HAAGA-HELIA
University of Applied Sciences

Yanca Oy Ltd:
Purchases Budgeting Tool for SME Buyers in The Fashion Industry

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PRODUCT-ORIENTED THESIS ASSESSMENT FORM

Author/s
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Thesis title
Purchases Budgeting Tool for SME Buyers in The Fashion Industry

Thesis title in Finnish (if available)

If completed in a theme group, the name of the group	

Assessment items	Grade (0-5)
1. Topic and objectives	4,5
2. Framework	4
3. Project planning and implementation	4,5
4. The product	4
5. Written expression	3,5
6. Process management	5
Average *(item 4 has double weight)*	4,21
Thesis grade	4

Assessment statement

The thesis topic and objectives has current relevance for SME buyers in the fashion industry in Finland.

The thesis is product oriented and the framework focuses on the practical perspective, not theoretical. Key words and budgeting process are introduced though.

The student created an Excel based purchases budgeting tool with a well illustrated user guide. The tool was tested by two boutiques and the feedback received was very encouraging and positiv in order to launch the product. There were suggestions for further development ex. an assortment plan and purchases orders.

The student exhibits a very good command over the thesis process and cooperation with advisor.

The maturity examination was written in	Finnish	
Thesis advisor	Jaana Melamies	
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Purchases are the most important part of all retail businesses. Budgeting the purchases well is the key issue in avoiding over or under purchases. This thesis is made for Yanca Oy Ltd, established in 2011, by the author of the thesis. The company operates in the fashion industry offering guidance for retail shops in the field of visual merchandising, budgeting and purchases. Yanca Oy Ltd has an auxiliary business name Designers & Buyers db, the aim of which is to help fashion professionals to network and internationalise. This auxiliary business name is used as the name of the tool created in this product-based thesis.

The idea for this thesis was ignited by the fact that there are several shop owners in the Finnish fashion retail business who do not have the required tools or knowledge how to plan their purchases ina more accurate and economical way.

The thesis process started by an overview of relevant theory about purchases planning and budgeting in the fashion industry. An Excel based purchases budgeting tool was designed and created. Finally, the tool was tested by Boutique Sipilä and feedback was also requested from Suvi Kari, a buyer in Bestseller A/S.

The outcome of this thesis is a purchases budgeting tool for buyers in the fashion industry.

Keywords
Purchases budget, purchases budgeting tool, inventory turnover, buyer

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1   Introduction

A purchases budget is essential for retailers in all industries. The bought products are making the money. If purchases are not planned and budgeted well, the risk of making mistakes in purchases will increase. This leads the sales to be low and the stock to be too high. Especially in the fashion industry, where fast moving trends are playing an important role, planning the purchases is crucial.

The outcome of this thesis is a product. It is an Excel based purchases budgeting tool for SME buyers in the fashion industry. Aim of this tool is to help buyers to plan and to do purchases in more professional and economical way.

In this thesis I will first present briefly the case company, explain background information of the project and present demarcation criteria, project objective and tasks and introduce the key concepts. Second part of this thesis is the theory of the purchasing process in the fashion industry. After that the tool will be presented and explained. The owner of Boutique Sipilä, Mrs. Sari Nisula, will test the tool. In addition short feedback of the tool is requested from Ms. Suvi Kari, a buyer of Vero Moda label in Danish clothing company Bestseller A/S. The last chapter introduces some ideas for further developing of the tool.

1.1   Case company Yanca Oy Ltd

Yanca Oy Ltd was established in July 2011, by the author of this thesis. The company offers services for small boutiques, mainly clothing stores. Key services are visual merchandising and support for planning and budgeting the purchases. Stock control support and seasonal sale support are also provided. (Yanca Oy Ltd, 2014.)

Yanca Oy Ltd has an auxiliary business name, Designers & Buyers db. The aim of the D&B is to create a networking platform and an information site for the Finnish fashion professionals. One aspect is to help Finnish fashion brands to get international. (Designersandbuyers, 2014.) In addition, there is a plan in the future to develop a

comprehensive support for designers and buyers, for example the Designers & Buyers db purchasing event.

The budgeting tool in this thesis is made for the Yanca Oy Ltd and in the tool; the auxiliary business name Designers & Buyers db is used as a brand for the product, because of the future plans explained in the paragraph above.

1.2   Background

The thesis topic was found while contacting shop owners by phone throughout Finland. The reason to contact shop owners was about a virtual showroom, which is planned to be one of the services offered in the Designers & Buyers website. Basically the question was about a need and interest for this virtual showroom. While discussing about the service, shop owners were asked about additional tools they would like to have on the site. One of the tools mentioned was a budgeting tool for purchases. The shop owners would like to have the purchases budgeting tool, to make the purchases planning and implementation more easy and professional.

For big organizations, there is usually an accounting department, which has the responsibility of planning and budgeting the purchases. The department delivers all the needed information for the purchasing department. In small shops, where the owner is usually doing everything by herself, there is not necessarily enough time for careful planning. This was seen when I was lecturing in a workshop about purchases in Kokkola, many of the workshop participants told they do not make budgets for purchases.

For an experienced buyer, it is easy to make the purchases with "gut feeling". But in most cases these "gut feeling" -purchases lead to overstocking. When doing the purchases planning and budgeting, the existing stock must be taken into account. For example, if overstocking happens how to get rid of it? The main purpose of the budget is to know how much money is needed for purchases. The planning and budgeting are linked to a bigger picture. Understanding this is one of the weak links in small shops; this budgeting tool is created to help out storeowners in those issues.

1.3 Project objective and project tasks

The objective is to plan and to create the purchases budgeting tool for buyers operating in the fashion industry. The company, this tool is made for is established by the author of the thesis.

Project timeline is presented as a Gantt chart (Attachment 1). My timeline is longer than usually, since I was pregnant and about to have my baby when I started to plan the thesis. I did not want to build too optimistic schedule, or to leave the start of the thesis project later, which would have delayed my graduation.

Overlay matrix (Attachment 2) shows the project tasks. First task in the thesis process is to collect relevant literature and information to draft the theory framework. The purpose of the theoretical framework is to find out the correct approach to make the purchases budgeting tool. Second task is to design and to build the tool by utilizing the theory. The outcome of the second task is to get the test version of the budgeting tool ready. Third task is to test the tool, the target of the testing is to find out possible errors and get comments for improving the tool. Final step is the evaluation and results. The outcome is the purchases budgeting tool.

1.4 Demarcation

The tool is targeted for small retail shops employing one to five persons and for web-shop owners. This tool does not include designing clothes and is not meant for designers. This tool is not meant for overall budgeting it is purely for retail purchases.

The report includes two season spring/summer and fall/winter because in the fashion industry the year is divided like this for the purchases. Totals in the report are seasonal and at the end of the tool there are two seasonal follow-up sheets, which combine all the necessary information.

The tool is in English and is for international use. All prices are net values, ignoring Value Added Tax (VAT). The tool can be used with all currencies.

In this thesis supportive services or technical support are not explained nor planned. Pricing the tool or invoicing the customer from using the tool have not been planned nor explained. Marketing plan for promoting the tool is also left out. In addition following subjects are not included in this thesis: assortment planning theory, what brands to choose, legal and ethical issues in brand selection and overall budgeting. This is simply a purchases budgeting tool, not a purchasing guide.

1.5   Key concepts

Key concepts of this thesis are: *purchases budget; purchases budgeting tool, inventory turnover and buyer.* These key concepts are explained briefly.

Purchases budget. Purchases mean the resources bought either for manufacturing products or services, or to finished goods bought to be sold (Braun&Tietz 2013, I-13). In this thesis purchases refers to finished merchandises. The budget is a quantitative estimation, developed for managers as a guide how to coordinate and implement the plan (Braun&Tietz 2013, I-6). In my own words, the purchases budget is estimation of how much has to be spent on merchandises to reach the estimated sales target and the inventory turnover.

Purchases budgeting tool, refers in this thesis to the Excel based tool, created by the author. Purchases budgeting tool, as it is meant to be understood in this thesis, is a tool that works as a guideline and a tool for a buyer when planning the purchases and as a support while doing the purchases.

Inventory turnover. Low inventory turnover means slow sales and that leads to merchandises to look shopworn, meaning that items might be damaged because being handled by many customers and by being displayed for so long. By increasing the inventory turnover, sales are increased and vice versa. New products available often attract customers to visit the shop regularly. (Levy&Weitz 2012, 307.)

Buyer. Clodfelter (2008, 39) describes buyer, "Individuals in the retail organization whose primary job is to purchase merchandise are buyers." In this thesis term buyer is also used to refer to the entrepreneur who runs the shop and does the purchases.

2 Purchases in the fashion industry

Behind every successful idea and product is a relevant information and knowledge about the subject. Sources for this theory is narrowed down to purchases and budgeting process in the fashion industry, there is no theory about overall budgeting. The theory part of this thesis consist of giving information about retail buying and buying preparations in the fashion industry, including sales forecast and inventory-level planning. Finally six-month merchandise budget plan is explained.

2.1 Retail buying in the fashion industry

Buying function in the fashion industry is often seen as a glamorous job. Especially in the big organization the buyer needs to travel and visit fashion fairs abroad. However, as I have visited several international fashion fairs, it is a hard job and a lot of walking. Most times the buyer does not have time or energy to explore the city she is visiting. Doing purchases in international fairs asks for a comprehensive plan and time management skills. There is no time for "shopping around".

The basic idea in running the clothing store is to have enough items in the store for customers and to be able to keep the inventory low and markdowns in minimum. To be able to do this, the buyer needs to have experience and skills, but most of all planning is essential. A detailed assortment plan and a merchandise plan are needed and buyers should follow them to be able to maintain in the euro plan. The assortment plan, which is enough comprehensive and detailed, will help the buyer to calculate open-to-buy money and this assortment plan is used together with the buying plan. (Clodfelter 2008, 251.)

Goworek (2007, 127) explains how in small shops, owners are also buyers among all other tasks. There rarely are separate merchandisers and this is also the buyer's, in this case entrepreneur's, responsibility. These are important issues, because it matters how items are placed in the shop and the fact that the buying is done according to the space and inventory (shelves, tables and racks) of the shop.

It is also important to notice, when buying fashion merchandises, the buyer must be able to select right items in the season and those items should be sold in the exact time frame. The ability to hunch the next "it" product at the right time is even more important for the small shop. (Goworek 2007, 127.)

I have learned that the big brands with a large collection might divide the purchases into two sales in season. The first sales are held in the beginning of the season and the second at the middle of the season, the delivery period is also divided, in the first sales the delivery period is earlier than for the items bought from the second sales.

Next chapter explains how to prepare for the purchases.

2.2 Buying preparations

Calculation formulas mentioned in this sub chapter are listed and can be found in attachment 3.

There are several steps for preparing the purchases. From figure 1 can be seen buying or merchandise planning process as Levy&Weitz (2012, 309) have described it.

Figure 1. Merchandise planning process by Levy&Weitz (2012, 309)

These steps (figure 1) are the base of the budgeting process, and should be explained thoroughly. For that reason some of the steps are explained more in detail in following subchapters. *Forecast category sales* is explained in subchapter 3.2.1, *Develop an Assortment Plan* is left out since this thesis concentrates more on issues effecting the budgeting process. The assortment planning can be seen as the point how the budgeting is involved to the stock planning. *Determine Appropriate Inventory Level and Product Availability*, and *Develop a Plan for Managing Inventory* are explained in sub chapter 3.2.2 under the title Controlling inventories.

Steps *Allocating Merchandise for store*, *Buy merchandise* and *Monitor and Evaluate Performance and Make Adjustments* are left out having own chapters, since in this thesis the emphasis is on the issues straight affecting the budgeting process.

The actual plan for merchandise is a financial plan, usually based on a fiscal year. It is defined for four months to a year before actual selling season. It covers a six-month to a year period: the spring, which is February to July and the fall, August through January. The reason it is made is to allocate money for the purchases so that it will meet the customer demand and sales goals. (Frings 2002, 306.)

In the budgeting tool, the six-month period is divided January to June and July to December. This is because the season sales are started at the end of the seasons in June and in December. It is easier to plan from season to season, even though the spring does not start form the January.

Merchandise plan components by Frings (2002, 306) are:

- Receipt plans—cost of goods (at retail value) that need to be received to sell in the store.
- Sales plans.
- Mark-up plans—adding on to process to cover costs.
- Markdown plans—reducing prices to move goods.
- Inventory shortages.
- End-of-month stock levels—goods that are in the store.
- Weeks of supply—how long it will take to sell out merchandise.

- Gross margin—profits.
- Promotional plans.
- Stock turn—figured by sales divided by average stock.

Merchandise plan can be divided into sections according to Berman&Evans (2004, 346) in figure 2.

Figure 2. Devised merchandise plan by Berman&Evans (2004, 346)

Innovativeness, the bubble at top in figure 2, can be seen as distinctiveness, it gives opportunities but also can be seen as a risk. Being first in the market can be a success or a failure. (Berman&Evans 2004, 347.) It is important to consider this when budgeting the purchases. In the fashion business it is crucial to have trendy items at the right time, but it is impossible to know if the trendy items of the season are selling or not. For that reason there should be left money for innovative purchases but only for spicing up the assortment. Next bubble is *Forecasts*, left from innovativeness in figure 2. In my opinion forecasting is crucial, it means planning the expected sales. All budgets start from planning the sales, so does the purchases plan.

Bubbles, down from forecasting in the figure 2, *Allocation, Timing* and *Brands*. In my interpretation of this devised merchandise plan allocation means, where in the shop new merchandises will be placed. This means for example, are there enough tables/shelves for products that are best sold from tables/shelves, and are there enough

products for racks. Timing, in my opinion, means that delivery period is considered. If for example heavy clothes, such as jackets, come too early or too late in the shop it will influence the sales. Brands as I see it needs to be well planned that the shop has right brands for its image. Also, depending on the shop, it needs to be up to date with the new, fresh and upcoming brands.

Assortment merchandise, the last bubble in the figure 2, is all about selection. According to Berman&Evans (2004, 346) it means that retailer has variety of products to enhance customer possibility for selections. For example, a clothing store might offer bottoms, shirts, jackets, shoes etc.

2.2.1   Forecasting sales

There are some challenges in forecasting the sales for fashion merchandises. One of the biggest challenges is that some, or sometimes all of the items, are new and different from the items offered in previous seasons or years. Another big issue is that usually the orders are placed well in advance, about three to six months before the delivery. (Berman&Evans 2004, 311.)

The buyer needs to be well prepared to hunch the next big thing in the coming season. For that, in my opinion, the buyer should at least follow trends utilizing the Internet. Even better would be to visit once a year in some fashion fair and some trendy cities such as Berlin, London or Paris to name a few. Also, it is crucial to follow news and happenings in the world. As I have learned these are affecting to and giving birth to trends.

For buyers, forecasting is essential tool for planning. Sales forecasts forces buyers to think customers, competitors and the future trends not only in the market but also in the economy. (Clodfelter 2008, 194.) The buyer must do thorough examination of the store and its markets, before preparing the sales forecast and to be able to build up the merchandise-buying plan. Even tough forecasts are always somewhat predicting, it should be based on facts not on guesswork. (Clodfelter 2008, 193.)

According to Clodfelter (2008, 192) forecasts are made to answer questions such as:

- How much of each product will need to be purchased?
- Should new products be added to the merchandise assortment being offered?
- How much inventory is needed to support the planned sales?
- What price should be charged for each product? (Purchasing price)

Clodfelter (2008, 193) points out that the buyer needs to make assumptions and predictions of a customer behavior to find answers to these questions listed above. As I see it, this clarifies the importance of knowing your customer, but also to be able to see the bigger picture and to be aware what is happening around the world. We are living in the time of information abundance and we are able to tap into it fast. People are more and more aware of trends and one job for the buyer is to be one step ahead of consumers.

These previously mentioned issues might be divided into internal and external forces. The external forces are economic conditions, demographic trends and competition. Internal forces are things happening in the store and in the company, like advertising expenditures, credit policies and retail prices. (Clodfelter 2008, 195-197.) I want to add that also the shop space itself is affecting, is there enough space to widen the product range for increasing the sales?

Clodfelter (2008, 193) crystallizes that the sales forecast can be a prediction of:

- Total sales volume
- Specific products or services (brands, models)
- Specific consumer group (women, over 50)
- Time periods (weekly, monthly)
- Specific store locations

Sales forecasts should be at least for six months for fashion merchandises (Clodfelter 2008, 193). The reason is that six-month period includes at least one season and is enough long. Retailers usually need to follow up monthly sales and to make budgets in

monthly basis. For buyers this is essential too. A Monthly sales index is a way to make more specific estimates. The monthly sales index is calculated by dividing each month's actual sales by average monthly sales and to multiply the result by 100 (Berman&Evans 2004, 399). These indexes show the sales compared to the average sales of the year, it shows the high sales months and low sales months. (Table 1.) The formula used to calculate monthly index is:

Monthly sales index = (monthly sales / average monthly sales) x 100

Table 1. Monthly sales and indexes. Berman&Evans (2004, 399)

Month	Actual sales € in 2013	Sales index %
January	46,800	67
February	40,864	58
March	48,000	69
April	65,600	94
May	112,196	160
June	103,800	148
July	104,560	149
August	62,800	90
September	46,904	67
October	46,800	67
November	66,884	96
December	94,792	135
Total yearly sales	**840,000**	
Average monthly sales	**70,000**	

From the table 1 can be seen that best months of the year have been May (which was the best month of the whole year) and June, July and December. May for example was 60 % higher than average. February was the weakest 42 % below average. From the table 1 the buyer can do assumptions and make the monthly sales forecast.

In my experience as a shop manager the February was usually a quiet month. I assumed it was due to preceding Christmas sales, followed by Januarys' big sale. For buyer the table 1 offers information about the sales in the previous year. It gives information for needed order quantities and values. This is crucial information especially for inexperienced buyer. The monthly sales forecast can be calculated by using the information from the table 1. From the table 2 can be seen the monthly sales forecast for year 2014. The expected growth in this example is 5 %. This means, with average monthly sales of 70,000€, the average monthly sales for year 2014 is expected to be 70,000€ x 1,05 = 73,500€. The table 2 shows actual sales and sales index per month from year 2013 and the monthly sales forecast for year 2014. The numbers shown in the table 2 are from the table 1.

Table 2. Monthly sales forecast for year 2014

Month	Actual sales 2013	Sales index 2013	Monthly sales forecast for 2014
January	46,800	67	73,500x0.67 = 49,245
February	40,864	58	73,500x0.58 = 42,630
March	48,000	69	73,500x0.69 = 33,120
April	65,600	94	73,500x0.94 = 61,664
May	112,196	160	73,500x1.60 = 117,600
June	103,800	148	73,500x1.48 = 108,780
July	104,560	149	73,500x1.49 = 109,515
August	62,800	90	73,500x 0.90 = 66,150
September	46,904	67	73,500x0.67 = 49,245
October	46,800	67	73,500x0.67 = 49,245
November	66,884	96	73,500x0.96 = 70,560
December	94,792	135	73,500x1.35 = 99,225
Total yearly sales	**840,000**		**856,979**
Average monthly sales	**70,000**		**73,500**

Additional way to follow and record sales is the monthly index. In the company I worked we compared sales to the previous years' sales. Table 3 indicates monthly sales compared to the previous year. The index is calculated as follows:

Monthly index = This years' sales / Last years' sales x 100

Table 3. Monthly sales compared to last years' sales

Month	This year 2014	Previous year 2013	Index %
January	48,900	46,800	104
February	40,000	40,864	98
March	53,000	48,000	110
April	64,500	65,600	98
May	114,450	112,196	102
June	104,000	103,800	100
July	105,400	104,560	101
August	63,000	62,800	100
September	39,890	46,904	85
October	47,930	46,800	102
November	66,500	66,884	99
December	97,350	94,792	102
Total	**844,92**	**840,000**	**101**

This (table 3) gives information about the past sales and comparison with the forecast. With these figures and with the category sales lists the buyer can follow which items have been sales stars and which items have been slow or non-movers. Of course there are external and internal factors that are affecting the sales, but those are not important in this thesis.

The sales forecast should be done for categories also. Categories vary depending the size of the store and the company. In bigger companies such as Zara, Vero Moda,

Hennes&Mauriz they usually have software and every item in stock is listed. For smaller companies it can be enough to follow categories as a whole, for example jeans, pants, shirts, t-shirts et cetera. In the table 4 is shown an example sales forecast for categories for a small store. The following table is modified from Berman&Evans (2004, 399), by using made-up category names and sales numbers.

Table 4. Simple sales forecast for categories, modified. Berman&Evans (2004, 399)

Category	Actual sales € 2013	Projected growth/decline %	Sales forecast € 2014
Jackets	80,000	+ 10.0	88,000
Tops	55,000	+ 3.0	56,650
Sweaters	65,000	- 5.0	61,750
Shirts	40,000	+ 4.0	41,600
T-shirts	58,000	+10.0	63,800
Jeans	93,000	- 3.0	90,210
Pants	62,000	+ 2.0	63,240
Shorts	10,000	- 6.0	9,400
Dresses	18,000	+ 7.0	19,260
Skirts	15,000	- 2.0	14,700
Total year	496	+ 2.5	508,61

2.2.2 Inventory-level planning

Inventory planning is important. The inventory-level should be adequate enough to meet sales expectations. In my opinion well-prepared assortment plan is crucial. This means that the floor and shelf space should be big enough for products.

Open-to-buy is a tool for keeping track of purchased goods; it shows the money spent. The open-to-buy can be calculated as a difference between a planned EOM (end of the

month) inventory and a projected EOM (Levy&Weitz 2012, 336). Another way, which is used in the purchases budgeting tool: planned purchases minus merchandise on order (Clodfelter 2008, 240):

Open-to-buy for a month = Planned Purchases – Merchandise on Order

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When the open-to-buy is positive, there is still money left to do purchases in certain month. Negative open-to-buy is a sign of over purchases; the buyer has spent over the budget. Planned EOM inventory can be seen from the budget. (Levy&Weitz 336, 2012.)

The projected EOM inventory is calculated as follows by Levy&Weitz (336, 2012) BOM means beginning of the month inventory:

Projected EOM inventory = Actual BOM inventory

           + Monthly additions actual (received new merchandise)

           + On order (merchandise to be delivered)

           - Sales plan (merchandise sold)

           - Monthly reductions plan

The projected EOM is needed in season, because calculations in the budget plan are estimations. This projected EOM stock plan can be seen as a new and improved version of planned EOM, which was estimated for the budget. (Levy&Weitz 336, 2012.)

In the tool I have used simplified way, according to Clodhard (2008, 232). It is simply the planned BOM stock for the following month; it is more user-friendly way to estimate the EOM stock. Since planning is done for new season and is done usually at least six month earlier there is no information about monthly additions or merchandise on order.

There are several techniques to plan the inventory-levels. According to Berman&Evans (2004, 400) they are: *basic stock*, *percentage variation, week's supply, and stock-to-sales method.* Clodfelter (2008, 207) says that the most commonly used method in the fashion industry is a stock-to-sales ratio method. For that reason the stock-to-sales ratio method is examined.

Basically the stock-to-sales ratio means that inventory is maintained at a specific ratio to sales and is calculated (Clodfelter 2008, 207):

Stock-to-Sales Ratio = Value of Stock (EOM) / Actual Sales

The calculated ratio points out how much inventory is needed to meet the planned sales. This ratio is used for calculating the BOM (beginning of the month) stock levels, which is the value of the stock needed in the beginning of the month. The stock-to-sales ratio for the month multiplied by the planned sales for the month gives the value of the inventory needed in the beginning of the month. (Clodfelter 2008, 207.) The formula is following:

Planned BOM inventory = Stock-to-Sales Ratio x Planned sales

For example, a shop has an inventory value of 45,000€ in the beginning of August, and the sales are 25,000€. Planned sales for October would be 20,000€. Calculation:

Stock-to-Sales Ratio = 45,000€ / 25,000€ = 1.8
Planned BOM Inventory = 1.8 x 20,000€ = 36,000€

In my opinion the stock-to-sales calculation and the planned BOM inventory are most important for the buyer to be able to determine the level for the inventory. However, it must be noticed the purchases are done approximately six months before the selling season and these calculations are based on estimations. For making calculations the buyer must use actual sales from the previous year plus the forecast for increase or de-

crease in sales. For that reason the sales forecast must be done carefully, too low esti-mations will lead to low stock and too optimistic forecast will lead to high stock. Ev-erything is linked together.

The stock turnover rate is important tool for the buyer as well as for the shop manag-er. In my previous work as a shop manager, stock turnover rate was followed carefully. Stock turnover tells how many times the average stock is sold for example in a year. It gives the information how well the purchases and sales forecasts meet.

Stock Turnover Rate is calculated (Clodfelter 2008, 208):

Stock Turnover Rate = Sales / Average Stock

The average stock is, determined by Clodfelter (2008, 208), for any period of time:

Average stock = total stock value / number of inventory listing

For example, the buyer wants to calculate the stock turnover for the shop. Assuming the total sales would be 55,000€ and the total inventory in retail values for 12 months would be 170,000€. Calculation:

Average stock = 170,000€ / 12 = 14,167€
Stock Turnover Rate = 55,000€ / 14,167€ = 3.9

This means that the stock is sold and supplemented 3.9 times during the year. For clothing store this is not a good rate since there are two seasons, spring/summer and fall/winter, the stock should be sold at least 6 times a year. The needed sales to meet the target stock turnover rate is calculated as follows:

Sales = Stock Turnover Rate x Average Inventory

So, if average stock is 14,167€ as calculated previously and stock turnover is estimated to be 6 the sales should be 85,002€. Calculation:

Sales = 6 x 14,167€ = 85,002€

Another way to measure buyer's performance and the contribution to return on assets (ROA) is a gross margin return on inventory investment (GMROI). This ratio indicates how many gross margin Euros are earned on every Euro of inventory investment. Below is GMROI calculation. (Levy&Weitz 2012, 305.)

GMROI = Gross margin percentage x Sales-to-Stock ratio

Sales-to-Stock ratio = GMROI / Gross margin percent

2.3 Merchandise budget plan
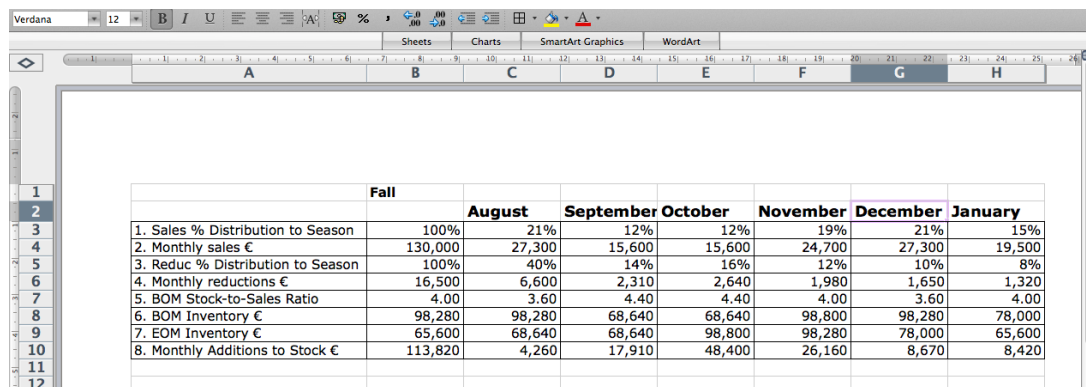
In this subchapter is explained the actual budget planning. As could be seen from previous chapters, there are several important stages to plan and to take into account before actual budgeting process can begin.

Each store should have the GMROI (gross margin return on investment) target for a certain season or period. The merchandise budget plan determines how much in Euros should be bought to achieve the GMROI goal. Calculations are based on the sales forecast, discounts given to employees and customers and needed inventory to support the sales. (Levy&Weitz 2012, 322.)

Berman&Evans (2004, 402) introduces a formula for planned purchases at retail:

Planned purchases at retail = Planned sales for the month + Planned reductions for the month + Planned EOM – BOM

However, this calculation is not enough there should be a budget plan and there are several categories to be examined. Figure 1 shows six- month budget plan, which is done by the example of Levy&Weitz (2012, 322).

	Fall	August	September	October	November	December	January
1. Sales % Distribution to Season	100%	21%	12%	12%	19%	21%	15%
2. Monthly sales €	130,000	27,300	15,600	15,600	24,700	27,300	19,500
3. Reduc % Distribution to Season	100%	40%	14%	16%	12%	10%	8%
4. Monthly reductions €	16,500	6,600	2,310	2,640	1,980	1,650	1,320
5. BOM Stock-to-Sales Ratio	4.00	3.60	4.40	4.40	4.00	3.60	4.00
6. BOM Inventory €	98,280	98,280	68,640	68,640	98,800	98,280	78,000
7. EOM Inventory €	65,600	68,640	68,640	98,800	98,280	78,000	65,600
8. Monthly Additions to Stock €	113,820	4,260	17,910	48,400	26,160	8,670	8,420

Figure 1. Six-month budget plan for inventory

In the budget plan (figure 1), can be seen 8 different categories. The first row in the sheet shows the sales distribution to season in percentages and the second row shows the monthly sales in Euros. Sheet rows 3 and 4 shows reductions. Usually there will be some reductions such as possible employee discounts and seasonal sale discounts et cetera. These reductions should be planned also. The formula by Berman&Evans (2004, 204) is:

Planned reductions = (Beginning inventory + Planned purchases)
-- (Planned sales + Ending inventory)

However, the estimation for reductions can be taken from the past records as Clodfelter (2008, 232) suggests. In the purchases budgeting tool this method is used since it is faster and more user friendly. Clodfelter (2008, 233) suggest to calculate monthly reductions as follows:

% Reductions planned for the month x Total planned reductions = Planned monthly reductions

The sheet row 5 (picture 1) is about the beginning of the month stock-to-sales ratio. Sheet rows 7 and 6 are showing the beginning and ending inventory each month. The final row 8 is about the monthly additions. These are explained in more detail in following working sheet.

Table 5. Rows 1 and 2. Monthly sales percentage distribution to season and monthly sales forecast in Euros

	Six-Month Data	August	Fall September	October		November	Winter December	January
1.Sales distribution to Month	100%	21%	12%	12%		19%	21%	15%
2.Monthly sales €	130,000	27,300	15,600	15,600		24,700	27,300	19,500

Row 1. Monthly sales percentage distribution to season is shown in the table 5. Usually, percentages of total categories do not vary much on a yearly basis. These percentages give information to the buyer about changes in buying patterns and special promotions. For example, the buyer can have a feeling that due to cold summer the selling season for cardigans, which usually should start in the fall, is starting already in July. This is effecting to the sales, by increasing the July percentages and decreasing the fall percentages. These percentages can also help when planning special promotions between actual sale seasons. (Levy&Weitz 2004, 332.)

Row 2. Monthly sales in Euros (table 5). The sales forecast for six-month is 130,000€. This amount is divided for the months by the sales distribution percentages in first category. For example August sales is 130,000€ X 21% = 27,300€. (Levy&Weitz 2004, 332.)

Table 6 shows *rows 3 and 4*. The main reason for planning these reductions is to prevent under stocking. These reductions are considered when planning the purchases. The forecast for reductions are mainly based on historical data, but environmental changes should be taken into consideration, for example competition and general economic conditions. Monthly reductions in category 4 are calculated by multiplying the six-month data with the monthly percentage: For example August is 16,500€ X 40% = 6,600€. (Levy&Weitz 2004, 333.)

Table 6. Rows 3 and 4. Reductions distribution to season in percentages and in Euros

	Six-Month Data	August	September	October	November	December	January
			Fall			Winter	
3. Reduc % Distribution to season							
	100%	40%	14%	16%	12%	10%	8%
4. Monthly Reductions €							
	16,500	6,600	2,310	2,640	1,980	1,650	1,320

Rows 5 and 6 are shown in table 7. Category 5 is beginning of the month stock-to-sales ratio. Levy&Weitz (333, 2004) describes how it

> "— specifies the amount of inventory that should be on hand at the beginning of the month to support the sales and maintain the inventory turnover objective for the category."

For example a ratio of 4 indicates that there is in the beginning of the month, inventory at hand for 4 months or 16 weeks or about 112 days. (Levy&Weitz 2012, 334.)

Row 6 (table 7) shows the planned stock for the beginning of the month and *row 7* (table 7) shows the end of the month inventory in Euros. Simply put, the BOM inventory is the EOM inventory from previous month. For example the EOM inventory for October is BOM inventory for November.

Planned BOM inventory can be calculated as follows (Levy&Weitz 2012, 335).

BOM inventory = Monthly sales (planned) x BOM stock-to-sales ratio

BOM inventory October = 15,600€ X 4.4 = 68,640€

Table 7. Rows 5, 6 and 7. BOM stock-to-sales ratio, BOM stock and EOM stock in Euros

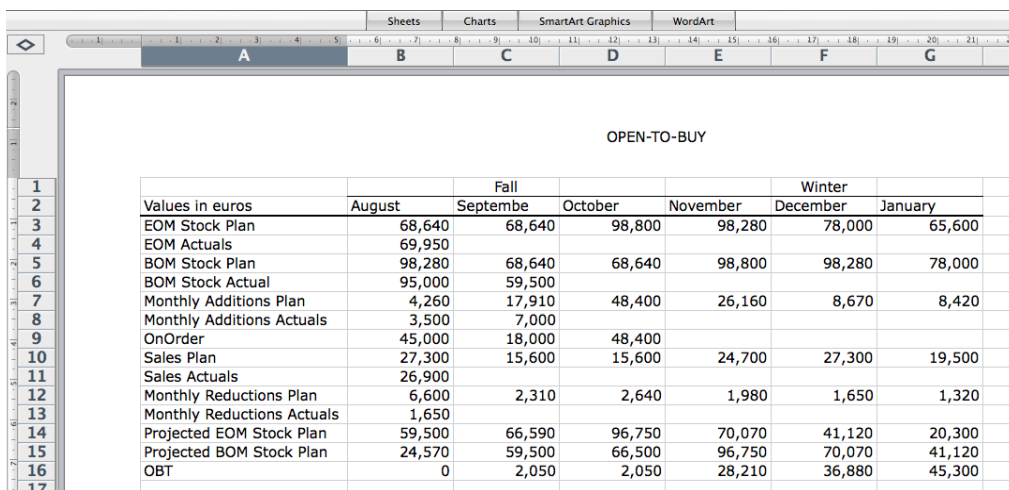|	Six-Month Data	August	September	October	November	December	January
			Fall			Winter	
5. BOM Stock-to-Sales Ratio							
	4.0	3.6	4.4	4.4	4.0	3.6	4.0
6. BOM Stock €							
	98,280	98,280	68,640	68,640	98,800	98,280	1,320
7. EOM Inventory €							
	65,600	68,640	68,640	98,800	98,280	78,000	65,600

Table 8 presents the last row. Monthly additions to stock means the amount of products needed to meet the planned sales and planned inventory turnover. The calculation for monthly additions is done as follows. (Levy&Weitz 2012, 335.)

Additions to Stock = Sales (categ. 2) + Reductions (categ. 4)

+ EOM inventory (categ. 7)

- BOM inventory (categ. 6)

Table 8. Monthly additions to stock in Euros

			Fall			Winter	
	Six-Month Data	August	September	October	November	December	January
8. Monthly Additions to Stock €							
	113,820	4,260	17,920	48,400	26,160	8,670	8,420

These explained steps are needed to calculate the open-to-buy (figure 2).

OPEN-TO-BUY

	Fall			Winter		
Values in euros	August	Septembe	October	November	December	January
EOM Stock Plan	68,640	68,640	98,800	98,280	78,000	65,600
EOM Actuals	69,950					
BOM Stock Plan	98,280	68,640	68,640	98,800	98,280	78,000
BOM Stock Actual	95,000	59,500				
Monthly Additions Plan	4,260	17,910	48,400	26,160	8,670	8,420
Monthly Additions Actuals	3,500	7,000				
OnOrder	45,000	18,000	48,400			
Sales Plan	27,300	15,600	15,600	24,700	27,300	19,500
Sales Actuals	26,900					
Monthly Reductions Plan	6,600	2,310	2,640	1,980	1,650	1,320
Monthly Reductions Actuals	1,650					
Projected EOM Stock Plan	59,500	66,590	96,750	70,070	41,120	20,300
Projected BOM Stock Plan	24,570	59,500	66,500	96,750	70,070	41,120
OBT	0	2,050	2,050	28,210	36,880	45,300

Figure 2. Open-to-buy for fall and winter

As already mentioned, in the budgeting tool, open-to-buy is planned purchases minus merchandise on order. These previous steps were shown for the reader to get more detailed information about the calculation process, and the logic behind them. It is more understandable by showing calculations and not just the simplified methods or end results.

The next chapter is about the actual budgeting tool and the process of creating it.

3 The purchases budgeting tool

As this thesis is product based, most important phase of this process was to design, create and test the tool. The purchases budgeting tool, how it was designed and created is explained first, followed by detailed introduction of the tool.

3.1 Designing and creating the tool

This budgeting tool is designed and targeted mainly for SME shops in Europe. The designing process started by collecting literature related to the purchases planning and budgeting in the fashion industry. I decided to use only sources that were directly made for the fashion industry purposes. I had been working as a shop manager in a clothing store, and by that experience of using a purchases tool, doing purchases and following the stock turnover; I had an idea of what kind of tool to create.

The basis and guideline for the tool was a book named *Retail Buying from basics to Fashion, by Richard Clodfelter*. Detailed information of the book can be found at references list. The book offered a step-by-step guidance for proper purchases planning and budgeting process.

After the theory part was ready, I began to create the tool first with Macintosh software Tables. The reason to start with the Tables and not with the Excel was that in the Tables the appearance was better than in the Excel, which made designing easier.

After designing process was ready I transferred tables made to the Excel format, I corrected and finalized calculations and polished the look of the tool. I inserted picture to every sheet to make it visually more appealing.

3.2 Introduction of the purchases budgeting tool

The tool is purely designed for planning the purchases in the fashion industry. It is not supposed to be an overall budgeting tool for financial planning. For that reason it

should not be investigated as a financial budgeting tool for sales, costs and so on. It is developed for making the purchases planning process easier for the shop owners.

The tool is designed in the way that it is not dependant on currencies; it is usable with different currencies. Only exception is in open-to-buy with the conditional formatting, that issue is explained more in detail at the subchapter 4.2.9 explaining Open-to-Buy. VAT is not needed and therefore it is not taken into consideration in the tool.

The tool sums up seasonal totals at the merchandise plan, explained in 4.2.11. The reason for using seasonal totals instead of yearly totals is that buyers work seasonally and it is more convenient to use seasonal data. This tool is not meant for summing up the overall financial data, it is made only for purchases.

This tool is not synchronized with any cash register systems, since those usually provide their own tools. However those tools provided are paid licenses and are somewhat costly. The idea of this tool is to offer affordable tool for those shop owners who are not able to pay for the expensive licenses.

The tool is presented sheet by sheet in the following subchapters.

3.2.1   Table of content

The first sheet of the tool presents **the table of content**, the color codes and some clarifications for the letter codes (figure 3). Green indicates that numbers can be inserted; it is the only area that can be touched. Grey means that do not insert numbers and yellow shows the results, no numbers should be inserted. BOM stock means beginning of the month stock, EOM stock is end of the month stock. S/S stands for spring/summer and FW is for Fall/Winter.

Figure 3. The first page of the tool

3.2.2 Sales plan

The second page of the tool is **the Sales plan** (figure 4). The first table shows **the seasonal sales and the total sales** (figure 5). There is no need for inserting figures in those tables; they are calculated from monthly sales, which should be inserted first. The reason the total table is first, is for follow-up, it is clearer when totals are shown first.

Figure 4. Sales plan sheet

The planned sales increase as a percentage, after the sales column, is put in the green area. (Figure 5). The gray area will show **the planned sales increase in monetary value** and the last column, in yellow, shows **the total planned sales**. (Figure 5).

Figure 5. The sales plan total first column

Monthly sales distribution percentage last year –table (figure 6) shows the monthly sales, which are inserted in green area, **the monthly distribution percentages** are shown in yellow area. These monthly distributions vary very little yearly, for that reason the same distribution percentages can be used for planning the monthly sales. The last year percentages are shown in **the planned monthly sales distribution** table in the gray area, as well as **the planned monthly sales** are shown in the yellow area. (Figure 5.)

Figure 6. Monthly sales distribution percentages last year and planned monthly sales distribution

Note! This is a purchases plan, and it must be kept in mind that if, for example, planning the purchases for spring/summer 2015 in fall/winter 2014, the numbers indicating last year are the numbers from 2014 spring/summer sales.

Usually purchases are planned seasonally and in this table numbers can also be inserted by season. For example spring/summer numbers can be inserted first, and later on fall/winter figures can be added.

The idea of having them together is to get yearly data in one place for making follow-up more convenient.

Also, if for some reason there is a need to change the monthly distribution for next year, it can simply be done by increasing/decreasing the sales for last year in green column. It is crucial to keep in mind, this is a budgeting tool for purchases planning, if there is a need for more detailed sales planning, I suggest to use separate tool for budgeting the sales.

On page two in the same sheet there is a sum-up table for spring/summer and fall/winter. It shows the previous year sales and the planned sales. (Figure 7).

Sales Plan

| Planned Sales S/S | | | | | | |
January	February	March	April	May	June	Total
Last Year	15 368	11 873	12 960	18 102	12 667	13 653	84 623
Planned	8 780	6 783	7 404	10 342	7 237	7 800	48 345

| Planned Sales F/W | | | | | | |
July	August	September	October	November	December	Total
Last Year	17 976	15 302	16 080	19 250	11 922	11 115	91 645
Planned	11 122	9 467	9 949	11 910	7 376	6 877	56 701

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Figure 7. The planned sales for seasons with the previous year sales

3.2.3   BOM stock & stock-to-sales ratio last year

The first table in the sheet is titled 'BOM Stock', which means Beginning of the Month stock (figure 8). In the green area will be inserted **the BOM stock values at cost from the last year**. If there is a need for some changes, for example the stock values have been too high, simply add adjusted value. The reason for using the last year values is, if the stock is in good level, to find out the level of the stock needed. (Figure 8.)

Figure 8. Beginning of the month stock at cost and at retail last year

In the next column (Figure 8), **the monthly markup percentage from the previous year** is inserted. **The average mark-up percentage for spring/summer and fall/winter** is calculated, as well as **the total average mark-up percentages**. The last column, in yellow, shows **the BOM stock at retail value**. This is calculated with the seasonal average mark-ups. (Figure 8).

The next table shows **the stock-to-sales ratio last year** (figure 9). These figures are calculated by using the sales last year from the sales plan and the BOM stock at retail. This is an important table, because when planning the stock values, there should be some target stock turnover rate. This table shows if there is a need to lower the stock value to speed up the stock turnover. (Figure 9.)

Figure 9. Seasonal stock-to-sales ratio

3.2.4 BOM Stock Plan

The planned monthly BOM stock (figure 10) is calculated by using the stock-to-sales ratio and planned sales. The table in picture 10 shows the BOM inventories at retail price and at cost and is calculated by using the seasonal average mark-up percentages. No need for inserting numbers in this table.

BOM Stock Plan

Month	Stock-to-Sales Ratio	Planned Monthly Sales	Planned Monthly BOM Inventory at retail	Planned Monthly BOM Inventory at Cost	Average Markup SS	Average Markup FW
January	5,20	8 780	45 639	24 988	45%	42,7%
February	5,51	6 783	37 341	20 444		
March	5,60	7 404	41 490	22 716		
April	4,41	10 342	45 639	24 988		
May	5,73	7 237	41 490	22 716		
June	4,79	7 800	37 341	20 444		
Total SS			248 943	136 296		
July	3,57	11 122	39 730	22 765		
August	4,66	9 467	44 144	25 295		
September	4,88	9 949	48 559	27 824		
October	3,50	11 910	41 703	23 896		
November	5,86	7 376	43 237	24 775		
December	5,78	6 877	39 775	22 791		
Total FW			257 148	147 346		
Total			506 091	283 642		

Figure 10. The beginning of the month stock plan

3.2.5 Stock Turnover & Average Stock

The average stock plan shows the seasonal planned average stock at retail price and at cost, plus the average markup. (Figure 11). **The stock turnover plan** (figure 11) shows the planned stock turnover rate for both seasons. Also it shows how many days and months it takes to sell the stock. There is no need for inserting any numbers in these tables.

Average Stock Plan

Total Planned BOM at Retail	Number of Inventory Listings	Planned Average Stock at Retail	Average Markup	Planned Average Stock at Cost
Average Stock Plan S/S				
248 943	6	41 490	45,3%	22 716
Average Stock Plan F/W				
257 148	6	42 858	42,7%	24 558

Stock Turnover Plan

Planned Sales	Planned Average Stock at Retail	Planned Stock Turnover Rate	How many days to sell the stock	How many months to sell the stock (Stock-to-Sales Ratio)
Stock Turnover Plan S/S				
48 345	41 490	1,17	157	5,15
Stock Turnover Plan F/W				
56 701	42 858	1,32	138	4,54

Figure 11. Average seasonal stock plan and stock turnover plan

3.2.6 Planned monthly ending stock

This table (figure 12) simply shows the BOM stock values from the following month. For example if the BOM for February is 96,000€, it must be the EOM balance for January. To remind, in the fashion business the purchases are done seasonally, which means that the goods for fall/winter are purchased in the spring and for the spring/summer in the fall.

Planned EOM						

Planned EOM S/S Retail

EOM (=BOM of following month)	January	February	March	April	May	June (estim.)
Last Year	65 363	72 625	79 888	72 625	65 363	60 000
Planned	37 341	41 490	45 639	41 490	37 341	40 000

Planned EOM Retail

EOM (=BOM of following month)	July	August	September	October	November	December (estim.)
Last Year	71 350	78 485	67 404	69 883	64 288	60 000
Planned	44 144	48 559	41 703	43 237	39 775	70 000

Figure 12. The planned EOM stock

The planning for the next season is done well in advance. For example, purchasing for 2014 fall/winter is starting in January. Planning for these seasons is likely done in December and there is not data from the December closing stock, it needs to be estimated. However, when December closing stock is known, it can be inserted. For that reason June and December are in green and data is not readily inserted (figure 12).

3.2.7 Planned reductions

Six-month data and the total yearly data are in the first table of the sheet (figure 13). The table shows the markdown percentages, the total sales and the total reductions for spring/summer, fall/winter and the total of those two seasons together. Below, in the same table, there are **planned seasonal and total data** (figure 13). Total seasonal reductions should be added. The next step is to insert values to **the plan for total seasonal reduction percentages**, so that **the total seasonal reductions in monetary value** are in yellow areas (figure 13).

Planned Reductions			
	Total Markdown %	Total Sales	Total Reductions
Last year S/S	38,0%	84 623	32161
Last year F/W	35,9%	91 645	32 878
Total	36,9%	176 268	65 039
Plan S/S	38,0%	100 701	38 267
Plan F/W	35,9%	109 058	39 152
Plan Total	37,0%	209 759	77 418

Figure 13. Planned reductions, six-month and yearly data

The monthly reductions distribution is calculated in the next table (figure 14). Numbers are entered in the green area, those numbers can be inserted seasonally, January through June, and later on July through December. Below the table is shown **the average reduction percentages and the average reductions in monetary value**. In the yellow area are shown reductions percentages, which are calculated by dividing the monthly reduction by the total seasonal reductions. The table shows how many percents the monthly reduction is from the total reductions. (Figure 14).

Monthly Reductions Distribution Last Year		
	Monthly Reductions LY	Reduction % Last Year
January	6200	19,3%
February	5572	17,3%
March	5867	18,2%
April	4569	14,2%
May	3707	11,5%
June	6246	19,4%
July	8126	24,7%
August	6930	21,1%
September	5185	15,8%
October	7202	21,9%
November	2821	8,6%
December	2615	8,0%
Average total	5 420	16,7%

Figure 14. The monthly reductions distribution last year, the average reduction percentage and the average reductions in monetary value

The last table (figure 15) shows the planned monthly reductions. It is calculated by multiplying the monthly reductions percentage by the seasonal total reductions.

Planned Monthly Reductions		
	Reduction %	Monthly Reductions
January	19,3%	7 385
February	17,3%	6 620
March	18,2%	6 965
April	14,2%	5 434
May	11,5%	4 401
June	19,4%	7 424
July	24,7%	9 670
August	21,1%	8 261
September	15,8%	6 186
October	21,9%	8 574
November	8,6%	3 367
December	8,0%	3 132
Average total	16,7%	6 452

Figure 15. Planned monthly reductions

There are minor variances in monthly reductions, but sometimes there is a need for adjustments. If there is for example high stock value with lots of old stock, the old stock needs to be cleared out and that should be taken into consideration when planning reductions. For that reason, the reduction percentage column is left green in the first table of the screen in the row **planned seasonal total markdown percentage** and in **the planned monthly reductions** table (figure 16). Figure 16 shows how the planned reductions sheet looks like.

Planned Reductions

Planned Reductions			
	Total Markdown %	Total Sales	Total Reductions
Last year S/S	38,0%	84 623	32161
Last year F/W	35,9%	91 645	32 878
Total	36,9%	176 268	65 039
Plan S/S	38,0%	100 701	38 267
Plan F/W	35,9%	109 058	39 152
Plan Total	37,0%	209 759	77 418

Monthly Reductions Distribution Last Year				Planned Monthly Reductions		
	Monthly Reductions LY	Reduction % Last Year			Reduction %	Monthly Reductions
January	6200	19,3%		January	19,3%	7 385
February	5572	17,3%		February	17,3%	6 620
March	5867	18,2%		March	18,2%	6 965
April	4569	14,2%		April	14,2%	5 434
May	3707	11,5%		May	11,5%	4 401
June	6246	19,4%		June	19,4%	7 424
July	8126	24,7%		July	24,7%	9 670
August	6930	21,1%		August	21,1%	8 261
September	5185	15,8%		September	15,8%	6 186
October	7202	21,9%		October	21,9%	8 574
November	2821	8,6%		November	8,6%	3 367
December	2615	8,0%		December	8,0%	3 132
Average total	5 420	16,7%		Average total	16,7%	6 452

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Figure 16. Planned reductions sheet

3.2.8 Purchase plan at retail value and at cost

The purchase plan at retail price and at cost are explained jointly, even though tables are shown in separate sheets (Figure 17). It is more convenient for reader that they are in separate sheets. There is no need for inserting any data for neither of them. The purchase plan is calculated by using data already inserted in previous sections.

The purchase plan shows the plan for spring/summer and for the fall/winter in retail values. It means that it is calculated with the mark-up added, VAT is not included (Figure 17).

Purchase Plan at Retail

Purchase Plan S/S at Retail					
Month	Planned Sales	Planned EOM	Planned Reductions	Planned BOM	Planned Purchases at Retail
January	18 288	76 157	7 385	84 619	17 211
February	14 129	93 081	6 620	76 157	37 673
March	15 422	98 158	6 965	93 081	27 464
April	21 541	84 619	5 434	98 158	13 436
May	15 074	93 081	4 401	84 619	27 936
June	16 247	84 907	7 424	93 081	15 497
Total at Retail				529 714	139 218
Purchase Plan F/W at Retail					
Month	Planned Sales	Planned EOM	Planned Reductions	Planned BOM	Planned Purchases at Retail
July	21 391	84 907	9 670	76 416	39 553
August	18 209	93 397	8 261	84 907	34 961
September	19 135	80 210	6 186	93 397	12 134
Ocotober	22 908	83 161	8 574	80 210	34 432
November	14 187	76 502	3 367	83 161	10 896
December	13 227	70 000	3 132	76 502	9 857
Total at Retail				494 593	141 833

Figure 17. Purchase plan at retail value

The purchase plan at cost (figure 18) shows the money needed for the purchases at cost. It is calculated by the seasonal average mark-up.

Purchase Plan S/S at Cost		
Month	Planned Purchases at Retail	Planned Purchases at Cost	Average Markup
January	17 211	9945	42,2%
February	37 673	21769	
March	27 464	15870	
April	13 436	7764	
May	27 936	16143	
June	15 497	8955	
Total at Cost		80 445	
Purchase Plan F/W at Cost		
Month	Planned Purchases at Retail	Planned Purchases at Cost	Average Markup
July	39 553	22 664	42,7%
August	34 961	20 033	
September	12 134	6 953	
Ocotober	34 432	19 730	
November	10 896	6 243	
December	9 857	5 648	
Total at Cost		81270	

Figure 18. Purchase plan at cost

3.2.9 Purchase plan by label

The purchase plan by label is divided into two sheets, spring/summer and fall/winter. Both tables are similar and explained jointly.

In figure 19 are **the total previous seasonal sales**, **the average markup, and the total planned purchases at retail price and at cost** and **the total estimated sales**. These figures come from previous calculations. The table shows also **the total actual purchases at cost** and **the difference in percentage between the actual purchases** and **the planned purchases at cost**. (Figure 19).

Purchase Plan Per Label
Fall/Winter

Total FW Sales Last Year	Average Markup	Total Planned Purchases at Retail	Total Planned Sales	Total Planned Purchases at Cost	Total Actual purchases at cost	Difference actual/planned
90 000	43%	130 681	107 100	74880	61017	81%

Figure 19. The purchase plan per label first table

The table, below the first table (figure 18), is **the purchase plan by label**. The name of the brand is inserted in the first column. It is up to the shop owner/buyer to decide does she want to list all of the brands in the store selection or for example the top 10 labels. (Figure 19.)

Purchase Plan Per Label F/W

	Label	Sales Last Year	Sales Distribution % Last Year/Adjusted	PCS	Markup	Planned Sales per Label	Total Planned Purchases per label at Retail	Total Planned Purchases per label at Cost	Actual purchases	Difference actual/planned
1	Marc O'Polo 2012	25 509	27,8%	225	42,3%	30 356	39478	22621	22047	97%
2	Repeat 2012	17 034	18,6%	150	43,4%	20 271	26363	15106	11481	76%
3	Sipilä 2012	25 685	28,0%	182	64,0%	30 565	39751	22777		0%
5	Cambio 2013	9 040	9,9%	57	54,3%	10 757	13990	8016	6592	82%
6	Laurie 2013	6 760	7,4%	87	52,4%	8 045	10462	5995		0%
8	2or+byYAT 2013	3 193	3,5%	25	29,4%	3 800	4942	2832	1266	45%
10	Ivo Nikkolo 2012 !!	2 404	2,6%	14	34,1%	2 861	3721	2132	3317	156%
11	Manuela Conti 2012	5 177	5,6%	13	46,7%	6 160	8012	4591	3967	86%
14	Mos Mosh 2013 !!	979	1,1%	13	42,4%	1 165	1515	868	1135	131%
17	Lumi 2013	3 156	3,4%	14	52,6%	3 756	4885	2799	2885	103%
18	Minna Parikka	4 000	4,4%			4 760	6191	3547	3137	88%
19	Sakari Sauso	1 900	2,1%			2 261	2940	1685	1204	71%
21	Bruuns Bazaar	2 500	2,7%			2 975	3869	2217	1971	89%
22	Gustav	4 000	4,4%			4 760	6191	3547	2015	57%
23			0,0%			-	0	0		#DIV/0!
24			0,0%			-	0	0		#DIV/0!
25			0,0%			-	0	0		#DIV/0!

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Figure 20. The purchase plan by label second table in the sheet

The column after labels is for **the sales last year or adjusted** (figure 20). If there is a need to adjust the sales values for the particular label, it is done simply by increasing or decreasing the sales amount. The total seasonal sales must be adjusted too! The next column (figure 20) calculates **the sales distribution percentages**. The number of pieces sold and the markup percentage can be added for follow-up and statistical reasons. Those however do not influence on calculations explained next.

The planned sales by label (figure 20) is calculated by the given sales mix percentage. Next two columns show the planned purchases by brand at retail value and at cost. Last columns show the actual purchases by label and the difference in percentages between the actual and the planned purchases by label. (Figure 20.)

3.2.10 Open-to-buy

The open-to-buy is a tool that can be used in season and I recommend to use it for monthly basis. In the first row of the table is shown **the planned purchases at cost** (figure 21). The second row is for inserting **the actual money spent for making the purchases**, at cost. The second last row is for the values for **in-season purchases**. The final row shows, with color codes, **the open-to-buy** money. If there is more than 5,000€, cell appears green. If there is under 5,000€ but above 0€, cell will appear yellow. When there is no money left or there is a negative amount, which indicates over budget purchasing, cell appears in red. (Figure 21.)

Open-to-Buy

Open-to-Buy S/S

	January	February	March	April	May	June	Total
Planned Purchases at Cost	9 945	21 769	15 870	7 764	16 143	8 955	80 445
Actual Purchases at Cost	0	0	0	0	0	0	0
In-Season purchases	0	0	0	0	0	0	0
Open-to-Buy	9 945	21 769	15 870	7 764	16 143	8 955	80 445

Open-to-Buy F/W

	July	August	September	October	November	December	Total
Planned Purchases at Cost	22 664	20 033	6 953	19 730	6 243	5 648	81 270
Actual Purchases at Cost	30 724	19 947	7 634	2 712	0	0	61 017
In-Season Purchases	0	0	0	0	0	0	0
Open-to-Buy	-8 060	86	-681	17 018	6 243	5 648	20 253

Picture 21. Seasonal Open-to-buy

3.2.11 Merchandise plan and last page

Seasonal merchandise plans are in the last two sheets (figure 22), those are identical in form and are explained at the same time. The merchandise plan is made for follow-up purposes.

Figure 22. Six-month merchandise plan

The table shows **the stock-to-sales ratio, the reduction percentage; the average stock at cost and the markup percentage** (figure 23). Figures with grey filling are from previous sheets and the green area is for figures to be added. The final column shows **difference in percentage of the planned and the actual figures**. (Figure 23.)

			SIX-MONTH MERCHANDISING PLAN				Difference
			Spring/Summer	Last Year	Plan	Actual	Actual/Plan
		Stock-to-Sales Ratio		5,33	5,26	1,4	27%
		Reduction %		35,9%	38,00%	11,0%	29%
		Average Stock at Cost		62000	51 014	18000	35%
		Markup %		42,2%	46,0%	45,4%	99%

Figure 23. First table in Six-month merchandise plan

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The next table (figure 24) is divided into sections: **sales, the BOM stock at cost, reductions, purchases at retail price** and **purchases at cost**. The first column on the left, the same row with months, indicates the season and next that the year can be inserted.

S/S 20		Jan	Feb	Mar	Apr	May	June	Season Total
			markup %			42,2%	40,0%	43,4%	55%
	Last Year	15 368	11 873	12 960	18 102	12 667	13 653	84 623
	Plan	18 288	14 129	15 422	21 541	15 074	16 247	100 701
Sales	Actual							-
	% LY	0%	0%	0%	0%	0%	0%	0%
	% Plan	0%	0%	0%	0%	0%	0%	0%
	Last Year	50 000	45 000	55 000	58 000	50 000	55 000	313 000
BOM	Plan	48 896	44 006	53 785	56 719	48 896	53 785	306 087
Stock at	Actual							0
Cost	% LY	0%	0%	0%	0%	0%	0%	0%
	% Plan	0%	0%	0%	0%	0%	0%	0%
	Last Year	6200	5572	5867	4569	3707	6246	32161
	Plan	7 385	6 620	6 965	5 434	4 401	7 424	38 228
Reductions	Actual							0
	% LY	0%	0%	0%	0%	0%	0%	0%
	% Plan	0%	0%	0%	0%	0%	0%	0%
	Last Year							0
Purchases	Plan	17 211	37 673	27 464	13 436	27 936	15 497	139 218
at	Actual							0
Retail	% LY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	% Plan	0%	0%	0%	0%	0%	0%	0%
	Last Year							0
Purchases	Plan	9945	21769	15870	7764	16143	8955	80445
at	Actual							0
Cost	% LY	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
	% Plan	0%	0%	0%	0%	0%	0%	0%

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Figure 24. The second table of the six-month merchandise plan

All sections work the in similar way. The last year figures and the planned figures are given from the previous sheets in question, except the last year purchases at retail and at cost, those figures should be entered. The actual figures are inserted in green area, the difference in percentage of the actual values and the last year values (actual/last year *100), and the difference with the actual and the planned values (actual/planned *100) are shown in each row. Totals are calculated automatically. Below the merchandise plan table there is a space for own comments at the second page (Figure 25).

Figure 25. Comment area in six-month merchandise plan

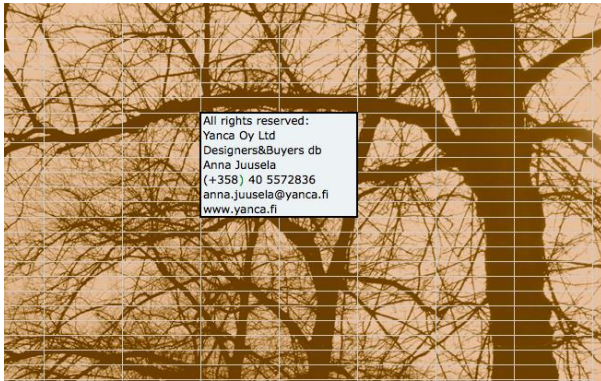Last page of the tool contains contact details (Figure 26).

Figure 26. Contact information

4 Testing the tool

Important step of this thesis process was to test the tool. Fortunately, Boutique Sipilä's new Owner Sari Nisula was happy to test the tool. Since Mrs. Nisula was new in the buying process, we decided that I would guide her in the purchases process.

4.1   Boutique Sipilä

Clothing designer Linda Sipilä and her mother Alisa Sipilä founded boutique Sipilä in 2010. Linda won Tv-program Muodin Huipulle in year 2011 and in October 2013 Boutique Sipilä was purchased by Sari and Antti Nisula. Boutique Sipilä operates in Seinäjoki, the official name of the company is Zarant Oy. (Boutique Sipilä, 2014.)

Boutique Sipilä sells high quality women's clothes and accessories. It carries labels such as Marc O´Polo, Repeat, Ivo Nikkolo, Linda Sipilä, Cambio, Sauso, Minna Parikka and Lumi just to name a few. The store size is approximately 50 square meters. The net turnover in 2013 was 201,924€ (Nisula, 2014.)

The fashion industry and running a shop is completely new for Mrs. Nisula and for that reason the purchases budgeting tool was found very helpful in planning and doing the purchases for the first time. It was decided with Mrs. Nisula, that I would be helping her throughout the purchasing process from planning and budgeting to the actual purchases. The schedule for testing the tool was planned to be for the fall/winter 2014 purchases at the beginning of February 2014.

The reason for choosing Mrs. Nisula as a tester instead of experienced buyer was the fact that the person with no experience looks the tool with fresh eyes; in addition the tools' suitability to help out beginners is tested. Feedback about the tool was collected mainly by phone and face-to-face. No questionnaire or written feedback was required due to a busy schedule of Sari.

4.2   Testing process

The testing process began by figuring out the sales target for 2014. Mr. and Mrs. Nisula had set a target for sales increase and they had budgeted sales estimation for 2014 and these figures were used in the sales plan. Mrs. Nisula found the sales plan to be quite easy to use and Mr. Nisula actually modified the sales plan table and used it as a base for overall sales budgeting.

Some adjustments were needed for the purchases plan and for the budget. From summer 2013 to October 2013 Linda and Alisa Sipilä had closing-down sale, since they were selling the store and for those months sales were pretty high. Sales figures from year 2012 were used as a helpful guideline.

The next step was to determine BOM stock. Boutique Sipilä had a quite high stock and the stock figures needed adjustment. Those figures were adjusted by finding out the level of the stock-to-sales ratio, which was determined to be around 4. However, at the time of purchase of the company in October the old stock was almost sold out. Actual stock figures from 2013 November and December could be used. The planning took place in January and actual December stock figures for EOM stock could be used. After the EOM stock was defined the reductions needed to be determined, Mrs. Nisula thought this to be a very important step. When doing the purchases planning without experience, reductions might be ignored easily. Mrs. Nisula told that if a plan for reductions had not been in the tool, she probably would have disregarded them. At this stage also figures from year 2012 for July to October were used as a guideline, November and December figures could be used from year 2013. With these figures Mrs. Nisula was able to see her purchase plan at retail price and at cost. Compared to her estimations from value of purchases in previous year and sales target she thought those figures were reasonable.

Before the actual purchases, Mrs. Nisula determined which brands were necessary to insert in the purchase plan by label in the fall/winter sheet (figure 27).

	Purchase Plan Per Label Fall/Winter								Total Actual purchases at cost	Difference actual/planned
	Total FW Sales Last Year	Average Markup	Total Planned Purchases at Retail	Total Planned Sales	Total Planned Purchases per label at cost	Total Planned Purchases at Cost	Difference: Total planned purchases and planned per label			
	91 645	43%	141 833	109 058	98 733	81270	(17 463)		61017	75%

	Purchase Plan Per Label F/W								Actual purchases	Difference actual/planned
	Label	Sales Last Year	Sales Distribution % Last Year/Adjusted	PCS	Markup	Planned Sales per Label	Total Planned Purchases per label at Retail	Total Planned Purchases per label at Cost		
1	Marc O'Polo 2012	25 509	27,8%	225	42,3%	30 356	39478	22621	22047	97%
2	Repeat 2012	17 034	18,6%	150	43,4%	20 271	26363	15106	11481	76%
3	Sipilä 2012	25 685	28,0%	182	64,0%	30 565	39751	22777		0%
5	Cambio 2013	9 040	9,9%	57	54,3%	10 757	13990	8016	6592	82%
6	Laurie 2013	6 760	7,4%	87	52,4%	8 045	10462	5995		0%
8	2or+byYAT 2013	3 193	3,5%	25	29,4%	3 800	4942	2832	1266	45%
10	Ivo Nikkolo 2012 !!	2 404	2,6%	14	34,1%	2 861	3721	2132	3317	156%
11	Manuela Conti 2012	5 177	5,6%	13	46,7%	6 160	8012	4591	3967	86%
14	Mos Mosh 2013 !!	979	1,1%	13	42,4%	1 165	1515	868	1135	131%
17	Lumi 2013	3 156	3,4%	14	52,6%	3 756	4885	2799	2885	103%
18	Minna Parikka	4 000	4,4%			4 760	6191	3547	3137	88%
19	Sakari Sauso	1 900	2,1%			2 261	2940	1685	1204	71%
21	Bruuns Bazaar	2 500	2,7%			2 975	3869	2217	1971	89%
22	Gustav	4 000	4,4%			4 760	6191	3547	2015	57%
23			0,0%			-	0	0		#DIV/0!
24			0,0%			-	0	0		#DIV/0!
25			0,0%			-	0	0		#DIV/0!

Figure 27. The purchase plan by label F/W Boutique Sipilä

The sheet **planned purchases by label**, was modified after the testing. There was a cell for **the total planned purchases by label at cost** and a cell showing **the difference with the planned purchases at cost** and **the total planned purchases by label** with conditional formatting: cell appeared red if negative difference and green if positive difference (figure 27). It turned out to be unnecessary to have those, and for make the table more clear those two cells were left out.

After the purchases, Mrs. Nisula added figures for open-to-buy sheet at the actual purchases at cost row (figure 28). For July, August and September there is no money left for in-season purchases (figure 28).

Open-to-Buy F/W							
	July	August	September	October	November	December	Total
Planned Purchases at Cost	18 997	16 724	4 477	16 260	5 176	5 409	67 044
Actual Purchases at Cost	30 724	19 947	7 634	2 712	0	0	61 017
In-Season Purchases	0	0	0	0	0	0	0
Open-to-Buy	-11 727	-3 223	-3 157	13 548	5 176	5 409	6 027

Figure 28. The open-to-buy F/W Boutique Sipilä

It must be noticed that some of the big labels have two sales in season. Mrs. Nisula decided to attend only for the first sales, where the delivery is mainly between July to September/October. For that reason, there are no purchases for November and De-

cember (picture 28). It is reasonable decision for store of this size considering enough items are found at the first sales. It should be noticed that first spring items might be delivered already in December. However, the storeowner should consider not place all of the items in the store all at the same time, but gradually. That way there is something new for customer every week. Figure 29 presents the time of the first and the second purchases for fall/winter 2014 and the delivery period.

	Spring/Summer						Fall/Winter					
	January	February	March	April	May	June	July	August	September	October	November	December
Purchases												
Delivery												
Sales	1	1		2	2							

Figure 29. The time of the purchases and the delivery period

Final step for Mrs. Nisula is to fill in the six-month merchandising plan at autumn 2014.

4.3 Feedback: Boutique Sipilä

The feedback was collected by phone and face-to-face since Mrs. Nisula has a busy schedule and no previous experience to mirror the testing process.

Mrs. Nisula found the tool to be confusing at a first look because of no previous experience about planning the purchases. There were so many things to be taken into consideration, many sheets and the fact that it was in English. However, after taking a closer look and with my guidance, Mrs. Niusla found that the tool was really helpful and not complicated. It helped her to understand how the stock turnover, reductions and the sales plan are all linked and how crucial it is to plan the purchases. (Nisula, S. 2014.)

The purchase plan by label was found to be very useful at the actual purchases. The only problem was, due the closing-down sale, sales figures were high and from 2013 July to October sales figures could not be used, for some labels sales figures from 2012 were used as a guideline. The difference between **planned purchases at cost** and for

the planned purchases by label at cost was due using the adjusted sales figures from year 2012. We decided to follow **the planned purchases at cost total** and ignored **the planned purchases by label total**. For the final version, **the planned purchases by label at cost**-cell was left out as mentioned earlier.

At the purchases situation, we noticed there was a need for a column for inserting actual purchases by label, and a need for column that shows difference between actual purchases and planned purchases. Those were added.

Mrs. Nisula found the open-to-buy tool to be helpful when planning and doing the in-season purchases. It shows her clearly how much there is money for purchases. (Nisula, S. 2014.) One thing was noticed; open-to-buy does not take into account sales. If sales are higher than planned, it frees up money. I was considering about adding that, but decided to leave it out from this thesis.

All in all Mrs. Nisula was relieved to have my guidance and this tool to help her through the purchase planning process and the actual purchase situation.

> Purchases budgeting tool was very helpful for me. It would have been so much more difficult to plan and do the purchases alone and without any budgeting tool. I was very pleased for the tool, and after I understood the logic, it was actually pretty easy to use. I will definitely use it in the future too. (Nisula, S. 2014.)

4.4   Feedback from buyer at Bestseller A/S

I was interested in professional feedback from an experienced buyer. I contacted Suvi Kari, a buyer in a global clothing organization Bestseller A/S. Bestseller has brands such as Only, Vero Moda and Jack and Jones. Ms. Kari works in Denmark, as a Vero Moda label's buyer for Finland and Sweden. (Kari, S. 2014.)

I sent the tool by e-mail for her and we discussed briefly about the matter at phone. Ms. Kari explained how they used to budget the purchases only at cost, but nowadays they use also retail prices at budgeting. It gives much more accurate result and clearly

shows how much you have to purchase to be able to reach the target sales. Ms. Kari told it was good I had taken that into account in the tool; the buyer is able to see the budgeted purchases both at cost and at retail price. Ms. Kari gave also positive feed-back about the fact that reductions were calculated. (Kari, S. 2014.)

Ms. Kari found the tool to be very useful for storeowners and buyers. She said that all necessary items for planning and doing the purchases could be found in the tool. (Kari, S. 2014.)

5 Conclusion

I have learned a lot during this thesis process and the project itself has given me a lot. The thesis process deepened my knowledge about the purchases and I learned about using the Excel. The fact that the thesis topic is for my company gave me energy and enthusiasm to work and to complete it. I will evaluate in following paragraphs the project and the next step is also briefly explained.

5.1   Project evaluation

The journey of building the purchases budgeting tool and thesis report started in fall 2012 at the thesis-planning course. I had the idea ready for my thesis before attending the course, which I found out to be good, I was able to start the process and plan my actual thesis at the course.

I was very glad I reserved enough time for the project, since my baby was born in December 2012. I was first a bit stressed how I would be able to handle the baby and finish the school on time. As I look back now I know that if I had not started the thesis planning process already in fall 2012, it would have been difficult for me to finish the project within timeframe.

The whole process went on quite nicely and I had no big difficulties. The reduction planning was the most challenging task while building up the tool. It took me some time to find out the best way to pre present and calculate the reductions. The buyer should be able to modify the reductions for the coming season and I wanted it to be possible. Before the testing process the reduction percentage was calculated by dividing the monthly reduction with the total seasonal sales. I understood that the reduction percentage should be compared to total seasonal reductions instead. The reduction percentage should show how much each month's reduction is from the total reductions, not how much reduction in percentage is of the sales.

My time management was successful. I have noticed that the most suitable for me is to do little often instead of a lot seldom. Also, well-planned but flexible schedule for do-

ing the thesis was necessary for me to be able to take care of the baby and finish the thesis on time.

My own knowledge and experience from doing purchases gave me a starting point for the project. The first step for me was to find relevant literature and write the theory part. It turned out to be the correct way. It gave me insights and deepened my knowledge of how and why to calculate the different steps in the tool. I learned from the process how to build up the purchases budget; I did not have that knowledge since as I worked as a shop manager the accounting department calculated the budget for purchases.

First I was afraid I had not enough sources for this thesis but as I now look back, I had done the right decision with narrowing down to use only sources relevant to the fashion industry purchases budgeting. I feel that if I had not restricted it and I had included sources also for overall budgeting, the theory part would probably been too vague and confusing.

I was enjoying building the tool. Even though I only had basic knowledge about using the Excel, I am proud of the project outcome. Maybe in the future I will diminish the number of sheets on the tool, depending the feedback I receive from buyers. I also want deepen my knowledge about the Excel, some of the calculations might have been done more easily, if I would have had the skills.

I am pleased with the project outcome and I will continue to develop the tool in the future.

5.2 The next step

The process continues and the next step is to set the price for the tool and create the marketing plan and the sales channel. In addition I need to figure out a suitable name for the tool. The preliminary idea is to present the tool on the Yanca Oy Ltd webpage and to write about it on the blog on the site. Possibilities for creating an application of the tool for tablets will also be examined.

Ideas for additional tools, such as developing an assortment plans and purchases orders, are already being thought of. However, first this existing version needs to be launched. Feedback is necessary for future developments, since the tool is created for shop-owners and it is crucial that the tool is providing help and assistance for their needs.

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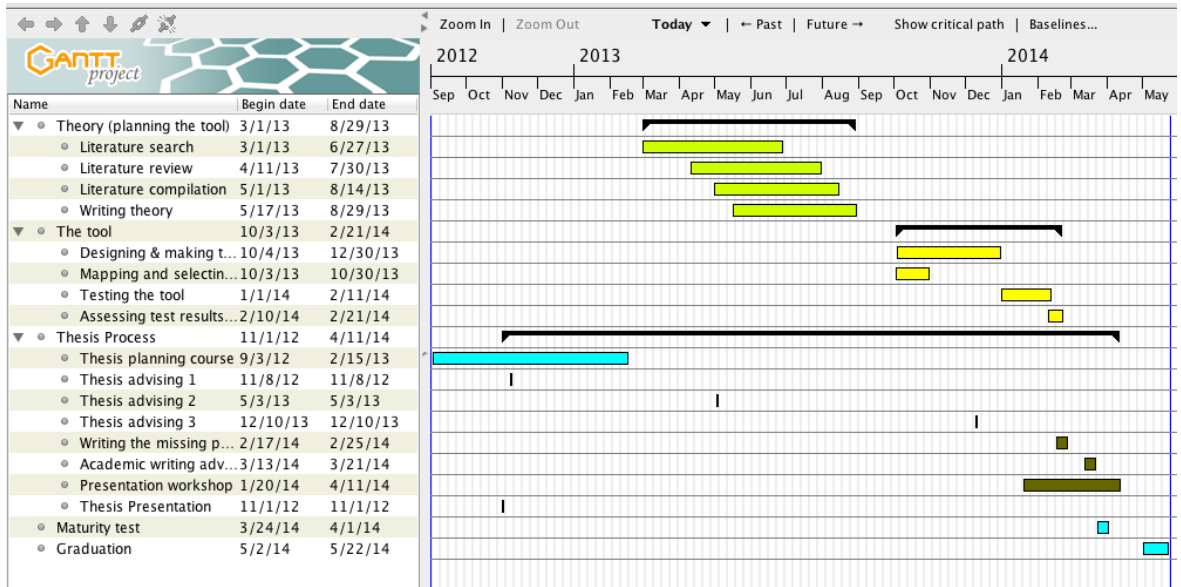Kari, S. 9 Jan 2014. Buyer. Bestseller A/S. Phone interview. Vantaa.

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Attachments

Attachment 1. Project schedule as Gantt chart

Attachment 2. Overlay Matrix

Project Objective	Project Tasks	Purpose	Output
Purchases Budgeting Tool for SME Buyers in Fashion Industry	Theory framework	Finding the correct approach to the budgeting tool	Theoretical framework for the budgeting tool
	Designing&building the tool	Theory utilization	The Budgeting tool test version
	Testing the tool	Find out possible errors	Comments for developing the tool
	Results&Evaluation	Project evaluation The next step	The budgeting tool ready

Attachment 3. Calculation formulas sub-chapters 2.2.1 & 2.2.2

Monthly sales index = (monthly sales / average monthly sales) x 100

Monthly index = this years' sales / Last years' sales x 100

Open-to-buy for a month = Planned Purchases – Merchandise on Order

Projected EOM inventory = Actual BOM inventory

   + Monthly additions actual (received new merchandise)

   + On order (merchandise to be delivered)

   Sales plan (merchandise sold)

   - Monthly reductions plan

Stock-to-Sales Ratio = Value of Stock (EOM) / Actual Sales

Planned BOM inventory = Stock-to-Sales Ratio x Planned sales

Stock Turnover Rate = Sales / Average Stock

Average stock = total stock value / number of inventory listing

Sales = Stock Turnover Rate x Average Inventory

GMROI = Gross margin percentage x Sales-to-Stock ratio

Sales-to-Stock ratio = GMROI / Gross margin percent

Attachment 4. Calculation formulas, sub-chapter 2.3

Planned purchases at retail = Planned sales for the month + Planned reductions for the month + Planned EOM – BOM

Planned reductions = (Beginning inventory + Planned purchases)
- (Planned sales + Ending inventory)

% Reductions planned for the month x Total planned reductions = Planned monthly reductions

BOM inventory = Monthly sales (planned) x BOM stock-to-sales ratio

Additions to Stock = Sales + Reductions
+ EOM inventory
- BOM inventory