

# **BI Project Proposal**

## **Recognize the business problem**

Given that Business Analysis is the framework for identifying, clarifying and developing solutions to an organizational problem, therefore given the context of Mr. Michel's situation we need an action plan in which the management of different steps will be necessary to propose a solution, we will study and precisely analyze the data. It is critically important to understand the problem faced by the store in order to provide recommendations that can address the needs of the company and use our skills in data analysis to find corresponding solutions.

### **●The business problem**

The problem of the company is: should Mr. Michel continue with the sale of tomatoes or not? That is, is the business profitable or not according to its current mode of operation. As a group of Data Analysts we will analyze the data of the first three months in order to propose to Mr. Michel the best possible answer for this question.

### **●The problem significance to the organization**

Mr. Michel has invested in his store to sell tomatoes for which he has identified a demand. The essence of any investment is the search for maximum profit, taking into account the constraints resulting from the demand and the perimage of the products. It is therefore very important for Michele to find the best strategy that can help him eliminate his probable losses and increase his profit to the maximum.

## **Research the organization**

To do our job well as a data analyst and propose the best possible solution, we need the key elements of the store :

### **●The objective of the organization**

L'objectif principal de de Michèle est de faire du profit le maximum possible. Par la, il essaie tout de même de répondre aux besoins de sa communauté de tomates.

### **●The values of the organization**

Au-delà de la recherche du profit, Michele semble honnête dans la vente de ses produits, il refuse de vendre ces produits périmés alors qu'il fait des pertes exagérées. C'est très important et ce sera pris en compte dans nos analyses et recommandations.

### **●Other organizations the organization interacts with**

Michele interacts en tres grande partie avec son fournisseur qui lui livre les produits regulierement.

### **●How does the organization measure success**

Michel's measure of success is knowing the information about whether or not to stop trading tomatoes. for his son, it is likely to be complying with his father's measure

The measure of success for the supplier could be continuing to do business with Michael.

## **Identify your client**

The problem was identified by Mr Michel the owner and he told his son about it but nothing was done to deal with it.

The solution will be proposed to the son of Mr. Michel. The customer is concerned about his orders of tomato paste. For the last three months the business owner has made no profit on the tomato paste cans. That is the reason why he went and talked to his son about it.

He measures success especially through the benefits. He has come to understand that he was heading in the wrong direction. He expected us to provide him with the best solution to remedy this situation and increase his profits.

### **•Who are the relevant stakeholders**

The people who are really affected by the problem:

- a) Michel the shop owner
- b) Michel's son (the client)
- c) The suppliers
- c) The customers

### **Identifying other relevant stakeholders**

The stakeholders who are impacted by the problem are the owners (Michel and his son), the supplier, and the customers. All of them will be affected by the decision to continue or not to sell tomato paste. The owners are the most concerned about the problem; they want to know if the selling of tomatoes is beneficial to them and how to maximize their profit. The suppliers are also concerned by the problem because the decision of reducing or increasing the amount of tomato will affect their income. They would not like to lose Michel as a client. Finally, the consumers are concerned because they buy the tomato paste from Michel. The increase or decrease in the offered amount will impact the prices and therefore, their consumption and their welfare.

- What authority or power does each stakeholder have?
- How is the business problem affecting the stakeholder?

## **5. Conceptual Model**

A partir des données recueillies au cours des 3 derniers mois, on a effectué des analyses pour comprendre la vente et le roulement du stock dans la boutique pour les tomates. On a réalisé une sorte de diagnostic pour la période donnée.

Models help to explain the context that the business problem is occurring within. Models are used by the analyst to help clarify their understanding of the problem and communicate their understanding to others.

This step is iterative, the analyst should return to the client and organization to validate the conceptual model.

Conceptual Models should include the following information:

- Identify the problem
- Identify the stakeholders
- Identify relationships between stakeholders

SWOT Methodology

Strengths - Identify strengths within the system.

Knowledge, resources, location, or timing.

Weaknesses - Identify weaknesses within the system.

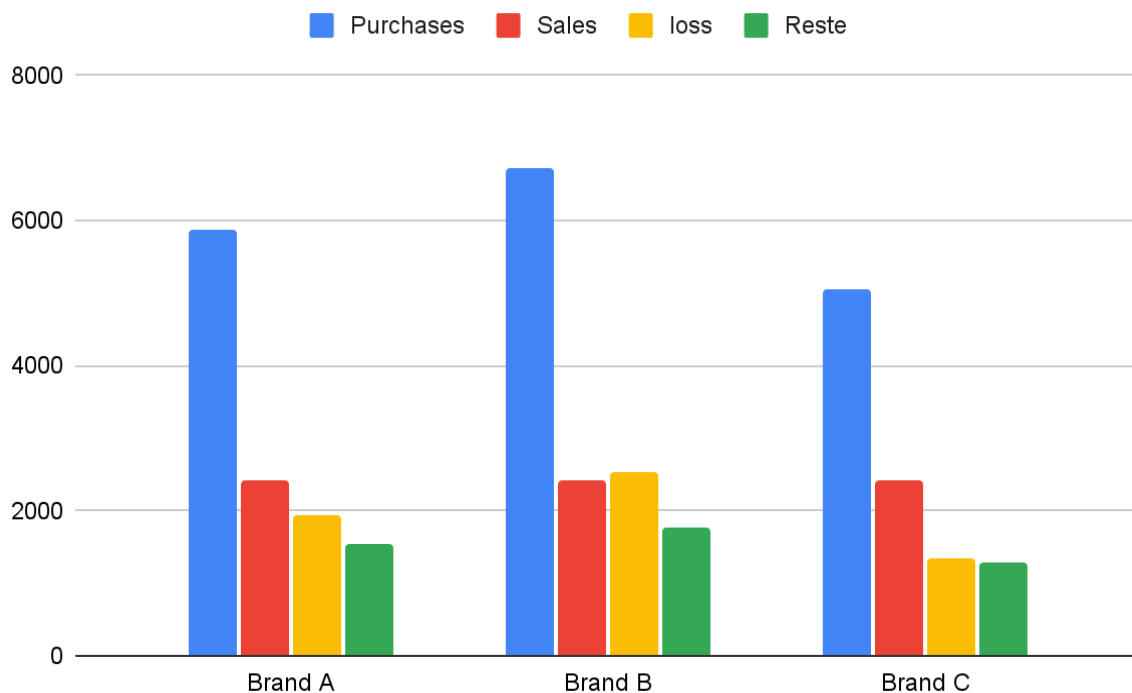
Lack of information, missing tools, or deadline.

Opportunities - Events which can help generate value from the system or improve the system.

Threats - Events which can deteriorate or reduce the value of the system.

## **Results**

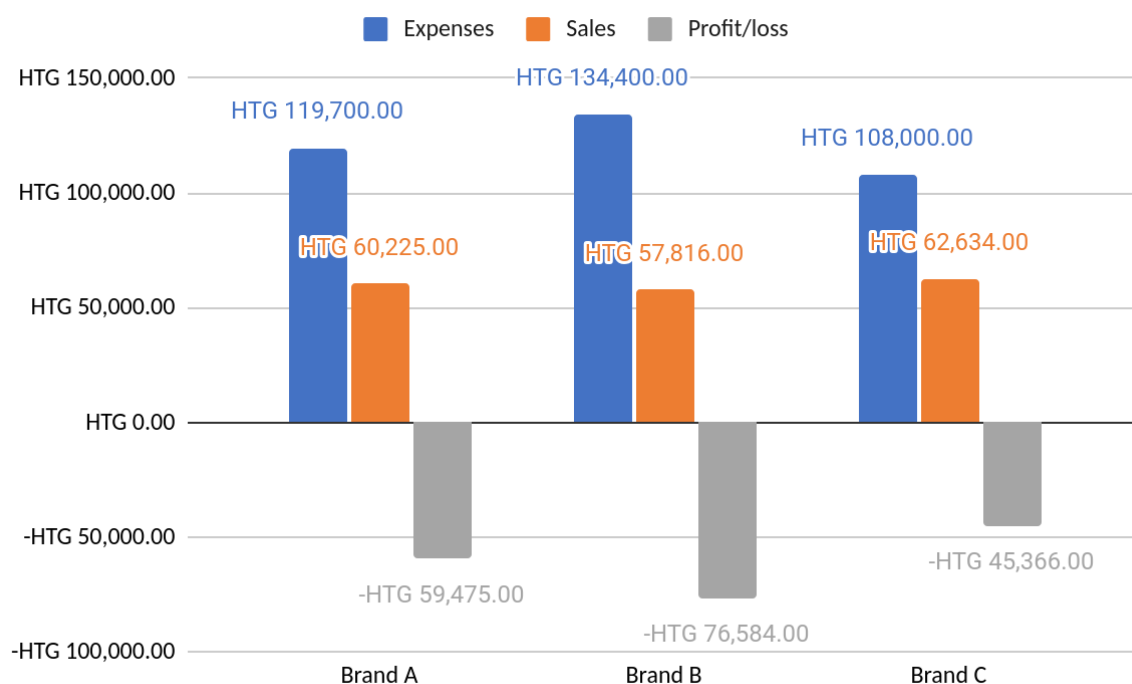
A partir des données recueillies au cours des 3 derniers mois, on a effectué des analyses pour comprendre la vente et le roulement du stock dans la boutique pour les tomates. On a réalisé une sorte de diagnostic pour la période donnée. Le graphique ci dessous donne une idée claire des achats, ventes, pertes et le reste de tomates.



On observe que la quantité vendue de chaque Brand approche plus ou moins la quantité perdue. Pour les trois, il n'arrive à écouler que 40,9% de ses achats. On arrive même à constater que la quantité vendue est inférieure à celle perdue pour la Brand B.

Ces pertes sont énormes.

On a procédé à l'évaluation des pertes par Brand, et le résultat trouvé et présenté par le prochain graphique est catastrophique.

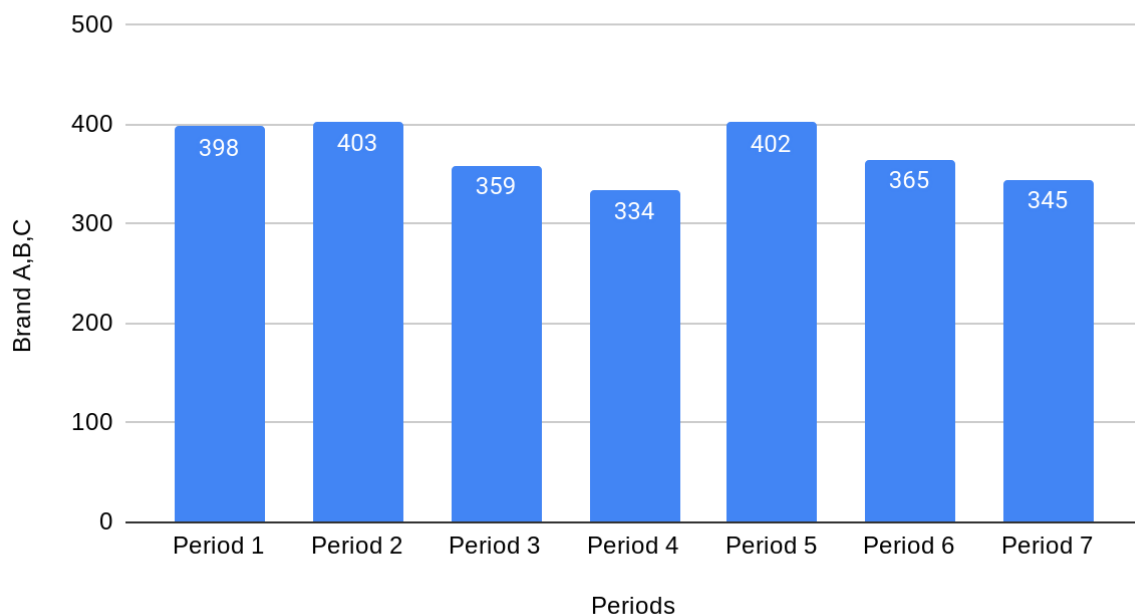


Sur tous les 3 mois, la boutique enregistre une perte de plus de 59 000 gourdes pour le Brand A, d'environ 76 500 pour la Brand B et de 45 336 gourdes pour la C.

La structure de la demande devra beaucoup nous renseigner sur la préférence des clients de Michèle par rapport à chaque Brand de tomates

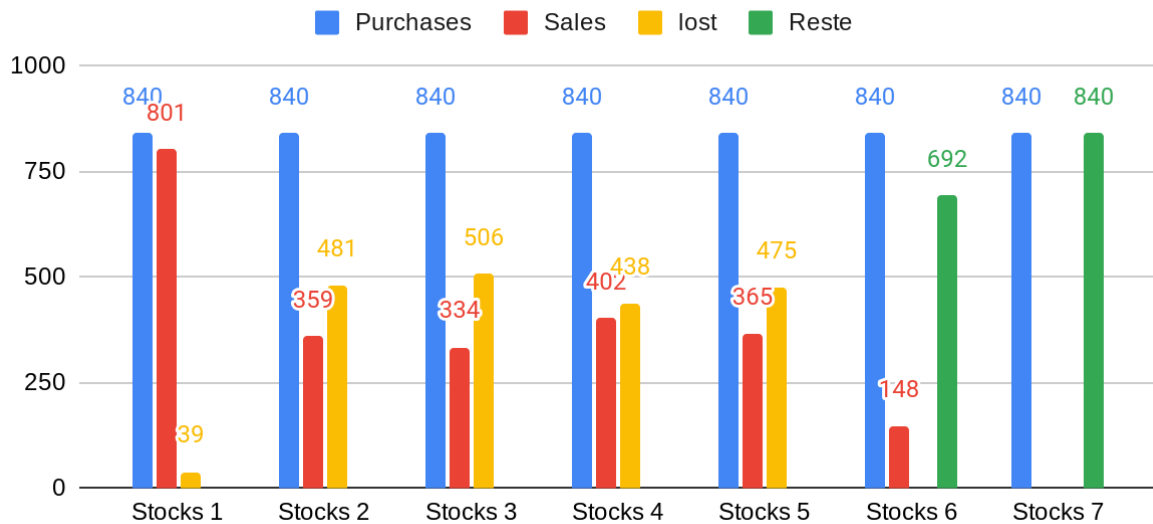
Nous découvrons que Michele vend pour Chaque Brand tous les jours la meme quantite. C'est difficile de faire ressortir une tendance à partir des ventes quotidiennes, néanmoins, on a pu constater une décroissance moyenne des ventes de 1% .

Sales cans per Periods



Le graphique susmentionné présente les ventes pour chaque période fixe selon la date des commandes, la quantité de canettes vendues ne dépasse pas 403 pour une période. Or Michele fait régulièrement des commandes de 840, 960 et 720 pour respectivement B et C.

Il a l'obligation de vendre ses produits avant la fin du mois, sinon il ne pourra plus les vendre. Cette contrainte engendre des conséquences que Michèle devra subir profondément, le graphique suivant en est une illustration de taille pour la Brand A.

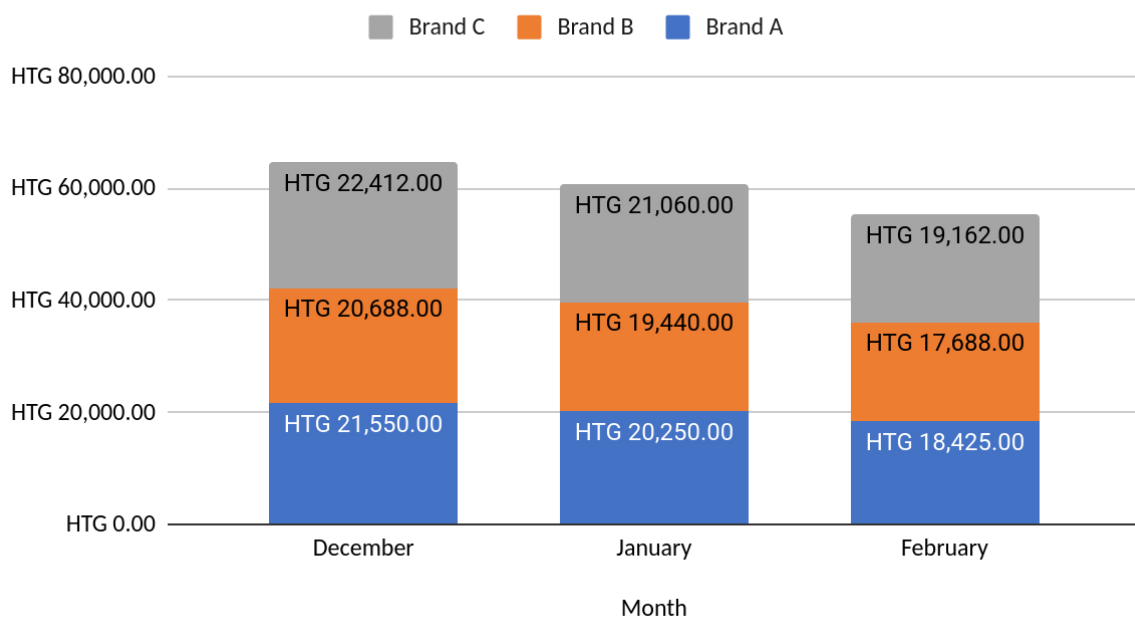


A partir du graphe présente en haut, on voit que les pertes sont a chaque fois superieure aux ventes puisque Michele n'attend pas la fin du stock pour en commander un autre alors que ces produits ne resistent plus apres 1 moi. Les deux dernieres commandes en sont des exemples, alors qu'il lui reste 692 cannetes de tomates a vendre, il decide tout de meme d'augmenter son stock 840 de. En fin de compte, la seule commande qui lui est rentable est la premiere. Ce qui ne répond à aucune logique de management.

Une analyse comme celle ci est faite pour chaque Brand séparément et on comprend que le roulement des stocks est mal fait.

En plus du stock qui est mal géré, la vente diminue progressivement.

Amount of sales by Month and Brand



Pour la Brand C, la vente est passée de 22 412 gourdes à 19 162 gourdes, soit une baisse d'un peu moins de 5%. On peut toutefois remarquer que malgré cette baisse, Michele ne fait pas varier ses commandes. Il en est de même pour la Brand B dont les ventes passent de 20 688 gourdes à 17 688 gourdes. Pour la Brand A, de 21 450 à 18 425 gourdes.

La demande est en train de baisser continuellement, il faut une réponse qui puisse adapter les commandes et le stock à la nouvelle dynamique du marché.

## **Develop Alternative Solutions**

### **1. Solution 1**

La boutique de Michele enregistre des pertes sur pratiquement toutes les commandes, il n'arrive jamais à faire écouler ses produits. Pour les deux dernières commandes dont les produits n'expirent pas encore, nous recommandons une liquidation des canettes pour au plus le prix d'achat.

Cette solutions permet de réduire les per

Once the problem is understood, the analyst should define the requirements that must be fulfilled to address the problem. With defined requirements, the analyst should work with the client and other key stakeholders to brainstorm potential solutions that meet the requirements that have been defined. The analyst should try to identify the value created to the various stakeholders by each proposed solution.

Potential Solutions should include:

- How does the solution address the problem
- Cost to implement the solution
- Who will be affected by the solution
- Timeframe to implement the solution
- Risks in deployment of the solution

### **7. Present the solutions**

Once the solutions have been sufficiently developed with the client and key stakeholders, the analyst

must present the solutions to the organization. The analyst should use the information gathered in each

step to provide the organization with further information regarding the business problem. It is important

to note

the analyst is not the decision maker

and should provide all the information effectively for the organization to make a decision.

Key aspects of the presentation:

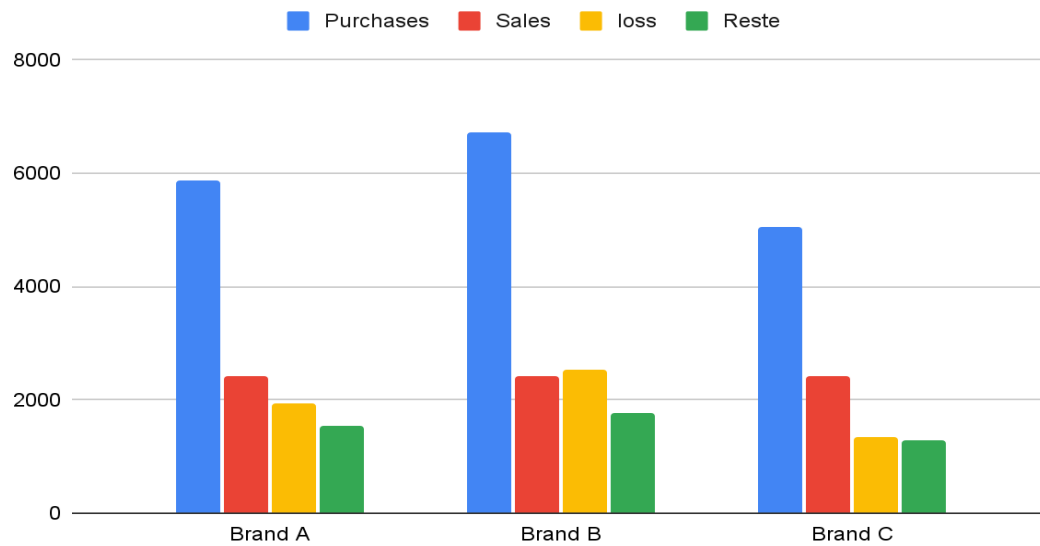
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Clarify the business problem

- 

Identify all the relevant stakeholders

- 
- Definition of solution requirements
- 
- Proposal of solution alternatives and the necessary information regarding those solutions





count	Date	Day	Month
1	02/12/2019	lundi	2 décembre
2	03/12/2019	mardi	3 décembre
3	04/12/2019	mercredi	4 décembre
4	05/12/2019	jeudi	5 décembre
5	06/12/2019	vendredi	6 décembre
6	07/12/2019	samedi	7 décembre
7	08/12/2019	dimanche	8 décembre
8	09/12/2019	lundi	9 décembre
9	10/12/2019	mardi	10 décembre
10	11/12/2019	mercredi	11 décembre
11	12/12/2019	jeudi	12 décembre
12	13/12/2019	vendredi	13 décembre
13	14/12/2019	samedi	14 décembre
14	15/12/2019	dimanche	15 décembre
15	16/12/2019	lundi	16 décembre
16	17/12/2019	mardi	17 décembre
17	18/12/2019	mercredi	18 décembre
18	19/12/2019	jeudi	19 décembre
19	20/12/2019	vendredi	20 décembre
20	21/12/2019	samedi	21 décembre
21	22/12/2019	dimanche	22 décembre
22	23/12/2019	lundi	23 décembre
23	24/12/2019	mardi	24 décembre
24	25/12/2019	mercredi	25 décembre
25	26/12/2019	jeudi	26 décembre
26	27/12/2019	vendredi	27 décembre
27	28/12/2019	samedi	28 décembre
28	29/12/2019	dimanche	29 décembre
29	30/12/2019	lundi	30 décembre
30	31/12/2019	mardi	31 décembre
31	01/01/2020	mercredi	1 janvier
32	02/01/2020	jeudi	2 janvier
33	03/01/2020	vendredi	3 janvier
34	04/01/2020	samedi	4 janvier
35	05/01/2020	dimanche	5 janvier
36	06/01/2020	lundi	6 janvier
37	07/01/2020	mardi	7 janvier
38	08/01/2020	mercredi	8 janvier
39	09/01/2020	jeudi	9 janvier
40	10/01/2020	vendredi	10 janvier
41	11/01/2020	samedi	11 janvier
42	12/01/2020	dimanche	12 janvier
43	13/01/2020	lundi	13 janvier
44	14/01/2020	mardi	14 janvier
45	15/01/2020	mercredi	15 janvier
46	16/01/2020	jeudi	16 janvier
47	17/01/2020	vendredi	17 janvier
48	18/01/2020	samedi	18 janvier
49	19/01/2020	dimanche	19 janvier
50	20/01/2020	lundi	20 janvier
51	21/01/2020	mardi	21 janvier
52	22/01/2020	mercredi	22 janvier
53	23/01/2020	jeudi	23 janvier

54	24/01/2020	vendredi	24 janvier
55	25/01/2020	samedi	25 janvier
56	26/01/2020	dimanche	26 janvier
57	27/01/2020	lundi	27 janvier
58	28/01/2020	mardi	28 janvier
59	29/01/2020	mercredi	29 janvier
60	30/01/2020	jeudi	30 janvier
61	31/01/2020	vendredi	31 janvier
62	01/02/2020	samedi	1 février
63	02/02/2020	dimanche	2 février
64	03/02/2020	lundi	3 février
65	04/02/2020	mardi	4 février
66	05/02/2020	mercredi	5 février
67	06/02/2020	jeudi	6 février
68	07/02/2020	vendredi	7 février
69	08/02/2020	samedi	8 février
70	09/02/2020	dimanche	9 février
71	10/02/2020	lundi	10 février
72	11/02/2020	mardi	11 février
73	12/02/2020	mercredi	12 février
74	13/02/2020	jeudi	13 février
75	14/02/2020	vendredi	14 février
76	15/02/2020	samedi	15 février
77	16/02/2020	dimanche	16 février
78	17/02/2020	lundi	17 février
79	18/02/2020	mardi	18 février
80	19/02/2020	mercredi	19 février
81	20/02/2020	jeudi	20 février
82	21/02/2020	vendredi	21 février
83	22/02/2020	samedi	22 février
84	23/02/2020	dimanche	23 février
85	24/02/2020	lundi	24 février
86	25/02/2020	mardi	25 février
87	26/02/2020	mercredi	26 février
88	27/02/2020	jeudi	27 février
89	28/02/2020	vendredi	28 février
90	29/02/2020	samedi	29 février

J'ai decoupe les donnees en 3 periodes de 30 jours tout en tenant compte des achants toutes

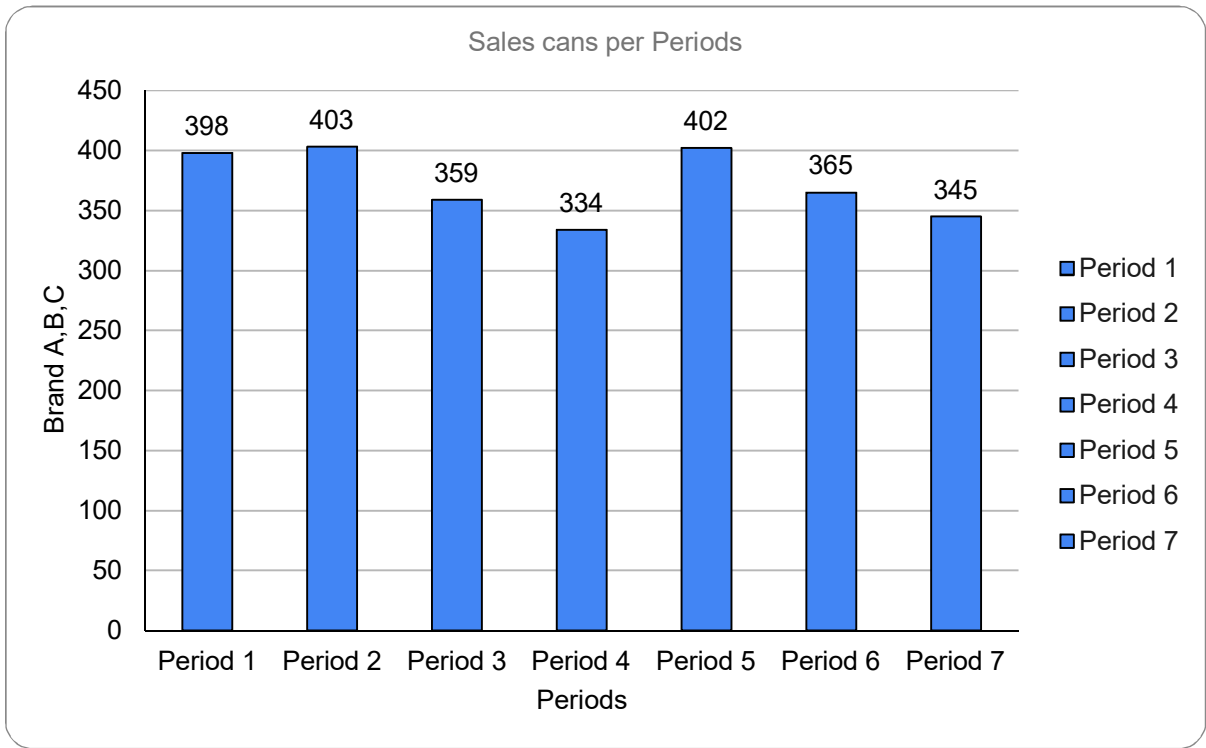
Brand	Purchases	Sales
A	840	398
B	960	398
C	720	398

Brand
A
B
C

Brand	Purchases	Sales	Brand
A		840	A
B		960	B
C		720	C

Brand	Purchases	Sales
A	840	148
B	960	148
C	720	148

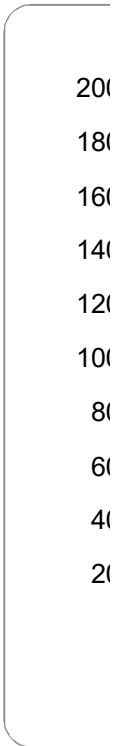
Periods	Brand A	Brand B	Brand C	Trend
Period 1	398	398	398	398
Period 2	403	403	403	403 0.012562814
Period 3	359	359	359	359 -0.109181141
Period 4	334	334	334	334 -0.069637883
Period 5	402	402	402	402 0.203592814
Period 6	365	365	365	365 -0.092039801
Period 7	345	345	345	345 -0.054794521
Total				-0.01824962



Brand A

Stocks	Purchases	Sales	lost	Reste
Stocks 1	840	801	39	
Stocks 2	840	359	481	
Stocks 3	840	334	506	
Stocks 4	840	402	438	
Stocks 5	840	365	475	
Stocks 6	840	148		
Stocks 7	840			
		0		

692  
840



Stocks	Purchases	Sales	lost	Rest	
Stock 1	720	720	0		
Stock 2	720	440	280		
Stock 3	720	334	386		
Stock 4	720	402	318		
Stock 5	720	365	355		
Stock 6	720	148		572	572
Stock 7	720			720	720
	0				

Date	Purchases	Sales	Reste	
2/12/2019	840	398		
16/12/2019	840	403	437	
30/12/2019	840	359	39	
13/01/2020	840	334	481	
27/01/2019	840	402	506	
10/02/2020	840	365	438	
24/02/2020	840	148	475	
29/02/2020	0		692	

	Quantity of cans	Price of purchases	Sales
Brand A	862	20472.5	21550
Brand B	810	18900	19440
Brand C	737	18425	19162
Total			

	Purchases	Price of purchases	Price of sales
Brand A			
Brand B			
Brand C			

	Purchases	Price of purchases	Price of sales
Brand A			
Brand B			
Brand C			

	Sales	lost	Sales amount
Decembre			
Janvier			
Fevrier			

	Orders	orders amount
Brand A	5880	139650
Brand B	6720	156777.6
Brand C	5040	

Stocks	Purchases	Sales	lost	Reste
Stock 1	960	801	159	
Stock 2	960	359	601	
Stock 3	960	334	626	
Stock 4	960	402	558	
Stock 5	960	365	595	
Stock 6	960	148		812
Stock 7	960			960

Brand	Trend	Quantity of cans
A		24
A	0.958333333	47
A	-0.680851064	15
A	-0.533333333	7
A	2.428571429	24
A	1.291666667	55
A	-0.636363636	20
A	1.2	44
A	-0.363636364	28
A	0.035714286	29
A	-0.689655172	9
A	2.777777778	34
A	-0.382352941	21
A	0.952380952	41
A	0.317073171	54
A	-0.111111111	48
A	0.083333333	52
A	-0.673076923	17
A	-0.411764706	10
A	1.3	23
A	-0.043478261	22
A	0.681818182	37
A	0.243243243	46
A	-0.652173913	16
A	0.9375	31
A	0.096774194	34
A	-0.794117647	7
A	-0.142857143	6
A	1.666666667	16
A	1.8125	45
A	-0.8	9
A	0.111111111	10
A	-0.2	8
A	2.625	29
A	0.586206897	46
A	-0.391304348	28
A	-0.357142857	18
A	0.833333333	33
A	-0.303030303	23
A	1.173913043	50
A	-0.88	6
A	5.333333333	38
A	0.157894737	44
A	-0.931818182	3
A	8.333333333	28
A	-0.571428571	12
A	1.333333333	28
A	-0.535714286	13
A	0.307692308	17
A	-0.705882353	5
A	2.6	18
A	0.5	27
A	0.296296296	35



A	-0.114285714	31
A	0.064516129	33
A	0.212121212	40
A	0.225	49
A	0.102040816	54
A	-0.074074074	50
A	-0.7	15
A	-0.333333333	10
A	3.3	43
A	-0.674418605	14
A	0.142857143	16
A	1.3125	37
A	-0.486486486	19
A	0.157894737	22
A	-0.363636364	14
A	-0.357142857	9
A	4.555555556	50
A	-0.74	13
A	-0.538461538	6
A	-0.5	3
A	5	18
A	1.666666667	48
A	-0.145833333	41
A	0.341463415	55
A	-0.309090909	38
A	-0.868421053	5
A	7	40
A	-0.575	17
A	-0.058823529	16
A	0.8125	29
A	0.24137931	36
A	-0.111111111	32
A	0.03125	33
A	-0.575757576	14
A	1.142857143	30
A	0.2	36
A	-0.916666667	3
	0.530896256	

Sales

403  
403  
403

Sales

402  
402  
402

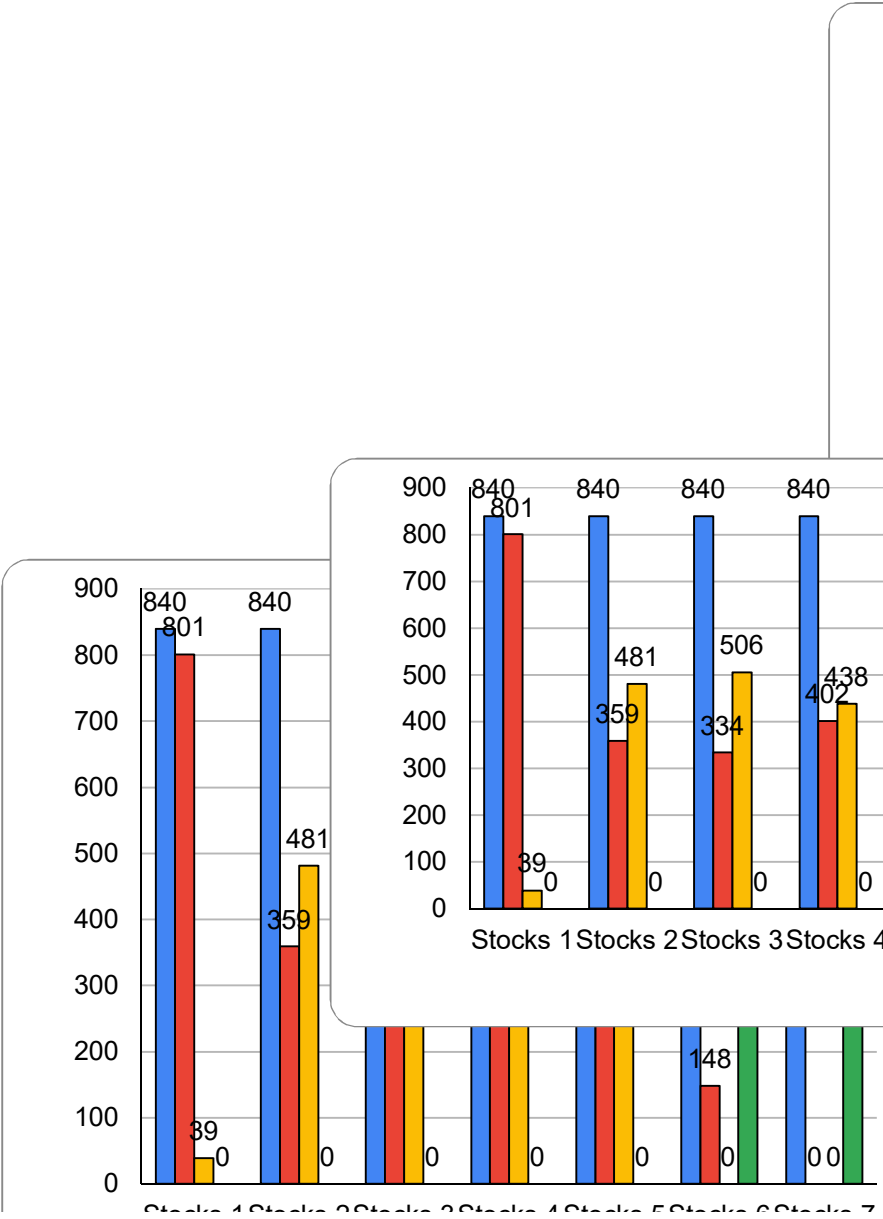
Date	Purchases	Sales	Brand A	
			Reste	
2/12/2019	840			
16/12/2019	840	398	442	
30/12/2019	840	403	39	
13/01/2020	840	359	481	
27/01/2019	840	334	506	
10/02/2020	840	402	438	
24/02/2020	840	365	475	
29/02/2020	0	148	692	

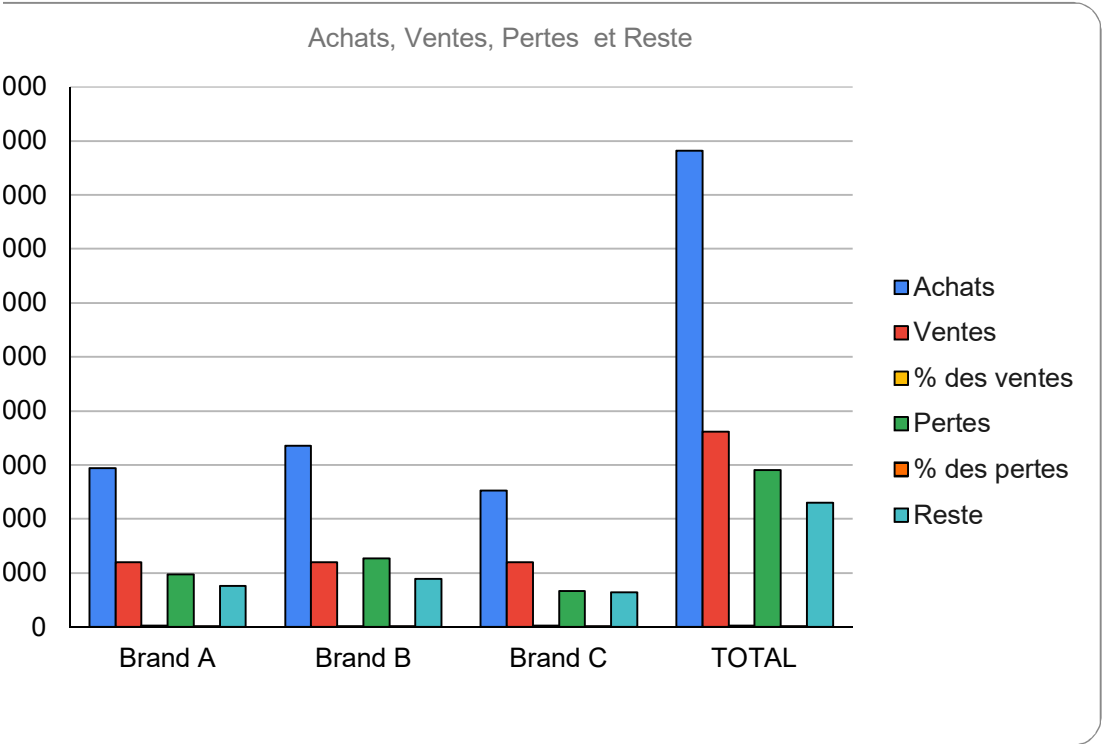
Date	Purchases	Sales	Brand C	
			Reste	
2/12/2019	720			
16/12/2019	720	398	322	
30/12/2019	720	403	317	
13/01/2020	720	359	361	
27/01/2019	720	334	386	
10/02/2020	720	402	318	
24/02/2020	720	365	355	
29/02/2020	0	148	572	
			720	

Date	Purchases	Sales	Brand B	
			Reste	
2/12/2019	960			
16/12/2019	960	398	562	
30/12/2019	960	403	159	
13/01/2020	960	359	601	
27/01/2019	960	334	626	
10/02/2020	960	402	558	
24/02/2020	960	365	595	
29/02/2020	960	148	812	
			960	

Brand	Achats	Ventes	% des ventes	Pertes	% des pertes
Brand A	5880	2409	40.96938776	1939	32.97619048
Brand B	6720	2409	35.84821429	2539	37.7827381
Brand C	5040	2409	47.79761905	1339	26.56746032
TOTAL	17640	7227	40.96938776	5817	32.97619048

0.409693878  
0.409693878





Gate	Jrs restants	
	-81	
	280	
	386	
	318	
	355	
	572	10
	720	24

loss	Jrs restants	
		0
		0
	78	0
	506	0
	438	0
	475	0
	692	0
	840 Expire dans 10 jrs	

loss	cost of loss	benefits	reste	PAchat A	PAchat B
	39	926.25			23.75 23.33333333
				Ben A	Ben B
					1.25 0.666666667

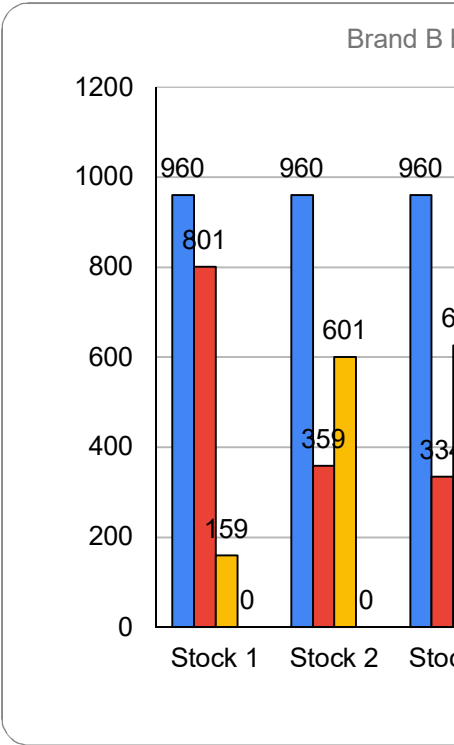
loss	cost of loss	benefits	reste
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loss	cost of loss	benefits	reste
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lost amount

sales	sales amount
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Gate	Jrs restants
	0
	0
159	0
601	0
626	0
558	0
595	0
960	Expire dans 24 jrs



Price	Sales	Brand	Quantity of cans	Price
24.0	576.0	B	24	26.00
24.0	1,128.0	B	47	26.00
24.0	360.0	B	15	26.00
24.0	168.0	B	7	26.00
24.0	576.0	B	24	26.00
24.0	1,320.0	B	55	26.00
24.0	480.0	B	20	26.00
24.0	1,056.0	B	44	26.00
24.0	672.0	B	28	26.00
24.0	696.0	B	29	26.00
24.0	216.0	B	9	26.00
24.0	816.0	B	34	26.00
24.0	504.0	B	21	26.00
24.0	984.0	B	41	26.00
24.0	1,296.0	B	54	26.00
24.0	1,152.0	B	48	26.00
24.0	1,248.0	B	52	26.00
24.0	408.0	B	17	26.00
24.0	240.0	B	10	26.00
24.0	552.0	B	23	26.00
24.0	528.0	B	22	26.00
24.0	888.0	B	37	26.00
24.0	1,104.0	B	46	26.00
24.0	384.0	B	16	26.00
24.0	744.0	B	31	26.00
24.0	816.0	B	34	26.00
24.0	168.0	B	7	26.00
24.0	144.0	B	6	26.00
24.0	384.0	B	16	26.00
24.0	1,080.0	B	45	26.00
24.0	216.0	B	9	26.00
24.0	240.0	B	10	26.00
24.0	192.0	B	8	26.00
24.0	696.0	B	29	26.00
24.0	1,104.0	B	46	26.00
24.0	672.0	B	28	26.00
24.0	432.0	B	18	26.00
24.0	792.0	B	33	26.00
24.0	552.0	B	23	26.00
24.0	1,200.0	B	50	26.00
24.0	144.0	B	6	26.00
24.0	912.0	B	38	26.00
24.0	1,056.0	B	44	26.00
24.0	72.0	B	3	26.00
24.0	672.0	B	28	26.00
24.0	288.0	B	12	26.00
24.0	672.0	B	28	26.00
24.0	312.0	B	13	26.00
24.0	408.0	B	17	26.00
24.0	120.0	B	5	26.00
24.0	432.0	B	18	26.00
24.0	648.0	B	27	26.00
24.0	840.0	B	35	26.00

24.0	744.0	B	31 26.00
24.0	792.0	B	33 26.00
24.0	960.0	B	40 26.00
24.0	1,176.0	B	49 26.00
24.0	1,296.0	B	54 26.00
24.0	1,200.0	B	50 26.00
24.0	360.0	B	15 26.00
24.0	240.0	B	10 26.00
24.0	1,032.0	B	43 26.00
24.0	336.0	B	14 26.00
24.0	384.0	B	16 26.00
24.0	888.0	B	37 26.00
24.0	456.0	B	19 26.00
24.0	528.0	B	22 26.00
24.0	336.0	B	14 26.00
24.0	216.0	B	9 26.00
24.0	1,200.0	B	50 26.00
24.0	312.0	B	13 26.00
24.0	144.0	B	6 26.00
24.0	72.0	B	3 26.00
24.0	432.0	B	18 26.00
24.0	1,152.0	B	48 26.00
24.0	984.0	B	41 26.00
24.0	1,320.0	B	55 26.00
24.0	912.0	B	38 26.00
24.0	120.0	B	5 26.00
24.0	960.0	B	40 26.00
24.0	408.0	B	17 26.00
24.0	384.0	B	16 26.00
24.0	696.0	B	29 26.00
24.0	864.0	B	36 26.00
24.0	768.0	B	32 26.00
24.0	792.0	B	33 26.00
24.0	336.0	B	14 26.00
24.0	720.0	B	30 26.00
24.0	864.0	B	36 26.00
24.0	72.0	B	3 26.00
	57,816.0		2409

Brand	Purchases	Sales	
A		840	359
B		960	359
C		720	359



Brand	Purchases	Sales	
A		840	365
B		960	365
C		720	365

loss	Jrs restants	
		0
		0
39		0
481		0
506		0
438		0
475		0
692	Expire dans 10 jrs	
840	Expire dans 24 jrs	

	Sales means	Sales means Box	Per n
A	803	33.45833333	
B	803	33.45833333	
C	803	33.45833333	

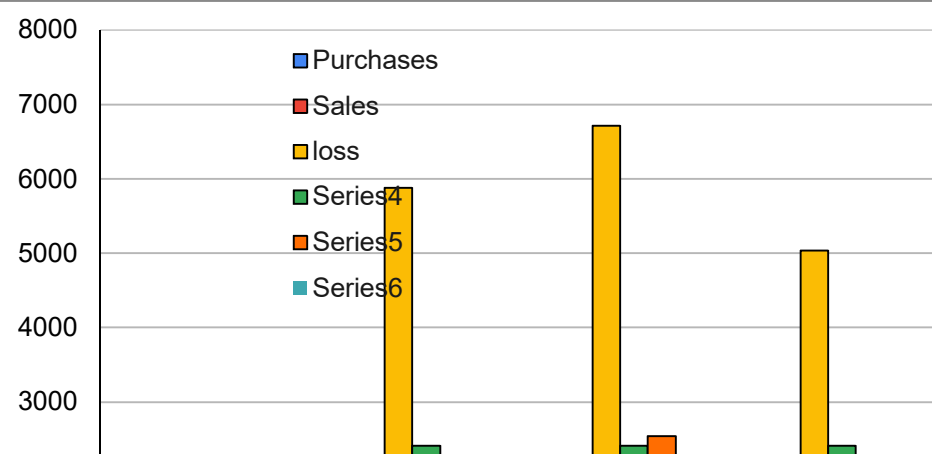
Gate	Jrs restants	
-81		
280		
386		
318		
355		
572	10	
720	24	

	Quantity loss per mo
Decembre	
A	39
B	159
C	0
Total	198

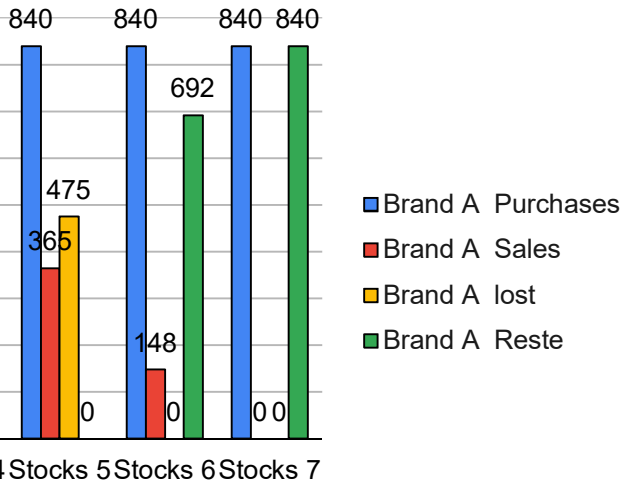
Gate	Jrs restants	
		0
		0
159		0
601		0
626		0
558		0
595		0
812	Expire dans 10 jrs	
960	Expire dans 24 jrs	

Reste	% du reste	Somm
1532	26.05442177	100
1772	26.36904762	100
1292	25.63492063	100
4596	26.05442177	100

0.25  
0.2  
0.15  
0.1

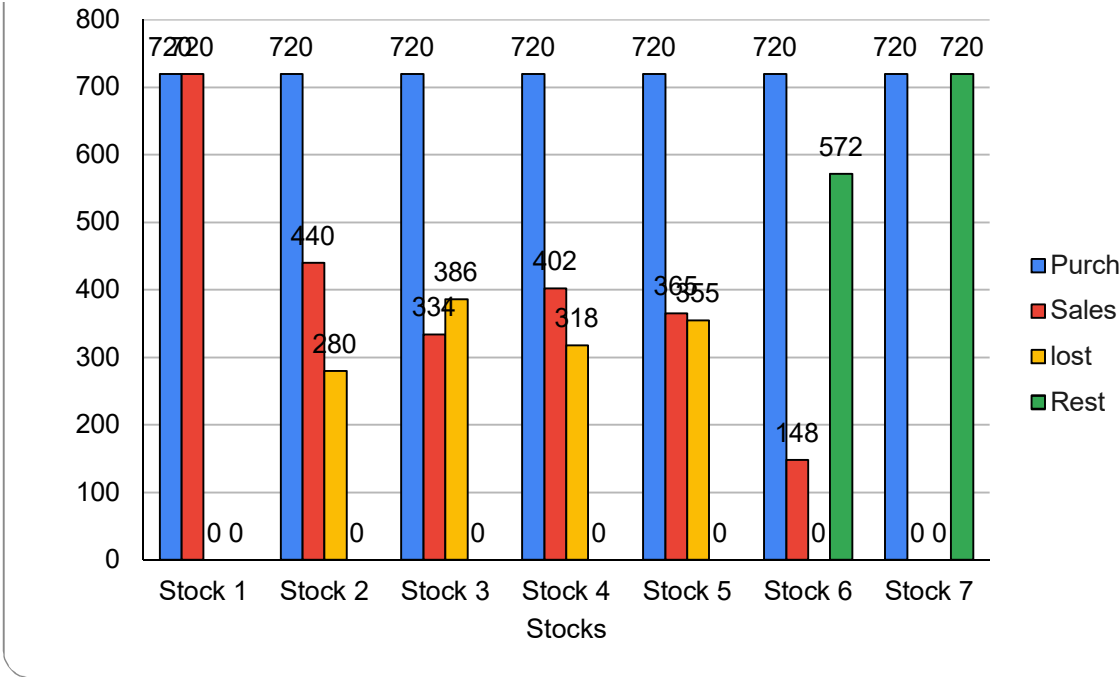


Period 1 Period 2



1 Stocks 5 Stocks 6 Stocks 7





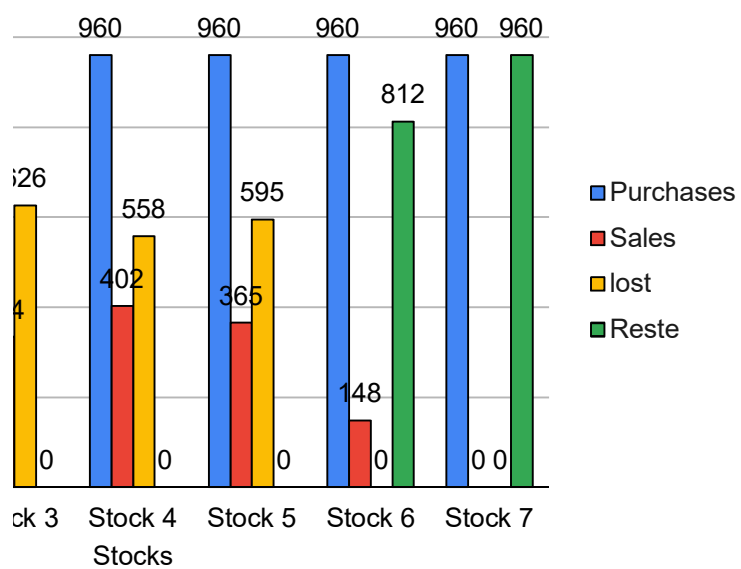
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Ben C

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by Purchases, Sales, lost et Reste



Sales	Brand	verif	CommandeA	StockA	COM1	
624.00	C	#NAME?		840	816	816
1,222.00	C	#NAME?		0	769	769
390.00	C	#NAME?		0	754	754
182.00	C	#NAME?		0	747	747
624.00	C	#NAME?		0	723	723
1,430.00	C	#NAME?		0	668	668
520.00	C	#NAME?		0	648	648
1,144.00	C	#NAME?		0	604	604
728.00	C	#NAME?		0	576	576
754.00	C	#NAME?		0	547	547
234.00	C	#NAME?		0	538	538
884.00	C	#NAME?		0	504	504
546.00	C	#NAME?		0	483	483
1,066.00	C	#NAME?		0	442	442
1,404.00	C	#NAME?		840	1228	388
1,248.00	C	#NAME?		0	1180	340
1,352.00	C	#NAME?		0	1128	288
442.00	C	#NAME?		0	1111	271
260.00	C	#NAME?		0	1101	261
598.00	C	#NAME?		0	1078	238
572.00	C	#NAME?		0	1056	216
962.00	C	#NAME?		0	1019	179
1,196.00	C	#NAME?		0	973	133
416.00	C	#NAME?		0	957	117
806.00	C	#NAME?		0	926	86
884.00	C	#NAME?		0	892	52
182.00	C	#NAME?		0	885	45
156.00	C	#NAME?		0	879	39
416.00	C	#NAME?		840	1703	23
1,170.00	C	#NAME?		0	1658	-22
234.00	C	#NAME?		0	1649	-31
260.00	C	#NAME?		0	1639	-41
208.00	C	#NAME?		0	1631	-49
754.00	C	#NAME?		0	1602	-78
1,196.00	C	#NAME?		0	1556	-124
728.00	C	#NAME?		0	1528	-152
468.00	C	#NAME?		0	1510	-170
858.00	C	#NAME?		0	1477	-203
598.00	C	#NAME?		0	1454	-226
1,300.00	C	#NAME?		0	1404	-276
156.00	C	#NAME?		0	1398	-282
988.00	C	#NAME?		0	1360	-320
1,144.00	C	#NAME?		840	2156	-364
78.00	C	#NAME?		0	2153	-367
728.00	C	#NAME?		0	2125	-395
312.00	C	#NAME?		0	2113	-407
728.00	C	#NAME?		0	2085	-435
338.00	C	#NAME?		0	2072	-448
442.00	C	#NAME?		0	2055	-465
130.00	C	#NAME?		0	2050	-470
468.00	C	#NAME?		0	2032	-488
702.00	C	#NAME?		0	2005	-515
910.00	C	#NAME?		0	1970	-550

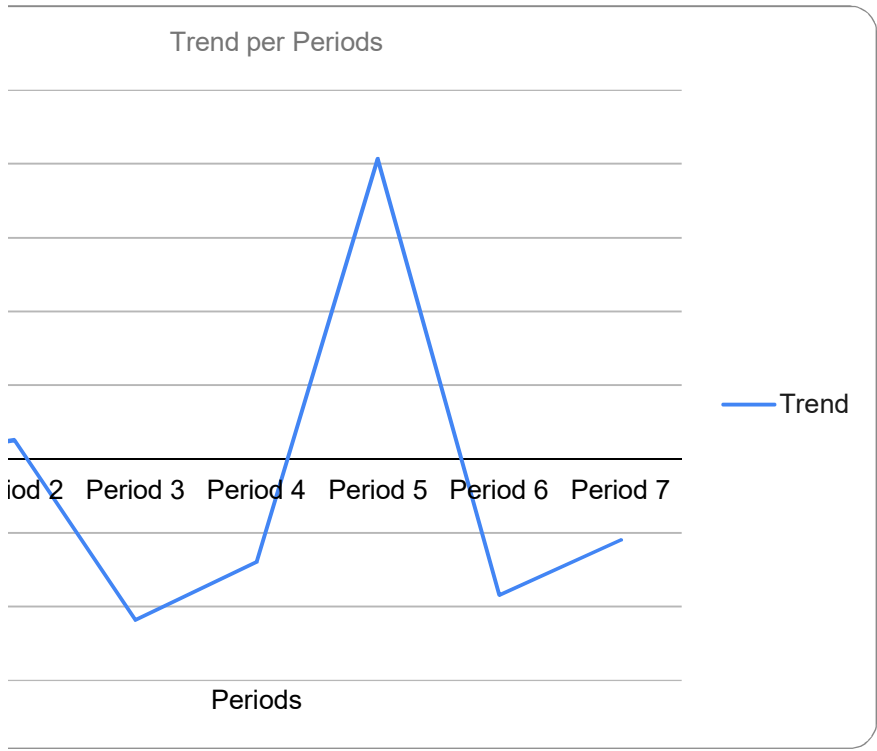
806.00	C	#NAME?	0	1939	-581
858.00	C	#NAME?	0	1906	-614
1,040.00	C	#NAME?	0	1866	-654
1,274.00	C	#NAME?	840	2657	-703
1,404.00	C	#NAME?	0	2603	-757
1,300.00	C	#NAME?	0	2553	-807
390.00	C	#NAME?	0	2538	-822
260.00	C	#NAME?	0	2528	-832
1,118.00	C	#NAME?	0	2485	-875
364.00	C	#NAME?	0	2471	-889
416.00	C	#NAME?	0	2455	-905
962.00	C	#NAME?	0	2418	-942
494.00	C	#NAME?	0	2399	-961
572.00	C	#NAME?	0	2377	-983
364.00	C	#NAME?	0	2363	-997
234.00	C	#NAME?	0	2354	-1006
1,300.00	C	#NAME?	0	2304	-1056
338.00	C	#NAME?	840	3131	-1069
156.00	C	#NAME?	0	3125	-1075
78.00	C	#NAME?	0	3122	-1078
468.00	C	#NAME?	0	3104	-1096
1,248.00	C	#NAME?	0	3056	-1144
1,066.00	C	#NAME?	0	3015	-1185
1,430.00	C	#NAME?	0	2960	-1240
988.00	C	#NAME?	0	2922	-1278
130.00	C	#NAME?	0	2917	-1283
1,040.00	C	#NAME?	0	2877	-1323
442.00	C	#NAME?	0	2860	-1340
416.00	C	#NAME?	0	2844	-1356
754.00	C	#NAME?	0	2815	-1385
936.00	C	#NAME?	0	2779	-1421
832.00	C	#NAME?	840	3587	-1453
858.00	C	#NAME?	0	3554	-1486
364.00	C	#NAME?	0	3540	-1500
780.00	C	#NAME?	0	3510	-1530
936.00	C	#NAME?	0	3474	-1566
78.00	C	#NAME?	0	3471	-1569
62,634.0				0	
				0	
				0	

nonth

Order	Order box	order price	lost price	QEC	QEC Cans
1680	70	39900	15350.41667	13.18844259	336
1920	80	44800	19744.95667	12.3219109	312
1440	60	36000	11158.33333	14.69327932	360

nth					Total
Janvier	Fevrier		lost price		
987	913	1939	15350.41667		
1227	1153	2539	19744.95667		
666	673	1339	11158.33333		
2880	2739	5817			







ases



COM2

Com3

COM4

COM5

COM6

COM7



818  
809  
799  
791  
762  
716  
688  
670  
637  
614  
564  
558  
520



473  
445  
433  
405  
392  
375  
370  
352  
325  
290

828  
816  
788  
775  
758  
753  
735  
708

259	673			
226	642			
186	609			
137	569			
83	520			
33	466			
18	416	825		
8	401	815		
-35	391	772		
-49	348	758		
-65	334	742		
-102	318	705		
-121	281	686		
-143	262	664		
-157	240	650		
-166	226	641		
-216	217	591		
-229	167	578		
-235	154	572		
-238	148	569		
-256	145	551	822	
-304	127	503	774	
-345	79	462	733	
-400	38	407	678	
-438	-17	369	640	
-443	-55	364	635	
-483	-60	324	595	
-500	-100	307	578	
-516	-117	291	562	
-545	-133	262	533	
-581	-162	226	497	
-613	-198	194	465	
-646	-230	161	432	
-660	-263	147	418	
-690	-277	117	388	810
-726	-307	81	352	774
-729	-343	78	349	771

2409













CommandeB	StockA	CommandeB	StockB
960	936	720	696
0	912	0	649
0	865	0	634
0	850	0	627
0	843	0	603
0	819	0	548
0	764	0	528
0	744	0	484
0	700	0	456
0	672	0	427
0	643	0	418
0	634	0	384
0	600	0	363
0	579	0	322
960	1498	720	988
0	1444	0	940
0	1396	0	888
0	1344	0	871
0	1327	0	861
0	1317	0	838
0	1294	0	816
0	1272	0	779
0	1235	0	733
0	1189	0	717
0	1173	0	686
0	1142	0	652
0	1108	0	645
0	1101	0	639
960	2055	720	1343
0	2039	0	1298
0	1994	0	1289
0	1985	0	1279
0	1975	0	1271
0	1967	0	1242
0	1938	0	1196
0	1892	0	1168
0	1864	0	1150
0	1846	0	1117
0	1813	0	1094
0	1790	0	1044
0	1740	0	1038
0	1734	0	1000
960	2656	720	1676
0	2612	0	1673
0	2609	0	1645
0	2581	0	1633
0	2569	0	1605
0	2541	0	1592
0	2528	0	1575
0	2511	0	1570
0	2506	0	1552
0	2488	0	1525
0	2461	0	1490

0	2426	0	1459
0	2395	0	1426
0	2362	0	1386
960	3282	720	2057
0	3233	0	2003
0	3179	0	1953
0	3129	0	1938
0	3114	0	1928
0	3104	0	1885
0	3061	0	1871
0	3047	0	1855
0	3031	0	1818
0	2994	0	1799
0	2975	0	1777
0	2953	0	1763
0	2939	0	1754
0	2930	0	1704
960	3840	720	2411
0	3827	0	2405
0	3821	0	2402
0	3818	0	2384
0	3800	0	2336
0	3752	0	2295
0	3711	0	2240
0	3656	0	2202
0	3618	0	2197
0	3613	0	2157
0	3573	0	2140
0	3556	0	2124
0	3540	0	2095
0	3511	0	2059
960	4435	720	2747
0	4403	0	2714
0	4370	0	2700
0	4356	0	2670
0	4326	0	2634
0	4290	0	2631













Brand	Qa	Qv	rejet	restant
a		5,880.00	2409	
b		6,720.00	2409	
c		5,040.00	2409	



\_\_\_\_\_

\_\_\_\_\_

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# DESCRIBING THE PROBLEM

❑ WHAT IS THE BUSINESS PROBLEM?

❑ WHO ARE THE STAKEHOLDERS IMPACTED BY THE PROBLEM?

❑ WHY IS THIS PROBLEM IMPORTANT TO THE ORGANIZATION?



# ❏ WHAT IS THE BUSINESS PROBLEM?

- THE CLIENT'S POINT OF VIEW : SHOULD THE BUSINESS OWNER CONTINUE TO SELL TOMATO PASTE OR NOT ?
- OUR UNDERSTANDING : WHAT CAN BE DONE TO ENSURE PROFIT AND AVOID THE CURRENT SYSTEMATIC LOSS.

# □ WHO ARE THE STAKEHOLDERS IMPACTED BY THE PROBLEM?

- 1) MICHEL (BOUTIQUE OWNER)
- 2) HIS SON (WHO IS ASKED SOME PIECES OF ADVICE)
- 3) THE CONSUMER (WHO BUY THE TOMATO PASTE)
- 4) THE SUPPLIERS (THE PRODUCER, THE DELIVERY GUY)



## ❑ WHY IS THIS PROBLEM IMPORTANT TO THE ORGANIZATION?

- THIS PROBLEM IS IMPORTANT TO THE ORGANIZATION BECAUSE IT IS AFFECTING THE ORGANIZATION PROFIT NEGATIVELY.
- MR. MICHEL HAS INVESTED IN HIS STORE IN ORDER TO SELL TOMATOES
- IT IS THREATENING THE ORGANIZATION EXISTENCE

# METHODOLOGY USED FOR THE ANALYSIS



❑ METHODS, DATA SOURCES, AND CHOICE OF VARIABLES.

❑ HOW THEY WILL HELP ADDRESSING THE PROBLEM.

# METHODS, DATA SOURCES AND CHOICE OF VARIABLES.

WE HAVE USED A DATA SET THAT CONTAINS THE SALES RECORDING OF THE LAST THREE MONTHS.

- WE USED THE FIRST-IN-FIRST-OUT METHOD, ALL INVENTORY CALCULATIONS WERE DONE USING THIS METHOD.
- MICROSOFT EXCEL IS THE MAIN SOFTWARE USED TO PROCESS AND ANALYZE THE DATA.
- A DIAGNOSIS OF THE SALES IS MADE FOR THE 3 MONTHS.
- WE HAVE DIVIDED THE 3 MONTHS INTO 7 PERIODS, EACH OF WHICH STARTS WITH THE DATE OF AN ORDER. MONTHLY ANALYSES HAVE BEEN MADE ON THE SALES TO UNDERSTAND THE PROFITS/LOSSES ACCORDING TO THE BRANDS.



## HOW THEY WILL HELP ADDRESSING THE PROBLEM.

THE METHOD OF FIRST ENTRY AND FIRST EXIT ALLOWS US TO CHECK THE QUANTITY OF TOMATOES SOLD, LOST OR REMAINING FOR EACH ORDER. IT ALSO ALLOWED US TO SEE IF THE ORDER WAS REALLY NECESSARY AND TO EVALUATE THE PROFIT OR LOSS OF THE STORE.

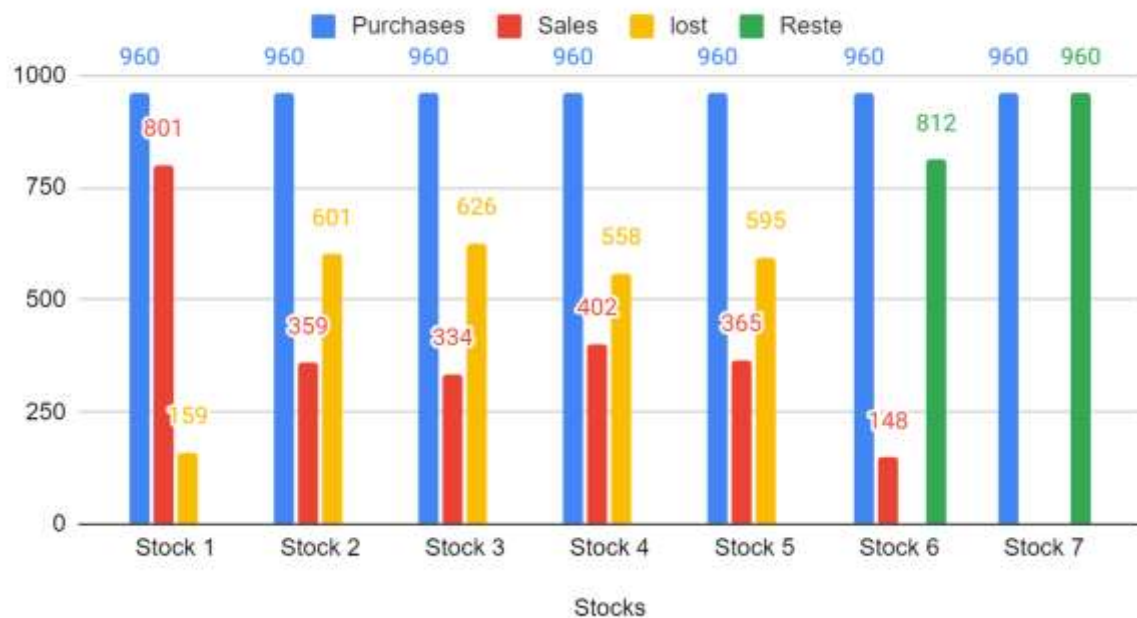
# SUMMARIZING THE RESULTS





- It can be seen that the quantity sold for each brand is more or less the same as the quantity lost. For the three brands, he manages to sell only 40.9% of his purchases. We can even see that the quantity sold is less than the quantity lost for Brand B. These losses are enormous.

Brand B by Purchases, Sales, lost et Reste



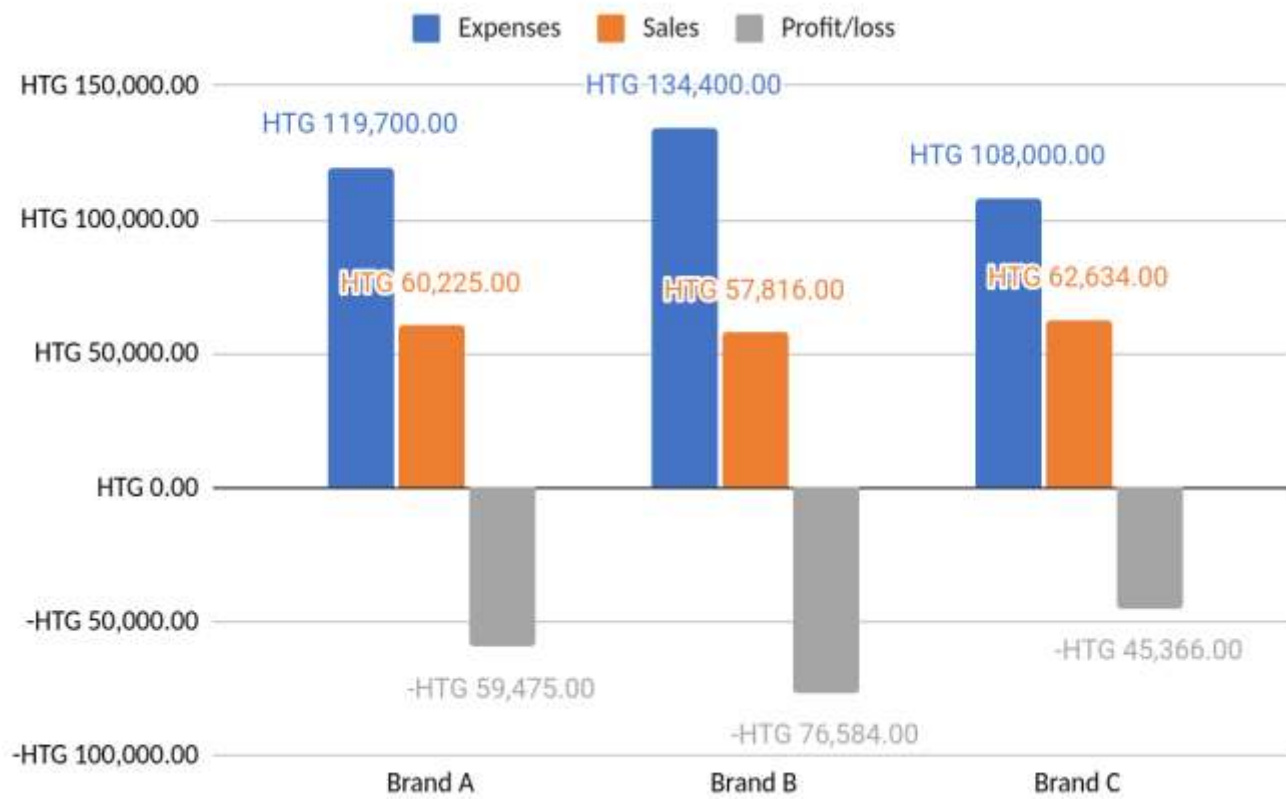
Brand C by Purchases, Sales, lost et Reste



WE OBSERVE THE SAME THIN FROM A IN B

The observation is almost the same for brand C except that generally the total sales volume is higher than the volume of lost goods, which is a positive thing in itself. However the problem of buying the merchandise too often persists. And that plays a great role in the general problem the boutique is facing.





THE ABOVE CHART SHOWS THE SALES FOR EACH FIXED PERIOD ACCORDING TO THE DATE OF THE ORDERS, THE QUANTITY OF CANS SOLD DOES NOT EXCEED 403 FOR ANY PERIOD. HOWEVER, MICHELE REGULARLY PLACES ORDERS FOR 840, 960 AND 720 FOR B AND C RESPECTIVELY.

HE IS OBLIGED TO SELL HIS PRODUCTS BEFORE THE END OF THE MONTH, OTHERWISE HE WILL NOT BE ABLE TO SELL THEM. THIS CONSTRAINT CREATES CONSEQUENCES THAT MICHELE WILL HAVE TO SUFFER DEEPLY, THE FOLLOWING GRAPH IS A GOOD ILLUSTRATION FOR BRAND A.



Paste tomato-A  
Purchases, Sales, Lost, Stock.

- FROM THE GRAPH ABOVE, WE CAN SEE THAT THE LOSSES ARE SYSTEMATICALLY HIGHER THAN THE SALES SINCE MICHELE DOES NOT WAIT FOR THE END OF THE STOCK TO ORDER ANOTHER ONE. HOWEVER THE PRODUCTS EXPIRE AFTER 1 MONTH. WHILE THERE WERE 692 REMAINING CANS OF TOMATOES, HE DECIDED TO INCREASE HIS STOCK BY 840 CANS. IN THE END, THE ONLY ORDER THAT IS PROFITABLE FOR HIM IS THE FIRST ONE. THIS DOES NOT CORRESPOND TO ANY MANAGEMENT LOGIC.



## Amount of sales by Month and Brand



- FOR BRAND C, THE SALE WENT FROM 22,412 GOURDES TO 19,162 GOURDES, A DECREASE OF JUST UNDER 5%. HOWEVER, DESPITE THIS DROP, MICHELE DID NOT VARY HIS ORDERS. THE SAME IS TRUE FOR BRAND B, WHERE SALES HAVE DROPPED FROM 20,688 GOURDES TO 17,688 GOURDES. THE DEMAND IS CONTINUOUSLY DECREASING, AND A RESPONSE IS NEEDED TO ADAPT THE ORDERS AND THE STOCK TO THE NEW MARKET DYNAMICS

# PROPOSED SOLUTIONS



❑ WHAT IS YOUR PROPOSED SOLUTION?

❑ WHAT ARE STRENGTHS OF THE ORGANIZATION THAT YOU HAVE LEVERAGED IN YOUR SOLUTION?

❑ WHAT ARE WEAKNESSES OF THE ORGANIZATION THAT COULD UNDERMINE YOUR SOLUTION?

❑ WHAT ARE CHALLENGES THAT YOU MIGHT ENCOUNTER? HOW CAN YOU MITIGATE THEM?

## SOLUTION 1

- 1) LIQUIDATE THE REMAINING PRODUCTS IN ORDER TO AVOID THE POTENTIAL LOSS.
- 2) REDUCE THE AMOUNT OF TOMATO PASTE ORDERED.
- 3) ORDER TOMATO PASTE MONTHLY INSTEAD OF BI-WEEKLY.



# WHAT ARE STRENGTHS/WEAKNESS OF THE ORGANIZATION THAT CAN INFLUENCE THE SOLUTION

STRENGTH: THIS SOLUTION WILL ALLOW MICHEL TO REDUCE HIS LOSSES AUTOMATICALLY AND SOOTH THEIR RHYTHM, BY ATTEMPTING TO MAKE AT LEAST ZERO PROFITS ON HIS LAST STOCKS INSTEAD OF NEGATIVE PROFITS.

WEAKNESS: THE CLIENTS MIGHT STILL NOT WANT TO PLACE MORE ORDERS AS THE PRICE OF LIQUIDATION IS SET AT THE COST OF ACQUISITION

## WHAT ARE CHALLENGES THAT YOU MIGHT ENCOUNTER? HOW CAN YOU MITIGATE THEM?

- TIME (HOW LONG?): THIS SOLUTION WILL TAKE, AT MOST, ONE MONTH TO COMPLETE, SINCE THE TOMATO PASTE HE HAS IN STOCK CANNOT BE SOLD AT ALL AFTER ONE MONTH.
- EXPECTED COST FOR IMPLEMENTING THE SOLUTION: MICHEL WILL HAVE TO WAIT AT MOST ONE MONTH. HE WILL NOT SPEND ANY MORE MONEY TO GET THE SOLUTION IMPLEMENTED, AND HE WON'T HAVE TO HIRE ANY SPECIAL NEW STAFF TO LIQUIDATE THE PRODUCTS FOR HIM.



## SOLUTION 2

- ANOTHER SOLUTION TO THE PROBLEM CONSISTS OF RUNNING A MARKET ANALYSIS TO UNDERSTAND THE DEMAND FOR TOMATO PASTE.

THE MARKET ANALYSIS WILL HELP HIM UNDERSTAND HIS COMPETITION, UNDERSTAND HIS CLIENTS BETTER, GATHER MORE INFORMATION.

# STRENGTHS

- - *UNLIMITED STOCK OF PRODUCTS*
- - SALE DIFFERENT TOMATO BRANDS
- - REGULAR SUPPLYING



## ❑ WHAT ARE CHALLENGES THAT YOU MIGHT ENCOUNTER? HOW CAN YOU MITIGATE THEM?

- TO RUN THE MARKET ANALYSIS, THE BUSINESS OWNER NEEDS TO SPEND MONEY. HE MAY NOT BE INTERESTED IN THAT SOLUTION BECAUSE HE IS ALREADY LOOSING MONEY.

I WOULD ADVICE HIM TO CONSIDER THE MARKET SOLUTION AS AN INVESTMENT IN ORDER TO MAKE MORE MONEY IN HE FUTURE OR AVOID LOOSING MORE MONEY.

## PRESENTING TEAM MEMBERS

- KETENIE FLORE THÉNÉUS
- RAPHAEL MIKA BONY II ALEXANDRE
- WEDSANLEY JEAN PHILIPPE