Conditioning the Supply Chain in a Fast Moving Consumer Goods Business

Using value stream mapping to visualise, condition, manage information and product flow in Oriflame

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Abstract

Oriflame, since it was founded in Sweden in 1967 has become a major player in the cosmetics industry. The impressive annual growth of 17% that Oriflame has had in the last 17 years requires evidently a lot from the supply processes. It has been shown that the current set-up and the countermeasures at hand do not provide a sustainable business model i.e. having a balance between service level and inventory level. The purpose of this thesis is to propose to Oriflame actions that need to be taken to manage their supply issues. This is to be achieved by recommending a process and appropriate tools for reviewing and conditioning the supply chain.

As Oriflame is striving to become the number one direct selling beauty company, is there anything that can be learned from the Toyota Production System (TPS) philosophy to become a leaner enterprise? During recent years more and more companies have seen the benefits of Lean Thinking mostly through the success of Toyota. The concept of a lean enterprise has become a journey to ensure reduction of waste, cost, lead-time and at the same time increasing efficiency and value added activities.

The path to lean can be divided in five different steps: define value, the value stream, create flow, pull and perfection. The value for Oriflame is motivation of its sales consultants but little is known about constraints in the value stream which is the second step towards lean. To be able to propose and develop a process and appropriate tools for reviewing and conditioning the Supply chain three case studies have been completed and evaluated. These cases show that Oriflame, apart from poor forecasting, slow information and product flow also have to deal with a range of constraints in the value stream. Demand fluctuations combined with limited capacity, long lead-times and high minimum order quantities cause shortages, excess and result in the bullwhip effect.

Inherited supply chain processes have been proven redundant due to current business growth and complexity. In order to ensure that the right product is at the right place at the right time it is crucial that knowledge exists of how the value stream looks for the products offered in each catalogue. By creating value stream maps to visualise the value stream Oriflame will be able to be proactive in terms of eliminating waste and foresee potential issues.

By improving the information flow and reducing batch sizes and thereby reducing cycle time Oriflame will take a major step towards achieving its targets of reduced inventory and increased service levels. Improved information flow could be a more frequent planning cycle or establishment of partnerships with suppliers. Oriflame has to start understanding, conditioning and controlling the supply chain. To understand the complexity of the supply chain for a specific product or range, value stream maps have to be created to visualise the actions, steps, processes that in the end result in finish goods delivered to end customer.

Although Oriflame have a long way to go before being considered lean and flexible, it has to its advantage exceptional people that work according to the company philosophy. There are also clear company values and operating principles. All these factors are in line with the Toyota operating principles and the most important operating principle is to create a learning organisation that reflects and improves continuously. In this sense Oriflame has already come a long way.
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1 INTRODUCTION
The purpose of this chapter is to provide the reader with an overview of why this thesis has been initiated by Oriflame as well as the purpose, scope and the stakeholders of the thesis.

1.1 Background
Oriflame, has since it was founded in Sweden in 1967 has become a major player in the cosmetics industry. The impressive annual growth of 17% that Oriflame has had in the last 17 years [11] requires evidently a lot from the supply chain i.e. having the right products at the right place at the right time and last but not least at the right cost. This is of course a challenge for most companies but in this case there are some factors that differentiate Oriflame:

- Oriflame is dependent on its today more than 2.2 million [11] sales consultants which have to be provided with world class service in order to maintain the motivation to actually sell (see 1.1.3).

- Frequent catalogues i.e. every third or fourth week are released with new launches and promotions (1.1.4). As a product might only be available for sale during the period of one specific catalogue any responsiveness due to over sales has to be carried out within the same period.

- The demand for innovation is continuously growing; increasing the number of launches, decreasing the product life cycle and consequently the complexity of the business in terms of Stock Keeping Units (SKUs) (see chapter 2.5).

- Forecasting accuracy is very low which often results in either stock-outs or over-stocking. With a high turnover of products excess stock can easily become obsolete and must be written-off.

- Oriflame has a clear vision to become the number one direct selling beauty company.

Oriflame’s strategy is to provide world class service in a sustainable business model i.e. finding the balance between good service and reasonable inventory levels. At the moment, the service levels are feasible but the inventory levels are above the desirable. Although a high inventory level has not yet caused any major issues for the company, it will do so as the company’s sales are still growing rapidly. Due to this evolution Oriflame is eager to revise the current processes and procedures within the Supply Chain department in order to maintain a sustainable business model.

1.2 Problem Description
The main problem in the supply chain of Oriflame is that the re-order lead-times that are up to 3 months do not correspond to the business model with 3 week catalogues. The product flow is therefore pushed to the markets based on their forecast rather than pulled based on actual sales. The misalignment in the supply chain makes it more or less impossible to rapidly react to over and under sales. It is very important to react in terms of over sales to keep a high service level and in terms of under sales to avoid any excess.
1.3 Purpose
The purpose of this thesis is to propose to Oriflame actions that need to be taken to manage their supply issues and recommend a process and appropriate tools for reviewing and conditioning the supply chain. This is in order to achieve the desired service level and maintain a level of Inventory in a controlled manner. In order to simplify the future work within Oriflame a process and appropriate tools for process and value stream mapping will be recommended.

1.4 Method
The investigation of the current processes within the Oriflame supply chain will be compared with existing literature in the field of Lean Thinking in order to condition the new set-up and process.

The first step is to create value stream maps of the current information and product flow from the point of forecasting by the markets and until the desired product is received at the correct central warehouse. The information needed to execute this will be gathered by floor-walking through the production plant(s) as well as interviews with the people that work within the extended supply chain on a daily basis (both within Oriflame as well as both internal and external suppliers). The value stream mapping of the supply chain will visualise parameters such as lead-times, delays, inventory and waste.

The second step will consist of a literature review from Toyota Way, Lean Thinking and The Goal and the phenomenon bullwhip effect. The Toyota Way and Lean Thinking are based on the Japanese Production Philosophy with its fourteen principles along with the principles of Lean Thinking. The Goal explains the Theory of Constraints (TOC); that every organisation has at any given point a constraint that sets the limitations of the output. This chapter includes causes and effects of the bullwhip effect to emphasize the importance of communication across a supply chain to avoid high fluctuation of demand across the supply chain.

Based upon the findings from the first and second step, three suppliers will be value stream mapped and the outcome of that evaluation will be used as a basis for the results, conclusion and recommendations. The chosen suppliers will be producers of different types of products and will consequently have different types of limitations, processes and procedures. These have been chosen purposely in order to cover as many types off issues and solutions in the scope of this thesis. The desired set-up has to be realistic, feasible to implement and reflected in a proposed supplier agreement.
1.5 Scope

The scope of the thesis is from the point by forecasting from the markets until production of components/raw material through to conversion by the fillers and delivered to a specified stocking location. The process of product development and deliveries from warehouses to markets will therefore not be considered in this study (see Figure 1 below).

Figure 1 Oriflame supply chain from product development to delivery to sales consultant (Source: Oriflame Annual report 2006)
1.6 Disposition

In order to help the reader orientate, the thesis has been divided in the following chapters:

Chapter 1/ Introduction: This chapter aims to give a brief presentation of the thesis. Different aspects such as the problems discussed, short background, scope and main purpose of the thesis will be presented.

Chapter 2/ Presenting Oriflame: To really understand the issues that the Oriflame Supply Chain faces on a daily basis this chapter presents the most important parts of the business that are affecting the supply chain i.e. the catalogues, sales consultants and demand for innovation.

Chapter 3/ Literature Review: This chapter will focus on existing literature on the subject. In brief, explaining the pillars of lean thinking and the steps that one has to go through in the process of a leaner and more flexible supply chain.

Chapter 4/ Empirical Results and Analysis: Within this chapter, the findings from the literature reviewed and the case study will be described. The findings will then be discussed and compared.

Chapter 5/Conclusions and Recommendations: In this final chapter, conclusions and recommendations for further work on lean implementation in Oriflame using value stream mapping will be presented.

1.7 Stakeholders

This thesis aims to primarily develop and propose to Oriflame a process with appropriate tools in their work when conditioning the supply chain and setting up new processes. The secondary objective is to propose tools so that the work can be carried out by Oriflame in their work with continuous improvements. The process and tool will hence set the standard process for their first steps towards becoming a more lean enterprise. The thesis will cover the process from the receipt of the forecast from the markets until finish goods are received at central hubs. There are many internal and external stakeholders (see Figure 2 below).

Figure 2 Stakeholders of the thesis
2 PRESENTING ORIFLAME

As a direct selling cosmetics company Oriflame is exposed to challenges such as extreme product turnover, maintaining the motivation of its sales consultants and issuing frequent catalogues to increase the activity. This chapter explains the importance of these factors and why there is a need to improve the supply chain set-up to support the sales.

2.1 Need for Improvement to Achieve the Vision

Being an international cosmetics company selling direct in more than 63 countries with a turnover above 1 billion Euros, Oriflame has shown that the concept of direct selling is sustainable. The vision is to become the number one direct selling beauty company. The brand is now represented in more than 63 markets and among many of these Oriflame has a very strong position, against other direct selling companies such as, the giant in the industry, American AVON as well as the retail brands such as L’Oreal. A part of the company strategy is to provide world class service (see Figure 3 below), which is the reason why this study was initiated. To understand the way Oriflame operates one also needs to understand the drivers behind the increased sales, complexity and the need to challenge the current set-up of the supply chain. This is required to support the future growth which is essential to becoming the number one direct selling beauty company.

Figure 3 The foundation of the Oriflame business (Source: Company print material)

2.2 Direct Selling

Direct selling is the process where independent sales consultants market and sell products directly to the end consumer. This kind of selling is also known as “Tupperware parties” or “Party planning” where independent sales consultants call on their customers, friends and family to demonstrate and sell products in their homes or workplaces. The main benefit is that no investments in infrastructure are needed compared to more traditional retail stores. Low capital requirements with high proportion of variable costs have shown to be very successful once the market presence has been
established. The direct selling companies have been forecasted to grow faster than the companies that operate through retail sales. The main reason is that the direct selling business offers two factors that cannot be offered through retail sales; attractive earnings opportunity (see chapter 1.1.3) and the capability to reach customers in non-urban areas. However, by providing service in non-urban areas direct selling companies reach a major potential of customers. By doing so many problems have to be overcome. Many of these locations have very limited access to transport infrastructure i.e. islands and isolated cities far away from highways, airports and train stations. In this specific case, Oriflame has a two month lead-time to some of its local branches.

2.3 The Oriflame Offer to its Sales Consultants

Oriflame offers anyone the ability to become a sales consultant in order to make extra money, have a part-time income or even build their own career or business. For 41 years; hundreds of thousands of people have been able to profit from this offer to gain additional income. The Oriflame Success Plan rewards sales consultants for building their own successful networks. The Success Plan rewards consultants for their own sales as well as the sales of any consultant within his or her network. As Oriflame is a multi-level marketing company the consultants are rewarded with Senior Managers and Directors titles as the sales of a network reaches certain levels. As it is very easy to become a sales consultant Oriflame has created a win-win situation. The sales consultants do not have to build any inventory as they receive their already sold products from Oriflame owned inventories and have an immediate 30% discount of the catalogue price. They also earn an additional 3-21% on their personal sales and the sales of those consultants that they have recruited to their network. On top of this they can also be rewarded with cash awards and bonuses based on achieving targeted sales volumes. In addition to this sales consultants can be rewarded based on achievements related to leadership development, training and motivation of the people they have recruited. Every consultant starts as a consultant and has the opportunity to receive the President Directors title with cash and gifts such as a car as rewards. To support, motivate and improve the productivity of the existing consultants Oriflame provides training programs and seminars. It also provides consultants the tools to maximize the sales of their networks. For the top leaders/consultants there are international conferences that are the key motivator. For recruiting new consultants recruitment campaigns are organised where people are shown the possibilities within Oriflame.

2.4 The Oriflame Catalogue

The main sales tool in Oriflame is the catalogue. Although the Internet, PR, events, leaflets, posters, TV, print and billboards are also used, the catalogue remains as the main channel of communication between consultants and their customers. In an article in the Swedish business paper, Affärsvärlden, the CEO, Magnus Brännström highlighted the importance of the catalogues. He emphasized that selling cosmetics through a direct selling model is a lot about emotion and therefore it is very important to create a catalogue that can communicate that. The catalogue should motivate the consultant to sell and the end consumer should feel that the catalogue is offering something new and interesting every time he or she looks at it (see chapter 2.4). A new catalogue is released every third to fourth week depending on the market which includes new launches, offers and promotions. Each edition is released in regional versions and in 35 languages [11].
2.5 The Demand for Innovation in the Business

Product innovation is a key driver in the cosmetics business. There are more and more products that are developed to satisfy different demographic and geographic segments. This means that products, in some cases are not launched globally and are aimed at a specific geographic segment. The result is as in many other businesses, the trend is moving towards having more frequent launches of new products, shorter product life cycles, more innovation and excitement with every new product that is presented to the end customer. Due to inevitable trend and the fact that all products in Oriflame are launches with big promotions, the bullwhip effect is magnified, causing disturbance in the entire supply chain (see chapter 3.3).

The graph below (see Figure 4 below) shows the increase of complexity that has to be managed in the Oriflame supply chain on a daily basis. It can be observed that the products in the current catalogue are only a small portion of the total number of SKUs that have to be managed. The majority of SKUs are either discontinued products or being launched in the next 8 months hence the rapid turnover of products.

![Business Complexity Graph](image)

**Figure 4** Oriflame business complexity by SKU from Jan 03 to Jul 07 (Source: Oriflame DWH/Data Warehouse)
3 LITERATURE REVIEW
The information in this chapter is taken from groundbreaking books in the field of Lean Manufacturing, The Toyota Way [7] and Lean Thinking [2]. This chapter also includes causes and effects of bottlenecks and the bullwhip effect.

3.1 Japanese Production Philosophy
Toyota is today recognized as the most successful automotive manufacturer in the world with fewer man-hours, less inventory, fewest defects than any competing manufacturer. As Oriflame is striving to become the number one direct selling beauty company, is there anything that can be learned from the TPS?

3.1.1 Toyota Production System (TPS) and Lean Thinking
The TPS is a unique approach to all manufacturing and has set the base for Lean Thinking that has become a trend during the last few decades. Liker states in The Toyota Way the attempts carried out today by most companies to become a Lean company have been carried out in the wrong manner, focusing too much on tools such as 5S (sort, stabilize, shine, standardize and sustain) [7] and Just in Time (JIT) rather than seeing the whole picture.

3.1.1.1 Seeing the Whole According to The Toyota Way
As a car manufacturer Toyota can present some very impressive achievements. In 2003 Toyota had an annual profit larger than the combined earning of Ford, Chrysler and GM [7]. Another achievement is that Toyota has the fastest new product development process in the world. They can design a new product in 12 months whereas other manufacturers require two to three years [7].

What is then the secret behind the success of Toyota? There are 14 principles constituting The Toyota Way and that have lead the company to its current success [7]. Their fourteen principles are discussed in chapter 3.1.2. But according to one of the inventors of TPS, Taiichi Ohno the answer to the success is rather simple:

“The key to the Toyota way and what makes Toyota stand out is not any of the individual elements...But what is important is having all the elements together as a system. It must be practiced every day in a very consistent manner - - not in spurts” [7]

What does it then take to start looking at all elements together as a system, as the one stated by Taiichi Ohno rather than individual and independent segment of an organisation? Creation of flow is one of the fundamental pillars of lean manufacturing [7]. How this flow is achieved through lean thinking is discussed in chapter 3.1.3.

3.1.2 The Operating Principles that made Toyota Number One
The TPS should not be seen as a set of tools e.g. JIT or 5S that will enable companies to become more efficient. It is in fact a philosophy that can support and encourage people to achieve continuous improvement and contribute with the best interest of the company in mind. This philosophy or The Toyota Way consists of the following fourteen principles [7]:

12
1. Avoid short-term decision making even if it will affect the financial goals. Management decisions should be based on a long-term philosophy in order to grow and align the whole organisation towards a common purpose.

2. Create process flows in order to eliminate waste (muda) and increase the value added time. Ensure that the lead-time for both material and information flow is as short as possible and linked to people that can bring the issues to the surface.

3. Align the processes to react based on actual customer demand by creating a supply chain based on pull rather than push (see chapter 3.1.4). Reduce the batch size and increase the frequency of replenishment.

4. By levelling the workload (heijunka), you eliminate fluctuations in the production. Heijunka reduces pressure on staff as well as equipment.

5. Stop or slow down the process if it does not provide the right quality. Make sure that problems are dealt with immediately.

6. Manage the existing knowledge by standardizing the current practice. Standardize processes where appropriate and allow creativity to improve the processes.

7. By using visual control and avoid computer screens so that problems do not remain hidden. Visual control keeps the workers focus on the workplace whereas computers tend to do the opposite.

8. Use only reliable and tested technology to support your people and processes. Remember that technology is supposed to support the people and processes, not replace them.

9. Leaders should really understand the work and live according to the company philosophy. The leaders that truly work according to the company philosophy and know the daily work are invaluable for the company as they can teach others.

10. Develop exceptional people and teams who believe in the company philosophy. Not only can exceptional people achieve exceptional results but can also be ambassadors for the company philosophy.

11. Respect all parties of your extended supply chain and challenge them to improve. Your extended network of partners and suppliers should be seen as an extension of your business, so if they improve, you improve.

12. Make sure that you understand the situation by going to see it yourself. From top to bottom, managers and executives should see the source of the problem and not base decisions on what others say or information computer systems provide.

13. Take your time when you need to make a decision. Make sure you take into account several alternatives and that you have consensus. Once you have made a decision, implement it rapidly.

14. Create a learning organisation that reflects and improves continuously (hansei and kaizen). By using hansei you ensure that the organisation avoids mistakes that have been experienced
previously. Based on reflection from previous tasks or projects, standardized processes can be created to avoid waste.

3.1.3 Lean Manufacturing: A Five Step Process
During recent years more and more companies have seen the benefits of Lean Thinking mostly through the success of Toyota. The concept of a lean enterprise has become a journey to reduction of waste, cost and lead-time; at the same time increasing efficiency and value added activities. The way to creating a lean enterprise consists of several steps that have a clear beginning but no end, as the journey to perfection never ends. The path to lean can be divided in five different steps: value, the value stream, flow, pull and perfection [2]. The following chapter will explain these steps in more depth.

3.1.3.1 Specify Value
One would be amazed by the all the activities that are carried out in companies that actually do not add any value for the end customer. Many times companies offer products based on their knowledge and assets they have and if the customer does not respond positively the options of price adjustments and add-ons are reviewed. This mindset is production focused and not at all customer focused. Therefore the first step to lean thinking is to rethink and challenge the definition of value from the perspective of the customer. We have during the ages been indoctrinated in the idea that efficiency always comes from using the existing assets to produce large batches to get high utilisations and thereby a lower unit cost. This type of perspective only takes into account a few of the elements in the whole picture.

A good example is the way the airline industry operates. The value in this case is that passengers want to get from point A to point B as quick as possible without holdups and lost luggage. However, the way the airline industry is headed is towards a system that is far away from lean. We see more and more jumbo jets like the new Airbus 380 and large national airport complexes. With this kind of set-up the airline companies try to maximise their assets e.g. planes and sorting centres, by moving people in large batches. Having in mind that flights to these airports often mean that the customer often has to take a connecting flight to his or her final destination which for him or her is first of all more money spent and secondly more time spent and lost in transfer [2].

Often creativity and good solutions come when we think “outside the box”. Although this is well known, many companies still look at their existing assets and use those to find new ways to improve them to progress. Lean Thinking starts when companies ignore what they can offer to the customer but start to investigate what the customer wants to be offered and what is perceived as value. Therefore it is very critical that the value for the end customer is well and accurately specified before the journey to creating a lean enterprise starts.
3.1.3.2 The Value Stream

As we continue down the path for more lean processes we must first of all determine what is needed to manage the whole value stream for a specific product. In a value stream there are three types of actions that in the end result in the output of process:

- Actions that create value as perceived by the customer.
- Actions that do not create value but are actually required to achieve the final product (type one muda). These actions should eventually be eliminated.
- Actions that do not create value and are not required to achieve the final product (type two muda). These actions should be eliminated immediately.

Did you know that it takes 319 days to produce Coca Cola from the point that it is bauxite to the point that is ready for sales in your average Tesco store [2]? Out of these 319 days that covers the whole value stream from the mine to home storage only 3 hours are actual processing times! The British consulting firm Oliver Wight [10] use a very basic calculation to show how efficient a process is. By dividing the value added time by the total processing time they calculate the so called Velocity ratio. In the case for the Coca Cola the ratio would be as calculated below.

\[
\text{Velocity ratio}_{\text{Coca Cola}} = \frac{\text{Value added time}}{\text{total processing time}} = \frac{3h}{7656h} = 0.00039\%
\]

It might be surprising that the velocity ratio is virtually zero, but that is actually not that hard to grasp considering the following [2]:

- 99% of the process time is when the products at different steps in the process are waiting in incoming and finished storage.
- The cans and aluminium are picked up and down thirty times. They are also moved through 14 storage lots and warehouses.
- Four times are the cans palletized and unpalletized.
- The scrap rate of the expensive aluminium accumulates to 24% before the finish product reaches the customer.

Why is it so that there is so much muda in the value stream for Coca Cola production? The main reason is that despite the fact that the Coca Cola cans are very small and are consumed in small quantities by the end customer the actual production batch sizes are very large. The whole supply chain is set up to manage huge batch sizes in order to operate the machines at high speed with few change overs. The issue with big batch sizes will be discussed further in chapter 3.2.
3.1.3.3 Process and Value Stream Mapping

Mapping processes is a fundamental part of the TPS which is all about reducing waste and creating a more lean company [8]. Uncertainty in demand can only be responded to if the structure of the business is set for fast decision making and a responsive supply chain. Even if the market for books, tools and seminars on process mapping is increasing rapidly there are no generally accepted guidelines. The purpose of this chapter is to explain why process and value stream mapping is used as a method to achieve the purpose of this study as described in chapter 1.3. This chapter will also explain how these tools should be used in order to fulfil its purpose.

There are several reasons why processes should be mapped. First of all maps provide a visual tool to make work visible. Increased visibility not only improves communication and understanding but also creates a common frame of reference for those involved. Process maps are usually snapshots in time that shows the relation between functions, steps, inputs and outputs within and between companies. More and more organisations are today recognizing the benefits of process mapping hence the range of books, products, tools and software available in the market today. With tools like Microsoft Visio and eVSM (see chapter 3.1.2.4) it is possible to make dynamic process maps that interact with Excel, PowerPoint etc. When used correctly, process maps can be a powerful tool when you want to:

- Orient new employees
- Evaluate or establish alternative ways to organize your people to get the work done
- Quickly bring people up to date on what your team, group or department provides to the rest of the organisation and vice versa.
- Identify improvement opportunities.
- Communicate your processes to your suppliers, clients etc.

There are basically three different ways to get the necessary information to create a process map.

- Self generate: If you already know the process, you can draw the process map and acquire others’ input when drawn. This is the fastest way to map a process but your knowledge is the constraint.

- One-to-one interviews: Meetings with suppliers, performers etc enable you to create a quick overall map of the processes. Once a straw model is created you have the knowledge of whom to turn to when process mapping on a more detailed and accurate level. A less detailed overall map is also very helpful to start with since it gives you a brief insight of the interaction between functions before you start the interviews.

- Group Interview: Having relevant individuals to participate in a meeting where the process map is generated has several advantages. This method provides a direct interaction between different suppliers/functions and saves a lot of time as questions can be responded to immediately.
Value stream mapping (VSM) has recently become more discussed among organisations. This has mainly to do with the new awareness of Lean manufacturing and the TPS, where VSM has a central role. By following a product from beginning to end, and drawing a visual representation of every process in the material and information flow one can identify opportunities to enhance value, eliminate waste and improve flow. Therefore there are always two maps drawn, one that represents the “current state” and one “future state” that shows how value should flow (see Figure 5 & 6 below). There are today many tools that enable quick and easy ways of drawing value stream maps although the most common one is Microsoft’s Visio. Managing the value streams involves a process for measuring, understanding, and improving the flow and interaction of all the associated tasks to keep the cost, service, and quality of a company’s products as competitive as possible.

Figure 5 Current state Value stream map

Figure 6 Future state value stream map with improved material and information flow
3.1.3.4 Tools for Process and Value Stream Mapping

The most common and known tool for process mapping is Microsoft Visio which is an easy tool to learn and use. Visio provides you with all the shapes you need, and your task is to connect them together. From various stencils of shapes you just drag the shape you want on to the drawing area. Once the shape is there you can edit text, size, color etc. Even if Visio is easy to use it should not be underestimated. The possibilities with Visio are vast and besides advanced drawing you can create organisation charts, Gantt chart, office layouts etc.

For value stream mapping, the eVSM software is a very easy way to visualize value stream maps. It is an additional package to Visio providing an extra toolbar and five sets of stencils containing shapes that are not standard in Visio. The main benefit with of eVSM is that it interacts with Microsoft Excel which makes it simple to export and import data between Visio and Excel. This means that calculations can be done directly in Visio and automatically exported to excel and vice versa. The best way to learn this additional package in Visio is to visit the eVSM website, www.evsm.com where tutorials and movies are available to guide users through the process of drawing value stream maps. The basics are the same as in Visio i.e. “drag and drop” shapes on a sheet and connecting them together.

3.1.3.5 Flow

It is no longer a secret that large portions of various processes are waste in different forms e.g. waiting and storage. This is mostly due to the fact that there rarely is a flow in the process. In the end it is actually the customer that has to pay for all this waste even though it does not add any value for them as discussed in chapter 3.1.1.

Once it is established what is perceived as value and how the value stream is operating it becomes easy to evaluate the flow and how it can be improved. It is here one can re-engineer the process to eliminate scrap, waiting and other non value added activities in order to allow a product to proceed in the value stream continuously. To achieve a continuous flow there are three dimensions that need to be considered [2]:

1. Focus on the actual product or service from the beginning of the process to completion
2. Ignore the current boundaries and constraints of jobs, careers, departments and functions and base your lean solution based on the steps that have to be taken to create the flow.
3. Think “outside the box” and try to ignore the way the process looks today and rethink the current practices and tools to achieve the flow

A big step towards the above mentioned dimensions is to implement the concept of takt time, meaning that production is at the same rate as your sales to the customer. Obviously the demand for products varies over time and therefore the takt time has to be adjusted accordingly. By calculating on a frequent basis the actual takt time in relation to required takt time it is clearly visualised if there is any need to reduce waste in the process. If the actual takt time is lower than the desired one you will get waste in form of overproduction (with inventory as a result) and vice versa you will have
waste in the form of waiting (with stock-outs as a result). Therefore, it is very crucial that the each step of the process is supplied by the previous step of the process just in time (JIT). The JIT technique was pioneered at Toyota in the 1950’s [2] with the purpose of creating a smooth flow in the value stream. This technique however required very quick changeovers and reduced batch sizes (see chapter 3.2). In this way each step of the process handles small amounts of units and handles them as soon as the downstream operations has produced them more or less eliminating work in progress (WIP). The JIT technique is consequently fully dependant on level scheduling, also known as heijunka. The purpose of level scheduling is to smooth the production based on the bottleneck (see chapter 3.6) of the process so that no buffers or WIP are built in due to lower output in a certain step. By establishing the concept of takt time, JIT and level scheduling throughout the value stream products can be produced in a continuous flow with the minimum amount of waste. So once a flow is established in the value stream it is time to establish the process of pull i.e. producing the right product at the right time so that the customer gets fully satisfied.

3.1.3.6 Pull
The purpose of pull is that nothing should be produced unless it is asked for by a customer. So in accordance to fluctuations in the demand and the desire for low inventory it means that you should not produce until you have the demand and once you have it you should be able to produce the product really fast. This point of view is of course very logical for everyone but not easy to implement in real life. Once again we realise the need for small batch sizes but also the need of a more frequent ordering process for the product, from monthly to weekly or daily. These two factors combined are for most manufacturing companies associated with high costs. But Toyota has actually proven that this set-up can be more cost efficient than having big batches shipped on a monthly basis [2]. A more in depth analysis showed that the increased cost of daily freight of spare parts from their Part Distribution Centres to spare part dealers in USA would be covered by:

- Simplification in the picking process
- Savings on cost of holding the inventory until despatch
- Elimination of express delivery if product was needed before the agreed despatch date
- Lower inventory at dealers allowing them to increase the range of parts they could have on hand. In this way they would also be able to have in stock the parts that are requested less frequently.
- And maybe the most important, no sudden waves in the day-to-day orders allowing consolidation of trucks.

By creating this pull system Toyota was able to cut costs and at the same time increase the service level at the same time. The implementation of this specific pull process however took years but reduced the inventory levels by 50% and shortened the service rate from 98% in 7 days to 98% in only 1 day [2]. Even though these figures are impressive there is always room for improvement and perfection.
3.1.3.7 Perfection

When working on process improvements there is according to the Japanese philosophy, no end. There are always enhancements that can be made and they should be a part of the daily work and mind set of all people within the organisation (see chapter 3.1.2, principle number 14).

3.2 Reduce Set-up Time and Batch Size to Improve Efficiency

It is not a secret that all manufacturing companies prefer to have as big production batches as possible. Big production batches will of course reduce the need of changeover and therefore a lower total cost per produced unit. However the demand is rarely reflected in big batches. Consequently big production runs lead to inventory buildup. The classic view on batch sizes, also known as economic lot size was developed by Ford W. Harris in 1915 and calculates the tradeoff between ordering and storage costs i.e. economic order quantity (EOQ). However this simple model assumes among other factors that the supplier has unlimited quantity of the wanted product, the demand is constant and the lead-time for placing an order and its receipts is zero. As discussed in chapter 2 the business which Oriflame operates within do not fulfil the criteria for using the calculation for EOQ due to the constraints in supply and demand uncertainty.

One big leap to create a more reactive supply chain is about creating manufacturing systems with smaller batch sizes. Much of the focus in the “manufacturing revolution” in the 1980s was on reducing the batch sizes [1]. Many times the concept on EOQ has resulted in small batches appearing uneconomical to run. The main reason is that it assumes long set-up times, which is a non-value added activity. The set-up between production runs are in fact non-value added activities but they are not to be considered fixed and uncontrollable. Set-up time can be reduced either by changing process or changing machinery. Too often many companies face the obstacles of extremely inefficient machines when they try to implement the lean ideology. The concept of lean has to be understood and adapted and new purchasing strategies have to be considered that are in line with the product value stream [15].

Below is a comparison (table 1) between two scenarios with the same processing time per unit regardless of the quantity but with different set-up times. With a long set-up time there are big improvements in the effective processing time when producing bigger batches whereas a process with short set-up time only results in a very marginal improvement. So if a manufacturing process is properly set up with short set-up time it does not make a big difference if the batch size is 100 or 10.000 units. This is one of the findings that can be done when doing value stream mapping if one decides to include set-up times in the calculation.

<table>
<thead>
<tr>
<th>Batch size</th>
<th>100</th>
<th>1,000</th>
<th>10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup time</td>
<td>3 minutes</td>
<td>3 minutes</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Processing time per piece</td>
<td>60 seconds</td>
<td>60 seconds</td>
<td>60 seconds</td>
</tr>
<tr>
<td>Effective Processing Time</td>
<td>1.03</td>
<td>1.003</td>
<td>1.0003</td>
</tr>
<tr>
<td>% Improvement</td>
<td>N/A</td>
<td>2.60%</td>
<td>2.90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Batch size</th>
<th>100</th>
<th>1,000</th>
<th>10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup time</td>
<td>3 hours</td>
<td>3 hours</td>
<td>3 hours</td>
</tr>
<tr>
<td>Processing time per piece</td>
<td>60 seconds</td>
<td>60 seconds</td>
<td>60 seconds</td>
</tr>
<tr>
<td>Effective Processing Time</td>
<td>2.8</td>
<td>1.2</td>
<td>1</td>
</tr>
<tr>
<td>% Improvement</td>
<td>N/A</td>
<td>58%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Table 1 The effect of batch size of effective processing times in relation to set-up time. Effective processing time is calculated by adding set-up time with total processing time, and then dividing the sum by total processing time.
3.3 Demand Uncertainty
As mentioned in the previous chapter there is a possibility to calculate the trade-off between the cost of ordering versus stock-holding. The issue is that it, among other assumptions, assumes that demand is constant and ignores the demand uncertainty and forecasting accuracy. Today many companies forecast far in advance and base the whole planning process as if the initial forecast is accurate. One should remember the following principles about forecasting [1]:

- Forecast is always wrong
- The longer the forecast horizon, the worse the forecast
- Aggregate forecast is more accurate

Although hard to accept, a forecast is no more than a qualified guess based on experience to predict future demand. The further out one has to predict, the discrepancy between forecast and actual demand will accumulate taking into account seasonality and future trends. However, if it is difficult to forecast on a specific SKU it is easier to forecast on a family or concept level, e.g. an Eye Shadow range rather than specific shades (see Figure 7 below). Forecasting on a higher level than a SKU could be used to purchase generic components or book capacity. It is only when the product goes into production and a purchase order is placed that SKUs should be considered. This kind of set-up would need a correct set-up further down the supply chain in terms of safety stock of raw materials and components but would increase the flexibility and reduce the dependency on forecasting on SKU level.

![Figure 7 Example of product hierarchy at Oriflame](Source: Product fulfilment documentation)
3.4 The Bullwhip Effect

It has been shown that suppliers and retailers experience that while demand is relatively constant, the inventory and orders across the supply chain fluctuate a lot more than the actual demand from the end customer. This phenomenon has been experienced and examined by Procter & Gamble (P&G) while they examined the demand for their disposal diapers. Note that this is a product with more or less constant demand throughout the month and even year. However, P&G noticed that the further back in the supply chain they went the more the orders fluctuated. This variability in orders when moving further back in the supply chain is referred to as the *bullwhip effect*. Assume a rather simple supply chain in four steps, retailer, wholesaler, distributor and factory (see Figure 8 below). The customer demand data for the retailer is not communicated to the rest of the supply chain. Therefore the wholesaler, distributor and factory have to place orders, book capacity and build safety stock based on previous orders in order to maintain a high service level. If now the order from the retailer to the wholesaler fluctuates upwards. As the wholesaler do not have access to the sales data it cannot know if this small fluctuation is due to example EOQ or a real increase in sales. Therefore the wholesaler has to quickly amend the order to the distributor to react to the new, higher order and build safety stock based on the new order. Also the new forecast will be amended accordingly. Consequently the distributor will increase the orders placed to the factory. The factory will in the end receive an order that includes the safety stock for the retailer, wholesaler and distributor. This order will be far above the actual demand from the customers. If now the next order from the retailer to the wholesaler is lower than the previous, the wholesaler will assume a lower demand, decrease the forecast and use the safety stock before placing any new order to the distributor (see Figure 9 below). The same actions will be carried out by the distributor and factory. The example below shows that if the real demand data is not communicated across the whole supply chain whatever signal comes from the retailer will be amplified and will cause increased costs in terms of transportation, inventory and manufacturing costs due to sudden changeovers.

![Figure 8 The extended supply chain showing the delay in information from actual demand to factory](image)

![Figure 9 The increase in variability in the supply chain due to the bullwhip effect [1]](image)
3.4.1 Managing the Bullwhip Effect

Although demand will always vary there are ways to reduce the bullwhip effect and its impact on the supply chain.

The most effective remedy is to reduce the uncertainty across the supply chain with centralized information. Existing technology with data warehouses, web services and internet make sharing information rather easy and secure. If each step of the supply chain has access to complete information about the current demand they can plan and forecast more accurately. This method also enables suppliers to react faster and adapt to supply issues. In a fully integrated supply chain each step has access to inventory levels, orders, production status and delivery status at each step. Instead of a reactive supply chain that would react to any minor fluctuations a fully integrated supply chain would be more proactive; focusing on achieving a high service level with low inventory. Another tool for managing the bullwhip effect is to engage in strategic partnerships with shared information and inventory i.e. vendor managed inventory (VMI) that is covered in the next section.

3.4.1.1 Vendor Managed Inventory (VMI)

When working according to VMI, the manufacturer is responsible for managing the inventory of its products at the retailer’s warehouse. The retailer do not have to place orders to the manufacturer who has full data visibility regarding sales, inventory levels etc. As the manufacturer does not have to rely on actual orders from the retailer the bullwhip effect is completely eliminated. Although a VMI can create win-win situation for the parties involved in terms of increased visibility, more stable production and lower inventories it also implies some risks as well. This transparency can strengthen as well as weaken a relationship [13]. A buyer that has full insight into the suppliers’ organisation structures, processes and finances could make use of this information to reduce the purchase costs for all suppliers in the business. Although partnerships and alliances have been used for a long time this new way of working with full transparency or open books requires apart from clear goals, common understanding, substantial agreements and responsibilities. It is very important that both parties have a good and well working relationship. The shared information could be commercially sensitive and should not be shared with any parties outside the partnership even when the partnership is terminated. As the exchange of information from both parties is essential to create a successful VMI, mutual trust and respect is crucial.
3.5 Theory of Constraints (TOC) and Allocating the Bottlenecks in a Process
Another approach to the way of seeing the whole is outline by Eliyahu M. Goldratt and Jeff Cox in their novel The Goal. According to their Theory of Constraints (TOC) every organisation has at any given point a constraint that sets the limitations of the output. The limitation can be internal as well as external, however the limitations represent a bottleneck in the flow. Therefore the constraint has to be allocated and managed correctly in order improve the system’s performance. The overall performance of a system is solely dependent on the output of the bottleneck. Therefore a bottleneck should always be utilised to the maximum (assuming that a demand exists), and all other operations should be aligned according to the bottleneck. High utilisation and higher output in non-bottleneck machines will result in increased work in progress (WIP) which is money invested in the organisation’s inventory. The approach to continuous improvements according to TOC is as detailed in the following five steps [6]:

1. Identify the constraint(s), internally and externally that is limiting the throughput of the system

2. Examine and manage the constraint so that it is fully utilised

3. Subordinate all other processes so that they are aligned and support with the bottleneck. Processes that are not bottlenecks should never have a higher throughput than the bottleneck.

4. Increase the capacity of the bottleneck either via new processes or shifts. If that is not possible investments should be made to allow this to happen.

5. Repeat the previous points until a new bottleneck is found. This process is a continuous process and as mentioned earlier, a system always has a bottleneck that limits the output.
4 CURRENT SUPPLY CHAIN SET-UP IN ORIFLAME

Each year Oriflame sources approximately 600 million units of which approximately 50% is produced internally. Internal manufacturing is represented in Sweden, Poland, India, China and Russia. Today Oriflame is distributing products through 2 Central hubs in Holland and Poland to its 63 markets (see Figure 10 below).

Figure 10 Oriflames logistic footprint with internal factories and Central hubs

4.1 Product Fulfilment

To cope with the growth and complexity of the business, a Product Fulfilment project has been initiated to review and improve different aspects of the supply chain. In brief the main objectives are:

1 More accurate forecast and improved New Product Development (NPD) process.
   1.1 Increase forecast accuracy by forecasting on SKU and concept level.
   1.2 Shorten the NPD process by reducing waste and shortening the time to market.

2 New supply chain structure, inventory strategy and logistics footprint.
   2.1 New structure and processes in the Supply Planning department in order to increase flexibility, shorten lead-time and thereby reduce inventory.
2.2 New logistics footprint to enable a different inventory strategy by centralising the inventory to Central/Regional hubs rather than having the inventory in the markets.

In alignment with the scope (see chapter 1.4) of this report it is only point 2.1 that is covered.

4.2 Current Information and Product Flow
The planning department in Oriflame is fully responsible for in-flow of products to the central group hubs. The execution is based on a monthly forecast that consists of 8 months forecast from markets and an additional 4 months forecast produced centrally by the global forecasting team. The forecast for the 12 months are on SKU level. Based on the forecast the planning department issue delivery plans and send them to the internal and external suppliers/fillers (see Figure 11 below). Suppliers are then responsible for placing orders for components and raw material where needed in order to fulfil the delivery plan. As seen in Figure 11, there are several break points in both information and product flow across the supply chain, starting from Sales Points (SPO) and Immediate Services Centres (IS), ending at the component producers. As the transparency is low, the risk for the bullwhip effect is very high.

![Figure 11 Overview of the information and product flow in the Supply chain.](image)

4.2.1 Low Possibility to React to Forecast Changes
Regarding the information flow, a new forecast submission is issued from all markets beginning of each month. The new forecast is then consolidated in the monthly calculation of the distribution requirements i.e. DRP (Distribution Requirement Planning) and then available for the Planning department. Based on the output from the DRP new delivery plans are created and sent to all suppliers. The suppliers then have according to the operational agreement five days to review the plan and confirm deliveries to Oriflame. The whole process, from the point that new forecast is received from the markets takes approximately 30 days before new supply plans are created, confirmed by fillers and updated in the system (see appendix 1). According to the operational service agreement Oriflame provides all suppliers with a plan with a firm order period of 2 months (M1 and M2) in weekly buckets and commitment for purchase of raw material and components for the third
month (M3). The delivery plan is sent on a monthly basis firming up another 4 weeks each time. This means that changes in the delivery plan if the forecast would change could only be done in the third month (M3). So when the “January plan” is sent out in December, the month of January and February are firm and changes can only be done for March. Have in mind that the January plan is based on a forecast that was submitted at the beginning of December. Once the actual products are produced they are shipped to the central hubs in either Holland or Poland. From the central hubs the goods are sent on to regional warehouses and from there on to local branches and Service Centers (SC) as shown in Figure 12.

![Diagram of planning process](image)

**Figure 12 Time line for the planning process and lead-time from forecast to receipts of product in the markets**

### 4.2.1 Current Difficulties within Supply Planning

According to Karl Jennings, Planning Manager in Oriflame, the planning department has to deal with many issues on a daily basis in order make their requested delivery plan actually happen. The main issues that are highlighted by Karl Jennings are the planning process, lead-time variability and batch ordering:

The current planning process (see appendix 1) is solely dependent on the monthly DRP that upon receipt provides more than 2 weeks old data. The DRP run is also misaligned with the catalogues that are released every third week (see chapter 2.4). This causes even further delays before the information about the actual sales reaches the fillers, raw material suppliers and component suppliers. As the two coming months are firm according to the operational agreement there is basically no possibility to react to fluctuations in sales within the current catalogue. Oriflame tackles this problem by having safety stock and strategic safety stock across the supply chain. Safety stock is kept at central hubs, regional warehouses, market warehouses as well as branches. Looking at this at local level the safety stock might not be a big issue but at a global perspective all these safety stocks result in huge inventory holdings.
The planning tool is also a weakness in the process. When planning the planners do not have any support from the system in terms of capacity constraint (i.e. bottlenecks), minimum order quantity (MOQ), or lead-times for raw material or components. As Oriflame is using generic lead-times for all product groups irrespective of the complexity (i.e. two months firm order window), some products have big margins in terms of re-order lead-time and others are being planned to failure. The lead-time for raw material and components can be as long as 12 weeks. The most extreme case is the re-order lead-time for glass that could be up to 26 weeks. Raw materials in cosmetics can be very specific and in some cases there is only one single supplier that can provide them. To cut costs, components are more frequently sourced from the Far East and that also has a negative impact on the lead-time and makes it impossible to even change the delivery plan in the third month (M3 according to Figure 12).

Different MOQs between raw material, component suppliers and fillers cause a misalignment. The result is that the filler always has different quantities available of either raw material or components when going into production. As Oriflame has a high turnover of products, the discrepancy will end up as excess and will be scrapped.

4.2.2 Extreme Demand Uncertainty due to Promotions and Shortage Gaming

As a direct selling company there are more issues than forecasting, slow information and product flow that adds to the complexity of the supply chain. The success of Oriflame has much to do with the entrepreneurial mind set of both managers of the individual markets as well as the sales consultants (see chapter 2.2 and 2.3). Ironically it is also these characteristics that cause some of the major issues for the supply chain. Two main factors that amplify the demand uncertainty and sales fluctuation are parallel extreme product promotions and shortage gaming.

Extreme product promotions (see Figure 13 below) are needed to drive sales but when they occur at the same time in several regions it causes stock building in terms of under sales and limits response time for oversales. Another not proven effect is that products that are bought by sales consultants when they are on offer and sold at standard selling price in the following catalogues and thereby increase their profits. Below is a graph showing the effect promotions have on sales.

![Figure 13 Sales pattern for a top selling product (Source: Top Level Forecast February 08)](image)
Due to the current process of distributing products to markets there are ways that markets can take actions to ensure that they get as much products as possible during supply shortage. Sudden increase of forecast and orders to headquarters can result in the fact that the partial shipment will cover their initial forecast. Markets occasionally also request that their products are shipped earlier than actually required so that they are guaranteed a certain inventory that is not taken by another over selling market.

4.3 Case Studies
To be able to propose and develop a process and appropriate tools for reviewing and conditioning the supply chain, three case studies have been completed and evaluated. They have been carefully chosen in order to reflect a wide range of issues as well as possible solutions.

4.3.1 External Supplier with Limited Capacity: Gammacroma: Bronzing Pearls
For a long time Oriflame has had issues with meeting the demand of a product range that consists of 4 SKUs. This has caused poor service to the sales consultants and ultimately lost sales. These SKUs are high selling products with an annual sale volume of more than 2 million units and have been a part of the Oriflame product portfolio since October 2006. This range also has a high sales volatility with a difference of 321% between the highest and lowest monthly sales (see Figure 14 below).

![Figure 14 Sales pattern for Bronzing Pearls (Source: Top Level Forecast March 08)](image)

To understand why the supplier constantly had problems delivering according to the orders placed for finished goods a value stream map was drawn of the extended supply chain (see Figure 15). Based on the analysis the following important conclusions have been drawn:

- Filling capacity of finish goods supplier is far above the Oriflame sales and future forecast. Gammacroma can actually fill 7 million units per year versus the Oriflame forecast of 2 million annually.

- Although the capacity is not fully dedicated to Oriflame the utilisation of the filling lines are at such level that it should not be a bottleneck.
• The bottleneck is however at the component level where the supplier of the jars has a weekly capacity of 60,000 pieces and a lead-time of 7 weeks.

• As Gammacroma does not hold any stock of this item and solely places orders based on actual orders they are by default late in deliveries as Oriflame only places firm orders for 8 weeks (see appendix 3)
4.3.2 Long Lead-Times and Inflexibility: Oriflame Production Sweden (OPS): Fragrance Lines

In one of the internal production facilities Oriflame produces fragrances. The issue with fragrance is that it has a very complex supply chain set-up with long lead-times for its components i.e. glass, pumps, cartons and caps. OPS has a frozen production window of 3 months, but changes/priorities can be done as of week 3 and no approval for purchase outside of the committed period is required. The long lead-times and inflexibility is a major concern as over sales cannot be met and under sales causes build up of inventory and as fragrances are high value products this has a relatively high impact on the cash-flow compared to other product categories.

To understand the scope of these issues a value stream map was drawn of the extended supply chain (Figure 16). Based on the analysis the following important conclusions can be made:

- Longest re-order lead-time is for glass were suppliers often having their production fixed for the next 4 to 5 months. For glass production Oriflame has in place a stock holding agreement that allows glass supplier to hold the stock for 6 months for call-off. After this period Oriflame is responsible for any leftover stock. Although the call-off quantity is 180,000 pieces the production MOQ can vary between 1 to 3 million.

- Caps, cartons and pumps have a very long re-order lead-time and as can be seen the lead-time is not always known until the order has been placed. This is due to the fact that Oriflame not always have dedicated capacity and therefore the lead-time is dependent on the utilisation of the machines.

- Due to the complexity of the supply chain a definite bottleneck cannot be identified. The bottle neck is always one of the components and as explained in the previous point, their lead-times vary over time.

- Huge amount of inventory at Oriflame Production Sweden due to:
  - Changes in forecast after the order has been placed for components that Oriflame are being responsible for.
  - Glass that has been held at supplier and not been used within the stock holding period and thereafter pushed to Oriflame Production Sweden.
  - High MOQs combined with discrepancy for MOQs for components.
  - Discrepancy between MOQ at OPS to its suppliers and Oriflame Planning Department to OPS leaving leftovers that accumulates.
  - The production lead-time for the fragrances are no longer than 8.5 days but in the worst case scenario it could take up to 148.5 days to get a product sent to the central hubs from the moment an order has been placed to Oriflame Production Sweden.

- The amount of cash that is tied into inventory at Oriflame Production Sweden is 3,612,435 Euros! A lot of this is either obsolete stock or risks becoming obsolete in the near future.
Figure 16: The current state Value Stream Map of Oriflame Production Sweden, fragrance
4.3.3 Many Ranges and High Inventory: Oriflame Production Poland (OPP): Mascara Lines

In Oriflame’s biggest internal production site, OPP, mascaras are produced on two dedicated filling lines. In terms of production mascaras are relatively easy to produce. The components (bottle, cap and brush) are sourced from the same supplier and bulk production in addition to the filling is being done in-house. A limited amount of high end mascaras are packed into cartons and mascaras in the same range are differentiated by labels that are put on the bottom of the bottle. Also in terms of shade complexity mascaras are easier to produce compared to lipsticks and eye shadows that contain up to 25 shades per range. Mascara ranges seldom contain more than three shades. On the other hand the numbers of ranges are more numerous to satisfy different requirements (curling, lengthening, thickening etc.) from end customer and seasonal trends. The demand for mascaras is always at a high level as it is a base in every woman’s make-up portfolio. Due to high inventory in the pipeline a value stream was drawn to see the extended supply chain set-up for mascaras (see Figure 19). In this case coverage and service level was also calculated to see how much they differentiated with the set targets of Oriflame. The long term target for coverage is 90 days for finish goods and service level should be at 95%.

Based on the analysis the following important conclusions can be made:

- The service level was a very high level (97%) but the coverage of finish goods was too far above the target of 90 days (212.5 days) (Source: Oriflame DWH)
  - The amount of cash that was tied into inventory for components at filler and finish goods in central and local warehouse was 8.7 million Euros!
  - The majority of this amount is due to finish goods in markets that are dedicated stock and cannot be re-distributed to any other market. Some of this stock risks becoming obsolete or passing its expiry date.

- Despite the high inventory the lead-time for components are relatively short with only 8 weeks for the bottle, cap and brush and less for all other components going into the mascaras.
  - Note that some specific raw materials have more than 8 weeks lead-time but they never cause an issue as each bought batch lasts for a very long time.

- The production lead-time is only 9 days from the moment the first step in the process has started.
  - The transportation lead-time to the main central warehouse in Warsaw where most markets get their products from is only one day.

- Overall high MOQs and discrepancies between MOQ for components, labels and cartons

- Discrepancy between MOQ between OPP to its suppliers and Oriflame to OPP leaving leftovers that accumulates.
• High sales volatility for some ranges and over forecasting/under selling causing issues for all entities as high orders are placed across the supply chain. When products undersell high orders and forecast are reduced as the inventory pipeline is filled with finish goods.
  
  o A generic “rule of thumb” used in Oriflame is that the forecast for the 3 initial months of a new product should be available for distribution from the central warehouse 7 weeks before the launch date. This so called launch quantity is calculated to give a rough estimation of the volume required to cover sales and potential oversales by putting safety stock of finish goods across the supply chain i.e. markets and central hubs.

• In the example below a mascara range, Lash Extreme was forecasted to be a key launch with high forecast due to promotion at launch and parallel launches in several regions. The forecast for the initial 3 months were 2.9 million units that would correspond to the launch quantity. The actual sales for the same period were only 1.4 million for that period (see Figure 18 below). In fact, the quantity of finish goods that was available 7 weeks before the launch would cover actual sales for 9 months.
  
  o By the point the actual information was received that this range was underselling the whole pipeline was filled with finish goods and firm orders for another 2 months was given to suppliers.

  o Evidently, outside of the firm period orders to suppliers were reduced dramatically causing issues as each part of the supply chain was counting on continuously high orders and has aligned their production accordingly.

![Figure 18 Discrepancy between forecast and actual sales (Source: 0811 Top Level report)](image-url)
Figure 19 The current state Value Stream Map of Oriflame Production Poland, Mascara
5 RESULTS, ANALYSIS AND PROPOSAL FOR THE FUTURE

Inherited supply chain processes are becoming redundant due to business complexity changes. A new catalogue is launched every third week, however at best the information of sales would only be reflected one month later. In addition there are inflexibilities in terms of planning horizon and long lead-times that limits Oriflames responsiveness to sales fluctuation. These factors combined, will evidently create inventory buildup in terms of Safety Stock as this is currently the only countermeasure against oversales.

Oriflame is experiencing a strong sales growth and increased Size of Line (SOL) in terms of SKUs. It has been shown that the current set-up and the countermeasures at hand do not provide a sustainable business model i.e. having a balance between service level and inventory level. Therefore it is critical to start taking ownership of the extended Supply Chain, reduce lead-time, increase flexibility and thereby reduce inventory. Only then is it possible to provide world class service to our sales consultants and keep the inventory at desired levels.

This chapter is based on previous chapters, link the Oriflame business to the philosophy, tools and methodologies that have been reviewed and propose actions to enable a more suitable supply chain set-up that supports Oriflame.

5.1 Look at it From the Consultants Perspective, Provide Service and Value

As Oriflame operates in the direct selling business they are solely dependent on the motivation of their sales consultants that in the end are the ones that have contributed to the success of Oriflame. Therefore it is very important that the first step in the work to create an improved supply chain is specifying the value that is perceived by the Consultants. As the Lean philosophy states that value for the end customer is well and accurately specified before the journey to creating a lean enterprise starts. Oriflame has to be able to provide world class service according to their strategy based on the needs of the Consultants. Product catalogues and new innovative products that are developed are essential corner stones in today’s competitive business but it is the Consultants that need to have their requested product at the right place and at the right time.

In order to ensure that the right product is at the right place at the right time it is crucial that knowledge exists of how the value stream looks for the product offered in each catalogue. By creating value stream maps to visualise the value stream Oriflame will be able to be proactive in terms of eliminating waste and foresee potential future issues. By allocating bottlenecks in the process and knowing the limitations in terms of throughput improvements according to the Theory of Constraint could be applied to cases as the one shown in the case studies in chapter 4.3.

The majority of cosmetics product are not sold in big batches, therefore a flow has to be created in the production process so that waste (muda) is eliminated or reduced as it does not add any value to the product. To reduce the batch sizes, level scheduling (heijunka) is required to reduce work in progress and create a smoother flow. Once the flow has been created, products have to be pulled
through the supply chain based on demand and not pushed by forecast as forecast is always wrong and the longer the forecast horizon, the worse the forecast (see chapter 3.3). As Oriflame products are sold through catalogues the time frame to react and pull products from the source to correct destination is only 3 weeks. This might sound like a huge challenge but in order to find a balance between service levels and low inventory Oriflame has to set up the supply chain so that products are pulled rather than pushed which could result in increased costs (e.g. inventory and transportation) and risk of excess and obsolescence.

Below are some of the actions/steps that need to be taken by Oriflame in order to be able to increase the service level and reduce inventory.

5.2 Improve Information Flow and Reduce Bullwhip Effect

To be able to react to any deviation between a forecast and actual sales without risk of the bullwhip effect effective communication and quick access to data is required. As products are sold in catalogues combined with various types of discounts as well as the shortage gaming that occurs the sales patterns for Oriflame are very fluctuant. As forecast is always wrong and if the deviation between forecast and sales is only communicated to the closest entity to Oriflame, the deviation will be amplified further down in the supply chain due to the bullwhip effect (see chapter 3.4). In the value stream maps in chapter 4.3 it s shown that Oriflame provide fillers with orders and forecast to fillers that are responsible for providing component suppliers with the same data for the full horizon. The main risks with this process are:

- The filler does not forward any forecast to its supplier leaving all entities further down in the supply chain without any information regarding future projected sales.

- Fillers could add safety to the figures showing higher figures to its suppliers than the actual figures provided by Oriflame.

- The additional lead-time can be considered waste as Oriflame could just provide all entities with the same information at the same time.

By increasing the transparency and visibility via a data warehouse or common platform via the Internet a supplier could react faster and adapt to supply issues.

5.2.1 Weekly Planning Cycle

Oriflame is currently working according to a generic planning process with all fillers regardless of product complexity. Delivery plans are issued to all fillers on a monthly basis with a firm order period of 8 weeks (see Appendix 3: Previous Supplier Agreement). Any increase or decrease of the plan can only be done after the 8 weeks firm order period. The fillers are then fully responsibility for providing sufficient components and starting materials, so as to ensure smooth operation and delivery of finished goods in time and in full as to the plan. In reality not all products have a lead-time of 8 weeks. On the other hand many products have far longer lead-times. The lead-time for components such as glass and components sourced from the Far East could be several months. Consistency of
information flow towards the extended supply chain i.e. components and raw material suppliers are an area of improvement.

A very rapid and efficient way to improve communication with suppliers is to establish a more frequent planning cycle than the current one. It does not make much sense to plan on a monthly basis when catalogues and products are launched every week in the different regions were Oriflame operates. A weekly planning cycle would improve communication with suppliers and allow a faster reaction in terms of over and under sales. By reacting to over and under sales (within agreed time fences) Oriflame will be able to improve service levels in cases of over sales and reduce inventory and risk of obsolescence in terms of under sales.

However, by changing the planning process, Oriflame has to take ownership of the extended supply chain so that inventory is actually reduced and flexibility increased rather than relying on fillers to manage flow of information and goods from component and raw material suppliers. In order to do so Oriflame has to understand, condition and control the extended supply chain. This process can be managed according to the three steps described below:

1. Meet with suppliers, create value stream maps to understand the complete process from receipts of sales data/forecast to shipment to the warehouse or markets. The value stream maps will visualize lead-times, inventory, waste and bottlenecks.

2. Take necessary actions to reduce lead-time and increase flexibility. This includes revision of MOQ, information and material flow, safety stock or min-max levels for components and raw material.

3. Manage the information and product flow across the supply chain. Increase transparency and create win-win situations in order to deliver benefits, by ensuring data visibility regarding sales and inventory levels. Reviews would periodically be undertaken to assess the min-max levels rather than the constant necessity of delivery plans.

Issuing information to the supplier base on a more frequent basis based on actual sales deviations is not an easy task but the business benefits are for example:

- Reduced inventory: Reduced cycle time from 4 weeks to 1 week will reduce the average stock, increase the stock turnover and thereby release cash into the business. Based on the supplied quantities during 2008 (source: Data Warehouse) and the cycle stock of 4 weeks, Oriflame brought in 52 million units with each planning cycle. If this would have been done based on a weekly cycle stock the value average stock value would have been reduced by 10.7 million Euros.

<table>
<thead>
<tr>
<th></th>
<th>Cycle stock 4w</th>
<th>Cycle stock 1w</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply (M)</td>
<td>52.4</td>
<td>13.1</td>
</tr>
<tr>
<td>Average stock (M)</td>
<td>26.2</td>
<td>6.6</td>
</tr>
<tr>
<td>Average standard cost (€)</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Cost of average stock (M€)</td>
<td>14.3</td>
<td>3.6</td>
</tr>
<tr>
<td><strong>Cash released into the business (M€)</strong></td>
<td><strong>10.7</strong></td>
<td></td>
</tr>
</tbody>
</table>

Figure 20 Cash released into business due to reduction of cycle stock
• Increased responsiveness: Shortening the lead-time will increase responsiveness to any sales deviation. Reacting more rapidly to over sales increases the Unit Fill Rate (UFR) and reacting to under sales decreases the inventory and risk of obsolete stock of finish goods in the warehouses and markets.

• Eliminate risk of obsolete stock of components: In conditioning and introducing min-max levels thus having full overview for components and raw material in the pipeline the risk of obsolete stock before and after discontinuation is drastically reduced.

![Figure 21 Reduction of cycle stock and control of components stock via min-max levels lead to reduced inventory](image)

5.2.1.1 Possible Approach to Implementation of Weekly Planning

Implementation and transition to a weekly planning process should be executed in parallel to lead-time reduction, re-engineering and alignment of the supply chain.

To be able to switch to a weekly planning cycle and in alignment to the purpose of this thesis, below is the proposed process for conditioning the supply chain:

1. Analysis:
   • Create value stream maps to understand the process and constraints of the supply chain.
     o Constraints of both the filler and the extended supply chain?
     o Where in the process is the stock, finished goods and components?
     o What are the manufacturing constraints, both filler and component production?
     o Can we align the processes?
     o What can be change to eliminate waste and reduce the lead-time throughout the supply chain?

2. Take necessary actions:
   o Analyse the sales patterns and demand of the product groups.
   o Using the findings from point one to:
     • Condition the supply chain accordingly to maximise flexibility allowing for changes in sales to rapidly convert. Introduce min.max levels.

3. Manage the Information and product flow:
   • Educate and get the suppliers on board with the vision and implementation.

4. Write/update supplier agreement according to findings from point 1-3.
5. Review and recondition if necessary on a frequent basis e.g. quarterly based on latest sales and forecast

5.3 Reduce Batch Sizes and Ship Product Mix, Decreasing Cycle Time

As demand is rarely reflected in big batches and specially in the business of Oriflame reduction of batch sizes is a must. Although fillers prefer to produce big batches in order to minimise number of change overs it is in the end Oriflame that will be responsible for the inventory build up that is the consequence of big batches. Even if the unit cost is lower when orders are placed for big quantities the total cost could in the end be higher due to:

- Inventory cost as products have to be stored until actually needed.
- Risk of excess and obsolescence.
- Cost of lost sales for other products as cycle time increases with big batches. This is very evident for Oriflame as ranges often have several shades e.g. lipsticks, powders and share the capacity.

Economic Order Quantity (EOQ) and Economic Batch Quantity (EBQ) concept has resulted in small batches appearing to be uneconomical to run. However, they assume long set-up times which are non-value added activities and the fact those set-up times are fixed and uncontrollable, which is not true. Set-up time can be reduced either by changing process or machinery. The concept of lean has to be understood and adapted and new purchasing strategies have to be considered that are in line with the product value stream [15]. Otherwise machines will become a major obstacle when trying to implement the Lean ideology. In Oriflames case, low batch runs have to be negotiated so that cycle time is reduced and all shades within a range can be sent to markets as shown below, either by just starting off with the smallest batch or by introducing heijunka that eliminate fluctuations in the production. Heijunka also reduces pressure on staff as well as equipment.

![Comparison between high batch sizes and heijunka showing when a dispatch with all variants could be executed](image-url)
5.6 Establishing Partnerships with Suppliers

The supply chain should be seen as a system and not as separate entities. This is one of the fundamental pillars of Lean thinking (see chapter 3.1.2) and Oriflame should challenge their suppliers to improve and consider them more like extensions of Oriflame rather than just suppliers. Due to the fact that Oriflame operates with a business model were it is difficult to forecast and new products are launched on a very frequent basis it is very important that every entity in the supply chain is considered and coordinated accordingly. Only then can a flow be created and waste reduced [7]. Long-term a VMI process should be established at least for the internal fillers as the risk of sensitive information being exposed is not an issue.
6 CONCLUSIONS

Oriflame has since it was founded become a major player in the cosmetics business. Monthly planning cycle and safety stock as countermeasure against sales deviation compared to forecast no longer meets Oriflame’s requirements. In order to become the number one direct selling cosmetics company in the world Oriflame has to find a balance between inventory and service levels. Changes have to be made if Oriflame wishes to fulfil its strategy of providing world class service. This is based on current processes and tools combined with the constantly increasing business complexity and demand uncertainty that is a part of the everyday life of Oriflame.

The first step is to understand what is considered as value by the consultants and where in the supply chain this value is created. This is absolutely the most important aspect of any lean implementation. It should not take several months to react on sales deviation or forecast changes when new catalogues are launched every week somewhere in the world. Oriflame has to make the adequate changes that enable the demand to pull the products through the supply chain rather than pushing it based on forecast that in the end is always wrong.

The case studies have shown that both the information and product flow are extremely slow and that Oriflame has a fragmented supply chain. Access to same information is missing and a lot of responsibility for is placed on fillers that have to ensure that enough components and starting material is available to meet any changes in forecast. This will evidently cause fluctuations in orders across the supply chain as the sales patterns for Oriflame are driven by promotions in the catalogues that change on a very frequent basis. Therefore the agreements that are in place have to be changed to reflect the Oriflame business better and allow for more flexibility and sharing of responsibility.

Oriflame has to start understanding, conditioning and controlling the supply chain. To understand the complexity of the supply chain for a specific product or range value, stream maps have to be drawn to visualise the actions, steps, processes that in the end result in finish goods delivered to end customer. It is important that the problem has actually been seen so that decisions are not solely taken based on what others or computers tell. Bottlenecks have to be known in order to allow qualitative decision making in case of anticipated supply issues and improvement work has to be done so that the bottleneck is utilised fully and not preventing the flow of goods. As Oriflame has both internal and external fillers it will sometimes be very complicated to actually now where the bottleneck is as capacity is shared among many clients. It is here were Oriflame has to integrate its filler more into its processes so that the supply chain can react faster and adapt to supply issues. All improvement work has to include all entities of the supply chain as all entities have to improve in order to achieve a good result.

Oriflame has a strong company culture and philosophy with a well defined vision and strategy. Its success is mainly due to all the exceptional people that work according to the company philosophy. The company also has also clear values and operating principles such as respect for people, focus on customers and long-term growth. All these factors are in line with the Toyota operating principles. Although Toyota operates in a different business to Oriflame it is shown that the operating principles that made Toyota number one also can be used by Oriflame in order to achieve its vision, becoming the number one direct selling beauty company.
No matter what methods or tools are used in the implementation of lean or any other improvement work I believe that the most important operating principle should be to create a learning organisation that reflects and improves continuously.

7 METHOD CRITICISM AND PROPOSAL FOR FUTURE

With the high number of suppliers and products the three cases that were used as a basis for the result and conclusion might not cover all aspect of the business. However, they were chosen carefully so that as many aspect would be covered as possible.

Several factors that have a major impact on the supply chain and demand fluctuations where not investigated in details as they were outside the scope of this thesis. As mentioned Oriflame has a poor forecasting accuracy. Although forecast by default is wrong there are always limits to which deviation between forecast and sales that a supply chain can respond to. Even if Oriflame achieves a more flexible and lean enterprise the forecast accuracy has to improve if targets of 95% service level with 90 days of inventory cover are to be achieved.

If the supply chain is supposed to respond on demand fluctuations there should also be a defined process for the demand to respond to supply issues. Oriflame can, via the catalogues control the demand and if supply issues are identified then catalogues should be amended to reduce the impact of service level. This can be achieved if catalogues are printed and distributed at a very late stage.
REFERENCES

Books


Reports

Newspapers


[14] Lean (an appendix along with Dagens Industri during September 2008), Medioplan Bold/DNEX Tryckeriet AB, Akalla

Internet
http://www.lean.org/common/display/?o=19
Personal contacts
Karl Jennings, Planning Manager
Appendix 1: Current Information Flow From Forecast to Order

1. Forecasting figures are stored in DWH
   - Forecasting fed into Merica via interface (Petra)
2. Stock GIT are manually checked before sent to Merica.
   - Product info, variants
   - Market SS via SC portal
3. GP compares Fairshare output and markets request. Negotiation and manually allocation. Output confirmed customer orders sent to warehouse/GDC
   - Fairshare
   - DRP (Merica)
4. Long term demand (5-8 weeks). Customer schedule and FOA
   - Short term planning (daily)
   - Warehouse/GDC
   - Group planning

4a. Supplier PO split sent to hub
4b. Supplier PO split input to MRP
4c. Hub Safety stock levels to MRP via SC portal
4d. Supplier PO split sent to suppliers
4e. Output: Supplier schedule sent to suppliers

4f. Output to IFS Supplier Schedule

5. Markets orders & daily demand (daily)
   - FTool (Petra)
   - Regional Forecast (4-12 months tbc)
   - Global Forecast (12-24 months tbc)

Stock and GIT data sent by markets via Orionics & Orico

Long term planning (monthly)

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Appendix 2: Process Map Monthly Planning Process
Appendix 3: Previous Supplier Agreement

OPERATIONAL SERVICE AGREEMENT

ORIFLAME AND THE COMPANY

Oriflame is a customer focused organisation, where maximum service is critical to the success of the business. The company operates in a very dynamic sales environment, where high responsiveness is often needed and highly regarded. High-quality transparent information and efficient communication mechanisms are key to the operation.

Against this background, the document below has the objective of clarifying the operational relationship between Oriflame and the suppliers, defining the mutual expectations and laying the grounds for performance beyond the boundaries of routine agreement.

1. Plan and Performance

Oriflame will provide THE COMPANY with a new supply plan by the 15th working day of each month. Such plan will follow the format attached hereto and will comprise the following:

Firm order period of 8 weeks in weekly buckets, firming up another 4 weeks each time; and

Forecast period of 8 months, the first month in weekly buckets and the remainder in monthly buckets.

THE COMPANY will immediately advise Oriflame if the new supply plan is not received by the respective agreed day of the month, as expected.

THE COMPANY will confirm each new supply plan within 5 days of receipt, considering all parameters having effect on the performance, with exact delivery dates and quantities in case of differences. Should THE COMPANY by exception foresee a delay of such confirmation, they will advise Oriflame within the specified period. The plan should be returned in the format as received, with those modifications made within the plan highlighted. The confirmation should cover the first 3 months deliveries as specified and the later 7 months should be assessed for the capability to supply the requirements. The response time should be measured each month and presented to Oriflame as per the attachment KPI number 1.

THE COMPANY will deliver product as per the firm order/s in the firm order period, as confirmed by them in their latest communication.

Should Oriflame not collect the product as per their firm order/s within the firm order period, THE COMPANY will keep such product for a maximum of 2 months at their premises, specifying up front any potential cost that might start to accrue, e.g. cost for storage etc. THE COMPANY will then request specific instructions on how to proceed with the product.

THE COMPANY will make sure that all documents are clearly marked with the respective purchase order (PO) number, duly provided by Oriflame, INB number by Birkart, and that product delivery meets all other distribution requirements (see separate agreement).
THE COMPANY will confirm delivery in two steps:

Pre-advice 3 days prior to shipment to Birkart according to the distribution requirements.

Confirmation upon dispatch, within 2 hours from shipment (as per the attached format).

THE COMPANY will measure the delivery performance against the confirmed supply plan, The measurement should be calculated as follows:

Dispatched on time and in full for each week in the month (XX %). The average for the month will be calculated across each of the weeks. THE COMPANY must inform Oriflame in advance of any changes to the delivery plan; early deliveries must be approved by Oriflame prior to dispatch. The expected level of service is at 95%.

In line with the agreement for product collection by Oriflame, delays of transport beyond THE COMPANY’s control will not have an adversely affect on THE COMPANY’s performance measurement.

The above results should be communicated to Oriflame on a monthly basis by the 3rd working day after the end of the month as per the attachment KPI number 3 Service Level.

THE COMPANY will endeavor to meet any changes exceptionally requested by Oriflame outside the supply planning cycle and confirm such changes within 1 day of receipt. In case of problems obtaining a critical confirmation from a component & starting material supplier within such period, THE COMPANY will keep Oriflame informed of the progress and do their best to speed up such confirmation. THE COMPANY will also act with the utmost urgency to support Oriflame where urgent delivery of product is requested to keep the sales markets in stock. Within the supply plan, changes within the two month Firm period should be measured. This is to be measured as per the attached format in KPI number 2 responsiveness to changes within the 2 month firm order period. This should also be issued to Oriflame on a monthly basis.

THE COMPANY will communicate without delay any major issues that might have come to their knowledge, estimating the possible adverse effect on delivery, and take immediate actions to rectify any such issues. They will keep Oriflame informed of the progress at all times.

THE COMPANY will notify Oriflame as early as possible of holidays and planned close downs ensuring that such periods will not have an adverse impact on their performance through taking alternative or prior actions.

Late deliveries of quantities, due to THE COMPANY and leading to loss of sales for Oriflame, may be subject to postponement or cancellation with no liability for finished goods and/or components. Oriflame will in all cases be fully cooperative in trying to avoid or minimize such potential excess through alternative sales actions.

THE COMPANY should maintain the target delivery performance of 95%; failure to do so could have an affect on the business relationship and could lead to sanctions.
2. Components and Starting Materials

THE COMPANY will assume full responsibility for providing sufficient components and starting materials (C & SM), so as to ensure smooth operation and delivery of finished goods (FG) in time and in full as to the plan.

To guarantee smooth supply from component suppliers THE COMPANY should provide a forecast to the C & SMs suppliers covering a maximum forward period as per Oriflame's forecast.

THE COMPANY will measure the performance of C & SM suppliers and highlight issues, where service levels are unacceptable. They will initiate improvements and/or establish safety stock of C & SMs in agreement with Oriflame at the sub suppliers' to ensure target performance.

In case of longer lead-time items and MOQ issues for both C and SM's THE COMPANY has the opportunity to commit beyond the 3 month horizon with the approval of Oriflame. This has to be clearly communicated and approved prior to purchase.

3. Excess and Obsolescence

Products on discontinuation in the coming 9 – 12 months and any changes to such lists will be clearly and regularly communicated by Oriflame.

THE COMPANY can produce quantities outside the firm period for products which have been fixed, either for Limited Life or Discontinuation, these however must be delivered as per the delivery plan or otherwise agreed with Oriflame.

THE COMPANY will not commit to any C & SMs for a product on discontinuation in the next 6-12 months without Oriflame's explicit prior approval unless quantities have been fixed.

THE COMPANY will report to Oriflame at the point of fixing the final quantities his full stock of FG and C & SM and highlight any potential risks beyond the planned volumes.

THE COMPANY will communicate without delay, at least on a monthly basis, any potential risk of excess of FG and/or C & SM due to forecast changes and request Oriflame's clear commitment. Issues not communicated in due time become INTERPACK's sole responsibility and cannot be claimed at a later stage.

THE COMPANY will accept cancellation of quantities not delivered on time within the discontinuation period, when the remaining period is too short to sell such late product, as well as bear all costs related to such cancellation. Oriflame will in all cases be fully cooperative in trying to avoid or minimise such potential excess through alternative sales actions.

4. Contact and Communication

Oriflame’s plan and report formats as attached hereto will be used for all regular communication and confirmations.

Both parties will provide a single point of contact on all planning issues through a person of adequate experience and authority. Such persons will be adequately replaced during their holidays and/or absence and should be communicated in a timely manner.
Both parties will keep each other updated of any changes within the organisations, which might have an impact on the relationship, operations, and Supplier’s performance or communication routes.

Oriflame will regularly meet THE COMPANY to keep them informed of:

The overall forward demand, promotions and latest unit sales expectations of their product, review KPI;

All procedures that have an impact on the relationship, e.g. discontinuation, launch etc.
Appendix 4: Modified Supplier Agreement

Draft
Operational service agreement (tbd)
Forecast management and operative principles (tbd)
Collaborative agreement (tbd)

Oriflame and “The Company”

Oriflame is a customer focused organisation, in the direct selling business where maximum service is critical to the success of the business. The company operates in a very dynamic sales environment, where high responsiveness is often needed and highly regarded. High-quality transparent information and efficient communication mechanisms are key to the operation.

Against this background, the document below has the objective of clarifying the operational relationship and operative principles between Oriflame and the suppliers, defining the mutual expectations and laying the grounds for performance beyond the boundaries of routine agreement.
**Production planning**

**Filling planning procedure:**

- After the completion of DRP each month the planner will provide 10-month forecasts including agreed firm period of production and commitment in terms of components, raw material or/and bulk.

- Each week (see appendix 1) the Planner will issue a plan showing following show new requirements for:
  - New production (purchase) orders for finish goods for the week that has fallen within the firm period.
  - New quantities within the committed zone
  - Launch dates for new projects as well as product variants.
  - Remarks regarding stock outs, changes, critical shipments etc

The planning provided by Oriflame will show requirements

- by week for the first 12 weeks and by month for the following 7 months
- launch dates for new projects/variants
- remarks regarding watch outs, changes, critical shipments, optimum order/shipping quantities in covering

- The plan will be sent to Fiabila the date and time stated in the appendix and will respect the agreed capacity and MOQ.
  - Issuing of the plan be measured each week as KPI number 1 (KPIs to be defined).

- Fiabila will immediately advise Oriflame if the new supply plan is not received by the respective agreed day and Oriflame will advise if plan confirmation is not received according to agreed timings
  - The response time will be measured each week as KPI number 1(KPIs to be defined).

- Fiabila will use the monthly and weekly data to review their short and long term capacity planning and to highlight to Oriflame any periods of risk.

- Fiabila Filling manager will clarify any issues on the production planning for the firm and committed zones with the Planner by close of business on Tuesday of week 1.
  - The response time will be measured each week as KPI number 2 (KPIs to be defined).
  - The plan should be returned in the format as received, with those modifications made within the plan highlighted.
**Components and Starting Materials**

- Fiabila will assume full responsibility for providing sufficient components and starting materials (C & SM), so as to ensure smooth operation and delivery of finished goods (FG) in time and in full as to the plan.

- Unless Oriflame provides the whole supply chain with sales and forecast to the whole supply chain, Fiabila will provide a forecast to the C & SMs suppliers covering a maximum forward period as per Oriflame’s forecast.

- Fiabila will measure the performance of C & SM suppliers and highlight issues, where service levels are unacceptable.
  - If required hey will initiate improvements and/or establish safety stock of C & SMs in agreement with Oriflame at the sub suppliers’ to ensure target performance.

**Bulk making planning procedure:**

- Bulk planning will be done weekly by Fiabila and is driven by the filling production and committed zones provided by Oriflame.
- Batch sizes will be based on demand within committed period
- Batch making will be 2 weeks prior to production filling week to allow for adequate QC release time and delivery to line.
- Bulk that has been produced according to the committed zone could be held in inventory in 6 month in cases where forecast decreases.
- After 6 month additional QC has to be done by Fiabila to verify the quality of the bulk and thereafter approved by Oriflame QC before being used for filling.
- As part of the weekly planning process Fiabila will identify any bulks where the current stock covers more than 8 weeks demand and share this detail with the planner.

**Full Service Packagings**

Full Service packagings are purchased by Fiabila for use in Oriflame Products based on the MOQ and safety stock agreed between the 2 companies in relation to the forecast.

The safety stock levels should be reviewed and if needed changed on quarterly basis.

Where no safety stock is set, Fiabila will use the short and long term plan to place orders. If purchase of MOQ exceeds coverage of 3 months forecast, Fiabila will communicate the issue to Oriflame so that appropriate action can be taken to prevent excess.

Remaining stock of packagings ordered by Fiabila and based on the forecast provided by Oriflame will be charged at purchasing price to Oriflame and disposed.

Fiabila shall order materials in line with the planning parameters and agreed as above. Any orders exceeding those parameters will have to be covered at the Fiabalas risk.
Fiabila must inform Oriflame immediately of any problems or increased risk to their ability to maintain reliable supply (i.e. fire, strikes, moving, replacing tools etc)

**Delivery and dispatch process**

The weekly dispatch will be done according to the Oriflame Procedure. See the document “Supplier Instructions Finance, Shipping and Packaging Requirements” for more information.

**Critical Delivery procedure**

For critical deliveries an agreed process between Fiabila and Oriflame will apply

- The Planner will advise Fiabila of the need for a shipment outside of the weekly process as described above.
- Changes to production within the firm zone must be kept to a minimum and only carried out with the agreement of both Oriflame and Fiabila.
- In the event that a change to the production schedule is required within the firm zone the following should be taken into consideration:-
  - impact on current production must be assessed by the planner and Fiabila prior to inserting new production order or replacing order. As guidance:
    - Any changes to current production in week 1 should be communicated and agreed between Oriflame and Fiabila by 12 noon on Wednesday of week 1.
    - No change should be made if it results in pushing firm production into the following week.
    - No change should be confirmed by Fiabila unless the bulk is already available.
    - No change should be implemented by Fiabila unless production order has been received from Oriflame planner.

**Inventory**

- Inventory report will be sent by Fiabila by the first Monday of the month, highlighting actual stock levels held for bulk (with expiry date) and packaging.
- The inventory report will also be used to track wastage of components over the previous month.
- The contractor will conduct physical stock count of Oriflame materials at least once a year.

**Expiry of Bulk**

- Bulk will be made by Fiabila on a rolling 6 week forecast based on the Supply plan data provided weekly by Oriflame. The minimum batch size for bulk manufacturing is 102 kg per kg for 10 000 pieces ordered.
- Any bulk produced outside the 6 week is produced at Fiabila risk unless the forecast was less than the requirement for the minimum batch size in which case Oriflame will be liable for the amount of the minimum batch size that is unused.
- Bulks due to expire must be reviewed and agreed that they will not be used with the Oriflame planner 1 month prior to expiry. Expiry date of bulk is 12 months from the date of manufacturing and is linked to the approval of the lab. (has to be verified by Oriflame QC department)
- Bulks that have been produced according to 6 week rolling forecast and have expired should be disposed of and invoiced to Oriflame with a 50% discount.
Appendix 1: Illustration of Firm, committed and forecast zones

With a rolling weekly plan new quantities will be transferred from being a forecast to committed volumes and committed volumes are only to be considered as firm orders when they enter the firm zone. Quantities within the committed zone can be pushed back as long as they remain within the committed zone.
FIABILA – High Level Current state

Appendix 2: Value stream map

Incoming inspection
- Hours

Shelf
- Per

Pack
- Per

Pins
- Per

QR
- Per

Glue
- Per

Product
- Per

Out
- Per

Pack
- Per

Shelf
- Per

Launch of shelf condition valuation within extended zone

Launch of filling based on valuation within time zone

Total

- Hours

Production L7T
12.2

Line transfer
1.2

Fill Zone
- Hours

Inbound Zones
3.6

Weekly dedicated capacity
£135000
### Appendix 3: Capacity and operational Information for Planning & Logistics

<table>
<thead>
<tr>
<th>Capacity Information</th>
<th>Operational Information</th>
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<tr>
<td><strong>Filling</strong></td>
<td><strong>Shift Patterns</strong></td>
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</tbody>
</table>
| Fill Rate: 30 000 pieces /days/2 shifts X 4.5 days  
August: 1 shift 15 000 pieces x 4.5 days | No. of Shifts: Current production requires 2 shifts  
Shift Duration:  
Day shift – 7.5hrs per day Mon – Fri  
Back shift – 7.5hrs per day Mon – THURS  
Capacity for extra shifts:  
2 weeks notice for FRIDAY AFTERNOON SHIFT |
| **Assembly**         | **Scrap**               |
| Assembly Rate: N/A   | During filling: -       |
| Change Over: N/A     | Bottles and caps – 1%   |
|                      | Labels – 10%            |
|                      | Bulk 3%                 |

### Shutdown periods during the year
- Christmas and New Year – 1-2 weeks
- SUMMER SHUTDOWN – only 1 shift
- Actual dates to be confirmed 3 months prior to shutdown by Fiabila.
## Appendix 4: Planning parameters

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<th>Oriflame Product Code</th>
<th>Description</th>
<th>Fer zone</th>
<th>Committed zone</th>
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**Appendix 5: Safety stock parameters**

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<th>Oriflame Code</th>
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In signing this document we agree to the details included in this Document

Changes to the document may be instigated at any time subject to the consent of both

ORIFLAME

FIABILA

Name
Date

Name
Date

Signature :

Signature :