Lean Management -
Consultant perspective on the concept

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Abstract

Lean has become a popular management concept in the last decade, especially in the management consultant industry in Sweden. However, regardless of the popularity, it has been criticized in academia for its inconsistency. Researchers have questioned the validity for Lean as a concept. The lack of consistency in the management literature also makes Lean a target for misinterpretation by practitioners, which also influences the success rate for implementing the concept. Success in the implementation stage is critical and management consultants are often the change agents in this process. The management consultant industry has therefore an important role in how the management concept is set into practice.

This thesis explores how Swedish management consultants perceive and implement the concept Lean. Interviews with management consultants were conducted in order to retrieve this information.

The findings indicated that the inconsistency in the literature of the field affects how management consultants perceive the content of the Lean concept. It was discovered that all the participating consultants had their own unique version of what Lean is and how it should be implement.

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1. Introduction

The European engineering company was very proud of their work with Lean and was considered to be the furthest in the field. The managers were very proud of their work but still eager to know if there was something more they could develop.

The company invited Ooba-San, the legendary Toyota manager, to visit the company. He arrived and was given a guided tour of the factory.

The company’s representative proudly showed their work; their clean work places, their visual planning boards, where all aspects of how the business was working were shown in real time. They talked proudly of their low levels of inventory in the factory, and they showed the different tools that they used in order to raise the level of quality.

We are Lean, aren’t we?, one of the company’s representatives asked rhetorically.

But the Japanese visitor simply said: ‘interesting’.

Ooba-San even had the chance to speak with operators working in the factory and everyone he spoke to had the same understanding of the company’s vision and goals. Everyone talked about how their work fitted in with the whole, and how they contributed to the final product delivered to the customer. The operators explained with genuine enthusiasm the improvement work in which they were involved.

This just has to be Lean, doesn’t it?, asked the company’s managers.

Again, Ooba-San simply responded by saying: ‘interesting’.

After the guided tour everyone gathered in the conference room where the discussions continued. The company’s representatives were eager to obtain some confirmation from Ooba-San about how lean their company was. However, no answer was forthcoming and the frustration in the room began to increase. Finally the chairman said:

Ooba-San, we have now shown you the whole factory and told you about our work with Lean, which we are very proud of. We are wondering now if you consider this to be world-class Lean?

Ooba-San’s answer was short and to the point:

‘It is impossible for me to say. I wasn’t here yesterday.’

(Niklas Modig & Pär Åhlström, 2012)

The story above emphasizes the complex nature of Lean. The concept is not easy to grasp, even when following the literature to the letter.

Defining Lean has always been a challenging task for researchers, it seems. In the last decade many researchers have tried to define and redefine the management concept (Hines et al, 2004; Pettersen, 2009). As Modig and Åhlström (2012) ironically put it: “It exists as many definitions of Lean as there are authors that are trying to define it.” This might be because
there are many different variations within the concept. Moreover, each and one of those attempts to define Lean results in divergent findings (Pettersen, 2008; Pettersen, 2009). Some researchers insist that the concept cannot yet be defined, due to the fact that it is still developing (Hines et al., 2004), while others believe that a consensus in the definition of Lean is not necessary at all (Pettersen, 2009). Still, it seems relevant that a management concept as popular as Lean is clearly defined. Looking at how the concept has evolved the past years, it is easier said than done.

1.1 The evolution of the Lean concept

Lean has its roots in the Toyota Production System (TPS). The concept is based on a set of principles and tools that was utilized under the establishing of Toyota Motor Company in 1937. The key components of TPS were: Just in time (JIT) practices, the Kanban method of pull production, respect for employees and high levels of employee problem-solving and automated mistake proofing (Hines et al., 2004). TPS was first introduced by Taiichi Ohno, who was considered to be the father of the TPS (Womack & Jones, 1996). The inspiration behind it was the continuous flow that exists in supermarkets. The main idea was to apply the same effective system into organizations. Toyota's JIT system was considered to be the most outstanding feature TPS had to offer, because it increased the companies’ effectiveness and waste elimination. (Shingo, 1989) It claimed to form organization processes to produce the right items, on the right time of the right amount.

In western literature, the concept was first mentioned by Krafcik in 1988 to describe the manufacturing system and the TPS (Krafcik, 1988). The concept derives from his studies on the Japanese manufacturing industry. He argues that implementing the Lean systems both helps organizations become better at achieving high level of productivity as well as offers better quality (ibid). It was Toyota’s TPS innovative thinking and their company values that created the core for the Lean concept (Schonberger, 1982).

Many researchers have tried to further enhance the TPS principles of Lean. Shingo (1989) expanded the view on the TPS system with his studies on quality control, which developed the concept further [1].

The most famous revision on Lean was made by Womack and Jones, when they published ‘The Machine That Changed the World’ in 1990 and later on with their book Lean Thinking in 2003. Womack & Jones (1990) aimed to point out that these manufacturing problems were also relevant on a management level in every kind of industry. (Hines et al., 2004) They extended the concept to include Lean principles that fit modern management. Lean Thinking principles focus on the identification of customer value, management of the value stream, flow production and the use of the ‘Pull’ mechanism to support material flow while reducing all forms of waste (Womack & Jones, 2003). Nevertheless, Lean Thinking was criticized for only focusing on fitting the automotive manufacturing industry, and therefore to lack solutions of how to handle variation of product demand. It was also criticized for being
entirely tool focused and to neglect the human aspects. The human aspects were considered to be some of the most important aspects of the high-performance work system, which lean manufacturing approach has to offer. (Hines et al., 2004)

Liker (2009) revised *Lean Thinking* when criticizing the way the TPS system was presented in the Lean literature. He considered the TPS system limited and mostly focused on offering managerial quick fixes. He argued that related studies disregard the learning culture that organizations need in order to acquire a true Lean system. In an attempt to revalue the TPS system, He presented 14 principles, which were aimed to offer a strategic framework. This framework emphasizes the importance of employees and continuous improvements. The main focus of those 14 principles is that the starting point is the customer value on products, rather than from producer demands.

A recent contribution is made by Niklas Modig and Pär Åhlström (2012) in their book *This is Lean: Resolving the Efficiency Paradox*. They argue that increasing the level of abstraction on the definition of Lean makes it more applicable on every organizational environment. According to them, the point is not to copy what Toyota does, it is to understand why they do it. They attempt to bring back the focus on Lean by redefining it as a universal operational strategy, rather than to have a context-specific definition. By doing this, it becomes more fitting as a strategic choice for all types of organizations. They mean that the operational strategy depends on the organizational context and situation. Therefore, a solution that fits one organization or environment will not necessarily be suitable for another. (ibid)

**1.2 Problem discussion and research question**

The complex evolution of Lean has resulted in an inconsistency and fragmented views on the management concept in academia and practice. The lack of consistency in the management literature also makes Lean a target for misinterpretation by practitioners, as well as affects the success rate for implementing the concept (Hines et al., 2004; Shah & Ward, 2007). Furthermore, some authors suggest that the blurred distinction between Lean and other management concepts, such as TQM, damage the concept’s validity because the concept barely passes discriminant, convergent and construct validity (Langstrand, 2012; Petersen, 2009).

Regardless of the lack of a clear or consist definition, Lean has become a popular management concept in the last decade, especially in Sweden. Some of the concept’s variations such as *Lean administration, Lean product development* and *Lean healthcare* have been developed in the country. In addition, many leading Swedish companies compliment their success to Lean, along with the growing management consulting industry in the country. (Brännmark, 2010).

Change agents play a vital role in the success of implementing new management concepts (Ahrens, 2006). Management consultants are the typical change agents when implementing
Lean (Womack & Jones, 2003). Therefore, management consultants have a large impact on how the concept is managed in practice. The consultants often introduce, educate and advocate Lean. Therefore, consultants influence how managers perceive the concept and how it is practically worked with later on. (Qing et al., 2014)

Exploring how consultants interpret the concept contributes to a better understanding of how the concept is being implemented as well as fills up a theoretical gap. Existing literature is usually based on practical examples. Those practical examples are often taken from the organization perspective, and are therefore often very specific to a certain kind of industry or situation. Investigating the consultants’ perspective on the concept contributes to a better understanding of the management concept. The research question is therefore:

- How do management consultants in Sweden perceive and implement Lean in practice, considering the lack of clarity that exists around the concept in academia?

1.3 Purpose and contribution

The purpose of this thesis is to explore Swedish management consultants’ views, knowledge and experiences concerning the Lean concept in order to discover how the inconsistency in the field’s literature influences practitioners. Gathering information from management consultants with various implementation experiences contributes to the understanding of the concept in general terms. By comparing the findings with modern theory, this thesis offers a unique approach to study Lean, since it is not related to a specific case or industry.
2. Theoretical framework

The theoretical framework consists of two chapters: The first chapter reviews the theoretical key aspects of the concept, namely the Lean philosophy and the managerial toolbox. The second chapter focuses on the operational aspects of the concept, in order to understand how those conceptual ideas and tools are put into practice. The figure below visualizes how these two parts fuse when implementing the concept.

Figure 1: Lean as a management concept (Own illustration)

2.1 What is Lean?

Lean is a management concept. A management concept is a multidimensional management approach consisting of principles, practices and techniques (Langstrand, 2012).

Literature usually divides the concept into two parts: One that handles it as an abstract concept, an approach, a philosophy or principles. While the other handles it from a more concrete way of working. The following section will present the concept in those two stages; first, an explanation about the conceptual ideas behind it, hence the philosophy, and then an explanation about the managerial toolbox that the concept has to offer, hence the toolbox.
2.1.1 The Philosophy

Womack & Jones’s (2003) *Lean Thinking* made a significant impact on the concept over the last decade, both in academics and in practice (Hines et al., 2004). According to them, the main goal with *Lean Thinking* is to increase customer value. This is done through waste elimination, by striving to create high quality products or services that match customers’ needs, and eliminating any human activity that absorbs resources but add no value (Womack & Jones, 2003).

Womack and Jones (2003) stress that the value adding should always be defined from the customers’ perspective. They present five principles that reflect the basis of how to increase customer value. A principle in this context is a fundamental value that relates to the various activities that are included in the concept, and it gives attention to certain aspects of the organization (Langstrand, 2012). Womack and Jones (2003) stress that the main purpose of the principles is to reach flow efficiency, and that efficiency is reached by constantly working on waste elimination (ibid). The principles guide the organization to know how to understand and create the value. Hence, the principles represent the philosophical core of the *Lean Thinking* because they show the relationship between the value creation and flow efficiency. (Hines et al., 2004)

![Figure 2: The five principles of Lean thinking (Own illustration)](image)

*Specify value through customers*: Value should always be considered from the customers’ point of view. Products or services should be optimized to meet customers’ demand, rather than from an organizational perspective of what is effective. Managerial strategies, processes
and systems should be adjusted to meet optimal customer demand, in order to increase customer value.

*Identification of value stream and elimination of waste:* The value stream is the overview of every specific activity or process, which is required to produce a specific product or service. Identification of the entire value stream is essential to identify waste in organizational activities and processes. The Waste elimination should be applied in all organizational levels.

*Continuous flow:* Once value has been specified, the value stream is fully mapped and optimized by waste elimination, which is necessary to ensure continuous flow in the process. The main purpose with this principle is to meet the real customer demand instead of unnecessary stockpiling of resources. The processes need to be tightly set up to reach high customer value in a smooth and effective way. This principle encourages redefining functions and structures within the organization to optimize the value creation.

*Pull production based on customer consumption:* The process scheduling and inputs should be adjusted to customer demand in order to achieve high customer value. The main idea is that customers ‘pull’ the products as they desire them to be, rather than having a situation where the organizations ‘push’ products that are unwanted.

*Continuously improving:* The strive to perfection by constantly following the previous four principles. The point is that there is no end to working with Lean. The four initial principles interact with each other in a virtuous circle. Being dedicated to finding ways to specify value more accurately, learning more ways to enhance flow efficiency and pulling production.

**Other researchers’ view on the philosophy of Lean**

There are other views about the philosophy of Lean. In contrary to Womack and Jones (2003), other researchers see the value creation principle mainly as equal to cost reduction (Dennis, 2002; Shingo, 1984; Pettersen, 2009). Pettersen (2009) explains that most researchers agree that the main objective of Lean is to reduce waste, but he further explains that there are different opinions about the purpose of doing this. According to him, the concept contains two different types of goals; internally focused and externally focused. The internally focused is about cost reduction initiative and differs substantially from the externally focused initiative, which is to improve customer satisfaction. (Pettersen, 2009) The internal goals align more with early literature in the field, which was mainly focused on waste and cost reduction in the shop-floor level of industrial organizations, while the external goals align more with the modern *Lean thinking* view on goals for the concept (Hines et al., 2004).

Liker (2009) criticizes the simplicity of Womack and Jones’ (2003) *Lean Thinking*. He argues that it is important to have a mindset that focuses on making the products flow through production without interruptions. To have a pull system that is steered by customer demand and a culture in which everyone is striving continuously to improve, is not that simple. He
further develops Womack and Jones’ five principles by offering his 14 principles instead. These principles are more specific and summarize his view on the philosophy of Lean. The 14 principles are based on four Ps; Philosophy, Processes, People, and Problem Solving.

![4P-model (Liker, 2009)](image)

The first P concerns the principle of long-term perspective that management needs to acquire when making decisions:

*Principle 1*: To base management decisions on a long-term philosophy

The management should have a long-term focus to increase customer value by improving the organizational processes. The long-term goal should be prioritized over short-term financial goals. The main focus should be on creating value for the customer, society, and economy. Continuously improving the processes and the organization’s resources (technique and personnel) will contribute to increasing the customer value.

The second P contains seven principles which is about process optimization:
Principle 2: Continuous process flow contributes to identifying problems and waste.

Principle 3: Using pull production will prevent overproduction.

Principle 4: Balancing the workload prevents the employees and processes from overburdening.

Principle 5: Having a culture that promotes high quality products by stopping processes when errors occur.

Principle 6: Standardized processes are the foundation for continuous improvements and employee involvement.

Principle 7: Using visual control and transparency.

Principle 8: Using only reliable technology that supports the personnel and processes.

These seven principles concern both operational and cultural aspects. The operational improvements consist of the practical work that is necessary to create a Lean system, with processes that are suitable for identifying and removing waste. Following the fundamental principles of continuous flow and pull production optimizes the workload. This promotes an organizational environment that is efficient and user-friendly, which is necessary for the work with continuous improvements. The organizational culture needs to promote employee involvement and continuous flow. Standardized methods are also the key to gain knowledge on how to improve processes and create employee involvement. Visualization and transparency are needed in order to easier identify problems and to help employees understand the concept.

The third P consists of three principles that concern the human aspect by developing managers and employees with teamwork and respect for each other:

Principle 9: Developing leaders that are committed to the daily work of Lean. They should act as role models that promote the organizational philosophy.

Principle 10: Creating exceptional individuals, who are put into improvement teams that align with the organization's philosophy.

Principle 11: Respecting your extended network of partners and suppliers by challenging them and helping them improve and develop.

The fourth P involves three principles that are about problem solving and decision-making:

Principle 12: Managers and employees should always visually and practically identify problems.
Principle 13: Management should always consider various solutions to a problem and not make hasty decisions.

Principle 14: Become a learning organization through relentless reflection and continuous improvement.

Managers and employees need to be involved in practically finding solution to problems. Managers’ participation is needed in order to make the right decisions, which should be based on thoroughly analyzed problems. Employee feedback plays a vital role for the identification of several solutions. It is necessary in order to promote employees’ reflections and improvements. These two principles create the foundation of the learning environment and a culture of continuous improvements.

These four Ps are interconnected with each other. The long-term philosophy is the foundation of the whole pyramid. Therefore, the long-term perspective and goals are apparent in all principles. It is important to work simultaneously with the four Ps. It is also important to understand the human perspective within these principles: all the tools, the improvement work and philosophy that Lean stands for involve individuals.

The main difference between these 14 principles and Womack and Jones’s (2003) five principles is the focus on the human perspective. Liker’s principles emphasize on having a culture that promotes respect for others, therefore Lean Thinking (Womack & Jones, 2003) is criticized for ignoring the human aspect.

Modig and Åhlström (2012) have a different view on the philosophy of Lean, which differs from Womack and Jones’ (2003) and Liker’s (2009). They argue that increasing the level of abstraction on the definition of Lean makes it more applicable for every organizational environment. It is essential to understand why Toyota act the way they do. How an organization should apply Lean depends on the context. A solution that fits one organization or environment will not necessarily be suitable for another. Modig and Åhlström (2012) explain that the principles for a specific organization should be developed from what they consider as value adding.

2.1.2 The Toolbox

Lean literature contains a wide variety of different managerial tools to apply in order to adopt the philosophy. A management tool is defined as techniques, models, methods and practices that are related to the philosophy and principles of the concept (Langstrand, 2012). The evolution of the concept resulted in a wide variety of management tools, where some of them are specific to a certain type of industries. This section will describe the fundamental Lean tools that the concept includes:
**Just In Time (JIT)**

JIT practices contain managerial tools with components such as flow, pull, takt time and standardize work. These tools aim to eliminate waste and create value, by creating a system or process that produces the right items, on the right time with the right amount (Womack & Jones, 2003). JIT is considered to be a mandatory part of the Lean toolbox, since it makes organization systems effective, easier to identify and that it effectively eliminate waste (Pettersen, 2009).

**Visual control and management**

It is important to set up clear visual views so that everyone easily understands the status of the system. To place tools, parts, production activities and indicators of production system performance so that everyone in the organization can see and grasp it immediately. (Krajewski et al., 2010)

**Human relation management**

A successful Lean system requires the involvement of the management and employees in the organization in order to reach Continuous improvements. Cross-functional coordination, teamwork and employee involvement are essential parts of this practice (Krajewski et al., 2010). Teamwork promotes a solid ground and a good learning environment in order to succeed with the improvements work. (Liker, 2009)

**Improvement strategies**

Improvement strategies are the foundation for succeeding with Lean implementation, since the concept is about continuously improving the processes in order to create customer value and reduce waste (Womack & Jones, 2003). There are several different techniques, models, methods and strategies to work with continuous improvements. Which one of them that is relevant depends on the organizational circumstances. Plan-do-study-act cycle is an example of an improvement model, which aims to solve organizational problems by planning, executing and creating improvement strategies (Krajewski et al., 2010). Defect control is also a main part of improvements strategies. This is a standardize procedure to prevent defects in the value stream (ibid). Five whys is a method about asking why five times whenever a problem is encountered in order to identify the root cause of the problem and develop countermeasures for it (Womack & Jones, 2003).

**Value stream mapping (VSM)**

This is the visual tool to map the activities that occur in the value stream. It aims to manage the supply chain by creating a visual map of all processes and systems in the organization. VSM includes the resources, raw materials and workforce. The visual mapping should be
done in all procedures (Krajewski et al., 2010). The focus on VSM should be on flow efficiency in all organizational levels (Petersson et al., 2009). The VSM is essential in the planning phase when implementing Lean. It is a useful tool to get an overhead view over the organizational processes, which is important so that the management is able to figure out how the concept should be approached in the organization. It also makes it easier for the management to identify how employees should work and learn the processes in order to place them in improvement teams for working with Lean (Womack & Jones, 2003).

*Standardization*

Standardization enables organizational learning, which is required for the continuous improvements (Liker & Morgan, 2006). It is important to standardize each work activity in different processes in order to be able to efficiently work with Lean. A common standardization method is the *Five Ss (5S)*, which consists of five standardization methods to make the workplaces suitable for visual control and lean production. This method aims to remove unnecessary materials in order to clean up the workplace. (Womack & Jones, 2003)

2.2 Operational aspects of the concept

There are different views in literature about the operational aspects of the concept. This section discusses managerial strategies in order to create suitable circumstances for the application of the concept.

Womack and Jones (2003) emphasize the need for an action plan when implementing the concept. The action plan involves what the management needs to do in order to implement Lean properly. The action plan consists of elements such as appointing a change agent, getting the knowledge, having a long-term perspective, using value mapping, executing a pilot phase and having a system perspective.

The change agent is an individual that must take a leading role for the implementation process, to assure that things get done. A consultant is usually assigned for this role, but it can also be the manager that initiates the organizational change. The change agent role is also to ensure that the employees acquire the knowledge needed about Lean. The change agent’s competence about how to apply Lean in the organization is vital. Having a long-term perspective is especially important due to the cultural aspects of the concept. Being Lean is a never-ending process. The personnel needs time to grasp the importance of continuous improvements in order to optimize the processes on a daily basis. Value mapping is important to execute in small steps. Sometimes it is necessary to focus only on one department first. This department is in most need for change and Lean should initially be applied there, as a pilot phase. This phase is necessary to make the concept grasable, because it is difficult to implement Lean directly into the whole organization. It also contributes to identifying success factors and potentials within the organization. This first, successful practical example can be used to understand how to implement Lean into other departments. This motivates managers
and employees from other departments to adapt the success. In this process it is vital to receive feedback from employees. When results start to show, it is necessary to use the momentum to further expand the improvement work on other departments. Viewing the implementation process from a System perspective is also necessary. It is important to realize that every part of the organization is unique but still a part of the whole. Therefore, the identified solutions cannot just be replicated and put into organizational activities and processes without adjusting them accordingly. These aspects are vital in order to be able to work with value stream mapping and acquire the Lean culture. (Womack & Jones, 2003)

**Other researchers’ view on the operational aspects of Lean**

Liker (2009) also offers a specific guide on how to plan and execute the implementation of Lean. This guide has a lot in common with the operational aspects of *Lean Thinking*. Liker (2009) also stresses the importance of having a planning phase. However, he stresses that the implementation strategy should be done on different levels, namely ‘Top-down’ the hierarchy in the organization. He explains that it is necessary to identify suitable key persons to lead the change process; these managers should be active participants in the value stream mapping and engaged in the improvement work. He further explains that it is important to consider and acknowledge the cultural aspects of Lean already on an early stage. The management should plan thoroughly the work on those aspects as part of the implementation process. Educating employees through involvement and participation is necessary. He means that the employees will never learn to work with Lean only through theoretical education, and therefore recommend conducting workshops as well as building improvement teams that include both managers and employees. Teamwork creates a unity between the employees and managers, which increases employee involvement and empowers the change process. Working in teams is also a necessary part of the creating of a learning environment, which is essential for Lean.

Liker (2009) also stresses the importance of having a management that has ‘ownership’ of the processes. He means that these individuals are the driving force when implementing Lean, because they are committed and willing to adopt the Lean philosophy into the organization goals, vision and structure. This is important in order to ensure the long-term perspective, to promote employee involvement and motivation. He further explains that it is vital that managers in the organizations are not short-term focused on the Lean toolbox. This would impede organizational culture to change and would prevail the creation of a learning environment.

Lantelme and Formoso (1999) criticize *Lean Thinking* to only consist of principles and tools without acknowledging that the application of the concept also includes cultural aspects. They mean that working with the concept requires a *learning environment*. Forslund (2009) also explains that the learning environment is an essential requirement to work with continuous improvements in Lean. Furthermore, Schneier (1994) points out that organizational learning is a key factor when implementing any type of management concept.
Miller (2005) describes how important it is to be clear about the objective for the management change, which means that employees need to be informed and educated on the organizational changes that will be done when implementing Lean. According to Miller (2005) the optimal way for employees to work with the concept is to form teams that consist of managers and employees that work together with the process improvement. This improves employee motivation and it decentralizes the improvement work with processes, which are essential for improvement work. Having an involved management is necessary as well as being business focused and prioritizing employee involvement.

Modig and Åhlström (2012) explain that a suitable organizational culture is the main basis for a successful implementation of the concept. They explain that the organizational values define how an organization should act, and that it is the basis for an organization's existence. This is what guides the organization in every performance, which in Lean is how to satisfy the customers’ need. Having integrated values reduces variation in the applied principles, which thereby reduces the imbalance as to how management prioritizes and makes decisions. They suggest that reducing the variability of these values requires an operational strategy that is mainly focused on the balance between resource efficiency and flow efficiency.

Align with the discussion above, 13 key implementation elements were identified: Action plan, change agent, knowledge & education, feedback & evaluation, customer focus, business result orientation, improvement work, integrated values, employee involvement, management involvement, long term perspective, pilot phase and system perspective.

The majority of these key elements include cultural aspects (integrated values, business result orientation, customer focus, improvement work, learning environment, employee involvement, management involvement with ownership, long term perspective and system perspective) while the rest of the elements seem to consider practical issues in order to implement Lean successfully.
3. Method

This chapter contains a description of the research design. It explains how the respondents were selected, how the empirical data was gathered and how the analysis was executed. Moreover, it also discusses the variability and reliability of this thesis.

3.1 Research design

The descriptive nature of the research question *how*, leads to the conclusion that an exploratory qualitative method with conducting interviews is suitable. Moreover, comparing the theoretical framework with the empirical data that received from the interviews is an optimal way to conduct this exploratory study (Sekaran & Bougie, 2009). It is also suitable because the research question is trying to answer a question were important variables are not known or thoroughly defined (Cooper & Schindler, 2014).

3.2 Selection of respondents

The empirical data consists of interviews from five management consultancy firms with variation in sizes and competence. Additional information was also gathered by email and secondary data was retrieved from the consultancy firms’ websites. A total of 18 consultancy firms were identified to be suitable to participate in this study since they displayed on their websites to have core competence related to Lean. Those companies were contacted by email. Five of them accepted to participate in this study, one of them declined and the rest of the contacted firms did not respond. This sample size was therefore less than intentionally preferred. This limits the empirical findings to be constrained with a small sample size. However, the chosen consultants gave variation in information about experience and knowledge, they offer a useful data for analysis and conclusions and therefore benefits this thesis. Each interviewed consultant (See table 1) has practical experience from several Lean related cases and projects. The participating consultants were three men and two women. They have experience from working with various firm size, different industries, and location. The consultancy firms appeared to have different views on how they perceive and apply the concept, which revealed from an examination of their WebPages.

Consultant A has experience with Lean projects within the public sector. Consultant B has Lean experience from two different firms. Consultant C has educated managers in the Lean concept and also has consultant experience of Lean. Consultant D previously worked as a financial controller and has consultant experience from several Lean-related cases. Consultant E is the owner of a consultancy firm and his specialty is Lean solutions. Table 1 presents the anonymous consultancy firms and consultants:
<table>
<thead>
<tr>
<th>Respondent</th>
<th>Consultancy firm</th>
<th>Interview date</th>
<th>Interview type</th>
<th>Interview Length</th>
<th>Additional information</th>
</tr>
</thead>
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<td>Consultancy firm A</td>
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<td>In-person</td>
<td>1 hour</td>
<td>Mail</td>
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<td>Consultancy firm B</td>
<td>10 March 2015</td>
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<td>40 min</td>
<td>Mail</td>
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<td>20 March 2015</td>
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<td>55 min</td>
<td>Mail</td>
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<tr>
<td>Consultant D</td>
<td>Consultancy firm D</td>
<td>23 March 2015</td>
<td>Telephone</td>
<td>47 min</td>
<td>Mail</td>
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<td>Consultant E</td>
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<td>26 March 2015</td>
<td>Telephone</td>
<td>45 min</td>
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</table>

Table 1: Table of respondents

3.3 Empirical data collection

The interviews were Semi structured and the questions were used as a guide (6.4.1 Interview guide appendix). This was considered more suitable than structured interviews. This is a common method within qualitative studies and it is useful when trying to extract information based on the respondent's skills and experiences. Moreover, it is also beneficial to achieve a greater clarity and deeper answers (Cooper & Schindler, 2014). Surveys could also be suitable method for this thesis because it is aligned with this descriptive approach (Saunders et al., 2009). However, it was decided that interviews would be preferable to gather empirical data and benefit the explorative nature of this thesis. Furthermore, it is also suitable to retrieve information on work knowledge and experience (Cooper & Schindler, 2014).

The respondents were given basic information on the thesis. Moreover, the main interview questions were sent by e-mail before the interview, so that the interviewees could be able to prepare themselves and give fully detailed answers (Cooper & Schindler, 2014). The participants were also received information that the interview would be audio-recorded. This was done to allow transcription and to promote high reliability source (Saunders et al., 2009). It is also an effective way to filter and select the relevant data for the analysis (Olsson & Sörensen 2007).
The interviews were performed in Swedish and lasted 40-60 minutes. Individual depth-interview or telephone interviews should last between 20 minutes and 2 hours, depending on the topic for the interview (Cooper & Schindler 2014). Five main questions were considered enough to gain relevant and deep information to answer the research question. The interview questions were open-ended questions. The questions were based on the theoretical framework and aim to understand how the consultants view Lean and implement the concept. This was done to ensure that the questions captured the relevant information. Leading questions were avoided to ensure that the received answers didn’t affected by confirmation bias. Examples on the interview questions is presented below:

• What is the goal with Lean?
• What tools, models and method do you apply when implementing Lean?

A limitation of the open-ended questions is that they might result in general descriptions of the concept, which is influenced by what the consultants perceive as most relevant. This was considered to benefit this thesis; to discover if the consultants priorities some aspects of the concept, instead of confirming the components of Lean from the literature. There is a risk of choosing consultants as study object because they might want to promote their business. To reduce the risk of consultants glorifying their response for selling purpose, the interviews were anonymous. It is also important for the respondents to feel that they have a chance to freely speak of cases and examples from different situations without worrying to expose confidential customer information (Cooper & Schindler, 2014). Interviewing only one consultant from each firm limits the reliability of this thesis. It would be beneficial if additional consultants were interviewed from each firm. However, this is an explorative study that aims to gather various views and experience from consultants from different consultancy firms.

3.4 Analyzing method
The analysis method follows a deductive reasoning and has a narrative analysis method, since it is a fitting choice in order to analyze the empirical data that was gathered from the interviews (Sekaran & Bougie 2009). It was also deemed to fit the descriptive nature of the research question.

3.5 Validity and reliability
The content validity was considered when managing the interview questions and when the empirical material was gathered. The theoretical framework contains several different tools, models, principles, methods and strategies. Therefore the interview questions were formed to be open and align with the subject of concept, but also in order to give the respondents a chance to answer freely on how they perceive and implement the concept. When creating the semi structured interview questions, it was important to form the questions to not be biased by the theoretical framework. Control questions and follow-up questions were prepared in
advance to ensure reliability and that the interviewees did not misinterpret the questions. This was also in order to give the interviewee a chance to further develop their answers. Moreover, it also ensures that the interviewee stayed on topic with the thesis purpose. It is also increases the reliability of the thesis, since it ensure that the questions is acknowledged correctly (Björklund & Paulsson, 2003).

4. Empirical findings

The empirical findings are presented case by case. Each case starts by introducing the consultant and the consultancy firm and continues with presenting the empirical data.

4.1 Consultant A

Consultancy firm A has many years of experience in the consultancy industry. The company has 40 consultants and offers management solutions that involve strategy and leadership support, process development and change management (Consultant firm A web page).

Consultant A main Lean experience is within the public sector (WebPage). The consultant has an education in Master of Science in engineering with specialization on process development and process managing. He has experience of five years as a management consultant and his focus area is process management and development of organizational systems. He led two large Lean projects, where the main objective was strongly linked to the long-term goals of Lean. He was also responsible for other projects, where parts of the concept were implemented. (6.4.2 Email appendix)

Consultant A mainly sees the concept as working with optimization of the value stream within an organizational environment that promotes continuous improvements. Organizations should always prioritize value stream and process improvements in order to increase customer value. He believes that Lean is not just another management concept, its something more than that, it’s about improving customer value and continuous improvement work. The main goal with Lean is to adapt a culture. This culture consists of the Lean principles. He consider a central part of Lean is to coach and encourage the employees to question why they do their work in a certain way, and to help them realize a better way of working. It is also important to have a management that encourages questioning, and not only ordering the employees around.

According to him, there is no point of applying the concept without knowing what the organization aims to accomplish by changing the culture. Just applying some selected methods, tools or models from Lean it is enough to adopt the concept. He further explained that some organizations are less fit to implement Lean because they don’t have the right mindset and understanding about the concept. According to his experience, it is often hard to change the organization’ perspective when a long-term commitment is required:

“There are a lot of organizations that have their “inside perspective” where the focus is on their short term financial goals and result oriented perspective. They [usually only] focus on
their daily work, so to speak. Here Lean [for us as consultants] is all about challenging the organization to start asking who they are improving the organization for."

He further explained how important is to have a long-term focus to conduct continuous improvements. Reducing the short-term focus is an important part of changing the organizational culture to become more fit with the Lean concept.

He stated that they often follow a standardized procedure when implementing Lean. They start by analyzing and introducing the term customer value, which is usually done in a workshop format. Then they conduct visual mapping and value stream mapping, which he thinks has a vital importance for implementing it successfully:

“Next step is visual process mapping and value stream mapping. Here it is important to start introducing the keyword “Waste” and only start working in one of the departments in the organizations. This is to make it create momentum to further expand the success of the Lean implementation. I think to implement Lean all over the organization directly usually is not successful.”

This momentum is needed to spread the motivation throughout the whole organization. He thinks that visual mapping is one of the strongest tools that the concept has to offer. He also mentioned that visualization, five Ss and flow optimization are important tools. Another frequent tool that he uses in the implementation stage is employee surveying. He believes that this is a good way to measure that the employees understand the goals of Lean and how to perceive customer value. They also use improvement strategies such as 5 whys, JIT practices and defect control when optimizing the processes.

He stated that all organizations could benefit by adapting the good aspects of the Lean philosophy. He also thinks that an organization can never have too much focus on customer value and process development. Although, he also stresses the importance of acknowledging the cultural aspects of Lean:

“It is important to break down the cultural barriers that hinder change management, the keyword culture is something I am a strong supporter for. You can have as much flashy visual mapping boards as possible, but in the end it is the employees that works together with the change management and it is they who need to adapt the responsibility.”

He explains that changing the organizational culture is not something that the visual mapping will help to do, per se. Consultant A believes that it is important for employees to be involved and feel control over the change process. This is achieved when employees feels ownership on the changes:

“It is only the employees that can feel if organizational processes creates value. It is them that have the power and knowledge to raise questions about if the processes are effective, since it is them who works daily with the processes.”
He further explains why ownership bounded to teams is a vital part of the Lean implementation:

"It is important to link the responsibility and ownership to improve the value stream with the ones that are responsible for the processes... [or else] it creates a conflict of interest and it becomes unclear and confusing if the ownership of the change management is not secured by individuals that has the most power to affect organizational processes."

With this statement he points out why it is important to set the focus on teamwork to improve the processes. He means that having ownership of the change process benefits the improvement work, which is the core in the concept. He further explained that having ownership gives these individuals accountability. Not having ownership on the process creates a demoralized atmosphere for the improvement work.

4.2 Consultant B

Consultancy firm B is a global company with 45 employees in Sweden. The company has expertise in various industries such as media, production industry, healthcare, retail and the public sector. Lean is one of their main competences within the Organization and Process Development area. (WebPage)

Most of Consultant B experiences with Lean are from her previous job, also as a management consultant. She worked there for 13 years. This firm has its main competence within the financial- and operational management area and Lean is their main focus. She is newly employed at consultancy firm B but managed several Lean projects in her previous work. (6.4.2 Email appendix)

Consultant B thinks that Lean should always be about reflecting the customer needs and constantly improve the processes to ensure that the customer gets the right products or services at the right time with the right quality. This is done by waste elimination while having a mindset of long-term perspective, respect for the employees and their competences. According to her, the main goal is to have this culture of doing that on a daily basis. She explained that a successful implementation depends on several components; it is mostly about the organizational circumstances and how the implementation is managed. It is also about management having the correct approach towards the concept: To see the implementation as a long-term change process. Lean requires a unique cultural attitude and establishment of new organizational routines and processes. Educating employees on the concept is necessary and management participation is one of the most important factors:

“The goal is to acquire this way of thinking, of working, it's about strategy, structure and culture [...]It is not just to add some activities [...] It is important that it is viewed as a long-term change, and not as a short-term way to save money [...] Leaders also need to be prepared when starting to work with Lean and it will raise a lot of new challenges in the
organization, such as growing commitment and ideas [...] It also creates expectation for the management to receive and take care of those contributions and ideas.”

The goal with Lean is to change the organization to fit the concept. By that she means to work with the concept as a whole. She further develop that it is not just to add some tools or philosophy, it should be viewed from a long-term perspective. Management commitment to the change process is important.

They work with the same implementation model as when they are implementing other management concepts. Their model is based on three different perspectives; strategy, structure and culture. The first phase is ‘the knowledge phase’ which is aimed to give them a deep understanding of the organization, on how the concept is perceived and about the expectations of implementing the concept. They then map the organization’ circumstances, which involves both advantages and potential factors. Furthermore, they design a hypothesis about how the improvement work could look like in practice. They do that together with a number of chosen key individuals in the organization. The main activities in this stage are education and workshops seminars in order to acquire the same reference frame. After that they execute the pilot phase:

“We select a department, a workgroup or a process, it depends a bit on what is the most urgent, or reasonable, it’s different how we prioritize. [...] The pilot phase is about seeing if the designed structure works well, but also to get a good practice and [changed] culture for working with the continuous improvements.”

The pilot phase is a platform to identify how to work with continuous improvements in the daily work. It is also important in order to gain experience that can contribute for the implementation in other departments.

She considers the Lean toolbox to be mainly for visualization purposes, in order to understand the processes in depth. In this stage they mainly use ‘soft tools’ such as education and dialogue in order to create shared understanding and knowledge:

"If you take the hands-on [Lean] tools, then it is often about wanting to make things visible, you want to bring things up on the surface, it should be easy to then see when there is a problem, when it's going well or when there is a need to prioritize. To simplify and make decision making easier in daily activities [...] There are other tools [Aside from usual Lean tools] that are more important; tools that helps to create an understanding for Lean and which creates a fitting culture for the concept [...] To work with on those soft parts we use dialogue as a tool, to constantly have dialogue with the leader and with the employees, to encourage dialogue between each other.”

She believes that it is more important to use the tools to improve the organizational culture. Working with the tools also increases employee motivation and the knowledge for Lean.
According to her, this is much more efficient than to use them for analytical purposes. Although it is necessary part of the concept, she thinks that working with the tools from educational purposes is what makes the Lean tools more powerful.

It is challenging to work with the concept, because Lean is a term with various definitions. She believes that the consultant role in the change process should not be central. The main driving force should be the management group. She stressed that the challenge is always on creating a culture adjusted for Lean and to contribute with knowledge that support the work with the concept in a correct way:

“In some cases they call it Lean, but they focus only on identifying cost reductions. Then people have the wrong meaning and wrong view of what Lean is [...] Another challenge is related to the consultant role in the implementation process; the risk of becoming the main driving force behind the efforts for changing the organization to fit Lean, this may be short term effective, but will harm the implementation in a long-term perspective”

It is therefore important to coach the management to be the driving force for the continuous improvements.

**4.3 Consultant C**

Consultancy firm C has 18 employees and has a long experience in the consulting industry with an international network of customers. The company offers management consultancy services concerns of strategy and leadership, organizational management, organizational culture and IT development. (WebPage).

The consultant experiences within Lean are mainly from her earlier employment, where she educated production managers and employees in both Lean and Six Sigma. She has a Bachelor of Science in engineering with specialization on chemistry. She also has work experience related to organizational change, management and internal control systems. Her main experiences from her current employment are with management development, process development and organizational governance. She worked with a few Lean projects and implemented the management tools, methods and models.

Consultant C stressed that the Lean concept should be seen from a system perspective. She considers the main objective of Lean to be the focus on customer needs and constantly develop the processes and systems. Continuous flow is a central aspect of Lean. The toolbox should be adjusted depending on the organization’ circumstances. An organization should initially work with the cultural aspects of Lean. She explained that seeing the concept from a system perspective when working to achieve a continuous flow is important, and the organizational culture has to fit this:
"I would say that the system perspective is a central part of Lean. You cannot see organizations as independent parts and you cannot separate culture from structure in an organization."

She further explained that the system perspective is a way to promote the cultural change. Seeing the whole organization from a system perspective makes it easier to identify which structural and cultural changes that needs to be done. Another main part in the system perspective of Lean is to promote employee motivation:

"A common mistake is to believe that the Lean tools have in itself a purpose, but that is not the case. It is far more important that the employees feel that they make a difference when working with Lean and it is important to have a culture that promotes employee motivation. When employees are motivated then the middle and upper management also gain motivation for the organizational changes that Lean creates. These cultural changes should be detached from working with the actual Lean tools."

Increasing the employee motivation contributes to have a flexible organizational system that adapts to customers:

"The goal is that the organization will function as a one system and that the system should be adjustable and flexible and adapt to what is happening in the organization and with the customer all the time."

In order to achieve a good implementation of Lean, the organization's management needs to focus on the continuous improvements rather than on the tools. They need to constantly question themselves, their goals and how they should achieve them. She thought that there should be a quality responsible manager that led and have ownership on the implementation.

She thought that the work with the concept is challenge since there is a lot of standardize methods, which might cement the organization to be inflexible. The solution for this is to fill the knowledge gap, which is often about understanding the philosophy behind Lean:

"It is common that there is a knowledge gap within management when working with Lean, which makes it hard to for management to grasp the whole reason of the Lean concept. This usually makes management turn to using the Lean tools only, without focusing on the purpose and goals of Lean."

When implementing the management concepts, they focus on education and on creating a clear reference frame. Afterwards they apply the tools, models and methods that fit the organizational circumstances. They further exemplify the processes with visual mapping or value stream mapping. Moreover, they focus on the employees’ understanding of the tools, especially 5S and see if they get a good standardized platform in the organization.
Consultant C thinks that the best way of implementing Lean is to coach and support the people in the organization, both management and employees. She thinks that central aspects of Lean are primarily the visualization of the flow and to be process oriented. The most challenging aspects when implementing the concept are that there is too much short-term focus and standardization. This intricate the implementation since there is a risk that applying the tools becomes the focus, since the tools makes the most significant difference in the beginning.

4.4 Consultant D

Consultancy firm D consists of 14 consultants. The company has a long experience in the consultant industry, with customers from various industries. Their main focus is strategy and management control and they primarily work with efficiency and operational strategy. They offer Lean refer to competence within large variety of industries. They have experience working with some of biggest companies in Sweden (WebPage).

Consultant D has five years experience as a management consultant. He has earlier been a controller and chief accountant in another company. He has a Master in Business Administration and has additional education in Informatics. He has led five Lean projects, but has also been involved in additional five projects with Lean related work. These experiences have been in both the private sector and the public sector. (6.4.2 Email appendix)

The Consultant sees Lean to be ‘a group of individuals that works in an efficient way while focusing on adding value to the business’. He believes that the goal with Lean is to eliminate waste while increasing flow efficiency. The primary goal is to have this mindset as the organizational culture. The short-term focus should be about flow efficiency, not on cost savings. He suggest that doing that also improves cost savings and the organizational structure in the long-term:

“I have been involved in some Lean project where management had focused mainly on reducing costs, and this is something that the staff sees and then you can never really achieve the Lean culture there [...] the cost saving is the long term goal, but it is not what you should be working towards in the short perspective. In the short term, the organizations need to work on effective working processes [...]”

He mentioned two success factors; committed and actively participating managers and to have a long-term perspective:

“[...] It is really about management to stand up for this [implementation] and believe in it. Then the message will arrive to the rest of the organization and employees will believe in it too, so I think the key is a committed management group [...] The right organizational conditions is when the management is dedicated and understand the concept. [...] We know that if you don’t have a long-term perspective when working with Lean, the project will not turn out well, because it’s a concept based on culture.”
Consultant D explained that they initially usually only discusses and educates the toolbox for the employees. He revealed that they don’t practically use the tools in an early stage of the implementation. The main point is to first transform knowledge into understanding:

“We try to avoid talking too much about the concept and tools depending on how the organization looks like. Sure, you can start working with value stream mapping and get it to work and develop further some formal structure around it, but I don’t think that's the right thing to do. You can use the Lean toolbox in general, but there are lots of other tools that you need to work with as well […] If we will give them a fixed framework of tools [too early] then only few will grasps it, so it will never become a cultural change.”

He thinks that cultural changes are most important in order to reach the long-term Lean goal and to motivate the employees. He also believes that the culture is the most difficult to handle, especially in large groups of people, or when the involved originates from different organizational levels and has different backgrounds. He further explained that they work initially with some key individuals. They focus 70-80% of their effort in the beginning on educating personnel on the concept. This is mainly to overcome the resistance but also because working with Lean demands a deep understanding of the concept:

“[…] Get them reading [Lean] books, having them training with Lean games, talking with them about the process of change and involving them because they have the expertise and understanding […] We coach them to use visual instruments in everyday life, measurement, control […] We want them to understand themselves and work their way out to the solution. It is then when they themselves will grow with the concept.”

It is therefore necessary to implement tools that are useful for working with the concept. However, it is far more vital to fill the knowledge gap and to change the organizational culture so that it fits Lean.

4.5 Consultant E

Consultant E offers Lean solutions for customers mostly within the manufacturing industry. In his company he offers Lean solutions to organizations. He serves customers in different type of industries and sizes. (WebPage)

Consultant E has his background from being industrial operator. He worked with organizational development and has an education in human behavior with specialization in organizational psychology and lean production. He has worked with the Lean concepts since 2000 and as a management consultant since 2006. He has experience from working with more than 50 companies with Lean related projects. (6.4.2 Email appendix)

According to Consultant E, the core of Lean is respect for others. By that he means not only management and employees, but also customers and stakeholders. Respect for others is
achieved by employee involvement and creating the possibilities, both structural and intellectual, for them to succeed with the improvement work:

"The most fundamental aspect of Lean is to be as good to involve individuals in the improvement work as possible. To respect all people in the company by setting high standards (quality) and the right possibilities to succeed with the improvement work and let the employees take more and more responsibility in the improvement work."

According to him, active participation is a prerequisite for success with the concept. This mindset should be implemented in both cultural and practical levels. He also stresses the importance of having a long-term perspective when implementing the concept.

He divided the goals of Lean into two categories: Hard goals and soft goals. The hard goals are the continuously improvement work while the soft goals the cultural aspect and aim to develop the individuals in the company and be accustom with the improvement work. He explains that the soft goals are mostly important, but that organizations often acquire the short-term focus. This is why it is easier to implement and understand the hard goals of Lean. He elaborated further that the soft goals are harder to achieve because many organizations usually misjudge the importance of them. He describes this problem:

"... Management missed one of the most important the point of the Lean journey: To find all the fantastic people that should be part of the improvement work. I can often see that these individuals that should be part of the Lean implementation have not had the chance to be mentally prepared to begin to work with Lean."

He also points out that it is necessary to work simultaneously with both types of goals. In order to overcome the knowledge gap, he focuses mainly on education of the management team and employees. Understanding the essence of the improvement work is necessary in order to have shared understanding and implement Lean successfully:

"When working with the organizational culture I focus a lot on the leadership of management. I believe that improving leadership (in management) is the best way to change the culture too."

Consultant E also believes that prestigeless management and learning environment is essential. It is about detailed planning of the improvement work with the concept and promoting objective feedback; by celebrating successes and applying defect control. He believed that the management attitude (culture) should match Lean. By only working with the tools, without changing the culture results in failure. He stresses the importance of acknowledging the mental journey that Lean requires. He focuses on coaching the management to become adapted to the concept so that they can lead their employees to work correctly with Lean. Management succeeds with Lean through planning and feedback, not orders.
He reveals that he uses a standardize implementation method; Education of management, introduce and apply basic Lean tools (such as: 5S, 5 whys), create focus groups or teams, implement operator maintenance and specify the goals for the implementation.

He stresses the importance of toning down the whole concept view and working with the basics of five whys, since this is, according to him, the basic tool to handle waste elimination and understanding Lean. This is where both management and employees learn the most, and it is a vital step when starting working with the concept:

"I think that many company's management misses the mental journey that the employees are partaking when working with Lean, and it is therefore important to begin with 5 whys. I think it is necessary to begin with asking questions as: "Why we cannot find our materials or tools?"."

He further explains that he usually work on one tool at a time and when the employees grasp the concept of it he moves on to the next tool. It is important to choose suitable tools:

"... It is too often that companies just choose the Lean tools they think is trendy at the moment and believe that they work correctly with Lean, which of course is not the case!"

When the organization start implement the tools, the main point is that they succeed to improve themselves and their processes, which is according to him, the main focus of the concept.
5. Analysis and discussion

5.1 How do they perceive Lean?

The consultants had divergent opinions on how they perceive the concept Lean. *Value stream & Waste elimination* was the only term that all five consultant mentioned when explaining how they perceive the concept. *Continuous flow* and *improvement work* was mentioned by four of the consultants; while only three of them stress that the value adding should be seen from the customer’s perspective. The term *Pull production* was not mentioned at all by neither of the consultants when they described the elements of the concept. Consultants D and E had an unique views on Lean, consult D though that Lean is about adding value to the business while consultant E define Lean as ‘Respect for others’.

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Table 2: Lean principles analysis table

None of the five participating consultant define Lean exactly as it is defined in Womack & Jones (2003). Applying all the five principles together is necessary for the concept, the five principles interrelated to each other and the conductive focus must be on the customer’s perspective, since defining value from the customer perspective affect how the organization works further with the *value stream & waste elimination* in order to optimize the flow. (Womack & Jones, 2003).

All participants thought that Lean is about working with *value stream & waste elimination*. The application of this principle is rather pragmatic and can be applied for different types of purposes, although Womack & Jones (2003) point out that it should be applied to reach higher customer value. Consultant D defines the value adding to be from the business perspective, he also explained that cost reduction is one of the long-term goals with the concept, which contradict Womack & Jones’ (2003) *Lean thinking*. According to Liker (2009) the value adding should be evaluated from the customer, society and economy perspectives. Since adding value to the customer will eventually lead to adding value to the society and economy as a whole, initially the value adding should be from the customer perspective. On the contrary, Pettersen (2009) suggest that once the value defined from the business’ perspective the main focus will be on cost reduction, instead on value creation.
Continuous flow and continuous improvements was perceived by four out of five participants to be part of the concept. According to Womack & Jones (2003) once value being specified, the value stream is mapped and optimized by waste elimination, the organization should strive to ensure continuous flow in the process. Again, specifying the value from the customer’s perspective is essential. The principle of continuous improvements is especially important, because of the philosophical and cultural aspects on Lean. Four of the consultants discussed this process thoroughly and therefore even interpreted to acknowledge the importance of some of the philosophical aspects of the concept. Although, the consultant that did not mention working with continuous improvements, explained the importance of the cultural aspects, when he explained what he perceives as success factors when implementing the concept. Consultant E did not consider the value adding to be from the customer perspective, and was rather focused on the value adding from the company’s perspective, he stress that respect for other means not only the management and employees within the organization, but also customers and stakeholders, which is more aligned with Liker’s explanations; about having a long-term perspective that profit the customer, the society and the economy as a whole.

The pull production principle was not as obvious as the other principles, it was not mentioned by any of the consultants. An explanation to this is that this principle may mostly be associated with the production industry and therefore have been perceived by the consultants to have minor importance to the concept in general. Modig and Åhlström (2012) argue that in order to be able to apply Lean in all types of industries, the principles of Lean should stay on a more general level. Another explanation can be the fact that the majority of the consultants are working with companies from the service or public sector. In this business environment the ‘production’ process is first initiated when the customer contact the organization, and therefore the pull principle is more apparent by itself in those cases.

When examining the consultant’s answers compared with Liker’s (2009) 14 principles, the first principle; to have a philosophy that promotes long-term perspective, is the foundation for the rest of the principles. The other principle can be seen as instructions of how to get this long-term perspective, but also following those instructions without having this substantial long-term perspective, will not generate the Lean culture. The 14 principles are therefore interconnected. All the consultants emphasize the importance of having a long-term perspective when applying the concept (see Table 4). Consult A discussed the long-term perspective thoroughly and explained that most companies have hard time prioritizing the long-term perspective in the daily work and therefore usually focus on short result-oriented goals instead. Liker (2009) discusses that and stress that the long-term goals should be above short-term goals because this is the only way to reach a true Lean culture and high customer value. Having a long-term perspective is also in accordance with Womack and Jones (2003) because of the cultural aspects of the concept; the continuous improvements need to become a culture while the long-term goal, to generate high customer value, is always apparent.
The main difference between Liker (2009) and Womack and Jones (2003) principles is the focus on the individuals in the organization, though Womack and Jones emphasize the importance of management and employee’s engagement and involvement, Liker emphasis this to be an important part of the philosophy of Lean and stress that the individuals in the organization need to be developed as persons. All the consultants emphasized the importance of educating, developing and respecting the employees in the organization and they all discussed thoroughly the importance of the individuals in the change process. An exception was consultants E, which actually define Lean as ‘respect for others’. According to him, Lean is all about the individuals in the organization. He also explained that this is a common mistake organization do when implementing Lean; they forget the wonderful people and their knowledge. This is align with Liker human perspective (principle 10) that this should be a focus on trying to find individuals that should follow and spread the knowledge and philosophy of Lean to others.

An additional remark concerning Liker’s (2009) principles is the focus on the cultural aspects of Lean, becoming a learning organization and creating a culture that fix problems and promote high quality is in somehow between the lines in Womack and Jones’s (2003) principles, but the fact that liker specify that as a principle indicates the importance of it as part of the Lean philosophy. Some of the consultants expressed the significance of having a learning environment while others explained that implementing ‘Lean demand a certain culture that fits the Lean culture’ in order to be able to work with continuous improvements, which interpreted also as having a learning environment. Consultant B thought that education of employees should be a priority and management involvement is one of the most important aspects and that they should be prepared to receive and take care of feedback from employees. This is what Liker (2009) puts emphasize on when presenting the fourth P; organizations need to form a learning environment, in which management make decisions that takes employee feedback into consideration.

At a first glance it seems that the consultants might prioritize some of the principles being more relevant than others. It seems natural that the majority of the consultants mentioned continuous improvements being relevant to the concept together with value stream & waste elimination and continuous flow, since these are main parts of the concept. However, not all of them consider the value adding to be from a customer’s perspective. Therefore, the focus on customer value is not as obvious as it is presented in the studied literature (Womack & Jones, 2003; Modig & Åhlström, 2012). It is obvious that some of the consultants seem to have adapted only some of the principles and have their own version of what they want to include in the Lean concept. Liker (2009) points out that most of the companies got stuck in the level of processes when working with Lean and never move on to apply all 14 principles together as a system, which according to him is the true culture of Lean.
All the consultants thought that the goal of implementing the concept is to acquire the Lean culture in the organization. However the views about what the culture is was rather mixed as presented below;

<table>
<thead>
<tr>
<th>Consultant</th>
<th>The Goal of Lean is:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>To acquire the Lean culture; to apply the Lean principles.</td>
</tr>
<tr>
<td>B</td>
<td>To acquire the Lean culture; continuous improvements to insure customer value.</td>
</tr>
<tr>
<td>C</td>
<td>To acquire the Lean culture; to have flexible organizational systems that easily adapt to customer.</td>
</tr>
<tr>
<td>D</td>
<td>Overall goal; to acquire the Lean culture; to eliminate waste and reach flow efficiency. The goal in the long-run is the reach cost reduction.</td>
</tr>
<tr>
<td>E</td>
<td>‘Hard’ goal; continuous improvements ‘Soft’ goal; to acquire the Lean culture; continuous improvements</td>
</tr>
</tbody>
</table>

Table 3: Lean goals analysis table

Womack & Jones (2003) Lean thinking points out that the main goal of Lean is to increase ‘Customer value through waste elimination’, while Pettersen (2009) statistical literature study on quotation from Lean literature reveal that the word ‘goal’ was the most frequent in Womack and Jones (2003) with the phrase: “Creating high quality products or services that match customers’ needs and desires” while Liker’s (2009) goal was found to be: “One piece flow” (Pettersen, 2009; Langstrand, 2012). Therefore, an interpretation that the critical point in Lean thinking is the focus on customer value, which is also confirmed by other authors (Hines et al., 2004; Modig & Åhlström, 2012) while the goal according to Liker (2009) have an operational character that aim to create the Lean culture. The majority of the participants had some influences of customer value and waste elimination or flow in their answers, although not in a direct way. Although, they all mentioned that the goal is to acquire the culture of Lean. However, consultant D had an exceptional view on seeing the value adding from the business perspective and therefore was interpreted to be more result focused, with cost reduction being the long-term goal of Lean.

All the consultants displayed a deep understanding about what the Lean toolbox includes, their answer were interpreted being aligned with the studied literature (Womack & Jones, 2003; Liker & Morgan, 2006; Krajewski et al., 2010; Modig & Åhlström, 2012). They all mentioned the central tools for the concept, such as: Visualization, analytical tools such as value stream mapping, 5 whys, JIT, defect control and improving strategies. However, they had divergent opinions about how to practically work with the tools in the implementation phase, and how to match accurate tools to specific implementation cases. They all described that ‘soft’ management tools are vital when implementing the concept, such as education and dialogue. Four of them explained that they apply a Lean toolbox from the first stage of implementation in order to practice this way of thinking, which they expressed it as “To get
the culture”. Consultant D was quite unique in this matter; he explained that they mainly work with education, dialogue and coaching. He also explained that they try to avoid mentioning the concept and tools at the early stage of implementation at all in order to overcome the resistance for the change process. This is in order to inspire the employees to find their own solution and tools. According to him the high focus on education is needed in the beginning of Lean implementation, because of the vast knowledge that is required when applying the concept. Consultants B, C and E explained thoroughly the importance of educating the employees about the concept in order to overcome the knowledge gap, before practically work on the implementation of it. Visualization control and management was a method mentioned by all the consultants being prioritized in the implementation phase. Consultant A described visual process mapping as priority when implementing Lean and consultant B explains that the entire Lean toolbox is mainly for visualization purposes. Liker’s (2009) seventh principle emphasizes the importance of visualization within Lean.

Consultant E had a unique tool-focused approach. He has a standardized method where he learns, supports and coaches the employees to use one tool at a time. This is an approach that can be compared with of Liker’s (2009) twelfth principle; managers and employees learn best by practically solve problems. Although, having this attitude on the operational aspects of Lean can be problematic. Liker (ibid) explains that it narrows down the time perspective to be more focused on the success of the practical implementation of the tools, instead of having a long-term perspective. Liker points out that there is a risk that organizations get stuck in the second P, only focusing on improving processes. However, consultant E also had a long-term perspective and focused a lot on developing individuals and improving involvement and decision making by managers. Consultant E therefore interpreted to follow Liker (2009) human aspect more than Womack & Jones (2003) five principles, when it comes to operationally implementing the concept.
5.2 How do they implement the concept?

When practically implementing the concept, all the consultants state that they have a standardized implementation model. Two of them also mentioned that they work with the same implementation model as when they implement other management concepts. However, they all had their own unique ways to work with the concept. This table below presents a summary on which key implementation elements that was mentioned by the consultants:

<table>
<thead>
<tr>
<th>Key implementation elements;</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action plan</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Change agent (ownership)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Knowledge &amp; education</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Feedback &amp; evaluation</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pilot testing</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term perspective</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>System perspective</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Culture- Integrated values</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Business result oriented</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Customer focus</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvements work</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(Process development)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning environment</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Employee involvement</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Management involvement</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 4: Key implementation elements analysis table

These implementation elements were identified in the Lean literature as essential. These implementation elements were also mentioned by the consultants when they explained how they practically work with the concept, and named what are the success factors. All the consultants mentioned or described implementation elements such as; Action plan- strategy,
Long-term perspective, Culture- Integrated values, Improvements work, Management engagement & involvement, Employee involvement. However, implementation elements such as; change agent, feedback & evaluation work, learning environment, pilot testing and system perspective were not as obvious as they were only mentioned by two or three of the participants. The two elements; business results oriented and customer focus interpreted to be excluded, since the consultant that stress that Lean is about business results did not think that it is necessary to have an organizational culture that promotes customer value.

Both Womack and Jones (2003) and Liker (2009) point out that an action plan is needed in order to implement the concept properly, while Modig and Åhlström (2012) explain that the concept by itself need to be perceived as an operational strategy. All the consultants had some kind of standardized action plan, though only some of them mentioned that they consider different organizational levels and aspects in their action plan. For example: Consult B explained that their implementation model is based on three different perspectives; strategy, structure and culture, which aligns with Liker’s explanation about having the action plan specified ‘top down’ the hierarchy and considering both cultural and operational aspects. Consultant D considers the different organizational levels in his explanations. All the consultants explained in different ways that the organization’s circumstances are the basis to how they form the action plan. None of the consultants mentioned Modig and Åhlström’s (2012) ideas; that the strategic essence of Lean is to find balance between the resource efficiency and the flow efficiency. However, consult C explain that Lean should be seen from a system perspective and extended that the goal is to find balance in the company. She described the importance of flow efficiency when working with Lean.

The choice of a change agent can be either the consultant itself or a key person within the organization according to Womack & Jones (2003). Not all the consultants pointed out the importance of appointing a change agent from within the company. Although, the consultants themselves can also perceived as the change agent. In the consultancy situation, they are practically the individuals who spread the knowledge about Lean to the management group and later on to the rest of the personnel in the organization. However, both Womack & Jones (2003) and Liker (2009) stress the importance of appointing an ‘insider’ change agent because it promotes employee involvement and motivation.

Liker (2009) also emphasizes that the change agent should have ‘ownership’ on the implementation process. Three of the consultants used the actually term ‘ownership’ and also explained that this is one of the success factors, when implementing the concept. However, all the consultants perceived management engagement & involvement as important success factors. Therefore, it is hard to distinguish from the consultant’s explanations between the terms ‘ownership’ and engagement & involvement.

The knowledge & education element is related to the change agent, it is important to have a deep knowledge on Lean since it influence how this knowledge is transformed to the rest of
the organization. The transformation of the knowledge concerns the education aspects in the implementation phase. Womack and Jones (2003) specify the importance of getting the knowledge while Liker (2009) specifies and explains that teamwork and workshops are the most suitable methods to educate Lean. All the consultants’ explanations were align with the literature. They all used different types of Lean games and conducted workshops. Consultant A and E mentioned the importance of teamwork while consultant A extended that the teams needs to include both managers and employees and that these teams are designed specifically to each process. Consultant E also mentioned that employees should work in focus groups when implementing Lean. These explanations align with Liker’s (2009) tenth principle about the human perspective as well with the twelfth principal about decision-making.

Only consultants A and B explained that they usually initiate a pilot phase in the implementation stage. Having a pilot phase is important in order to raise the motivation for the change, when having a successful implementation example within the organization (Womack & Jones, 2003). It is also useful from a learning perspective, to let one department experiment with the concept and further develop the improvements strategies. The employees in that department can guide and coach other departments’ managers. It is also beneficial from a practical perspective, since it is more complicated to implement the concept at all departments inside an organization at once (ibid). These two consultants were also among the three consultants that mentioned the importance of the employee’s feedback. The third consultant explained that managers should not give out orders, but rather give feedback to the employees. According to Womack and Jones (2003) it is necessary to receive feedback from employees in order to use the momentum to further expand the knowledge on the concept, particularly on the improvements work. Liker (2009) also points out that employee feedback is necessary for managers to make the right decisions. Furthermore, Miller (2005) stress that employee involvement is one of the most vital elements when implementing the concept, he means that it is only when the employees are questioned and engaged in the improvements work that the organization is really having the Lean culture. Some of the consultants, especially consultant E, mentioned that it is important to work near processes, actively in a improvement group or teams, to achieve employee and management involvement for improvement work, which is more aligned with Liker (2009). Since the majority of consultants stress the importance of these two key elements it seems to indicate that they are relevant in consultancy work when implementing Lean.

All the consultants stress the importance of having a long-term perspective in accordance to the studied literature (Womack & Jones, 2003; Liker, 2009; Modig & Åhlström, 2012). However, not all of them talked about the importance of having a comprehensive view when implementing the concept. Womack and Jones (2003) point out the importance of having a system perspective. He means that the organization needs to find the unique optimized solution for each process while at the same time consider all processes as an integrated system.
All consultants acknowledge the important cultural aspects of Lean when implementing the concept, which is in accordance with the studied literature (Schneier, 1994; Lantelme & Formoso, 1999; Womack & Jones, 2003; Liker, 2009; Forslund, 2009; Modig & Åhlström, 2012). Modig and Åhlström (2012) describes how important it is that the Lean culture includes integrate values. This was acknowledged by all the consultants as a vital aspect of the implementation process, since they all described how important it is to transfer Lean knowledge into practice. Three consultants also pointed out the importance of having a Learning environment. Lantelme and Formoso (1999) stress that this is an essential circumstance in order to work with the continuous improvements that Lean dictate. Forslund (2009) and Schneier (1994) also verify that. Learning environment is something that these consultants see as vital for organizations to be able to work with continuous improvements.

All the consultants discussed the importance of Management involvement, and some of them even stress that this is a main success factor when implementing the concept. They explained that ‘ownership’ is an important driving motor in the implementation phase. Womack & Jones (2003) as well as Liker (2009) talk about the importance of management engagement & involvement. They explain that it is necessary that the driving force is also the one who have the authority to change the organization and transform it to be Lean.

At first glance it seems the only consultant D is business oriented in line with Miller’ (2005) explanation. However being customer oriented can also be interpreted as being business oriented, while considering the long-term perspective. Womack and Jones (2003) stresses that being customer oriented will eventually lead the organization to wealth. By that he means that in the long run the organization will be more efficient, will produce high quality products and will have satisfied customers, and this will eventually be seen in the annual rapport.
6. Conclusions

There is some variation in the consultants’ descriptions about the content of Lean. The focus on customer value was not as obvious as expected. None of the five participating consultants defined Lean exactly aligned with the studied literature, hence with Lean thinking, or with Liker’s (2009) 14 principles. However, there are some agreements; Swedish consultants appear to think that Lean is about identification of value stream and waste elimination. They also believe that acquiring the Lean culture is the goal of Lean. Furthermore, they all stated that having a long-term perspective, planning the implementation process, having good knowledge about the concept, adjusting the organizational culture to fit the philosophy of Lean, active improvement work, involved employees and engaged management as well as having change agent are the success key elements when implementing the concept.

To manage continuous flow and improvement work were perceived as essential components to achieve higher customer value. Having customer focus was not as obvious, although two consultants thought that the value adding should be considered from the company’s perspective. This is a remarkable result, because the majority of the examined literature stresses the importance of having customer value as focus. The Pull principle was not mentioned at all, which illustrates the influences of how the concept evolved during the years, from first being about Lean production to be a general management concept. There was no doubt regarding the content of the lean toolbox and the consultants exhibit wide knowledge about all the fundamental tools that are included in the concept. However, they had different ideas about how to apply them. Some of them saw the toolbox as a good example on how organizations can practically work with Lean and used them mostly for education purposes, while others thought that applying certain tools are necessary to succeed with Lean. Although, they all thought that the choice of which tools are suitable differs from organization to organization, depending on the organization's specific circumstances.

The participated consultants acquire inherent knowledge about the concept of Lean. Each and one of them have unique knowledge; they perceive and implement the concept in an individual and unique way. Although the consultants’ views on the concept is consistent and aligns with the existed literature in the field as a whole there are some signs that the consultants have handpicked some aspects from different theoretical sources. Therefore, the findings indicate that the inconsistency in the field’s literature affected how management consultants perceive the content of the Lean concept.
6.1 Limitations and Future research

The result of this study is limited in three ways: Firstly, it is based on a small sample size, which makes the result less reliable than if it would have had a higher sample size. Additional interviews would therefore have improved the accuracy of the analysis. Secondly, most of the data is mainly gathered through interviews, which increases the risk for the empirical data of being affected by response bias from the respondents (Cooper & Schindler, 2014). Thirdly the collected data is only from one consultant at each firm. Selecting more consultants at each firm would have enriched the result. This could have further improved the analysis by taking the consultant firm's perspective more into account.

This thesis opens up a lot of possibilities for future studies to further investigate how consultant perceive and implement Lean. This thesis is explorative and don’t have a confirmative character. Therefore, a future research can contribute with an explanatory study that further develop and confirm the findings. Another suggestion is to study if Lean should be categorized to be a management concept that is aim to change the organizational culture. Moreover, the suggested key implementation elements that suggested in the theoretical framework should be studied and confirmed further. This could be done with a case study on consultant firms or an explorative study with a higher sample of interviews. Both these approaches can bring more accuracy to the conclusions that are made in this thesis. A quantitative study with a statistical method can be made to investigate how acknowledged these key operational elements are within the management consultancy. There is also a possibility to further expand the thesis by adding the research question why do consultants perceive and implement Lean the way they do, which could be approached with translation theory to see how the concept is translated from theory into practice by practitioners, as for example Langstrand (2012) has conducted.
7. References

7.1 Literature

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7.2 Online references

http://www.strategosinc.com/lean_lot_sizing.htm (Retrieved 2015-02-05)

7.3 Tables and figures
Figure 1 and 2: Schwartz, L. O., & Söderberg, C. (2015) Lean definition, The five principles of *Lean thinking* and The Liker pyramid.

Figure 3: Liker, J.K., (2009), The Toyota way: *Lean för världsklass*. First edition, Liber, Sweden.
Appendixes

Interview guide

These are translated from Swedish to English and are the main questions included in the interview guide, excluding the control questions and follow up questions:

• Based on your experience on working with Lean, what is Lean according to you?
• What is considered a good implementation of Lean in your opinion?
• What do you think is the challenge of working with the Lean concept?
• How do you proceed when you implement Lean?
• Are there specific Lean tools that you offer when you are applying Lean to an organization?

Email Appendix

This is translated from Swedish to English and is the questions sent to receive additional information on the consultants:

"Hello!

We want to thank you again for an interesting interview. We are in the final phase of the thesis and want to ask some additional questions about your consulting experiences, because we feel that we need some more information about it:

1) Can you briefly describe your experience as a consultant and a little more about yourself? (background, education, how many years have you worked as a consultant and what specialization you as a consultant).

2) How many Lean-related projects have you had?

Sincerely Christian and Oshy"