and built a lot of relationships, and I think people started to **learn to trust us**.” (Transformation Specialist, emphasis added)*

*“... today we look at the culture first, and try and **gain the trust**.”(Transformation Specialist, emphasis added) -*

Other instances show more secondary trust relationship concerns that were highlighted.

In this specific case the interviewee, the Transformation manager went to a colleague who was in the Lean Transformation team. The interviewee has since become the manager of the Transformation Specialist.

*“So once I had some discussions with people, specifically the Transformation Specialist because the Transformation Specialist was already there. **Explain to me what is all of this about**, it’s fine telling me I have a whiteboard- and yes, what about it?” (Transformation Manager B, emphasis added) –*

In the quote below an independent measure was taken to conduct a staff survey.

*“And our staff satisfaction went up to the middle of the second quartile. So **independent measures showed us that wow, this is successful**.” (Transformation Head of Department, emphasis added) -*

The following quote co-occurs with failure

*“So where things go wrong, **people won’t voluntarily admit that things stalled or whatever so you tend only to see the good things.**” (Operations Chief, emphasis added)*

The researcher found that the following respondent identified a crucial contrast between what they as coaches are trying to achieve and what managers are doing.

*“To me, that’s already very much depends on the **management** because us, as coaches, **we can go out and influence and tell people to speak** up as much as we can, but if you’ve got the **wrong management** in place, they tend to shoot people down.”*

It will create company **schizophrenia** whereby you have coaches trying to drive a culture, and embed characteristics only to have management behave completely differently.

5.6.1.7. Encourages learning from failure

The code “failure,” was used to code all negative aspects of Lean such as objectives not being met, abandoned projects, loss of focus and deviating from the original plan.

There was a high emphasis on failure based on the transcripts. There is also a shared vision created by the respondents to have leadership in a place where failure is part the culture of the organisation.

There is significantly more discussion from Operations regarding failure compared the Transformation team.

The OPS COO was the most outspoken towards failure. During the first six interviews, there was a positive outlook towards Lean. The COO was the second last interview and offered a harsh contrast towards the other respondents.

*“... so if you look back and say, was **Lean a success?** In a binary sense, **I don’t think it was.**” (Operations Chief, emphasis added)*

The researcher was completely surprised by the comment especially that all other respondents’ fall under the COO according to the company organogram and the substantial investment made by the corporation into the Lean programme.

The COO admitted on certain improvements directly after the comment on failure.

*“**There were successful parts of it,** so there was some **kind of benefit and lift.**” (Operations Chief, emphasis added)*

Learning from failures has occurred in the organisation, and it is an effort to create a no-blame culture

*“...but what we’ve learnt in the last two years because part of what we want, is we **want to learn from our mistakes.**” (Transformation Head of Department, emphasis added)*

*“So then we realised that **you need to make mistakes to learn**. So if I’m making mistakes, and I’m learning from them, have I really failed?” (Transformation Manager B, emphasis added)*

5.6.1.8. Leadership Training

No training was provided to the leadership of the organisation on how to manage the implementation. The comment links to support but also can highlight to self-train.

*“We did, as management team, what we could in the change management space but we got **no leadership, no guidance, nothing, not from HR, not from Lean, not from anywhere**.” (Operations Manager, emphasis added)*

5.6.1.9. Reflection

The correspondent is of the opinion that reflection by the team is not adequate. This was a referral to a team effort and therefore can also be linked to communication.

“I think the reason is that we’re not taking enough time as a team to reflect.” (Operations Manager, emphasis added)

5.6.2. Research Question 2 – What are the required changes in Leadership practices?

5.6.2.1. Introduction into changes required for Leaders

The need for change in Leadership practices has been highlighted by the respondents. Based on the respondents a different approach is required.

*“I think for as long as management believes that they’re there to oversee people work and allocate work, and this, that and the other, you know measure people, then you’re **going to see a different thing**.” (Operations Chief, emphasis added)*

*“So you had to **change the thinking**, and it takes a long time to **change the thinking**. And the one thing that, and the measurements, and there’s lots of fear in the organisation regarding what is going to happen if things go wrong. Because the way it’s been dealt with, is if it goes wrong, they hammer the guys.” (Transformation Manager A, emphasis added)*

A change implemented by the leadership is to focus on the culture and not only hard facts.

*“So our **focus has shifted totally**. Where it was tool-driven, and tool-based, today we look at the culture first” (Transformation Specialist, emphasis added)*

Changing the approach was noted as a key insight by the respondent.

*“And we **understand** that’s sometimes we need to do something. It is not that we should not do that.” (Transformation Manager B, emphasis added)*

5.6.2.2. Lead by example

Leaders need to lead by example and be part of the change they would like to see.

*“The role of a leader, we’ve discussed it a lot. A lot of it is actually about **being a change champion, a culture champion** actually” (Operations Integration Manager, emphasis added)*

*“I think the guys really struggled to get some of the areas to change because **life’s happening, things are important, we haven’t got time for this nonsense kind of thing.**” (Operations Chief, emphasis added)*

Leaders need to encourage a changing environment within the organisation.

*There's just so much change, and that's I think going to be the **status quo for a long time.** Hopefully not the negative change, necessarily in the cycle we're in now, but **there's always going to be change.** (Operations Integration Manager, emphasis added)*

*“Questions that we have- so, even though it was evolving, if you look at it from their side, and they had a very valid question or remark, saying – **we have just got this right, now you’re changing it again.**” (Transformation Manager B, emphasis added)*

Leaders need to acknowledge that they can make mistakes. Leading by example to recognise to a mistake made can create a positive reaction amongst staff.

*“Then I thought that as we went through the stages, we suddenly **realised** that the data we collected **was A- wrong, inappropriate, because we should have collected others,** or didn't go to the level that we should have had” (Operations Manager, emphasis added)*

5.6.2.3. Refocus on Team effort

Initially, the Lean implementation was driven from the top by one person and therefore not sustainable.

*“So although it started at the top, within I'd say six months, that **guy left the bank and the focus there died,** because it wasn't anybody else's idea except his. The other people brought their own ideas, and that's where we've shifted to now. But what we did in our area is we've continued across all teams, and it's a now bottom-up driven thing rather than a top-down.” (Operations Head of Department, emphasis added)*

The change occurred to create a team-effort within departments.

*“But what we did in our area is we've **continued across all teams,** and it's a now bottom-up driven thing rather than a top-down. **So the spark was top-down,** the fire is bottom-up.” (Operations Head of Department, emphasis added)*

*“We've also totally **changed** our operating model into working in small **teams**” (Transformation Head of Department, emphasis added) -*

The respondent below noticed improvements in isolated pockets where the teams are more autonomous.

*“So where improvement does take place, and there is a lot of **improvement**, but **it’s in isolated pockets in areas**, is where the teams are more autonomous, where the management is more enlightened, where the guys actually- I’m going to use a terrible word here- but self-solve.” (Operations Chief, emphasis added)*

The focus of the Leadership is to create unity building. The siloed approach will be discussed in section 6.5.6.2

*“The third leg of the strategy was **unity building**, and breaking down silos within the organisation” (Transformation Head of Department, emphasis added)*

The researcher questioned the respondent on failure. The respondent applied the thought of individualistic approach and the consequences thereof.

*“If I dream up an idea on my own and I go and lose 35 million, I’d most probably **be fired** if not, a final written warning at best case.” (Operations Head of Department, emphasis added)*

*“So if you think about all of those types of things, you want to get into a position when **something goes wrong, instead of just trying to push the problem to someone** or even, later on, push the **blame to someone**, you want to be **able to get together quickly in a collaborative fashion**” (Operations Integration Manager, emphasis added)*

The positive feedback received from successful endeavours was applied to a team perspective based on the respondent below.

*“So we started making things more **transparent** and getting guys who’d been on the journey to explain the benefits that they had achieved personally, but also as **a team**.” (Operations Integration Manager, emphasis added)*

5.6.2.4. Allocate time

Leaders need to find the time to get out of their offices and to get their hands dirty. Gemba or shop floor visits to show an interest in the staff is a practice that all respondents acknowledge they would like to do more of.

*“ ... you’re facing off to the business, **we want to get closer to the business**, we want to **understand- because what the consultant** was now doing, they were saying, we’re going to change the way in which we’re working, we want people to be in the work, understanding what the customer wants. And then once they understand it, we will contact these teams to do it. So we’ve redesigned all of that.”- (Transformation Manager A, emphasis added)*

The respondent changed their practices and created smaller teams as an operating model. The researcher found that the agility associated with smaller teams were attractive to management in the case-study.

*“We’ve also totally **changed our operating model** into working in small teams”
(Transformation Head of Department, emphasis added)*

Creating cross-functional teams require special skills in order to have a holistic approach.

*“**Teams are cross-functional.** So in the old days, we were organised around silos, so in this case, our silos became competencies, so we worked on competency models.”
Transformation Head of Department, emphasis added)*

5.6.2.5. Having an open mind-set

The Leadership practices must promote an open mind-set framework. In the leader’s, personal capacity an open mind-set must prevail as well as focus to shift fellow staff’s mind-set, therefore embedding the thinking in the organisation to achieve the vision of the organisation.

*“So it really is around how we work with **people’s minds**. I would say, the – well, for me at least- the majority of the work is around, how do I shift someone’s **mind-set**?”
(Transformation Manager B, emphasis added)*

*“So in some instances, people still have the **belief**, which is still **the mind-set**, so we haven’t changed the **mind-set** - that they don’t need this” (Transformation Manager B, emphasis added)*

*“So for the next two or three years, till that elastic wears out, we need **to institutionalise** a lot of this, in terms of **how people think**.” (Transformation Head of Department, emphasis added)*

5.6.2.6. Accept resistance

It was identified that Leaders need to acknowledge that some people will not be open to change.

*“And the nature of the beast was that some of these teams were very **anti-Lean, and still are anti-Lean. Anti-new *Project, Anti-*other, Anti-everything. Anti-anything change.**”
(Operations Manager, emphasis added)*

5.6.2.7. Training

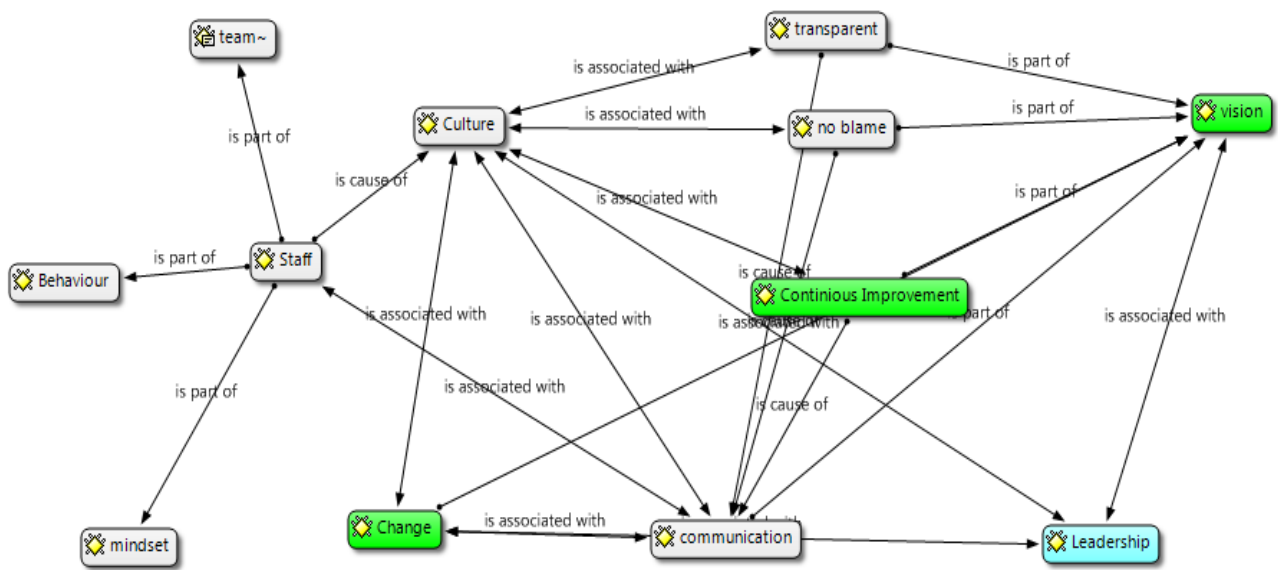
Training oneself to understand complexities in an organisation.

*“But we changed it all, we just brought in a **couple of our coaches**, and we said let’s take all of it- We will **build the new material**, and then after every course we will **change the material, and we will teach** you stuff on the ground and made it very practical and it’s been a hell of a success to also use the leadership courses to take them through stuff, that they **really understand** what it’s all about.” (Transformation Manager A, emphasis added)*

5.6.3. Research Question 3 - The effect on company culture during Lean transformation?

5.6.3.1. Introduction

Table 5.6.3 – A network view of Culture using ATLAS.ti



During the implementation of the new Lean roll out, the organisation discovered that applying a tool based approach was not the way to initiate the process and that culture of the organisation is far more important. The researcher concluded that there should be no attempt to start a Lean journey until the culture of the organisation has been fully understood.

*“So our **focus has shifted** totally. Where it was tool-driven, and tool-based, today we look at the **culture first**” (Transformation Specialist, emphasis added)*

Based on the feedback from the respondents the following connotation was made by the researcher. Communication is the most important driver of a culture in an organisation as it is the center point holding of all aspects of the organisation together. A communicating organisation creates a culture of communication.

*“We started engaging people in terms of, what is our **current culture**, what are the current impediments to being able to deliver, and what type of **culture we want**” (Operations Integration Manager, emphasis added)*

Of the respondents, it was clear that the Leadership had a strong role to change the culture in the organisation. Setting the context refers to communication of what the vision for the organisation is.

*“The leaders have a strong role in **helping change the culture**, helping set the context of why we’re doing all these changes” (Operations Integration Manager, emphasis added)*

The role of Leadership is to be the communication link between the existing culture and the vision of the future culture.

*“Where am I heading, what am I trying to do, or what am I trying to achieve? And you can call it True North- it’s not really True North, it’s more, **I am here to shift mind-sets and behaviours.**” (Transformation Manager B, emphasis added)*

The details on the vision for the culture of the organisation were discussed by the respondents. Each respondent had a different view of the future culture. The researcher found this interesting as it confirms that the Leadership has not communicated the future culture of the organisation.

*“So if you think about the **culture we’re trying to build**, we’re trying to **build a culture of transparency, of problem-solving, of logic dialoguing** as opposed to emotional dialoguing, we are trying to talk to a **collaborative culture.**” (Operations Integration Manager, emphasis added)*

*“Ultimately it’s about a **cultural change** as well, **cultural continuous improvement, continuous change, continuous optimisation**; everybody is empowered to make the small changes in their areas to improve things.” (Operations Chief, emphasis added)*

The existing culture of the organisation is different to the envisaged culture.

*“I’m generalising when I say the organisation tends to have a bit of a **good news culture**. So where things go wrong, people won’t voluntarily admit that things stalled or whatever, so you tend only to see the good things.” (Operations Chief, emphasis added)*

The respondent refers to an active Lean culture. The researcher concluded that according to the respondent the measurement of the effectiveness could be measured by the continuous changes that occur to improve the organisation.

*“I don’t know what the rest of the world would say, but the single biggest thing in an **effective Lean culture** is the whole thing around **continuous improvement**” (Operations Chief, emphasis added)*

The invitation by managers to be challenged by their own staff is seen as a leadership characteristic that requires a change in the organisation. The respondent states that Leaders should start behaving in this manner. It can, therefore, be concluded that the current leaders do not encourage this behaviour.

*“I think that’s what every leader- well, we’re all leaders in a way- every line person and that type of division should start practicing. They should start inviting their people **to challenge and to talk.**” (Transformation Specialist, emphasis added)*

*“It’s ok to take risks and make mistakes, and we are all in this together type of a thing. So as a leader, that’s **the culture you’re trying to instil.**” (Operations Integration Manager, emphasis added)*

5.6.3.2. Changing the behavior and mind-set

The only respondents that indicated a focus on the behavior were from the Transformation team. It, therefore, indicates that the transformation team that deals with the staff have realized the need to change the behavior.

It is clear that the focus of the transformation team is to change the behaviour of the organisation, by opting to get assistance from specialists it shows a commitment and the need to understand.

*“And we’ve started other things like we’ve brought in people that **understand behaviour modification**” (Transformation Manager A, emphasis added) –*

*“..if you want to change culture, you need to change behaviours, so it is like systems around people, around strategy, and we took, this time round it was 150 people, we took them away and set, what **behaviours** do you want to see?” (Transformation Head of Department, emphasis added)*

The respondent was not part of the transformation team at the time when there was no focus on the behaviour. The researcher noted a distinct distinction between the respondent at the time and the implementation team.

*“Then they were carrying on for pretty much about a year and **weren’t really looking for mind-sets and behaviour changes**, but were looking for these cost initiatives and I think everybody went along and played the game” (Transformation Manager A, emphasis added)*

According to the respondent, there is a chain reaction between mind-sets, behaviours, attitudes and results.

*“That’s what I mean by **having an open mind**. For me, it’s what’s my **mind-set**, that **mind-sets drive behaviours**, **behaviours drive attitude**, and **attitude drives results**” (Transformation Manager B, emphasis added)*

It is echoed by the respondent stating the culture in the organisation is the pre-requisite to become more innovative.

*“And secondly, to become more innovative, but to do that, **the cultural or behaviour changes** that go with that, is things like having retrospectives, **having learning sessions**, and no blame, that type of thing.” (Transformation Head of Department, emphasis added)*

*“So you need to **understand**, what the **behaviour is you want** before you start looking at putting some of these things” (Transformation Manager B, emphasis added)*

The transformation team measures their performance of changing behaviour during stressful periods. The researcher found no evidence on how the existing behaviour was described and documented in order to look for changes.

*“So as soon as there’s stress, people tend to go into their natural state. So if people are highly stressed and they are **having different behaviour** than previously, we can say we have **shifted the behaviour**.” (Transformation Manager B, emphasis added)*

5.6.3.3. Transparency

Transparency was highlighted by operations as a key requirement for the future culture. This was not echoed by any other respondent during the interviews.

The researcher aligned transparency close to measurement in terms of culture. Measuring items create a level of understanding if all is measured all aspects will be transparent.

*“The second huge thing is it brings **transparency**”- (Operations Integration Manager, emphasis added)*

*“We need to get it fired up again. Because we still believe that you need to make things **transparent**, we still believe that you need to be able to measure everything that you do before you make a decision, so it’s actual data orientated, your decisions are **data based, not emotionally based type of thing**.” (Operations Integration Manager, emphasis added)*

Transparency is then linked to communication and no blame culture.

*“And just the **culture of transparency, openness**, guys happy to talk about stuff, happy to talk about their problem, as opposed to a person who did it wrong, that type of thing.” (Operations Integration Manager, emphasis added)*

5.6.3.4. Communicating

The organisation had to learn what communication is required to change the behaviour of the staff.

*“So also at that stage, we had to learn what **kind of communication** is required, how do you **communicate with people**, because the first wave was “we’re going to do this, and this is what we’re going to get out of it.” (Transformation Manager B, emphasis added)*

The respondent has perfected the skill of communication and therefore gets results from staff.

*“**Change** the way I talk to someone, I get a **different result**.” (Transformation Manager B, emphasis added)*

5.6.3.5. Challenging conversations

The respondent’s focus for the future culture of the organisation was on having challenging conversations.

*“I think that’s what every leader- well, we’re all leaders in a way- every line person and that type of division should start practicing. They should start inviting their people **to challenge and to talk**.” (Transformation Specialist, emphasis added)*

*“To get back to our CEO, who’s doing Gemba walks, she invites people to speak up and **challenge**” (Transformation Specialist, emphasis added)*

The researcher did find that the respondent felt there were trust relationships.

*“we’ve done a lot of work, and built a lot of relationships, and I think people started to learn **to trust us.**” (Transformation Specialist, emphasis added)*

The respondent might encourage the behaviour of challenging conversations; the researcher did not note any training and guidance from the respondent on how to have these conversations.

5.6.3.6. Culture signals

The respondent is creating the future culture on a daily basis by dressing in jeans. The simple act is sending a message to the team of leadership is looking to be active.

*“Two years ago, * the company was a total **suit culture**. You know, if you were elected for a senior manager, you would wear an Italian suit with a beautiful tie, you know all that type of stuff. You will find very few people doing that now, because part of the **cultural change** we wanted is, management needs to be in the work, and you cannot roll up your sleeves in an Italian suit. So you will find, so I’m standing here talking to you in my denim and a normal shirt.” (Transformation Head of Department, emphasis added)*

The researcher confirmed that all the respondents were dressed in jeans during the face to face interviews.

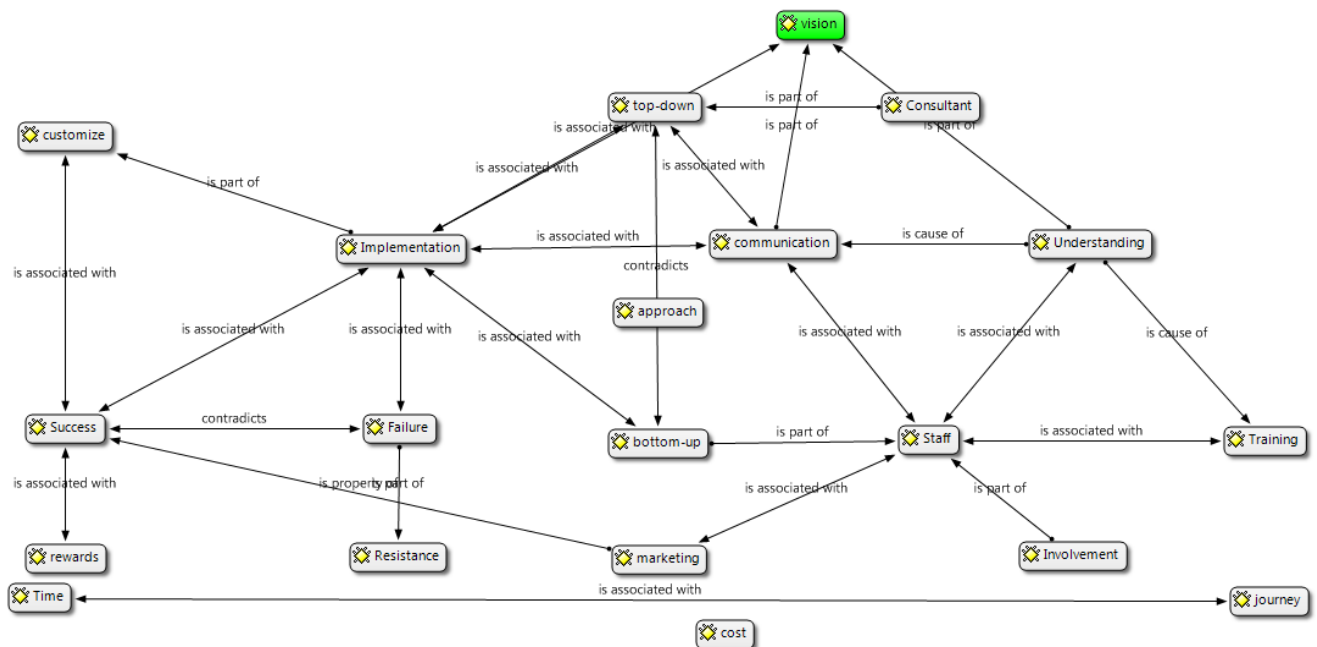
5.6.4. Research Question 4 – How is Lean implementation done in a South Africa context ?

5.6.4.1. Introduction

From all the network views generated implementation is the most complicated due to all the different aspects associated. Communication and staff is a key enabler between the various aspects from either top-down or bottom-up.

Communication is the key connector between the tools and staff.

Table 5.6.4 – A network view on Implementation using ATLAS.ti



Implementing Lean in the case study had mixed success in the sense that certain pockets adopted Lean quickly and certain groups did not get any movements from historical practices.

*“it’s not just a framework **that you plug and play**, it’s not just a process that you follow- so if you’re going to go out and examine stuff, and try to get to buy-in and other parts of the multi-national in your organisation to be aligned, it’s not going to simply follow this recipe” (Operations Integration Manager, emphasis added)*

*“The negative was, it was almost this **forces, formulaic approach**, where you kind of think, well if I just follow the five lenses, if I follow these certain templates, I will solve my problem,*

and then my problem is over, and I stop, I just carry on with” (Operations Integration Manager, emphasis added)

*“We had just started, on the **first day, five people already left the organisation**. So it would have possibly been better, just to drive it in-house, but obviously, we didn’t have all the tools and the knowledge at the time, and it’s sad to say- I’m going to say it because I think it happens all over” (Transformation Specialist, emphasis added)*

5.6.4.2. Approach

The initial approach can determine the success of the implementation. There were two distinct approaches followed by the organisation. An initial top-down approach was followed to kick off the Lean journey; this process morphed into a bottom-up approach over time.

The initial top-down approach involved a well-known management consulting group that was contracted to manage the Lean implementation process. It was clear that the Management consultants were financially driven as fees were paid on savings generated.

It is the opinion of the researcher that the consulting company negatively impacted the perception towards Lean. This resulted that all staff was forced by the outside company to implement Lean. The word “forced” was often used by the respondents.

It can also be argued that were the consultants did not perceive to make money, that those divisions were left behind. The negative sentiment towards the consultants overpowered the positive vision of the Lean implementation.

*“After some **heated discussions** with the *Consultants, because they wanted to shove something down our throats, and I don’t do, shove something down my throat” (Transformation Manager B, emphasis added)*

*“The initial one was extremely- can I call it **rigid**? A **very rigid** approach. so there was a **whole toolbox full of tools**. The *Consultants forced us to use each and every one with each and every department.” (Transformation Specialist, emphasis added)*

The respondent shared his view on the approach required in order to have a successful implementation.

*“If I could make this journey with more of a **productivity angle**- what we had in heart, productivity angle- there isn’t a cost agenda whatsoever, and I **didn’t have to be forced to cut costs**, I was just doing to **because I want to improve my company naturally**- that would **be the holy grail**” (Operations Manager, emphasis added)*

Keywords taken from the respondent is productivity; no cost agenda; not forced and improve naturally.

5.6.4.3. Communicating the goal and vision of the process

The respondents stated that there was no clear communication on what the aim of the Lean implementation was.

*“So you have to **before** you start the process, say, **what will be your measures of success** be at the other side?” (Operations Head of Department, emphasis added)*

“.. if you don’t have a vision of what Lean can be, it’s not going to work” (Transformation Head of Department, emphasis added)

The researcher perceived that implementation only had a short-term approach. It was not in the interest of the consultant to communicate the long-term approach as it can be assumed that they had fixed term contract over a period of time.

Of the respondents, it was not clear if a vision ever existed in the company for the implementation phase. The researcher concluded the implementation was a failure in the organisation.

*“ It should not be, here’s a bunch of people(Consultants), they’re going to do something, they’re (Consultants) going to leave. You need to **explain** to them(staff), **what** it is we’re **trying** to achieve. So **what’s** the purpose, why are we(Leaders) doing it, and start having **conversations**. And have conversations around, what is their(staff) problems.” (Transformation Manager B, emphasis added)*

The alternative approach was highlighted by the following respondents:

*“**Tell me** what you’re **trying to achieve** from that, and I’ll make it work. Don’t tell me, just do this.” (Transformation Manager B, emphasis added)*

*“If I could make this journey with more of a **productivity angle**- what we had in heart, productivity angle- there isn’t a cost agenda whatsoever, and I didn’t have to be forced to cut costs, I was just doing to because I want to improve my company naturally- that would be the holy grail” (Operations Integration Manager, emphasis added)*

What also became relevant to the researcher that the cost-cutting agenda was a hidden agenda from the management team. The employees discovered the agenda by the actions of the management team.

As there was no communication, the staff realised that job security was at stake. The result was various people left the organisation. It is precisely at the implementation phase the leadership needs to communicate regarding the desired outcomes in terms of staff numbers.

*“I mean the minute you see cost saving and stuff, people start reading into that **jobs** and me and the rest of the stuff.” (Operations Chief, emphasis added)*

*“And in the context of a **broader transformation**, the first thing any human being will think about is their **job security and their retrenchments**” (Operations Integration Manager, emphasis added)*

The respondent noted that after the initial uncertainty that existed progress was made and earlier progress could have been made if proper communication had taken place.

*“I think once we got past the initial difficulty of people seeing it as all this could **be the end of my career or my job** and this kind of stuff, there was a lot more traction, and I think, the effort started to happen in the individual areas” (Operations Chief, emphasis added)*

The aim of the communication of the vision is to create understanding at all levels. If there is understanding conversation can take, place and employees can contribute to the vision.

5.6.4.4. Customized to the different teams

Every Lean journey is unique for every practitioner based on the company (Anand & Kodali, 2010). Therefore a unique approach for implementation is required. In a large company, the customisation can be done per division based on their needs.

The implementation took two years in the specific division. Communicating with your team, that this process is a journey and it will take a substantial amount of time is part of the implementation. In fact, Lean should not be deemed as only a set of tools or a Kaizen project, but an endless journey (Anand & Kodali, 2010).

As noted in section 5.6.4.4 the respondent took the approach of implementing Lean in small teams. Firstly one team at a time and then progressed to two teams at a time. Understanding the teams and the people within that group allows you to create an individually customised approach.

*“You as a manager have to understand all five hundred people and where they are on that change curve as they’re going through it. So you obviously don’t do it at five hundred people level, **you go team by team by team**- and we’ve started doing two teams at a time, and it took us two years to actually roll it out.” (Operations Head of Department, emphasis added)*

*“As we kind of package all three of those, and I guess in a way when doing so you make it kind of **more IT relevant as opposed to just generic practice** and process improvements or kind of Lean construct” (Operations Chief, emphasis added)*

*“So it is not, I would be **lying** to say to you, **everybody operates in exactly the same way**, it doesn’t work like that.” (Transformation Head of Department, emphasis added)*

*“**Different people respond to the Lean journey in different** ways because they pick up on what works for them” (Operations Integration Manager, emphasis added)*

Getting to know every single person on the journey is required in order to customise the approach to catch that person's interest.

*“So some people are very **process-orientated**, and they like to see process efficiency and would be excited about that, some **other people would be excited by the skills uplift potential**, or the greater accountability and empowerment, **so it's quite personal**, hence back to my point that it's a cultural thing, and you've got to really get that right.” (Operations Integration Manager, emphasis added)*

Allowing the teams the flexibility in how they operate and measure their progress can create *ownership* of the process.

*“It depends. Some teams would have something called accomplishments, **some teams make use of graphs**, **some teams will provide a monthly report**. Is it really substantial? Not specifically. Where we actually have got charts and graphs, and people are tracking using data, there we can definitely see something.” (Transformation Manager B, emphasis added)*

The respondent did not advise what the action was on those teams that were stuck. The researcher felt that the focus where on those teams that performed well.

*“But what's interesting- obviously your organisations are always going to have **some variability**, there are teams that got stuck after, they're more mature, all that kind of stuff. So you'd find where we are at the moment, is we've got **pockets or departments** in the organisation who are really where I would have liked them to be.” (Transformation Specialist, emphasis added)*

In order to adopt the right approach, some experiments are required.

*“we're talking about sermon leadership courses, which we're **experimenting** with.” (Transformation Manager A, emphasis added)*

5.6.4.5. Creating involvement

From the respondent, the distinct difference from a top-down and bottom-up approach was how the staff perceived the implementation. The aim of the Lean coach was to create a bottom-up approach.

*“Number one, when we have an **engagement with the team**, if the team feel we are doing Lean to them, we've lost the plot. If we don't let people do the work themselves, then we will always sit and do it for them, which means we are doing it to them” (Transformation Manager B, emphasis added)*

No distinction was made by the respondents on the sustainability of either a top-down or bottom-up approach. In the quoted reference below the staff originated ideas on improvement.

“But when they see you there- and we make a huge thing, even if its seems simple, and not a lot of money, the minute people start coming with success around- we can get rid of these

*vacancies, or we can now do some of that 40% we weren't doing before, or these are the continuous improvements, this is the waste we're removing- they get rewarded, either a day off, they get a dinner for two voucher, they get published in my monthly newsletter that I distribute, so that it's something that's **not being done to them, they're participating in it.*** (Operations Head of Department, emphasis added)

*"The way we approached it back then, we had *Consultants as a partner, **so they came in with a rather formulaic approach of saying, well, this is Lean, these are the key things that you do,** literally there are five dimensions, and this is how you would analyse each business unit across these five dimensions, in order to identify key issues and resolve them."* (Operations Integration Manager, emphasis added)

*"I think there was a bit of cost cutting pressure that we kind of started introducing, and we very quickly, very early on, realised **the negative impact of taking that approach.** In other words, even literally the metrics that you use, at some point, would have to feed back to a broader steer-co, explaining how Lean was doing- and some of the metrics were things like rand value savings, which immediately is the wrong connotation"* (Operations Chief, emphasis added)

5.6.4.6. Marketing the success

The respondents actively marketed their success to create awareness and support. The success came from colleagues within the organisation. It can be argued that because this was in-house, it created trust and interest.

*"So we started getting **success stories** from wave 1. We literally have had people, we invited people to a large room, and we had guys stand up with their whiteboards, and they would explain where they were before, their transformation that they went through, what they enjoyed about the Lean journey. So we started doing a bit of PR around the whole thing, which worked quite a bit."* (Operations Integration Manager, emphasis added)

*"We did a lot of **visual marketing**, and show and tell, and come and see, and those things"* (Operations Chief, emphasis added)

It is interesting to note that the Lean coach created a divide between the different staff, those who had changed and those who has not. The word charging is also indicative that there is no thought of their actions.

The researcher also felt a faith-like connotation. The non-believers as they are referred to, know it is there but have not seen the evidence that Lean can work for them.

*"Then obviously you get your teams, your **non-believers**, I call them the non-believers, who are just charging through on the old way, but what I'm also starting to see- and that's very nice, is- as other teams that are more mature that have been on this journey are starting to celebrate their successes and make it visible, the **non-believers** are starting to*

*say, oh shit, we better start doing something because we're being left behind.”
(Transformation Specialist, emphasis added)*

The researcher did find that the marketing is creating the right environment of change. It reflects that the company is moving in a direction and these staff will be left behind.

No mention is made of the staff that is being left behind and how to assist those staff on changing into a new way of working. It will create division as confirmed by the respondent on the non-believers.

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5.6.4.7. Resistance to change

The researcher found that certain teams were exempt from implementing Lean in their divisions. In other instances, the implementation team realised the resistance to Lean and moved onto the next group.

The researcher is of the opinion that it could create a division in the company by not being consistent.

*“If you have really **kicked in your heels**, I’m not **pushing you**. I’m not going to say I’ve completely dropped you off my radar because I still would like to help you. Its just, I’m still here if you need some help. That’s it. Where people have embraced it and seen that it actually is helping them, we are still driving it really hard. Because they’ve asked us to be there.” (Transformation Manager B, emphasis added)*

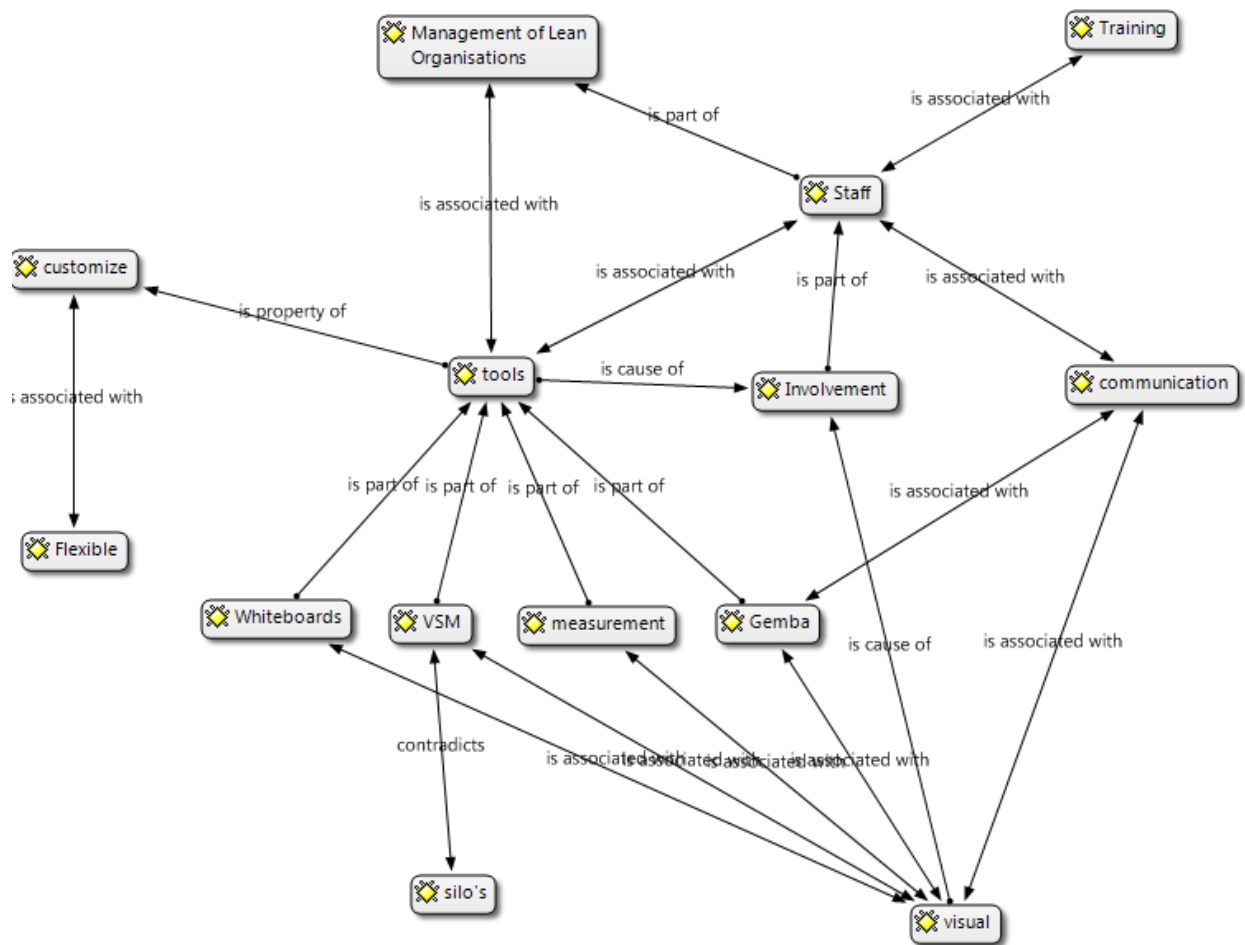
5.6.5. Research Question 5 – How do Lean Leaders manage Lean organisations?

5.6.5.1. Introduction

From the network view generated on how Leaders manage Lean organisations, it reflects the emphasis on visual aspects.

Communication is the key connector between the tools and staff.

Table 5.6.5.1 – A network view of how Leaders manage Lean organisations using ATLAS.ti



From the interviews, there are various ways in which the respondents identified how Leaders manage Lean organisations. There are Lean tools that are used to manage the activities.

*“So whatever tools you learn, whatever thinking processes you learn, you should be using those **forever more, going forward**” (Operations Integration Manager, emphasis added)-*

The respondent mentioned it should be used forever more. This links to the culture of the organisation.

The vision for the management of a Lean organisation was summarised by the respondent.

*“And the type of picture in my head is that you have these sort of **self-organising empowered people** that have enriched themselves knowledge-wise, are **not scared** to tackle something that they don’t know, **not scared** to tackle a problem that is also unknown or quite big, and they would just naturally **pull in whomever** they need to pull in, **to resolve the problem**, and acknowledge that just taking one small step in resolving that problem is better than spending a year analysing, breaking down, etc., etc.” (Operations Integration Manager, emphasis added)*

5.6.5.2. Lean Tools

For this respondent, the matter was not the tool being used but rather the learning that the tool is generating.

*“That’s what I focus on. Whether that shift is, **this tool, that tool, this methodology, that methodology**, it really does not matter to me. Because it is the knowledge that I gain based on that situation.” (Transformation Manager B, emphasis added)*

Various tools exist that each has a function, the respondent almost disregards the tools and is focusing on the problem at hand.

*“What I can say, we looked at all these **myriad tools in the toolbox**, and they’ve all got a place there, you know, they can all add value in a certain instance. But we looked at a simpler model, so go in and see what the problem in the area is, and **then choose the appropriate tool if you need to use a tool.**” (Transformation Specialist, emphasis added)*

The frustration noted from the respondents when forcing tools onto users was seen as a stumbling block that created a negative perception to the process.

*“The negative was, it was almost this forces, formulaic approach, where you kind of think, well, if I just follow the five lenses, if I follow these certain templates, I will solve my problem, and then my **problem is over**, and I stop, I just carry on with the new way of doing stuff. What it doesn’t teach you, is that it’s **a cultural thing, it’s a way of thinking, and it never ends**” (Operations Integration Manager, emphasis added)*

*“The initial one was extremely- can I call it **rigid**? A very **rigid approach**. so there was a whole **toolbox full of tools**. The *Consultants forced us to use each and every one with each and every department.” (Transformation Specialist, emphasis added)*

These specific respondents are moving away from tools but rather focusing on the culture of the organisation.

*“So **our focus** has **shifted** totally. Where it was **tool-driven, and tool-based**, today we look at the culture first” (Transformation Specialist, emphasis added)*

*“So the name of the game, is to use all of these things- theory of constraints, Lean, Agile, Scrum, pick whatever, your points, and then use it as **tools** in that bigger cultural transformation.” (Transformation Head of Department, emphasis added)*

*“So it’s a much softer approach, it’s **not this hard tool**, financial. Financial gain, in actual fact, at this point for us is **the last outcome, it’s just an outcome, it’s not really our goal.**” (Transformation Specialist, emphasis added)*

5.6.5.3. Involvement

From the interviews, involvement was noted various times, and the lack of participation from certain teams posed a concern. In the case, the Leaders were required to reignite the process in order to involve people. No mention was made on why the staff became uninterested.

*“So we re-ignited that two months ago, and what we did, we followed exactly **that type of process, got people involved**, but this time round, we followed the Seven S model- I’m not sure if you’re familiar with that?” (Transformation Head of Department, emphasis added)*

The Seven S model will be discussed further in Chapter six.

The chief operating officer highlights for involvement by all staff.

*“If management spent more time **going to the work, going** to the stand ups, **going** to see what was **going** on, being actively **involved**, I think we would have had **more traction** and possibly this thing would’ve **been better** than we did.” (Operations Chief, emphasis added)*

5.6.5.4. Communication

Communication is not in any way seen only as a Lean tool. However the researcher found the fact that it was identified as a tool quite surprising. Based on the case studies environment and the technical staff working at the organisation there was a distinct need to improve on communication.

Leaders, therefore, need to ensure communication within the organisation as well as communication on the vision of the organisation.

*“Coming back to the other tools- so just **getting people to talk**. Having a daily **check in**, that kind of stuff, I think, are simple, very simple, almost 101 management tools, which we’d come to forget about.” (Operations Manager, emphasis added)*

Customising the communication strategy is required to target specific areas that need more encouragement than other divisions.

*“So I think the best tool to get the people **to start speaking** up is to start with the middle management layer there, in a way. So people are encouraged **to speak** up and if it's something that's really not that cool, not 100%, they don't come down on you- just to learn how to say no in a nice way, if that makes sense” (Transformation Specialist, emphasis added)*

5.6.5.5. Visual Management

Visual management is according to the respondent, one of the most critical techniques used in the transformation process.

*“I really believe **visual management** is one of the most critical things in this transformation.” (Transformation Specialist, emphasis added)*

In creating visualisation, it shares the information and people start seeing opportunities.

*“And I was becoming very verbal, to say it's all rubbish, let's **make things visible** - so the visualisation thing became quite big- the guys started to realise that of you start to visualise your work **you start seeing things.**” (Transformation Manager A, emphasis added)*

From the respondent, it was noted that, visual management creates interaction and communication between staff.

*“And the reason for the **visual management** is trying to get people to **start interacting** more. So to get people to have a value stand up, to talk to one another.” (Transformation Specialist, emphasis added)*

*“And what I see now is there is more, let's just go **visualise** this stuff, let's make it **visible**, and then lets talk about the problems and let's talk about the flow of work” (Transformation Manager A, emphasis added)*

The respondents did not mention the anticipated culture change associated with the communication; however, the researcher felt that this will ultimately impact the culture of the organisation.

*“But the **visibility** of the whiteboards, **the way we talk, the things we say**, we have a CI forum every two weeks, the teams still present, the teams still track waste-removal, and efficiencies and improvement and we try to translate it into either people are happier, it's costing us less to do the same or do more, or those type of things.” (Operations Head of Department, emphasis added)*

5.6.5.5.1. Visual Management and the use of visual management tools

In the case study the tools used were aimed at creating a visual understanding. From the respondents, the visual management had the biggest impact on the organisation. As the case-study is an Information Technology driven company, there is no physical equipment and goods present. All the information is electronic, and therefore it is understandable that visual projections on a whiteboard had such an impact, as this was not the norm in the company.

*“We also started trying to make things **more visual**. So we also had- our people that went on the Lean journey, they had to **have whiteboards**, as they came out of their little phase.” (Operations Integration Manager, emphasis added)*

*“we look at a few different tools, **like visual management**, value stream management, those are two big ones, and the third one I guess is proper problem solving, and root cause analysis we use- so the A3 thinking tool.” (Transformation Specialist, emphasis added)*

*“But the **visibility of the whiteboards**, the way we talk, the things we say, we have a CI forum every two weeks, the teams still present, the teams still track waste-removal, and efficiencies and improvement and we try to translate it into either people are happier, it costs us less to do the same or do more, or those type of things. A people-process-technology discussion.” (Operations Head of Department, emphasis added)*

5.6.5.5.2. Value Stream Mapping – Understanding the organisation

The focus of the respondents was to create flow in the different processes. Later on, specific emphasis will be placed on the historic siloed approach ingrained in the organisation and the efforts made to change it.

The researcher found no focus on the creating value for the customer from the respondents. There seems to be a disconnect between the technical teams providing the backbone of the operations and the teams that face the customer.

*“Run this value stream analysis and then have a Kaizen event where we bring together everybody that works across **the value stream**, from- well, we started with only IT people, not the business.” (Transformation Manager A, emphasis added)*

From the respondent the change in approach was evident and the fact that a different methodology was required was clear. Value stream mapping created the understanding of the different process in the case study.

*“And from that initiative, they said we need to **start focussing on value streams**. Let's start thinking about value streams, there's something wrong here, we need to think differently.” (Transformation Manager A, emphasis added) -*

*“But what we did is we made sure that we ended the process across the **full value chain** of what we do so that the full team gets the benefit.” (Operations Head of Department, emphasis added)*

*“Or we could go through a case of let's have a **look at the system from end to end**, and see which of the components are sub-optimal and how do we incrementally completely change things over time.” (Operations Chief, emphasis added)*

*“So how do you **decouple value streams from each other** so the **flow can flow** more naturally versus its kind of reliant on things all over the place.” (Operations Chief, emphasis added)*

This respondent referred to VSM being the manifestation of the Lean principles. The researcher felt that it provided the missing link between creating idealistic concepts and putting it into action.

*“And then when we started to introduce the whole thing **of our value stream**, I could see the improvement from Lean principals” (Transformation Manager A, emphasis added)*

The researcher found that VSM brought the organisation back to a simple consideration of what they offer to clients. If they have misaligned that value, they can reconsider on how to plan for the future.

*“He created a process that obviously had your flow, that there was some form of backlog, he built in a pool there, he said you deliver, you check at the **end what the customer is going to want**.” (Transformation Manager A, emphasis added)*

*“And it just provides us I think, harnesses and mechanisms through which to **consider how do we** organise value, how do we create value streams, **how do we organise, how big, and how** we go through a process” (Operations Chief, emphasis added)*

5.6.5.5.3. Value Stream Mapping - Braking down the silos

Of the respondents, it was evident that silos created over the years is the biggest bottleneck. The researcher found that the historic strengths of the organisation became their current weakness.

*“So in the old days, we were organised around **silos**, so in this case, our silos became competencies, so we worked on competency models” (Transformation Head of Department, emphasis added)*

*“But they were still all in their pockets, lots of functional **little silos**. And that is what we then said- we need to break all of this” (Transformation Manager A, emphasis added)*

*“The third leg of the strategy was unity building, and breaking down **silos** within the organisation” (Transformation Head of Department, emphasis added)*

The creating flow was impacted by the siloed approach. The researcher found that the company had no solution to overturn the siloed culture but rather to create teams to bridge the silos.

*“an organisation that used to be organised **around pillars of vertical specialisation**, and we’ve actually just built massive multi-disciplinary, multi-functional feature teams all over the place. So we’ve got a couple of hundred teams of 10 – 12 people each” (Operations Chief, emphasis added)*

*“**everybody**, probably like 22 people or so in a **value stream** that had to talk to each and every piece.....” (Transformation Manager A, emphasis added)*

*“Or we could go through a case of let’s have a look at the **system from end to end**, and see which of the **components are sub-optimal** and how do we incrementally completely change things over time.” (Operations Chief, emphasis added)*

*“We didn’t. I think what was amiss- and we raised that, I think, as part of the learnings.... was that the implementation of Lean **was done by the team**. It should have **been done per value stream**.” (Operations Manager, emphasis added)*

Value stream mapping was the tool used to identify the breaks in creating flow. There have been areas of success as there are fewer silos in the organisation.

The organisation became aware that they are only as strong as their weakest link. The respondent gave up because of the organisation setup.

*“I **just gave up** because the rest of the organisation **determines the rate at which you deliver stuff**..” (Transformation Manager A, emphasis added)*

*“You need to take a process, a **value stream**, and **Lean the process end to end**.” (Operations Manager, emphasis added)*

*“Currently we have portfolios which are **still silo** focussed, although we are trying to break **down silos, so there're fewer silos**, in that way. When you start adding the value stream component in, or layer in, we are taking it to the next level, in terms of **breaking down silos**.” (Transformation Manager B, emphasis added)*

The respondent was enthusiastic on what value streams achieved. There is also need to do more value streams on a regular basis. From the interviews, no mention was made on revisiting previous value streams and to create further improvement on the value stream.

“... we should have done S\$\$ loads **more with value stream maps**, S*\$\$ loads more” (Operations Manager, emphasis added)*

5.6.5.6. Measurement

Measurement was raised by both the operational team as well as the transformation team as a management tool that adds value.

*“Where we actually have got charts and graphs, and people are tracking using data, **there we can definitely see something**. When we don’t have data, it becomes more the fluffy stuff.” (Transformation Manager B, emphasis added)*

Therefore not only the hard business KPI’s measured, but also the softer emotional aspects of the organisation.

*“the teams still track waste-removal, and efficiencies and improvement and we try to **translate it into either people are happier**, it's costing us less to do the same or do more, or those type of things.” (Operations Head of Department, emphasis added)*

The lack of data when there is an insistence on measurement creates false data.

*“And because I don’t have data I need to provide something. So I’m starting to do it, I try and do something, the best I can with what I have. **Which is not real data**. Which **skews the bits and pieces** and then also, because it was **linked to people’s performance**”*

bonuses, you can just imagine, the interesting discussions that happened around that.” (Transformation Manager B, emphasis added)

Measuring the performance of the team can indicate to leaders on where assistance is required.

“I **think** the guys really struggled to get **some** of the areas to **change** because life’s happening, things are important; we haven’t got time for this nonsense kind of thing.” (Operations Chief, emphasis added)

“So you need somebody to **drive the admin** if that’s the right word, and the reporting, and the alignment of Lean across it. But it’s not a one to five hundred or one to ten relationship; it’s how active does that person want to be? The bigger the team, the less active she can be on each team. But when the team leaders start doing it properly, then **it’s sort of self-driving.**” (Operations Head of Department, emphasis added)

5.6.5.7. Whiteboards

The basic approach of putting up Whiteboards across the organisation had a positive effect on the organisation. It created visualisation and communication amongst the employees.

“So we can talk about the big topic of **whiteboards**- everybody talks about whiteboards. I think they were awesome.” (Operations Manager, emphasis added)

“We also started trying to make things **more visual**. So we also had- our people that went on the Lean journey, they had to have **whiteboards**, as they came out of their little phase.” (Operations Integration Manager, emphasis added)

5.6.5.8. Training

The need for training was identified as a key requirement by the Transformation Managers. The researcher did not get any other respondents on training as part of how leaders manage Lean organisations.

“... so we **need to teach**, we need to help teams, **coach**, all those things. So that we understand what the real problems are, on the ground.” (Transformation Manager B, emphasis added)

The training material developed by the organisation was done in house.

“But we changed it all, we just brought in a **couple of our coaches**, and we said let’s take all of it- We will build the new material, and then after every course we will change the material, and we will teach you stuff on the ground and made it very practical and its been a hell of a success to also use the leadership courses to take them through stuff, that they really understand what it’s all about.” (Transformation Manager A, emphasis added)

Limited training was provided on VSM.

“And there was **a bit** of training regarding what it meant to think in terms of value streams, what are the principals of Lean thinking.” (Transformation Manager A, emphasis added)

5.6.5.9. Gemba Walks

Gemba walks is a management tool for active participation and in the case of the respondent was the fact that the CEO was taking the time out to participate in the event. It is clear that communication is encouraged by the CEO.

*“To get back to *the CEO, who’s doing **Gemba** walks, she **invites people to speak** up and challenge- I mean; she does it while she’s there. And it’s actually amazing to see how that just calms people down, that she invites them to challenge (Transformation Specialist, emphasis added)*

6. Chapter 6: Discussion of results.

The aim of this chapter is to discuss the results in terms of the literature presented in chapters one to five.

6.1. Research question 1 - What are the characteristics of Lean Leadership

6.1.1. Introduction

According to Mann (Mann, 2009), 80 percent of the success lies with the ability to change leadership practices and behaviours and ultimately their mind-set. This chapter will focus on the leadership characteristics.

The type of leadership identified by the respondents in section 5.6.1.1 as the kind of leadership required in the organisation is servant leadership. The definition of servant leadership is where leaders serve their followers in order for them to grow and prosper. One of the strengths of servant leaders is the ability to encourage learning and growth (Sendjaya et al., 2008)

The quote by the COO reflects a servant leadership quality by referring to clearing the path and making life easier.

*“I think the minute management acknowledges that they are there to **clear the path**, to make life easier for the guys who are doing the real work at the coalface, then I think you’re going **to start seeing a change**.” (Operations Chief, emphasis added)*

Being adaptive to a changing environment requires Leadership to change their behavior and changing leadership behaviour is the most difficult process due to traditional management styles (Koenigsaecker, 2005)

*“So the **roles and responsibilities** that we’ve just discussed, and the way that you said that your CIO has **completely changed**” (Transformation Head of Department, emphasis added)*

Time was mentioned as a constraint when the respondents are referring to spending time on the floor during Gemba walks.

*“*The CEO has done it, I mean **he hasn’t done it that often** but the guy is quite busy. I haven’t done it that often either because **I’m also quite busy**.” (Operations Integration Manager, emphasis added)*

*“I think the guys really struggled to get some of the areas to change because life’s happening, things are important, **we haven’t got time** for this nonsense kind of thing.” (Operations Chief, emphasis added)*

The quotes above are in contrast to acting as servant leaders.

Leaders should lead by example to be the change they require in the organisation.

*“The role of a leader, we’ve discussed it a lot. A lot of it is actually **about being a change champion, a culture champion actually**”. (Operations Integration Manager, emphasis added)*

6.1.2. Communication

Communication from Leadership characteristic has two distinct roles, communication on the vision of the company and enabling others to communicate internally.

Communicating the vision of the company

Hoshin kanri is the method of communication of target management or policy deployment to include everyone in the business to the business goals(Nicholas, 2016).

The conclusion in section 5.6.1.2 was that the employees were unaware of the company goals.

Both Transformation managers had the same perspective on communication on the vision.

*“You need to explain to them, what it is **we’re trying to achieve**. So what’s the purpose, **why** are we doing it, and start having **conversations**.” (Transformation Manager B, emphasis added)*

The quote below from Transformation manager is reflective that there was a desperate need to create an understanding and a vision for the future. The word “tried” can be interpreted that limited success was achieved. He also concludes that there was limited focus on creating the understanding.

*I tried to put a lot of people through this Lean Primer which we, myself and another guy, we believe that we need to get the guys **to understand why**” (Transformation Manager A, emphasis added)*

*“**Why** do you want to do this? **What** is the problem? **Why** do we need to change it? And **what** needs to change? How does it all fit together? The why, what- the how, we didn’t focus much on it.” (Transformation Manager A, emphasis added)*

It can, therefore, be concluded that the Transformation Managers are required to fill the gap left by the leadership on communicating the vision.

The leadership did not know how to deal with the problems they faced. They, therefore, started communicating in order to get an understanding. Covey(Covey, 2006) stated that where there is communication, there is an ability for solving challenges

The leadership did not know how to deal with the problems they faced. They only after realising that don’t have an answer, started communicating in order to get an understanding.

*“... we did designs and **talking to everybody**, trying to figure it out..” (Transformation Manager A, emphasis added)*

The focus on the old style of leadership that will be discussed in section 6.2. whereby Leaders are to be problem solvers for the employees and not the enablers to the problems.

A lack of communication can create uncertainty that will lead to fear. This fear caused staff to leave the organisation.

*“I think the biggest **fear** in the organisation at the team level was after this exercise, they’re going to fire somebody” (Operations Head of Department, emphasis added)*

*“We had just started, on the first day, **five people already left the organisation**” (Transformation Specialist, emphasis added)*

6.1.3. Enabling communication

Servant leaders expand on their influence by inspiring other people to find their voice increase the ability to solve challenges and serve human needs and resulting in leadership becoming a choice rather than a position (Covey, 2006). Communication within the organisation was deficient based on the respondents in section 5.6.1.2. It can, therefore, be argued that if there is a lack of communication; challenges will not be solved in the organisation.

*“What I liked about the whiteboard was, it **forced people to talk**, it gave us some visible means of **communication**, and it introduced this concept of pure accountability.” (Operations Manager, emphasis added)*

Enabling communication within the organisation was lacking based on the respondents below. The researcher found that in the organisation staff was focused on their computers and the means of communication between staff were limited to email. Limited face to face conversations took place between employees within the same department on the same floor.

*“So every Tuesday and Thursday they’ve got a stand-up and that I think is working because it’s **forcing people to actually get together**, and talk and do stuff.” (Operations Manager, emphasis added)*

*“So also at that stage, we had to learn what **kind of communication** is required, how do you **communicate with people**.” (Transformation Manager B, emphasis added)*

*“And the reason for the visual management is trying to get people to **start interacting** more. So to get people to have a value stand up, to talk to one another.” (Transformation Specialist, emphasis added)*

There is a distinct difference between where the organisation finds themselves and where they aim to be.

*“.....there’s lots of **fear** in the organisation regarding what is going to happen if things go wrong. Because the way it’s been dealt with, is if it goes wrong, they hammer the guys.” (Transformation Manager A, emphasis added)*

The fear created will cause staff not to experiment on new projects and therefore the organisation is not benefit from possible innovations.

The COO made a comment on the difficulty of communication in a large organisation. Based on his profile the researcher believes that the COO, should find it easier compared to the other employees to find staff in order to arrange a face to face meeting.

*“When you sit in a room like this, and there is 12 of us here, and we’re all covering inventions, suddenly things happen, because you’re just talking to the oke, **you’re not trying to find him in another building, on another floor.**” (Operations Chief, emphasis added)*

Having an open mind-set was mentioned as a key leadership characteristic by the respondent. In order to have an open mind-set also requires to actively listen to your staff and therefore forms part of communication.

A leader’s willingness to seek input, listen carefully and contentiously learn creates an environment where employees feel respected and encouraged to contribute to creative solutions (The shingo model™.2016).

*“I have an **open mind**. I would say that’s the first thing. And with that, we typically have pre-conceived ideas- put it away. Put it in a box. Even if I have a pre-conceived idea, still have an **open mind**. Do not assume something.” (Transformation Manager B, emphasis added)*

From the respondent, there is a clear emphasis on getting information from the staff. The mind-set applied can enable for employees to contribute to challenges. The underlying factor in order to achieve the goals, therefore, lies in communication.

If there is participation by managers, there will be more communication, hence the requirement

6.1.4. Creates motivation, support, and involvement

As discussed in section 6.1.1, servant leadership encourages leaders and followers to raise one another to higher levels of motivation and morality (Sendjaya et al., 2008).The motivation from the leadership referred to by the respondents was mostly focused on after the fact events. The motivation was also limited to success stories.

The most important management task is the ability to influence people which are a requirement transformational leadership skills and behaviours (Poksinska et al., 2013). In the initial coding the term motivation was used, but in retrospect, the researcher realized that *appreciation* would have been more appropriate in certain cases.

*“By publishing it, **encourages** the other teams to see that my name is not on there. Therefore, I would like my name on there, therefore I better go do something.” (Operations Head of Department, emphasis added)*

*“...I get to see some progress and every now and then we get to send them down to the COO and say hey **you’ve done some awesome, cool stuff**, which is a really **good morale booster** for the team.” (Operations Manager, emphasis added)*

*“The CEO sent a personal note from **a personal email to each and every one** of those people, to say thank you, and this is the most wonderful thing to see and keep up **the good work and have fun.**” (Transformation Specialist, emphasis added)*

Creating excitement in the team when a change occurs is more difficult. True leadership is required where there is a lack of progress and performance.

A sense of excitement was revealed by the respondent when changes were introduced.

*“What that did for us was a **great ignition**, it **ignited** stuff, it **got stuff going**, it **got people motivated.**” (Transformation Head of Department, emphasis added)*

Of the respondents, there was a lack of management listening to employees

*“Ok guys, now we need to do x, because of y. **Not- hey guys, what do you think of doing this? Don’t you think that’s a cool idea? Maybe we should try this? None of that.** so I think from senior management, it’s all very – **it’s a reactive thing**, and we spend a lot of, so a lot of management’s time has become very focused on, I think because of all **the burning pressures**” (Operations Manager, emphasis added)*

*“**And nobody listens to us**, they just shoot us down.” (Transformation Specialist, emphasis added)*

Based on the comment there is a distinct disconnect between staff and the employees. Survey has a purpose but being close to you staff, will remove the need to perform surveys.

Performing staff survey is a method to listen to comments of your staff

*“...we also had our **staff happiness survey.**” (Transformation Head of Department, emphasis added)*

Leadership needs to build in factors that maintain a level of motivation.

Creating excitement in the team when a change occurs and is more difficult compared to normal circumstances. True leadership is required where there is a lack of progress and performance

Leadership needs to build in factors that maintain a level of motivation

6.1.5. Focus on Empowerment

The Lean philosophy is based on empowerment with structured methods to provide the highest quality at the lowest possible cost. Lean tools aim to improve productivity and eliminate waste through adapting the organisational processes (Goodridge et al., 2015). BBBEE is focused on empowerment of black people and therefore the term empowerment is crucial in a South African context.

From the respondents in section 5.6.1.4, there is a real hunger from the staff at the coalface to be empowered.

*“So you find the coalface guys want to be **empowered** and they’re quite excited about the concepts and the ideas because they’ve only got stuff to gain, they not going to lose their jobs, because they’re **being empowered**.” (Operations Integration Manager, emphasis added)*

*“Yes and that’s why the fires aren’t burning like they used to. Because people now, instead of saying, I can’t do anything about it because I don’t have the money; nobody listens; that’s not my area of expertise; **they now feel that they can do something about it**, they can say something about it, they can influence it” (Operations Head of Department, emphasis added)*

The responsibilities of Leadership are to drive the empowerment and to ensure all stumbling blocks are addressed. In the section 5.6.1.4, the respondent noted the middle management as a stumbling block in the organisation in terms of empowerment.

*“I picked up, they didn’t really worry much about **building up skills** and things like that, but there was line management career development, skills development.” (Transformation Manager A, emphasis added)*

In order to drive empowerment, there is a requirement for structured methods (Goodridge et al., 2015). No mention was made by the respondents on an existing structure in place and therefore the organisation is relying on a natural empowerment to take place.

Therefore the progress on empowerment requires measurement of the initial goals set by management (Hutchins, 2012). Comparing the empowerment in the organisation to the BBBEE code, the BBBEE code has structure and can be measured with a score, and has direct implications if the practices are not adhered to.

Based on the respondent below there are concerns with middle management that can be the cause for the lack of progress. There needs to be communication between staff to address this matter. See discussion on communication as per section 5.6.1.2

*“I think for as long as you don’t deal with **the attitudes and mentality and the concerns and the worries of these guys** (Middle Management) here, it becomes incredibly difficult to **connect somebody** who has an intention up here with a person who does the execution there and actually believes in it, with each other” (Operations Chief, emphasis added)*

This links into the siloed structure in the organisation in section 5.6.5.5.3 which poses a further challenge to empower staff.

6.1.6. Committed and focused

The terms committed and focused is close related to support and motivation; however, the researcher felt the need to isolate the concepts.

The researcher found that the commitment to Lean implementation was limited. The journey of improvement was initiated by implementing Lean, and other improvement concepts followed.

*“So although it started at the top, within I’d say six months, that **guy left the company and the focus there died**, because it wasn’t anybody else’s idea except his.” (Operations Head of Department, emphasis added)*

One respondent referred to the different initiatives as a flavour of the month idea.

*“That was categorically a **flavour of the month**. Because what happened to A3 training? One of the other things that came out of Lean was that we had, we were going to have what was called the LMO. The Lean Management Office. Which was going to be our on-going coaches and rah-rah guys, and doing what needed to be done, they would come and join our stand-ups, they would see how it’s going, they would advise ...”(Operations Manager, emphasis added)*

Based on the above there were various commitments made by the Leadership that never materialised. A lack of commitment by senior management is one of the key reasons of Lean (Goodridge et al., 2015)

Furthermore, if the leaders were not committed, it can conclude that neither would their employees be.

*“And when a guy sees that his **manager is not interested**- so what are we doing this thing for?” (Operations Chief, emphasis added)*

The rationale for Lean implementation was also financially driven and required a substantial investment. If the results were not fruitful in the defined period of time and the return on Investment was negative, the association with the project by managers will become less supportive, and the commitment will evaporate.

The interactive process of discussion and debating plans and objectives at each level provide feedback in multi-directional horizons which ensures the whole organisation is committed to the same goal.(Tennant & Roberts, 2001)

*“The companies IT costs were **disproportionate** to the rest of the industries costs in this regard, to our domestic peers and international peers. So there was a desire to kind of*

improve a lot of things. And this was one of the interests of that project. (Operations Chief, emphasis added)

*“And we’ve capitalised most of our projects, and even if we just start to depreciate and repay that debt, **we won't even have money for anything else**. So we need to really take a lot of cost out of the organisation somehow.” (Transformation Manager A, emphasis added)*

6.1.7. Learning

Based on the interviews in a highly transformative environment it is common there are various trial and error scenarios in order

The questions should be asked what was the expectations from Management on what Lean can do for them? Why is Lean not meeting their expectations. What time period should be allowed for Lean to be a success?

*“So where things go wrong, people **won’t voluntarily admit** that things **stalled** or whatever so you tend only to see the **good things**” (Operations Chief, emphasis added)*

*“What’s not ok, is being a victim, **not being able to tackle the problem head on** and discuss it, not putting your hand up with information because you feel you’re going to be victimised, etc. and certainly what’s not ok, is ignoring it.” (Operations Integration Manager, emphasis added)*

According to Mann (Mann, 2009) a key leadership characteristic is ensuring accountability on all staff on meeting the Lean objectives. The distinction is therefore required by Leaders on how to communicate not meeting objectives and the failure associated with innovation and changes.

What the researcher found is that where there is supposed to be accountability on the Lean transformation there is none and when there is not meant to be accountability on failures on innovation there is.

6.1.8. Trustworthy

During the interview, certain direct referrals to the trust relationship between the staff were made. Building a trust relationship with the staff was set as an objective for the organisation.

*“As soon as you have a level of understanding, I can empathize with you, and then we **build trust** in the relationship.” (Transformation Manager B, emphasis added)*

*“And we’ve done a lot of work and built a lot of relationships, and I think people started to **learn to trust us**.” (Transformation Specialist, emphasis added)*

*“... today we look at the culture first, and try and **gain the trust**.” (Transformation Specialist, emphasis added)*

The majority of the comments made on trust came from the Transformation team and in the particular interviewees that have dealt with the implementation of Lean. It can, therefore, be concluded that the Transformation team is required to fulfill the role.

Other instances show more indirect trust relationship concerns that were highlighted. In this specific case the interviewee, the Transformation manager went to a colleague who was in the Lean Transformation team. The interviewee has since become the manager of the Transformation Specialist.

*“So once I had some discussions with people, specifically the *Transformation Specialist because the *Transformation Specialist was already there. **Explain to me what is all of this about, it’s fine telling me I have a whiteboard- and yes, what about it?**” (Transformation Manager B, emphasis added)*

It is a reflection that even though there were comments made, a one on one conversation was required by the respondent in order to get an understanding.

If there is a lack of trust, the likelihood of having an honest conversation will be limited. The researcher initially concluded that senior operational staff is unaware of the lack of trust in the organisation, yet management obtains an independent company to survey the staff. It can, therefore, be argued that management is aware of the lack of trust.

*“And our staff satisfaction went up to the middle of the second quartile. So **independent measures showed us that wow, this is successful.**” (Transformation Head of Department, emphasis added)*

The researcher found that the following respondent identified a crucial contrast between what they as coaches are trying to achieve and what managers are doing

*“To me, that’s already very much depends on the management because us, as coaches, we can go out and influence and tell people to speak up as much as we can, but if you’ve got the **wrong management** in place, **they tend to shoot people down.**” (Transformation Specialist, emphasis added)*

It will create company **schizophrenia** whereby you have coaches trying to drive a culture, and embed characteristics only to have management behave completely differently.

Creating a trust relationship between Leadership and employees. is essential to understand the root cause for failure.

6.1.9. Leadership training

According to Karp (Karp, 2012), leaders need to develop their ability to develop themselves based on the environment they operate in. In the quote below the respondent refers to the Lean team that realized there are other tools that they were not aware of.

“There were one or two people there that started to figure out- but wait a minute, this is what Lean is all about. And they started to ask *the consultants questions like, what about value streams and what about A3 thinking and understanding all those things and what’s going on here? Because they were starting to read lots of books and after about 18 months they said to

*the consultants to go away, we don't want you anymore, we'll do it on our own because we don't think you know what you're doing." (Transformation Manager A, emphasis added)

The result of the leaders taking the initiative to self-train was that consultants were kicked out.

This was not the case however throughout the organisation. The respondent below noted the following:

*"We did, as management team, **what we could** in the change management space but we got **no leadership, no guidance, nothing**, not from HR, not from Lean, not from anywhere." (Operations Manager, emphasis added)*

No training was provided to the leadership of the organisation on how to manage the implementation. It can, therefore, be concluded that not all leaders have the ability for self-development.

The leader required training and based on the feedback it can be argued that because of the lack of training and understanding, the success of changes process will be questionable. Companies committed to learning to develop employees and managers that can adapt to changes will result is a workforce that is comfortable in performing new and proactive behaviours (Gunasekaran, 2001)

As the rate of changes in the business environment is high, it requires constant learning as it will improve adaptability, and the ability to meet new challenges with confidence (Sherehiy, 2008).

6.1.10. Reflection

The correspondent is of the opinion that reflection by the team is not adequate. This was a referral to a team effort and therefore can also be linked to communication.

*"I think the reason is that we're not taking **enough time** as a **team to reflect**."(Operations Manager, emphasis added)*

From this comment, managers take a head down approach to work. It can, therefore, be argued that the leaders are not checking the path they are following on a regular basis. This can also create more large-scale changes instead of constant adjustments on a regular basis to ensure goals are being met.

According to the steps six and seven in Hoshin Kanri a review is required on a monthly, quarterly and annual basis(Hutchins, 2012; Nicholas, 2016). The respondent below commented that it decreased over time and it can, therefore, be concluded that the Hoshin Kanri steps were not followed.

*"In fact a lot of that kind of cross-functional change, improvement initiatives **petered out over time**, so the value kind of disappeared. And this probably goes to- one of the real difficulties- so if you look back and say, was Lean a success? In a binary sense, I don't*

*think it was. There were successful parts of it, so there was **some kind of benefit and lift.***” (Operations Chief, emphasis added)

*“..what have we learned, so what retrospect can we have on this thing, and say listen guys, in certain areas it worked, what’s happened there, **what is the magic mix;** and where it’s failed, **why did it fail, what went wrong**”* (Operations Chief, emphasis added)

Based on the PDCA principle detailed by (Pietrzak & Paliszkievicz, 2015), Leaders need to reflect and check where they are compared to initial planning, in order to make quick alignments to the original plan.

Reflection can be linked to commitment in terms of the responsibility of leaders to create the platform with a view to reflect on the progress and adjustments required.

6.1.11. Conclusion

Based on the respondents it was clear that where the required leadership characteristics is not in place, it will hamper the transformation efforts. In order to continue with the transformation, attempts will be made by other staff to fill the gaps. In the case study, it is Transformation team that try to fulfil the role on certain leadership characteristics and fill the void left by the leadership.

The authority of the transformation team can however be questioned since certain attempts have been made on implementing Lean without success.

In companies where there is no transformation team the void will remain.

6.2. Research question 2 – What are the required changes in leadership practices

6.2.1. Introduction

The question assumes there are changes needed in the leadership practices. Based on the respondent is in section 5.6.2.1 a change is necessary in the leadership practices, however, according to Koenigsaecker (Koenigsaecker, 2005) changing leadership behavior is the most difficult process to change.

*“I think for as long as **management believes** that they’re there to oversee people work and allocate work, and this, that and the other, you know measure people, then you’re going to see **a different thing.**”* (Operations Chief, emphasis added)”

*“So you had to **change the thinking,** and it takes a long time to change the thinking. And the one thing that, and the measurements, and there’s lots of fear in the organisation regarding what is going to happen if things go wrong. Because the way it’s been dealt with, is if it goes wrong, they hammer the guys.”* (Transformation Manager A, emphasis added)

A traditional measure of success was based on the hard facts e.g. profitability, cash flow, etc. As these may remain as a measure, there are other contributing factors to the financial numbers. According to the respondents, the focus has shifted to ensuring the culture of the organisation is aligned to the goal of the company.

*“So our focus has **shifted totally**. Where it was tool-driven, and tool-based, today we look at the culture first” (Transformation Specialist, emphasis added)*

The key factor in creating and changing a culture is Leadership (Schein, 2010). Culture will discuss in detail in section 6.3

The approach to the problems faced has to be changed by the leadership. It is no longer expected that the management will resolve all problem on behalf of staff.

6.2.2. Lead by example

Leaders need to lead by example and be part of the change they would like to see.

*“The role of a leader, we’ve discussed it a lot. A lot of it is actually about **being a change champion, a culture champion actually**.” (Operations Integration Manager, emphasis added)*

Leaders need to encourage a changing environment within the organisation.

*“There’s just **so much change**, and that’s I think going to be **the status quo for a long time**. Hopefully not the negative change, necessarily in the cycle we’re in now, but there’s always going to be changed.” (Operations Integration Manager, emphasis added)*

“Questions that we have- so, even though it was evolving, if you look at it from their side, and they had a very valid question or remark, saying – we have just got this right, now you’re changing it again” (Transformation Manager B, emphasis added)

Leaders need to acknowledge that they can make mistakes. Leading by example to recognize a mistake made can create a positive reaction amongst staff.

“Then I thought that as we went through the stages, we suddenly realised that the data we collected was A- wrong, inappropriate, because we should have collected others, or didn’t go to the level that we should have had” (Operations Manager, emphasis added)

6.2.3. Team focus

Initially, the Lean implementation was driven from the top by one person and therefore not sustainable.

“So although it started at the top, within I’d say six months, that guy left the bank and the focus there died, because it wasn’t anybody else’s idea except his. The other people brought their own ideas, and that’s where we’ve shifted to now. But what we did in our area

is we've continued across all teams, and it's a now bottom-up driven thing rather than a top-down." (Operations Head of Department, emphasis added)

The respondent identified a change required in the way that leaders dealt with problems

*".. if an escalation comes to me, in **the old days**, an old school manager might want to actually make a decision around the escalation, and say ok fine, this is what needs to be done. Now, you call the person, or you go walk over to the area and join one of their stand-ups in the morning or whatever it is, but you go and talk to the person at the coalface, you find out what actually is the real situation, not what somebody escalated to you. And then from that, you can establish what's not working". So back to our CEO, the culture of I'm interested in what you guys are doing, the culture of what you say, the coalface, is worth 10 times what somebody, 9th-floor exec type person has to say. That's also the leadership element that comes into it." (Operations Integration Manager, emphasis added)*

6.2.4. Allocate time

Leaders need to find the time to get out of their offices and to get their hands dirty. Gemba or shop floor visits to show an interest in the staff is a practice that all respondents acknowledge they would like to do more of.

*"... you're facing off to the business, we want to get closer to the business, we want to understand- because what *the consultant was now doing, they were saying, we're going to change the way in which we're working, we want people to be in work, understanding what the customer wants. And then once they understand it, we will contact these teams to do it. So we've redesigned all of that." (Transformation Manager A, emphasis added)*

The respondent changed their practices and created smaller teams as an operating model. The researcher found that the agility associated with smaller teams were attractive to management in the case-study. Creating cross-functional teams require special skills in order to have a holistic approach.

6.2.5. Have an open mind-set

A leader's willingness to seek input, listen carefully and contentiously learn creates an environment where employees feel respected and encouraged to contribute to creative solutions(The shingo model™.2016).

The Leadership practices must promote an open mind-set framework. In the leaders, personal capacity an open mind-set must prevail as well as focus to shift fellow staff's mind-set by Embedding the thinking in the organisation to achieve the vision of the organisation.

"So it really is around how we work with people's minds. I would say, the – well, for me at least- the majority of the work is around, how do I shift someone's mind-set?" (Transformation Manager B, emphasis added)

“So in some instances, people still have the belief, which is still the mind-set, so we haven’t changed the mind-set - that they don’t need this” (Transformation Manager B, emphasis added)

“So for the next two or three years, till that elastic wears out, we need to institutionalise a lot of this, in terms of how people think.” (Transformation Head of Department, emphasis added)

6.3. Research question 3 – The effect on company culture during Lean transformation

6.3.1. Introduction

According to Dombrowski & Mielke(2013), the foundation of Leadership according to the Lean Leadership model is an improvement culture. It involves the attitudes and behaviors of the staff that supports the vision of the organisation.

The respondent quoted a famous quote from Culture eats strategy for breakfast lunch and dinner

As an example a culture built on “firefighting” honors and promotes “firefighters” rather than fixing the root cause(The shingo model™.2016)

*“Lean should help you get **out of fire-fighting mode, to a more predictable, stable mode**” (Operations Head of Department, emphasis added)*

A culture built on “firefighting” honors and promotes “firefighters” rather than fixing the root cause(The shingo model™.2016).

6.3.2. Change the behaviour and mind-set

During the implementation of the new Lean roll out the organisation discovered that applying a tool based approach was inadequate to initiate the process and that culture of the organisation is far more important. Western companies also believe that measurement can cover all aspects of Organisational improvement. Western companies tend to focus more on the rational aspects rather the more softer issues such as organisational culture, values, people motivation, training and education (Dahlgard-Park, 2011)

*“So our focus has shifted totally. Where it was tool-driven, and tool-based, today we look at **the culture first**” (Transformation Specialist, emphasis added)*

The researcher concluded that there should be no attempt to start a Lean journey until the culture of the organisation has been fully understood. The theme of measurement can, therefore, be applied to the concept of culture.

Based on the feedback from the respondents the following connotation was made by the researcher: Communication is the most important driver of a culture in an organisation as it is the center point holding of all aspects of the organisation together. According to (Dahlgaard-Park, 2011), a focus is made on all staff to ensure inclusion and to support the centralised team focus. A focus on staff requires communication, and therefore the researcher concluded that a communicating organisation creates a culture of communication and inclusion.

Of the respondents, it was clear that the Leadership had a strong role to change the culture in the organisation. Setting the context refers to communication of what the vision for the organisation is.

*“The leaders have a strong role in helping change the culture, helping **set the context of why we’re doing all these changes**” (Operations Integration Manager, emphasis added)*

The role of Leadership is to be the communication link between the existing culture and the vision of the future culture.

The present culture of the organisation is different to the envisaged culture. Leadership therefore needs to lead by example by enforcing a different culture in the organisation

The details on the vision for the culture of the organisation were discussed by the respondents. Each respondent had a different view of the future culture. The researcher found this interesting as it confirms that the Leadership has not communicated the future culture of the organisation.

*“So if you think about the culture **we’re trying to build**, we’re trying to build a culture of **transparency, of problem-solving, of logic dialoguing as opposed to emotional dialoguing, we are trying to talk to a collaborative culture.**” (Operations Integration Manager, emphasis added)*

*“Ultimately it’s about a cultural change as well, **cultural continuous improvement, continuous change, continuous optimisation; everybody is empowered to make the small changes in their areas to improve things.**” (Operations Chief, emphasis added)*

The respondent refers to an active Lean culture. The researcher concluded that according to the respondent the measurement of the effectiveness could measure by the continuous changes that occur to improve the organisation. This viewed is confirmed by Dombrowski & Mielke(2013), that the foundation of Leadership an improvement culture .

*“I don’t know what the rest of the world would say, but the single biggest thing in an **effective Lean culture** is the whole thing around continuous improvement.” (Operations Chief, emphasis added)*

The invitation by managers to be challenged by their own staff is seen as a leadership characteristic that requires a change in the organisation. The respondent states that Leaders

should start behaving in this manner. It can, therefore, be concluded that the current leaders do not encourage this behaviour.

I think that's what every leader- well, we're all leaders in a way- every line person and that type of division should start practicing. They should start inviting their people to challenge and to talk.

6.3.3. Transparency

Transparency was highlighted by operations as a key requirement for the future culture. This was not echoed by any other respondent during the interviews.

The researcher aligned transparency close to measurement in terms of culture. Measuring items create a level of understanding if all is measured all aspects will be transparent.

*"The second huge thing is **it brings transparency**" (Operations Integration Manager, emphasis added)*

*"We need to get it fired up again. Because we still believe that you need to make things **transparent**, we still believe that you need to be able to measure everything that you do before you make a decision, so it's actual data orientated, your decisions are data based, not emotionally based type of thing." (Operations Integration Manager, emphasis added)*

Transparency is linked to communication and no blame culture.

*"And just the **culture of transparency**, openness, guys happy **to talk** about stuff, happy to talk about their problem, as opposed to a person who did it wrong, that type of thing." (Operations Integration Manager, emphasis added)*

*"So if you think about all of those types of things, you want to get into a position when something goes wrong, **instead of just trying to push the problem to someone, or even, later on, push the blame to someone**, you want to be able to get together quickly in a collaborative fashion you want to be able to break down the problem in a logical fashion, so not saying why didn't you do something, but rather, what went wrong, are we sure it went wrong, if we can measure it with data, that's great- a logical problem-solving approach to talking about the problem, not the people involved, and then be transparent enough to be able to identify what went wrong in order to get an answer." (Operations Integration Manager, emphasis added)*

The view of the respondent is endorsed by Dombrowski & Mielke(2013), that Lean leadership is in contradiction to mainstream business, especially regarding failure as it adopts a no-blame culture. In Lean, the focus of failure is not the person who caused the failure but rather to identify the root cause of the failure.

The following respondent stated there is an aim for a no-blame culture

*"we want to be more agile, we want to **be a blameless culture**, you know, you come up with culture status, and you go top-down" (Transformation Head of Department, emphasis added)*

This is however in contradiction to the current situation whereby a blame culture is in place.

*“And the one thing that, and the measurements, and there’s lots of fear in the organisation regarding what is going to **happen if things go wrong**. Because the way it’s been dealt with, is if it goes wrong, they hammer the guys. So that respect for people isn’t there, so we need to change the culture.” (Transformation Manager A, emphasis added)*

Therefore to conclude, it is the responsibility of the leadership to instill a no-blame culture.

*“Because you cannot learn and push new stuff in a **blame culture**, because **who will just ever trust you**.” (Transformation Head of Department, emphasis added)*

According to Dombrowski & Mielke(2013), the foundation of Leadership according to the model is an improvement culture, and if there is a blame culture, no improvements will be possible due to the risk of being blamed for trying to find alternative solutions.

6.3.4. Communication

Linking into the previous section on transparency the respondents’ points to the type culture of communication they are striving for.

*“So if you think about the culture we’re trying to build, we’re trying to build a culture of transparency, of problem-solving, of **logic dialoguing as opposed to emotional dialoguing**, we are trying to talk to a collaborative culture.” (Transformation Head of Department, emphasis added)*

The organisation had to learn what communication is required to change the behaviour of the staff.

*“So also at that stage, we had to learn what kind of communication is required, **how do you communicate with people**, because the first wave was “we’re going to do this, and this is what we’re going to get out of it.” (Transformation Manager B, emphasis added)*

The researcher identified the way you talk to some as part of the respect shown for that person. Respect for every individual must be felt by every person in the organisation; this includes respect for customers, suppliers, the community and society in general(The shingo model™.2016)

In order to show respect, it will be required to be part of the behaviour of the company that ultimately drives the culture of the organisation.

6.3.5. Challenging conversations

The respondent’s focus for the future culture of the organisation was on having challenging conversations.

*“I think that’s what every leader- well, we’re all leaders in a way- every line person and that type of division should start practicing. They should start inviting their people **to challenge and to talk.**” (Transformation Specialist, emphasis added)*

The CEO does invite people to challenge him.

*“To get back to our CEO, who’s doing Gemba walks, she invites people to speak up and **challenge**” (Transformation Specialist, emphasis added)*

The researcher found that the respondent was trying to build trust relationships

*“we’ve done a lot of work, and built a lot of relationships, and I think people **started to learn to trust us.**” (Transformation Specialist, emphasis added)*

The respondent might encourage the behaviour of challenging conversations; the researcher did not note any training and guidance from the respondent on how to have these conversations.

6.3.6. Culture signals

The respondent is creating the future culture on a daily basis by dressing in jeans. The simple act is sending a message to the team of leadership is looking to be active. The culture signals closely correlates with leading by example. The staff will observe the culture being displayed and will adopt a similar culture. The researcher confirmed that all the respondents were dressed in jeans during the face to face interviews.

If there is a tendency by management to be late for meetings the staff will adopt this culture as the norm.

During interviews the researcher was two minutes late, the interviewee was already seated in the meeting room waiting. This sent a clear message to the researcher and all further the researcher took care in order to be on time.

6.4. Research question 4 – How is Lean implementation done in a South African context

6.4.1. Introduction

Implementing Lean in the case study had mixed success in the sense that certain pockets adopted Lean quickly and certain groups did not get any movements from historical practices.

There were different aspects of the Lean implementation process. The researcher categorised each under a subheading.

6.4.2. Approach

The initial approach can determine the success of the implementation. There were two distinct approaches followed by the organisation. An initial top-down approach was followed to kick off the Lean journey; this process morphed into a bottom-up approach over time.

*“So the leadership role is also to create the context around **why** we’re doing this. It’s for productivity reasons, it’s for improvement reasons, it’s for empowerment reasons.” (Operations Integration Manager, emphasis added)*

The initial top-down approach involved a well-known management consulting group that was contracted to manage the Lean implementation process. It was clear that the management consultants were financially driven as fees were paid on savings generated.

It is the opinion of the researcher that the consulting company damaged the perception towards Lean already during the implementation phase. All staff were forced by the outside company to implement Lean without the reasoning behind the need to implement Lean. The word forced was often used by the respondents.

It can also be argued that where the consultants did not perceive to make money, that those divisions were left behind. Therefore the focus was skewed from the onset. As discussed in section 6.5.6.2 on creating flow, the company will be limited by the slowest process and therefore not achieve improvements.

“And we (the company) did not get the anticipated results. Which, if you know the consultant’s business model, I (Consultants) get paid based on how much I save you. They (Consultants) weren’t happy.” (Transformation Manager B, emphasis added)

The negative sentiment towards the consultants overpowered the positive vision of the Lean implementation.

*“After some heated discussions with the *Consultants, because they wanted to shove **something down our throats**, and I don’t do, shove something down my throat” (Transformation Manager B, emphasis added)*

*“The initial one was extremely- can I call it rigid? **A very rigid approach**. so there was a whole toolbox full of tools. The *Consultants forced us to use each and every one with each and every department.” (Transformation Specialist, emphasis added)*

The keywords included from the respondents were; productivity, no cost agenda; not forced and improve naturally as the approach that should have applied.

After the initial implementation of top-down it transformed into a bottom-up approach. This is confirmed by Womack & Jones (Womack & Jones, 1996) that a top-down approach is part of the initial stage of a journey and it, later on, should change to a bottom-up approach.

*“But what we did in our area is we’ve continued across all teams, and it’s a now **bottom-up** driven thing rather than a **top-down**. So the spark was top-down, the fire is bottom-up.” (Operations Head of Department, emphasis added)*

*“The guys right at the **bottom**, you treat them differently, and you actually allow them to make a commitment, and they understand what they need to do, and they can work based on their capacity and make their commitments” (Transformation Manager A, emphasis added)*

In order to achieve improvement shop floor workers need to be actively involved(Chay, Xu, Tiwari, & Chay, 2015) therefore the improvements that the company pursued will now come forth due to the bottom-up approach.

6.4.3. Communicating the goal and vision of the process

As Lean is described as a journey, it requires a destination. It requires fellow travelers on the journey, and therefore the travelers need to know where they are going. Hoshin kanri is the method of communication of target management or policy deployment to include everyone in the company to the business goals(Nicholas, 2016).

*“**Where** am I heading, **what** am I trying to do, or **what** am I trying to achieve?” (Transformation Manager B, emphasis added)*

The respondents stated that there was no communication on what the aim of the Lean implementation was.

*“So you have to before you start the process, say, what **will be your measures of success be at the other side?**” (Operations Head of Department, emphasis added)*

*“.. if you don’t have a **vision** of what Lean can be, it’s not going to work”(Transformation Head of Department, emphasis added)*

The researcher perceived that implementation only had a short-term rushed approach. It was not in the interest of the consultant to communicate the long-term approach as it can be assumed that they had fixed term contract over a period of time.

Of the respondents, it was not clear if a vision ever existed in the company for the implementation phase. The researcher concluded the implementation was a failure in the organisation.

The organisation has since learned from their mistakes and an alternative approach was highlighted by the following respondents:

*“Tell me what you’re trying to achieve from that, and I’ll make it work. **Don’t tell me, just do**”*

What also became relevant to the researcher that the cost-cutting agenda was a hidden agenda from the management team. The employees discovered the agenda by the actions of the management team.

As there was no communication, the staff realised that job security was at stake. The result was various people left the organisation. It is precisely at the implementation phase the leadership needs to communicate regarding the desired outcomes in terms of staff numbers.

The respondent noted that after the initial uncertainty that existed progress was made and improved progress could have been made if proper communication had taken place.

The aim of the communication of the vision is to create understanding at all levels. If there is understanding conversation can take place and employees can contribute to the vision.

6.4.4. Customised to different teams

Lewis (2000) noticed that every Lean journey is unique for every practitioner. The respondent took the approach of implementing Lean in small teams. Firstly one team at a time and then

progressed to two teams at a time. Understanding the teams and the people within that group allows you to create an individually customised approach.

The implementation took two years in the specific division. Communicating with your team, that this process is a journey and it will take a substantial amount of time is required by Leadership.

Getting to know every single person on the journey is required in order to customise the approach to catch that person's interest. Allowing the teams the flexibility in how they operate and measure their progress can create ownership of the process.

The respondent did not advise what the action is on those teams that are stuck. The researcher felt that the focus where on those teams that performed well. It is the role of Leadership where teams struggle to perform to assist with support. This links to servant Leadership as discussed in section 6.1.1

In order to adopt the right approach, some experiments are required. Learning can only take place if there is room for failure as per section 6.1.7

*“...we're talking about sermon leadership courses, which we're **experimenting** with“
(Transformation Manager A, emphasis added*

6.4.5. Creating involvement

From the respondent, the distinct difference from a top-down and bottom-up approach was the how the staff perceived the implementation. The aim of the Lean coach was to create a bottom-up approach.

No distinction was made by the respondents on the sustainability of either a top-down or bottom-up approach. In the quoted reference below the staff came with ideas on improvement.

6.4.6. Marketing success

The respondents actively marketed their success to create awareness and support. The success came from colleagues within the organisation. It can be argued that because this was in-house, it created trust and interest.

It is interesting to note that the Lean coach created a divide between the different staff, those who had changed and those who has not. The word charging is also indicative that there is no thought of their actions.

The researcher also felt a faith-like connotation. The non-believers as they are referred, to know it is there but has not seen the evidence that Lean can work for them.

*“Then obviously you get your teams, your **non-believers**, I call them the non-believers, who are just charging through on the old way, but what I’m also starting to see- and that’s very nice, is- as other teams that are more mature that have been on this journey are starting to celebrate their successes and make it visible, the non-believers are starting to say, oh shit, we better start doing something because we’re being left behind” (Transformation Specialist, emphasis added)*

The researcher did find that the marketing is creating the right environment of change. It reflects that the company is moving in a direction and the certain staff will be left behind.

No mention is made of the staff that is being left behind and how to assist those staff on changing into a new way of working. It will create division as confirmed by the respondent on the non-believers.

6.4.7. Resistance to change

According to (Anand & Kodali, 2010) to it is a known fact that any new implementation on change there will be resistance from the staff, and it takes the time to adapt to changes. In this case, resistance was encountered from the staff. There was no clear strategy defined on how the resistant staff will be approached, other than to leave them alone.

The researcher found that certain teams were exempt from implementing Lean in their divisions. In other instances, the implementation team realised the resistance to Lean and moved to the next group.

*“And then some of the smaller teams of, the bigger teams were then excluded from this because they **could justify that they didn’t need Lean.**” (Operations Manager, emphasis added)*

The researcher is of the opinion that it could create a division in the company by not being consistent. According to (Koenigsaecker, 2005), all resistance needs to be addressed as “they will become cancer, like any cancer, they will metastasize throughout the organisation unless they are eradicated.”

The term eradicated can be deemed to be harsh, but it shows the importance of the matter to the author.

(Koenigsaecker, 2005) further states “Dealing with them can be tough stuff, and if the process of addressing resistance is not understood and led from the top, it won't get done. And neither will the Lean transformation.”

Therefore what based on the respondent a different approach is followed by the company. The approach is not to push back, but rather wait to be approached for help.

*“If you have really **kicked in your heels, I'm not pushing you.** I'm not going to say I've completely dropped you off my radar because I still would like to help you. Its just, I'm still here if you need some help. That's it. Where people have embraced it and seen that it actually is helping them, we are still driving it really hard. Because they've asked us to be there” (Transformation Manager B, emphasis added)*

It can be argued that the lack of support from the top has forced the transformation manager to adopt the approach.

6.5. Research question 5 – How do Lean Leaders manage Lean organisations

6.5.1. Introduction

*“So whatever tools you learn, whatever thinking processes you learn, you should be using those **forever more, going forward.**” (Operations Integration Manager, emphasis added)*

In order to engrain the tools and processes into infinity, a culture change is required from the organisation. It is the responsibility of the leadership to ensure the culture incorporates these aspects. It can, therefore, be concluded there is a need to manage Lean organisations with these objectives as the goal.

6.5.2. Customisation of the tools used

It was evident that no one tool fits all users in the organisation. Customisation is required in order to manage Lean Organisations effectively.

Various tools exist that can perform similar functions. For this respondent, the matter was not the tool being used but rather the learning that the tool is generating.

*“That's what I focus on. **Whether that shift is, this tool, that tool, this methodology, that methodology, it really does not matter to me.** Because it is the knowledge that I gain based on that situation.” (Transformation Manager B, emphasis added)*

The researcher felt that the respondent was overwhelmed with all the tools available. It can also be concluded that certain of these tools are complex and therefore a simpler model was required.

*“What I can say, we looked at all these **myriad tools in the toolbox**, and they’ve all got a place there, you know, they can all add value in a certain instance. But we looked at a simpler model, so go in and see what the problem in the area is, and then choose the appropriate tool if you need to use a tool.” (Transformation Specialist, emphasis added)*

The frustration noted from the respondents when forcing tools onto users was seen as a stumbling block that created a negative perception to the process.

*“The negative was, it was almost **this forces, formulaic approach**, where you kind of think, well, if I just follow the five lenses, if I follow these certain templates, I will solve my problem, and then my problem is over, and I stop, I just carry on with the new way of doing stuff. What it doesn’t teach you, is that it’s a cultural thing, it’s a way of thinking, and it never ends” (Operations Integration Manager, emphasis added)*

*“The initial one was extremely- can I call it **rigid? A very rigid approach**. so there was a whole toolbox full of tools. The *Consultants forced us to use each and every one with each and every department” (Transformation Specialist, emphasis added)*

Due to certain negative connections to tools, the specific respondents are moving away from the tools but rather focusing on the culture of the organisation.

*“So our focus has shifted totally. Where it **was tool-driven, and tool-based, today we look at the culture first**” (Transformation Specialist, emphasis added)*

*“So the name of the game, is to use all of these things- theory of constraints, Lean, Agile, Scrum, pick whatever, your points, and then use it as tools in that **bigger cultural transformation**” (Transformation Head of Department, emphasis added).*

The overemphasis on tools can, therefore, hamper the performance of the organisation and leaders need carefully consider each tool being used.

*“So it’s a much **softer approach**, it’s not this hard tool, financial. Financial gain, in actual fact, at this point for us is the last outcome, it’s just an outcome, it’s not really our goal.” (Transformation Specialist, emphasis added)*

The fact that the respondent is referring to a softer approach links to the 7S model in section 6.5.4

6.5.3. Lean Tools

The evidence as per section 5.6.5.5.2 shows there was various discussions surrounding VSM. Managing the value stream requires understanding, measuring and creating flow (Forno et al.,

2014). The operative word in the process of VSM is managing, which was lacking from the respondents' feedback.

The researcher is of the opinion that VSM was seen as once off event. This was confirmed by the respondent stating they should have done more VSM's.

“... we should have done S & \$ loads more with **value stream maps**, S* & \$ loads more.”
(Operations Manager, emphasis added)*

The operations Manager shared his enthusiasm on the benefits generated by VSM's. He also acknowledged that they, referring to himself included, should have done more VSM. The reason for the limited number of VSM can be attributed to the limitations of the tool that include being time-consuming, the inability to detail dynamic behaviour and the complexity associated with processes (Lian & Van Landeghem, 2007).

The specific manager confirmed the time constraints challenge in his operation. The researcher can echo the time constraints challenge, as setting up an interview with the respondents took the longest from all the correspondents.

6.5.4. Involvement

The respondent referred to the 7S model of McKinsey in section 5.6.5.3.

The McKinsey 7S Model consists of seven elements of an organisation that must align synergistically in order to operate successfully. The seven elements are split between hard and soft groups (Hanafizadeh & Ravasan, 2011). Hard elements are tangible and physically present, while the soft elements are intangible and cannot be seen.

Shared values are the center point of the model that creates the underlying culture, effectiveness, performance and strategy that is linked to every element in the framework (Hanafizadeh & Ravasan, 2011).

The fact the company has learned from the past mistakes and realised that an different approach is required is an reflection of a learning organisation. More specifically is the focus on the soft issues that creates culture.

There is a void in what the COO provokes and what the reality is on the floor. The statement below is from the COO stating the need for involvement and the benefits associated.

“If management spent more time going to the work, going to the stand ups, going to see what was going on, being actively involved, I think we would have had more traction and possibly this thing would’ve been better than we did” (Transformation Head of Department, emphasis added)

It is clear that involvement creates traction and can be linked to leading by example. The inverse can argue that if there is no involvement from leaders the project will not gain traction.

The feedback from another respondent on the COO was as follow.

*“...the *COO came with the *CEO that was **supposed to come**, he (The CEO) didn’t pitch.he (the COO) was the star of the day. He came, and rumours were, oh he’s going to spend the day here. He can **really just interact** with the dudes. He came to the stand-up, good interaction at the stand-up, and **he left**.” (Operations Manager, emphasis added)*

It is clear that there was disappointment from the team on the behavior of the executives. Mistakes like this can damage the trust relationship and create a negative culture in the organisaiton.

6.5.5. Communication

Communication as a Lean tool will be hard to argue, however in a modern society where communication is limited to emails, communication has to be reintroduced as a means to use and cannot be deemed to be self-evident. The environment of the case study adds further barriers to communication due to the technical nature of the employees.

*“Coming back to the other tools- **so just getting people to talk**. Having a daily check in, that kind of stuff, I think, are simple, very simple, almost 101 management tools, which we’d come to forget about.” (Operations Manager, emphasis added)*

As referred to in section 5.6.5.4 the leaders are to ensure there is communication strategy in place. The strategy can create a focus on specific areas that are lacking in communication.

6.5.6. Visual Management

The researcher found that the organisation has performed well on visual management based on what he observed. The tangible evidence of visualisation was clearly visible on the walls and whiteboards. The brightly coloured boards draw attention and researcher felt inquisitive to see what was presented.

The respondents noted in section 5.6.5.5 in that is a critical tool in the transformation journey as creates interaction and communication between staff.

*“And the reason for the **visual management** is trying to get people to **start interacting more**. So to get people to have a value stand up, to talk to one another.” (Transformation Specialist, emphasis added)*

There is a distinct link between communication and visual management as visual management in itself is a form of communication. Visual management enables staff and managers to communicate across time and facilitate teamwork (Ulhassan, von Thiele Schwarz, Westerlund, Sandahl, & Thor, 2015)

As visualisation creates communication and communication creates culture (Carey, 2008) it can, therefore, be concluded that visualisation indirectly creates culture.

The researcher confirms based on the literature that visualisation can be used to determine the culture change and efficiencies. The respondent below ignited the thought with the researcher.

*“But the **visibility of the whiteboards**, the way we talk, the things we say, we have a CI forum every two weeks, the teams still present, the teams still track waste-removal, and efficiencies and improvement and we try to **translate it into either people are happier**, it's costing us less to do the same or do more, or those type of things.” (Operations Head of Department, emphasis added)*

6.5.6.1. Value Stream Mapping

Value stream mapping as a visualisation tool to identify each step in a process between value adding and non-value adding activities. It is a two-pronged approach as current state map is drawn based on the existing steps and future state map is planned by eliminating the waste identified in the current state (Ali et al., 2016)

VSM is a tool to create understanding the actual process in order to make future improvements (Forno et al., 2014).

The outcome of a VSM is the value flow across the whole organisation (Rohac & Januska, 2014). In the case-study, there are too many processes to create a VSM for each. The researcher felt that the respondent acknowledged that they did not apply the VSM across the full value stream but rather on certain sections.

*“...Run this value stream analysis and then have a Kaizen event where we bring together everybody that **works across the value stream**, from- well, we started with only IT people, not the business.” (Transformation Manager A, emphasis added)*

It is clear that they realised that the aim is to include all the processes.

*“But what we did is we made sure that we ended the process **across the full value chain of what we do so that the full team gets the benefit.**” (Operations Head of Department, emphasis added)*

This respondent referred to VSM being the manifestation of the Lean principles. The researcher felt that it provided the missing link between creating idealistic concepts and putting it into action. VSM is included in many process optimisation initiatives due to its ease of understanding (Rohac & Januska, 2014).

*“And then when we started to introduce the whole thing of our value stream, **I could see the improvement from Lean principals**” (Transformation Manager A, emphasis added)*

The researcher found that VSM brought the organisation back to a simple consideration of what their processes entails and what value they offer to the customer. If the organisation has misaligned the value to the customer, they can reconsider on how to improve their offering to be more competitive in the future.

*“He created a process that obviously had your flow, that there was some form of backlog, he built in a pool there, he said you deliver, you check at the end **what the customer is going to want.**” (Transformation Manager A, emphasis added)*

6.5.6.2. Value Stream Mapping continued – Creating flow

The aim of VSM is to improve the flow of the process. In the case-study, the flow of a process involved different departments within the organisation.

The respondent realised that even if he improved his section, it might not have an impact at all due to the process as a whole not being optimised. The attitude portrayed will have an adverse effect on the culture of pointing fingers and having a don't care attitude. The researcher believes it creates a sense of inequality.

*“I just gave up because the **rest of the organisation determines the rate at which you deliver stuff.**” (Transformation Manager A, emphasis added)*

The researcher found that this current organisation developed over many years and therefore changing the setup will not be possible in short space of time. The historic strengths on which the company operated became their current weakness.

*“So in the **old days, we were organised around silos**, so in this case, our silos became competencies, so we worked on competency models” (Transformation Head of Department, emphasis added)*

The realisation that the siloed approach is hampering their performance is evident as identified in section 5.6.5.5.3. where respondents refer to breaking silos.

Realising the need to change the siloed approach but being faced with historical legacy created a challenge. The researcher realised that the risk associated with massive change could possibly disrupt the organisation.

In order to bridge the gap on the silo's in the organisation created multifunctional teams.

“...an organisation that used to be organised around pillars of vertical specialisation, and we've actually just built massive multi-disciplinary, multi-functional feature teams all over the place. So we've got a couple of hundred teams of 10 – 12 people each” (Operations Chief, emphasis added)

*“...everybody, probably like 22 people or so in a value stream that had **to talk to each and every piece**.....” (Transformation Manager A, emphasis added)*

The focus of the team is to communicate. This re-iterates the importance of communication as noted in section 6.5.5.

6.5.7. Measurement

Based on respondents in section 5.6.5.6 there are different applications of the term measurement. Measurement can be applied to measure the actual performance of the process in a specific division in order to create an understanding. Secondly, the term was also used to gauge the effectiveness of the Lean roll out as well the measurement of the improvements that a Lean tool has made in a specific business unit.

For the purposes of the research question, the evidence is clear that measuring performance on all levels is required. The researcher felt it created an understanding between the different levels of the organisations. Measurement of progress and improvements made in the organisation can create focus.

*“Where we actually have got charts and graphs, and people **are tracking using data, there we can definitely see something**. When we don't have data, it becomes more the fluffy stuff.” (Transformation Manager B, emphasis added)*

Therefore not only the hard business KPI's measured but also the softer emotional aspects of the organisation.

An interesting point on measurement was made by the respondent that links to culture. No mention was made on how these measurements are translated into measuring the culture.

*“... the teams **still track waste-removal, and efficiencies and improvement and we try to translate it into either people are happier**, it's costing us less to do the same or do more, or those type of things. “(Operations Head of Department, emphasis added)*

What was lacking from the respondents is creating truly measurable indicators upfront in order to have meaningful insights into the organisation. Managers, therefore, need to measure the real data. If actual data is not available there, no value in the process and it should rather be stopped.

“And because I don't have data I need to provide something. So I'm starting to do it, I try and do something, the best I can with what I have. Which is not real data. Which skews the bits and pieces and then also, because it was linked to people's performance bonuses, you can just imagine, the interesting discussions that happened around that.” (Transformation Manager B, emphasis added)

Measuring the performance of the team can on Lean implementation can indicate to leaders on where assistance is required.

According to respondent the measurement of the different aspects can become time intensive. To avoid putting further constraints on the managers, the specific respondent created a role on measuring the performance of the specific unit.

*“So you need somebody to **drive the admin** if that's the right word, and the reporting, and the alignment of Lean across it. But it's not a one to five hundred or one to ten relationship; it's how active does that person want to be? The bigger the team, the less active she can be on each team. But when the team leaders start doing it properly, then it's sort of self-driving.” (Operations Head of Department, emphasis added)*

6.5.8. Training

It was evident from both the Transformation managers the emphasis on continuous training of the staff. Training the staff creates interaction and communication between teams.

*“... **so we need to teach, we need to help teams, coach, all those things**. So that we understand what the real problems are, on the ground.” (Transformation Manager B, emphasis added)*

The training material developed by the organisation was done in-house. Therefore the researcher can conclude that it was done to fit the existing culture of the organisation. The fact that the training material was made practical creates understanding.

*“But we changed it all, we just brought in **a couple of our coaches**, and we said let's take all of it- We will build the new material, and then after every course we will change the material, and we will teach you stuff on the ground and made it very practical and it's been*

a hell of a success to also use the leadership courses to take them through stuff, that they really understand what it's all about.” (Transformation Manager A, emphasis added)

Continuous improvement is also required for the updating of the material which links to the culture of continuous improvement. The implementation team is also leading by example to state they are improving the material on a regular basis.

Training creates an understanding of what the purpose is of the specific tool but more importantly it can also act as a supporting measure to the vision of the Leadership.

*“And there was a **bit of training regarding what it meant to think in terms of value streams, what are the principals of Lean thinking**” (Transformation Manager A, emphasis added)*

6.5.9. Gemba Walks

Gemba is the process taking the time to understand a knowledge set outside of a persons' immediate area of concern and to apply a unique perspective to a challenge at hand (Gesinger, 2016). A natural consequence of a Gemba walk is communication when management visits the shop floor

*“... we **did designs and talking to everybody, trying to figure it out..**” (Transformation Manager A, emphasis added)*

In the case below the CEO can apply his perspective on the situation. It can also provide support in order to achieve the goals and vision of the organisation. This links directly to the Lean Leadership model (Dombrowski & Mielke, 2013), whereby Gemba is depicted as a pillar of support to keep the team in position to meet the goals.

*“To get back to ***the CEO, who's doing Gemba walks**, she invites people to speak up and challenge- I mean, she does it while she's there. And it's actually amazing to see how that just calms people down, that she invites them to challenge” (Transformation Specialist, emphasis added)*

The respondent highlighted the fact the CEO encouraged communication as discussed in section 6.1.2

The researcher considered this as a visual tool as well as the employees physically see that the CEO is present in the business unit. It was confirmed by the respondent as a signal of the changing culture in the organisation.

*“So it's just those little type of signals, where you can see differences. **Gemba walks are more frequent**” (Operations Chief, emphasis added)*

7. Chapter 7: Conclusion and Recommendations

7.1. Introduction

In this chapter, the findings of Chapter 5 and the discussions in Chapter 6 are merged into a model that summarise the outcome of the research. This is followed by a section on implications for management and academics. The limitations of the study are shown and suggestions for future research have been made.

7.2. Principal findings

In the case study the organisation realised they had a crisis that threatened their survival. As per the respondent their IT costs were disproportionate compared to their peers and they did not have money and are therefore not competitive, in the current environment. According to the World Economic Forum, South Africa is ranked 49th in the 2015/2016 Global Competitiveness Report (2016) and it can therefore be argued that this is not an isolated case.

It is the responsibility of the Leadership to correct these core challenges and remain competitive as they have a responsibility to staff and shareholders of the business. Lean is often the go to concept when a crisis has arisen in a business.

Lean as a concept is easy to comprehend (Poksinska et al., 2013) According to Mann 80 percent of the success lies with the ability to change leadership practices and behaviours. However changing leadership behavior is the most difficult process to change as it counterintuitive to traditional management (Koenigsaecker, 2005). Therefore only two percent of companies are able to transform (Goodridge et al., 2015)

Therefore as companies apply what initially seemed like a solution in order to fix the burning challenges of the organisation does not deliver on the promised results of improvement. This creates frustration with leaders, as desperate funds have been invested in the Lean programme that did not deliver eventually leads to abolishment of lean practices.

In order to ensure Lean is successful the focus is on changing the Leadership practices and behaviours. In section 6.1.1 the Leadership behaviour was identified as predominantly being that of servant leadership and transformational leadership. It understandable under the auspices of Lean these are appropriate as they drive the improvement culture, which the basis of Lean Leadership (Dombrowski & Mielke, 2013)

The leadership characteristics required as per section 6.1 are understandable and makes sense and are not only associated with Lean principles. They are common behaviours that can be applied to any Leadership context regardless of Lean.

Where these basic Leadership characteristics are not in place it requires a change from Leadership. Leading by example, team focus and an open mind-set is taught in primary school as ways to succeed in life. Therefore these changes required are also common behaviours that can be applied to any context regardless of Lean. In team sports such as Rugby, Soccer and Hockey the captain of the team is selected based on his or her qualities that promotes these characteristics.

The foundation of Lean Leadership model is improvement culture (Dombrowski & Mielke, 2013) If the existing culture is not appropriate and suitable for improvement, a change in the culture is required. The key factor in changing a culture is leadership (Schein, 2010)

Culture is the critical centre point to achieve continued success (The shingo model™.2016). Western companies that South Africa tends to follow focus more on the rational aspects rather the softer issues such as organisational culture, values, people motivation, training and education (Dahlgard-Park, 2011). The leadership made the same mistake by focusing on tools in the case-study “So our focus has shifted totally. Where it was tool-driven, and tool-based, today we look at the culture first” (Transformation Specialist).

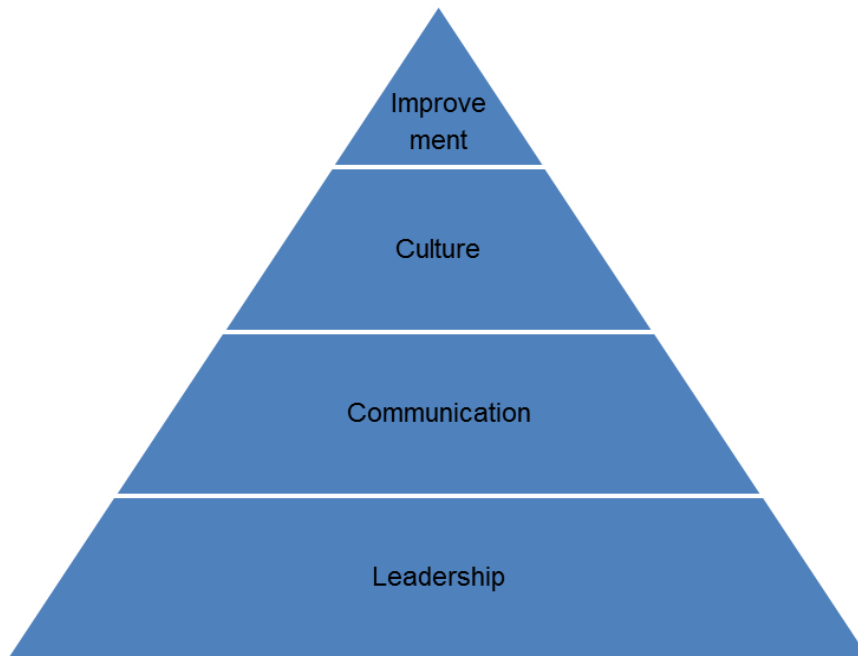
The vision of the culture that the company is striving for is drastically different to the existing culture. The existing culture has been cultivated over many years and enforced by Leadership over the years. Therefore changing the culture will not occur overnight which again points to the fact that Lean is not a quick fix tool.

The culture the company is striving for is a “culture of transparency, of problem-solving, of logic dialoguing as opposed to emotional dialoguing, we are trying to talk to a collaborative culture (Operations Integration Manager).” The culture envisaged is evident in various smaller companies where communication is easier.

The method of communication of target management or policy deployment of the business goals also referred to as Hoshin Kanri (Nicholas, 2016). The authors state that it includes everyone in the business to business goals. The researcher found that the staff were unaware of the business goals and the communication of what the objective of Lean was.

Therefore if culture is the prerequisite for improvement, and communication is the prerequisite for culture, the starting point of any Lean project should be at communication. Communication is however a Leadership characteristic and therefore it all refers back to Leadership. Most organograms depicts Leaders at the top of the organogram, however based on the discussion the researcher proposes a different view, at the base or bottom of any Lean organisation. It links to initial point that Lean Leaders should be servant leaders.

Figure 7.1 – The Lean Pyramid.



Source: Authors own

Once the building blocks are in place the Leadership can focus on the management of the organisation by using Lean tools to drive long-term success. These tools are there, to create communication, involvement and understanding. The tools have a specific purposes and each tool should be carefully selected. The respondent stated it as follow “But we looked at a simpler model, so go in and see what the problem in the area is, and then choose the appropriate tool if you need to use a tool”(Transformation Specialist).

Lean tools can still be applied in organisations where the Lean Pyramid is not in place, it will create short-term improvement but is not sustainable. As the required long-term results will not be achieved by management, different tools will be forced and this will have negative effects.

The constant tool changes were referred to as a “flavour of the month” concept due to the underlying culture not being in place.

Tools such as VSM and Whiteboards are Lean tools to visualise the complications in business processes to create an understanding. The respondent summarised the future of the business environment as follow: “In this day and age - never again in history will you ever know the answer immediately. Life is not a one plus one mathematical question. There are so many things, thing is so complicated, especially in large organisations, and that constantly shifting environment.” (Operations Integration Manager)

Lean is about change, specifically changing the old ways of working, the historic ways of operating. Lean can be seen a new beginning, as it creates a division between the old and the new way of thinking. Therefore Lean is just a collective noun for this new approach, it can be called anything “Fresh Leadership”, “New way of working”, “Phoenix Leadership”.

It will be difficult for the Leadership to admit that they were wrong, and the root cause of the problem lies with them. Therefore if it needs the label of Lean to initiate a new way of working, it is acceptable, because at the end of the day we are looking to improve ourselves, our company, our country and therefore each other.

7.3. Contributions to the literature

From the discussion of the findings of this research regarding the existing literature already presented, the following contributions to the literature on Lean Leadership in Lean implementation in South Africa have been identified.

The focus on Leadership practices and behaviour as the key to success has been covered by the work of (Mann, 2009). The focus on culture has also been identified by (Dombrowski & Mielke, 2013). The research herein compliments both (Mann, 2009) and (Dombrowski & Mielke, 2013). Communicating the goal of the organisation has been covered by the work on Hoshin Kanri (Hutchins, 2012). The researcher found that emphasis on basic communication as the link between Leadership and Culture brought new insight from a South African perspective. This study is the first to be undertaken within the South African IT environment.

7.4 Implication for management

Lean provides a platform for improvements, however various other basic Leadership principles need to be in place before Lean should be attempted as a long term improvement strategy. By outsourcing Lean to consultants might seem as a viable option but can cause long-term damage to the company and its employees. Furthermore to provide incentives for savings made can be costly and should rather be done in-house with basic Lean training. There are various easy improvements that are achievable by changing the mind-set of the staff. Reflection is as important as planning which links to the emphasis on communication. A lack of communicating to employees will create fear and insecurity. The staff that are high in demand will leave the organisation first that will create further financial pressure in organisations. Lean does offer the tools to create the understanding required in a complicated business environment. Choosing and applying tools should be done after considering all viable options and the consequences thereof.

7.4. Limitations of the research

7.4.1. Researcher Bias

Exploratory research is subjective and is influenced by the researcher's own perspectives. The researcher has acknowledged the potential biases as suggested by (Saunders & Lewis, 2012) Therefore it must be stated that the researcher has experienced a Lean transformation implementation in a global company. The researcher was tasked to change the South African operations without any support from Leadership. The organisation that the researcher is employed by has certain cultural challenges that could pose as a bias.

7.4.2. Sampling bias

According to (Saunders & Lewis, 2012) the use of purposive sampling is the most frequently used form of non-probability sampling and because the researcher is required to use his judgment a bias towards certain individuals might have applied. In obtaining approval, the researcher liaised with two of the respondents. As this was a case study of a single company in a specific industry, it might limit to transferability of the research to South Africa as a whole.

7.4.3. Respondents bias

As the research was based on a case-study, the respondents might have a bias towards their employer, to not reflect the facts, due to the consequences they deem they might suffer.

The transformation team could also be biased on towards the success stories of Lean as this is their core function in the organisation. A negative reflection on themselves will not be perceived in a positive light.

7.5. Recommendations for future research

Having established that the prerequisite is the foundation of Leadership for a successful transformation the next step will be to test implementation on a case study where the foundation of Leadership is in place. The Lean Pyramid in section 7.2 should form the basis of the research

The Lean concept creates uncertainty on job-security and the word Lean itself has a negative connotation. Future research should be undertaken where Lean tools were implemented as part of a normal business process and not under the auspices of Lean as presented by the following quote.

We later said, well, people doesn't always completely understand what continuous improvement is, so lets make it more tangible and let's call it "fit for purpose". So if I go to a team, what is fir for purpose for that team? How will it work for them? It's a mind-set. So if I tell them you have to continuously be better, versus you need to always be fir for purpose-it means, when my purpose changes, I can change. If my purpose does not change, I don't need to see it as a big change in my head, I can have these small increments"(Transformation Manager B, emphasis added)

7.6. Conclusion

Bus driver and passengers' analogy

The conclusion will be based on an analogy. It will be used to create a simplistic model to link the theory and results. Analogy is an inductive tool based comparisons on mental illustrations or depictions. Analogical reasoning is a method involving the retrieval of structured knowledge from long-term memory to identify elements that interact on similar roles, creating new inferences and learning (Holyoak, 2012)

The analogy used will be that of a bus driver. The Leadership is depicting the bus driver, the staff will be the passengers on the bus and the bus itself being the organisation.



The Bus driver is there to serve his passengers. He communicates clearly on where the bus is going. He updates them on a regular basis on where the bus will stop and what the final destination is. Outside people can see where the bus is heading as it is clearly indicated on the front of the bus. He also sets to mood inside the bus as he controls the music (culture). He is in control of the volume, if it is loud no one inside the bus will be able to communicate or he can play softly to set the tone. The bus driver communicates with each person as they get on the bus, verbally and non-verbally as he has the option to greet them with a smile or not. He says “Good morning, lovely day today. I hope you have a good day.” Johnny has never greeted back the bus driver (resistance) but that does not deter him. The bus driver knows that Johnny has some problems and knows not push too hard.

The bus driver is committed and focused as he knows he has people’s lives in his hands. The passengers see this, and feel at ease (trust) with the driver in control, they know they are in good hands. The passengers know they can address the driver on shorter routes (improvement) and traffic around the corner (obstacles) as the bus driver is open to suggestions (learning). The driver looks every now and then in his rear-view mirror to see how his passengers are doing (reflecting). If there is an emergency he will stop the bus and attend to the passenger in need, before carrying on.

The bus driver leads by example, he dresses professional every day (consistency) but don’t mind to dress up on special days to drive a special cause (team effort). Every now and then the driver is required to change a tyre and get his hands dirty, he does not mind as he knows it is part of the job. The bus driver is transparent in his approach. The curtains on the bus are open for everyone to see where they are going and the speedometer is visible by the passengers in the front.

He has learned to park close to the pavement in order for Aunt Jenny to get in easily (customised approach) as she is recovering from an operation (care for staff). He also always greets Mr Howard by looking at his watch saying "on time as usual" (marketing success) as he knows that Mr Howard can't be late for his morning meeting (care for staff).

Last month the bus driver bought a GPS (tool), because on the odd occasion some of the passenger hires (proposals to business) the bus over weekends for special trips (experiments and new ventures). The bus driver was so excited about the one trip he played some rock music on the way there to get some excitement going (motivates).

Finally the bus driver is always forward looking setting the path on where the bus is going. He listens to his passengers on where they want to get on and off the bus. He knows he needs to serve them well as at the end of the day if there are no passengers, there will be no bus and no bus driver.

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9. Appendix A – Interview questions

Based on the work of Poksinska (2013) the following draft questions are proposed for the interviews.

- a. *How is Lean production defined and perceived in the organisation?*
- b. *How was Lean production implemented?*
- c. *How is the improvement work organized?*
- d. *How have the roles and the responsibilities of managers and employees changed after Lean production was implemented?*
- e. *What are the leadership characteristics?*
- f. *How has the company culture changed?*
- g. *How has leadership changed?*

10. Appendix B – Ethical Considerations

Consent form given to each participant at the start of the interview.

I am conducting research on the impact of Lean transformation in South Africa. Our interview is expected to last about 30 minutes and will help us understand how South Africa is impacted by the Lean transformation process.

Your participation is voluntary, and you can withdraw at any time without penalty.

All data will be kept confidential.

If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher: Arnold Smith

Email: 449083@mygibs.co.za or [REDACTED]

Phone: [REDACTED]

Research Supervisor: Philip Viljoen

Email: [REDACTED]

Phone: [REDACTED]

Signature of participant: _____

Date: _____

Signature of researcher: _____

Date: _____

11. Appendix C: Initial Coding Scheme

a3 abandoned acknowledgement Action Steps actively involved ADVANTAGE Agile Agile thing is pretty much 85%. alignment approach ask assumptions attention autonomous Awareness of underperformance Behaviour benefit bigger plan bottle-neck bottom-up Broader goal broken process building a community burning platform buy-in byproducts capacity Career progress catch ball Certain elements challenges Change Change Champions change in management methods Change Management characteristics change Clear the path coach	coalitions Commitment communication COMPETITIVE consistency constraints contingency Continuous Improvement contradiction Contributor control cost costs counter intuitive Cultural Culture Customer customise data gathering decision makers demand Description design,management, and assessment develop Lean practitioners difference between top and bottom different angle Different to historical difficulty discipline discover dragon den drive efficient effective Emotional empathy employee Empowerment empty promise	encourage energy Engaging Environment involvement ever-lasting excitement Experience exposure facilitate faded Failure failure to change false start fear financial firefighting fire-fighting false improvement Flow focus follow through forced form over substance foundation framework Gemba Goal good news culture guidelines habits happy help Honesty hope hosting Kanri how to hypothesis Ideal state
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<p>Ideas ignore impact Implementation Importance improvement In fact a lot inconsistent incorrectly independent individual influence Inhibitor Initial savings Initiative Innovation institutionalise intent internal Internal Staff internal stakeholders Interrelation of different processes invested</p> <p>Involvement isolated pockets isolation job security Job-security journey Kaizen Kan-Ban knowledge Kotter lack of understanding Lead Leadership Lean Lean Expert learn from mistakes</p>	<p>learning levels Link listen LMS long-term loss of focus loss of interest low hanging fruit make life easier Management Input marketing marshmallow McKinsey measured measurement methodology middle layer Mind-set misconception mistake Motivation multi-functional teams</p> <p>multiple approach negative outcome new approach no blame non-adaptive Nonsense not meeting expectations Objective old practices open optimising Outcome pace painful participate participation</p>	<p>PDCA perceived value performance permafrost personality phase plan pockets politics pre-con pride Principles problem solving Process Promotion proven pull Pursue Perfection Questions readiness reality reason reboot Recognition of a problem recoverable reduce cost re-engineering reflect relationships remove Research Resistance resources reverting back rewards rigid root cause sacrifice savings</p>
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<p>selected people only sequence Servant based leadership Set in their ways Sharing success shopfloor short-term short-term vs. Long-term Show and tell Signals silos silo's simplicity Situation skill small batches Small changes Some stable staff reduction stalling standard accountability process.. Standard work Strategy Strategy Support strict Structures Subject matter experts Success success Support sustainable System Thinking team teams Technical Expertise Test tick box Time</p>	<p>tool tools top-down Total involvement track Traction training training Transform transforming transparent true objective trust trying uncertainty Understanding unique unstable urgency utilisation value visibility vision visual visual controls vsm VSM waste Whiteboards who whom Why</p>
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12. Appendix D: Final Coding Scheme

a3 acknowledgement Action Steps Agile approach ask autonomous Awareness of underperformance Behaviour bottle-neck bottom-up building a community buy-in capacity challenges Change change in management methods Change Management characteristics coach Coaches Commitment communication Company Culture COMPETITIVE Consultant Continuous Improvement cost counter intuitive Cul Culture Customer customise decision makers Description develop Lean practitioners difference between top and bottom different angle Different to historical	difficulty discipline drive efficient empathy Empowerment empty promise encourage energy excitement Failure fear firefighting false improvement Flexible Flow focus follow through forced form over substance framework Gemba Goal help hoshin Kanri Ideal state Ideas ignore impact Implementation improvement inconsistent influence Initial Implementation Innovation intent Internal Staff internal stakeholders Interrelation of different processes	Involvement Job-security journey Kaizen Kan-Ban knowledge Leadership Lean Expert learn from mistakes learning Link listen loss of focus loss of interest Management Input Management marketing McKinsey measurement methodology middle layer Mind-set misconception mistake Motivation negative outcome new approach no blame not meeting expectations Objective old practices open optimising Outcome participate PDCA personality plan pockets

reason
reboot
relationships
Resistance
rewards
root cause
savings
Servant based leadership
Set in their ways
Shared Value
Sharing success
short-term vs. Long-term
silo's
simplicity
skill
Skills
small batches
Small changes
Staff
staff reduction
standard accountability process..
Standard work
Strategy
Strategy Support
strict
Structure
Structures
Style
Success
Support
sustainable

13. Appendix E: Ethical clearance

A copy of the ethical clearance letter received from this research has been provided for reference purposes

Dear Mr Arnold Smith

Protocol Number: **Temp2016-01118**

Title: **What is the impact of lean leadership on lean transformation?**

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards,

Adele Bekker