How to increase flow efficiency in sales processes

A Case Study at a Global Telecommunications Equipment Company

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ABSTRACT

The aim of this thesis is to study and explain how global telecommunications equipment companies can increase flow efficiency in their internal sales processes by using the management concept lean. Rapid technological development in combination with increased international competition in the last decades has put more pressure on efficient sales processes and embracing customer value. Hence, increasing flow efficiency has during the last decades been a common trend in organizations striving for better meeting customer demands. Increasing flow efficiency in sales processes is a rather new field of investigation and leaves many question marks for the interested. To investigate how this can be done in sales processes a qualitative case study has been conducted at the telecommunications equipment company Alfa. The first step included identification of obstacles restraining flow, followed by an analysis addressing why they have occurred. This was done through a triangulation consisting of observations, collection of documents & records and semi-structured interviews. In total 15 in depth interviews with employees from the company were made. Obstacles restraining flow in the sales process were found to be; not incorporating customer insights in the sales process, a technical orientation in the organization, resource efficiency and distinguished process goals. Aspects related to organizational elements such as culture, structure, and systems further showed to explain the different obstacles. The conclusion is that companies similar to Alfa needs to first address values and principles in order to increase flow efficiency in sales processes.

Key words: lean**,** flow efficiency, sales processes, customer value, sales support, sales teams

ACKNOWLEDGMENTS

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1.0 INTRODUCTION

In this chapter we want to give the reader a presentation of the chosen research field as well as an understanding of the thesis as a whole. Description of the background together with the problem discussion will consequently serve as a foundation for the purpose and developed research questions.

1.1 Increased sales focus in the telecommunications equipment industry

Today, few actors are dominating the telecommunications equipment industry (Yee, 2012). Ten years ago the reality looked different with more players acting on a more fragmented market. Only few actors being left can be explained by the enormous worldwide round of mergers & acquisitions of these companies during the 90's. During the past ten years, the telecommunication equipment industry has been characterized by fast movements related to rapid technological development and change of structure (Le Blanc & Shelanski, 2002). Drivers as deregulation & liberalization, technological innovation & digital convergence, a shortening of product life cycles and the evolving requirements of the capital markets are currently and have during several years affected the telecommunication industry as a whole. Due to tough international competition actors in the telecommunication equipment industry has undergone a transformation creating new opportunities as well as new challenges for them (Li & Whalley, 2002). Market winners have turn out to be those who are highly capable of turning a base technology into products that meets the customer needs (Brodt & Knoll, 2004).

Many of the largest players within the industry are currently suffering a slowdown in net profit due to weaker market demands (Jingting, 2012). Unless the rollout of 4G networks really takes off the world's telecom equipment vendors are said not likely to embrace a strong rebound. Meaning that in order to stay competitive actors within the industry have to secure turnover and profits. Turnover and profit is dependent on sales volumes and prices of the products whereon increasing efficiency in sales and creating greater value for customers are key issues. Reducing costs is difficult since such strategies already have been implemented during the last years of tough competition. Additionally, costs related to R&D are fundamental for surviving in the industry. As already mentioned, the tough competitive landscape has put pressure on price whereof

creating customer value through other aspects is required. A focus on improving product offerings and create efficient sales processes is now more important than ever.

Lean is known by many as being a popular management concept used to create efficient customer oriented processes. From having its origins in the manufacturing industry it has moved across several industries and business areas. Applying lean in sales processes is a fairly new phenomenon but now explored by industry companies that have stronger pressure than ever to increase turnover and profits. The lean concept could act as an enabler for better sales processes which would help these actors to manage the tough competition in the telecommunication's equipment industry that not yet seems to decline.

1.2 Challenges when adopting lean on sales processes

Many companies around the world, in all sectors of the economy are today using lean operating principles in their organizations (Piercy & Rich, 2009). However, the definitions of lean are many and the interpretations likewise which involves a challenge when organizations want to create an understanding and succeed with efforts to implement lean (Modig & Åhlström 2012). The literature contains many dimensions connected to lean such as Flow efficiency, Just in Time, Total Quality Management and so forth. Also, there is a scarce supply of studies where lean theories that have been contextualized in sales processes. The contextualization's that do exist are modifications of existing lean concept and interpreted to suit sales processes. These are moreover rather oriented towards the part of the sales process in which the organization interacts with the customers (Ade Asafeso, 2013; Piercy & Rich, 2009). Furthermore, no study that addresses internal sales processes i.e. activities done back office that is not visible for the customer has been found. Addressing internal sales processes in organizations and adopt lean is due to this fact a challenge. This rather new field in research can be said to involve the integration of lean in internal sales processes. With no known studies on the adoption of lean in these processes, challenges are created when managers are looking for guidelines grounded in research and science. We have therefore taken on the assignment to conduct research in this area so that managers at global telecommunication equipment companies can gain more knowledge about how to adopt lean on their internal sales processes.

Due to the multifaceted concept lean we have chosen to delimitate it by using a fairly high abstraction level. Due to the nature of our study we believe that this is the most appropriate approach. A general and a managerial point of view of a sales process has been taken, which speaks for defining lean on an abstract level. Furthermore, as the theory within this field is rather scarce, a holistic view of the concept lean would be appropriate.

The dimension *flow efficiency* is providing a fairly high definition of the concept lean, whereof we have chosen to further define lean as flow efficiency in this thesis. However, since flow efficiency is tightly connected to several other dimensions within lean, additional lean theories will be used when suitable.

1.3 Purpose & research questions

The purpose with this study is to make a contribution to existing lean theories by investigating a sales process from a lean perspective, hence striving for filling a theoretical gap. Derived from the background and problem formulation it is of meaning to investigate how companies within the telecommunications equipment industry can increase flow efficiency in sales processes. In order to make such an examination it is further essential to look at possible obstacles that could restrain such process. A case study will thus be conducted at the telecommunications equipment company Alfa when looking for answers to our defined research questions, presented below. Alfa is in reality called something else.

How can global telecommunications equipment companies increase flow efficiency in their sales processes?

What obstacles restrain flow efficiency in sales processes and why do these occur?

Our research questions shows that our purpose further is to examine how sales processes within companies similar to Alfa can increase flow efficiency. When answering the second research questions further contribution to the first research question will consequently be made. This since the understanding of what restrains a flow efficient sales process can provide insights on how to improve it, meaning that certain obstacles needs to be overcome before adopting lean on sales processes.

To succeed with our purpose a case study at Alfa has been conducted. Even though current lean theories will be used as a foundation for our research we are welcoming additional theories within other fields when answering our research questions as well. Arguments for our methodology will be further explained in the next chapter of the thesis.

1.4 Demarcation

Some delimitations have been necessary in order to provide reliable and valid results. Firstly we have exclusively investigated sales processes within business area A, which is one of three business areas at Alfa, delivering products. The reason for this is that the other two business areas are more related to service and installation offerings whereof the results within these business areas could most likely differ. We have further chosen to look at a product push process at Alfa, hence excluding other sales processes. The reason for choosing a product push process is that we considered it to be the most relevant one to investigate within the industry due to its challenges. With high R&D costs and continuous development of new products commercialization of product offerings are especially important, which strengthens the argument for choosing a product push process. Lastly, certain parts of the product push processes have been investigated, starting when a product is ready for marketing (ready developed) until the point before customer interaction and selling begins. Due to difficulties regarding participating in customer interactions and collecting customer data we have chosen to exclusively focus on the internal processes, i.e. before Alfa meets with customers.

1.5 Disposition

CHAPTER 1 – INTRODUCTION

In this first part we are arguing for the empirical and theoretical relevance in the study. Additionally, the purpose of the thesis as well as the research question is defined.

CHAPTER 2 – THEORETICAL FRAMEWORK

In chapter 2 we demonstrate our theoretical framework and argue for why chosen theories are relevant and applicable to our study. This is complemented with a description of the theoretical gap.

CHAPTER 3 – METHODOLOGY

Third, our methodical design is presented. Including arguments for choosing a case study, research approach as well as interview sampling and design. A discussion about how research quality has been secured and its limitation conclude the chapter.

CHAPTER 4 – EMPIRICS

This section aims at presenting collected data by giving broad and in depth explanations.

CHAPTER 5 – ANALYSIS

Presented findings from the data are analysed in chapter 5. These findings are further combined with defined purpose, research question and theories.

CHAPTER 6 – CONCLUSIONS

In this last section of the thesis our conclusions are presented and connected to earlier defined theoretical gap.

1.6 Definitions and clarification of concepts

TELECOMMUNICATION EQUIPMENT INDUSTRY: companies within this industry that are producing hard- & software for the purpose of telecommunication.

GLOBAL COMPANIES: organizations that operate in several continents all over the world.

PRODUCT PUSH PROCESS: a product push process is defined as a process that starts with a confirmation that a product is ready for marketing, lasting until the point before meeting with customers. The product push process will further be entitled simply as a sales process, with a sales process we further mean all activities related to it.

SALES SUPPORT: the sales support at Alfa is located at the head office in Sweden. The department consists of functions as marketing, pricing, product manager's and technical support.

REGIONS: Alfa has subsidiaries spread around the world, defined as their regions. The regions consist of technical functions as well as sales teams.

SALES TEAMS: the sales teams operate at the regions and are responsible for the actual selling. The sales teams are consequently the ones that meet and interact with potential and actual customers.

SALES MATERIAL: sales material is a merged definition of all material being produced to a specific product. Much of the material produced at sales support aims at supporting the sales teams in their daily work.

VALUE ARGUMENTATION: the overall purpose with the value argumentation is to highlight the benefits with Alfa's products. It involves arguments for why Alfa's products are considered more beneficial than others on the market.

2.0 THEORETICAL FRAMEWORK

In this part of the thesis our theoretical framework will be presented. It starts with a background to lean, its development and how it has been contextualized in sales processes. It is followed by an explanation of our selected theoretical standpoint. Further, we give an explanation of why chosen theories are relevant to our study and give additional arguments for its validity. The chapter ends with theories related to organizational elements, which showed to be appropriate to take into account when analyzing the sales process.

2.1 The evolvement of lean

Lean is today one of the most well-known management concepts and consequently incorporated in organizations within several different business areas (Piercy & Rich, 2009; Womack & Jones, 2003). In order to fully understand the concept and its increase in popularity an understanding of lean and its history is fundamental. Many of the tools and principles built around lean have its origin in the success story of the Toyota Production System (TPS), which proved that organizations can do more and more with less and less in manufacturing, including elimination of waste and a higher focus on value adding activities (Deif, 2010). From its start in the Toyota Production System it has later passed on to other areas such as supply chain and new industries such as services. Below, we give a more thorough description of the introduction of Toyota Production System and the subsequent development of the concept. We will emphasize particular theoretical contributions we found relevant in our study.

Resource constrains leading to reduction of waste

The lean concept has its origin in the aftermath of World War II in the Japanese manufacturing industry, where Japan needed to rebuild its industry. Resources were scarce and companies had in general small financial resources and little raw materials to work with, which forced them to think differently (Modig & Åhlström, 2012). When the Japanese manufacturing companies were investigating Western productions methodologies they found substantial waste, inefficiency, capital intensity as well as poor employment engagement (Deming, 1982a, 1982b). Due to the resource scarcity facing the Japanese manufacturing companies these results were something they could not afford (Pavnaskar et al., 2003). Instead they started focusing on finding ways to

remove waste and reduce inefficiency, which consequently led to a development of a new operational system (Ohno, 1988). The car manufacturing company Toyota began to stress the importance of doing the right things in order to avoid resource waste. A result of this new way of thinking was that Toyota started producing when an order arrived to the factory instead of the other way around. In this way they could ensure that they only produced cars that would be sold and were demanded by the customers. By having a pull approach instead of a push further contributed with valuable knowledge about what their customers demanded. Additionally, Toyota further stressed that *doing the things right* was equally important when having scare resources. They wanted to avoid slow processes that would tie capital in processes and therefore strived for quick transformations from raw material to delivered product (Modig & Åhlström, 2012). In this way Toyota applied a holistic approach with focus on coordinating all product flows, from raw materials inputs to final customers (Monden, 1983; Shingo, 1981, 1988). When taking on this approach they continuously had the customer in mind when working and stated that only activities adding value to the customers or the product should be in the process, everything else was considered waste. (Womack & Jones, 2003). Seven different wastes were identified in the Toyota Production System (TPS) (Ohno, 1988), presented below.

- **Overproduction:** Each step in the process should always produce only what the customer needs.
- **Waiting:** The process should be organized to avoid all unnecessary waiting.
- **Transportation:** Avoid transporting the products.
- **Over processing:** Avoid doing more work on a part or a product than the customer requires.
- **Inventory:** Inventory represents capital tied up in the process.
- **Movement:** The workplace should be organized so the workers do no need to move in order to do things.
- **Making defective products:** Every step in the process must produce fault-free parts.

In order to remove waste the following principles characterized Toyota (Womack & Jones, 2003);

- **Ensure zero production errors**
- **Encourage pull processes instead of push**
- **Make use of multifunctional teams in the organization**
- **Decentralize decision making**
- **Use vertical information systems**
- **Ensure continuous improvements.**

Results of this approach appeared in the shape of improved quality and reduced costs (Hayes & Wheelwright, 1984; Monden, 1983). These positive impacts quickly spread to western companies and were later on adapted to European and American manufacturing and service businesses (Womack & Jones, 2003). This way of producing was later on defined by John Krafcik in his article from 1988 "Triumph of the Lean Production System" as Lean production with "lean" as a collective word for using less of every resource when producing. The term lean was later on popularized through the book "The Machine that Changed the World" written by Womack, Jones (1996) and Roos (1990) where they benchmarked manufacturing companies around the world and found, at the time, that the Japanese manufacturers typically were more productive and efficient than their Western counter parts.

Lean moving from production to enterprise

In an attempt to make the lean concept more practical and applicable (Modig & Åhlström, 2013) Womack et al. (1996) formulated five principles that an organization should apply in order to become truly lean. These can be found in their book "Lean Thinking" from 1996, which further serves as a collective name for the five principles. This book is based on their article "From lean production to lean enterprise" from 1994 in which they give arguments for why the concept of lean must go beyond the firm and hence take a more holistic perspective; the entire set of activities entailed in creating and producing a specific product.

Lean thinking is a chain of principles where an organization must achieve the first principle in order to successfully apply the second and so forth. They are in total five and are presented below (Womack & Jones, 1994).

1. **Value specification in the eyes of the customer:** The critical starting point in lean thinking is value, which can only be defined by the ultimate customer. Lean thinking must start with an attempt to precisely define value in terms of specific products with specific capabilities offered at specific prices through a dialogue with specific customers.

2. **Identify value stream and eliminating waste:** The value stream is the set of all the specific actions required to bring a specific product in the hands of the customer. Identifying the value stream for each product is the next step in lean thinking and almost always exposes large amount of waste. When wasteful steps have been identified they should be eliminated. This is where the enterprise perspective is brought up, where Womack & Jones (1994) argue for the importance of mapping the value stream all the way from raw material to finished product in the hands of the customer, including all concerned parties in the production process.

3. **Create flow:** Once step 1 and 2 is achieved, the next step is to make the remaining value creating steps flow. Instead of performing tasks in function or departments tasks should be executed with customers primary needs in mind.

4. **Create pull:** Use pull instead of push, i.e. let the products be derived from customer demand. In this way, wastes such as inventory and overproduction can be avoided.

5. **Continuous improvements for getting perfection:** When achieving the first four steps it is a continuous work to discover better ways to create value for customers. Perhaps the most important way to perfection is transparency. In a lean system where everyone can see everything it is easier to find better ways to create value.

Lean moving to areas beyond manufacturing

The principles within lean thinking enabled applicability into entire enterprises rather than solely manufacturing. In this way the lean concept were not connected to a specific context or environment. Lean thinking also resulted in a more strategic view on lean rather than just an operational one (Hines, Holweg, Rich, 2004). At the same time, many organizations within the service sector began to adopt lean thinking which also enabled evaluation of the applicability of lean in services (Radnor et al, 2006; Bowen and

Youngdahl, 1998; Åhlström, 2004; Swank, 2003). The issue with lean production is that some of the principles are hard to apply to service organizations and must therefore be interpreted differently (Åhlström, 2004). This is also argued by Seddon &, O'Donovan (2009) which suggests in their article "Rethinking Lean Service" that managements first task should be to know whether or not they are solving the same problems before applying "lean tools" derived from Toyota.

One of the principles that is said to differ between the production industry and the service industry when adopting lean is the one related to elimination of waste. As what is considered as waste can vary, meaning that what is seen as waste in a production company can be seen as value adding in a service organization (Åhlström, 2004). Additionally, Seddon (2005) describes in his book "Freedom from Command Control" that TPS-principles must be transformed before adopting them on service organizations, as producing cars and managing customer service are two totally different ways of working, hence lean services has a larger customer focus compared to TPS. The author states that by always putting the customer first and consequently measure that performance it will help managers at service organizations to identify waste caused by current organizational design (ibid). Even though there are some criticism towards applying lean production on lean services it is evident that from the time lean thinking was formulated the concept has enabled application on to several service organizations.

Lean in sales processes

During recent years a lean explosion has been evident, meaning that the concept has been adapted to many areas way beyond manufacturing. Books have been released which describes how lean can be adopted in areas such as accounting, IT, marketing, healthcare and sales (Modig & Åhlström, 2013). As this thesis will have its foundation in the sales area we have further elaborated on lean and its connection to sales, what we have found is that this is a rather new area within lean. When searching for "lean in sales", "lean sales", "lean in sales processes" in different academic databases there is hard to find any relevant research on this topic. Piercy & Rich (2009) describes in their article "The implication of lean operations for sales strategy: from sales-force to marketing-force" that more organisations have started to implement lean in sales processes since this is seen as a more and more essential part in a company. In tracing

the changes in sales created by the operational forces of lean production, sales activity is shifting towards a marketing-orientated strategy, organization and approach to the customer (ibid). When incorporating lean in sales activities, the basis of them is redirected away from sales push towards the classical definitions of the marketing concept – understanding customer needs, sharing intelligence across functional boundaries and designing products and services to meet customer requirements. However this article is to a large degree focusing on how specific sales teams can adopt lean in their work and thus not taking the internal sales processes into account, which is what we strive for in this thesis. The report "Boosting sales in branch and agency networks through lean" further confirm that the literature available within this field tend to focus solely on the sales department (McKinsey Quaterly, 2011).

Lean sales and marketing

Even though the supply of the literature within this field is scarce we found one book being fairly aligned with our research topic, written by Ade Asefeso (2013) "Lean Sales and Marketing". In this book he explains that in order to adopt lean in sales processes there needs to be a constant focus on identifying what value is for the customers. When doing this, one can successfully develop appropriate product offerings that maximize customer value. When implementing lean in sales processes specific difficulties occur. Asafeso (2013) has from his studies concluded that employees working with sales usually are disconnected to the rest of the company as there are spending a lot of time "on the field". Sales people are thus much more problematic to reach in a lean initiative. Another difficulty is the variability in sales process, i.e. "no customer is the same", "no sales situation is alike" and so forth. Adopting lean is therefore a great challenge in sales processes. However, Asefeso (2013) has suggested organizations to follow four basic principles when adopting lean in sales processes that can help an organization to overcome obstacles mentioned above. These are *Stabilize, Standardize, Visualize* and *Improve (continuously).* A company's implementation of these steps should be made sequentially and are thus dependent on the starting point of a process. Connections can here be made to the five principles in lean thinking (Womack & Jones, 1996), as many of the principles interrelates.

Stabilize

The first and most critical step is to stabilize an unstable process. Instability in a process is often explained by a lack of process definition; hence defining a process is often the key first step. Once a selling process is in place, i.e. agreeing on terms and definitions and goals stability can be achieved (Asafeso, 2013).

Standardize

Standardize work is a fundamental concept of lean (Ohno, 1988; Womack & Jones, 1996) and part of continuous improvement in TPS. Involving documenting the current best practice through standardization, which forms the baseline continuous improvement. Since sales processes often include some amount of variability all actions cannot be standardized. Instead of standardize tasks a standardized process is what the organization should strive for (Asafeso, 2013).

Visibility

Providing visibility of a process and its key aspects is said to be an essential part of implementation of lean in a sales process (Asefeso, 2013). Additionally, visibility is included in the lean thinking principles by saying that when everyone can see what is going on it is easier to create value for customers (Womack & Jones, 1996). Making certain steps of a process visible will consequently lead to benefits such as better decision-making and improved actions taken. This step aims at preventing organisations to wait too long before evaluating occurred problems in a process; instead performance should frequently be reviewed. Important is that the evaluations not require a lot of non-value added activities, such as time consuming reports (Asefeso, 2013).

Improvement

Once a process has been standardised and made visible focus can move to the last step, continuous improvements. When discussing improvements in organizations theories most likely refer to Kaizen, which is the Japanese word for continuous improvement (Liker, 2003). A Kaizen process can be simply summarized through the three steps see, think and act (Yamamoto, 2010). The concept is well spread among companies around the world and includes activities such as effective group working, problem solving, data collection, analysis, documentation and finally improvement of processes (Yamamoto,

2010, Liker, 2003). Continuous improvements and elimination of waste will be easier done once the process is made visible (step three) as it enables identification of improvements on different levels along the way (Asefeso, 2013). Theories of Kaizen further emphasize the fact that a process needs to be stabilized and standardized before incorporating Kaizen events (Imai, 1986).

However, what should be said is that Asfeso's (2013) book focuses heavily on the sales process performed by the sales teams and is generally not including those internal processes supporting the sales teams. This could be argued to be a quite narrow view taking Deshpande & Farley's (1996, 1998), argumentation into account; "*In order to meet customer demand marketing orientation must be a responsibility for everyone in an organization and not just a matter for marketing or sales department*". However, we do believe it can serve as a guidance for any type of sales process since the principles are grounded in already established theories. Although as his specific principles is not well-established it indicates that the theoretical gap is still evident and further research should be made in order to answer how to increase flow efficiency in sales processes.

| Lean Production | Lean Thinking | Lean Services | Adopting lean on sales processes |

Theories available   **Theoretical gap**
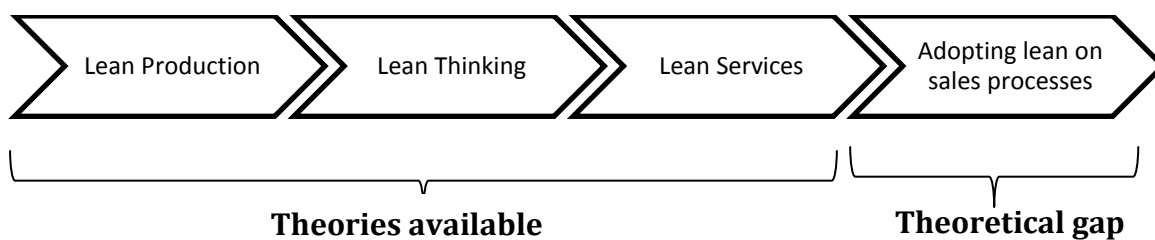
Figure 1: Theoretical gap

2.2 Defining lean as flow efficiency

As we can see from the introduction to the lean concept it is subject to a variety of definitions and explanations. There is said to be a clear difference between how the literature convey lean, either it is on a very abstract level where lean is a philosophy and a way of thinking or at a lower level where it contains tools and methods (Modig & Åhlström, 2013). As we are about to investigate how an organization can increase flow efficiency in their sales processes we believe that we should define lean on a fairly high abstraction level. It is vital to mention lean as a way of working and thinking as our study is covering an extensive process, including many areas in the company.

We have also chosen to look at the process from a managerial point of view, which also would promote a greater abstraction level of the lean concept. Modig & Åhlström (2012) argues for the risk of applying a low level of abstraction as tools and methods that has been used to apply lean is limited to specific environments. As the area we study is fairly unexplored there are no established tools and methods in this specific environment and hence starting with defining lean on a high abstraction level will help us to make use of the concept in our study. Our theoretical starting point will thus be defining lean on a high level yet still presenting principles we have found relevant for the specific context, i.e. when analyzing the data.

We believe that lean as Womack & Jones (2003) explains it in their book "Lean Thinking" offer a quite high abstraction level where the principles could be argued to be applicable to all types of organizations. Lean production offers a more narrow definition where focus is on reducing waste and where the specific tools presented might potentially be highly connected to the specific environment. Modig & Åhlström (2013) present lean in their book "This is lean" as a focus on flow efficient processes. They describe lean on a high abstraction level through the efficiency matrix where lean is when there is high flow a the process. The focus in flow efficient processes is the customers and meeting their needs as efficiently as possible. Lean thinking however, provides steps of principles that one should follow in a specific order in order to become lean, indicating a lower level of abstraction than that of flow efficiency. Considering lean services is further relevant when defining lean since these theories have a larger customer focus than the lean production theories (Seddon, 2005). Additionally, lean service theories are relevant due to the fact that Alfa has different supporting functions internally. Applying lean services theories and having a customer focus still keeps the approach on an abstract level.

We have therefore chosen to define lean as being flow efficient in order to reach a high abstraction level. However, additional lean theories will be used when it is suitable to our context, hence explaining how flow can be increased.

Flow efficiency

In the book "This is Lean" by Modig & Åhlström (2013) two types of efficiency are discussed, resource and flow. Resource efficiency is the most common and traditional

one when looking at efficiency and focuses on efficient use of resources that add value within a company, which involves utilizing resources as much as possible. This type of efficiency is an effect of the industrial development and is still, 200 years later dominating the way in which companies within different industries are organized, controlled and managed. When striving for resource efficiency the focus is on utilizing the resources that produce a product or service as much as possible. How much a resource is utilized in relation to a specific time period is one way of measuring resource efficiency. Striving for the most efficient use of resources makes sense from an economic perspective, since there is a perception that not using the resources to the fullest can be costly and implicate less value for money. When resource efficiency is premiered in an organization a common structure is functional where different departments are specialists doing a specific task (ibid). Even though it is argued that high utilization in the form of resource efficiency is important, it is equally important to meet customer's needs efficiently.

A focus on flow is a more modern way to look at efficiency and is defined as the amount of time it takes from identifying a need to satisfying that need, created through processes. That includes more attention on the unit that is processed, whether it is a product, customer or information, and how that unit flows through the organization. Instead of looking at processes from an internal view, flow is taking on a perspective from the flow unit's perspective. Instead of ensuring that every resource is active, flow efficiency is about always ensuring that someone is processing the flow unit. Flow efficiency can be analyzed by looking at how much value adding activities a process contain. Activities add value when they add value to the flow unit from the flow unit's perspective. One fundamental aspect when discussing flow in processes is the time the flow unit receives value. High flow efficiency is when there is a lot of value adding activities in relation to the total time of the process (Modig & Åhlström, 2013). Investigating flow efficiency has in this thesis been chosen since it takes the customer perspective into account and hence relevant from a sales perspective.

In the efficiency matrix Modig & Åhlström (2013) describes how the optimum state for an organization is high resource efficiency while at the same time reaching high flow efficiency. The matrix contains of four different distinct states, which have high –low

resource efficiency in combination with high – low flow efficiency. When an organization has high resource efficiency and low flow efficiency an organization must free capacity in the organization in order to move towards flow efficiency. Reaching both high resource efficiency and flow efficiency is the optimum state but difficult due to variation in the process. Variation can be grouped in three different forms; resource, flow units and external factors. As variation increases, organizations is often forced to choose between optimizing either flow or resource efficiency. In order to reach this state and organization would need perfect access to all information regarding the customers' present and future needs and perfect, flexible and reliable resources. These resources capacity, functionality and competence should also be able to immediately adjust to customer needs that arise. If variation can be reduced, it is easier to reach this state. Also, by becoming better at predicting demand and improve the flexibility and reliability of supply an organization can move towards the optimum state (ibid).

2.3 How to approach Lean in organizations

It is said that different ways to adopt lean and thus realizing a lean strategy in organizations exists (Modig & Åhlström, 2013). Either, the adoption of lean can be done on a high abstraction level where values and principles are developed or on a low level where methods and tools are designed. Creating conditions for flow efficiency the value in the organization must be addressed. Value defines how an organization should behave, where the lean concept points one condition for creation of efficient flow, i.e. teamwork (ibid). Teamwork has its ground in TPS and is being suggested by many lean in order to successfully adopt lean (Ohno, 1988; Womack & Jones, 1996; Myerson, 2012; Asafeso, 2013). Another way to adopt lean is to formulate principles that guide people in the organization on how to think when they strive for flow efficiency (Modig & Åhlström, 2013). These should be formulated with regards to the specific environment where lean shall be implemented in order to increase applicability. Lean can also be adopted through applications of certain methods. Methods define what an organization should do in order to improve flow efficiency. There are a lot of common methods used in lean whereof value stream mapping and 5S is two. The final element that needs to be considered when implementing lean is to consider what tools the organization has in order to become flow efficient. An organization must ensure that the right tools are available (ibid).
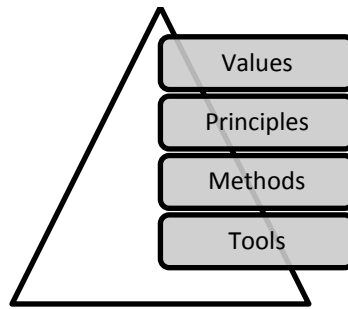
Figure 2: Ways of adopting lean

2.4 Alignment of organizational elements

In order to answer our research questions we noticed that additional theories related to different organizational components would be essential. This as there could be other explanations than just lean theories when analysing obstacles restraining flow efficiency. By relating our identified obstacles to these elements, it will enable us to truly address why they occur and thus increase the opportunity to formulate appropriate recommendations for increasing flow.

By using Jay Galbraith's (1995) five *"Star model"* framework different components of an organization can be analysed, i.e. Strategy, Structure, Systems, People and Culture. By having the Strategy aligned with the four additional elements better performance can be created in organizations (ibid). What also is relevant in the star model is the degree of complexity in an organization (Ashby, 1952), meaning that the more dimensions a business has, the greater the number of interfaces will need to be managed internally (Lawler & Worley, 2006). Number of products, business units and the size of a company are all factors that affect the complexity. Additionally, when a company is geographically dispersed new challenges of national culture, time and distance are introduced. This consequently leads to that many strategies today require high levels of cross-organization collaboration at multiple levels (Galbraith, 1995). The star model is fundamental in this study since an understanding of organizational elements and its problems is a prerequisite for making any future changes (Ohno, 1988).

Strategy

Strategy is the element in the star model that should be aligned with the four additional elements. When these alignments are evident the strategy that also encompasses the vision can thus be reached (Galbraith, 1995). The purpose of the strategy is to gain a

competitive advantage by either create better value through lower prices or greater benefits and services than the competitors (Porter, 1998). This theory further states that benchmarking and copying other organizations strategies has little useful application in organizational design. Meaning that when an organization starts to work towards a new strategy or vision it will affect the organization negatively if the strategy is not aligned with the other internal elements (Galbraith, 1995).

Structure

Organizational structure has been defined as following; the formal configuration between individuals and groups regarding the allocation of tasks, responsibilities, and authority within an organization (Galbraith, 1987; Greenberg, 2011). Mintzberg (1979) adds the dimension of coordination among these tasks, responsibilities and authorities by stating it as; the total of the ways in which its labor is divided into distinct tasks and then its coordination achieved among those tasks. In this way, he views structure as more than just static configurations. With this in mind, structure will be highly influential in how the sales process is coordinated in the studied environment.

Organizational structures can take different types of forms. We have chosen to present formations that are related large, well-established and global companies, hence increasing the relevance for our study. The structures that is relevant to discuss in our analysis is; functional, divisional and matrix. Functional and divisional forms of structures are two established formations with distinctive differences. Furthermore, when an organization wants to combine these two they apply a matrix structure.

In the functional structure the grouping is done according to department where people have the same skills and expertise (Kates & Galbraith, 2007). The advantages of this formation is especially efficient use of resources, in depth skill specialization, high quality problem solving and simplified training. The formation however results in poor communication across functional departments, slow response to external changes and difficulties to identify who is responsible for the problems that occur. Employees have also have a limited view of organizational goals. This organizational structure is common in well-established, large and stable environments with simple strategies and technologies (ibid).

In the divisional form departments are grouped together based on organizational outputs (Mintzberg, 1992). Diverse departments are brought together to produce a single organizational output. Division can be clustered in terms of products, regions or customers. The advantages with this formation is, compared to the functional form, higher responsiveness to the external environment, which is especially valuable in an unstable one. The coordination between departments improves and it is easy to point out who is responsible for what. It emphasizes overall product and division goals and people develop better general management skills. However the drawbacks are that the resources are duplicated across divisions, reducing resource efficiency. The technical in depth can also be affected negatively (ibid). This structural formation is often used in a company that is well established, large and has a diversified strategy (Kates & Gailbraith, 2007). Having divisions clustered by regions can also be called a geographical structure. Adopting this structure means that a company is organized around physical locations such as countries or regions. Benefits with a geographical structure is the local focus it contributes with and the opportunity for customization. Additionally, it enables relationships with local governments and can reduce transportation cost. On the other hand this type of structure can lead to challenges regarding difficulties to mobilize and share resources across regional boundaries (ibid).

In the matrix structure functional and divisional chains interrelate (Galbraith, 1972; Gailbraith 2009; Kuprenas, 2003). There are dual lines of authority where functional hierarchy or authority runs vertically and divisional hierarchy runs laterally. The advantageous of this formation is that an organization makes use of their resources more efficient than if only operating with a single hierarchy. It enables the organization to adapt easier to a changing environment and develop both general and specialist management skills. However, the dual chain of command can create confusion among the employees and conflicting interests between the two sides of the matrix. Many meetings are required to coordinate activities and human relations training are therefore a necessity (Kates & Galbraith, 2007). It is said that this is the only option available to capture all the value that can be exploited from widespread markets, global brands and products, and large, demanding customers (Kesler & Kates, 2010).

Different structural configurations are important to consider since the structure of our studied company most likely will influent the design of the sales process and thus affect how appropriate the structure is when increasing flow efficiency in sales processes.

Systems

Systems is the element in the star model that Galbraith (1995) also defines as processes, involving aspects as *how* the organization works. Including how information and activities cut across an organization's structure and how roles between different functions integrate. Additionally, systems also touch upon how ideas and knowledge flow in an organization or within a specific process (ibid). This is considered an essential element to analyse since our study aims at investigating a sales process.

People

This element in star addresses human resource management i.e. what motivates people and how organizations can work with incentives in order to influence what they do in their daily work. However, this part will not be relevant in our study, as we did not find any evidence for a resistance at Alfa to reach this vision. During our pre study people we saw that employees were aware of the new initiative at Alfa and hence open for discussing actions for change. However, we could have investigated suitable incentives for successfully reaching the new strategy, but because of the limited scope of the project we have chosen to focus on the additional four elements that are considered more suitable when investigating this change initiative (Kates & Galbraith, 2007).

Culture

The culture element in the star model points out the importance of overlooking the organization's culture in order to determine whether it is aligned with the vision or not. Definitions of cultures are several whereof Hofstede (1980/1984) state it as; "The collective programming of the mind that distinguishes the members of one group or category of people from others". Schein (1991) define corporate culture as; "the basic assumptions about how the world is and ought to be that a group of people share and that determines their perceptions, thoughts, feelings, and their behavior". Considering corporate culture is relevant due to the fact that organizations can use culture as a management tool to align the different parts of a company (Bartlett & Ghosal, 1987). Corporate cultures also involve challenges since it is difficult to construct and maintain

a culture that is flexible so that consensus can be reached. Four different categories of culture are described in the literature, i.e. Macrocultures, Organizational Cultures, Subcultures and Microcultures. Examples of subcultures within organizations are: the operator's, the engineer's and the executive's. Schein (1991) is convinced that the alignment between these three subcultures is critical as he states, "Many problems that are attributed to bureaucracy, environmental factors or personality conflicts among managers are in fact the result of the lack of alignment between these subcultures." It can also explain why formal structure and decisions don't always have the expected effect.

Schein (1991) has developed a model that divides a corporate culture in three different levels, i.e. *Artifacts, Espoused values* and *Basic underlying assumptions.* Artifacts is the first level and consequently easiest to detect in an organization, the level involves aspects as physical objects, language, expressions and behavior. The symbols are said to have different functions whereof one is that they can help the employees in an organization to share experiences with each other. The second level is espoused values, which involves rules of behavior, strategies, goals and philosophies that are stated by an organization. It further includes norms that employees are expected to follow, norms are vital when reducing uncertainty in different social interactions (Giddens, 1989). The third and most deeply embedded in the organization is the basic assumptions, involving behavior that is taken for granted and usually made unconscious by people. Employees further treat the basic underlying assumptions as "truths", which make them almost impossible to observe. According to Schein (1991), culture is the most difficult organizational attribute to change and hence could act as a great obstacle for reaching a vision. He further elaborate that the difficulty increases as the change addresses the lower levels of culture, meaning that basic assumptions is the most difficult part to change.

2.5 Theoretical framework

Described theories related to organizational elements aims at answering why certain obstacles occur in our study while earlier described additional theories connected to lean will be used when explaining why the obstacles identified are obstacles according to the lean concept. An illustration of our theoretical framework is thus presented below.
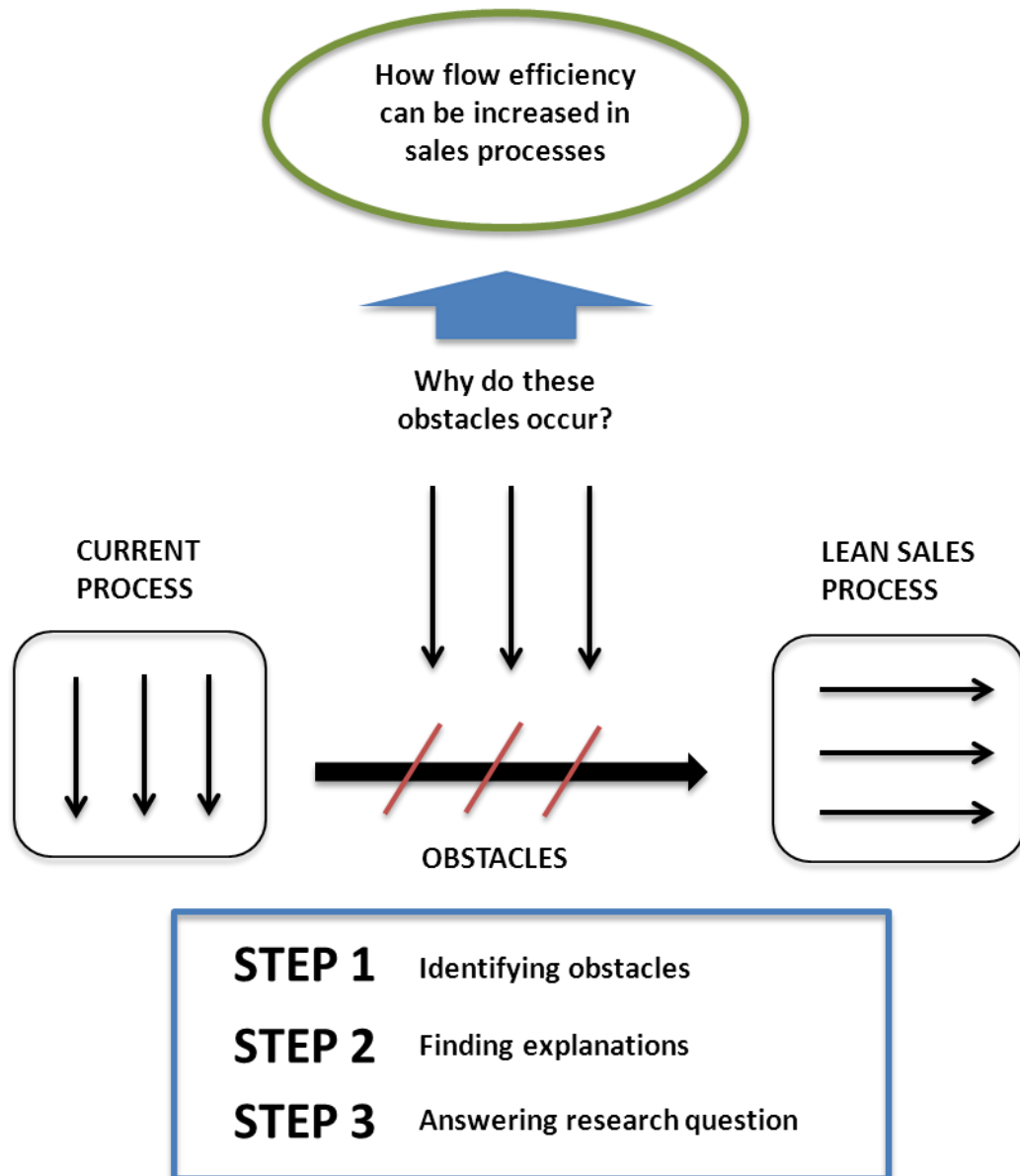

Figure 3: Theoretical framework

3.0 METHODOLOGY

The following chapter will describe and argue for used methodology. That includes descriptions of our research approach, our choice of doing a case study as well as interview sample & design. Finally we will discuss performed data analysis and how we secured its quality.

3.1 Research approach

The choice of method aims at reflecting the overall research strategy as the methodology shapes which methods are used and how each method is used (Mason, 1996). Below, different methods will be discussed and chosen.

Abductive approach

We will in our study apply an abductive approach by combining deductive and inductive reasoning. In deductive reasoning specific theory related to the chosen topic are used to formulate specific hypotheses that can be tested in the study. Inductive reasoning works the other way around. The study starts with collection of data to detect patterns and find consistencies. The researcher uses the findings to make broader generalizations and generate theories. (Bryman & Bell, 2007).

Simultaneously with the data collection relevant theories were discovered and discussed during the process. When analyzing the data and when our findings were clear the final theoretical framework was set. This would indicate an abductive approach where the researcher aims for new findings in the field and then use established theories to explain them.

Using a deductive approach had locked us to certain theories in an early phase and would consequently have given us little room for gaining new insights within the field. Since the theoretical field within the adoption of lean on sales processes is weak a more holistic perspective needs to be taken in order to make a contribution to the field, which indicates that an inductive approach is suitable. However, as Alfa already had initiated a lean sales project we knew that our study to some extent would involve theories related to lean which explained why an deductive approach also were applied.

Qualitative approach

A qualitative or quantitative approach is defined as two fundamental methods within research. Through a qualitative method the researcher can acquire a deep

understanding of a phenomenon by looking at it holistically and dissect it to point out the root problems. Further, this method helps the researcher to obtain underlying and non-obvious factors; which otherwise could have remained hidden (Miles & Huberman, 1994). The primary aim of a quantitative study is to generalize through statistical sampling procedures (Silverman, 2010). It provides the researcher with a representativeness of the sample if the population characteristics are known. It also allows one to make broader inferences about the whole population since the study examines a representative subsection of a precisely defined population (Arber, 1993). In a qualitative study these procedures are usually unavailable; instead, the data comes from one or more cases, which has been chosen without random selection (Silverman, 2010). Since the purpose with our report is to describe and provide a better understanding for what obstacles that can restrain adoption of lean on sales processes an explorative approach is taken. Meaning that a qualitative approach is the most suitable one (Justensen & Mik-Meyer, 2011).

3.2 A single instrumental case study

When evaluating which method to use when answering our defined research questions a case study at Alfa came up as the most appropriate choice. The basic idea of a Case Study according to Keith Punch (1998) is described as follows: *"One case will be studied in detail, using whatever methods seem appropriate. While there may be a variety of specific purposes and research questions, the general objective is to develop as full an understanding of that case as possible."* Backman (1998) explains that a case study is useful when the object is a complex organization or situation and the focus of the research is to understand and explain. The objective is to obtain multiple perspectives of a single organization by extracting information from company presentations, annual reports, along with direct observations and interviews (Blumberg et al., 2011). In other words, the objective of a case study is to obtain a holistic approach. In our study we are examining the defined research question in one particular environment but in various departments and through different angles, which indicates a holistic approach. Due to the large size of Alfa and their high technological products both the organizational structure and the products are considered to be complex, which gives us further arguments for choosing a case study. Furthermore, Robert Stake (2000) has identified three different types of case studies;

- The **intrinsic case study** where the case is of interest and have no purpose to generalize beyond the case or build theories.
- The **instrumental case study** where a case is examined to provide insight into an issue or to revise a generalization.
- The **collective case study** where a number of cases are studied in order to investigate some general phenomenon.

A collective case study would have been highly relevant in order to create a broad and in depth understanding of the phenomena, however our limited resources in this study give us no room for such an investigation. Furthermore, an intrinsic case study is resisted by many qualitative researchers since it is usually left with "So what?" questions (Stake, 2000). Given how behaviour varies in different contexts, an understanding of how any one setting may be different from others is essential (Gobo, 2008). With the purpose to contribute to the theoretical field of lean the research should entail some degree of generalizability, whereof we have chosen to conduct an instrumental case study.

Number of cases

This thesis will perform a one-case study at a company. Instead of investigating several companies we will dig deeper into Alfa's different functions in a process and thus take a holistic perspective within the organization. This is in line with what Blumberg et al (2011) argue for is the objective with a case study; to obtain multiple perspectives of a single organization. One case study also leads to more in depth observations (Voss et al., 2002) which we are striving for in order to get qualitative results. Due to limitations with this thesis, it was impossible to make several case studies with this approach as it would have taken too much time.

3.3 Pre study

Performing a pre study was essential as it contributed with necessary background information. It was also an opportunity to evaluate whether lean in sales processes was a relevant topic to conduct a study within. Additionally, it helped us to set up frames for the subsequent core study, involving how a product push process looks like today at Alfa and what types of issues that is connected to it.

During spring 2013 some employees at Alfa that participated in the lean sales initiative conducted presentations and power points about current problems they saw in Alfa's sales processes, which we could take part of. In total we studied all nine presentations as a part of our pre study. What we could conclude from these presentations was that there was clear issues related to a product push process which obviously explained why this initiative had been undertaken. The presentations gave us four overall obstacles that we would carry with us and test in our core study;

- Too many transactions between different units
- Low degree of customer focus
- The early phase in a product push process is too long
- Poor communication when sales material has been updated

Some of these obstacles were later disclaimed during our core study; additionally some were approved together with new being added.

3.4 Collection of data

In order to get a broader view of the phenomena as well as more qualitative results the case study was designed through a triangulation. That included observations, collection of documents and records as complements to qualitative interviews (Gillham, 2005).

The three aspects of our triangulation occurred parallel and not sequentially, even though some line of actions can be described in a wage order. Our first activity at Alfa involved participating and observing a whole day workshop at their head office. The purpose of that day was to make a collective review of their sales processes and to discuss how they could adopt lean on sales processes. Participants were among others a consultant with specialist competence in lean, several managers from the head quarter, a few representatives from the regions and other employees within the business area A. Approximately 70 people participated. During the workshop, two managers facilitated discussions and arranged with group sessions and presentations. They mainly elaborated on problems in their sales processes and how these can be overcome. We took notes and also conducted observations during this day.

With our insights from the pre study and our participation in the workshop we started moving towards a problem formulation and was able to decide upon research questions

that would target the overall problem within our research area. After we had formulated our research questions we began with our core study where we apart from conducting several qualitative interviews participated and observed in three internal get-togethers, each containing approximately six employees. Additionally, we had continuous discussions with our contact persons at Alfa. We also made use of internal documents such as quarterly quality reviews of the sales process. By doing so, our triangulation method was fulfilled. Our main focus in our data collection was however our qualitative interviews with employees working at different functions at different hierarchical levels in a product push process.

During the collection and interpretation of data we made use of the grounded theory approach developed by Glaser & Strauss (1967), meaning that theory is discovered from the data. What we did was to first collect the data and as a next step explore applicable theories, hence not start out by developing the theoretical framework and then collect data. Glaser & Strauss (1967) explain that this is a way to reduce the opportunistic use of available theories or force popular theories to the data. Using this approach has contributed to a creative theoretical framework where different theoretical areas come together to explain our findings.

3.5 Interview sample

We conducted fifteen qualitative interviews, that all lasted between one to two hours. Our contact persons at Alfa contributed with several persons to contact, whereof we had earlier indicated that we wanted to speak with people from different hierarchical levels and functions in a product push process in order to get at broad perspective on the sales process. All of our interviewees were currently based in Sweden. Many of the employees we talked to had however earlier worked abroad, and hence had valuable international experience and a broad understanding of the whole sales process, from the head quarter to the regions. Furthermore, they all had long experience from working at Alfa, everyone in the scope of 12-25 years. We saw their long and multifaceted working experience within the company as a benefit, giving us more qualitative data. Anyhow, interviewing more recent employed workers could have contributed with a better mix, this was however hard to accomplish since the vast majority of the people working at Alfa have been working there for a long time. Two of the fifteen interviewed had a business degree while the rest were educated engineers,

reflecting the large amount of engineers working at the company. The interviewees consisted mainly of people from different departments, although five of the fifteen were managers with personnel responsibilities.

During the data collection we were given new names to contact by the people we had already interviewed. This enabled us to lead the data collection process more independently as we could request new names working at positions we would like to further investigate. Consequently, this minimized the risk of Alfa controlling the people we talked to and thereof also their chance to affect the result and the information given to us.

3.6 Interview design

There are various forms of interview design that can be developed to obtain thick and rich data when applying a qualitative investigational approach (Creswell, 2007). There are three formats for interview design (Gall, Gall, and Borg, 2003) that can be applied in qualitative studies; *informal conversational interview, general interview guide approach,* and *standardized open-ended interview*. With the informal conversational approach, there are no specific types of questions; rather the interaction with the interviewees guides the interview process (McNamara, 2008). This approach was not chosen since it would make the interviews too unstable (Creswell, 2007), with a risk of moving away from the intention with our study, looking specifically for obstacles and issues in the sales process. The general interview guide approach is more structured although still a bit of flexibility is allowed in its composition (Gall, Gall, & Borg, 2003). The interviewer control the interview using some predetermined areas to talk about, however not formulating questions beforehand, instead they are formulated during the process. The drawback with this design is that the respondents may not consistently answer the same questions while the benefits is that it provides more focus than the conversational approach, still allowing a degree of freedom and adaptability in getting information from the interviewee (McNamara, 2008). The standardized open-ended interview is similar to the general interview approach but differ in terms of being extremely structured in terms of the wording of the questions. Interviewees are always asked identical questions although they are formulated so that responses become open-ended (Gall, Gall, & Borg, 2003). This allows the interviewees to contribute with as much detailed information as they desire and it also allows us to ask probing questions. We

choose this interview design, as it is explorative to its nature without the risk of losing focus in the interview. It also reduces the risk of getting inconsistencies in the answers and thus making it difficult to extract clear obstacles in the sales process. However, due to the richness in the responses it can according to Creswell (2007) be difficult to code and find patterns, although it is something we believe will not be a challenge in our case due to our manageable amount of interviews and the fact that we used interview protocols. The protocols ensured that the interviews were concentrated on the study's purpose and that bias due to poorly designed questions was avoided (Alvesson, 2010). During the interviews we started off with presenting an illustration of a product push process. The reason for this was that we wanted to secure that when answering the following questions they would all have a similar picture in mind of how a product push process looks like. The figure was a rather vague illustration of a process, i.e. functions being involved, transactions between different units as well as key decision making points. Our definition of a product push process was secured during our pre study since asking questions about how a process looks like would not fit in the scope of our qualitative interviews. Our first security question was consequently "Do you consider this to be an appropriate illustration of a product push process at Alfa?". Everyone agreed that it was a fairly representative illustration of the process.

Open questions regarding obstacles within the process were thus asked, i.e. obstacles from a flow perspective of lean. Since all of the interviewees earlier had been participating in at least one of Alfas's presentations about the lean sales initiative, they all had fairly broad knowledge about the lean concept and flow efficient processes. Our focus on the flow aspect of lean is derived from Alfa's own definition of lean but also, as described in theory, that we wanted to define lean on a high abstraction level. Nevertheless, obstacles not directly related to lean were not neglected as we collected data about all type of obstacles that was raised. The respondents answered the questions from his or her own point of view (function) as well as from a more holistic perspective, using the illustration as help. After elaborating on the obstacles questions about how these could be overcome was further asked. Even though this would later be analysed through our own analysis and theories we still wanted to involve the employees opinions as it got contribute to the analysis as well. If the interviewees had

not touch upon some of the obstacles that were discovered during our pre study questions about these were lastly asked.

This type of approach requires a lot of preparation as well as high levels of analysis and interpretations. In practice this implicates that the same type of open questions are asked to the interviewees, hence making use of a standardized open-ended interview (Gall, Gall, & Borg, 2003). A semi-structured approach like that of an standardized open-ended interview was selected due to the precision and the level of openness produced, i.e. the method facilitates strong elements of discovery while its structured focus allows analysis in terms of commonalities (Gillham, 2005). The questions we asked were open but at the same time targeted, as that increased the productivity. Asking questions that really gave answers to what we were investigating was further important.

3.7 Data analysis
Data was collected through transcription during our qualitative interviews and was thus not recorded. We both participated in all interviews since that reduced the risk of individual biases (Voss, Tsikritis & Frohlich, 2002). Our analysis of the data followed certain steps, which are further described below.

1. **Looking for patterns –** already in our first interviews we could start seeing certain patterns and obstacles in Alfa's product push processes. This is aligned with the grounded theory that says that the analysis starts already when the first data is collected (Glaser & Strauss, 1967). However, after have finished all the interviews we printed our transcribed material and more thoroughly categorized observed patterns, i.e. areas to which obstacles could be referred.

2. **Applicable theories –** with the problem areas being defined we continued with investigating applicable theories that could be interconnected to our empirics. Even though we had more or less started to research theory during our data collection (inductive approach) the final theoretical framework was set after the data collection was finalized.

3. **Coding** – During this phase we uncovered and compiled the data into sections or groups of information, also known as themes or codes (Creswell, 2003, 2007). These themes or codes are consistent phrases, expressions, or ideas that were common among research participants (Kvale, 2007). This procedure was relevant since a questionnaire with open questions is almost impossible to

analyse without coding (Gillham, 2005). Empirics from our triangulation together with chosen theories served as the foundation in our analysis. Even though the data has been coded qualitative interviews always contain some kind of interpretations of what the interviewee has said, in literature called the "reliability-validity dilemma" (ibid).

3.8 Limitations and quality aspects

As we have chosen a qualitative method, the trustworthiness in the results produced could be questioned, as these concepts cannot be used in a correct way (Shenton, 2004). Measurement is a central problem within qualitative research, however several researchers have demonstrated how to deal with this. Guba (1981) has constructed four criteria's in qualitative research that corresponds to the ones quantitative researchers employs in their work. In this way he has distance his work using another terminology.

In quantitative research, the researcher objectively tries to observe and assess data using the concepts reliability and validity. These are common concepts used with the purpose to ensure a quality in the research and that the phenomenon is being presented in a correct way. The concept reliability is being used to examine how consistent a measuring device is. If the measurement chosen in a particular method produce similar results in similar circumstances it has high reliability. The concept validity is being used for studying if the study measures or examines what it claims to measure or examine.

Reliability and validity have been transformed by Guba (1981) to four criteria's that are appropriate in qualitative studies. In preference to validity he uses the criteria's credibility and transferability. In preference to reliability he uses the criteria dependability. In addition to those, he adds one criteria which is confirmability. Guba's (1981) constructions have further been accepted by several researchers, whereof Shenton (2004) is one. We have chosen to ensure and examine the quality in our study derived from Guba's (1981) four criteria's, which will be further described below.

Credibility

In quantitative research, credibility would instead be labelled internal validity i.e. that the study measures what it intend to measure. Credibility is seen as the most important aspects to consider in a qualitative study in order to ensure trustworthiness (Guba & Lincoln, 1985). Suggested solution for this is further to use and adopt well established

methods. Conducting a qualitative study and using an abductive approach is not a new way of conducting a case study and has in several cases proved to be a suitable method when answering research questions like ours. In addition to this, we chose to use a triangulation method for data gathering (interviews, observations and secondary data from Alfa's internal documents) which according to (Guba, 1981 & Brewer & Hunter, 1989) "compensates for their individual limitations and exploits their respective benefits". Also, the triangulation in combination with interviewing a wide range of informants within different functions contributed with several perspectives. We believe that a multidimensional perspective is especially important when analysing a process consisting of several different people and functions in order to avoid a biased result. Stake (1994) further suggest this approach since is provides a greater knowledge of a wider group. However, some unavoidable limitations have been evident. Firstly, our sample of 15 in depth interviews can be seen as a too small sample size. The issue is mainly the fact that there were no more than one to three people from each department which increases the risk for biased contributions. Since we took a holistic perspective on a sales process a larger sample size, with specifically more people that represented each department, would have been required in order to strengthen the results. Another option that we considered was to conduct a survey to increase the credibility of what we found in our qualitative study, however this was not possible when discussing it with Alfa.

We ensured the participants that we were independent researchers with the mission to collect data for a large development project and had no interest of investigating or targeting individual persons in the study. By this we believed that we would encourage an open discussion about different issues and opinions with no concerns about us spreading individual comments to managers, also recommended by Guba (1981). After we had conducted our interviews we had a debriefing session with our supervisors at Alfa where we discussed the results together. Guba (1981) further argues that this provides an arena for testing developed ideas and interpretations. Additionally, it enables an investigation of recognition of biases and preferences, which increases the credibility in the results. Through our close discussion with the researcher within lean, Niklas Modig, we were able to scrutinize the work as it progressed from an academic point of view, which also increased the credibility (ibid).

The researchers' choice of theoretical approach, interview questions, interview techniques and samples, can lead to potential deformations of the result of the research (Ahrne & Svensson, 2011). We therefore acknowledge that the choice of our theoretical approach might affect our results. Also, when considering these aspects critique can be pointed at our interview sampling and the fact that all interviews were made with people currently working in Sweden. Since Alfa operates globally it would have been essential to interview employees working at some of the different regions abroad. This was however in some way secured since few of the interviewees previously had been working abroad and could therefore contribute with valuable insights from a global point of view. It should lastly be mentioned that one possible limitation is that the interviews were held in Swedish, which involves a potential risk for errors when translating the transcribed material into English.

Transferability

Transferability is within quantitative research called external validity i.e. how the work at hand can be applied to a wider population. Creating generalizability in qualitative work is impossible according to Erlandson et. al (1993) as the results created in these type of work comes from the specific environment investigated. Buchanan (2012) defends this by saying that it is possible to generalise findings from case studies, not from sample to population but from experience and observations to theory. Since it has only been possible to conduct one case study in the scope of this research the generalizability can thus be questioned. We are investigating a high technological company operating globally, whereof we want to make a contribution to the theories related to companies witch such characteristics. Since only one case study has been made and not a comparable one it will thus be hard to conclude that our results not can be applicable to companies with other characteristics as well. We have been well aware of this fact and hopes that further research can explore this further. However, Bassey (1981), Lincoln & Guba (1985) and Firestone (1993) all argues for the fact that if the contextual environment is being described sufficiently so that the reader can make inferences to similar situations the transferability increases. We will therefore in our empirical background introduce the reader to the broader environment were the study has taken place so that one can make inferences to similar type of organizations. We

will further on in the empirics describe the specific sales process in order to enable the reader to make inferences to similar type of processes.

Dependability

Quantitative researchers employ special techniques to gain reliability in their studies, i.e. similar results would be obtained in another study if it contained similar methods, with the same participants and in the same context. However in a qualitative study the phenomenon addressed takes place in a changeable environment, creating issues for the researcher (Marschall & Rossman 1999). Shenton (2004) states that dependability can be obtained through describing the processes within the study in detail, enabling a future researcher to repeat the work. With this in mind, we ensured a thorough description of the research design and its implementation and also ensured that we reflected upon the methodology's effectiveness using these four quality aspects. A thorough description of the research design can be found in the chapter *"Research design".*

Confirmability

Aiming for total confirmability in a study is argued to be impossible as the use of instruments in the study is designed by humans and inevitable objects for subjectivity (Patton, 1990). Our triangulation has however been suggested as a method for dealing with subjectively (Shenton, 2004) something we have been undertaken in this study. Also, we have also strived for informing the reader where confirmability issues might occur (see previous parts in method) recommended by Miles and Huberman (1994).

4.0 EMPIRICS

In the empirics we present our main findings from the study. We will start off with providing the reader with an empirical background, including descriptions of the company Alfa as a whole and describing the design of a sales process, specifically a product push process. After this we present the different types of obstacles we found with the use of our data from the interviews. We describe how the obstacles takes form and general comments from the interviewees why these can be seen as obstacles.

4.1 Empirical background

Data in the empirical background is mainly gathered from observations, the information provided during the workshop and collection of documents & records, even though the interviews contributed with additional information as well.

The company Alfa

Alfa is today one of the world-leading providers of telecommunications equipment and services to mobile and fixed network operators. The company offer's end-to-end solutions for all major mobile communication standards and is with its multibillion dollar turnover one of the largest actors on the market. Over 100 thousand people work at Alfa and are scattered across different continents around the world, with most of the employees located in Northern Europe and Central Asia. Alfa, as well as all other actors within the industry invest heavily in research and development (R&D) of new products and want with this deliver high quality products.

Alfa's head office is located in Sweden were the strategic apex and different stab functions as HR and Sales Support are located. The operational core is distributed at several different regions spread across the world, each operating independently. Their primarily mission is to work towards customers in the specific region and are further responsible for sales, operations and maintenance of Alfa's products.

Alfa has initiated a stronger sales focus

Actors within the telecommunications equipment industry generally have high R&D costs since the development of new high technological and complex products is a fundamental part to the overall business. A common used key ratio within this industry is sales to R&D, thus showing how well an organization can convert its R&D investments into sales. Since delivering high quality products always has been important for Alfa this

is seen as an essential component of their business. With this in mind it can be argued that it is especially important for actors within this industry to have a higher turnover, whether it is driven by volume or price in order to reach satisfying sales to R&D ratio. However, due to increased international competition throughout the last years, Alfa and other actors within the industry have faced high pressure to lower prices in order to close deals, which have had negative effects on their profit margins (APPENDIX 1). Even though actors within the industry believes that the quality of the products should correspond with higher prices it is still announced that it is nowadays difficult to argue for higher prices and the actors are hence being force to lower prices to ensure sales. This has had a positive effect on sales volumes (APPENDIX 2), although not a sufficient state when creating a satisfying R&D to sales ratio and ensures profits. However, Alfa still wants to keep their positioning as a quality provider for the customers, thus the focus in the sales process is foremost to become better on arguing for the value of their products. Still, they do not ignore the importance of securing sales volumes, which makes the issue two pieced.

With these insights Alfa has recently initiated a strong sales focus in the organization, by introducing a lean sales initiative. The initiative was introduced in the organization during spring 2013 with the vision to create better and faster results to customers, using lean as a foundation. The implementation of the vision is still in process and when they formulated it the purpose was to introduce a new way of doing businesses and hand over much of the responsibility to the employees to articulate actions for change. As one manager stated;

"Alfa has a long history of centralized decision making and as the lean concept implies, we instead have to empower the employees and make them responsible for creating change. Therefore we are just providing them with the opportunities to act as drivers for change."

With this in mind, our purpose became obvious. A next step to reach this vision would be to investigate what types of obstacles that could be found in a sales process which in turn act as barriers for the employees to drive change and consequently increase flow efficiency in their sales processes. In the next section a description of the product push process will be presented.

The product push process

A product push process is the process that occurs when Alfa is about to launch a new or modified product on the global market, meaning that a product is called new when the R&D department has developed a new hard- or software. The products are generally characterized by high complexity, high degree of differentiation and numerous hard- and software components. Alfa is delivering a range of products that is broader than many of their competitors. Their customers are mainly telecommunication companies.

Through a product push process, a new product is subject for creation of sales and marketing material and product offerings. The product push process can hence be said to be divided in to. The production of sales and marketing material and the creation of a product offering for a specific customer. Production of sales material is produced for a specific product before initiating any type of sales and have the purpose to support the creation of product offerings and enable sales. In this creation only internal processes occur. As a next step in the product push process the product offering is created with support from the existing sales material. In this stage customers are involved in order to make the product offering correspond to their demand. A product offering can further include one specific product or a set of packaged products. In a product offering both internal and external processes occur. Pricing, additional services and installation solutions is included in the creation of a product offering.
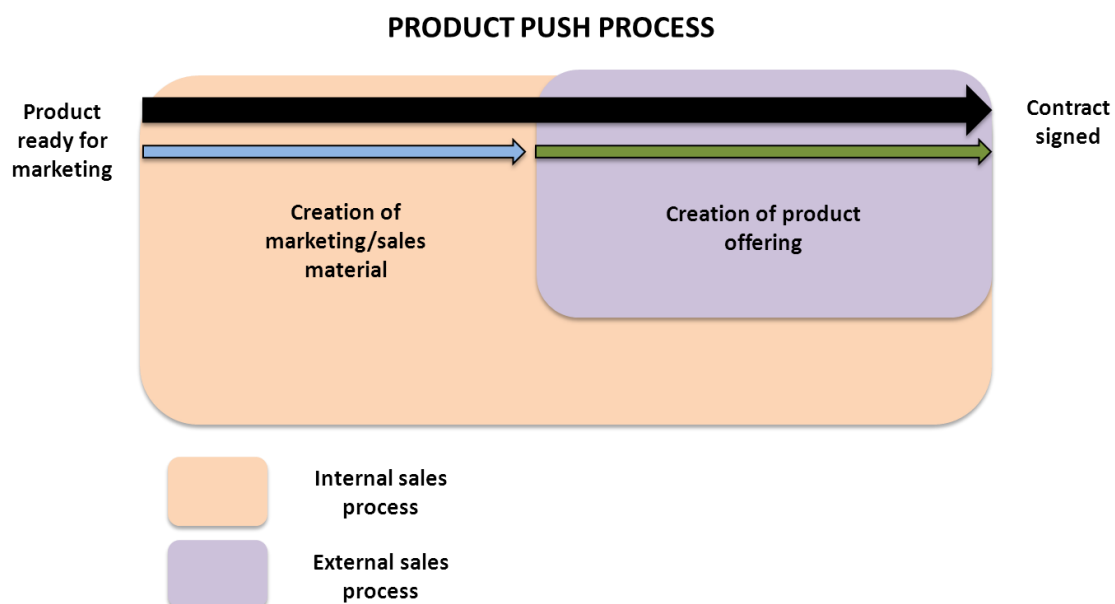
PRODUCT PUSH PROCESS

Figure 4: Product Push Process

During a product push process different action steps needs to be completed by different units within the organization, hence leading to numerous transactions flowing collaterally during a product push process. Example of action steps can be updating or producing value argumentation material, calculations of sales price or technical descriptions of the product. We have chosen to look at the internal processes that take place within a process and hence not including external interactions with customers. Today, all sales material that is used when creating a product offering is documented both virtually and physically, containing different categories of sorted and collected information. This material is essential in a product push process since it contains all information about a specific product. This is also what we define as the flow unit in a product push process. The purpose with all the material being produced in a product push process is to support other functions at Alfa, mainly the regions, with essential information and knowledge about a product offering, which will be described more in depth in the following chapter when describing the actors in the product push process.

Even though there are guidelines regarding what should be done in a product push process variations are still evident, thus different processes can have different characteristics. The degree of complexity in the products is one factor that can affect the type of material being produced. Which department or person that is responsible for certain action steps can further vary, whereof our data showed that there is some degree of uncertainty among the employees related to responsibilities in the process as they at some instances can differ. Numerous transactions and queries are flowing between different departments during a product push process, both when creating sales material and product offerings.

Actors in the product push process

When studying Alfa we have mainly divided its actors into two categories, meaning that we have separated those who work at the sales support department in Sweden and those who work at one of the regions around the world.

Sales support's overall responsibility is to produce and deliver sales material to the regions. The purpose with the sales material is among others to generate valuable knowledge and information regarding product offerings. Sales support further supports three different business areas within Alfa whereof the one focusing on products

(business area A) will be analysed in this thesis. At sales support functions as Marketing, Pricing, Services, Product owners and Technical support can be found.

By being physically closer to Alfas's different markets the regions are responsible for interacting with potential and actual customers and consequently sell the product offerings. The regions further consist of several sales teams and additional functions. The sales teams consist of Key Account Managers (KAM) and additional supporting roles, relationships with the customers are mainly built through the sales teams as they are the ones that physically meet with the customers.

4.2. Empirical findings

This part of the thesis we present our finding from our qualitative interviews, observations and secondary data collected. The findings are presented according to which obstacle they are connected to and in total we present three main obstacles. Within the first obstacle, several aspects has been pointed out but they all is corresponded to the overall issue which is

Customer insights not incorporated in the sales process

One main finding from our data is the lack of customer insights being incorporated in the sales process which is shown in the value argumentation produced at sales support. This absence of incorporating customer insights is hampering the ability to argue for high customer value of the product. Low degree of customer insight in the sales material further showed to have a negative effect on the usage rate of the material at the regions. Explanations are presented below.

Value argumentation not bringing enough value to the customer

During our study, we got the information that the value argumentation is one of the most important aspects of the sales material when a product offering is being presented to a customer. This part shall enhance the positive effects the product will have on the customers own business performance and hence stand for the commercial aspects of the product offering. Having customer insights when formulating the value argumentation is said to be an important aspect in order to make the offering relevant to the customer and commercial viable. Customer insights involve knowledge about what the customers demand and perceive as value. Especially employees within the sales teams stated that not incorporating customer insights in the value argumentation

leads to difficulties when communicating the value of the product to the customers. Further explaining that the content of the value argumentation currently has low relevance when convincing the customer to buy a certain product or offering. The value argumentation does not fully explain how the specific customer would value from buying the product. Instead, the value argumentation is more described as generic and targeted to all customers. This further makes the value argumentation product oriented rather than customer oriented, containing descriptions of potential benefits connected to the products. One employee states;

"The value argumentation is pretty much a summarized product description" –
Sales support

Both sales support and the regions believe that more customer insights when producing this material would increase the quality of it as sales support would be able to create value argumentations less product oriented and generic. Furthermore, our data showed that customer insights already exist internally at Alfa, within the sales teams. Since the sales teams continuously interact with their customers, insights are naturally gathered in the day-to-day work. One representative describes;

"Since we are closest to the customers we also know what they demand and value" -
Regions

However this knowledge about the customers is said to not be fully utilized when creating value argumentations. Sales support states that they independently are responsible for producing the material, which the regions confirm by stating that they are not involved in that creation. It is said that in order to transfer valuable insights between sales support and the regions collaboration between the two needs to be apparent when the argumentation is being produced, which is not the case today. However, some degree of transferring of customer insights is confirmed. This happens when queries are continuously flowing between the two, for example when sales support is answering questions coming from the sales team. Different questions could sometimes indicate what information the customer need and thus contribute with knowledge about what is value for customers. This was thus not totally evident and

consequently hard to evaluate, we instead conclude that there is no set structure for collaborative work between sales support and the regions.

"It would have been good to get feedback on the material we produce and also indications of what is used and what is not, however we have no strategy for it" – Sales support

Both sales support and the regions raise concerns regarding the low degree of collaboration and how it also consequently leads to the two have different opinions about how a value argumentation should look like and what is should comprise. Sales support believes that they have the customer in focus when producing the material while the regions believe it is too generic. Meaning that since the regions are working towards different markets the value argumentations consequently should be adjusted to different customer segments. A KAM strengthen this fact by stating that it is hard to convey customer value when sales support has produced material that aims at targeting all potential customers. Even though sales support to some extent consider the material to be customer focused they also highlights that there is need for improvements regarding how insights are transferred between sales support and the regions. Sales support mentions how continuous feedback and remarks from the regions when material is being produced would help them create more qualitative material, as it would enable revisions and continuous improvements.

Low customer value leads to low usage of the value argumentation

Not incorporating customer insights enough in the value argumentation is shown to impact the use of it at the regions. When talking to employees that are currently working or have been working at the regions they state how the value argumentation is not bringing enough value for them in their work. Some even say that they are not using it at all and hence do not get enough support from sales support. Even though this was especially evident for the value argumentation the low usage rate could also be referred to additional material aiming at convincing customers to buy. Reasons for low usage rate of additional material will be presented further on in the data below "technical focus". In this part we focus on the low usage rate of value argumentation material at the regions.

The purpose with the value argumentations is to communicate benefits with a product, which the sales teams consider is not working optimally today. This since it contains too much calculations without enough additional text that are commercial. This was further strengthened by our own observations of the sales material. Vast amounts of different diagrams and statistics related to product performance and features were evident, without successfully communicating an understanding of the offering. It should however be considered that it was our own observations, when we investigated the material without anyone explaining it to us. We can thus not for sure say that the value argumentation lacks customer focus if only considering our own observations.

People working in the sales team states that they would demand more arguments that they could actually use when selling, that includes arguments that has its foundation in what the customers demand, their interests, how they evaluate the product offerings, answering questions like "Why Alfa?", "How much money will I save in the long run?", "How will this impact my customers?". Today the value argumentation is to a large extent product oriented rather than customer oriented. Once again, this was seen during our own observations of the value argumentation, many of the calculations and figures were only combined with a few sentences of text, hence indicating that it can be difficult to understand by the sales team as it is not put in a context they understand, i.e. a more commercial one. When the value argumentation material moves towards becoming too product oriented, with less regard to what the customer demands it creates less value for the sales team when trying to convince customers, which consequently makes it difficult to use in their daily sales work. That leads to production of support material that is later not fully used by the sales team and consequently not reaching the end customers. This is something that has been confirmed by both those who currently works at the regions and those who previously have been working there and now are located at the head office. As one person at sales support states;

 "We are not sure about what is considered as useful at the regions" – Sales support

Our data further shows that this problem is not related to the sales support not considering the regions demands, rather the sales teams does not know what is considered as valuable since they do not have a set structure collecting such insights.

Technical orientation

Another finding from our data is the evident technical orientation at sales support. This is reflected partly by the material being produced but also through other aspects, which was found during our observations. The sales teams further showed to perceive this as an obstacle when receiving some of the material. Below we describe this finding more thoroughly.

When producing sales material at sales support the technical focus of it was evident. People working in the sales team said that this was an issue as much of the material is difficult to understand or make use of in their daily work when it becomes too technical. It was although further showed that for some of the material the technical aspects are totally necessary while for some it is not in the same extent. Descriptions of products and its features is information that customers and employees regard as essential and consequently work as hygiene factors in the product offerings, simply meaning that it needs to be delivered even if it may not be the determining factors when selling. While in for example the value argumentation and additional sales material that aims at convincing the customers other aspects, such as a commercial focus is more important.

Our data showed that one explanation for the overall technical focus in the sales material is because of a technical mind-set at sales support. The technical mind-set is believed to originate from the fact that many people are educated engineers, hence having a strong technical background as well as low exposure to customers in general. As one person states;

"One problem with our insufficient value argumentations is among others that there is too many engineers and too few being educated in business here at sales support " – Sales support

Additionally, many of the employees at sales support do not have any sales experience or knowledge in customer behaviour or needs, which they believe affects the content of the sales material and how it is being presented. However, due the fact that people at the regions do not have the same type of technical experience or in depth knowledge about the products is said to increase the low usability of the material at the regions, connected to earlier presented obstacle. These two distinct competence areas are further evident when people from the regions elaborate regarding the value

argumentation and its content. A KAM believes that the value argumentation could be improved by putting more emphasize on what concrete results the product can produce for the customer. Another manager at a region thinks that there is an issue when the product owners tries to argue for how their product can benefit all potential customers instead of thinking; "What type of customer should I reach?" and thus directing the argumentation for this specific group.

In general, people from the regions mention that value argumentation and other additional material that aims at convincing the customers to buy in a larger extent should be customer focused rather than technical focused. When further elaborating on this fact too much details and high complexity in the material was highlighted. This came up as an obstacle when calibrating the information, as when the regions does not perceive the material as qualitative enough they instead have to put effort into adjusting the material to better suit their customers. Even though they believe that some modification to their specific customers is necessary since they know these customers best, it is still more technical than needed.

Employees further states that increased quality in the material most likely would lead to fewer transactions between sales support and sales team. Sales support mentions how they sometimes get very simple questions from sales teams and that these queries should have been answered through the material. One quote emphasize this finding;

"We get a lot of basic questions from the regional offices which probably could have been reduced by producing more qualitative material" – Sales support

The sales teams defence this by saying that the material is either not good enough or that they do not have the time it takes to calibrate all the information, hence calling or e-mail someone is easier. The sales material contains a lot of information to calibrate for the sales team and choose from.

Further evidence for a technical atmosphere at sales support was evident when visiting Alfa's head office; many of their products were exposed through pictures attached to walls in corridors and in the reception a large exhibition of products were exhibited.

Lack of commercial contextualization

Another issue connected to low value adding material is the lack of putting the sales material into relevant contexts. This was said to be a consequence of a technical focus at sales support. From a previous study internally at Alfa they found that 92 % of the sales teams lack some information in the documents that can be related to contextualization. These include value proposition, reference cases (success stories from other clients) and business scenarios (explaining how the product can create financial benefits by putting it in a commercialized context). This issue was also present during our interviews and people from the regions pointed out the problem of contextualization i.e. they had hard time to fully understand where and why to use some of the material produced at sales support. Leverage on previous cases was highlighted as something that could improve the selling process;

"We could sell more by thinking business cases – sell business opportunities to the customers" - Regions

Also, the coherence between each subcategory of the overall material being produced at sales support was showed to be weak. Expressed explanations for this were that since different functions at sales supports are responsible for producing different type of material no one is consequently responsible for the coherence of all material and how it interrelates. When we observed the material ourselves this was further evident, one could see that different functions insert produced material at different categories without further consideration to other parts and categories. People from the sales teams also expressed a wish for more information about reference cases and potential business scenarios indicating a need for commercially contextualizing the products.

Resource efficient

During our interviews it became evident that actors within the sales processes are very time constrained, indicating that employees at Alfa are resource efficient. This was expressed when they elaborated about overall issues in the process. The majority of the employees we talked to stated that it is sometimes difficult to get in touch with departments and persons when needed in order to move the product offering or a query forward in the sales process. They often have to wait for their queries being answered, which is explained by other departments having own priorities and urgent errands to handle. As one employee states;

"I constantly have to deliver to different product offering and must therefore prioritize among them" – Sales support

We also noticed during our participation in internal meetings that is was more a rule than exception that people dropped in late or that someone cancelled on short notice. Also, we noticed people dropping off earlier and answering text messages and telephone calls during the meetings. Indicating that the employees at Alfa are overall busy and time constrained.

Even though time constrains was highlighted by the majority of the employees we talked to indications of that this was especially evident at the regions was further showed. Both people from sales support and the regions agreed that the regions overall are more exposed to working overload, which the employees explained is a result of heavily resource rationalization during the last years at the regions. Furthermore, people at the regions said that they have much time consuming interactions with potential customers, overall preparations and continuous queries related to product offerings that takes most of their time. Also, acquiring knowledge and information about the products was said to be time consuming, as there can be quite a lot of information to calibrate. Since we only talked to employees within the sales teams we don't know whether this is applicable to the regions overall. Since time is a rather vague field without measuring we can only state that we got indications on that time constrains was an overall issue in the whole company and that it could be especially evident at the regions.

Distinguished goals and key ratios

During our study it became evident that people and functions are to a large extent led by distinguished goals and key ratios in the sales process. Also, sales support and the regions are measured by different key ratios. The sales teams are measured by the total turnover they generate per customer while sales support is measured by turnover per product. This affects how activities are prioritized. It was said that the sales support often prioritize larger clients when creating an offering over a smaller one since that customer offering will generate more turnover for the sales team and are more

strategically important for Alfa. This is also an effect of the resource efficiency we saw in previous part.

On account of the colliding agendas at sales support and the sales team, the product owners has to work hard to convince the sales team that their specific product is the best for the customer and should be highlighted when arranging for customer meetings. Additionally, different agendas occur within the regions where one function at the regions is measured by how much turnover they generate in the overall account in that region while the sales teams goals are directly related to a specific customer. A consequence of the different agendas, is that the different functions prioritize errands that are mostly aligned with reaching his or hers goals. Furthermore, we got the information that different departments have their own budget they should spend on activities in order to reach their goals. When we elaborated what consequences this had on the sales processes it was clear that the incentives for arranging common activities that could contribute to a better overall sales process were low. When we asked about what different goals departments had in the sales process people employees generally lacked that knowledge, indicating low transparency of different driving goals in the sales processes.

5.0 ANALYSIS

In this part of the thesis defined obstacles will be analysed by connecting them to our research questions and also apply theories from our theoretical framework where possible. The analysis contain two parts; an analysis of the obstacles restraining flow efficient sales processes and why these have occurred from an organizational perspective. In this way we tie the data together with our theoretical framework.

5.1 Customer insights not incorporated in the sales process

When analysing this obstacle it showed to contain two parts that to a large extent interrelated with each other. A cohesive analysis of these two parts would have been one way to present the analysis however, in order to make it more structured and easy to follow we have separated them. However, there might be recurring themes in both of the parts.

Waste when value argumentations are not bringing value to the customers

One main obstacle within the sales process showed to be the fact that customer insights are not enough incorporated in the production of the value argumentation today. Not having customers insights incorporated in the material further indicates that the knowledge about what is customer value is weak. When sales support has low insights in what customer values they do not offer a satisfying explanation of why different products or offerings are of value for the customers. Considering what is customer value is according to theories defined as the first described principle within lean thinking (Womack & Jones, 1996), which in this concept is said to be a prerequisite in order to create flow efficient processes. Modig & Åhlström (2013) and Seddon (2005) further describe how gaining and collecting customer insights are fundamental in order to increase flow efficiency in the sales processes. Since one announced goal with the lean sales initiative is to create faster and better results to Alfa's customers an understanding for what faster and better results means for their customers is essential. It is important to truly understand customer value from the customer point of view and not fall in a typical trap where customer value is defined from an internal perspective. Without knowledge about what customer value is it is further hard to produce relevant value propositions (Asafeso, 2013), which could explain why the value argumentations are not sufficient today.

Our data showed that there is a customer focus when producing the material. By this they mean that they think of the potential customers and how the product potentially could benefit them. However as, lean theories imply, in order to increase flow efficiency in sales processes the starting point should be the customers and what is value for them (Modig & Åhlström, 2013) and not the other way around, i.e. a "guessing" of what is considered customer value and then try to push out the offerings (Asafeso, 2013). Today, the obstacle is related to the fact that sales support produces value argumentation material with a push strategy rather than a pull strategy. Meaning that little consideration to what the customers perceive as value is incorporated during the process (pull), instead all material is produced independently and the control of it is released when the material is finalized (push) (Womack & Jones, 1996). Due to the push focus when producing value argumentation material there is a great risk that the material is not relevant for the sales teams and consequently not for the customers.

Derived from our empirics it is evident that incorporating customer insights at sales support is interrelated with increased transferability of insights between sales support and the regions. Since the sales teams continuously interact and meet with the customers they consequently have valuable knowledge and insights about what creates customer value, indicating that customer value could be defined through what the sales teams perceives as customer value. By involving sales representatives when creating value argumentations a movement from push to pull would be apparent. Sales support could then gain knowledge about what the sales teams value and in turn what the customers demand, which consequently would lead to more value adding material being produced. In line with Piercy & Rich (2009) that states that understanding customer needs, sharing intelligence across functional boundaries and designing products and services to meet customer demands is especially important when incorporating lean in sales processes. Thus, our analysis shows that it is the transferability of insights that is the main obstacle and not the insights per se, as those already exists internally. In order to create flow those insights needs to be transferred back in the organization, to sales support as illustrated below.
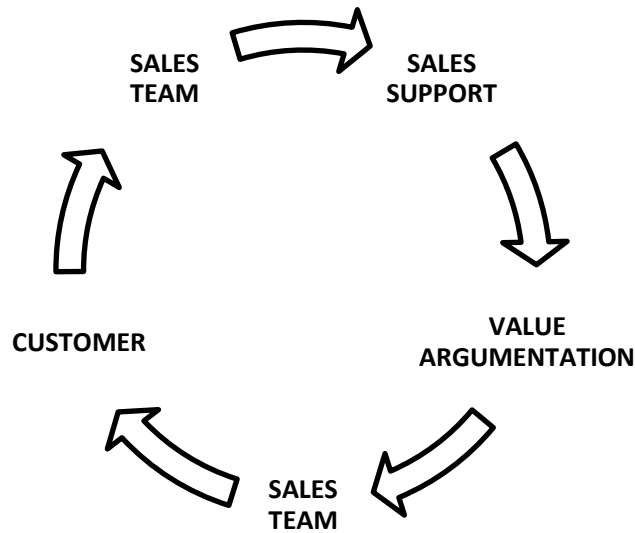
Figure 5: Transferring of insights

That this is an obstacle restraining flow efficiency in Alfa's sales processes is evident. However, in order for Alfa to increase the flow efficiency the reason for the occurrence of the obstacle is of relevance. When analysing this obstacle the process design and the routines related to it showed to explain why this obstacle has occurred. In order to increase flow efficiency and succeed with the transferability of insights some degree of standardization, stabilization and visibility firstly needs to be in place (Asafeso, 2013) in the process, which is not in case today. Due to fact that the employees had distinguished perceptions about what is important when producing value argumentations, some degree of instability in the process is shown. Without everyone involved in the process jointly agreeing on goals in the process it is hard for all actors to strive towards the same results, hence different actors can have different perceptions about how the process is defined. Further, since incorporating customer insights and considering customer value is not defined in the process it is hard for the employees to strive towards such work. Instability in the process can be a fundamental explanation for the obstacle, however standardizations related to incorporating customer insights in the daily work is an additional one. Since there is no set structure regarding *how* to incorporate the insight at sales support today and who is responsible for what it is hard for the employees to perform such a work. To standardize work can thus be difficult due to the characteristics of Alfa's products. Meaning that since the products involve a high degree of differentiation and complexity it is hard to apply the same type of

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standardized work to all offerings. Additionally, different customer segments and markets have different demands and perceptions about what is value. Variation is overall seen as problematic since it restrains lean processes and flow efficiency (Asefeso, 2013; Modig & Åhlström, 2012). However, Asefeso (2013) argue for the fact different styles can be exhibited and at the same time follow a standard process. For Alfa that would mean that different customer demands and value perceptions would be incorporated in the setting of a process. Example by standardizing the way in which insights are collected and adapted to different markets and segments. The difficulties related to the standardization can hence help to explain the obstacle. By making the process more stable and standardized the variation in the process will consequently decrease. This as when there are clearer goals, guidelines, responsibilities etc variation will decrease and hence flow increase (Modig & Åhlström, 2013).

These two first principles (stabilization and standardization), seem to mainly explain the obstacle meaning that the additional two (visibility and continuous improvements) explains it indirectly since they are all interrelated (Asafeso, 2013). The fact that the actors in the process are working independently and not sharing what they are currently working on can explain the obstacle since transferability is impossible without making information visible (Asafeso, 2013; Womack & Jones, 1996). However, this is not the main explanation rather an indirect one. Our analysis shows that it is the same thing with continuous improvements, which is according to theories (ibid) seen as the last step to improve in order to increase flow. Not having planning meetings and continuously revise and improve the material (Yomamoto, 2010; Liker, 2003) out from what is considered customer value can of course explain the occurrence of the obstacle. However this is also a more indirect explanation. Meaning that exclusively improving this step and the visibility wouldn't make the obstacle diminish.

Waste created when value argumentation material is not being fully used
This second part of the obstacle related to customer insights not being incorporated in the daily work describes how that consequently leads to a low user rate of the value argumentation material at the regions. A concept in lean is to have many value adding activities in relation to the total process time in order to increase flow efficiency in a process (Modig & Åhlström 2012; Womack & Jones, 2003). Meaning, that by creating more value adding activities flow will increase and waste will thus be eliminated. When

employees at the regions states that they cannot use the value argumentation to its fullest as it do not add value when they try to convince customers, it can be argued that waste is created during the process when material is being produced. When the content of the value argumentation do not reach the customer or for that matter do not add any value for the customers waste through overproduction of the material is further implied (Ohno, 1988; Womack & Jones, 2003). Meaning that extensive material is produced and non-adding value activities at sales support are evident. The issue is however not only related to a higher amount than needed being produced it is also about the quality in it. It can thus be argued that if the material would be more qualitative less amount of it would be needed, as it would be more concise and impactful. Since this study did not measure the actual usage rate of the material being produced it is further hard to evaluate the degree of waste related to this area. However our analysis can conclude that there is waste related to the fact that the sales teams does not perceive the value argumentations as optimum, which consequently effect how much of it that is used in their daily work.

Overproduction is further a problem since it means that sales support does not fully succeed with being a support function to the regions when producing material that is considered as waste. Sales support aims at delivering a service to the regions by contributing with supporting material, which is not working optimally today. In order to identify what is waste, sales support should according to lean services theories put the sales teams first when working and consequently measure or evaluate what is of use for them (Seddon, 2005). Since the sales teams stated that they are not fully using all the value argumentation material being produced should be evaluated and thus communicated back to sales support, or in some way measured. By allowing the sales teams to give feedback and evaluate the material during the process continuous improvements would also be possible through this method (Yomamoto, 2010; Liker, 2003), which would lead to more value adding activities at sales support.

When analyzing why this part of the obstacle has occurred its relation to the process design (systems) becomes evident again. Hence working with the two first steps of Asafeso's (2013) principles (stability and standardization) would diminish this problem since the material would be more qualitative. However, this part of the obstacle is also explained by a lack of communication between sales support and the regions and not

just how the material is being produced. Our analysis shows that sales support don't get any feedback or evaluation of the material from the regions, which makes it hard for them to understand what is of use at the regions. Additionally, even though lack of feedback and evaluation can explain this low usage rate it is still related to the process design as the evaluation and feedback is not an incorporated part of the process design.

The currently low user rate of the material being produced can further have structural explanations. Alfa is a functionalized company divided through different expertise areas, which accordingly leads to poor communication between units (Mintzberg, 1992). The fact that Alfa is a large organization with over 100 000 employees and regional offices spread out around the world further restrains communication between the different functions. Being structured through functions efficient use of resources is created (ibid) but consequently restrains flow efficiency in processes (Modig & Åhlström, 2012). With a large physical distance between the head office and the regions coordination and communication between sales support and sales teams is even harder, sales support operates independently in Sweden and the regions at their markets. The low transferring of customer insights can also be explained by the existing structure as it restrains a natural flow of information among departments.

In order to increase collaboration and coordination between the two the way the organization is structured needs to adapt. A structure that would promote flow efficiency is a divisional form where people from different competence areas work collaborative towards a market, customer or product. In this form higher responsiveness to the external market is created, which could be specifically valuable in an unstable one (Mintzberg, 1992). This structure could be argued to be suitable for Alfa as they nowadays operates in a highly competitive market where winning customers requires better responsiveness to customer demand. However, this would indicate a major structural change and reduce resource efficiency enormously, and thus increasing costs. It can therefore be argued that this structure is not suitable in an environment where cost cutting has been crucial in order to survive. Instead combining functions and divisions through a matrix structure would be a more appropriate direction to move towards. Matrix form could be argued to be a structure that could enable combining resource efficiency and flow efficiency. While still using its resources efficient, focus on the output is equally important. It would also facilitate development of general

management skills without having to compromise with removing departments having specialist knowledge. The structure would in practice looks like this; sales support work towards specific regions in order to create the optimum value argumentation. Sales support represents the functional hierarchy in the matrix and the regions represent the divisional hierarchy. Having the regions as the divisions would be given as this is how they concentrate their business today.

This structure would allow Alfa to easier adapt the value argumentations and additional sales material to changes in the process, e.g. changed customer demand. Additionally, it would facilitate customization of offerings to different segments and markets, something that as earlier mentioned is essential. Anyhow, moving towards a matrix structure with increased collaboration between units further requires additional planning meetings and interactions (Mintzberg, 1979; Asefeso, 2013).

5.2 Technical orientation

This obstacle is related to a technical oriented culture being evident at sales support, which consequently creates subcultures between sales support and the regions where the latter one has more of an opposite culture, a commercial one.

A large technical focus at sales support came up as an issue when striving for flow efficiency in the sales processes. This was mostly evident when people from the regions stated that they sometimes have difficulties comprehending the material being sent to them. Why they did not understand it was because of low commercial relevance and contextualization. It does not necessary have to mean that sales support does not have relevant calculations, information and so forth, the problem is rather that it is put in a context that the sales teams do not understand, i.e. a technical one. This makes some of the material hard to grasp and consequently leads to that the sales teams either do not use it at all or have to calibrate the material being sent to them and try to independently put the information in a context that would be appropriate for the customer.

First of all, having a technical focus is not irrelevant due to the characteristics of Alfa and its overall business strategy. The company is selling high technological and complex products, which consequently requires a technical focus. However, in order to move towards increased flow efficiency in their sales processes this focus needs to be complemented with a larger commercial focus.

A larger customer focus is partly related to external pressure and the pressure that is put on companies like Alfa. Due to increased competition in the industry and more demanding customers questions like *Why Alfa?* have increased in importance. Additionally, as mentioned in our background the rapid technological development together with increased competition has forced these types of companies, i.e. telecommunications equipment companies operating globally to put more emphasis on sales and commercialization. Leading to that companies like Alfa needs to switch focus and become more customer oriented, as only relying on products isn't enough anymore. This new focus was not as apparent only a decade ago, which can explain why Alfa is still stuck in the shadow of its history. The company has a long history of delivering high quality products whereof a new more commercial mind-set will require some changes which take time (Schein, 2004). This aspects is considered as an essential aspect and says something about that the obstacles do not necessary exclusively have to be related to internal factors.

Subsequently our analysis implies an existence of distinguished mind-sets within Alfa, i.e. between sales support and the regions. Since the sales teams consider some of the material being produced at the head office as too technical and hard to understand indications of a different mind-set among these employees is showed. This was mainly related to the value argumentation material but involved all material that aims at convincing the customers. Employees that had previously been working at the regions found the mindset and the way of operating at sales support some way dissatisfying, which further gives arguments for existence of distinguished ways of operating. The mindset among the sales teams showed to be more business oriented and less product oriented. Since we only talked with people form the sales teams we can however not say whether this is evident at the regions overall or only in the sales teams. Having more customer focus and being more business oriented within the sales teams is not surprising since they are responsible for the selling and building relationships with the customers, hence having large experiences of selling. Additionally, data showed that many employees at sales support did not have any sales experience at all. When people from the sales teams raise concerns, as "*When an offer is delivered to a customer they want technical information about the product, before that is totally irrelevant to them*" they are indicating that the regions and sales support are talking different languages.

Having different ways of working and thinking in organizations is problematic (Schein, 2004) and consequently restrains a collaborative way of working, something that has showed to be necessary when increasing flow efficiency in sales processes. Also in order to better serve customer demand and by this increase flow efficiency commercial orientation must cover everyone in an organization (Deshpande & Farley's, 1996; 1998). Since Alfa wants to be more customer focused it should be stressed that we have seen that such a mind-set to a larger extent should be incorporated at sales support.

These obstacle could be partly explained by their divisional structure. As the regions and sales support have distinguished tasks and responsibilities they have a general lack of understanding for other functions and does not possess general management skills (Mintzberg, 1979). This could explain why sales support lacks ability to package the sales material in a way so it becomes comprehensible for the regions. It highlights the importance for increasing general management skills at employees at Alfa and specifically targeting sales support knowledge in how the regions would like to receive information with accordance to their daily work context.

Another explanation could be the culture. The technical focus at sales support further indicates a technical culture at sales support, which could explain why the material produced by them also being technical. Further arguments for sales supporting having a technical culture will now analysed through Schein (2004) different levels of culture. Our analysis shows that the immediate technical focus is mainly reflected through the employees at sales support, i.e. how they talk, behave and work. Schein (2004) describes the first level explaining a culture is artifacts, which also is the most notable one and include aspects such as language and symbols. This was obvious when observing the environment at Alfa, with the corridors being covered by pictures of innovations and products being exhibited. Additionally, the majority of the interviewees in our study and the employees working at sales support are educated engineers, which reflects a very technical culture. A commercial mind-set is not naturally incorporated in the language and instead the interviewees often talked very proudly about the Alfa's products and its quality. The second more embedded level that can explain a certain culture is espoused values (ibid), which more relates to the rules of behaviour and way of working at sales support. This was mainly reflected in the produced material which we and the sales teams consider being quite technical or not put in a logical context, i.e.

a more business oriented one. Overall, the way of behaving in a technical matter is relevant for some aspects and not for others. The basic assumptions, which is the third level according to Schein (2004) and the most embedded one is in this case hard to evaluate. The basic assumptions most likely refer to an overall culture at Alfa and unconscious behaviours and values, hence not related to the technical aspect. Our analysis thus shows, through the two levels defined by Schein (2004), artifacts and espoused values that a technical culture does exist at sales support.

5.3 Resource efficient

As we saw in the data, people are busy and often in need for prioritizing between tasks. Busy people indicate high resource efficiency at Alfa where people are as efficient as they can within their function (Modig & Åhlström, 2013). However, we also saw that the flow unit i.e. the product offering is not flowing as efficient as it can since waste is created during the process. The time constraint also results in flow units having to wait to be processed, which is create non-value adding activities (ibid). When a specific department is busy and need to prioritize among its tasks it affects how fast they can process the flow units. Sometimes flow units are set in line by a specific department due to other urgent tasks, which creates waiting time and thus waste (Ohno, 1988; Womack & Jones, 2003). In order to move towards more lean sales processes these queues that flow units risk being put in needs to be removed. The optimum state would be to be both resource efficient and flow efficient, however this state is difficult to reach if an organization is heavily resource efficient i.e. the efficiency paradox (Modig & Åhlström, 2012). In order to move towards this optimum state, flow must first be achieved. In order to achieve flow is then to reduce resource efficiency.

What Alfa must accomplish in order to increase flow efficiency is to ensure that queues for the flow units do not occur. This can be done through freeing capacity (Modig & Åhlström, 2013), either by increasing the resources available or reducing the amount of tasks one resource must accomplish during a specific amount of time. In this way, a better flow will be achieved. Resource efficiency could be strongly related to the functional structure that is within the organization (Mintzberg, 1979), making it not only a process issue but also an overall issue that must be addressed beyond the sales processes. When Alfa has organized themselves through functions, everyone is

performing certain tasks in a process, which is not corresponding to an approach when creating flow.

5.4 Distinguished goals and key ratios

As we could see from the data, Alfa has organized its processes where different functions having distinguished tasks and responsibilities. These different functions have own goals and certain key ratios within the specific department. The problem here is that this does not encourage flow efficiency. People seldom put energy into activities that do not support their own goals even though they sometimes know that it would benefit the outcome of the whole process. Conflicting goals also results in activities at sales support not connected to creating customer value as people put a lot of effort into convincing the sales force to sell their specific products they own. This clearly constraints flow efficiency as it is waste for the customer. It could however be argued that these conflicting goals is of value as it forces sales support to ensure customer value of the product in order to make it viable to sell to the sales team.

Furthermore, the different goals also forces people to prioritize, having their own interests in mind rather than the customers, also not corresponding to a flow efficient process (Modig & Åhlström, 2013; Womack & Jones, 1996). Due to the lack of coherent and collective goals in the whole organization the incentives to work together between units for more qualitative product offerings is consequently low and is evidence for a resource based sales process (Modig & Åhlström, 2013).

This phenomenon could partly be explained as a result of a divisional function structure in the organization. Having people being measured towards a specific goal not related to any other department lower the incentives working together, which Mintzberg (1979) say is a typical drawback when operating through functions and also confirmed by the employees. Instead of letting the flow unit's needs steer the process the different functions need are instead steering it. Also, it is a consequence of a system not designed for evaluating whole sales processes, instead evaluations are made within each department which results in consequences presented above.

6.0 CONCLUSIONS

In this last part of the thesis will summarize our main conclusions from our analysis and hence answer our research questions. Additionally, limitations with the study and suggestions for future research will be presented.

What obstacles restrain flow efficiency in sales processes and why do these occur?

We have in this thesis investigated how global companies within the telecommunications equipment industry can increase flow efficiency in their sales processes. This has been done through identification of different obstacles that showed to restrain flow. The obstacles found were; customer insights not being incorporated in the sales processes; a technical orientation, resource efficiency and distinguished goals and key ratios in the process.

Our analysis showed that three different organizational elements could explain the occurrence of the obstacles, hence these elements needs to be addressed in order to remove them and thus increase flow efficiency in the sales processes. With other words meaning that by aligning the vision of increasing flow efficiency in the sales processes with the organizational elements Culture, Systems and Structure the goal can be reached.

Below we present a figure that concludes our findings. The figure illustrates identified obstacles as well as its connections to different organizational elements explaining the occurrence of them. As the figure shows, some obstacles are referred to only one organizational element while other are explained by several. Indicating that it will be easier to overcome the obstacles that are only related to one organizational element.
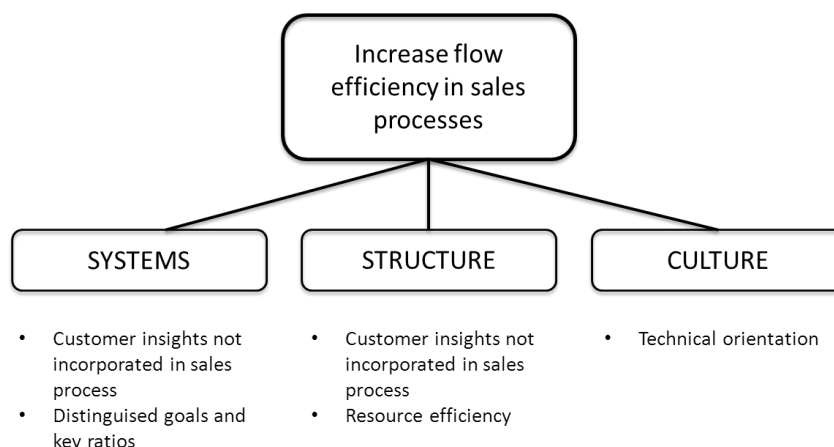

Figure 6: Obstacles in sales process

64

How can global telecommunications equipment companies increase flow efficiency in their sales processes?

In order for a global telecommunications equipment company to increase flow efficiency in its sales processes four different aspects needs to be addressed. Firstly, organizations need to have a constant focus on incorporating customer insights in its sales processes. When doing so, consideration needs to be taken to the organizational elements Systems and Structure. The second aspect includes a need for creating a commercial oriented focus in the organization, whereof reviewing the corporate Culture is essential. Further, capacity in the shape of time needs to be available among the employees, in order to secure that units are constantly flowing. The organizational element Structure needs to be considered when doing so. Lastly, employees must be steered by common goals and key ratios that are derived from value adding outputs. Systems, i.e. the process designed needs to be considered when creating these common goals.

Increasing flow efficiency in sales processes in companies like Alfa can be in some way challenging due to the vast amount of dimensions involved. Alfa is delivering many and complex products, operates globally and is large to its size, which indicates that a greater number of interfaces needs to be managed internally when aiming for change. Below, a figure of how global telecommunications equipment companies can increase flow efficiency in their sales processes is presented.
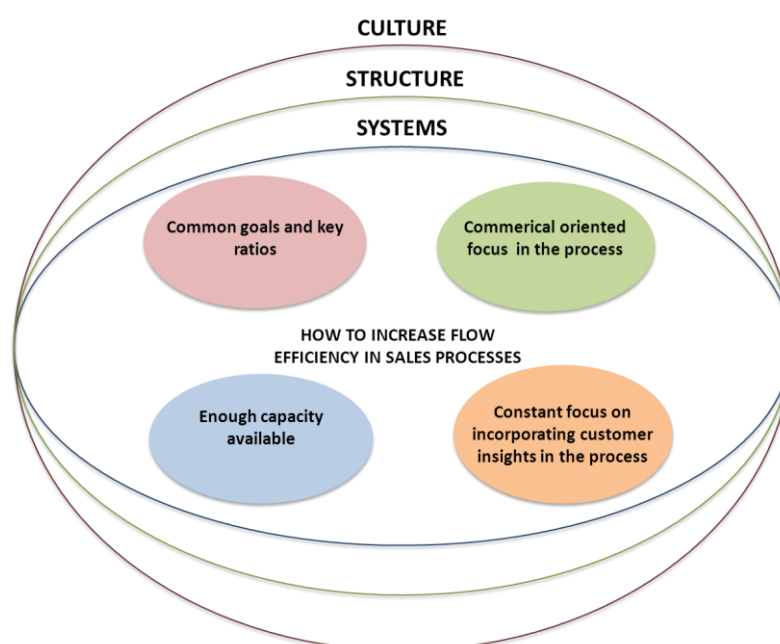

Figure 7: How to increase flow efficiency

Lastly, our analysis shows that in order for global telecommunications equipment companies to increase flow efficiency in their sales processes the work needs to start with the values and principles. Hence, building a stable ground is essential before implementing specific tools and methods. This thesis has focused on flow efficiency within lean and the obstacles found has consequently been related to this fairly high abstraction level as well. By considering the values and principles through the organizational elements culture, systems and structure a movement to methods and tools can later be made. We have contributed to the theoretical gap by providing values and principles that global telecommunications equipment companies should adopt in order to create flow efficient sales processes.
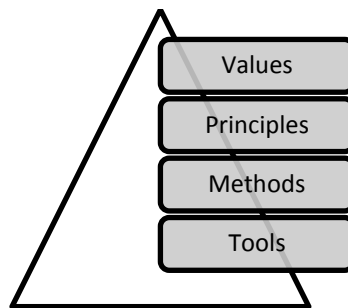

Figure 8: Ways of adopting lean

6.1 Future research

As the pressure on technological companies to commercialize increases it is highly essential to further investigate how sales processes that in general are very product oriented can become more commercially oriented. The theoretical foundation for lean in sales processes is weak which gives the future researchers a broad field to discover. As mentioned in the section above it is our perception that our results should benefit companies with similar characteristics as Alfa while it at the same time is unclear whether this is applicable to other type of organizations within other industries as well. Thus, suggestion for future research is to make comparative studies with companies like Alfa but also look into organizations operating in other industries in order to increase the generalizability of our conclusions. Another approach would be to test the findings in this study in a similar or new environment by formulating hypotheses from them.

In this research the sales process we looked into was a product push process. As there exists other types of sales processes than a product push process it would be interesting in future studies to investigate whether our findings are relevant for other type of sales processes as well. Additionally, this thesis took on a holistic perspective when investigating Alfa. However it would be of interest to dig deeper into our findings and explore them more thoroughly.

REFERENCES

A.K. SHENTON. (2002), The characteristics and development of young people's information universes, PhD Thesis, Northumbria University

ÅHLSTRÖM, P. (2004), Lean service operations: Translating lean production principles to service operations. International Journal of Services Technology and Management, Vol. 5, No. 5,6, pp. 545-564

ÅHLSTRÖM, P. (2004). Lean Service Operations: Translating Lean Production Principles to Service Operations. International Journal of Services Technology & Management, Vol. 5 No. 5, p. 1.

ALVESSON, M. (2010). Interpreting Interviews. SAGE Publications, London.

ASEFESO, A. (2013). Lean Sales and Marketing, AA Global Sourcing Ltd

ASHBY, W.R. (1952). Design for a brain. Chapman and Hall, London.

BACKMAN, J. (1998). Rapporter & Uppsatser. Studentlitteratur.

BARTLETT, C., GHOSAL S., (1987), Managing Across Borders: New Organizational responses, Sloan management Review, Autum1987, No1, pp43-53.

BLUMBERG, B et al. (2011). Business Research Methods. McGraw Hill Education.

BOWEN, D. YOUNGDAHL, W (1998) Lean service: in defense of a production-line approach, International Journal of Service Industry
BRYMAN, A et al. (2007). Business Research Methods. Oxford University Press 2nd edition.

BUCHANAN, D. (2012). Case Studies in Organizational Research. In G. Symon & C.

Cassell, Qualitative Organizational Research Core Methods and Current Challenges.

SAGE Publications Ltd, London.

C. MARSHALL AND G.B. (1999), Rossman, Designing qualitative research, 3rd ed. Newbury Park: Sage.

CA: Sage.

D.A. ERLANDSON, ET AL. (1993), Doing naturalistic inquiry: a guide to methods, London: Sage, 1993

DEIF, A. (2010). Dynamic analysis of a lean cell under uncertainty. International Journal of Production Research, Vol. 50, No.4, 15 February 2012, 1127-1139.

DEMING, W.E. (1982a). Out of crisis. Cambridge: Cambridge University Press.

DEMING, W.E. (1982b). Quality, production and competitive position. Boston, MA: MIT

Centre for Advanced Engineering Study.

DESHPANDE, R., & FARLEY, J. (1996). Understanding market orientation: A prospectively designed meta-analysis of three market orientation scales. Marketing science institute Working Paper Report 96-125

DESHPANDE, R., & FARLEY, J. (1998). Measuring market orientation: Generalization and synthesis. Journal of Market Focused Management, 213-232

E.G. GUBA. (1981), Criteria for assessing the trustworthiness of naturalistic inquiries, Educational Communication and Technology Journal 29, pp. 75–91

GALBRAITH, J. (1995). Designing Organizations: An Executive Briefing on Strategy, Structure and Process. Jossey- Bass Publishers, San Francisco.

GIDDENS, A., (1989), Sociology, Cambridge: Polity Press

GILLHAM, B (2005). Research Interviewing: The Range of Techniques. McGraw-Hill Education, Berkshire, England.

GOBO, G (2008). Doing Ethnography (introducing qualitative methods series). SAGE Publications.

HAYES, R.H., & WHEELWRIGHT, S.C. (1984). Restoring our competitive edge: Competing through manufacturing. New York: Wiley.

HINES, P. HOLWEG, M. RICH, N (2004) Learning to evolve: A review of contemporary lean thinking, International Journal of Operations & Production Management, Vol. 24 Iss: 10, pp.994 – 1011

HOFSTEDE, G. (1980/1984). Culture's Consequences: International Differences in Work-Related Values– Abridged edition, Newbury Park, CA: Sage Publication.

HOFSTEDE, GEERT H. (2005), Cultures and organizations: software of the mind.

IMAI, M. (1986). Kaizen (Ky'zen), the key to Japan's competitive success, McGraw-Hill.

J. BREWER AND A. HUNTER. (1989), Multimethod research: a synthesis of styles, Newbury Park: Sage, Sage Library of Social Research Series, Vol. 175

KATES, A; GALBRAITH, KATES, A. (2007). Designing your organization: using the STAR-model to solve 5 critical challenges. Jossey-Bass, San Francisco.

KEITH F, K. (2005). Introduction to social research: Quantitative and Qualitative approaches. Saga Publications.

KEITH F. PUNCH (1998). Quantitative and qualitative approaches. SAGE Publications.

KESLER, G. and KATES, A. (2010). Designing Strategic Organizations: The New Work of Executives and HR. People and Strategy 33 (3): 14-21.

KRAFCIK, J.F, (1988), "Triumph of the lean production system", *Sloan Management Review*, Vol. 30, No. 1, pp. 41-52

KUPRENAS, J. A. (2003). Implementation and performance of a matrix organization

LAWLER, E.E; WORLEY, C.G. (2006). Built to change: how to achieve sustained

organizational effectiveness. Jossey-Bass, San Francisco.

LE BLANC, G. AND SHELANSKI, H. (2002). Merger Control and Remedies Policy in the E.U and U.S: the case of Telecommunications Mergers, mimeo

LI, F. AND WHALLEY, J. (2002). Deconstruction of the telecommunications industry: from value chains tovalue networks, *Telecommunications Policy*, 26(9/10), pp. 451-472.

LIKER, J. (2003). The Toyota Way: 14 Management Principles from the World's Greatest Manufacturer, McGraw-Hill; 1 edition.

M. BASSEY. (1981), Pedagogic research: on the relative merits of search for generalisation and study of single events, Oxford Review of Education 7 pp. 73–93

M.B. MILES AND A.M. HUBERMAN. (1994), Qualitative data analysis: an expanded sourcebook, 2nd ed. California: Sage

M.Q. PATTON. (1990), Qualitative evaluation and research methods, 2nd ed. Newbury Park: Sage

MASON, J. (2002). Qualitative Researching. SAGE Publications.

MILES, H., HUBERMAN, M. (1994), Qualitative Data Analysis: A Sourcebook, Sage Publications, Beverly Hills, Newbury Park, CA

MINTZBERG, H. (1992). Structure in fives: Designing effective organizations. Upper Saddle River, NJ: Prentice Hall.

MODIG, N. & ÅHLSTRÖM, P. (2013), This is Lean, Stockholm, SSE Institute for Research

MONDEN, Y. (1983). The Toyota production system. Portland, OR: Productivity Press.

MONDEN, Y. (1998). Toyota production system: An integrated approach to just-in-time. New York: Engineering and Management.

MYERSON, P. (2012). Lean Supply Chain & Logistics Management. The McGraw-Hill Companies.

OHNO, T. (1988). The Toyota production system: Beyond large-scale production. Productivity Press, Portland.

PIERCY, N., & RICH, N. (2009). The implication of lean operations for sales strategy: from sales-force to marketing-force. Journal of Strategic Marketing, Vol. 17.

PORTER, M. (1998). Competitive Advantage: Creating and sustaining superior performance. The free press, New York.

R.E. STAKE. (1994), Case studies, in: Handbook of qualitative research

RADNOR, Z. WALLEY, P. (2006), Learning to Walk Before We Try to Run: Adapting Lean for the Public Sector, The authors journal compilation
RODT, T AND KNOLL, S (2004). Innovation-Expansion In The ICT-Industries: R&D Acquisition and Integration Success From A Knowledge Perspective, mimeo

SCHEIN, E.H. (1991), "What is culture?" P.J. Frost, L.F. Moore, M.R. Louis, C.C. Lundberg & J. Martin (Eds.), Reframing Organizational Culture, Newbury Park: Sage

SEDDON, J. &, O'DONOVAN, B. (2009). Rethinking Lean Service

SEDDON. J. (2005). Freedom from Command and Control: Rethinking Management for Lean Service. Productivity Press, New York.

SHINGO, S. (1981). Study of the Toyota production systems. Tokyo: Japan Management Association.

SHINGO, S. (1988). Non-stock production: The Shingo system for continuous improvement. Cambridge: Productivity Press.

SILVERMAN, D (2009). Doing Qualitative Research. SAGE Publications

STAKE, R. (2010). Qualitative research: studying how things work. The Guilford Press

structure. International Journal of Project Management, 21, 51-62.

SWANK, C.K. (2003). The Lean Service Machine. Harvard Business Review 81 (10), 123-129

VOSS, C. TSIKRIKTSIS, N., FROHLICH, M. (2002), Case research in operations management, International Journal of Operations and Production Management, 22(2): 195.

W.A. FIRESTONE. (1993), Alternative arguments for generalizing from data as applied to qualitative research, Educational Researcher 22 pp. 16–23.

WOMACK, J., & JONES, D. (2003). Lean thinking (2nd ed.). London: Free Press.

WOMACK, J.P. AND D.T. JONES, (1994). From lean production to the lean enterprise.

WOMACK, J.P., D.T. JONES AND D. ROOS, (1990). The Machine That Changed the World: The Story of Lean Production.

WOMACK, J.P., D.T. JONES AND D. ROOS, (1996). Lean Thinking: Banish Waste and Create Wealth in your Corporation.

Y.S. LINCOLN AND E.G. GUBA. (1985), Naturalistic inquiry, Beverly Hills: Sage

YAMAMOTO, Y. (2010). Kaikaku in production. PhD, Mälardalen Universuty.

YIN, R. K. (2003). Case study research: Design and methods (3rd ed.). Thousand Oaks

ONLINE RESOURCES

REUTERS (2012) [ONLINE] Available at:
<http://uk.reuters.com/article/2012/04/25/zte-earns-idUKL3E8FN8Q220120425>
[Accessed 10th November 2013]

CHINA DAILY (2012) [ONLINE] Available at:
<http://www.chinadaily.com.cn/business/2012-08/30/content_15719292.htm>
[Accessed 16th November 2013]
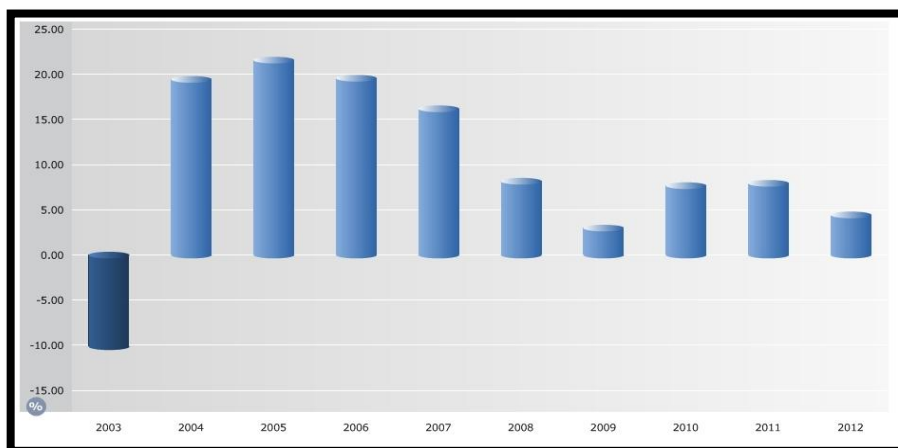
APPENDIX

APPENDIX 1: Operating revenue at Alfa (2003-2012)
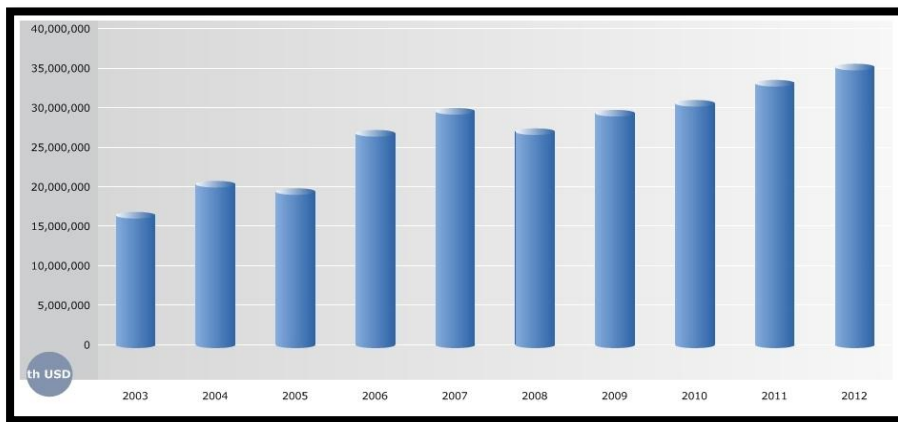
Source: Orbis

APPENDIX 2: Evaluation of key variable at Alfa: Profit margin (%)

Source: Orbis

APPENDIX 3

Interview material

Hi. First of all, we would like to thank you for taking time to participate in this interview, it is very valuable for us and will contribute to Alfa's organizational development. In the interview, there are no right or wrong answers and we want to inform that you can withdraw from it at any time. We are independent researchers with no personal commitments to Alfa so we want to ensure you that you can contribute with ideas and talk about your experiences without fear of losing credibility in the eyes of managers in the organization. We offer you to review the answers from this interview when we are done so that no misunderstandings has been made by us.

▸ As a first step, we want to know more about you and your job at Alfa. Can you briefly describe what you do in your daily work and what your responsibilities are? What's your background and for how long have you been working for Alfa?

▸ Here we have a product push process (showing a schematic view of a product push process), does it correspond to your view of one?

▸ According to what you know about lean, what type of issues do you perceive exists in this process that constraints it to become more flow efficient?

▸ What do you believe is the reasons for these issues?

▸ How do you believe these can be removed in order to create better flow?

APPENDIX 4

List of interviews

Position	Gender	Academic background	Setting	Time of employment
Sales support	M	Engineer	Physical	10 years
Sales support	M	Engineer	Physical	17 years
Sales support	M	Engineer	Physical	10 years
Sales support	M	Engineer	Physical	17 years
Sales support	F	Engineer	Physical	20 yeas
Sales support	F	Engineer	Telephone	12 years
Sales support	M	Engineer	Physical	18 years
Sales support, previous KAM	M	Engineer & business degree	Physical	18 years
Sales support, previous KAM	M	Engineer	Physical	17 years
Sales support	M	Engineer	Physical	15 years
Sales support	F	Engineer	Physical	20 years
Regions	M	Business degree	Physical	17 years
Regions	M	Engineer	Physical	13 years
Regions	M	Engineer	Physical	15 yeras
Regions	F	Engineer	Physical	25 years

Data collection tablet

OBSTACLE	QUOTES
CUSTOMER INSIGHTS	We must improve our collaboration with the regions (Sales support)
	There is a knowledge gap between marketing and the product managers as they do not know the other ones (Regions)
	The product managers needs to better know how the products is sold (Regions)
	One problem with our insufficient value argumentation is among others that there is too many technicians and too few economics (Sales support)
	Sales support is too far away from the customer (Sales support)
	There is just too little material of value in the beginning of the sales process and no feedback of the material produced, the organizational structure constraints this as well as too little time at the regions (Sales support)
	There is low understanding at the headquarters for what is sought for at the regional level (Regions)
	Sales support does not know if the material contains enough value for the customer or not (Sales support)
	On issue is that the product owners think their product is the best but do not know what the customer wants (Regions)
	The KAM's do not care about what they sell, they just want to sell whatever is sellable (Regions)
	Sales Support focuses on; how can I reach everyone instead of thinking; which client should I reach? (Regions)
	We do not produce the optimum value argumentation because we do not have the time (Sales support)
	Either the product managers or marketing is in charge of the value argumentation, it can differ (Sales support)
	The technical people often do not have time to explain to those who produce the sales material, what is the value of the product – and if they did, they would do their task anyway (Sales support)
	I do a lot of value argumentation on my own since marketing has limited knowledge about the product, marketing is more good at creating events (Sales support)
	There is too little people at sales support with sales experience or knowledge about the field work which is a problem (Sales support)
	The KAM is measured towards how much they sell, not how much they take time to give feedback to sales support or come with customer insights (Sales support)
	We should be more customer focused, however not only listening to specific customer but instead take in broader trends (Sales support)
	Marketing must work better with understanding the customer (Sales support)
	The value argumentation is pretty much a summarized product description (Sales support)
	The relationship with the customer is key when selling a product – not the product itself (Regions)
	We should work better with influence customer behavior, we are coming in too late in the process which affect prices (Regions)
	We are best in the world on products, however the future is more consultative with new types of sales teams (Sales support)
	We must become better with working with the service offering as the products is becoming commodities (Sales support)
	We do not have enough of competence closest to the customer (Sales support)
	We should use what we have learnt from previous cases and share with each other to create better value in what we do (Sales support)
	Services is involved too late in the sales process, we have to remember that it is not just a product that is being sold. We should be involved in the value argumentation (Sales support)
	It would have been good to get feedback on our material we produce in an early phase and also information about what is used and not, however we have no strategy for it (Sales support)
	The product manager is responsible for arguing for our prices and marketing should assist him in it by producing the value argumentation (Sales support)
	The chain of thought for the pricing is not clear and it is hard for us to argue for the price that is set (Regions)
	Sales support must take their argumentation one step further, instead of enhancing what the features does in abstract terms there should be more emphasize on concrete results (Regions)

	There is a general introvert focus in this organization (Regions)
	We could sell more by thinking business cases – sell business opportunities to the customers (Regions)
	The value argumentation is only half made if not pricing is included in it, pricing and marketing should do the argumentation to make it commercial (Sales support)
	80-90 % of the people have not worked with sales and do not know what sales is all about (Sales support)
	If the plan is to sell X amount of products within the next years, the sales material might not be the big priority (Regions)
	Today, material is being produced at Sales Support with no clue if they are even used in the regions (BM)
	The pricing material is almost never used out in the field as it brings no specific value anyway (Sales support
	We get a lot of basic questions from the regional offices which probably could have been reduced by producing better material (Head of BO)
	Maybe we do things the regions do not use, but we have to do them in our work (Sales support)

OBSTACLE	QUOTES
TECHNICAL FOCUS	We must focus on creating a common language and listen better to the users of our sales support (Sales support)
	There is too much focus on the product, more focus should be on solving customer problems by sending people at marketing to the sales field (Regions)
	The product should be put in a context so that the regions have more use of the material, this is something marketing should do but they do not have any time for it (Regions)
	There is no coherent view of what is important in the sales process, it is not the product that drives prices – it is services, support etc. that add value to the product (Regions)
	There is a lot of technical material that is produced in the sales material (Sales support)
	We focus too much on the product rather on the customer issues (Sales support)
	The regions hardly look at the material produced at sales support since it is totally irrelevant for the customer (Sales support)
	Sales support produces a set of power points with no context at all – the result is that it is unclear where to use it when selling the product (Sales support)
	Often people at the regions call their technicians when having questions about the product, they do not need to know a lot about the technical features that can be found in the sales material when selling to the customer (Sales support)
	When creating a tender, the product description needs to be there but not when selling the product (Sales support)
	There is too many technicians at Alfa, which partly explain the technical focus in the sales process (Sales support)

OBSTACLE	QUOTES
RESOURCE EFFICIENCY & DISTINGUISED GOALS	Alfa have a history of having a resource based focus (Sales support)
	It is difficult to get hold of people in the process, they are often busy (Sales Support)
	We should really work together with each other across functions more, however, there is no time for those priorities (Sales support)
	We all are examined by goals and key ratios connected to our functions (Sales support)
	We do not have any resources for joint activities (Sales support)
	We do not have any measurements for what a good product push process are (Sales support)
	No one owns the process (Sales support)
	There is too little resources in the regional offices, the KAM teams are too small (Sales support)
	There is some double work in the process as everyone does their own thing (Sales support)
	People need to be aware of what we want to achieve in the process and access to what other people are doing right now (Sales support)
	It should be a better transparency between functions, what goals and key ratios they are striving towards (Sales support)
	Every middle line boss get their own budget which they want to spend in their own function, no one wants to pay for joint activities (Sales support)
	The measurement in the process is not good and we should connect the measurements to the process (Sales support)
	There is no one responsible for the process and it covers too many functions (Sales support)
	We have organized ourselves to the limit and increased complexity in the process (Sales support)
	There is no one that coordinates work at sales support (Sales support)
	Today, we have to deliver to different flows and I have to prioritize (Sales support)
	The KAM's always get enormous responsibility and challenging tasks and they are too few for these responsibilities (Sales support)
	We are a company with obligations to stakeholders and thus focused on hard values and not soft values (Sales support)
	It is difficult for the KAM to cope with different people at sales support since they have their own agenda (Sales support)
	The regions have their own goals and have no incentives to co-operate with sales support today (Regions)
	We strive for working with the product managers to produce the value argumentation, however the time aspect sometimes constraints this (Sales support)
	The regions do not have time to give feedback on the material produced (Sales support)
	There is no one responsible for quality assurance of the material (Sales support)
	There is no trigger point for giving feedback on material (Sales support)