The Realization of a Product Development Division
An introduction to lean product manufacturing
Calvin Klein season Spring/Summer 2010

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MANAGEMENT SUMMARY

As a graduate student at the Amsterdam Fashion Institute I had the honor of ending my studies at Calvin Klein Inc. and writing my Final Thesis within the Research & Development division. Assisting with the realizations of this department in September 2009 made it extra interesting for an ambitious fashion & management student to do my thesis about how to set it up and how to make it successful. My final thesis can therefore be encapsulated as: “Which methods and what kind of strategy is of interest at Calvin Klein when you want to improve the effectiveness and efficiency of the research and development (sourcing) department…. In order to cut-back on lead-times”

By starting with the analysis of Calvin Klein I figured out the motive of why the organization wants to install the Research & Development department and its goals. By having a team solely devoted to the research and development of knits and sweaters Calvin Klein wants to achieve the below points within the next 2 years.
- Shortening the supply-chain with 100 days resulting in less risks and uncertainty when designing the new collection. As it gives design the opportunity to design products closer to the season, therefore leaving extra room for trend research and sales feedback.
- Increase the mark-up on basic knits with 5% minimal.
- Sample production time of 1 week by setting-up standard procedures/ communication regarding fabrication with the mills.
- Market-share increase of 44% by 2013 due to better competitive position, as products are more in line with the markets demand.

I analyzed Calvin Klein internally with the marketing mix, business models and my own observations during my 9 month stay as research and development assistant. Important are the interviews with professionals from the fashion business like the Vice-President of Sourcing and the Senior Fabric Manager of the Research & Development division. These interviews gave me the insight in lean manufacturing and helped in setting-up the strength, weakness, opportunities and treats analysis. The analysis presents action points to carry out in order to raise efficiency and effectiveness of the research and development department. Special attention goes out to:
1. Improve fabric and garment lead-times by implementing speed-to-market.
2. Book fabric and/or yarns in advance.
3. Source fabric facilities in America for competitive imports, lead-times and resources.
4. Invest in standardized communication systems and improve flow of communication within departments

In one sentence the essence of a successful research and development department is make what you can sell, do not make what you cannot sell, and do not lose sales because you failed to make what you could have sold. The action points realize this essence as they are contributing to shortening the lead-time with 40 to 170 days and improving communication. These extra days give the Research & Development team, Design teams and buying teams additional time to do trend and market research, implement sales feedback from the stores and do pre fabric development. This crucial information improves efficiency because less time and money is spend on developments that are not and will not sell, therefore lowering costs. And effectiveness is improved because developed products are synchronized with the markets demand therefore raising sales.
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PROLOGUE

Before beginning to read the main paper, I am herewith writing what to expect of my Final Thesis. The objective of my Thesis is an individual test of my competence in independently recognizing, analyzing and solving a problem in the Fashion Industry.

BACKGROUND

As a graduate student I came to New York City August 2009 to do my long-term internship at Calvin Klein Inc. as an intern product Research and Development Knits & Sweaters Mens and Womens. Calvin Klein created this department at the same time I joined the organization. The motive for this creation is to cutback fabric lead-times by having a team solely devoted to the research and development of knits and sweaters and therefore being able to implement the Company objective of the speed-to-market concept.

With the Company Objective in mind I can formulate the purpose of my final thesis: “Which methods and what kind of strategy is of interest at Calvin Klein when you want to improve the effectiveness and efficiency of the research and development (sourcing) department.... In order to cut-back on lead-times”

THESIS STRUCTURE

I start off with the motive of why Calvin Klein Inc. wants to implement the speed-to-market concept by a short introduction explaining Calvin Klein’s objective, strategy and future. Later on, I describe the current obstacles, and the relationship between Calvin Klein and speed-to-market.

The Analysis chapters give insight in the marketing-mix, business models application, bench-research of the industry and personal observations and experiences. Questions I answer are:

- Why does Calvin Klein want to implement the speed-to-market strategy
- Which processes regarding fabric development are not effective and/or efficient and need improvement. And what causes these frictions
- Where does Calvin Klein Inc. see itself within the next 2 to 5 years
- How are current communication processes being handled in the knits & sweater department
- What influences does the Research & Development department have
- Why does certain changes need to take place and how to implementing the changes
- What is my personal interpretation

I end the analysis with the Strength, Weakness, Opportunities and Threat (SWOT-analysis) and its conclusion, which give a clear point of view of where Calvin Klein White Label can be modified to improve effectiveness and efficiency.

This brings me to explaining action plans of how to improve the research and development department. Strategies and methods are explained and conclusions are drawn from the research. Finally I will answer the main thesis and point out the achieved goals.

In the epilogue I will mention my own goals and objectives, which I achieved by doing the investigations and writing the thesis about speed-to-market.
**MOTIVES**

1.0 INTRODUCTION

CALVIN KLEIN INC.
205 West 39th Street
New York, New York, 10018

Calvin Klein, Inc. is one of the leading fashion design and marketing studios in the world. It designs and markets women’s and men’s designer collection apparel and a range of other products that are manufactured and marketed through an extensive network of licensing agreements and other arrangements worldwide. Brands/lifestyles include Calvin Klein Collection, ck Calvin Klein, Calvin Klein, Calvin Klein Jeans and Calvin Klein Underwear. Product lines under the various Calvin Klein brands include apparel, accessories, shoes, sleepwear, hosiery, socks, swimwear, belts, eyewear, watches, jewelry, coats, suits and fragrances, as well as products for the home.

Calvin Klein Inc. is a part of Phillips-Van Heusen Corporation. PVH is one of the world’s largest apparel companies. It owns and markets the Calvin Klein brand worldwide. It is the world’s largest shirt and neckwear company and markets a variety of goods under its own brands, Van Heusen, Calvin Klein, IZOD, Arrow, Bass and G.H. Bass & Co., and its licensed brands, including Geoffrey Beene, Kenneth Cole New York, Kenneth Cole Reaction, BCBG Max Azria, BCBG Attitude, MICHAEL Michael Kors, Sean John, Chaps, Donald J. Trump Signature Collection, JOE Joseph Abboud, Tommy Hilfiger, and Perry Ellis Portfolio.

calvinkleininc.com

1.1 DIMENSION

Calvin Klein stretches out through every layer of the fashion retail industry, because of its several departments. Starting with Calvin Klein Collection, ck Calvin Klein and Calvin Klein Better/White Label. The White Label for instance contains Calvin Klein Wholesale, Retail, Jeans and Underwear. Besides, Calvin Klein is also sold in Retail Discount Shops.

![Fig.1 General set-up Calvin Klein divisions](image)

The Calvin Klein Wholesale, Calvin Klein Retail and Calvin Klein Specials are the divisions for which I functioned as assistant product developer Knits & Sweaters. Except for the Wholesale Womens, which is licensed to G-III.

In the beginning of 2009 Calvin Klein had over 500 freestanding stores outside the United States and 200 domestic stores. These stores cover the range of products under the entire Calvin Klein brand. All of them contribute to the Calvin Klein brands’ worldwide growth. An additional 100 new stores were opened in 2009, further expanding the Calvin Klein brands’ global footprint.
The Calvin Klein group has consistently grown every year. Since Phillips-van-Heusen acquired the brand in 2003, sales have grown to over $6 billion in 2009 compared to $2.8 billion in 2003. In 2009, 59% of global retail sales of Calvin Klein products came from international markets and the U.S. representing 41% of the total.

In general the division I am operative in, Calvin Klein White Label, continued to grow as a result of both increased penetration at existing stores and expansion into new stores, reaching over 700 stores at the start of 2009. This is an increase of 8% over the previous year. Despite the difficult environment, Calvin Klein White Label continued to show a reasonable double-digit growth.

Calvin Klein Retail of the White Label department however, could not protect itself from the decline in consumer spending. Store sales turned negative in the fourth quarter, after a strong performance through the first nine months of 2008. As a result 18 other PVH-brand stores will be converted to the Calvin Klein format. During 2008 there were five additional Calvin Klein specialty stores opened in premier malls, ending 2008 with more then 10 specialty stores in the U.S.

1.2 ORGANIZATION STRUCTURE

The men’s department is split into the Wholesale group and the Retail group. This has no direct influence on the Sourcing and Research & Development department as they are both managed by the same Vice-President, President and COO of sourcing (for the complete sourcing organization chart see attachment 1). The design divisions have a different set-up. On the retail side there are more organization layers, therefore more people have influence and judgment on the products. This sometimes makes it harder for the sourcing team to have design sign-off on styles. However, Calvin Klein has this division more under control, as there is no external account buying the product, but only internal buyers who buy the products.
The division I am researching to be improved, the Research & Development department Knits & Sweaters, is under supervision of sourcing. The department is directly reporting to the Vice-President of sourcing and therefore the decision making process is less complicated. The organization chart on the right gives an impression of the structure of the Research & Development department Knits & Sweaters.

1.3 COMPANY GOAL
The vision of Calvin Klein White Label for 2011 is to reduce production lead-times with 60 days and being closer to the production source resulting in improvement of effectiveness and efficiency. Through revising and streamlining the supply-chain and by having a centralized research & development department this total production time reduction and control over the supply-chain will be obtained by communicating mill direct and by installing communication technology.

1.4 COMPANY OBJECTIVES
Calvin Klein focuses on increasing their market-share with 40% by 2013 for the knits and sweater division. They want to obtain it through implementation of the speed-to-market concept. Resulting in 60 days of extra time to do proper trend research and process sales feedback from the store floors and thus by better anticipation of the collections improving their sales and market-share.

1.5 STRATEGY
Based on the “Ansoff Matrix” the growth strategy of Calvin Klein is market penetration. This business growth strategy focuses on selling existing products into existing markets. Calvin Klein seeks to achieve this by the four main objectives of this strategy:
- Maintaining and increasing the market share of the knits and sweaters and is done by a combination of competitive pricing strategies, advertising, sales promotion, increasing on-line sales and growing amount of sales points and brand stores. With the introduction of speed-to-market, market share will grow by better fulfillment of their customer’s needs and demands.
- Secure dominance of growth markets. With the installation of the Research & Development knits and sweater division and by implementing speed-to-market, Calvin Klein wants to take in a dominant position of growth markets and therefore be ahead of its competitors.
- Restructure a mature market by driving out competitors by offering high qualities for a low price and with the implementation of the speed-to-market also suffice to Calvin Klein’s customers needs. This in combination with the aggressive promotional campaigns makes the market less attractive for competitors.
- Increase usage by existing customers. Calvin Klein is stimulating sales per customer by introducing loyalty schemes, mainly through the on-line shoppers by offering them service and gifts when spending more. Speed-to-market supports service by better replenishment and therefore returning customers.
A market penetration marketing strategy is mainly about “business as usual” and focuses on markets and products it knows well. With market penetration it is likely to have good information on competitors and on customer needs. It is unlikely, therefore, that this strategy will require much investment in new market research. Therefore Calvin Klein installed the Research & Development department for knits and sweaters to have them mirror the woven’s team in which Phillips-Van Heusen is a market leader.

1.6 FUTURE
Calvin Klein white label represents the largest growth opportunity within the whole Calvin Klein Brand, particularly in North America. Growth opportunities for the White Label include:
- Continued expansion of an average of 5% annually in North America of the men’s wholesale business, which was first launched for Fall 2004 in the United States. Expansion shall take place with the introduction of new products and expanding shop-in-shops within existing doors.
- Expansion for Calvin Klein Retail will take place by opening 18 additional points of sales by the end of 2015.
- Continued development of the knits and sweater department and have it take-in a more dominant position on the market. Also this department will be fully operative with the Phillips-Van Heusen legacy brands IZOD, Arrow, Bass and Van Heusen at the start of the Spring 2012 season.
- Introduction and growth of fast track products and special promotion collections, which already started beginning 2010. This enhances the business relation with Calvin Klein accounts and will deliver an extra 5% sales increase.
- Pursuit to cut back on lead-times eventually having a twenty-week lead-time fully functioning in 2011, which offers better trend research, sales feedback analysis, competitive position and constant flow of new merchandise.

The Calvin Klein group expects the international components of the organization to continue to grow more rapidly. Mainly in China and South-America. As it is currently less developed compared to the United States business and therefore has the greater long-term potential. This growth should help to reach a projected total global retail sales level of $11.3 billion by the end of 2015 with an annual increase of 10%.

1.7 PROBLEMS and first findings during my presence
When I joined Calvin Klein Inc. in August 2009, there was no Research & Development department for knits and sweaters. Pearl, an experienced fabric manager, was newly hired and assigned to set-up this department within the Sourcing division. As her assistant I helped with the realization of this great task.
As Pearl and I had to create this department from the ground up, there was no basis to relay on. However, the existing Sourcing Team was very helpful in making us familiar with our mills, processes and the company. Not to forget the experience Phillips-Van Heusen has on the woven’s side.
Six months later the Research & Development team has already achieved quite some, but there is still room for improvement regarding fabric development, which are not effective and/or efficient and need improvement.
- Not having a proper fabric library
- No clear and easy to access database of fabric codes with corresponding information like mill, content, yarn size, weight, price, etc.
- Having to request if there is available yardage at the mill
- Back and forward sending of fabric charts
- Long fabric knitting and garment manufacturing lead-times
- No rhythm in the developments
- No standardized flow of communication, but informing our Hong-Kong office individually

Most of the above points are caused by the newness of the department and because the department had to start from the ground up. As both the Hong-Kong teams and the New York teams were used to a certain procedure the installation of a Research & Development department for knits and sweaters was and is causing most of the frictions in the new standard operating procedures.

1.8 SPEED-TO-MARKET and CALVIN KLEIN

Speed to Market is a system of concepts, tools, understanding, techniques, and metrics that is designed to fit order-driven businesses. Speed to Market is built around the quotes to cash process with an emphasis on cutting lead-time as a strategy for performance and profit improvement. However, it is not obsessively focused on cutting lead-time. Speed to Market takes the broader view of developing the ability to manage these types of businesses while continuously improving performance profitability, and competitiveness.

deltadynamicsinc.com

With speed-to-market you strive for the ability to quickly create and/or adapt processes, systems and personnel to build competitive advantage. The result is gaining competitive advantage, increased market share and earnings per share. Key component of it all is cost. Nevertheless it is vital to concentrate on the market clock and not on the project clock. Meaning costs for developments are less important than missing the position on the market, which will cost a lot more when you fail to serve a trend to the consumers.

Important points of focus in speed-to-market are:
- 40-50 week cycle to 20-30 weeks
- Speed is important but secondary to getting price and product right.
- Streamlined from order, to supplier, to receipt in store.
- Decisions based on product calendar dates.
- Seasonal flow of products.
- Larger shipments, and collections.
- Seasonal feedback from sales data.
- Brand promotion and push.
- Emphasis on good forecasting.
- Supply chain processes.
- Latest technology and making fully use of it.

After having a conversation with Kelley Robinson, Vice-President of sourcing and Research & Development Wholesale and Retail, I got a better perspective of why Calvin Klein wants to implement the speed-to-market method.

With the acquisition of Calvin Klein Inc. in 2003 and the financial turn-around in 2008 Phillips-Van Heusen brought in a consultancy company to analyze Calvin Klein on business processes.
and results. The outcome was that Phillips-Van Heusen is a massive organization without any technologies, knowhow or processes to keep up with the market and competitors. With an annual buy of 75 million yards of woven fabric, it is specialist in woven goods and it has the largest market share on the woven side. However on the knit side the complete supply chain has to be fine-tuned and more streamlined to be as competitive our even better then our competitors. Main focus should be on production time reduction and finding innovative ways to increase the speed-to-market and reduce lead-times from 420 to 300 days within the next 2 years.

This long production time triggers the following situation. With the current calendar, the design team is designing products and fabrics are being developed more then one year ahead. This means that there is no feedback from sales for that particular season of the previous year. Changes within the season are the result as feedback gradually flows back to the head-office and as a successful business you do not want to develop a fabric or create a garment that is not selling well on the floors.

CALVIN KLEIN’S GOALS
- Be more aware of risks by shortening the lead-time of the production chain from 420 days to 300 days. This reduction of cycle time gives design the opportunity to design products 120 days closer to the time that is needed to sell it on the selling floor. This leaves extra room for trend research and sales feedback.
- Setting up mill processes to react faster to a trend by having stock of greige carry-over fabrics at our manufactures. This replenishment can save knitting and transportation time of 100 days in the supply chain.
- By strategically mill locations and transportation to reduce transit time from 6 weeks to 2.5 weeks. Meaning picking domestic factories, vertically integrated factories or factories near harbors and other suppliers like trims manufactures.
- Reducing proto samples making from 4 to 1 week by setting-up one centralized division with standard procedures/ communication of putting together tech-packs. This will eliminate questions on factory and our side. Part of this is the arrangement of fabric out front to get proto samples in our New York Office in correct fabric to really judge them on look and fit.
- Increasing mark-up with 5% as a result of above changes.
- Increasing market-share with 40% by 2013 as a result of better synchronization with market demands.

In the consumer driven industry of today it is important to fulfill their needs and not miss out on trends. Speed-to-market can play a vital role in this all and therefore Calvin Klein wants to implement this concept in its White Label business. By just starting the Research & Development department of knits and sweaters Calvin Klein made the first step of towards this strategy. Therewith it is key to have a solid foundation on which further development and performance profitability and competitiveness improvement are build upon. My final thesis investigation is based on this first step and how to get the most out of it.

I encapsulate it by formulating the purpose of my final thesis: “Which methods and what kind of strategy is of interest at Calvin Klein when you want to improve the effectiveness and efficiency of the research and development (sourcing) department…. In order to cut-back on lead-times”
In order to give a consolidated and well-founded answer to my thesis I describe an internal and external investigation including the marketing mix, personal experiences, bench-research and business models. I conclude my investigation with the SWOT-analysis.

The following chapter contains action plans with possible methods of how to improve the efficiency and effectiveness and improve lead-times. Finally I look at the results of all investigations, analysis, actions and company characteristics to clearly answer my thesis.
ANALYSIS by EXECUTION

2.0 MARKETING MIX of Calvin Klein

- PRODUCT
  Everybody knows Calvin Klein for its jeans, underwear and provocative advertising. Despite having this background and image, Calvin Klein also distinguished itself into the apparel and sportswear department. This department is divided in a Wholesale business, which dresses the modern casual men in the age between 35 and 55 (see image on the right), and a Retail business, which look is younger and dresses the men and women in the age of 20 to 40.

  Calvin Klein has a broad and strong collection of formal/refined wear like dress-shirts, dress-pants and suits. And the casual/denim collection of polo’s, t-shirts, sweaters and pants. Due to the licensing agreement with Warnaco, who does CK Jeans, our department may not develop and source real denim or jeans like styles.

  Calvin Klein and Phillips-Van Heusen both have a woven background therefore they miss good experience on the knit and sweater department. As the knit and sweater world is becoming an important business and being very different from the woven’s world, Calvin Klein wants to establish and invest in a solid and innovative knit and sweater department.

  The current supply-chain time for the garments is shown in below table.

<table>
<thead>
<tr>
<th></th>
<th>Development</th>
<th>Costing</th>
<th>Samples</th>
<th>Order Processing</th>
<th>Production</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Normal Calendar</td>
<td>135</td>
<td>21</td>
<td>74</td>
<td>25</td>
<td>166</td>
<td>421</td>
</tr>
<tr>
<td>Retail Normal Calendar</td>
<td>130</td>
<td>21</td>
<td>74</td>
<td>25</td>
<td>147</td>
<td>397</td>
</tr>
</tbody>
</table>

- PLACE
  Calvin Klein is present all over the world. The White Label, for which I am doing my Final Thesis, is only represented in North America. None of the less, there are over 15,000 points of sales in department stores alone, and over 10 Specialty Stores (see image on the right) across the United States. Among the cities are Atlanta, San Francisco and Las Vegas.

  Due to the worlds financial situation of the past two years the upper management had decided in 2008 to put a hold on the development and opening
of new Specialty Stores until the situation has stabilized. Just recently, plans of resuming with the opening of these stores were presented. The same goes up for the restyling of Calvin Klein’s shop-in-shop concept in department stores with new displays and fixtures.

Besides having real points of sales, the on-line store (see image below) is becoming a bigger and important medium for sales and to reach out to the Calvin Klein customer. This E-commerce is therefore targeted as a potential growth area for the brand. Currently there are significant investments in this business and the team believes it can triple the business over the next three years. In addition, the on-line shopper can be followed carefully, which provide useful information about the products.

The Head-Office of Calvin Klein Inc White Label is located in New York City in the Garment district. This location offers a good interaction between vendor agencies and other fashion organizations. The overseas Sourcing office is located in Hong-Kong from which all production, operations and sourcing in China is overseen. Besides the manufactures in China, Calvin Klein also does business in India and Egypt.
**PRICE**

The price of the garments on the Wholesale department are generally higher, as of it is being sold in department stores and not in specialty stores at outlet prices. Below chart shows an overview of average garment prices for knits and sweaters with emphasis on the lower price.

<table>
<thead>
<tr>
<th>Article group</th>
<th>Wholesale Department</th>
<th>Retail Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweaters</td>
<td>$68.00 to $114.00</td>
<td>$24.99 to $59.99</td>
</tr>
<tr>
<td>Long sleeves</td>
<td>$48.00 to $98.00</td>
<td>$29.99 to $88.00</td>
</tr>
<tr>
<td>Short sleeves / Polo’s</td>
<td>$19.50 to $48.00</td>
<td>$14.99 to $48.00</td>
</tr>
<tr>
<td>Skirts/dresses</td>
<td>N/A</td>
<td>$68.00 to $128.00</td>
</tr>
</tbody>
</table>

With a 60% to 80% mark-up, the garment landing costs range from $5 to $23 US dollars. These price points show the competitive prices of the base fabrics to source. For a simple body, a polo for instance, no more then $8.- per pound can be afforded. For second layer knits and more complex styles the fabric price needs to be lower and can not be higher then $4.50 per pound, also because of the heavier weight of the second layer knits.

Due to the economic climate of the past two years, Calvin Klein lowered their retail price significantly. In the past, prices were almost 30% higher then they are now. It is the job of the Research & Development team to keep the quality the same while resourcing and/or reengineering certain fabrics at a lower price point to still make our margin.

Another issue I want to address is the minimum amount of yardage or pounds that need to be bought from the vendor in order for Calvin Klein to place the order. Often these minimums are too high at the Retail Department. This including with their lower price point makes sourcing good quality fabrics even more of a challenge. The average minimums are 500 yards per colour and maximum 3000 yards per order. A lot of vendors use 1000 yards per colour as their minimum and 3000 yards minimum per order.

**PROMOTION**

All branding and marketing of all Calvin Klein labels are handled in the office on West 40th street with an average annual promotion budget of $275 million.

The research and development department is not involved in the promotion of the garments. However, the team does have to source fabrics for special promotions. For instance for the next winter collection Phillips-Van Heusen and Warnaco, one of our licensees, came up with the “gold injection” line. This is a special promotion at a special retail price, which will be launched during Christmas 2010 as a gift-giving item. Because this is a million dollar order, proto samples and salesmen samples needs to come-in in correct fabric and trims as shown on the design sheets. For this promotion the retail price is higher and therefore can spend a little bit more money on fabric.

Likewise, the X-Fit campaign is in progress right now (see image). For this promotion high-tech fabrics with a sporty look had to be sourced. Most of it are synthetic and meshes. For this research and development project the teams needed to make sure the fabrics have that X-fit look of the campaign. Meaning a sporty look, but used in a clean Calvin Klein way.
**PRESENTATION**

Presentation is a very important subject when you want to sell your products. The influence of the knits and sweaters research and development team is that they need to make sure fabrics have a clean surface and are not stiff and harsh when laying down on the tables or hanging on the racks.

Consciousness about the image of the garment is a must. Like for the X-fit, the look and the presentation of the garments have to be more sporty and slim. Therefore fabrics need to have stretch and a light sheen.

During a previous corporate meeting, investigation of our Specialty Retail Stores showed that the image was too masculine. As a result stores are not accessible enough to women and could scare off men. The fact that there was little merchandise on display also played a part. Therefore more merchandising will be placed out on the store floors. This might lead to higher minimum orders in total.
2.1 **BUSINESS MODELS**

Based on observations, interviews, literature and my experiences I have set-up the business models in this chapter. The six months as an intern helped me to know the organization and the teams at Calvin Klein, which made is easier to obtain information.

- **BALANCED SCORE CARD**

*The balanced scorecard is a strategic planning and management system that is used extensively in organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals. It was originated as a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organizational performance.*

<table>
<thead>
<tr>
<th>Vision</th>
<th>Goal</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>Financial growth</td>
<td>Increase of the turnover, Increase of sales, Reduce development costs</td>
</tr>
<tr>
<td></td>
<td>Less risks of investments</td>
<td>Higher return on investments</td>
</tr>
<tr>
<td></td>
<td>Profitable knitwear section</td>
<td>Obtaining better margins in knits &amp; increase departments sales</td>
</tr>
<tr>
<td>Customer</td>
<td>(Inter)national growth</td>
<td>Larger market share inside and outside of the USA</td>
</tr>
<tr>
<td></td>
<td>Loyalty</td>
<td>Returning customers &amp; responding to demands</td>
</tr>
<tr>
<td></td>
<td>Satisfaction</td>
<td>Amount of returned goods &amp; amount of complains</td>
</tr>
<tr>
<td>Internal Business Process</td>
<td>Implementation of the speed to market principal</td>
<td>More time for forecasting and trend research</td>
</tr>
<tr>
<td></td>
<td>Reduce development costs</td>
<td>More time for forecasting and trend research</td>
</tr>
<tr>
<td></td>
<td>Improve development efficiency</td>
<td>Shorter production lead-time</td>
</tr>
<tr>
<td></td>
<td>Improve development effectiveness</td>
<td>More developed fabrics which are adopted into the collection</td>
</tr>
<tr>
<td>Learning &amp; Growth</td>
<td>Sharing knowledge about knits and sweaters</td>
<td>Better anticipation on developments and carry-overs by the New York Office and Hong-Kong Office</td>
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<tr>
<td></td>
<td>Having a centralized PDM system</td>
<td>Less questions on production and development side about fabrics and allocations</td>
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<tr>
<td></td>
<td>Excelling on the knits and sweaters like Calvin Klein is on the woven’s</td>
<td>Being known for the knit and sweater supply chain and reputation.</td>
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</table>
- **BCG-MATRIX**

The BCG Matrix method is based on the product life cycle theory that can be used to determine what priorities should be given in the product portfolio of a business unit. To ensure long-term value creation, a company should have a portfolio of products that contains both high-growth products in need of cash inputs and low-growth products that generate a lot of cash. It has 2 dimensions: market share and market growth. The basic idea behind it is that the bigger the market share a product has or the faster the product’s market grows the better it is for the company.

- **STAR**

The ‘star’ of the knits and sweater department are the big programs. For instance the ‘liquid cotton’ and the 20s/1 jersey, 1x1 rib and 2x2 rib fabrications. These fabrics are across multiple styles and seasons and will increase turnover as they can be bought for a lower price due to the higher quantity, ranging from 30,000 to 80,000 units per style. Calvin Klein stars are the liquid cotton 60s/1 interlock polo’s and the French Rib liquid cotton second layers. The margin is relatively low, but these programs need investing in as they make the Calvin Klein customers used to the product and from there these programs can flow into the ‘cash cows’.

- **CASH COWS**

The ‘cash cows’ are the old ‘stars’, which were redeveloped for a lower buying price. An example is the 60s/1 liquid cotton interlock. The R&D team redeveloped this fabric with a different mill in a 50/1 interlock with silicone finish to get a similar hand as the liquid cotton and a price decrease of about a dollar. With the price decrease they can now be selected for Calvin Klein Specials, which is a big money maker for the company as it is soled at lower prices in many doors. These units are over 100,000 a style.

- **QUESTION MARK**

The ‘question marks’ are the newly developed fabrics design and the research and development team has picked for the upcoming season. Most of the time it concerns bought garments, which the R&D team develops with one of Calvin Klein’s mills or a selected fabric from the existing mill collection, which either does or does not need to be tweaked to meet our standards and requirements. These seasonal fabrics have not yet been exposed to the public. After they hit the floors Calvin Klein annalists can tell if it will become a star and be carried-over to following seasons or will be a one of a kind. The fashion fabrics are across 3,000 to 10,000 units.

- **DOG**

The ‘dogs’ are the fabrics that are new developments and take-up a lot of time and have complications during the development process. Often these are quick trends to which Calvin Klein wants to react. For example lightweight or sheer fabrics, which cannot meet our standards for shrinkage or heavy weight and complicated fabrications in Pima cotton.
**FIVE FORCES MODEL**

The Porter’s 5 Forces tool is a simple but powerful tool for understanding where power lies in a business situation. This is useful, because it helps understanding both the strength of the current competitive position, and the strength of a position you’re looking to move into. With a clear understanding of where power lies, you can take fair advantage of a situation of strength, improve a situation of weakness, and avoid taking wrong steps. This makes it an important part of your planning toolkit. Conventionally, the tool is used to identify whether new products, services or businesses have the potential to be profitable. However it can be very illuminating when used to understand the balance of power in other situations too.

**SUPPLIERS**

The Calvin Klein knitwear section for the White Label consists of yarn, fabric and garment suppliers based in Asia. Besides them, Calvin Klein has agencies in India and Egypt who do their own manufacturing placements. The portfolio consists of three yarn suppliers, seven fabric suppliers and two vertical organizations.

The vertical organizations have the power of not selling their fabrics separately, but by offering a total fob package. Therefore when an organization has an innovative product Calvin Klein has to place the order with them if the team cannot be redevelop that finish or fabric with one of the other mills. Cost wise it can be very effective to redevelop a fabric with another mill. Fabric prices can change over one dollar, which will turn into our favor when making good margin. Quality control is a very essential topic when redeveloping, as not all of our mills can reproduce every fabric.

The power of our garment manufactures is also important. One of our manufactures does not want to work with one of our fabric suppliers. This can cause issues when pricing the garments and have to either redevelop the fabric or relocate the garment making.
- **BUYERS**
The Wholesale division is relaying on big department store accounts like Macy’s and Lord & Taylor. Macy’s in particular has a large influence as they place orders of over $70 million annually. Together with their buyers, garments are discussed, adjusted and bought.

The Retail side has their own buying team within the Calvin Klein organization, as this collection will be on display in Calvin Klein owned stores. The buyers have a lot of influence in which style will be adopted into the line and which one will drop out. They have an important vote regarding fabrics as well. Together with the design team they will go on buying trips to look for the upcoming trends and important competitors. The buying team also buys from one of Calvin Klein’s Licensee, Warnaco. This buy will more involve graphic t-shirts however.

- **SUBSTITUTES**
When looking at Calvin Klein’s shop-in-shop at Macy’s, Calvin Klein White Label is next to Ralph Lauran, Tommy Hilfiger, Nautica and Hugo Boss. All of them are offering the same range Calvin Klein does; jersey, slub, interlock, fleece, terry, Jacquard and pique. Competition is high and substitute products are easily found. However due to Calvin Klein’s price deduction at the beginning of 2009 puts us at a lower price point. This lower price point may make us look cheaper in the customer’s eye and may project a lower quality then the shop-in-shop next to us.

- **BARRIERS TO ENTRY**
With being on the market for over 40 years, Calvin Klein has projected itself in the consumers mind. Therefore the brand is strong and has loyal customers. For decades Tommy Hilfiger, Ralph Lauren, Donna Karen and Calvin Klein have been the big four in the American Fashion Market. Therefore it will be very hard and will take a lot of time for new competitors to reach the level Calvin Klein is at. Not to mention the business relation Calvin Klein has build over the years with its accounts, suppliers and customers. Being an older player on the retail market also has its disadvantages. Processes take larger to adjust to new situations. As new comers will come in with fresh ideas, which can put them right up there with the big players.

- **COMPETITIVE RIVALRY**
Big competitors of Calvin Klein White Label are Hugo Boss and John Varvatos. As product developer I see a lot of fabrics from them, which we are asked to duplicate with our mills. They might however carry the same basics; Calvin Klein does have a very clean and minimalistic image. Hugo Boss would therefore be its main competitor, although after the price deduction Hugo Boss is more expensive. Calvin Klein is an American brand, which makes it more appealing to the American consumer thus knowing its demands and market.
VALUE CHAIN MODEL

A value chain is a chain of activities for a firm operating in a specific industry. The business unit is the appropriate level for construction of a value chain, not the divisional level or corporate level. Products pass through all activities of the chain in order, and at each activity the product gains some value. The chain of activities gives the products more added value than the sum of added values of all activities. Typically, the described value chain and the documentation of processes, assessment and auditing of adherence to the process routines are at the core of the quality certification of the business, e.g.

PRIMARY ACTIVITIES

- Inbound Logistics
  For our production activities on the knitwear and sweater site, Calvin Klein does not have a central warehouse where to stock fabric or yarns. Neither does the organization receive and distribute it. Therefore we do not create any stock, however Calvin Klein does have liabilities for booked fabrics, which were not use in the end.

- Operations
  Calvin Klein’s operations works as a cut-make-trim method in which, yarns are transported to the related knitting mill. The fabric then goes to one of the manufactories including trims. Eventually the product is being shipped to our distribution center.
  Some of our mills only offer a fob package. These mills knit their own fabric and make the garment.

- Outbound Logistics
  The Retail line has its own stores in which the products are being sold. Therefore it also does the order fulfillments. Likewise for the on-line store of Calvin Klein, which is growing within the brand.
  The wholesale division sells the final products to department stores like Macy and Lord & Taylor. These accounts place orders with us after which, production is started and products are being shipped.
- **Marketing and Sales**
  All the activities of advertising, pricing, branding and merchandizing are done by a separate department within Calvin Klein Inc. This department does the marketing and sales for all the Calvin Klein lines. Even the licensed CK Jeans, CK Underwear and CK wholesale women’s. You can say that this department adds the most value to our products. Calvin Klein is known for its advertising and always achieves to create this tantalizing image around its brand.

- **Service**
  Certainly Calvin Klein wants to keep a good relation with its accounts and customers. Therefore Calvin Klein maintains a loyal service policy. The online shop often has free shipping, promotions, and discounts. Calvin Klein also works closely with department stores regarding special injection lines to boost sales. For instance, the teams currently delivered a fast-track collection with trend conscious styles and a ‘gold’ collection, which needs to boost sales after the holiday season.

**SECONDARY ACTIVITIES**

- **Firm Infrastructure**
  Calvin Klein has its head-office in New York City. In this building sits design, sourcing, development, human resource management, sales, public relations, marketing, finance and upper-management.
  In the Phillips-Van Heusen Hong-Kong office sits a separate development and sourcing department for Calvin Klein. Our overseas team coordinates fabric and garment production and logistics instructed by the New York office.

- **Human Resource Management**
  Employee recruiting, hiring, training, development and compensation for American activities are dealt with from the New York head-office. Since Calvin Klein is corporately owned the employees have good secondary benefits like unlimited personal days, health insurance, employee bonuses, maternity leave and corporate briefings. The PVH Hong-Kong office has its own Human Resource Management department from which HR activities are being coordinated.

- **Technology Development**
  With the new direction of speed to market, Calvin Klein is taking steps to improve technology development. They installed the product development team who oversees all in-season and out-season development, discuss with mills to look for new technologies and innovations, and sources for possible new suppliers. The research and development department also takes care of reserving fabric for proto and salesmen sample making.

- **Procurement**
  The procurement department is one of the biggest departments of Calvin Klein. The company does not produce any products themselves, but buy it from our suppliers, let it be constructed at a mill and ship it to our distribution center and shops. Therefore good logistic systems are essential to keep track of all purchases.
2.2 DESTEP ANALYSIS

- DEMOGRAPHY
  The demographic location of Calvin Klein White Label is America. America has a well-known history in the cotton industry. Still the US produces 80,000 tons of cotton staples annually. However, before the economic downfall this used to be 185,000 tons in 2007.

- ECONOMY
  After three years of financial downfall the economy is improving. This is noticeable worldwide in consumer spending and in the increased demand for cotton. In 2009 the cotton demand increased by 9% compared to 2008. In the first quarter of 2010 the demand has risen overwhelmingly to 30%.

- SOCIAL/CULTURE
  China being the main production location of Calvin Klein it is important to know the culture and their way of doing business. The CK Hong-Kong office definitely is a good mediator when it comes to communication with mills. Also by communicating with the Hong-Kong office it teaches us in New York how china operates and how Chinese interpreted messages.
  
Not only are the Western companies adjusting to Asian suppliers and companies, but the Asian companies are also adjusting to the Western market.

- TECHNOLOGY
  Technology is very important for economic growth. It can improve processes, fasten up communication, and relieve employees from duplicating work. America being a large supplier of technology and it being for hand gives American companies the opportunity and advantage of being more capable of implementing technology in their businesses.

- ECOLOGY
  Nowadays every company is in the spotlight when it comes to being a social responsible enterprise. Calvin Klein is aware of this matter, even though this is not the reason Calvin Klein customers buy the products. Phillips-Van Heusen has an independent agency, which looks after the social responsibilities of Calvin Klein’s mills. Not to long ago Phillips-Van Heusen employees received an e-mail stating one of our mills was not living up to the market standards and that this was addressed at the mills end. Resulting in an action plan from the mill of how they are improving the situation. This being said, Calvin Klein Inc. and Phillips-Van Heusen does do business with ecology in mind.

- POLITIC
  With today’s international organizational viewpoints and industries, politics play a large part in current businesses. The United States have free trade agreements with several countries under which cotton producing countries and clothing manufacturing countries like; Mexico, Peru, Chile, Honduras, Jordan and Morocco.
  Besides free trade arrangements with countries, there are also countries with which America has to pay a certain import duty to protect domestic production. For instance on garments imported from China an average of 16% has to be paid for duty. The import duty is subjected to the content of the garment as chief value cotton fabrics have lower duty then chief value synthetic fabrics.
2.3 BENCH RESEARCH

- ZARA

The ZARA concept is based on the following philosophy: “touch the factories and customers with both hands, therewith letting one hand helping the other”. This means that you have to control what happens to your product until the customer buys it. In addition to this philosophy, Zara has developed a super responsive supply chain. The company can design, produce, and deliver a new garment and put it on display in its stores worldwide in a mere 15 days. Zara achieves this by carrying out the below practices:

- Keeping almost half of its production in-house
- Leaving extra capacity in its factories
- Manufacturing and distributing in small batches
- Managing all design, warehousing, distribution and logistics functions itself
- Holding its retail stores to a rigid timetable for placing orders and receiving stock
- Putting on price tags on items before they are being shipped
- Leaving large areas empty in its expensive A-location retail shops.
- Tolerating, and even encouraging, occasional stock-outs.

These practices are controversial in the fashion business. However Zara manages to expand its businesses with it year after year. Zara achieves this through a system based on three principles.

1. Close the communication loop
   Zara’s supply chain is organized to transfer both hard data and anecdotal information quickly and easily from shoppers to designers and production staff. It’s also set up to track materials and products in real time every step of the way, including inventory on display in the stores. The goal is to close the information loop between the end users and the upstream operations of design, procurement, production, and distribution as quickly and directly as possible.
   By having a regular creation and rapid replenishment of small batches of new goods shipped to the Zara stores, customers always have new merchandise to pick from. This also encourages the ability of having a few items on display even though stores are spacious, therewith creating a sense of tantalizing exclusivity with the customers.
   This fast fashion system depends on a constant exchange of information throughout every part of Zara’s supply chain. Most companies insert layers of bureaucracy that can bog down communication between departments. But Zara’s organization, operational procedures, performance measures and even its office layouts are all designed to make information transfer easy.

2. Stick to a rhythm across the entire chain
   At Zara, rapid timing and synchronicity are chief. To this end, the company indulges in an approach that can best be characterized as “penny foolish, pound wise”. It spends money on
anything that helps to increase and enforce the speed and responsiveness of the chain as a whole.

By having a transparent rhythm all the players in the Zara’s supply chain align. It guides daily decisions by managers, whose job is to ensure that nothing hinders the responsiveness of the total system.
- It reinforces the production of garments in small batches, though larger batches would reduce costs.
- It validates the company policy of delivering two shipments every week, though less frequent shipments would reduce distribution costs.
- It justifies transporting products by air and truck, though ships and trains would lower transportation fees.
- It provides a rationale for shipping some garments on hangers, though folding them into boxes would reduce the air and truck freight charges.

Through these counterintuitive practices Zara has shown that by maintaining a strict rhythm, it can carry less inventory, maintain a higher profit margin on sales, and grow its revenues.

3. **Leverage your capital assets to increase supply chain flexibility**

Zara has made major capital investments in production and distribution facilities and uses them to increase the supply chain’s responsiveness to new and fluctuating demands. It produces complicated products in-house and outsources the simple ones.

It buys 40% of its fabric from another Inditex firm, and purchases its dyestuff from yet another Inditex company. This much of vertical integration and investment in capital assets increases Zara’s overall flexibility. It gives a level of control over schedules and capacities. They obtain this control of reacting to peak or unexpected demands faster, by tolerating lower capacity utilization in its factories and distribution centers. These practices do not burn up investment dollars, because Zara can sell its products just a few days after they are made. Therefore it can operate with negative working capital. The cash thus freed up helps offset the investment in extra capacity.

*Harvard Business Review - Rapid-Fire Fulfillment*

After analyzing ZARA I recognize the following points of what can help improving effectiveness and efficiency of the Research and Development department and its influences for the Speed-To-Market implementation at Calvin Klein.

- Close the information and communication loop, from end-user to upstream operations of design, procurement, production, and distribution as quickly and directly as possible.
- Sticking to a rhythm with ordering and delivery and share this information with the mills. Although, with less frequent deliveries for Calvin Klein, getting the products on the shop floors on time is key. Like earlier mentioned, the development costs are inferior to taking the position in the market by serving new goods to the Calvin Klein consumers. However with an adjusted rhythm you minimize the chance of late deliveries.
- By having control of your supply-chain it becomes more flexible and gives you control over schedules and capacities.
VICTORIA SECRET

My manager Pearl Malikul has a six-year background experience as Fabric Manager for Victoria Secret. In her position she sourced and developed cost effective fabrics, managed the fabric process, researched and developed wash and finish standards, traveled to overseas and domestic mills and agents to build relationships, and forecasted and researched seasonal trends through trade shows and market research. The standard operating procedures at Victoria Secret differs from the procedures of Calvin Klein on the below points:

- Having not a lot of knit-down requests for approval
- Sourcing fabric 3 months out-front of the season
- Selecting core fabrics for a period of 6 to 12 months after which the fabrics get revisited for quality and sales.
- Having the fabric development team under design
- Keeping a rhythm of 8 weeks per season and stick with the selected fabrics.
- Pre-booking yarns at mills of carry-over fabrics and early sourced fabrics
- Having fabric CAP’s, meaning that a maximum of 10 to 15 new fabrics and development per season.
- Having a team, which solely does trend forecasting on what will be the next big thing and from with that in mind fabrics are developed
- Demanding that their mills can produce 50,000 to 100,000 yards within 8 weeks and another 8 weeks for garment production.

Similarities are that design and sourcing would travel for new qualities on buying trips and mill visits. Then all findings are presented to each other like trends, innovations, new fibers, yarns and finishes. The difference is that at Victoria Secret this cycle could take up as much as 3 months, while at Calvin Klein the research and development department has one month. In this concept meeting all findings are edited and you will decide which fabrics to pick for the collection. At Victoria Secret 80% of the line would have been nailed down at that point and those fabrics are passed off. Pearl would then order 20 to 50 yards for the first proto and salesmen sample. For all long lead-time fabrics the yarns would have been pre-booked to meet the deadlines. These pre-booked yarns first had to be signed off by the Buying team for approval.

Only since the installation of the knits and sweater Research & Development department in Calvin Klein, the teams are sitting down all together to deliberate on fabrics. Because of our long lead-times, up to 50% of the picked qualities can change due to the flow of feedback during the collection development. Therefore yarns can also not be pre-booked as of the risk of having high liability costs with the mill that ordered the yarns and knitted the fabric.
PACIFIC TEXTILES

To improve efficiency and effectiveness for the Research and Development department at Calvin Klein, I found it necessary to also have the opinion and point of view of a mill. Pacific Textiles is one of Calvin Klein’s mills; this made it more interesting to select this mill for analyzing. Pearl used to work with them as well in her previous jobs where she met Clive Wan. Clive now works in Hong-Kong and not for Pacific anymore, but he was very helpful in answering below questions.

1. **What is the set-up of Pacific Textiles and what for position does it take in with its customers.**

   Pacific Textiles is a vertical set up company. It is located in Panyu (Southern part of China). They have knitting, dyeing, printing and finishing capacity. The Monthly capacity is around 16 million pounds. In term of knitting, Pacific has both warp knit and circular knit machinery.

   Pacific Textiles can process several materials like cotton, wool, polyamide, polyester, modal, tencel and spandex. Their market positioning is to provide better quality product to their customer at a competitive price and speed.

2. **What is important for the mill to improve fabric development and production lead-times for its customers.**

   Mills need to understand what the market is demanding first after which internal capacity is reviewed. After the market research Pacific Textiles will develop new fabrics to fit with the market trend. Important to notice is that the development has to be "common" to the factory’s abilities.

   For example, the market like the soft product at a lightweight, surely, the modal is one of the best choices. However, modal may not be a common yarn to Pacific, when they develop the new item, they may need to think about using some running yarn to develop the new collection, like the CVC (Chief Value Cotton) and Cotton yarn. In case, if the customer really like some special yarn, it should alert the customer in advance and work very closely with the customer to develop a trial to get some projection to reserve the yarn. Surely, this is a risk to increase the stock level.

   In short, my opinion is the mill should understand their capability and utilize their capability to develop the market collection. On the other side, if the market really forces to use some uncommon material, a good planning and good relationship with raw material supplier is needed.

3. **How can the customer contribute to this process in order to meet speed-to-market calendar. And what is the ideal process.**

   Clive mentioned the below three points:

   - Customers should build up clear standard requirements to let their suppliers understand their quality and colour requirement. As increased speed cannot lead to poor quality.
   - They should have a planned calendar and share with the suppliers so that people involved could have a better planning.
   - They need to shorten some idle time, like the time for getting colour approval.
4. **What is a common mistake made by customers when it comes to development and production.**

A common mistake is that mills do not understand their customers' need. On the other hand, customers do not understand the capability and capacity of their supplier’s base. Good relationship and communication is therefore necessity.

5. **What is Pacific's/Mill's main focus when it comes to production and development.**

- Good Quality, meaning also hitting the development right the first time as this will help to reduce duplicate work and reduce the refinish and rework time.
- Speed and turn-over time.
- Cost and Profit.

6. **How does development for customer’s influences speed-to-market.**

   Too much development may create too much workload for a mill. Making sample yardage takes up a lot of machinery time. Take printing developments for instance. A print sample will make a machine idle for 3 to 4 hours to just make 50 yards, however the mill could use this 3 to 4 hours time to print 3000 yards of bulk fabric. Therefore, over developments need to be avoided from a customer’s point of view. However, it is hard to reduce the development as the market is so "uncertain", and the customers really need to see the physical sample to make their decision before proceeding into salesmen sample and later on bulk.

7. **Lately a lot has been going on with rising resources prices and the yarn availability. How can this be countered and dealt with for a positive outcome.**

   The situation does not have a positive outcome and people will start seeing it in the next financial reports. The speed to increase selling price should be much slower than the increasing cost of material. But I should say this should be a short-term issue, as the market cannot afford the infinity price increase.

Clive Wan’s answers bring up a couple statements. Concluding I can say the below are the most important for improving effectiveness and efficiency of the Research & Development department:

- Building a good business relation between mill and customer by sharing industry related information, which leads to better communication and understanding.
- Customers needing to have good understanding of the mills capacity and knowledge.
- Sharing seasonal trends with mills for them to be better prepared for fabric developments.
- Sharing year calendars, which enable the mill to plan around it.
- Improve and streamline approval processes
- By implementing speed-to-market over-development can be avoided. As the customer will have more time to do research and analyze sales, which will take away uncertainty.
3.0 CURRENT COMMUNICATIONS in the knits & sweater department

The research and development team communicates everyday internally with the design, and operation/sourcing teams. External communication is with the Hong-Kong based teams, and with the mills and vendors themselves. This is also on a daily basis.

Internal communication is done through telephone, e-mail, shared-drives, and of course by just walking over there. External communication occurs through airmail, e-mail, shared drives, mill/vendor visits, or business trips to Hong-Kong. All development issues will be handled by writing a fabric recap, which are sent by e-mail. If it is a difficult issue and there is misunderstanding on both sides a conference call can be scheduled.

Instead of using the shared drive on “Windows Explorer”, documents are now going to be saved on the “Global Sourcing Site”. This site can be accessed through the Phillips-Van Heusen intranet site on the global web. It is very similar to “Windows Explorer” as you can save and open documents. However with the “Global Sourcing Site” people can save and open documents from any PVH desktop with granted access.

Fabric information is handled by assigning fabric numbers and development codes/names to fabrics. The development number is put in a chart with additional fabric information like: mill, mill fabric number, construction, yarn-size, content, weight, width, price, available yardage, etc.

At the same time, fabric qualities that design want to use and source are being sent over to Hong-Kong when it is a cutting from a bought garment or not from one of our mill/vendor.

When it is a quality from one of our mill/vendor then our Hong-Kong team will request a swatch from that particular mill. When sourced fabric qualities are submitted to the New York Office and Hong-Kong Office they all carry our assigned development number/name. Along with the swatch the “fabric detail form” is sent. This form Pearl introduced and will be filled in by the mills and gives information about the fabric details, characteristics, its price and available yardage.

The fabric information of the submitted qualities will then be put into the development chart by the Hong Kong team and saved. After a quality is picked for a development and put into a style it will be assigned a ‘real’ fabric number by the product data assistant. This fabric number gets linked with that quality for further reference and production.

3.1 INFLUENCES of the Research & Development department on product development

The main objective of Calvin Klein is to cut lead-times back with 60 days within the next 2 years and that the knits and sweaters department will become just as important as the woven department. Therefore the Calvin Klein management installed the Research & Development team, which is dedicated and solely responsible for knits and sweaters. The team manager makes sure the technical background is spread with colleagues and makes them aware of developments, innovations, capabilities, etc. Below are more points of attention of the Research & Development team:

- Constantly bringing new fabrics to the focus. Through inspirational shopping, desk research and requesting the new collections from our mills.
- Research with new mills, constant communication with mills.
- Redevelopment of core fabrics for better margins.
- Bring up what needs to be improved.

It is the responsibility of the research and development knits and sweater team to do the out-of-season sourcing of fabrics. Therefore constant development and sourcing of fabric qualities is taking place. Either by sending out fabrics of bought garments the team needs to counter, or by doing field and desk research and requesting qualities by giving our mills directions of what the teams are looking for.
The Research & Development team findings and submitted fabrics are presented to the design departments. Parts of the submitted fabrics are requested by design and parts are suggested from the Research & Developments side to adapt into the collections.

Next to the pre-development the team is involved in the production side. Responsibilities are to have available yardage at the mills to do proto garments in and request for correct fabric to be knitted for the salesmen samples. Incase the fabric lead-time surpasses the deadline; similar fabrics need to be provide for salesmen samples. Salesmen samples are extremely important to come-in in the correct fabric with correct trims as this is the product which Calvin Klein is selling to its accounts. Deception can lead to damaging the business relations.

In addition the knit and sweater team handles quality, price, and lead-time issues. Expensive fabrics have to be negotiated down, counter sourced, or re-engineered by changing the yarn size, finish or construction. For quality issues the team does the same and they review the fabric and give the mills direction on how to proceed. Lead-times are negotiated by reaching out to the mills as well.

3.2 PERSONAL INTERPRETATION, GOALS and OBJECTIVES analysis

Having the advantage of doing my graduation project internally at Calvin Klein Inc. and by being with the organization for over eight months gives me the advantage of really being exposed to the supply chain and its positive and negative sides. It gives me insight in business processes and systems that can be improved to make the research and development department for knits and sweaters more efficient and effective. As a management student I therefore want to leave a mark and start my career with excellence. Below I discuss my interpretation of what obstacles I felt like running into.

INFORMATION STREAM

My interpretation of the sourcing and development processes is mainly that there is not one main stream of communication or system which houses information. I felt that I had to chaise design, sourcing or Hong-Kong for information regarding fabric qualities Calvin Klein has been running for several seasons, and that this is not housed properly. When visualizing the communication flow it is not a round circle where every department hands over information to the next team, but rather 4 vertical lines all having their own information and stream of communication with mills and the Hong-Kong office, with hardly any horizontal communication. The situation that occurs is that nobody really is aware of what is going on with the production and that questions arise at both Hong-Kong as well as the New York offices. Moreover everybody keeps being involved in product approvals and thus cannot focus on the next step of development and season.

Of course that is why Pearl and I are installed at Calvin Klein, but the communication and information database is definitely a point that has to be improved. One of my personal goals therefore is: create the main point of information when it comes to fabric, development or mill information. Already this is noticeable, but the next step in my eyes should be to house it in a
product data system so everybody can see what is going on instead of having to ask the fabric development team.

Decision processes at Calvin Klein can be improved as well. When development times need to be shortened, it will be wise to decide on a fabric first and design around it. Also do fewer developments after a style has been created, as the fabric to develop might not work due to technical failure, pricing or development time.

Having a firmer hand and opinion when it comes to core-fabrics and new fabrics will be a good start to make the decision process faster. By using more core-fabrics and making varieties to them gives less risk. Consumers will know the products better, design knows the fabric characteristics and can design around it, mills will know certain quantities will be bought, sourcing can cost out garments quicker and the development team can focus on new fabrics or improving existing fabrics.

APPROVAL PROCESS

The fabric and colour approval processes at Calvin Klein are not streamlined when it comes to speed. The process is as follows. Before salesmen samples come in, solid colours are approved in the Hong-Kong office and yarn-dye stripes are approved in the New York office. Fabric qualities are either picked from a mills collection and used as is or tweaked to our demands. Or the fabric will be developed from scratch initiated by the Research & Development team. All options have to be submitted to the New York office and be approved by the fabric team and design. After approval salesmen sample yardage is knitted and the garment is made.

After the salesmen sample garments are approved, yardage for the bulk production is knitted in every colour and submitted to the New York office for colour and quality approval for every style. Moreover the submitted cuttings are not always a complete set, therefore comments have to be made on garments. These garments however are often borrowed by the buyers, operations, sourcing or are displayed in the showroom. All in all it is a process, which unnecessarily takes up a lot of time and energy from design and the fabric team.

Eventually it would be more efficient to comment on the salesmen sample garments and ask for a resubmitted colour, fabric or garment if necessary. This garment is ultimately what is being sold and by making changes before bulk production brings along high risks and cause deception with loyal Calvin Klein accounts.

TREND and FORECASTING

When talking about efficient and effective fabric development it is key to know what will be the next trend, but more important what is appealing to the Calvin Klein customer. Communication with the buying department is essential to know what is selling well and to which items the customers respond bad. Eventually you do not want to invest in product developments, which will ultimately not sell well when hitting the floor. At the moment there is hardly any communication between the buying and development department. With the implementation of the speed-to-market concept there will be more time on hand to communicate with the buyers and take relevant information into the development projects.
PERSONAL GOALS and OBJECTIVES
After having the one-on-one conversation with Kelley Robinson Vice-President of Calvin Klein White Label Sourcing Department a lot more of the importance of the speed-to-market concept became clear to me. This made my personal goals and the goal of Calvin Klein White Label a lot more realistic and worth working even harder for. I have listed the most important personal goals I want to achieve during my 1 year stay at Calvin Klein Inc.
- Leaving a mark and starting my career excellent by being part of a new and improving department and getting recognition for it. Resulting in a more efficient and effective development process, due to good management, effort and dedication
- Learning and understanding the importance of businesses development processes and knowing how to put it into work in an organization by participating.
- Making myself vital to the organization, which will show in respect, self-respect and opportunities.
- Contribute to the well know multi-national Calvin Klein and its present and future successes by doing my research about how to improve efficiency and effectiveness of the Research & Development department.
ANALYSIS by SWOT

4.0 SWOT-ANALYSIS Research & Development Department

- **STRENGTH**
  - Combined with the current experienced and well-trained team new hires on management level brings new influences and experience along.
  - Calvin Klein being a well-known brand in the industry and in the consumers mind.
  - A team totally devoted to knits and sweater research and development.
  - Facility in Hong-Kong which can communicate fast and direct with the overseas mills and keep control of them
  - Growing amount of Calvin Klein points of sale.
  - The power and the capability to implement the speed-to-market concept.
  - Investment capital and power
  - Owned by the corporate company Phillips-Van Heusen, which owns more apparel brands, offering the ability to leverage fabrics, teams and knowledge.
  - A well operating woven’s division to mirror for the knits and sweater division

- **WEAKNESSES**
  - A young department within a long existing organization with habitual operating procedures.
  - No strong library of core-fabrics to choose from
  - No centralized data base in which all fabric details are housed
  - Not yet progressive enough towards design to use profitable fabrics
  - Long lead-times of 140 days for fabric and garment production.
  - Not frequently enough meeting with design and buyers to discuss fabrics, needs and concepts
  - Communication between the NY office and the HK office is not standardized nor centralized, and therefore often paired with misunderstanding on both sides
  - Communication and decision-making on the Calvin Klein Retail side can be a time consuming process as there are several higher managers involved with the concept of the collections.
  - Teams are not aware of the fabric qualities used in previous collections.

- **OPPORTUNITIES**
  - Rapid growing market in Asia and Middle and South-America
  - Because of the economic ‘shake-out’ having less small competitors
  - Having design, sourcing, development and management on one floor
  - Having the Head-Office in New York City many overseas vendors have a showroom/ office in this metropolitan
  - Economy is getting better and consumers are spending again
  - Domestic suppliers

- **THREATS**
  - Rising resource prices of natural fibers and synthetics
  - Instable dollar currency
  - Because of the economic ‘shake-out’ competitors have differentiated themselves and became stronger
  - By lowering the retail price point the customer will not accept a significant nor sudden raise in price.
  - By costs being inferior to development there is a risk of overdevelopment, which can harm the mills planning and cooperation on future developments.
4.1 **SWOT-MATRIX Research & Development department**

In the below matrix I outlined three important strengths, weaknesses, opportunities and treats for planning possible strategies. In this strategy planning I focus on growth, improvement, defense and turn around/ pullback.

<table>
<thead>
<tr>
<th><strong>Strengths</strong></th>
<th><strong>Weaknesses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Team solely devoted to R&amp;D knits and sweaters</td>
<td>1. Not fully exploiting communication and data management technologies</td>
</tr>
<tr>
<td>2. Strong brand name and image in the industry and consumers mind</td>
<td>2. Long fabric and garment lead-times</td>
</tr>
<tr>
<td>3. Investment capital and power</td>
<td>3. Low budget to spend on fabrics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Opportunities</strong></th>
<th><strong>Strength opportunity strategies</strong></th>
<th><strong>Weakness opportunity strategies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improving world economy and consumer spending</td>
<td>1. R&amp;D team take in an important position for Calvin Klein and later Phillips-Van Heusen</td>
<td>1. Invest in PDM systems for more efficient fabric development</td>
</tr>
<tr>
<td>2. Rapid growing markets in Asia and Middle- and South-America</td>
<td>2. Flush new markets with Calvin Klein marketing and goods for increased market share</td>
<td>2. Improve fabric and garment lead-times by implementing speed-to-market</td>
</tr>
<tr>
<td>3. Economic shake-out caused less small competitors in the industry</td>
<td>3. Invest in a plant for vertical integration</td>
<td>3. Slowly rise retail prices resulting in higher budget for fabrics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Treats</strong></th>
<th><strong>Strength treat strategies</strong></th>
<th><strong>Weakness treats strategies</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rising resource prices</td>
<td>1. R&amp;D team focusing on ‘manipulating’ fabrics for lower price and keep same fabric effect</td>
<td>1. Bigger position of R&amp;D by being the main generator for fabric information</td>
</tr>
<tr>
<td>2. Economic shake-out made competitors differentiate themselves and become stronger</td>
<td>2. Focus on brand heritage and marketing campaigns.</td>
<td>2. Stay out of markets with competitors who have a high advantage by differentiating themselves</td>
</tr>
</tbody>
</table>

With the main thesis of improving effectiveness and efficiency of the Research & Development department in mind, the focus on the short term goes out to the below strategies. These points will be reviewed in the next section actions.

1. R&D team focusing on ‘manipulating’ fabrics for lower price and keep similar fabric esthetic and quality.
2. Invest in PDM systems for more efficient fabric development.
3. Improve fabric and garment lead-times by implementing speed-to-market
4. Slowly rise retail prices resulting in higher budget for fabrics
5. Bigger position of R&D by being the main generator for fabric information
6. Book fabric and/or yarns in advance
7. Source fabric facilities in America for competitive imports, lead-times and resources

On the longer term, emphasis should be on the position of the Research & Development team within Phillips-Van Heusen cooperation and its fulfillment. An investment in fabric facilities for vertical integration is also a strategy for the longer term. Both will lead to a stronger competitive position, more control of the supply chain, and market penetration.
5.0 METHODS and STRATEGIES for CALVIN KLEIN

In the SWOT-Matrix I show several methods of improving effectiveness and efficiency of the Research & Development department. In the action part I will exemplify all.

1. R&D team focusing on ‘manipulating’ fabrics for lower price while keeping same/similar fabric esthetics and quality.
   From the start of the installation of the Research & Development team fabrics were sent out for counter sourcing or being tweaked to meet our price, purposes and standards. Mills are instructed on what we expect from them and are directed on what to improve. This is a matter of good fabric management and knowledgeable fabric team. Both are present at Calvin Klein after the establishment of Pearl and her team. This practice of focus on development matters that acquire the abilities of the Research & Development team is called ‘Management by Exception’.
   The team’s presence and its influence can be shown in a before and after flow chart of product development. These charts are displayed in attachments #3 and #4.

2. Invest in PDM systems for more efficient fabric development
   Key for successful speed-to-market is making use of new technologies. Hence an up to date Product Data Management system is a necessity. Currently only the product data assistants are working with it. This however has to change and Calvin Klein Management already made a plan. In the near future the Research & Development team shall generate fabric codes.
   Nothing is yet revealed of who will do what but by having the Research & Development team put the fabric data in the system less confusion will take place at Hong-Kong’s, design, sourcing and product data assistants end.
   By not only generating fabric numbers but also inputting fabric data, this information is centralized and accessible for everybody. Instead of the old situation (shown in fig. 4) a better flow of data occurs in which data is constantly updated and passed-on to sourcing for the next step in the product development. The new information flow can be visualized in the below.

![Data Flow Diagram]

Fig. 5 improved data flow process

Initiated by the ZARA case. It shows how important it is to have control over your products.
By having one team controlling the fabric quality and sharing it across the divisions there will be less room for error. But more important is the mill direct communication, which will shorten the lead-times.
3. **Improve fabric and garment lead-times by implementing speed-to-market**

Introducing speed-to-market will have effect on the efficiency and effectiveness of the research and development department. Effectiveness will be improved because more time can be spend on forecasting and sales analysis, which will lead to a pull market position as Calvin Klein’s products meet the demands of its customers. Resulting in less inventory and waste.

Efficiency will be improved because of better flow of communication with mills and departments within Calvin Klein. Fabrics are easier managed and decisions of approval will be better dealt with.

Speed-to-Market should also increase flexibility by having multiple options of allocations of fabric production and garment production. Therefore not only need to be looked at facilities in India and Egypt, but also expand in China and look for options in America. Flexibility in manufacturing also shortens the forecasting horizon, which results in greater accuracy.

By having these advantages and a quicker delivery the competitive position of Calvin Klein increases and retail prices can gradually go up again.

4. **Slowly rise retail prices resulting in higher budget for fabrics**

With the rising resource prices, a higher retail price will be inevitable. The result unfortunately is that you get the same fabric for a higher price and cannot elevate in fabric esthetic with a minor rise in price on the short term. In a healthy market retail prices rise quicker then resource prices. But due to the combination of crop failure, high demand from China and India, improving world economy, halt on cotton exports, and the dollar currency it is beyond the opposite. Thus by slowly increasing the retail price the bigger budget for fabrics will be for the longer term.

5. **Bigger position of R&D by being the main generator for fabric information**

This change is important for better communication with mill and other departments within Calvin Klein. By having the R&D department generate fabric information, like fabric numbers, it is easier to pass that information to the next department and the R&D team can work on new developments and focus on the next season.

Not only has information to be generated by the research and development department, but the department also must take in a bigger position within the collection development. This way the information and communication loop will be closed and product is controlled from development to buy. This takes away uncertainty as well, thus less unnecessary developments. This cycle of product development is shown in attachment# 4.

6. **Book fabric and/or yarns in advance**

When thinking straight forward and logically, booking fabric and/or yarns in advance and in replenishment will be of great impact for the speed of garment delivery. By having the yarns ready at the mill will save two weeks of transportation time. By having the fabric ready at the manufacturer will save the two weeks of transportation plus the knitting time.

For instance the situation at Victoria Secret. Pin down a quality, preferably a carry-over fabric, for 6 months or 12 months and keep this on stock according to the buy projections. After the period the Research & Development team can sit down together with design and the buyers to review these qualities and decide which quality is still in and for how long and which quality is new or out of the collection. This way, the mill has less uncertainty, can plan the production better and you can get a better price. This however will need a year calendar instead of a season calendar only. With a year calendar better projections can be made and departments can adjust their planning in order to meet mills planning
7. **Source fabric facilities in America for competitive imports, lead-times and resources**

America is a vast continent with a history in the cotton industry, which still stands. To shorten lead-times having production in America will eliminate five weeks of shipment time already. When managing replenishment, Calvin Klein can eliminate 176 days in total in production and sampling making the complete supply-chain 213 days.

Having suppliers in America has more advantages, like having the same cultural background, which leads to better understanding, and duty free trade. Currently we are seriously looking into production with Pinehurst, which is American based with production facilities in Honduras (a free trade country). We are exploring what their capabilities are by starting off with t-shirt production, which may lead to big order placements. An analysis of a fast-track program from Pinehurst is shown in attachment #5.

An important action to mention besides the above is the approval process of fabrics and colours. This also being mentioned by Clive in the interview I had with him, makes it more then worth looking into and adjusting it.

In chapter 3.2 you can read that the approval processes are not efficient due to the many steps and the running around for qualities to make comments on. By streamlining it, the research & development team will be more efficiently used and improved effectiveness will follow. The main basic steps should be:

1. Existing mill qualities should proceed straight into proto and salesmen sample
2. Tweaked mill qualities should be sent to New York as soon as possible commented on and proceed into salesmen sample. For proto either existing or similar substitute fabric can be used and sent to New York so we know what will be used for proto.
3. Developed qualities have carefully directed and instructed to the mills. They have to be submitted to New York for approval, along with substitutes used for proto. When submits are approved it should be proceeded for salesmen sample.
4. When prototypes in correct fabric and/or salesmen samples are submitted, design and the research and development team should sit together and discuss any call-outs on quality.
   This can then be adjusted for bulk production or when time allows it corrected and submitted again.

Side-note with above points is that the fabric team should not handle colour approval. But entered and communicated by the colourist or designer. With the implementation of the new product data management system this should be taken into thought, as well as a better way to sign of on approved and proceeded qualities and late added qualities.

All explained actions can obviously only accomplish when interactive communication is present. Therefore departments have to have more interaction with each other. At the moment this is happening between development, design and sourcing. The last link in the chain would be the end-user or in this case the buying department. They have the vital information regarding sales, demands, how customers react to fabrics, marketing objectives, garment prices and fabric budgets and late added changes/styles. Also it is important to sit together while having salesmen sample reviews, so all comments can be taken into account and be applied into the new season. Also the information can then be shared with mills to have them better prepared for next seasons and get feedback from them regarding mill capabilities.

Better communication and relations with mills can also be achieved by asking them questions of what they need and how they can improve their work standard.

![Fig. 6 Ideal flow of communication](image_url)
RESULTS

6.0 CHANGES OCCURRED with installing the Research & Development department.
After nine months of being present, the research and development department influences can be noticed in sourcing and development operating procedures.

1. More direct contact with the mills and not so often through our Hong-Kong team.
2. Less spinning around regarding fabrics and consolidates in an earlier development state.
3. Taking over workload of the sourcing department, so they can focus more on garment manufacturing.
4. Having the mills sent over the “fabric detail form” which gives us instant fabric information.
5. A centralized fabric data division and a department solely for fabric development and management, which result in more control over the supply-chain.

These influences and changes can be put into a flow chart for better visual understanding. In attachments #3 and #4 the before and after situations are shown. Important to mention is the change and focus there now is on the development process shown in the grayed out section. In the last nine months the R&D team gradually set-up the situation as shown in the after flow-chart. However the last crucial step to take into caution is also the last step in the chart: Market analysis and best buy discussed with design and R&D.

By having this feedback needs and demands are better met and effectiveness of the research and development department will increase.

Due to the installation of the Research & Development department Calvin Klein is now able to work by the speed-to-market calendar, which leads to the shorter product cycle as shown in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Development</th>
<th>Costing</th>
<th>Samples</th>
<th>Order Processing</th>
<th>Production</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Normal Calendar</td>
<td>135</td>
<td>21</td>
<td>74</td>
<td>25</td>
<td>166</td>
<td>421</td>
</tr>
<tr>
<td>Wholesale STM Calendar</td>
<td>121</td>
<td>21</td>
<td>57</td>
<td>24</td>
<td>133</td>
<td>356</td>
</tr>
<tr>
<td>Retail Normal Calendar</td>
<td>130</td>
<td>21</td>
<td>74</td>
<td>25</td>
<td>147</td>
<td>397</td>
</tr>
<tr>
<td>Retail STM Calendar</td>
<td>110</td>
<td>21</td>
<td>55</td>
<td>18</td>
<td>133</td>
<td>337</td>
</tr>
</tbody>
</table>

Fig. 5 before and after calendar situation in days
With the total production time reduction of 65 days for wholesale and 60 days for retail, vital sales feedback can be taken into the next collection and developments. Moreover, the quicker customer demand can be satisfied, the more competitive and profitable Calvin Klein will become. The bottom line is that cutting lead-time is a business-development and profit-improvement strategy that will increase sales, reduce costs, improve margins, accelerate cash-flow, and increase effective production capacity all at the same time.

6.1 FINAL THESIS SOLUTION.

“Which methods and what kind of strategy is of interest at Calvin Klein when you want to improve the effectiveness and efficiency of the research and development (sourcing) department... In order to cut-back on lead-times”

The main conclusion is that with the implementation of the speed-to-market concept the effectiveness and efficiency of the Research & Development department will improve. Speed-to-market has effect on both side of the supply chain. At the initiation of the season due to the flow of feed-back from buyers and market analysis, and at the end due to shorter lead-times and a product that appeals to the Calvin Klein customer as you change the push market into a pull market.

By following the action points in chapter five and by keep on improving the Research & Development department the goals Calvin Klein Inc. wants to achieve will accomplish beginning 2011 already.

- Less risks and uncertainty when designing the new collection. As reduction of 40 to 170 days in cycle time gives design the opportunity to design products closer to the season. This leaves extra room for trend research and sales feedback.
- Strategic fabric management by having stock of greige carry-over fabrics at our manufactures. This replenishment can save knitting and transportation time of 40 to 170 days in the supply chain. With this extra reduction of 40 days the goal of having a 90-day production time is achieved based on the speed-to-market calendar.
- Reduced production and sample time to strategically mill allocations, and being able to redevelop and replenish fabrics at strategically located mills. Production and sampling from America will reduce 176 days in total.
- Increase on mark-up on basic knits of 5% minimal. (See attachment 5)
- Sample production time of 1 week by setting-up one centralized division with standard procedures/ communication regarding fabrication with the mills. This can then be easily passed of to sourcing for manufacturing and product data assistants for putting together tech-packs. This will eliminate questions on factory’s and our side.
- Market-share increase of 44% by 2013 due to better competitive position, as products are more synchronized with the markets demand. Also by broadening the market (making the pie bigger and not the slice) with the introduction of knit lounge wear like sweat-pants and sweat-shorts. With the realization of the Research & Development department these products can now be introduced as of the focus on knitwear development and price competitive fabrics. (See attachment 6)

All in all the essence of a successful research and development department is make what you can sell, do not make what you cannot sell, and do not lose sales because you failed to make what you could have sold.
EPILOGUE

Throughout my nine-month stay at Calvin Klein I was given the chance to express my capabilities and excel in all opportunities that are given to me. My drive and eagerness were well noticed by my manager at Calvin Klein and by my supervisor at the Amsterdam Fashion Institute. Often my manager and I sat together to discuss progress and my opinion was asked to show my sight of the processes. For instance the part in my Final Thesis regarding personal observations demonstrates my interest and involvement in Calvin Klein and the business.

Coming from a different continent with a different background and education my young insight in fashion and its business got a new twist by being part of a mature team of managers, designers, directors, vice-presidents and presidents. It truly was unique in its kind to be exposed to these stimulations. All of this helped to achieve my personal goals that I wanted to accomplish during my time within Calvin Klein. Point by point I can say I managed to:

- Start my career with excellent by being part of the Calvin Klein team and to have it on my resume and I gained a lot of new contacts and recommendations from my colleagues. Besides I left a mark in assisting in the set-up of a Research & Development department within an established team and investigating and sharing how to improve the efficiency and effectiveness.
- Learn through my interviews with Pearl Malikul, Kelley Robinson, Karen DiBonevatura and Clive Wan the importance of business development processes and understanding why it is necessary and what the impacts are of lean manufacturing, communication, fabric management and business.
- Make myself vital to the organization by showing my dedication and eagerness to learn. This made the management of Calvin Klein comfortable to give me tasks like ordering proto yardage, ordering salesmen sample yardage, requesting for developments and giving directions to the mills, giving directions to the CK Hong-Kong and commenting on fabric qualities before they are put into work. All these given opportunities earned me respect from my colleagues, gave me more self-respect and opened doors to new opportunities in the fashion industry.

With accomplishing my personal goals I contributed to the well-known multi-national Calvin Klein and its present and future successes. My special gratitude goes out to my supervisors Pearl Malikul of Calvin Klein and Mirjam Goedkoop of the Amsterdam Fashion Institute for giving me guidance and assisting me in setting-up my final thesis. In addition all my colleagues at Calvin Klein deserves a thank you for sharing their knowledge and for their patience in listening and explaining me the processes of a business.

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**SUPERVISORS/ ADVISORS:**
- Mirjam Goedkoop
  Head of department Fashion & Management – Personal Supervisor
- Interview with Pearl Malikul 04-01-2010
  Senior R&D manager Knits & Sweaters Calvin Klein Whitelabel – Personal Supervisor and Manager
- Interview with Kelley Robinson 04-01-2010
  Vice-President Sourcing and R&D Mens Calvin Klein Whitelabel
- Interview with Clive Wan 05-07-2010
  Former fabric engineer Pacific Textiles Holding Limited China
- Interview with Karen di Bonevatura 05-21-2010
  Director of sourcing knits & sweaters mens Calvin Klein Whitelabel
ATTACHMENTS

1. Organization Chart Sourcing department
2. SEVEN ‘S’ MODEL

The Seven-Ss is a framework for analyzing organizations and their effectiveness. It looks at the seven key elements that make the organizations successful, or not.

- Shared Values
  Due to Calvin Klein being a vast company with over 400 employee’s one corporate culture is hard to maintain. Personally I experience that every department has its own shared values. However, everybody wants to work as effective and efficient as possible and strives to growth. Especially after the financial situation and people had to be laid-off, employees want to be a factor to the success of Calvin Klein. On the other hand this stimulates an individual culture with less communication between departments, which is not contributing to the end result.

- STRUCTURE
  All departments have a manager/director who reports into the vice-president. Because of the several layers in the organization, information can get lost. The management tries to counter this as much as possible by having team meetings in which problems are being brought up and discussed how to solve them.

- STRATEGY
  The strategy of Calvin Klein is to shorten the lead-times of the supply chain and therewith having extra time for fabric sourcing and collection development. This will bring along that trends can be better investigated and that the team as a whole can react to the sales numbers of the previous seasons. Eventually this will give Calvin Klein a stronger and competitive position on the market.

- SYSTEMS

- STYLES
  The management style, which is practised at Calvin Klein, has a layered structured, because the organisation is owned and directed by Phillips-Van Heusen Corporation. Never the less communication within the sourcing department occurs often by meetings and standard operating procedures are discussed and approved all together. During meetings feedback is given and the hard work is emphasised and respected.

- STAFF
  The team of Calvin Klein is very skilled and experienced. The sourcing team consists of newly hired employees who are with the company for 3 or more years. The same situation occurs on the designs side.

- SKILLS
  Due to the high experience level at Calvin Klein White Label the average skills are high. Having a woven department as example to follow gives directions to the new installed knit and sweater team.
3. DEVELOPMENT PROCESSES at Calvin Klein Inc. before the installation of the R&D team.

START of new season

Trend research, buying trips, inspiration trips & mill presentations

Design defines looks, trends, colours and materials

Sourcing HK pass developments to mills for sourcing

Sourcing NY sends out mill cards to sourcing HK

Design pass-of mill cards to Sourcing NY

Sourcing puts proto yardage into work

Development is tweaked if necessary for correct price and purpose

Mills send developments to sourcing HK for comments

HK generates development chart for sourcing NY for tracking

Initial line review, Progress is reviewed and styles are discussed

FAIL

HK sends developments to NY for approval

Final line review. Decide how to proceed for salesmen sample

All fabrics and substitute fabrics are shown

APPROVED for salesmen sample

Sourcing NY orders salesmen sample yardage

Salesmen sample cuttings to NY

Commented on and improved where necessary by Design and sourcing NY

Salesmen sample garments to NY

Retail Market Week. Buying team final buys

Wholesale market week. Accounts final buy

REPEAT
4. DEVELOPMENT PROCESSES at Calvin Klein Inc. after the installation of the R&D team.

- **START of new season**
- **Design consults with R&D for new fabrics and developments**
- **Trend research, buying trips, inspiration trips & mill presentations**
- **R&D team sends out developments, directions and requests to mills**
- **Fabric & material presentation R&D team**
- **Design defines looks, trends, colours and materials**
- **Mills sends submits to R&D team**
- **R&D team sends out Knit development sheets to mills**
- **Design pass-of mill cards + Knit development sheets to R&D**
- **Initial line review**
- **R&D team puts proto yardage into work**
- **Final line review. Decide how to proceed for salesmen sample**
- **Progress is reviewed and styles are discussed**
- **All correct fabrics are shown**
- **R&D orders salesmen sample yardage**
- **Salesmen sample cuttings to NY**
- **Commented on and improved where necessary by R&D**
- **Salesmen sample garments to NY**
- **Retail Market Week. Buying team final buys**
- **Wholesale market week. Accounts final buy**
- **Market analysis and best buys discussed with design and R&D**
- **REPEAT**
5. **DOMESTICALLY SOURCED ADVANTAGES** for the lead-time of Calvin Klein production. Pinehurst Manufacturing is a private company categorized under Men’s and Boys’ Sportswear and Athletic Clothing and located in Albemarle, North Carolina. Current estimates show this company has an annual revenue of $10 to 20 million and employs a staff of approximately 50 to 99. Pinehurst also has a facility in Honduras. There they produce mainly graphic t-shirts for DKNY, Nike, Adidas, Sean John, and Armani. They established a ‘fast track’ program, which works as following. Pinehurst stocks an agreed amount of dyed fabric or blanks (depending on the customer’s program) in the colours in the standard size scale. Beside the basic carry-over colours like black, white, grey and navy Pinehurst also stocks greige fabric for fashion colours in an agreed upon amount. This enable Calvin Klein to run new designs monthly to offer to the in-house buyers and external accounts. This replenishment also eliminates sales sampling. Buys are placed on strike-offs usually done on white or black fabric from stock. The buy for fashion colours are sold from CAD’s and lap-dips of new colours.

The time-line of Pinehurst is as follows (projections made on 250,000 units)
1. 5 weeks to build up greige good inventory (un-dyed fabric in correct construction).
2. 8 weeks to build up fabric inventory (dyed fabric in correct construction).
3. 10 weeks to build up blanks inventory (garments in correct construction and colour).

From above for finished garment delivery:
1. Greige inventory takes 60 days production (ex 20 days of transport)
2. Fabric inventory takes 45 days production (ex 20 days of transport)
3. Blanks inventory takes 30 days production (ex 20 days of transport)

Samples:
1. Strike offs in core colours when blanks are ready takes 2 weeks
2. When strike off on fashion colours it takes 30 days for fabric in correct colours plus 2 weeks for graphic printing.

Looking at the spring 2011 calendar of Calvin Klein, goods need to be in the distribution centre in Jonesville on January 10th. Taking the Christmas holiday in account this give the below situation.

In DC = 1/10 Jonesville
Ship date = 12/20 x Honduras
- if blanks are stocked, send Print-Offs for print chosen 11/19
- if dyed fabric stocked, send Print-Offs for print chosen 11/5
- if greige is stocked, send Print-Offs for print chosen 10/20
Order fabric date = 9/10

From fabric ordering to delivery in the Phillips-Van Heusen distribution centre it takes approximately 120 days for the first round as there has to be build stock first. Once this stock has been build the lead-times range from 64 to 124 as shown in the chart below.

Similar programs can be set-up in Asia or Egypt, but by having production in America you already save five weeks of transportation time when shipping it from Asia and two to three weeks when shipping from Egypt.

Moreover, with the ‘Fast-Track’ program from Pinehurst there is also a cost saving. Depending on commitments on greige, dyed fabric or blanks a saving of $1.50 to $2.00 a garment can be achieved, resulting in the garment landing cost $6.50. This will have an increase of 6.4% mark-up for a garment with a $39.00 retail price.
Fast-Track lead-time situation:

<table>
<thead>
<tr>
<th></th>
<th>Development</th>
<th>Costing</th>
<th>Samples</th>
<th>Order Processing</th>
<th>Production &amp; Transport</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blanks Core Calendar</strong></td>
<td>110</td>
<td>21</td>
<td>14</td>
<td>18</td>
<td>50</td>
<td>213</td>
</tr>
<tr>
<td><strong>Blanks Fashion Calendar</strong></td>
<td>110</td>
<td>21</td>
<td>44</td>
<td>18</td>
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<td><strong>Dyed Fabric Core Calendar</strong></td>
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<td><strong>Dyed Fabric Fashion Calendar</strong></td>
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<td><strong>Greige Core Calendar</strong></td>
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<tr>
<td><strong>Greige Fashion Calendar</strong></td>
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<td>21</td>
<td>44</td>
<td>18</td>
<td>80</td>
<td>333</td>
</tr>
</tbody>
</table>

Fast-Track Mark-up increase:

**Old situation**
- Landing price: $8.50
- Retail price: $39.00
- Mark-up: \((39 - 8.5) : 39 \times 100\% = 78\%\)

**New Situation**
- Landing price: $6.50
- Retail price: $39.00
- Mark-up: \((39 - 6.5) : 39 \times 100\% = 83\%\)

Mark-up increase: \((83 - 78) : 78 \times 100\% = 6.4\%\)
6. Market share Calvin Klein at Macy’s Department Store


The total net sales at Macy’s for 2009 $23,489 billion
Average share men’s department in Macy’s 18%
Projected USA sales increase 2010 2.5%  [http://www.straitstimes.com](http://www.straitstimes.com)

<table>
<thead>
<tr>
<th>Year</th>
<th>Men’s Department Sales</th>
</tr>
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<tbody>
<tr>
<td>2009</td>
<td>$4,228,020,000.00</td>
</tr>
<tr>
<td>2010</td>
<td>$4,333,720,500.00</td>
</tr>
<tr>
<td>2011</td>
<td>$4,442,063,512.50</td>
</tr>
<tr>
<td>2012</td>
<td>$4,553,115,100.31</td>
</tr>
<tr>
<td>2013</td>
<td>$4,666,942,977.82</td>
</tr>
</tbody>
</table>

DATA Calvin Klein:
Value of goods sold to Macy’s 2009 $65 million
Value of goods sold to Macy’s 2010 $72 million
Mark-up Calvin Klein 3.4
Average increase Calvin Klein 10% (based on history)
Annual increase with R&D department 3.1% (based on 5 units out of 160)

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$221,000,000.00</td>
</tr>
<tr>
<td>2010</td>
<td>$244,800,000.00</td>
</tr>
<tr>
<td>2011</td>
<td>$276,188,800.00</td>
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<td>2012</td>
<td>$311,602,341.69</td>
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<tr>
<td>2013</td>
<td>$351,556,686.39</td>
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</tbody>
</table>

MARKET-SHARE increase:
Market Share Calvin Klein within Macy

<table>
<thead>
<tr>
<th>Year</th>
<th>Calvin Klein Share</th>
<th>Share increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5.2%</td>
<td></td>
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<tr>
<td>2010</td>
<td>5.6%</td>
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<tr>
<td>2011</td>
<td>6.2%</td>
<td>10.1%</td>
</tr>
<tr>
<td>2012</td>
<td>6.8%</td>
<td>10.1%</td>
</tr>
<tr>
<td>2013</td>
<td>7.5%</td>
<td>10.1%</td>
</tr>
</tbody>
</table>

Market-share increase 2009 to 2013
(7.5% - 5.2%) / 5.2% x 100% = 44%