



RMIT Business Analyst Champion Season 2

ROUND 1 CASE STUDY

Team Tên gì cũng được

Huỳnh Vân Anh

Nguyễn Hoàng Khôi

Nguyễn Đức Anh

Nguyễn Lê Khánh Nguyên



EXECUTIVE SUMMARY

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- The market is very competitive and **predicted to continue growing**.
- The players also embrace CSR values to generate more values for their stakeholders and the community surrounding

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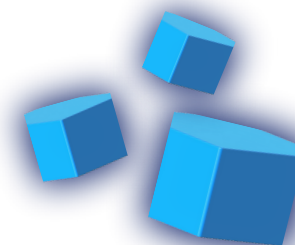
- Profit maximization for SP. Co is needed to improve financial performance and become competitive
- Since PET is company's popular choice for bottle production; the product packaging should conduct CSR practices to follow market trend
- Maximize operating cost

Q

- How SP. Co can maximize and yield more profit?
- How SP. Co can advance its position in Beverage Market?
- How SP. Co can generate sustainable values for consumers?

A

- Marketing solution: Sustainable product packaging; Campaign; Product experience
- Logistics solution: Apply lean manufacturing initiatives
- Finance solution: Optimal budget allocation



Vietnam's beverages market overview

+6%

Annual growth, the sector is the **major factor of Vietnam economy.**



1st

Highest total production of Vietnam's economy

Urban key cities

Rural



 YTD P5 2020
 YTD P5 2021

-2%**+2%****+6%****0%**

→ The market is very competitive and **predicted to continue growing.** The players also embrace CSR values to generate more values for their stakeholders and the community surrounding

Embracing CSR is the trends of FMCG industry



CHUNG TAY LÀM SẠCH BỜ BIỂN VIỆT NAM  **ĐỐI TÁC THỰC HIỆN**

MỤC TIÊU:

- ♦ Cải thiện tình trạng ô nhiễm môi trường thông qua hành động thiết thực.
- ♦ Tuyên truyền, nâng cao ý thức bảo vệ môi trường.



Từ 2019 - 2020, tổ chức 10 hoạt động, 28.8 tấn rác được thu gom



Gần 2.500 tình nguyện viên địa phương & Suntory PepsiCo tham gia



CỦ CỎ MĂNG CỎ KHÔNG MĂNG CỎ



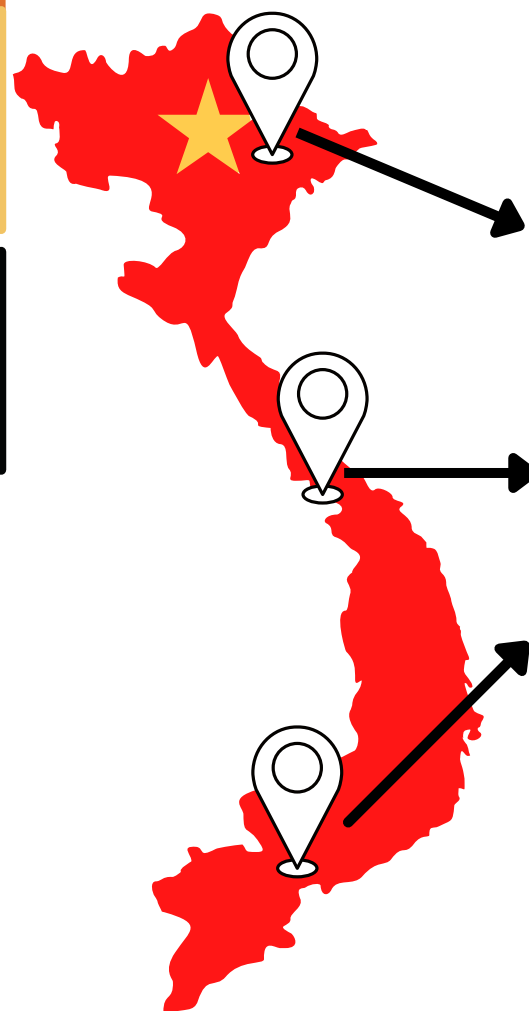
Tính từ năm 2018, Suntory PepsiCo Việt Nam đã tiết kiệm được 3.500 tấn nhựa, hay sáng kiến bỏ màng co ở nắp chai Aquafina giúp tiết kiệm 140 tấn nhựa mỗi năm.

Climate: Vietnam looking to end the use of single-use plastic by



Gross revenue drive: beverage consumption is seasonal

Buying frequency, consumption peaked in hot season and had a tendency to gradually decrease in the cold season. **HF** has **longer shelf time** than **CF**; the consumption for HF, CF might be **different** in different times.



The weather is extremely distinctive with **high temperature** amplitude; it's very hot in the summer and very cold in cold seasons

The season does **not** have **salient impact** on **HF, CF** consumption in South

The weather is divided distinctively: Hot season and rainy cold season

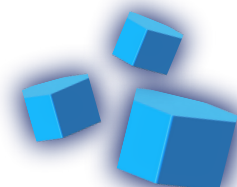
The season has **mild impact** on **HF, CF** consumption

The temperature amplitude is not fluctuated significantly; the overall temperature in a year remains stably high

The season does have **salient impact** on **HF, CF** consumption in North.



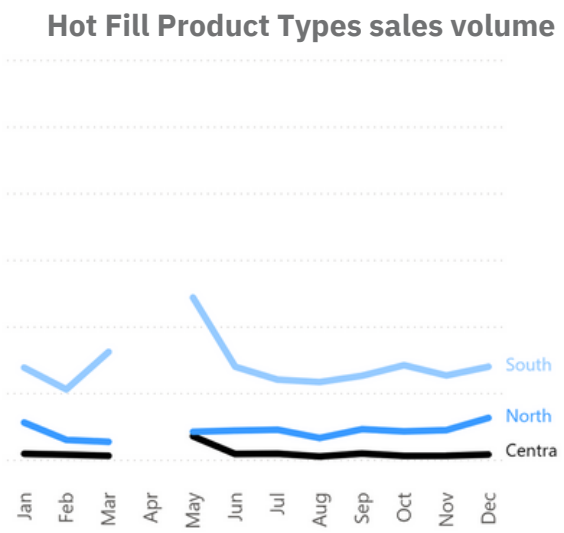
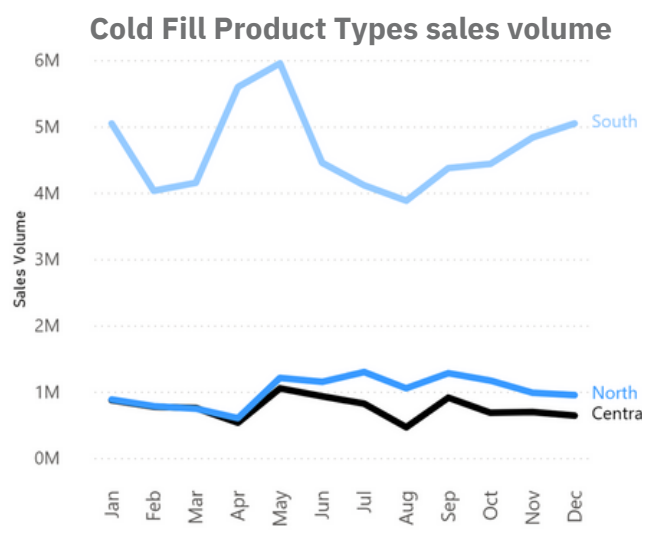
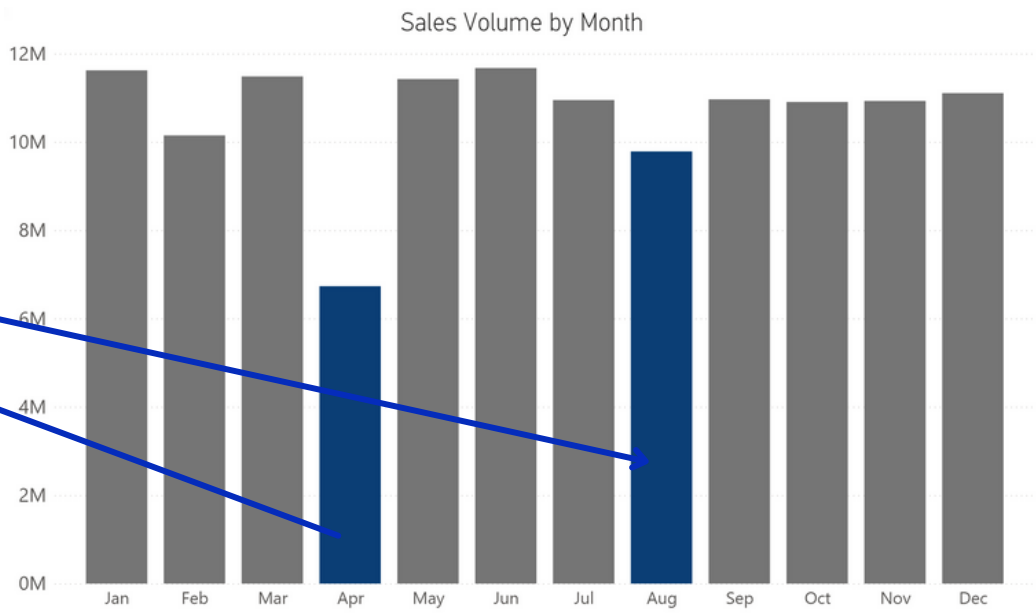
SP.CO might have suitable strategy for packaging to tap in seasonal consumption of the consumer



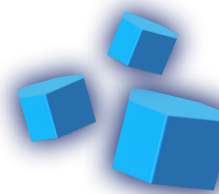
The variation of sales volume and gross sales during 12 months indicates special seasonal strategies of SP. Co



From the chart, **April and August** witness the lowest gross revenue.



The differences in 3 regions' **weather** of Vietnam was reflected in the product types' consumptions.

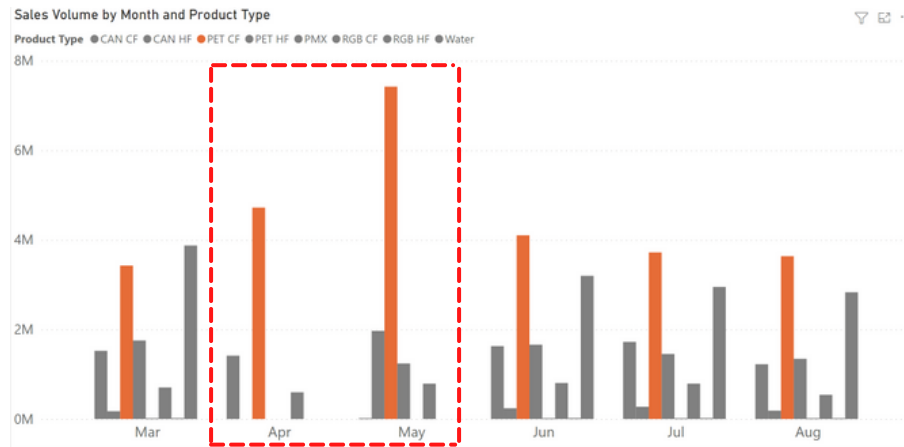


Gross revenue drive: consumers tend to purchase more drinks in summer; product shelf time is shorter



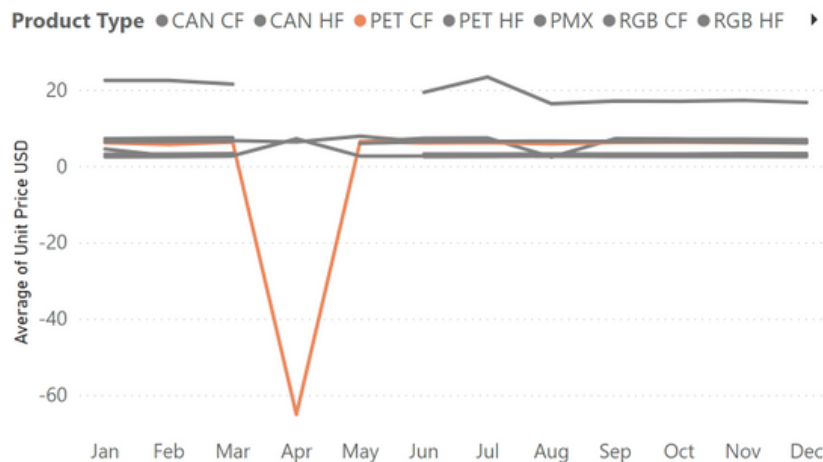
1

SP. Co strategized to **boost** sales for Cold Fill Drinks; especially **PETCF**. The sales for **PETCF** in April ranks second highest after May.



2

The **drop** of PET CF's average unit price in April to the Axis-Y's negative side is **significant**.



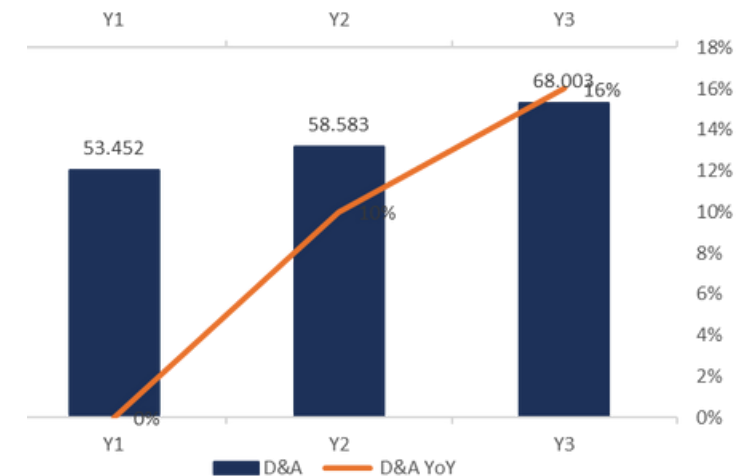
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Deduction from gross revenue consists of **sales discount** and **sales returns**.



Sales discount (D&A): D&A is reasonable to be **accountable** for gross revenue's **reduction** (D&A of Y3 was higher than Y2 by **16%**)

D&A expenditure Y1 - Y3 (thousand USD, %)



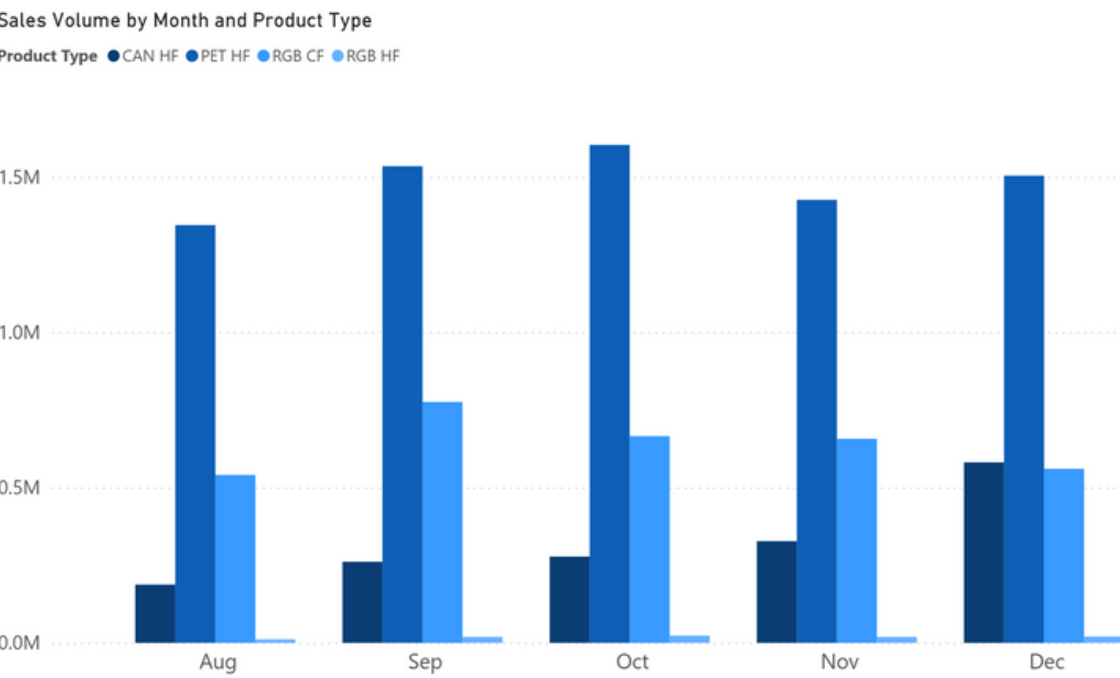
Sale returns: Lack of the sale returns data from SP Co., therefore we can not conclude that the unit price drop was caused by sales returns.

The sales for PET CF peak the highest in May impacted by the April promotion strategy

Gross revenue drive: Consumers tended to purchase less drinks in cold season; the product shelf time is longer

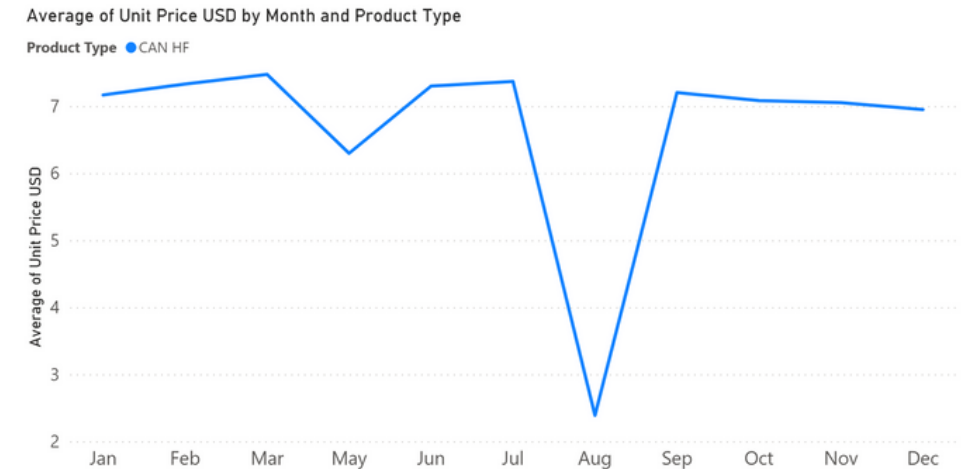


SP. Co strategized to boost sales for Hot Fill Drinks. The sales volume for HF increased gradually after **August**.



The sales volume for **CANHF** surges progressively after August, which was faster than **PETHF** – the one with higher consumption.

There was special price promotion for CAN HF during this time. The identical situtaion as summer case, the **decrease** of average unit price was affected by **D&A**.



3 factors contributing to gross revenue in Y3

- 1 **Weathers:** During the weather change period; the drink preference of consumers changes.
- 2 **Promotion strategy:** Company had proper promotion strategy to boost sales of their seasonal products.
- 3 **Product types:** Sp. Co chose the most suitable product to sell in each significant season of Vietnam

Variance Analysis

(Y3) Comparison between budgeted sales and actual sales

Applying the **What-if analysis**, we compared the Y3 performance with the Y2 budgeted plan.

Assumptions to conduct the budgeted sales in Y2, in terms of **1%** growth in revenue:

- The Y2's **unit price** and **price mix** was the **standard** variable
- 1% increase in each product's sales

The outcome will be the budgeted plan in Y2!

Sales Vol	Product Mix	Unit price
(4,102,024)	-1%	-0.02
(266,274)	0%	-0.02
(17,669,713)	-2%	-0.05
8,747,290	1%	-0.05
37,204,132	5%	-0.04
(3,852,731)	0%	-0.04
(14,547,278)	-3%	-0.02
(634,175)	0%	-0.15
(10,291,618)	0%	0.09

Variance Analysis table

Product mix and Sales Volume variance:

While most products received **adverse** results, **favorable variance** the product mix of **PETCF (5%)** and **CANHF (1%)** resulted in the **favorable variance** sales volume

Unit price variance:

Thanks to the **increase** in Gross Revenue, the total unit price of SP Co.'s products had a favorable variance, despite **adverse** results in each product's unit price



Regression results found that **Water's sales** and **unit price & sales** in **CANCF** and **PETCF** had the most impact on Gross Revenue Y3



Digging deeper in the impacts of **Sales Volume** and **Unit price** on the **▲1%** from Y2 to Y3 in Gross Revenue, econometrics regression model will be applied!

Errors data of duplicate results were **removed**. To construct the **best fit** model that measure the **monthly impact** of each product to the **total Y3 Gross revenue**, we decided to **exclude** month 4 and 5 (due to the results of 0 in some products' sales). Regression results showed that:

$$\begin{aligned} \ln(\text{GrossRevenue}) = & \mathbf{0.173} \ln(\text{CanCFsales}) + 0 \ln(\text{CanCFprice}) + 0.043 \ln(\text{CanHFsales}) + 0 \ln(\text{CanHFprice}) \\ & + \mathbf{0.428} \ln(\text{PETCFsales}) + 0 \ln(\text{PETCFprice}) + 0.012 \ln(\text{PETHFsales}) + 0 \ln(\text{PETHFprice}) - 0.002 \ln(\text{PMXsales}) + 0.026 \ln(\text{PMXprice}) \\ & - 0.012 \ln(\text{RGBCFsales}) + 0 \ln(\text{RGBCFprice}) + 0 \ln(\text{RGBHFprice}) + 0.018 \ln(\text{RGBHFsalses}) + \mathbf{0.31} \ln(\text{WATERsales}) + \\ & \mathbf{0.293} \ln(\text{WATERprice}) \end{aligned}$$

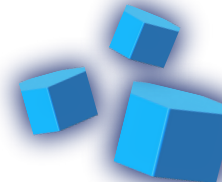
The model implied that, leaving other variables constant:

For **Water**: **1%** in sales would result in an **0.31%** increase in revenue
1% in unit price would result in **0.29%** increase in revenue

For **CANCF**, **1%** in sales would result in **0.17%** increase in revenue

For **PETCF**, **1%** in sales would result in **0.43%** increase in revenue

For the remaining products, increase in the unit price and sales **would not significantly impact** the growth in revenue. In contrast, **increase** in **PMX & RGGCF's sales** would result in a **slight decrease**, meaning we will make less money if we focus too much resources on selling these products.



Q2A. Overview of Net operating profit before tax (NOPBT) from Y1 to Y3

NET REVENUE IN Y3

\$ 597M

Previous Y2
\$ 599,7M

Change
▼ -0.45%

NOBTP IN Y3

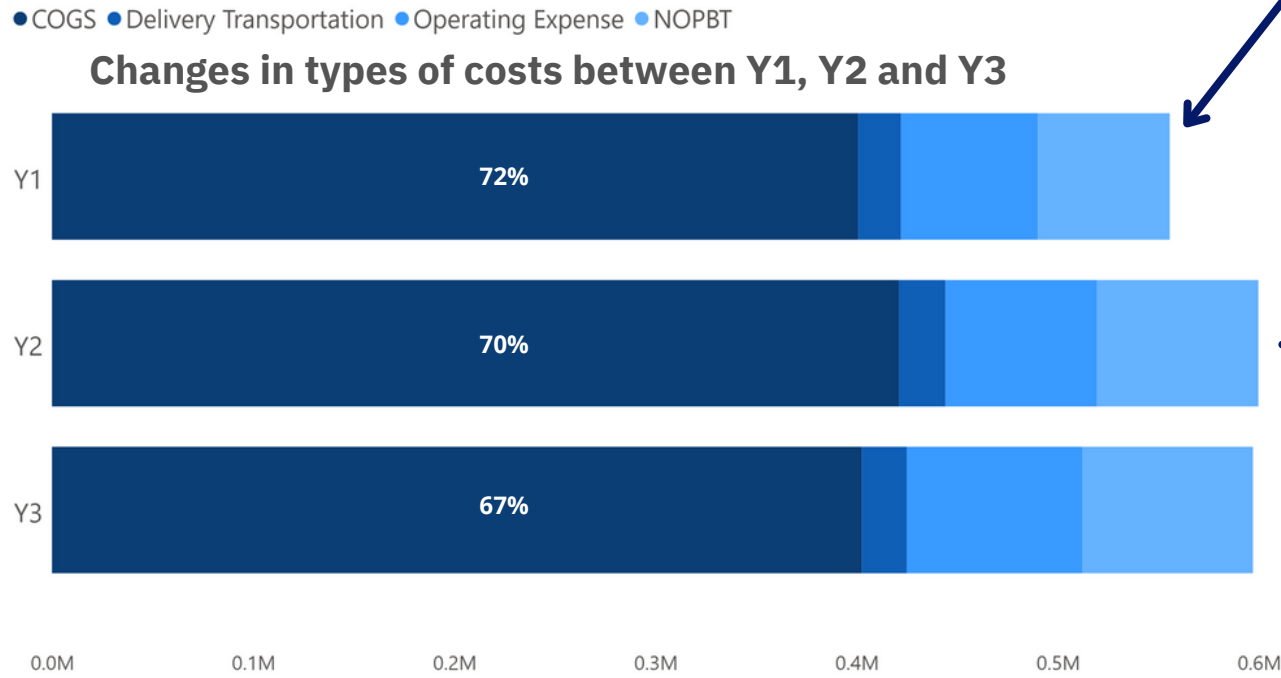
\$ 84,7M

Previous Y2
\$ 80,24M

Change
▲ 5.58%

NOPBT = Net Revenue - COGS - Delivery Transportation cost - Operating expenses (other income/expense, G&A, A&M, selling & distribution)

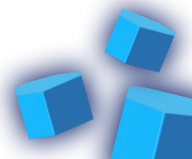
NOPBT Calculation



To maximize net profit, we need to **increase** Net Revenue and **decrease** costs & expenses, observing SP CO.'s Y3 performance...

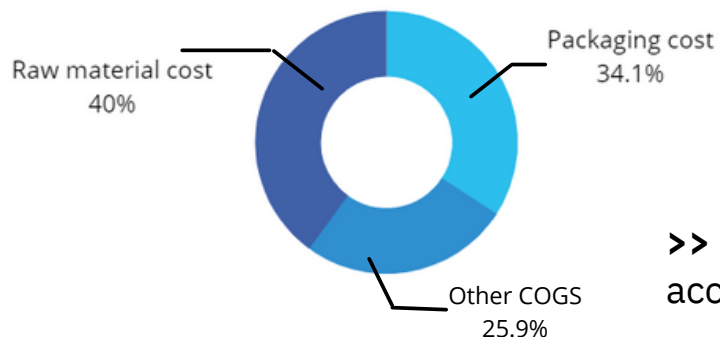
While the Y3 **net revenue -0.45%**, SP Co. managed to reduce **4%** of the **COGS** that accounted for nearly **70%** of the Y2 net revenue. As a result, the NOPBT **+5.6%**

From this, we analyzed 3 main **factors** that directly contributed to the increased **profit**...



[COGS] Production costs (1) decreased significantly

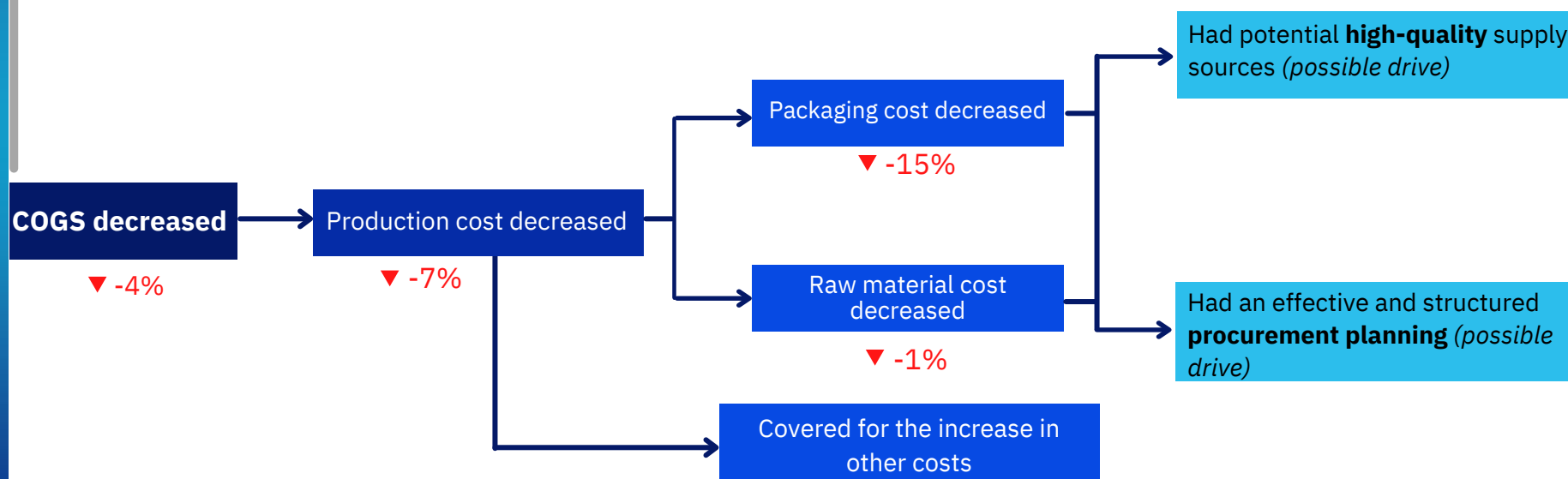
Cost components of COGS Y3



- From Y1 to Y2, resulting from the 6% **increase** in sales, **COGS increased** 5%.
- From Y2 to Y3, sales **decreased** 1% while COGS **decreased** 4%.

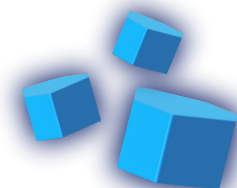
>> **Raw material** and **Packaging** (product costs) accounted for **74%** of the Y3COGS

Y3 COGS's issue tree and possible drives:

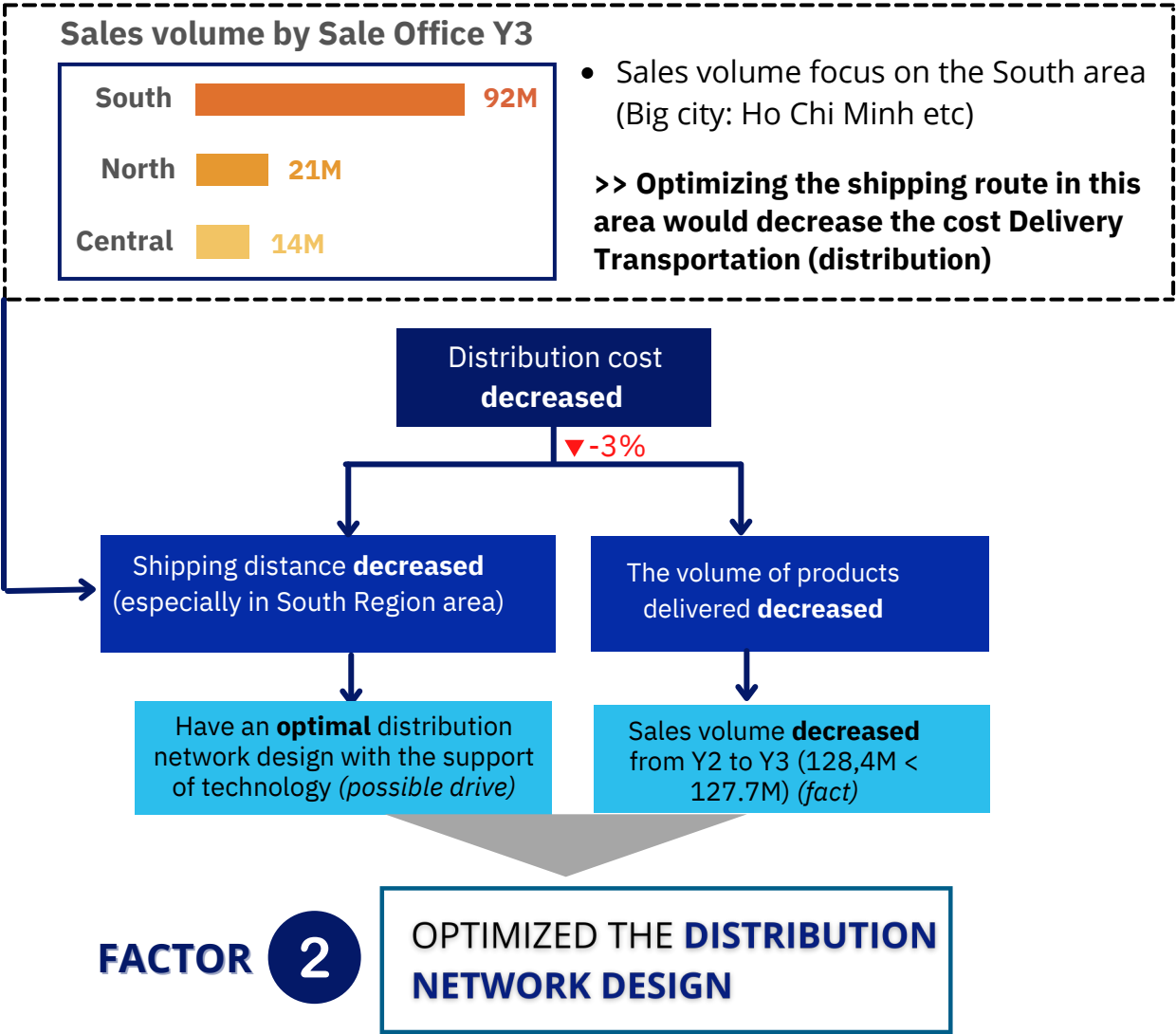


FACTOR 1

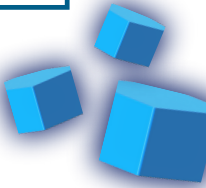
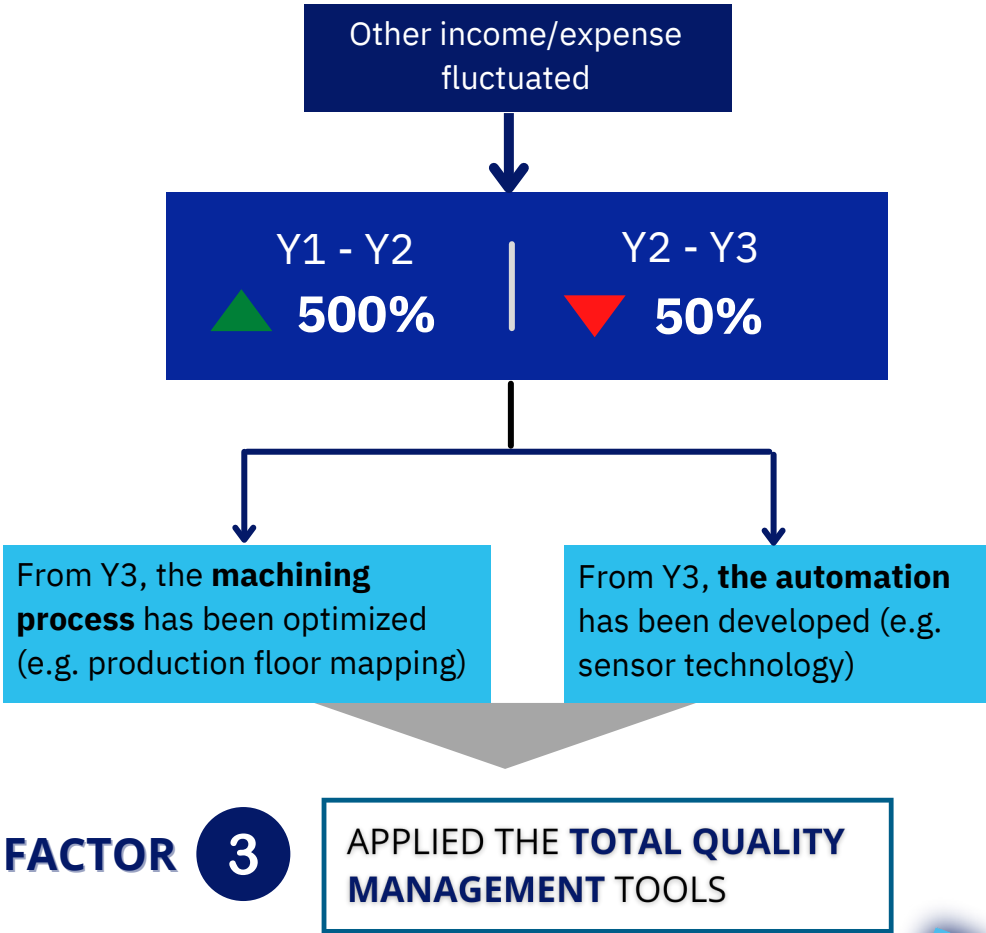
SUCCESSFULLY ADOPT THE SUPPLIER RELATIONSHIP MANAGEMENT (SRM)



Distribution cost (2) and Other Income/Expenses (3) also decreased

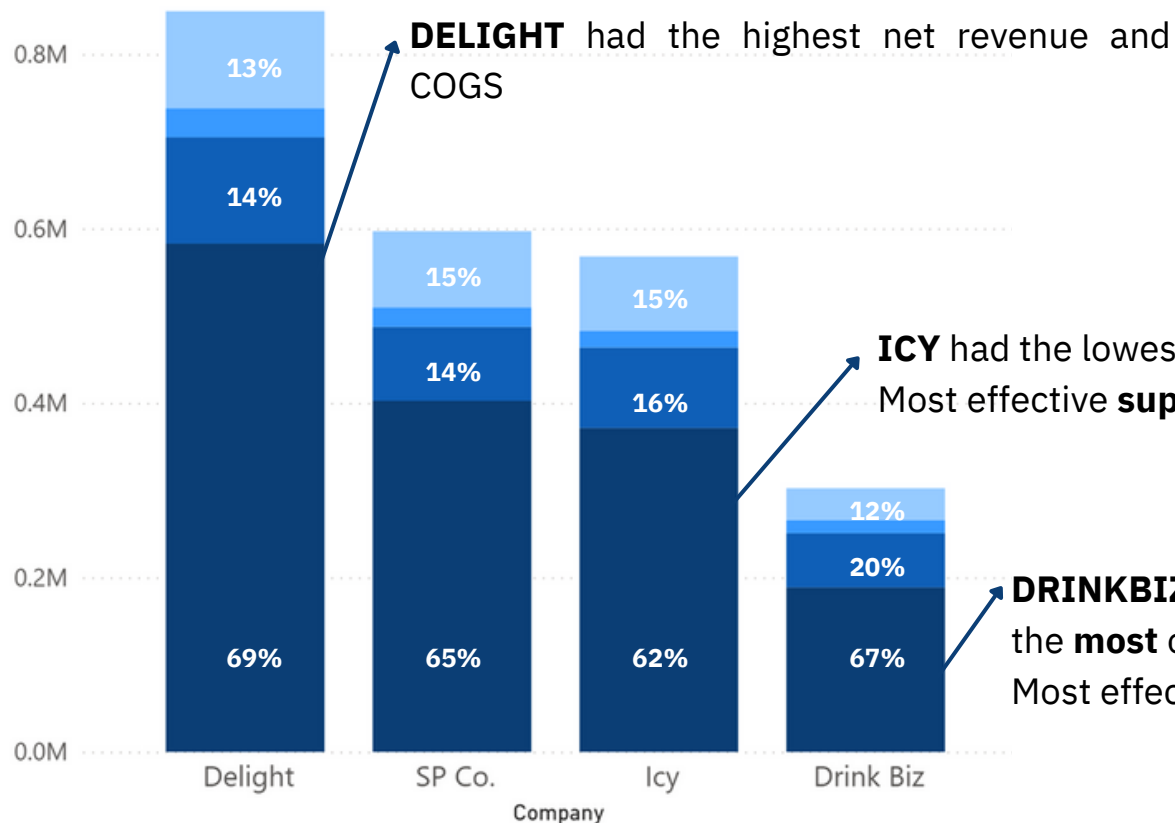


*Note: Since other income/ expense comprises securities, interest incomes, taxes etc, in our presentation, we defined **scrap sale (in manufacturing process)** is the one **major contribution** to come up with the appropriate potential factor



Comparing with others' net revenue, **each competitor** of SP CO. had **its own strength** in their business operation model

● COGS ● NOPBT ● Delivery Transportation ● Operating Expenses



All 4 companies had a relatively **similar** financial model and expenses allocation.

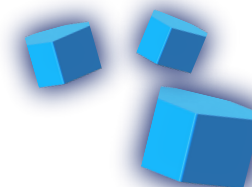
14 ~ 16% NOPBT

~4% Delivery Transportation

63~69% COGS

13~15% Operating expenses

SP.CO's competitors net revenue allocation Y3



Recommendation 1: Operation expenses management: Focus to apply product development strategy in Water and CANCF

RATIONALES

- **Regression models** showed that increase in **Water, CanCF** and would result in the **most significant increase in Gross Revenue**
- After using **What-if analysis** and considering **the limit control** of sales volume and unit price based on past data in Y3, an **optimal** plan to **maximize** the gross profit is developed

Sales volume of CANCF: **↑20%** than Y3's
Sales volume of WATER: **↑54%** than Y3's

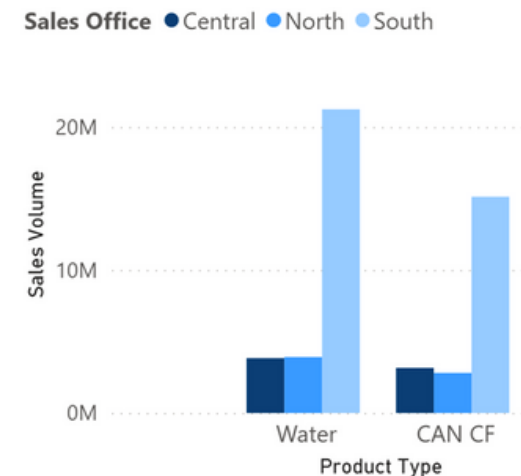
Optimal plan for the company

Product type	Sales volume	Uni price
CAN CF	38,324,727.00	6.46
CAN HF	0.00	6.69
PET CF	29,215,739.00	5.89
PET HF	13,740,013.22	5.99
PMX	57,196.00	20.70
RGB CF	6,227,095.00	3.03
RGB HF	155,571.00	2.45
Water	44,494,670.00	3.04
Total	132,215,011.22	54.25

➔ Company should deploy product development strategy to boost sales of **Water** and **CanCF** product

EXECUTION

Sales distribution of Water and CANCF



- Launch more **marketing activities** (online & offline) to attract more customers in **South Region** since this is a **potential market** to gain huge volume sales
- Research & Development team should invest to add **more visual elements** (e.g. packaging design, packaging color) to capture customers' attention.

Recommendation 2: Increase the investment in **CSR** to make SP Co. more competitive to its rivals and advance its position.



Innovate product to be more environmental friendly

PET - made up the most of SP. Co bottle production; has detrimental impact on the surroundings

=> Innovation in packaging specification is highly recommended to mitigate environmental impact

Campaign to promote CSR after product innovation

Objectives:

- Boost consumption in next year summer in South (April-July/ 2022) to 50 000 000 in terms of sales volume (increase by 46,68% to Y3).
- 37% people willingly to take sustainable action to protect the environment next year at the end of July (increase by 2% to now)

Job-to-be-done:

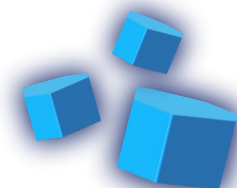
- Make audience realize that sustainability is affordable and not difficult to embrace.
- Educate them about the sustainability and how to apply sustainable practices in their daily life
- Motivate them to have a sustainable lifestyle

Target Audience

- Urban citizens (1996-2005)
- South, live in cities
- Tech-savvy
- Social media frequent users
- Love new experience and treasure uniqueness

Target Audience's Rationales

- More youngsters are engaged in sustainability
- 19,4% people contribute to FnB consumption is youngsters
- South Consumers loves new experiences for their consumption



Recommendation 2: Increase the investment in CSR to make SP Co. more competitive to its rivals and advance its position.



Consumer facts & Insight



Insight: Despite being aware of sustainability due to the severe consequences on the environment recently; consumers are shortage of incentives and knowledges to conduct sustainable practices. Because the conventional practices are inconvenient and unaffordable.

Big Idea Now, you can have your own sustainable conducts with SP. Co.

Execution

Product experience:

- Special product package to promote CSR with summer vibe
- Digital practices: QR code on package to scan the sustainable practices of Suntory Pepsico – “The recycling journey of a PET bottle”

- Leverage digital, social media channels to best reach the target audience
- Series: How to live sustainably
- Challenges: Sustainably living
- Utilizing influencer outreach to spread the campaign spirit

Above The Line

Below The Line

- **POP, Stores Banner Display:** To gain public awareness
- **Incentive program:**
- Point redemption: Everytime you either buy the special package products or complete the challenges, you earns redemeption points for your conduct.
- After you reach 100 points, you received special award from Suntory Pepsico at selling points.
- **Commercialization:**
- Distribute the special product in South first to test the water; and if it is success, we should consider expanding the campaign.
- **Retailers relationship:**
- Proper guidance for retailers for incentive program and product experiences
- More benefit for retailers to better take care of them.

Recommendation 3: Apply lean manufacturing initiatives

RATIONALES

Increase in both variable and fixed manufacturing cost from Y1 to Y3

➔ INEFFECTIVE PRACTICES IN MANUFACTURING PROCESS
THE CREATION OF NON-VALUE ADDED ACTIVITIES

	Year 1	Year 2	Year 3
Variable Manufacturing	25426.39	25216.81	25361.71
Fixed Manufacturing	51526.44	54371.61	59221.47

EXECUTION

Apply the **Five Key Principles** to implement the lean techniques of the company



- Through five key principles, real root causes leading to the increase of both **fixed and variable manufacturing cost** are identified and then the corresponding corrective actions would be deployed to tackle the issues.

➔ The use of this approach would result in the reduce of non value added activities, improved product quality, improved working environment.

CONCLUSION of SP CO.'s current situation

GROSS REVENUE: After the growth from Y1 to Y2, which increased 8% the revenue, SP CO. managed its product cost really well. The company had **adapted** proper resources, suppliers and operations to fit with the new level of Gross Revenue.

The slight decrease of 1% in Y3 **was not significant** and it is a **good new** that the company managed to generated the **similar** level of Gross Revenue, thanks to many drivers.

PROFITABILITY: The **8% increase** in Y2 Gross Revenue lead to **386%** increase in *Other Income/Expenses*. SP CO. managed the *Other Income/Expense* well by reducing 45% the no-value goods. This resulted in 6\$ increase in Net operating profit before tax.

GENERAL RECOMMENDATION:

After analyzing the current company and market situation, our team had developed 03 recommendations relating to the operation of Marketing, Logistics and Finance, which would help the profitability of the company as a whole.

SP Co can also learnt from competitors' strength to improve the company's model.

This would help the company to maximize its business and compete with the competitors in the market.

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