Creating reorder point calculator

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Laurea University of Applied Sciences **Abstract**
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The objective of this thesis is to create a calculator for a company called Hani-Tuote that gives a buyer information about how many items should be bought into inventory and when. The company sells end-phase construction items such as soap- and paper-towel dispensers for mainly construction companies. The company has been having too large inventory and the purpose is to improve the situation. The calculator gives data for the company to see what items are overstocked and how many of each item is being sold per year/month. The objective is to get in a situation where the storage is as small as possible without running out of stock.

I created a calculator based on data from the company's resource planning system and combined it using different Excel formulas. The calculator allows the user to filter products by category or name from over 350 products and see easily which products are overstocked or soon to be reordered. The calculator combines data from three different reports and calculates the data with different Excel formula in each of the cells. The calculator values are only estimate and the buyer still needs to make the decisions manually. To help in these decisions, our CEO set guidelines for the buyer to consider.

The current buyer has taken the calculator in use and has been giving good feedback about having a way to analyze all products at once. The calculator allows the buyer to filter for a single provider and see simultaneously what items should be replenished alongside with larger orders. Our accounting department is also now able to easily filter products that are overstocked so they can focus on offering those items to customers.

It would take several years to see how low the inventory value could be reduced to using the calculator since some of the products have several years' worth of stock. theoretically if all of the items would be set to 6-month worth of stock, the inventory would be 56,88% from current value.

Keywords: reorder point, calculator, Inventory management

Contents

1 Introduction

Hani-Tuote is a Finnish construction end-phase equipment supplier. The range of items they supply are for example soap dispensers, hand towel dispensers, towel hooks, handicap equipment and rubbish bins. Most of the equipment goes into various public buildings such as schools and hospitals. The customers are usually procurement officers of municipalities and cities and large construction companies. Having over 300 different types of equipment in the selection makes the inventory value quite large. The construction industry in Finland is quite hectic and requires fast deliveries so it is important to be able to have everything in stock.

The main purpose of this research is to improve the balance between having too many items in stock and still being able to provide quick deliveries. To improve the current situation, the calculator tries to forecast the optimal purchasing time not to run out of stock before the next delivery arrives.

The objective of this research is to develop a calculator that tells an estimate time when the buyer should buy each of the products in stock. In the end Hani-Tuote should have estimated buying points for each item and enough data to determine the optimal quantity to buy as well.

2 Key terms

This chapter goes through some of the main key terms and explains what they mean and why they are important. These key terms are mentioned in this paper and can be referred to and it is important to understand what they mean and from what perspective they are used.

Reorder point: Each product is defined an alarm limit and when the number of products goes below this limit, a restock order is being made. The limit is being based on average amount of sales, delivery time and safety stock. (Kesavan 2024; Logistiikan maailma 2024)

Safety stock: Extra inventory to protect the item from running out of stock due to forecast error or late shipment from a supplier. It is used also to protect the stock from running out when there is increase in demand for a particular product. Safety stock is also referred to as buffer stock. (Viale 1996. p 8)

Buying and selling: In this document buying and selling is always from the perspective of Hani-Tuote. This means that if something is being purchased, it means that Hani-Tuote buys It into

the storage. When a product is being sold, it is sold out of the storage. This is important to notice in order not to confuse the customer buying from us and us buying into the storage.

Inventory turnover ratio: The inventory turnover ratio tells how many times the whole stock purchased is being sold per year. This measures how quickly the company can liquidate the inventory. “If stock keeping unit came in twice during the year, was used/sold, and then replenished that would be two turns per year. If this happened once per month, it would be twelve turns per year, and so forth” (Muller 2002, 2-8; Paramasivan 2009, 23)

Netbaron: An enterprise resource planning system that Hani-Tuote uses. The numbers of products are tracked in Netbaron and all sales go through this system. All of the data to create the calculator in this project, is taken from the reports from Netbaron.

3 Inventory management

When we talk about inventory management, we need to understand the costs of inventory in general. Understanding the costs makes it possible to analyze more deeply why each decision is made and what needs to be considered when purchasing items to inventory. In this chapter I will divide the costs into physical inventory costs and background costs. Each of the expense could be analyzed more specifically but I will only explain them superficially. Similar subject was studied by Hilakari (2013) in Helsinki Metropolia University of Applied Sciences. Her research was named “Development of purchasing parameters” and by Peltoniemi (2018). Her thesis was named “Improving Purchasing by Inventory Management”.

3.1 Physical inventory

Having inventory ties money into the storage, requires space and storage space comes with additional costs to the physical location as well. Many items also may deteriorate over time. Deterioration is often thought to be physical for example the item getting rusty or food item being spoiled. There is also a risk for long term storage to get out of fashion or being old technology. For Hani-Tuote the items getting old fashioned is one of the largest risks if there is storage for several years. An example of this would be older fluorescent lamps that Hani-Tuote sells and nowadays they are all LED lamps, and the old ones are currently worthless. (Muller 2002, 2-8.)

Receiving goods also has multiple costs. The most obvious would be the direct transportation costs but also reception of the goods, quality control, shelving, repackaging, and resending involves labor costs that increase if the purchase frequency increases. (Muller 2002, 2-8.)

3.2 Inventory costs

It is important to understand what all of the costs are for purchasing and holding inventory. Roberto Rossi 2021 has divided these costs into 7 different categories in his book “Inventory Analytics”. First of these is inventory review cost which is charged every time an inventory inspection takes place. This would include for example the annual inventory where each of the items is calculated manually to know the actual inventory value. These inspections take several working hours which costs money in terms of the salary of the inspector. Second is fixed ordering cost which is issued each time an order is being made. This cost does not get affected by the size of the order. Third one is per unit purchase cost. This one is proportional to the number of items ordered. For example, buying 100 instead of 1 at a time most likely decreases the cost per unit. Fourth cost is per unit inventory holding cost which includes the work needed to be put into handling the item and the costs of having the storage space for it. Fifth is fixed stockout/backorder penalty cost which is charged each time the inventory number turns negative. Sixth cost is per unit stockout/backorder penalty cost which is the cost for individual item being backordered. The last one is per time period backorder penalty cost, which is charged every time the unit demand remains short. Backorder penalty costs involve the individual item price if the item is lost or broken, additional freight costs and extra work that needs to be done to fulfill the negative storage value. (Rossi 2021,31.)

The costs mentioned above are very direct costs, but there are also other factors to consider when purchasing items into inventory. One of which is the cost of money which means in general, if the item is bought using loan money, the interest rate should be calculated in the price. This is why the number of items should be as low as possible. If the purchaser saves money by purchasing large quantities at once but the payment is done with loan money, the savings should be more than the interest rate is.

3.3 Importance of cash

Optimizing the size of inventory has benefits from many different aspects such as keeping as much cash available as possible without binding it into the inventory value. Berman, Case, Knight refer to cash as “King”. In the book cash flow is mentioned to be the reality check to measure the financial health of the company and how well it can pay all the bills such as paychecks. In the past the managers of the companies were not required to pay attention to the cash flow and often the only focus is the profit. Profit can be delayed but employees’ paychecks and past purchases need to be paid in time. In the book the writer mentions how profit and cash flow are often not separated in people’s minds and employees often do not understand how their actions affect to the cash flow. The cash is what keeps the company alive because “you need people to run the business—any business. You need a place of business, telephones, electricity, computers, supplies, and so on. And you can’t pay for all

these things with profits because profits aren't real money. Cash is." (Berman, Case, Knight 2013, 126-127.)

In the same book the writer tells how every decision affects the cash flow. The managers may take items into inventory just in case an offer comes in. This means that the cash is staying on the shelves if the order doesn't come. This cash could be used to something else instead. Second problem mentioned is if the manager gives credit too easily the cash flow also slows down. When the payment period is very long, the company sort of acts as a bank for the customer. (Berman, Case, Knight 2013, 148-151.)

Value for cash stands out specially when the interest rates are high and if the company has loans. Each unnecessary euro being held in storage shelves could be used to pay loans and the interest costs keep running. Interest coverage ratio tells how easy for the company is to pay its interest costs. It is calculated by dividing the operating profit by annual interest amount. If this number is very low, the company is struggling to pay its interest, and this is what banks look as well when deciding if they should or should not give a new loan for a company. (Berman, Case, Knight, J. 2013, 174-175.)

Blanchard compares cash to oil in car engine. The car may run for a while but without oil it will eventually break. Without sufficient cash, the company is not able to pay its employees, suppliers, creditors and will not be able to invest in maintenance or new product development. (Blanchard 2021 247-248.)

4 Developing work

In the beginning in January, we held a meeting with product development and discussed what the required information of the products are what we want to achieve. (Figure 1) After that I created a very basic version of the calculator in Excel from the product data that I thought were necessary.

Two weeks after building the first version and discussing the needs with our product development person we collected data from several different products and gathered the price differences between buying for example 100 or 200 units at a time. After this I researched all the available data outputs from Netbaron, which is the warehouse management system used. I quickly learned that the data outputs needed to be the limiting factor for the calculator. The plan was to include the purchase price differences between two or three purchase quantities and calculate whether the difference was large enough that it is beneficial to buy for example one year stock instead of only six months.

We discussed with the product development person and our CEO that the purchase benefit percentage should be more than what it would cost to lend the same amount of money. This would give an idea for the purchaser that each euro saved may not actually be beneficial.

Data from Netbaron would not allow us to get the purchase benefit percentages without inserting them all manually so we had to drop the purchase amounts completely from the calculator. After this in February the goal of the calculator also cleared up since now the objective would only be to determine when to buy instead of when and how many. (Figure 1)

After identifying this problem, I started creating another version of the calculator and researched what data was available in the warehouse management system. I figured out that the calculator requires three different reports from the system and the calculator would need to combine those. One report shows the current available amount of each item, one lists every purchase and third one has the prices.

The calculator is being built from several sources of data being exported out of Netbaron. To figure out the reorder point, the most important Is to know the numbers of how many items has been sold. Netbaron does not have a ready report combining this data, so I had to do the combining using Excel formulas. There is a report for each transaction happened (event report 1021) and from there it is possible to figure out the amounts of items sold between set time period. To get more accurate number, we decided to look for two years of sales instead of single year to get better average. The report does not make any analysis, so the average sales number must also be done with an Excel formula.

The current numbers of items is being tracked by Netbaron constantly based on registered orders so it was possible to get this data directly from balance report 103. The current number is used to determine when the next estimated reorder time is. The calculator tells an estimated time remaining before next reorder should be done. Current number of items is also used to calculate the number of items that should be at least in storage before the next purchase in order not to run out of stock while waiting for the delivery.

By the beginning of March, the new version of the calculator was ready and it was ready to be tested in practice. The calculator is planned to give a good overall data of each of the products, but the buyer still needs to make his own decision based on the information the calculator shows. When the second version was ready, I gave it for the purchase department to test out.

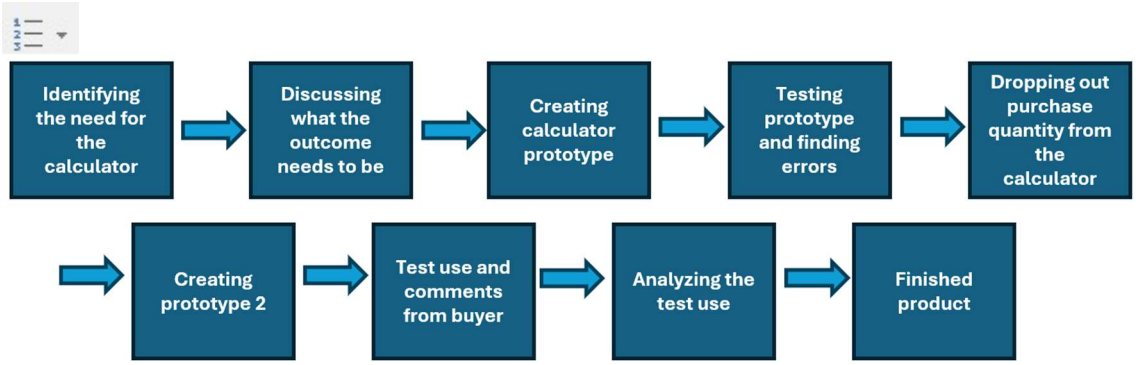

Figure 1 Development timeline

5 Risks

Risks for using the calculator are mostly monetary or the customer may end up waiting for a little longer. Other than that, there are no large risks involved. The buyer must know that the calculator only gives the data, but the decisions must be done carefully.

Within the company when the number of items bought at a time decreases, it simultaneously increases the workload that needs to be put into the purchasing and also the workload in warehouse receiving the items.

Smaller quantities also increase the freight costs overall since each purchase doesn't last for years. This can be reduced by combining the purchases and taking replenishment amounts along with larger purchases.

The calculator allows the user to set a caution period which means that the calculator suggests the buyer to make the purchase a little bit too early which gives some extra time if there are delivery difficulties for example. If the user decides to set this caution period too low, the risk of receiving the goods late increases. Doing this is beneficial for the cash circulation since the items are not received for example one month in advance but the risk of late delivery increases.

The calculator does not have any data of new products or products that have been separated from old products. For example, there was no separation between left- and right-handed products and they have now been made into individual products and there is no data to know how many of each has been sold. These items need to have an estimated reorder points and sales volume. These products have a greater risk of running out or being bought too much. Currently for these products it shows that the demand is 0 or close to it since even if it is sold with the new code, it is divided by 24 months.

6 Testing

The calculator does not tell the buyer directly how many items should be bought, but it gives the data to make the decision. When the buyer looks at the data from the calculator, he needs to have some guidelines to decide how many items to buy. With the CEO of the company, we decided to have eight different factors to limit the purchase quantity and help the buyer to make decision how many should be bought.

Two of these factors are decreasing the quantity and rest increasing it. The decreasing factors are to limit amount purchased to last for maximum 6 months based on the average sales and if the 6-month purchase would be over 5000€ the number should be decreased. Because of this, the calculator needed value estimates for each of the items. Netbaron has a value report 117 which contains the purchase prices. This report can be used to calculate the value of 6-month stock, but the price data is not completely accurate since some of the items may be purchased long time ago and if the purchase quantity decreases, the price may also increase. The rule of 5000€ maximum is only an estimate, so the price data does not need to be completely accurate.

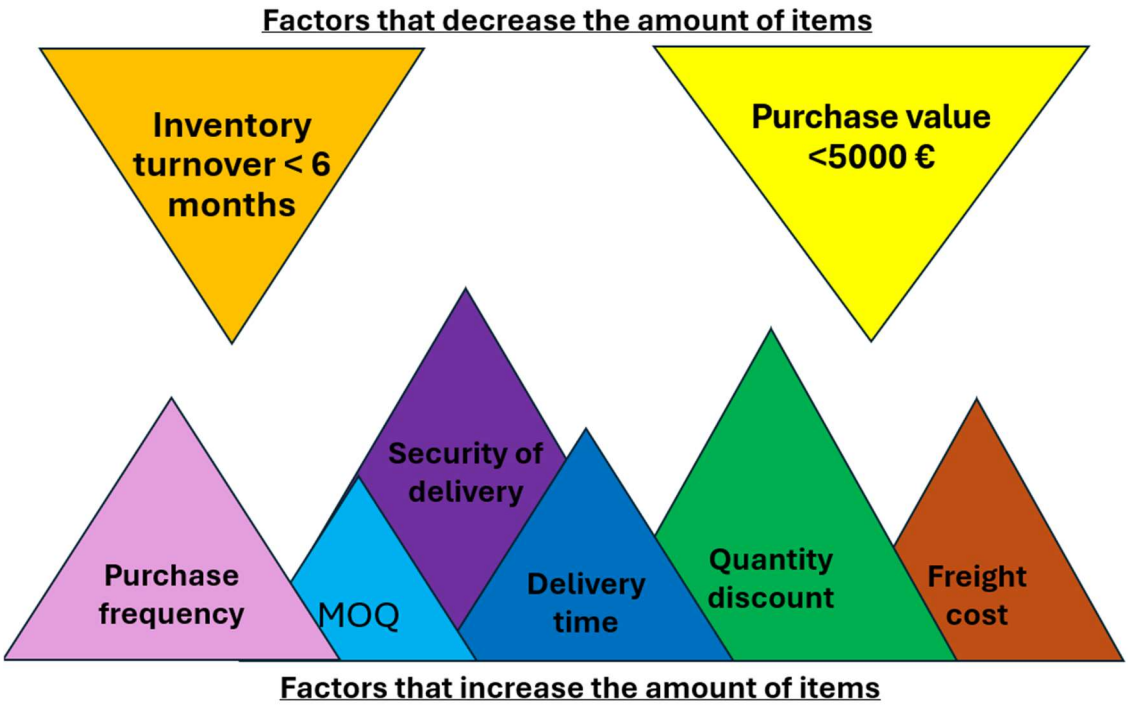

Figure 2 Purchase limitations

The number increasing factors are the purchase frequency, minimum order quantity, security of delivery, delivery time, quantity discount and freight costs. (Figure 2) If the purchase frequency would get too high based on the other limitations, this could be discussed

separately to increase the 5000€ limit for example so that the purchase frequency would not be unreasonably high.

Minimum order quantity varies between each provider and needs to be considered as well. Sometimes the minimum order quantity is more than 6-month sales and in these cases, it should be taken into consideration if the product should be changed or is the product overpriced.

The security of the delivery is also very important part since the customer satisfaction will be affected if the items are not delivered in time. Some products with long delivery time should be taken into inventory before the actual reorder point to be able to maintain the quick deliveries.

The fifth factor to restrict purchases is the quantity discount which needs to be considered carefully in order not to make decisions only based on prices. The quantity purchased often gives the provider incentive to give a discount in order to sell more items at once and gain larger amount of cash at once. As mentioned in section 3, the quantity discount itself is not unambiguous and if the purchase is made using loan money, the discount should be more than the current interest rate is.

Sixth factor is the freight cost which needs to be divided into the products to get the actual price for each product. If the freight cost gets high for each product, either the product provider should be changed, or the quantity purchased should be increased for these products.

7 User guide

Below I will go more into detail about each of the column of the calculator and what are they for. To understand the explanations better, one should have the calculator open while reading.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
						Huom tämä pitää päivittää manuaalisesti. Oletuksena kaikissa 4 viikkoa							*Menekki toimitusaikana + asetettu varoaika*	*Punainen = osta Keltainen = osta 1kk sisään Vihreä = ei vielä kiire*	*Varaston arvo:*	*885 354,00 €*
Tuotekategoria	Alakategoria	Hani-tuotteen numero	Cleor tuotenumero	Tuote	Sarake1	Toimitusaika / viikkoa	Saldo	Menekki / kk	Menekki vuodessa	Keskiostos	*Kiertonopeus*	Myyntitiheys/ vuosi	Ostopiste	Arvioaika ennen ostoajankohtaa / vko	6kk menekin ostohinta	Varaston arvo
11 Annostelijat	07 Saippua- ja käsidesiannostelijat	77335	1107050017	Katrin saippua-annostelija 500 ml, valkoinen muovi	*Toimittaja 3*	4	333	5,2916667	63,5	9,0714286	0,190690691	7	*11*	244	476,25 €	4 995,00 €

Figure 3 Calculator columns

First 5 columns are general information of the product itself (columns A, B, C, D, E) that can be used to search for certain products. (Figure 3) Column A is a main category of the product,

B is the subcategory, C is Hani-Tuote product number, D being Cleor product number and E is the name of the product itself.

Column F is the provider of the product. This column is useful to be able to filter products by the provider. When the buyer must buy a certain item, the person may also look at the other items from the same provider and see if it is beneficial to take some of the other products to the same delivery as well if the purchase point is close by to save in freight costs and time.

Column G is the estimated delivery time for each of the product. This is the only field of the calculator that needs to be inserted manually since it is different in each product and may also change if the quantity purchased changes. The delivery time need to include the whole process from the time of the product purchase to having the product ready to be sent to a customer. This becomes more difficult to estimate in some of the products if the product needs to be sent to be painted or involves two or more parts that are delivered separately and need to be assembled before having a finished product.

Column H is the current number of products in stock. The calculator searches the number from the second tab using XLOOKUP function which searches the number from the second tab based on the column B product number. The function in written form: =XHAKU([[Hani-tuotteen numero]];Saldot!B:B;Saldot!G:G).

Netbaron keeps track of the numbers of the products but since the calculator is in an external application the numbers need to be transferred. This transfer is made using Netbaron's balance report 103 which exports the numbers into a csv format from where all the numbers can be copy pasted into the second tab. This allows the user to see in real time how many items are in stock of each product. The user can determine how often the numbers need to be updated but it is the main way to determine when the next time to buy is.

Columns I and J are to tell the buyer how many items are sold per month and year in average. The column I simply divides the column J result by 12 months. The third tab of the calculator is for the sales from past two years. This time frame can be changed but two year's average is more accurate than sales from only past year. To list all the sales events from past two years Netbaron has a event report 1021 which has all the events listed in storage. When exporting this report, one should filter products collected and export the file into csv format. After this the data from the file can be copied into the third tab. Since this counts the two-year average, it does not need to be updated as often.

The sales numbers per item are collected using =sumif formula which looks for the specific product number and looks for all of the times it has been collected past two years and adds them together. After this the sum is divided by two which is for the two years. On the report the amounts are negative so the whole formula is changed to its absolute number by using

=abs formula. The function in written form:
=ITSEISARVO((SUMMA.JOS(Myyntimäärät!E:E;[[Hani-tuotteen numero]];Myyntimäärät!I:I)))/2

Column K counts the average purchase quantity per transaction in order for the buyer to see if the item is not sold very often but rather large quantities at a time. This helps to reduce the amount purchased when the buyer knows that the large orders can be separated from the regular smaller quantities.

Average purchase quantity is counted by summing up all of the collected amounts similar to column J but then divided by the number of purchase transactions. This number is also changed to its absolute value by using =abs formula. The function in written form:
=ITSEISARVO(KESKIARVO.JOS(Myyntimäärät!E:E;[[Hani-tuotteen numero]];Myyntimäärät!I:I))

Column L calculates the current inventory turnover ratio. This number means how often the current inventory will rotate per year. The turnover ratio is calculated by dividing the annual sales by the current inventory. In case the amount is 0, Excel would create an error. This error message is replaced by word “unknown” to make it look better by using =iferror formula. The function in written form: =JOSVIRHE(J127/[Saldo];" Ei tiedossa")

Column M calculates the number of sales transactions per year to know if the item is sold frequently but small amounts or fewer times but large quantities. This helps together with average sales and annual sales numbers to understand if the item is sold for example every two months to a single customer but large amount. This kind of product could have very low number of inventory and mostly bought from direct orders only.

The number of transactions is calculated from the third tab by using a =countif formula which counts the sales transactions without taking the quantities into account and then divided by two because the sales are from two years. The function in written form:
=LASKEJOS(Myyntimäärät!E:E;[[Hani-tuotteen numero]])/2

Column N is the computational reorder point for the item. This is to give the buyer an idea of how many items the current inventory should be before restocking it again. This is only an estimate, and all the other factors should be considered as well. The reorder point is calculated by counting a weekly sales estimate from the I column and multiplying that by the delivery time so that the item would not be sold out before the next delivery would come in. In addition to this estimate there is a safety period added which can be changed on the 5th tab of the calculator. This safety period is inserted in weeks and the calculator will add additional number of items to the reorder point based on the safety period weeks multiplied by the estimated weekly sales. The function in written form: =([[Menekki / kk]]/4)*[[Toimitusaika / viikkoa]]+([[Menekki / kk]]/4*'Määritykset ja ohje'!B2)

Column O is an estimated number of weeks remaining before a certain item should be bought. This is also an estimate but gives the buyer an idea when the item should be taken under closer scrutiny.

The time before the next purchase is calculated by taking the current number of items, reduce the reorder point from that number and dividing this by the estimated weekly sales. In case some of the numbers is 0 and the formula would give an error, the calculator changes it into a text which reads “unknown”. The function in written form: =JOSVIRHE(([Saldo]-[Ostopiste])/([[Menekki / kk]]/4);"Ei tiedossa")

The column O is also coded to change color based on the weeks remaining before the next reorder point. This is made by using the conditional formatting in Excel and the point is to give visual effect for the buyer to see what items are close to the next reorder point. This color changing can be adjusted on the 5th page of the calculator. If the number is set to 4, the cell will change its color to yellow from green when there is 4 weeks left to the calculated reorder point and the color will change to red when there is 2 weeks or less left. (figures 4 and 5)

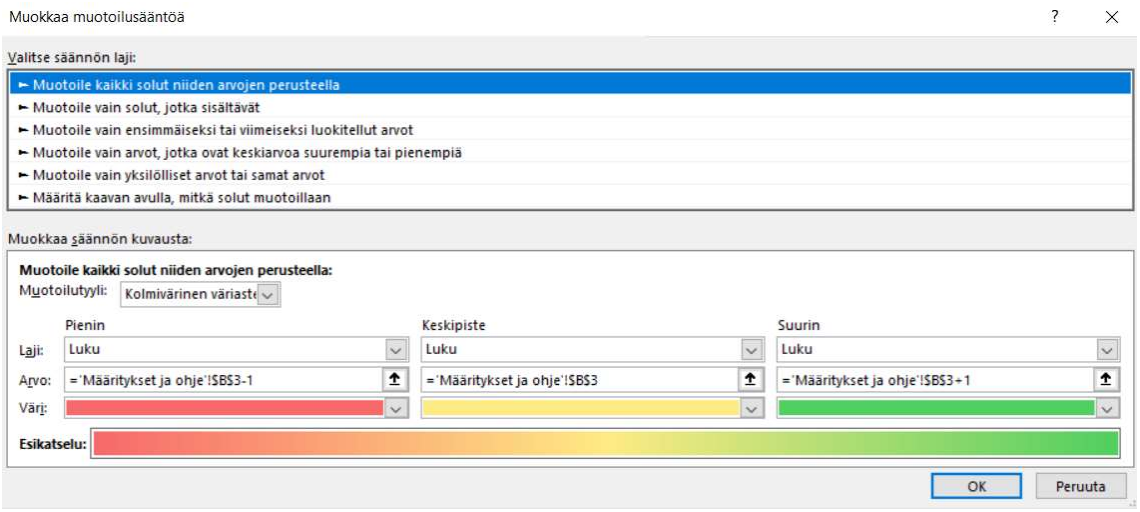

Figure 4 Color changing

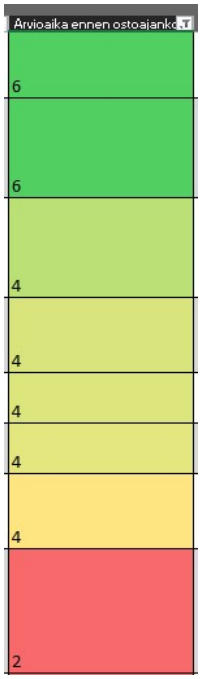

Figure 5 Color changing

Column P calculates the estimated value for buying 6 months' worth of stock for each product. This gives the buyer an idea of how important each of the purchase decision is if the ideal maximum storage would be at most 6 months' worth of stock. For example, If the price is very low, the buyer can easily take large quantities but if it costs several thousand euros, the buyer could decide to keep only 2-month storage.

Value for 6-month stock is calculated by multiplying the annual amount of product sold by 4th page price data and dividing it by two. The price data is taken from Netbaron's report 117 and exported into csv file and then copy pasted to the 4th page. This data does not change as often and is only used to give an estimate, so it is not required to be updated very often. The formula in written form: =XHAKU([[Hani-tuotteen numero]];Hintatiedot!C:C;Hintatiedot!F:F)*[[Menekki vuodessa]]/2

Column Q tells the current storage value for each of the items. This value helps the buyer to determine what products should be less in storage in general. This value is calculated by multiplying the current number of items by the price data from the 4th tab. The formula in written form: =XHAKU([[Hani-tuotteen numero]];Hintatiedot!C:C;Hintatiedot!F:F;"Ei tiedossa")*([Saldo])

Columns R and S are left to open comments from the buyer if the person likes to save additional information of the products such as how many were bought last time or what is the price difference between x and y amounts purchased.

On top of the calculator is the current value of the entire storage for the buyer to see if there has been progress in developing the storage value over time. The past values can be written on the right side of the calculator. The storage value is calculated by using =sum formula on the entire column Q. The formula in written form: =SUMMA(Taulukko1[Varaston arvo per tuote])

8 Feedback

The first purchase transaction using the calculator had good feedback from the buyer. The calculator shows what items to focus on by having red color for the products that should be bought soon. The company had decided to buy around 6 months' worth of stock at a time and from first provider the buyer decided to buy two different products at this time. The first product had 16 items in stock, the calculated reorder point would be at 12 and annual sales average shows 69 pieces so he decided to buy 30 which would be a good amount for half a year including the current stock. The second item was already about to be out of stock having only two items in stock while the order point would have been at 55 according to the calculator. The buyer decided to take 100 of these items even though the annual sales number is 329 because there was a large single purchase half a year ago for 105 pieces which distorts the annual sales average.

During the test use the calculator also showed the buyer that rest of the items from the same provider had loads of time remaining before the next reorder point so those could be ignored. One of the red ones was already bought last week, another one had only been sold to separate projects, so it was not necessary to buy it until the next larger order comes in. The next item to buy would need to be bought earliest after 6 weeks and the current amount in inventory will last for around 3 months. These examples show quite well that the calculator works, and the buyer has started to use it along with the purchases.

Our buyer has also started to add information about how many of each product will fit onto a single pallet to gather data for the future. The pallet size is often related to the optimal purchase quantity since it also affects the freight costs if the order needs to be packed on multiple pallets.

The use of the calculator is only in the beginning and in the future the regular use of it will show how accurate it is and if the caution period needs to be adjusted.

9 Discussion

The original plan was to calculate specific amount to buy along with the reorder point. It turned out to be too difficult to define the amount since there are no standard package sizes and the sales data has too many exceptions. Sometimes a product may be bought separately and sometimes it could be lower quantities along with some other item from the same provider only to replenish the stock quantity.

If someone would like to use this calculator for a business with more steady prices and purchase sizes, the calculator could be improved to tell the user how many items to purchase. The calculator could also easily be used by other companies using Netbaron and with small changes it could be adapted for other inventory management systems.

The calculator works well also for our accounting department since the calculator allows the user to filter for a set of products and analyze them. Accounting department in our company creates the offers to customers and chooses what products we offer. This filtering makes it possible to see what products are overstocked and should be offered to a customer instead of similar product that is almost out of stock. For example, if the customer is asking for a sanitary waste container but has not specified a color, the accounting person would see that we have several years' worth of stock for black ones but barely any white so they should offer them black containers to get rid of them instead of having to buy more white ones in.

Another use for the calculator would be our storage management who decide where each of the items are positioned in the warehouse. The calculator shows what items are sold most frequently so they could decide to give those items the best positions in order to make the packaging process more efficient.

To improve the calculator further, the purchase frequency would be a good addition. This would tell the buyer if there is a provider that is only bought from once or twice a year to increase the quantity of items bought not having to make a smaller separate purchase later in case a product runs out. In the other hand the buyer would see if there is a purchase done very frequently that any extra items are not required to buy.

To see the full potential of the calculator it would take several years but it is possible to calculate the estimated optimal value for the 6-month worth of stock in total. This value will never be exact but would show how many items on paper would be the optimal maximum number of each item and the value for all of them together. This optimal maximum storage value would be 56,88% from 1.1.2024 actual storage value.

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