How should SONAE MC redesign its PBS operation?

Supply Chain Management

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Context

Sonae MC is a company of the Sonae group, being leader in the food retail sector in Portugal, and is redesigning a PBS operation

Since 1985

Leader in the food retail market

Central warehouse in Maia

+35.000 employees

+2300 stores

+5.100M € sales volume in 2020

The goal is to achieve a picking strategy and a solution for the dispatch area that minimizes costs while maintaining the service level

Picking layout

- Dimension
- Picking flows
- Picking positions on the ground or on rack
- Picking position by pallet or box

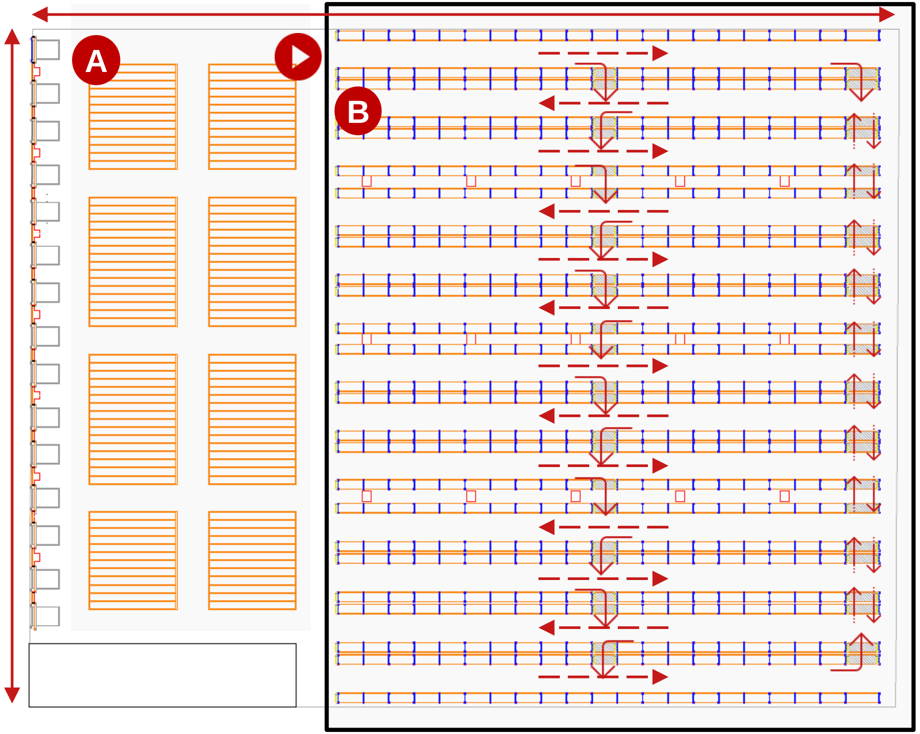
Dispatch area

- Fixed/dynamic layout
- Different solutions for different stores

Minimize total costs

02
Problem analysis

For a first iteration the base layout provided was considered, with 13 aisles and 1482 pallet places on the floor available



1482 positions

26 Rows x 19 Racks x 3 Palettes in each rack (ground floor)

113 empty positions

We have identified 1369 different SKUs in the data set. Each SKU has 1 position in the floor, leaving us with 1482-1369 = 113 empty positions

- **A** Dispatch area
- **B** Picking area
- **Starting point (picking)**
- **Passages below the racking**

The cost structure is divided into four main types of costs, three variable and one fixed

Picker cost

10€/hour

Transportation Costs
Travel time in the order picking process

Stabilization Costs
Costs associated with pallet stabling time, required whenever the weight sequence is interrupted

Waiting Costs
Cost of waiting forklift for second level picking

Despicking Cost
Cost of despicking the pallet on arrival at the shop

Forklift operator cost

15€/hour

Forklifting Costs (Picking and Replenishing)
Cost of using a forklift truck. Integrates the travel costs and the costs of stacking a pallet up or down

Set-up Costs
Costs of preparing a pallet

Pallet cost

8€/pallet

Cost of transporting a pallet

Warehousing cost

3,75€/m2/week

Cost of warehouse area

Variable cost   Fixed cost

For a total of 176,025 orders, a first segmented analysis by store and BU was made to understand relationships and highlights

 # Orders: 176 025 | **# Different SKUs ordered:** 1 369 | **# Requested boxes:** 333 205 | **Avg stores per day:** 93 | **Avg order per day:** 14 669

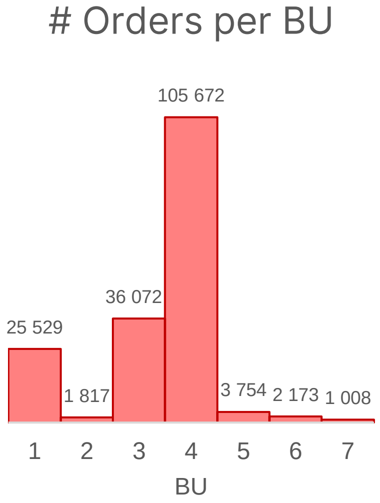
By store:

There is no relationship between the total stores per day ordered and the total weight and volume ordered

Date	# Stores per day	# Boxes	Total weight ordered(Kg)	Total volume ordered (m3)
01/07/2021	99	28 433	169 040,3	615,1
02/07/2021	76	21 771	134 108,6	512,7
03/07/2021	107	26 140	155 796,9	598,8
04/07/2021	83	21 362	138 254,9	531,9
05/07/2021	100	36 009	209 791,5	837,1
06/07/2021	96	40 534	236 717,9	908,4
08/07/2021	98	27 504	157 827,1	613,4
09/07/2021	76	22 742	137 799,3	504,0
10/07/2021	107	24 543	159 087,6	613,4
11/07/2021	82	18 980	129 085,2	500,5
12/07/2021	100	34 997	215 941,6	836,6
13/07/2021	96	30 190	193 111,2	771,0

By BU:

BU 1,3 and 4 make up 95.0% of all orders. Therefore, they deserve special attention



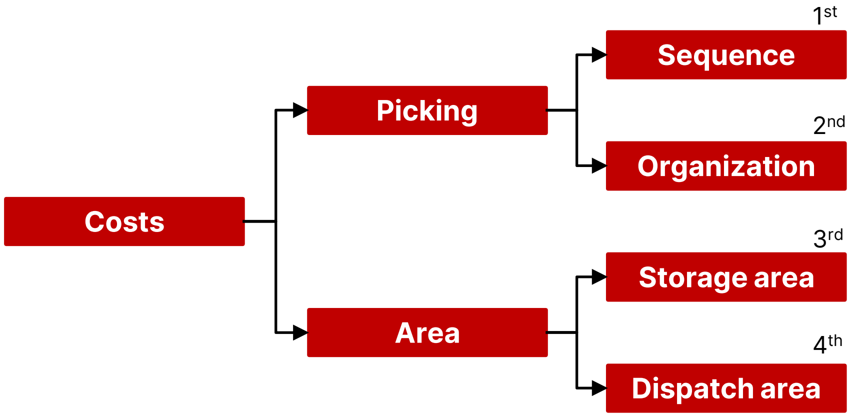
BU	# Orders	# Boxes	Weight unit (kg)
1	25 529	39 571	8,2
2	1 817	2 831	8,9
3	36 072	87 161	7,5
4	105 672	192 505	4,9
5	3 754	5 574	4,9
6	2 173	4 328	5,0
7	1 008	1 235	3,4

03
Methodology

The optimization model thought of at an early stage, could not be executed due to complexity, leading to the change to full cost calculation and iteration on that

The optimization model used a heuristic that aimed to get the best combination of SKUs within each order. However, due to the enormous number of possible combinations and, consequently, computational effort, it was not possible to execute, leading to the **change of approach**

Calculator: get costs, assuming that the picker starts at coordinate (0,1) and picks the orders in order and goes through the SKUs in order of distance
Output: Variable costs (picker, forklift picker, replenishment, transportation)



The worker would always pick the SKUs closest to the current order

Put the most important SKUs for a certain criterion first

The variations in the storage area aim to decrease unused space and distance traveled (second level and picking by box)

The dispatch area was calculated using the number of pallets shipped (arrangement of the aisles was changed)

Goal:
Cost minimization

Cost Calculation

In order to calculate costs with a python script, some assumptions regarding the picker's work and the despicking were made

Picker 's work

Transportation

Moves in ascending order of corridors, never going back. On each corridor, picks all the SKUs and only then moves to the next. Doesn't enter corridors with no needed SKUs unless crossing is needed to get to the next corridor (one-way only)

Stabilization

Stabilizes the pallet every time the SKU being picked is heavier than the last picked SKU

Pallets

Tries to fit everything into 1 pallet. When the entirety of the SKU doesn't fit, divides the boxes into different pallets

Position 0

Always starts and ends a trip on position 0 (top left corner), complying with safety measures. When he can't fit the next SKU in the 2nd pallet, goes back to position 0, where he leaves the pallets and starts a new trip until the order is finished

Interaction with forklift

If there is a picking position on floor 1 the Picker waits for the forklift to move the pallet down. While picking, the forklift waits and then the picker resumes the trip. The forklift puts the pallet back to the second floor and returns to position 0

Despicking costs

Calculated after sorting a pallet by weight (and for equal weights by BU), i.e., after stabilization

The previously made assumptions bring consequences to the model

Picker ‘s work

Transportation

While moving, there is no simultaneous optimization of distance, stabilization and BU costs

Stabilization

The picker can’t skip an SKU and pick a heavier one that only comes after it (trying to prevent the need for stabilization)

Pallets

Prioritizes optimization of volume occupied by pallet over despicking and stabilization costs. Alternatively, he could choose not to divide the SKU into different pallets to reduce those costs

Position 0

The distance travelled is not optimized (the Picker could leave the pallets by the Dispatch area, next to the corridor of the next SKU to pick)

Interaction with forklift

The distance travelled by the forklift is not optimized: for every level 1 picking necessity, the forklift will go to the SKU position and return. If there is the need for another SKU right after, he doesn’t wait

04
Scenarios

6 base scenarios (4 variables) were tested which organized SKUs based on one of four criteria

Weight Layout

1 scenario based on 2 criteria:

- 1st criteria: weight (Desc.)
- 2nd criteria: # Orders (Desc.)

Goal: decrease the stabilizing time

Business Units Layout

The warehouse is organized in 7 zones, each corresponding to 1 BU.

- Scenario 1: zones based on weight
- Scenario 2: zones based on #boxes

Goal: decrease the despicking time

Demand Layout

Most ordered Boxes to less ordered Boxes

- Scenario 1: boxes
- Scenario 2: orders

Goal: decrease of the travelling time

Random

Random organization

Goal: provide variability to the analysis

The despicking and stabilization times have the biggest impact on the final result and, therefore, are the ones that we will focus on optimize

	Random	Weigth	Demand	BU
Pallet Setup Time (min)	7,0%	7,1%	7,0%	7,1%
Travelling Time (min)	3,8%	3,6%	2,9%	3,3%
Picking Time* (min)	30,3%	30,3%	30,3%	30,3%
Stabilize Time (min)	**35,1%**	**0,0%**	**34,8%**	**34,6%**
Despicking Time (min)	**23,9%**	**23,7%**	**22,7%**	**14,9%**

*Depending on the number of SKUs to be collected

Analysing the base scenarios and the relative impact of the 1120 orders in each scenario, we conclude that, except in the by weight scenario, the Stabilization and the Despicking times are the ones with the biggest impact.

1 **Optimizing Despicking Time**

Optimization involves organizing SKUs in such a way as to priorities a BU organization that reduces the time spent on despicking

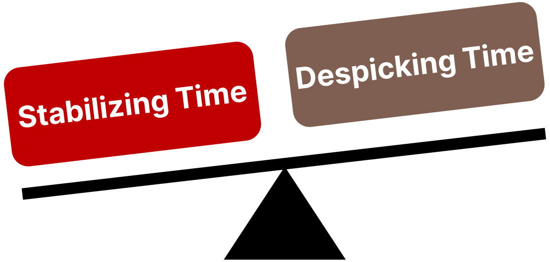
2 **Optimizing Stabilization Time**

This optimization involves organizing the SKUs in such a way as to give priority to the sequence of weights so they should be organized based on this criterion

To find a balance that minimizes the sum of the stabilizing time and the despicking time, a layout based on BUs and weight will be used

Problem

To minimize the stabilizing time, the SKUs should be ordered by weight, mixing all the BUs, resulting in a high despicking time.



Solution

Minimize the sum of the costs, by considering both weight and BU.

Define zones in the warehouse for each BU or for each set of BUs and organize the SKUs in these zones by weight

How many zones should be considered?

Where to locate each zone in the warehouse?

Which BUs make sense to be present in the same zone?

Finding the best SKU organization

By analyzing the previous scenarios, it is possible to obtain the average picking time of a pallet

Calculate no. Zones

Analysis / pallet

Total no. boxes / pallet = 57,88

Analysis of the base scenarios previously presented

Despicking time / pallet

Calculating (1) the average despicking time per pallet in each scenario

	Despicking Time / Pallet [min]
3BU + 4 BUs Mixed	9,84
4BU + 3 BUs Mixed	6,46
5BU + 2 BUs Mixed	4,44
All BUs Divided	1,45

a. Only if Zones P/Pallete is bigger than Total Zones in Warehouse

1 **Total Despicking Time / Pallet** = Avg (Boxes / Pallet) * Box Despicking Time

2 **Avg (Boxes / Pallet)** = Avg (Boxes / Scenario) / Avg (Pallets / Scenario)

Equations

The best layout based on the Bus is the one that divided the warehouse in 7 divisions, one for each BU

As each BU or set of Bus (zones) are organized by weight (to minimize stabilize time) it will be necessary to allocate 1 minute of stabilization for each different zone set contained in the pallet

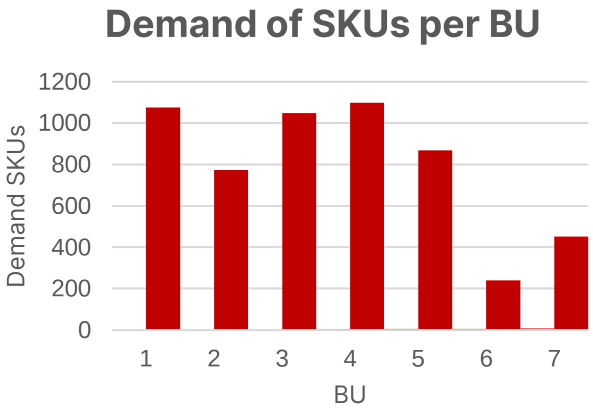
	Zones per Pallet						
	1	2	3	4	5	6	7
1 Zone (All BUs Mixed)	9,84	-	-	-	-	-	-
2 Zones (1BU + 6 BUs Mixed)	9,84	10,85	-	-	-	-	-
3 Zones (2BU + 5 BUs Mixed)	9,84	10,84	11,84	-	-	-	-
4 Zones (3BU + 4 BUs Mixed)	9,84	10,84	11,84	12,84	-	-	-
5 Zones (4BU + 3 BUs Mixed)	6,46	7,46	8,46	9,46	10,46	-	-
6 Zones (5BU + 2 BUs Mixed	4,44	5,44	6,44	7,44	8,44	9,44	-
7 Zones (All BUs Divided)	1,45	2,45	3,45	4,45	5,45	6,45	7,45

By admitting all the possibilities for the constitution of a pallet, it is possible to detect the worst scenario per pallet for each number of zones in the warehouse (using the previous formula)

It can be seen that in all pallet configurations (zones per pallet) it is possible to verify that the organization of the warehouse into **7 zones** (scenario 7) is the division that best optimizes the stabilize + despicking time, **each zone corresponding to a BU**

The layout of the zones in the warehouse must be based on the demand of each BU

Once the number of zones to be created has been defined and with the stabilizing time and despicking time optimized, it is necessary to define the location of each zone in the warehouse. The strategy for organising the zones by warehouse layout should aim to reduce non-optimised times, in this case travelling time. Thus, zones should be **organized according to the demand of each BU.**



1st zone	BU 4
2nd zone	BU 1
3rd zone	BU 3
4th zone	BU 5
5th zone	BU 2
6th zone	BU 7
7th zone	BU 6

Higher demand

The strategy reduces variable costs by 3 000 € compared to the first iteration

	Random [1]	Weigth [2]	Demand [3]	BU [4]	New Layout [5]
Pallet Setup Time (min)	285,1	288	285,55	290,10	289,50
Travelling Time (min)	153,79	148,36	118,19	134,68	151,37
Picking Time* (min)	1236,22	1236,66	1236,43	1236,72	1236,57
Stabilize Time (min)	1433,47	0	1421,22	1413,95	68,85
Despicking Time (min)	974,77	966,38	928,54	607,79	576,02
Variable Costs	**93 070,81 €**	**78 565,39 €**	**90 187,70 €**	**88 695,53 €**	**75 534,57 €**

The reduction of the despicking time is greater than the small increase in the stabilize time, something that can be justified by the more careful organization of the BUs

05

Improvements

Introducing 1st level picking

Introducing picking in the first level has relevant implications in our model

When a picker needs to pick a first level position, since its stacker isn't capable of picking that position:

1. The picker calls and waits for the forklift worker to lower the pallet
2. The forklift worker goes to the distinguished location and lowers the SKU pallet (2 min)
3. After the Picker performs the picking process on the ground the forklift moves the pallet back (2 min) to its original position (level 2) and returns to its initial place.

1st level picking

- ✓ Lowers area and, therefore, fixed costs
- × Increases the time needed to pick an SKU that was previously in a floor position

→

How many SKUs should be on the first floor?

Which ones?

As long as the gains are positive, it pays to have the SKU on level 0

To determine the SKUs to be placed on level 1, it is necessary to relate the cost of keeping the SKU on level 0 , and thereby increasing a rack, and the cost of picking a SKU that is on level 1.

Gains = Area Cost Saving per SKU – Cost of level 1 per order

Area SKU level 0 = Pallet Area = 1,2 x 0,8 = 0,96 m^2

Cost of area per 2 weeks = 15/2 = 7,5€/ m^2

Area cost saving per SKU = 7,5 x 0,96 = 7,20 €/SKU

To calculate this cost, a scenario was defined, where SKUs with a **demand of less than 6** were placed on level 1 (115 SKUs)

As long as the gains are positive, it pays-off to have the SKU on level 0

To determine the SKUs to be placed on level 1, it is necessary to relate the cost of keeping the SKU on level 0 , and thereby increasing a rack, and the cost of picking a SKU that is on level 1.

Gains = Area Cost Saving per SKU [1] – Cost of level 1 per order [2]

1

Area SKU level 0 = Pallet Area = 1,2 x 0,8 = 0,96 m^2

Cost of area per 2 weeks = 15/2 = 7,5€/ m^2

Area cost saving per SKU = 7,5 x 0,96 = 7,20 €/SKU

2

To calculate this cost, a scenario was defined, where SKUs with a **demand of less than 6** were placed on level 1 (115 SKUs)

SKUs that cause a gain by moving to level 1 are those with demand lower than 4 during the 2 weeks in analysis

	Scenario Level 0	Scenario Level 1
Forklift Cost	-	4 266,15 €
Transportation Cost	46 008,00 €	46 008,00 €
Replenish Cost	9 009,45 €	8 776,17 €

$$\frac{\Delta Forklift\ Costs + \Delta Transportation\ Cost + \Delta Replenish\ Cost}{\text{Total Orders (level1)}}$$

2,01 € / per Order

By calculating the Forklift Cost per order, we can obtain for each SKU group, grouped by demand, the economic savings if this group occupies a level1 position

SKUs Demand	Total Saving
1	5,19 €
2	3,18 €
3	1,16 €
4	-0,85 €

As for the group of SKUs with a demand of 4 every 2 weeks it is possible to derive that **savings will be generated if SKUs up to 3 of demand occupy a level1** position. Corresponding to 78 SKUs.

The best optimization is by distributing 76 SKUs per aisle, the total area being 29 137 euros

No. SKU / Aisles	Racks	Left	W	L	Storage Area	Storage Cost
72	17	67	75,00	9,00 €	48,03	63,07 €
73	17	50	76,00	9,00 €	48,03	63,87 €
65	19	56	68,00	10,00 €	53,5	57,47 €
76	16	75	79,00	9,00 €	46,83	66,27 €

Considering that the number of **racks cannot be less than 16**, so as not to distort the warehouse dimensions, the option which optimizes the use of the racks has been selected. Thus, the ideal warehouse will have **17 aisles with 79 places per rack (76 SKUs + 3 free spaces) and 77 SKUs on level 1,** removed 1 to ensure better optimization . These SKUs will remain within their classified zone according to their BU weight sequence and are only on the level 1 shelf.

	Level 0 Layout [5]	Level 1 Layout [6]
Total Variable Cost	75 534 €	76 222,65 €
Storage Cost	27 236,91 €	23 872,11 €
Total Cost	**102 771,50 €**	**102 262,5 €**

The new layout will lead to annual savings of €12,216

Introducing picking by box

After finding the best layout configuration with level picking, we introduced picked by box to reduce even more the warehouse area

Assumptions:

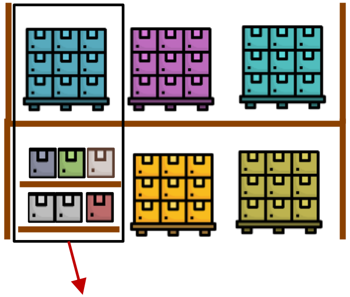
1. 1 cell = 1 pallet position, so if multiple SKUs are picked by box in the same pallet position, they are in the same position
2. The order in which the SKUs appear should not change from previous layout

Conditions for turning to pick by box:

A. The total quantity ordered of SKU for the 13 days must fit in less the half of the volume of a pallet so it never needs to be replenished

B. At least to SKUs in a row must follow condition A. (this means that if a certain sku fits in half the volume of pallet but the previous one or the next do not, then it is considered pick by pallet)

C. If condition B applies, then the sum of quantities must also fit half a volume, other wise it doesn't add (which means an SKU is not divided into different cells)



1 Cell
2 levels
1 sku level 2
5 skus level 1
(pick by box)

Sensitivity analysis of length-width combinations to fit all cells required with pick by box, 3 potential solutions reduced the number of storage racks by 10

Creating the new layout:

- **Algorithm**: iterate over SKUs order, check if SKU fits, check if last or next also fits, add quantities together, if qty fits in pallet (check by length < 0.8) the set SKUs into the same cell. Continue until no more SKUs fit in cell and move no next cell
- **Output**: array with SKUs and their respective cell number (which was afterwards turn to xy coordinates). Minimum number of cell was **1292** or 431 racks (each rack contains 3 cells)

Organizing the cells the best way possible:

1. Sensitivity analysis of wasted rack space to find number of racks in length and width
2. 3 options selected (very close results) and costs were calculated, to compare total costs (because distance change). -> best results in a table

	# Cells	# Racks
Solution	1294	432
Base	1326	442

Nec. Racks	431	Sensitivity Analysis																							
# Racks by:	X	20	21	22	23	**24**	25	26	**27**	28	29	30	31	32	33	34	35	**36**	37	38	39	40	41	42	43
	Y	22	21	20	19	**18**	18	17	**16**	16	15	15	14	14	14	13	13	**12**	12	12	12	11	11	11	11
	X*Y	440	441	440	437	**432**	450	442	**432**	448	435	450	434	448	462	442	455	**432**	444	456	468	440	451	462	473
	Dif	9	10	9	6	**1**	19	11	**1**	17	4	19	3	17	31	11	24	**1**	13	25	37	9	20	31	42

Although total cost reduces for a scenario due to reduced storage costs, variable costs tend to increase, mostly because of increased distance

Result	7 (Base)	8 (Pick By Box 1)	9 (Pick By Box 2)	10 (Pick by box 3)
Pallets Necessary	5790	5663	5790	5790
Trips Necessary	3171	3112	3171	3171
Distance Traveled (m)	917673,5	1319979,5	1354817,9	1328720,9
Picker Cost (€)	21262,23	21996,74	22285,00	22024,47
Forklift Picker Cost (€)	6783,33	6948,33	7476,64	7193,32
Repleneshing Cost (Forklift) (€)	10808,12	10740,12	13287,95	11521,22
Transportation Cost (€)	46320,00	45304,00	46320,00	46320,00
Total Cost (€)	78390,35	78040,86	81892,95	79865,69

	X	Y	Racks	Width (m)	Length (m)	Area (m2)	Storage cost (€)	Picking cost (€)	Total Cost (€)
7 (Base)	79	9	17	48,03	66,27	3182,95	23872,11	77337,51	101209,62
8 (Pick By Box 1)	75	9	18	49,23	62,40	3071,95	23039,64	78040,00	101079,64
9 (Pick By Box 2)	84	8	16	43,76	69,60	3045,70	22842,72	81892,95	104735,67
10 (Pick By Box 3	111	6	12	32,82	91,20	2993,18	22448,88	79865,69	102314,57

The low impact of picking by box might be due to the heavy restrictions imposed for the criteria to pick by box. By loosening those restrictions, we might be able to see higher impacts

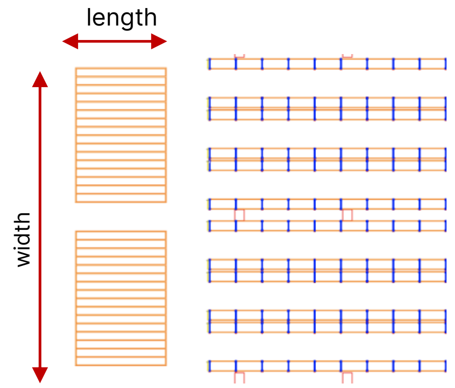
Dispatcher

The dispatch area is dependent on 3 main factors: # Pallets to ship in a day, # Stores to ship to, Shipping and preparation times

A. The dispatch area must be able to, at least hold the maximum pallets that ship at same time. This would require a shipping and preparation times analysis to find out what is the maximum number of pallets that are on the warehouse on any instant throughout the 2 weeks

B. We could also define the minimum area necessary as the maximum number of pallets shipped in a day (without considering shipping times). This would require joining multiple orders in a single line and/ or dividing orders into multiple lines while making sure that in same line there are not orders that ship at the same time and that all pallets form the same order are close together and finding an optimal value for length and width

C. Finally, we could set specific assumptions for the length (e.g. max number of pallets of a store) and/ or width (e.g. width of warehouse) of the dispatch area and distribute the pallets according to requirements in B without having to compute an optimization problem



Cost Calculator

Trips Table

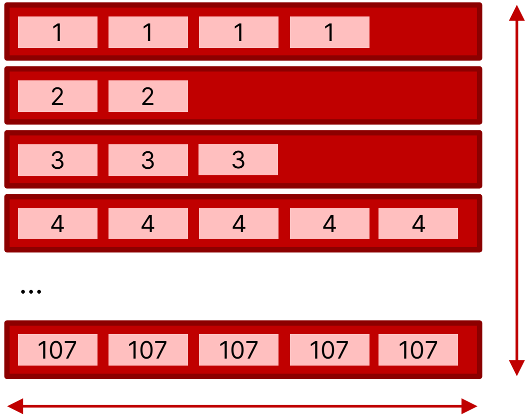
Order_ID	Day	Trip	Pallets	Time(h)	Trip Distance (m)
0	0	1	2	0.23	582
0	0	2	2	0.12	44
...					
1119	12	1	1	0.71	308

107
Max stores satisfied in a day

17
Max Pallets in an order

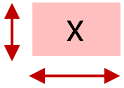
The dispatcher area needs 1746 m^2 if each dispatcher line only has pallets for one store

A **Assumption:** 1 line contains only one store, 1 store is only in 1 line



107 dispatcher lines
Max number of stores shipped in a day

17 pallets in each line
Max number of pallets shipped to a store in 1 day



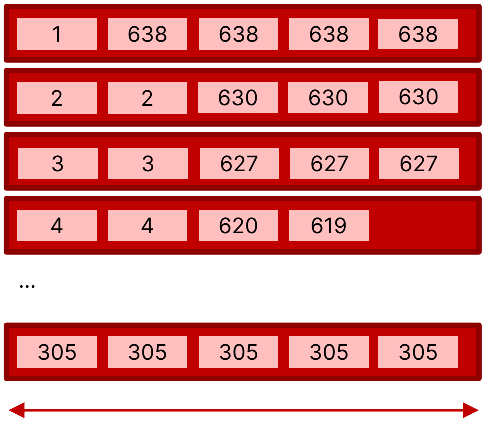
Pallet for store X

Total area = 107x0,8 + 17x1,2 =

1746.24 m^2

Joining orders for different stores in the same dispatcher line enables a consideable space saving

B **Assumption:** 1 store is only in 1 line, but 1 line can contain multiple stores only if the shipping time of those stores is not the same (to prevent bottlenecks)



17 pallets in each line
Max number of pallets shipped to a store in 1 day

64 dispatcher lines

Algorithm:

1. Sort orders for a specific day by number of pallets (ascending)
2. Try to join the order with less pallets with the order with most pallets, and then the second most, etc.
3. Iterate over each other until all orders are iterated

0,8 m X 1,2 m — Pallet for order no. X (after sorting)

Total area = 64x0,8 + 17x1,2 =

1044.84 m^2

Previous value: 1746.24 m^2
Space saved: 701,4 m^2

↘ **40%**

The previous configuration is very restricted and cause a lot of wasted space, so further iterations would be necessary

1. Set maximum dispatch width as overall layout width and find minimum length possible so every pallet shipped in a day fits. This would mean letting 1 line have multiple stores (if they don't have the same shipping time, and letting a store be in multiple lines (if they are side by side)
2. Run the previous algorithm but considering the maximum number of pallets that are simultaneously on the dispatch area (instead of using the highest number of pallets shipped in a day)
3. Create optimization algorithm to find best width-length configuration to minimize area

Service level

To determine the number of workers needed for a certain service level, some assumptions had to be made

Assumptions:

- Orders always arrive by 6 PM on the day indicated
- They are fulfilled on the delivery closest to the order day (for this it is necessary to understand the shipping time)
- Orders for a given day start to be prepared at 6 PM the previous day
- On each day only orders are prepared for the same day or the following day (so they don't work on from the 6 PM of Saturday to the 6 PM of Sunday)
- The warehouse has 3 possible shifts (8 hours each)
- To calculate the time per order it was considered one of the best scenarios

To achieve a service level of 100%, 8 workers are needed for 3 shifts

Goal: to have the minimum number of workers per shift that allows to satisfy all the orders in the necessary time

For this it was necessary to know how long each order takes to be done. After this, it is necessary to know how much total time per day is needed to satisfy those orders. Finally, this time should be divided by the number of workers, obtaining the optimal number of workers per shift

#Workers per shift	5	6	7	8
#Orders not satisfied	110	39	5	0
Service level	90,2%	96,5%	99,6%	100,0%

Number of workers per shift: **8**
Total number of workers: **8 x 3 = 24**

Extra: part-time solutions can be explored to reduce idle time

Final solution

Final solution costs 114 327€ and it includes mixed organization, 1st level picking and pick by box

Warehouse characteristics:

- Corridor length: 63,2m (76 pallets + 1 passage)
- Number of corridors: 9
- Dispatch width: 66,54m (64 lines + 5 corridors)
- Dispatch line length: 20,4m (17 pallets)
- Mixed organization (BU & weight)
- 1st level picking
- Pick by box

Dispatch area	13 247€
Storage area	23 040€
Picking	78 040€
TOTAL	114 327€

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Risks & mitigation strategy

Risks associated with layout or order execution can be solved by improved worker management

Impact Assessment	Risk to Manage	Likelihood of Occurring	Mitigation Strategy
Low	Organizing by BU may take too much time to organize at an early stage	>60%	Define a team and a planned schedule for this, with initial training for those involved
Medium	Having 3 shifts can influence workers' productivity/welfare	30-60%	Implement part-time workers and productivity bonuses - work by objective
High	Picking on the second level can lead to a higher risk of falling products	<30%	Put only experienced workers doing picking on the second level or only put non-fragile products on the second level
Medium	All workers starting at the same point can create congestion	30-60%	Put different starting points based on dispatch zone or route requirements
Low	There are pallets in the dispatch area without separation aisles, which can make shipping more difficult	30-60%	Experience internal HR and legal professional to identify possible issues and define and implement a precise plan for managing these cases

Thank you!

Questions?

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