

The Decrease in Sales of a Cheese Company and Recommendations

for Improvement

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The Decrease in Sales of a Cheese Company and Recommendations for Improvement

1. Introduction

1.1.General Overview of the Content and Back Ground Introduction

Laughing Cow cheese products are sold in more than 100 countries since they were founded nearly a century ago. Over the years, the cheese company has introduced new and innovative products such as light cheese triangles and snack-size cheese dippers. The brand's signature cheese spread is made with real cheese and comes in a variety of flavors, including original, light, and bold. It also has low-fat cheese to catch health-conscious customers. That is why the company has been successful in this industry for decades. However, the sales significantly decreased in the years 2020 and 2021 as compared to the years before, specifically in the Vietnam market.

This research will uncover the reasons why it happened by collecting and washing the data, analyzing data with descriptive analytics, predictive analytics, and prescriptive analytics, and developing models to help forecast future demand and sales.

1.2.Goals

Our purpose is to analyze the decrease in sales for The Laughing Cow cheese company over the past years to identify the root cause and recommend actions to improve the sales and propose insightful strategies that would definitely help The Laughing Cow cheese company maintain its position as a leading brand in the cheese industry in Vietnam. The data set we are using consists of sales data for the past years 2021 and 2020, including sales revenue, product categories, store locations, and customer demographics; Comparative financial statements for 2 years; Sales employee turnover report

2. Problem definition

2.1. Recognizing the problem

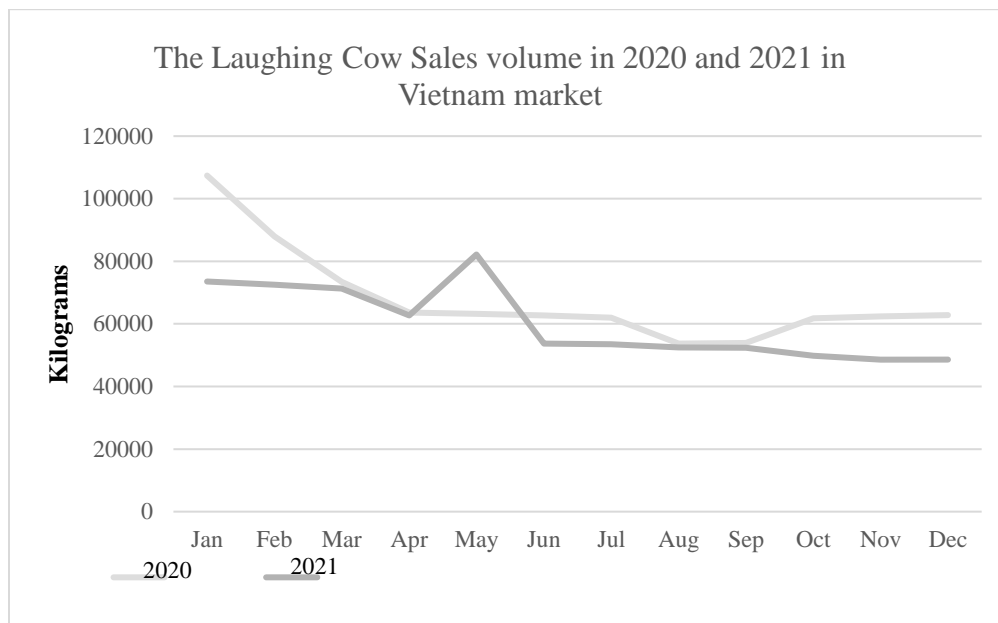


Figure 1, the Laughing Cow Sales Volume in 2020 and 2021 in the Vietnam market

As figure 1 shows, the cheese company saw a downward trend in its overall sales during 2020 and 2021.

The company sells the following product types in 2020 and 2021:

- BELCUBE - 15C - PLAIN
- BELCUBE - 24C - PLAIN
- TLC - 16P - PLAIN
- TLC - 8P - PLAIN
- TLC - SLICES - 10S - BURGER/ CHEDDAR
- TLC - SLICES - 10S - LIGHT
- TLC - SLICES - 10S - SANDWICH
- TLC - SLICES - 10S - TOAST

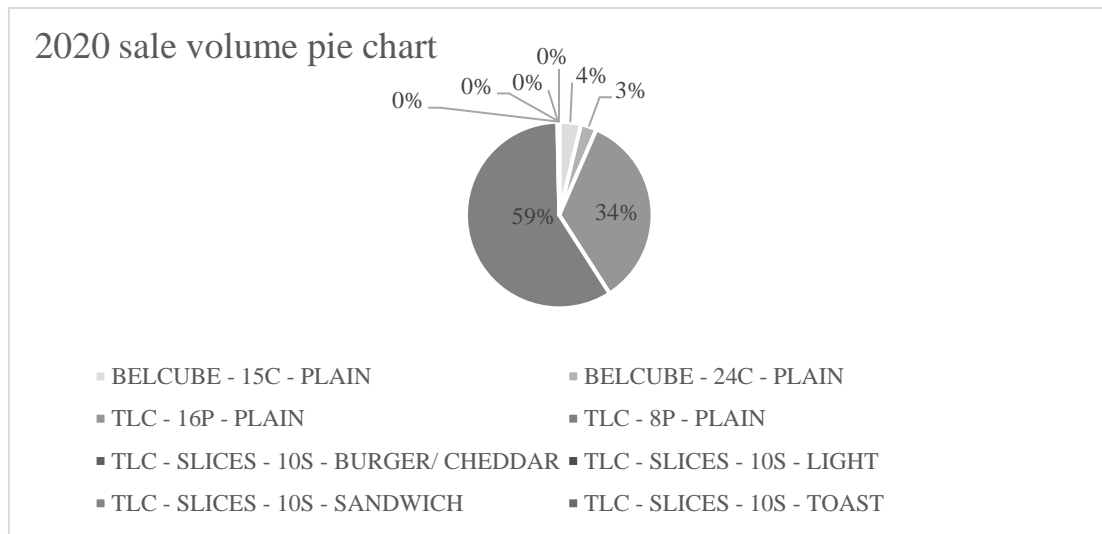


Figure 2, the sales volume 2020

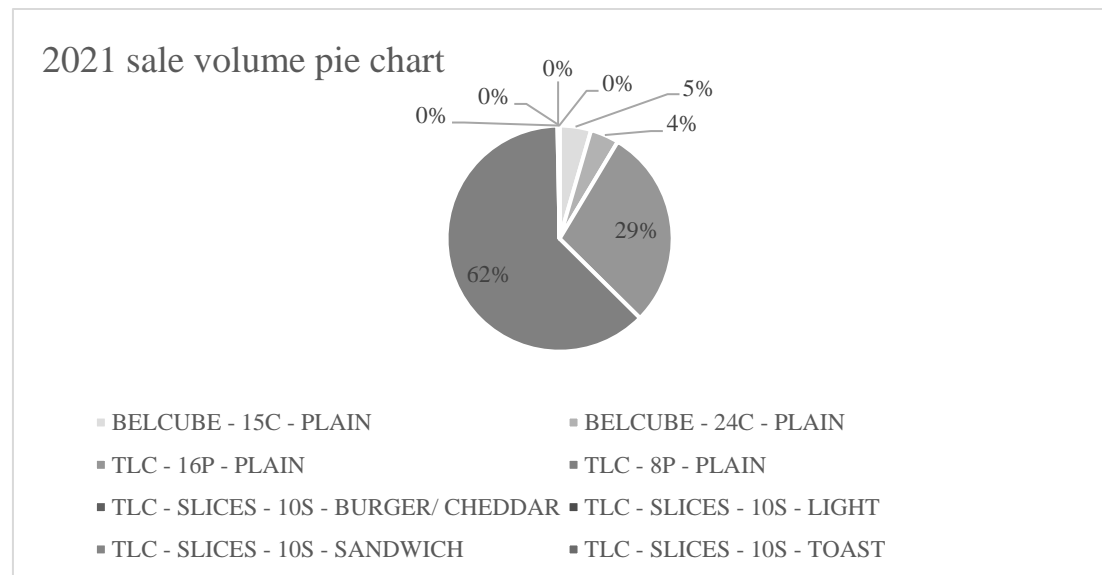


Figure 3, the sales volume 2021

From figure 2 and 3, it can be seen that in 2020 and 2021, TLC - 16P - PLAIN & TLC - 8P - PLAIN (Hereinafter referred to as 16P and 8P) these two types of products accounted for the vast majority of the company's sales by 91%. Therefore, this report mainly analyzes the indicators of these two types of products.

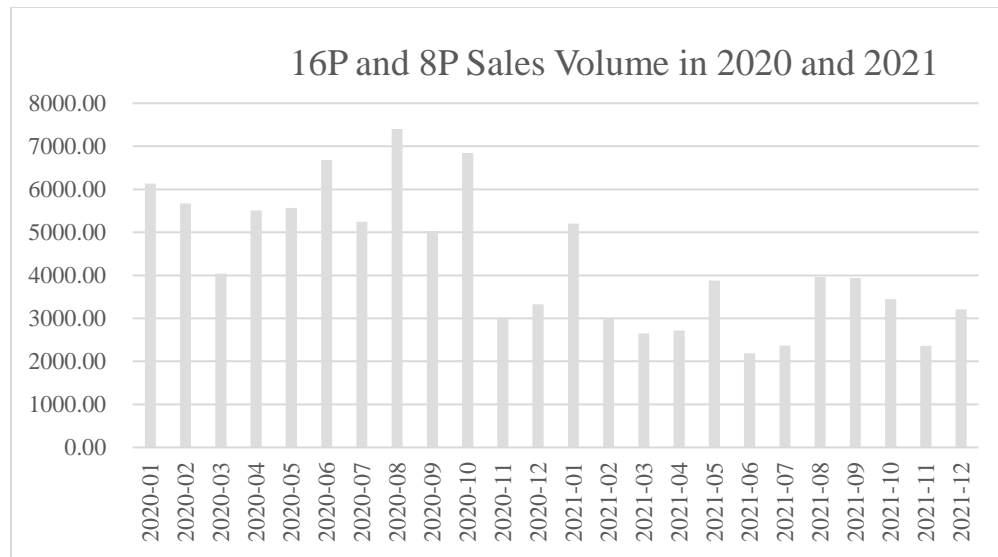


Figure 4, the sales volume of 16P and 8P in 2020 and 2021

Figure 4 shows an overall downward trend for the cheese company's two main products from January 2020 to December 2021.

This report will specifically analyze the main factors affecting the sales decline of these two products.

2.2. Defining the problem

- What factors contributed to the decrease in product sales?
- What is the most important factor affecting product sales?
- What should the company do to improve sales?

2.3. Challenges

After analyzing the factors affecting sales, and how to take measures to increase sales, the challenges but not limited to the following arise:

- How to increase production under the premise of controlling costs?
- How to collect effective data and analyze consumer preferences in various regions?
- How to improve supply chain efficiency?

- How to improve inventory management efficiency?
- How to improve competitiveness?
- How to integrate information systems for better sales communication and coordination?
- How to rely on e-commerce to increase sales?
- In response to customer preferences and customer needs, data often lags behind.

3. Approach and Technology to analyze

Our group has used the following technology and tests to aid our analysis:

- Microsoft Excel
- Visualizations such as line charts, bar charts, and combo charts
- Root cause analysis
- Trend analysis
- Financial Performance Metrics / Ratio Analysis

4. Data collection, processing, and analysis

We begin by cleaning the data to remove any duplicates, missing values, or inconsistencies. We also standardize the data format to ensure consistency across all variables. Next, we explore the data to identify any obvious patterns or trends that could explain the decrease in sales. We use visualizations such as line charts, bar charts, and combo charts to identify any correlations or relationships between different variables. We made use of the most well-known features of Microsoft Excel such as lookups and pivot tables to identify any significant factors that could be contributing to the decrease in sales. For example, we may identify that sales have decreased more in certain product categories or store locations. We conducted a root cause analysis to

identify the underlying reasons for the decrease in sales. We may identify factors such as increased competition, changes in customer preferences, or economic factors closely related to Covid-19. Our group has also used financial performance metrics to reveal the underlying business issues that the company needs to address such as poor production and inventory management. Our analysis is not limited to just using the data and understanding trends and patterns (Descriptive Analytics) but also to predict the future risks and opportunities for the organization (Predictive Analytics) and to identify and recommend the best solutions to the problem stated (Prescriptive Analytics).

5. Business Analytics

When the analyses were completed, each factor is used for further analysis to deeply understand the problems faced by the company and their effects on sales.

5.1.Covid-19 impact

The COVID-19 epidemic has probably resulted in lower sales for the company and many other Vietnamese companies. Several businesses, particularly the dairy industry, have been impacted by the epidemic, including transportation, supply chains, and consumption habits.

a. *Changes in consumer behavior:* Consumer behavior has altered dramatically because of the pandemic, including a spike in demand for basics like food and household items as well as a shift to online shopping.

b. *Supply chain disruptions:* Because of COVID-19, there are no shortages of some goods and materials due to disruptions in global supply networks. These interruptions had an impact on the company, causing a drop in sales if they couldn't get the essential ingredients or packaging.

c. *Restaurant closures:* The Laughing Cow Cheese Company had suffered a decline in sales of its products as these venues were the main recipients of its products. During the epidemic, several restaurants and cafés had to close or reduce their hours of operation.

d. *Economic impact:* Many people have lost their jobs or seen their income decline because of the pandemic, which has had a significant impact on the economy. This might have reduced consumers' discretionary spending on high-end foods, which could have impacted sales of the premium goods made by the Laughing Cow Cheese Company.

e. *Customer Priority:* The pandemic's effects on the economy might have contributed to Vietnam's declining cheese consumption. Many consumers have been less ready or able to spend more money on luxurious or non-essential things like cheese because of their financial issues or uncertainties.

5.2.Customer behavior

Consumer behavior in various industries, according to Deloitte (Deloitte, n.d.) and McKinsey & Company (Company, 2020), especially the food business, has been significantly impacted by the COVID-19 epidemic. Here is a breakdown of the Laughing Cow Cheese Company's consumers throughout the pandemic:

a. *Increase in online ordering:* Many consumers have chosen online ordering as a safer alternative to traditional buying because of the social distancing policies that are in place.

b. *Shift towards at-home dining:* During the pandemic, customers are more likely to prepare and dine at home because numerous eateries and cafes were closed.

Hence, this factor also affects the decline of sales in the company.

c. *Changes in shopping frequency:* To reduce exposure to the virus, many consumers were making fewer trips to the store and purchasing fewer items each time. As shoppers are more concerned about the external contamination of the products.

d. *Increase in demand for healthy and immune-boosting foods:* The epidemic has made individuals more conscious of the value of protecting their immune systems. Some consumers are more interested in selecting meals that strengthen their immune systems or have other products which are more beneficial for health. Cheese has a high calorie and fat content, which may not be in line with these values.

Overall, the pandemic will present possibilities as well as difficulties for the Laughing Cow Cheese Company. They may continue to prosper and expand their business in these unpredictable times by being aware of and responsive to the shifting preferences and demands of consumers.

5.3.E-commerce situation

Having said that the pandemic has changed consumers' behavior in shopping, many people go online to buy products instead of going to physical stores. According to Iris (Statista, 2021), in 2020, The Vietnamese eCommerce market reached more than 6.0 billion USD, and in 2021, this figure reached 7 billion USD, which means the growth rate was 16.7%. However, the investment in the online channel of the company was too low.

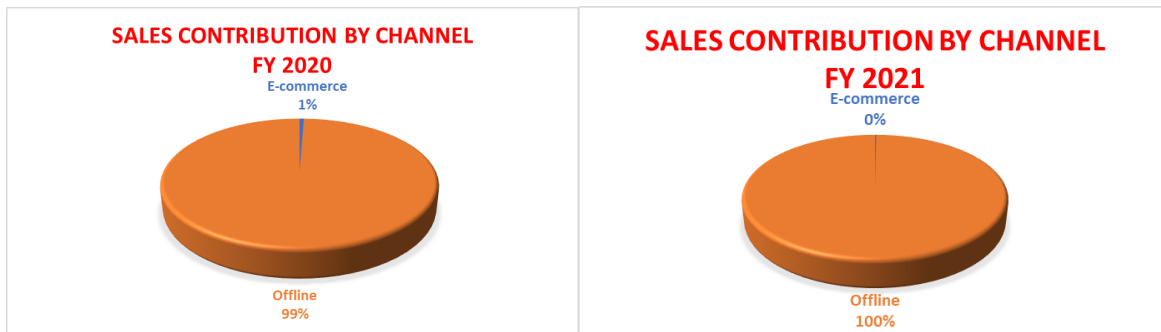


Figure 5, the contribution of sales by channel in 2020 and 2021

Figure 5 indicates that the contribution of sales in the E-commerce channel was 1% in 2020, and then its figure decreased to nearly 0% in 2021. This was contrary to the market trend.

To be more specific, as can be seen from figure 6, the E-commerce sales were 58,207 USD in 2020, and then this declined to 14,893 USD in 2021.

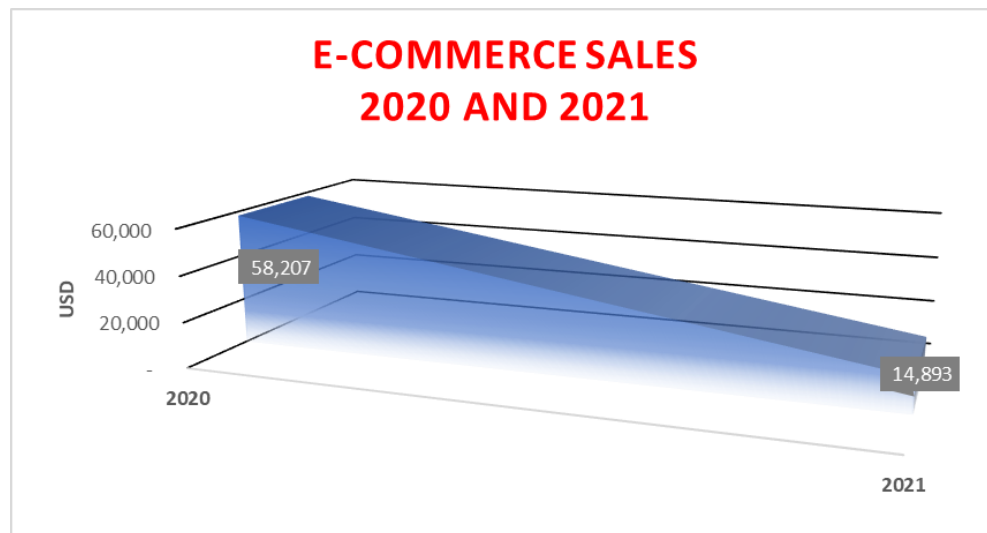


Figure 6, the E-commerce sales in 2020 and 2021

5.4.Product supply shortages

Figure 7 indicates that the production volume in the first half of 2021 was lower than the demand, which was one of the problems leading to the decline in sales of 8P. In Jan-21, the production volume supplied only 62.9% of the demand, then the situation continued till the next month, Feb-21, when the demand was only met by 69.5%. Production volume slightly improved

in the following months until Jun-21, although, it was still under 100% of the demand. It is particularly true the organization has suffered lost sales due to its failure to meet the demand.

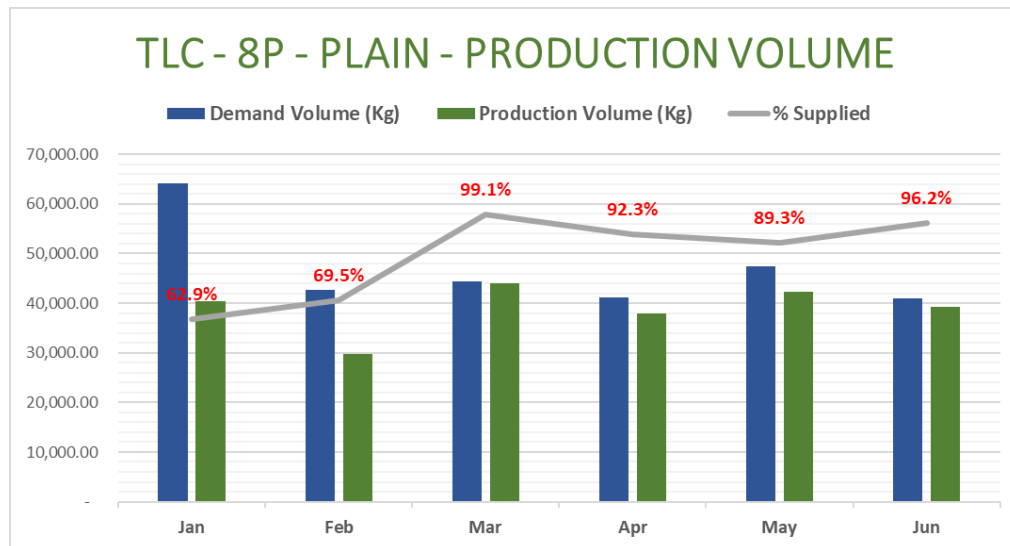


Figure 7: Production volume of 8P – Plain from Jan to Jun 2021

The loss of sales was also experienced with another SKU - 16P as depicted by figure 8 where the production rate hit a low of 57.3% in Feb-21. The production tried to cope with the demand from Mar-21 to Apr-21, however, still fell by around 20% in May-21 and continued till the end of the first half of 2021.

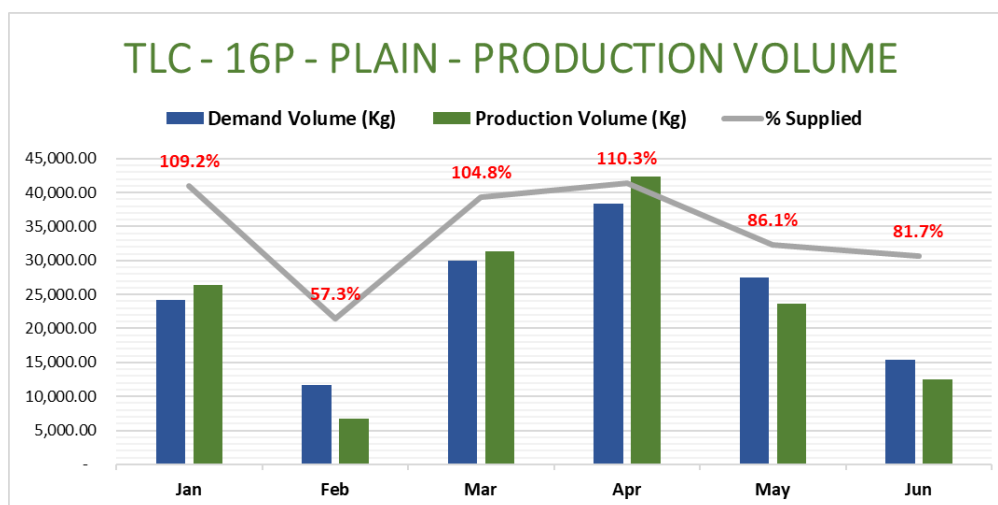


Figure 8: Production volume of 16P from Jan to Jun 2021

5.5. Inventory management failure

As a ripple effect of Covid-19, particularly in supply chain disruptions, the organization's financial ratios revealed a distorted performance in relation to its production and inventory management, thus, affecting sales. This can be seen from the below Financial Measures of Performance taken from the company's comparative financial statements for the years 2020 and 2021.

The company had increased its production volume in the second half of the year 2021 to counter the effect of its failure to accurately predict and meet consumer demands leading to significantly lowered inventory turns and higher holding costs.

a) Relative decline in Inventory Turnover (figures taken from the Balance Sheet and Profit & Loss Statement)

Inventory Turnover 2021:	<i>INVT</i>	$\frac{\text{Cost of Goods Sold}}{\text{Inventory}}$	$\frac{6,671,208}{4,703,426} =$	1.42
Inventory Turnover 2020:	<i>INVT</i>	$\frac{\text{Cost of Goods Sold}}{\text{Inventory}}$	$\frac{7,277,543}{1,326,750} =$	5.49

The inventory turnover ratio reflects how fast a company sells an item and is used to measure sales and inventory efficiency. The industry benchmark for a good inventory turnover ratio is between 5 and 10 (Henry, 2020), which was achieved by the company in the year 2020 but has

significantly declined in 2021. A relatively low inventory turnover ratio may indicate weak sales or excess inventory. Therefore, the combined effects of oversupply and a feeble demand for impulse goods have caused the ratio to drop.

b) Sudden increase in Finished Goods Inventory (figures taken from the Balance Sheet)

	2021	2020	Increase (Decrease)	%
<i>Finished Goods Inventory (Ending)</i>	<i>4,703,426</i>	<i>1,326,750</i>	<i>3,376,676</i>	<i>255%</i>

We have likewise observed that the company had moved from “just-in-time” to “just-in-case” inventory management by swelling its inventory in the second half of the year 2021. This means that the company had overstocked to meet unexpected consumer demand which turned out to be a lot lesser than the previous year 2020.

c) Freight cost skyrocketed (figures taken from the Cost of Goods Manufactured Statement)

	2021	2020	Increase (Decrease)	%
<i>Freight-in</i>	<i>438,453</i>	<i>179,568</i>	<i>258,885</i>	<i>144%</i>

Due to difficulties of sourcing raw materials from suppliers who shut down factories and suspended production, as well as higher freight costs, the company had produced more than enough safety stocks to make use of the economies of scale in the last 6 months of the year 2021. Based on the above findings, the Laughing Cow Cheese company is expected to suffer a negative impact on its overall financial health should it fail to get rid of the resulting obsolete inventory from a lack of supply chain visibility and efficiency.

5.6. The decrease in sales by the regions that were negatively affected by the pandemic

Figure 9 clearly indicates that the Mekong and South East regions suffered the greatest decrease in sales, with 22%, followed by North Province (16%). According to General Statistics Office (OFFICE, 2021), the Mekong and South East are the two regions that have been hit the

hardest because of the Covid-19 pandemic, accounting for the highest proportion, at 59.1% and 44.7%, respectively. This would be the reason for the sales decline in these regions.

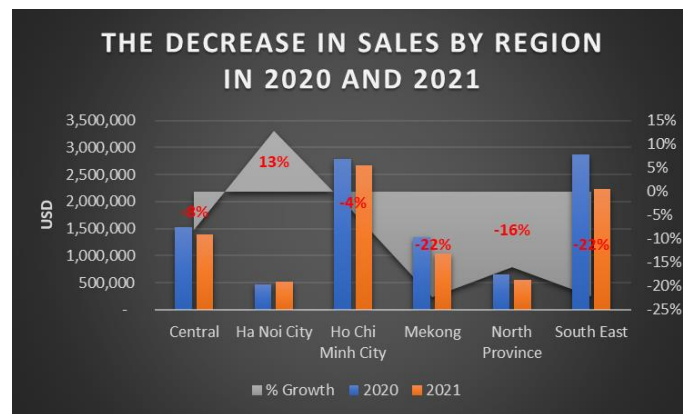


Figure 9: The decrease in sales by region in 2020 and 2021

5.7.Lack of information system integration

Most of the company reports are delivered via Microsoft Excel and while it can be a useful tool for organizing and analyzing data, relying solely on them can have disadvantages. One specific drawback is that MS Excel reports can be difficult to access for outside salespeople. As a result, the outsourced sales team may find it challenging to catch up with the latest updates about sales, preventing them to make an informed sales decision and improve productivity and thus, can impact the overall sales results.

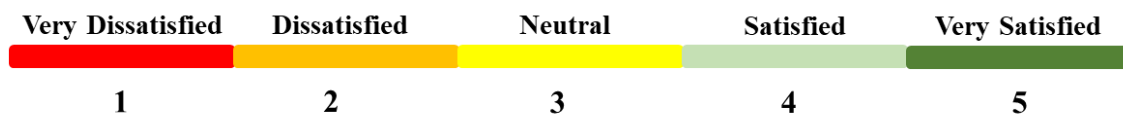
5.8.Customers satisfaction

Customer satisfaction is one of the important things that can lead to the success or failure of a business. Unfortunately, the rate of customer satisfaction in the company plummeted between 2020 and 2021. Explicitly, from figure 10, in 2020, the number of dissatisfied was 25,496 and then its figure rose to 33,297 in 2021. On the other hand, the number of satisfied was 36,096 in 2020 before decreasing to 34,995 in 2021.



Figure 10: Customer satisfaction in 2020 and 2021

Satisfaction with the products of the company is classified into five levels, which can be seen below:



The reasons for the dissatisfaction of customers are as follows:

- *Dissatisfaction with the products' prices:* Looking at Figure 11, it appears that consumers in 2021 are Dissatisfied with prices at the highest level, which is level 2, at around 11,961 respondents, followed by the Neutral level at 9,196. There were no respondents for level 5 which stands for Very Satisfied. This shows that after the pandemic the company increased its prices, which turned out to be a customer dissatisfaction factor.

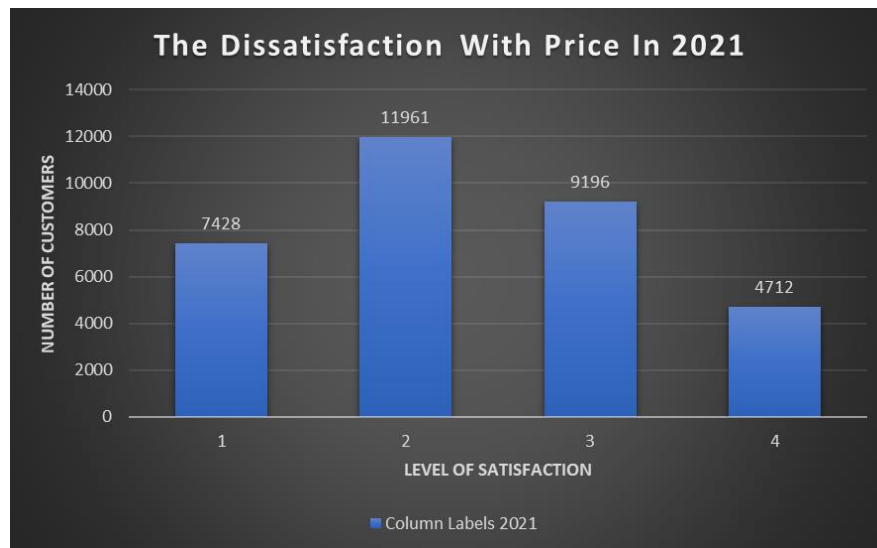


Figure 11: The number of customers dissatisfied with price in 2021

- *Dissatisfaction with the products' taste and promotion:* Figure 12 and figure 13

illustrate almost similar patterns with regard to dissatisfaction in terms of taste and promotion in 2021. Level 2, which was the range for the Dissatisfied customers, accounts for the highest number of respondents for both taste and promotion with 11,383 for the former and 11,055 for the latter, followed by Level 3, the Neutral range, which is 8,556 and 8,782 respectively. Level 5, which was for Very Satisfied customers had the lowest figure representing 444 customers who were satisfied with the Taste and 1,248 with the promotion.



Figure 12: The number of customers dissatisfied with taste in 2021



Figure 13: The number of customers dissatisfied with promotions in 2021

- *Dissatisfaction with the products' packaging*: Figure 14 depicts dissatisfaction with Packaging in 2021. While the majority of respondents were Satisfied and Very Satisfied with the packaging, which was 7,193 for the former and 6,743 for the latter, the number of respondents who were Dissatisfied and Neutral was still high, with over 6,000. This means that the packaging was still not attractive to some customers.

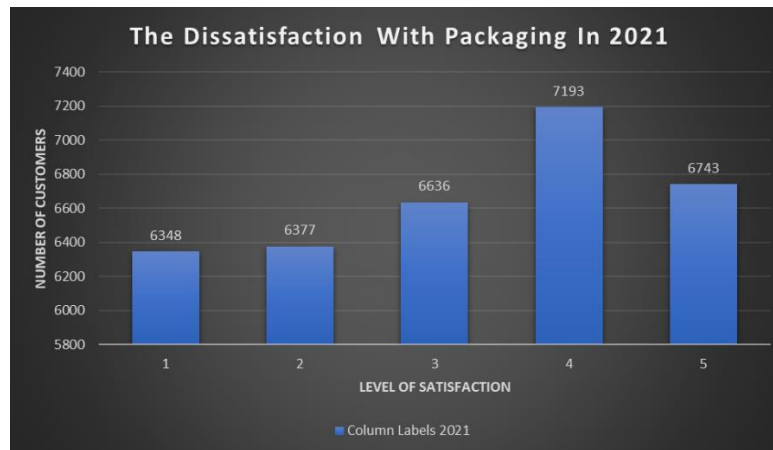


Figure 14: The number of customers dissatisfied with packaging in 2021

5.9.Activities of competitors

From table 1, it can be seen that the company was impacted in the sales of 8P because of competitors' promotions during 2021.

Regarding Competitor 1 (Vinamilk), although their pricing is the same as the company, their promotion rate during 2021 was higher: 10% off as compared with 7% off from Jan-21 to Feb-21. Moreover, from Jul-21 to Sep-21, competitors used gifts for their promotions, which can greatly attract potential customers. In the final quarter, the competitors released a 15% off promotion, while the company was just at 8% off.

Turning to Competitor 2 (Teama), despite the fact that their products' price was higher than the company, the competitor launched a promotion for buy 1 get 1 for six months in 2021, which can extremely entice buyers.

Promotion 2021 (SKU: 8P - Plain)	Selling Price per Box (VND)	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
My Business	29,000	7% Off		5% Off						8% Off			
Competitor 1 (Vinamilk)	29,000	10% Off			5% Off			Back to school's gifts			15% Off		
Competitor 2 (Teama)	30,000	Buy 1 get 1				10% Off				Buy 1 get 1			

Table 1: Competitors' activities of 8P in 2021

Table 2, illustrates that the sale of 16P was also impacted by competitors' activities. It is obvious that Competitor 2 and Competitor 3 ran appealing promotions during 2021 although their products' prices are higher. They categorized the year to specific occasions, then used different types of gifts for each occasion such as gifts for Lunar New Year, Summer, and Back to school. Their promotion rates during 2021 were also higher which was more than 10% off compared with under 10% off of the company.

Promotion 2021 (SKU: 16P - Plain)	Selling Price per Box (VND)	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
My Business	54,000	9% Off		7% Off						10% Off			
Competitor 2 (Teama)	53,000	25% Off				Plus children's gifts					Buy 1 get 1		
Competitor 3 (Milkana)	58,000	Lunar new year's gifts			Summer's gifts			Back to school's gifts			11% Off		

Table 2: Competitors' activities of 16P in 2021

5.10. Sales employee turnover rate

The turnover rate of individual salespeople can highly impact the sales of the company.

According to table 3 and figure 15, the salesman resignation rate in 2021 was higher than the previous year for most of the months. In 2020, the number of salesmen who resigned was 179 people, then it increased to 195 people in 2021. The highest rates of turnover were in Jan-21 and May-21, which was 67% for the former and 200% for the latter. This situation led to the problem of lacking salespersons who were selling products directly to customers.

# Salesman RESIGNED 2021 vs 2020 (By Month)													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2020	6	24	19	14	7	20	18	11	17	18	9	16	179
2021	10	25	14	18	21	20	18	13	18	17	11	10	195
%	67%	4%	-26%	29%	200%	0%	0%	18%	6%	-6%	22%	-38%	

Table 3: Salesman resigned in 2021 vs 2020 by month**Figure 15: Salesman resigned in 2021 vs 2020 by month**

With regards to table 4 and figure 16, North Province, Mekong, and South East regions accounted for the highest resignations rates in 2021, which were 108%, 40%, and 25%, respectively. This results in a decline in sales for such regions which are considered to likewise have the highest contribution.

# SALESMAN RESIGNED 2021 vs 2020 (By Region)								
Year	Central	Ho Chi Minh City	Ha Noi City	North Province	Mekong	South East	E-com	Total
2020	20	36	21	12	30	57	3	179
2021	11	29	15	25	42	71	2	195
%	-45%	-19%	-29%	108%	40%	25%	-33%	

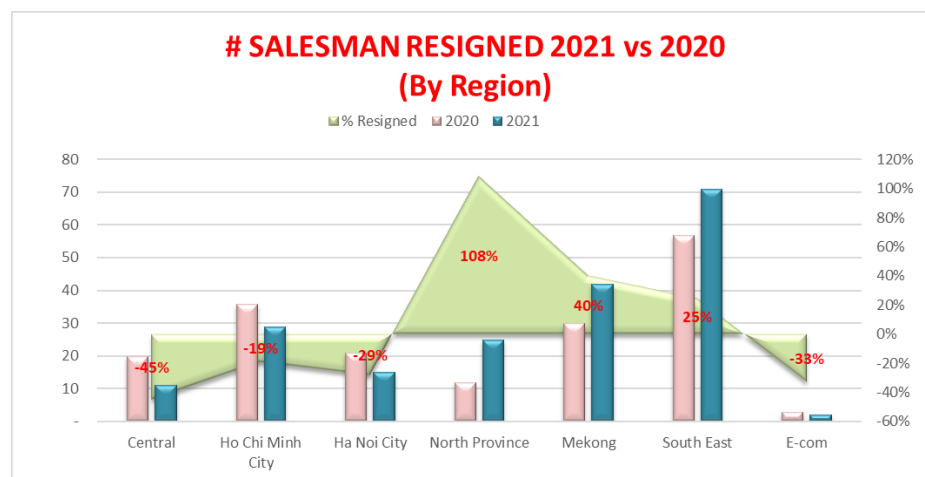
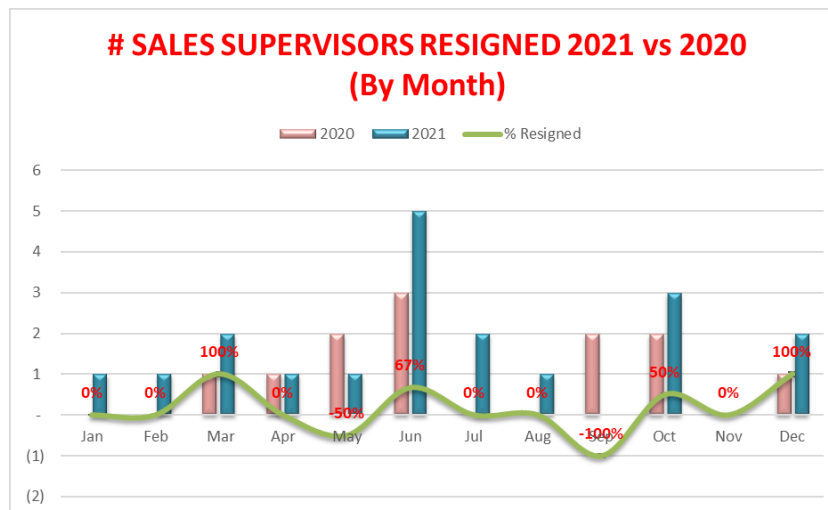
Table 4: Salesman resigned in 2021 vs 2020 by region

Figure 16: Salesman resigned in 2021 vs 2020 by region

Similarly, the high employee turnover rate of sales supervisors is to be considered.

Table 5 and figure 17, illustrate that the number of supervisors who resigned was initially 12 in 2020, then later increased to 19 people in 2021. The highest rates were in March and December of 2021, which double the number of resigned employees in the same months of 2020.

# Sale Supervisor RESIGNED 2021 vs 2020 (By Month)													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	FY
2020	-	-	1	1	2	3	-	-	2	2	-	1	12
2021	1	1	2	1	1	5	2	1	-	3	-	2	19
% Resigned		0%	100%	0%	-50%	67%	0%	0%	-100%	50%	0%	100%	

Table 5: Sales supervisors resigned in 2021 vs 2020 by month**Figure 17: Sales supervisors resigned in 2021 vs 2020 by month**

Looking at table 6 and figure 18, in terms of the number of North Province had the highest sales supervisors who resigned. However, if we compare the percentage increase from 2020, Ho Chi Minh City and Ha Noi City had the highest rates, which is 100% of the year's number of resigned supervisors.

# SALES SUPERVIORS RESIGNED 2021 vs 2020 (By Region)								
Year	Central	Ho Chi Minh City	Ha Noi City	North Province	Mekong	South East	E-com	Total
2020	-	1	1	3	3	4	-	12
2021	1	2	2	5	4	3	2	19
% Resigned		100%	100%	67%	33%	-25%		

Table 6: Sales supervisors resigned in 2021 vs 2020 by region

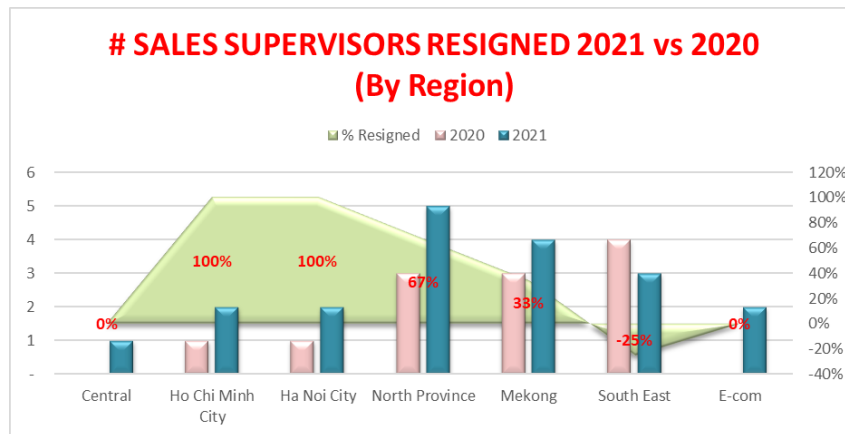
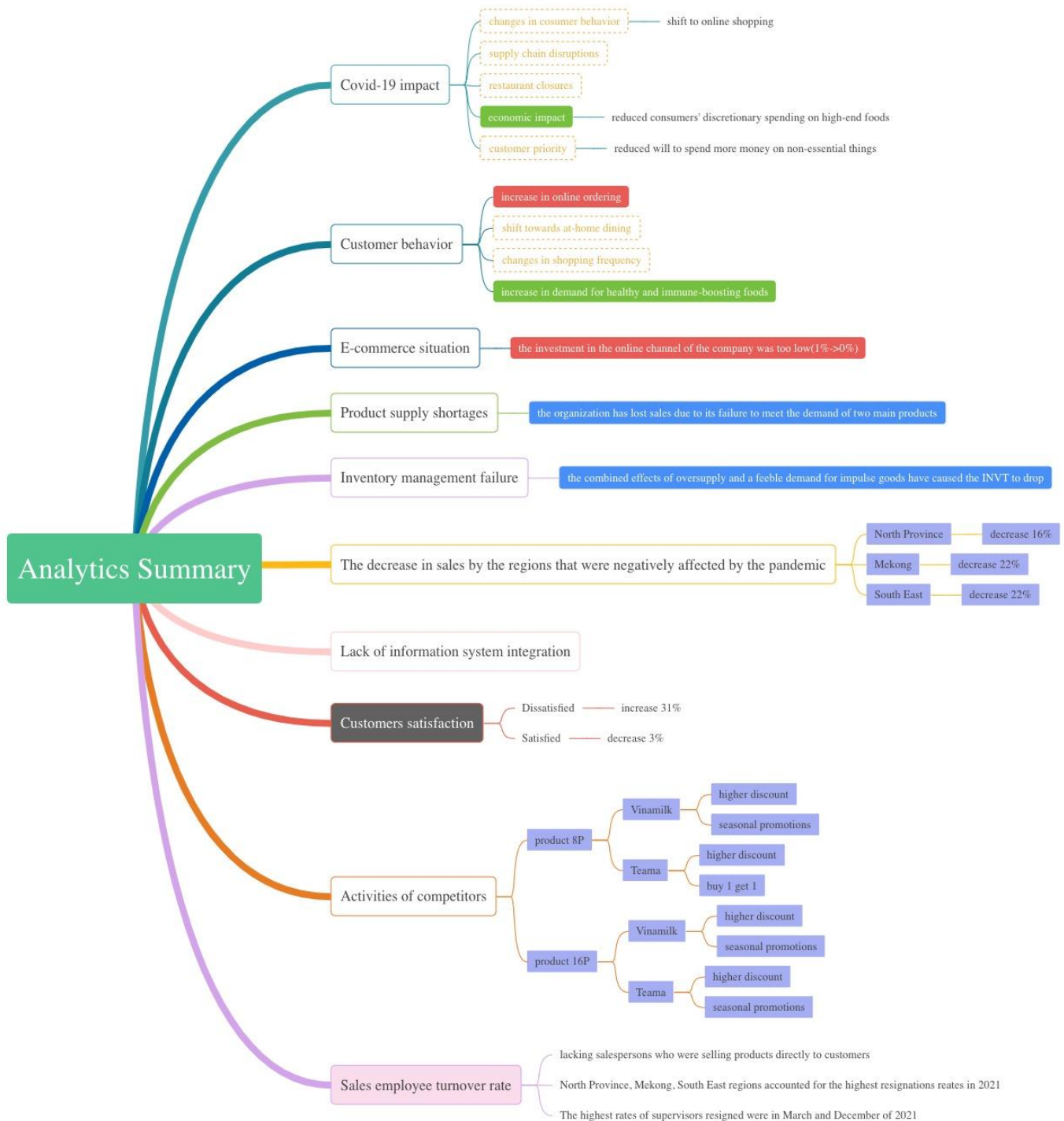


Figure 18: Sales supervisors resigned in 2021 vs 2020 by region

6. Recommendation

Based on the above data analysis, we can categorize the main factors influencing sales performance as follows.:



Meanwhile, we can categorize the solutions into the following forms based on the classification of the problems.

- The issues within the yellow dashed box are related to the epidemic, and there are limited proactive strategies that the company can implement. The timely recovery of production capacity and sales in response to the trend of the epidemic is the main solution.

- The issues highlighted within the green box, while related to the pandemic, are within our ability to proactively address. For instance, *we could introduce a more affordable product line to encourage customers to continue purchasing cheese in tough economic times.*

Additionally, we could *expand our health-focused product offerings to meet the increased demand for healthy food choices during the pandemic* and help customers make informed decisions.

- The issues highlighted within the red box pertain to a new sales model, which involves *establishing an online shopping team to cater to the emerging trend of online shopping,* in addition to our traditional brick-and-mortar stores. This includes *developing an online shopping app, creating exclusive online marketing campaigns, managing inventory, and providing delivery services.* As these aspects differ from our traditional sales model, they will require a separate infrastructure to be built.

- The issues highlighted in the blue box pertain to storage and inventory management. The commonality between these two issues is that they can be addressed through data analysis to develop models for timely predictions. Additionally, defining standard values (such as INVT should be maintained between 5-10) ensures the validity of the predicted data. *Real-time monitoring of existing data through a dashboard and adjusting the predictive data accordingly can help optimize the performance of the warehouse and inventory system.*

- The issues within the purple box can be classified under the marketing module, which involves making marketing adjustments for different regions, times, and competitive product

categories, to help the company achieve significant improvements in sales data. For example, increasing brand awareness in areas with declining sales, and designing more attractive promotions during competitor sales periods to encourage customer purchases.

- The issues within the gray box are related to user satisfaction, which is evaluated across a multitude of dimensions. From the data analysis above, it can be observed that users are highly sensitive to pricing. There are two ways to address this issue: first, by lowering prices through marketing activities; second, by adding low-priced, popular products that are consistent with the logic of the new production line, increasing brand awareness and maintaining the continuous consumption of a large number of price-sensitive users. Additionally, the design team needs to update the packaging in a timely manner to ensure that it is attractive, highlights key features, and is convenient and user-friendly.

- The content within the pink box is related to human resources. Firstly, the most fundamental point is to conduct a good investigation of the reasons for employee resignations, and solve the corresponding problems based on the investigation results to ensure that employees continue to stay in the company. Secondly, by observing the turnover situation in specific areas, effective employee care and incentives can be provided to increase employee goodwill towards the company. Finally, through analyzing turnover events, employee status surveys can be conducted two months before March and December each year to ensure sufficient warning measures for turnover trends. It is also important to maintain a reserve of personnel, including recruiting external employees and promoting from within the company.

7. Conclusion

The cheese company's success is heavily dependent on its ability to adapt to changing circumstances and proactively address the factors that impact its sales performance. As shown by the data analysis, there are several key factors that influence sales, including the pandemic, storage and inventory management, marketing, user satisfaction, and human resources. However, the company can take proactive measures to address these factors and improve its overall performance.

By analyzing the data and implementing proactive solutions, the cheese company can improve its sales performance, maintain customer satisfaction, and retain its employees. It is essential to stay agile and adapt to changing circumstances, such as the pandemic, to ensure the company's long-term success. By leveraging data-driven decision-making, the company can identify and address the factors that impact its sales performance, ultimately achieving sustainable growth and success.

References

Company, M. &. (2020, Oct 26). *Mckinsey & Company*. Retrieved from Mckinsey:

<https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/a-global-view-of-how-consumer-behavior-is-changing-amid-covid-19>

Deloitte. (n.d.). Retrieved from <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/consumer-behavior-trends-state-of-the-consumer-tracker.html>

Henry, R. (2020, Feb 07). *Extensiv*. Retrieved from Extensiv:

<https://www.extensiv.com/blog/good-inventory-turnover-ratio#:~:text=A%20good%20inventory%20turnover%20ratio%20is%20between%205%20and%2010,having%20to%20reorder%20too%20frequently>

OFFICE, G. S. (2021, 10 12). *GENERAL STATISTICS OFFICE*. Retrieved from

<https://www.gso.gov.vn/en/data-and-statistics/2021/10/report-on-the-covid-19-impacts-on-labour-and-employment-situation-in-the-third-quarter-of-2021/>

Statista. (2021, 9 21). *Marketreport*. Retrieved from <https://marketreport.io/e-commerce-2020-vietnam#:~:text=The%20Vietnamese%20eCommerce%20market,-While%20many%20other&text=Specifically%2C%20the%20data%20showed%20in,it%20is%207%20billion%20USD>

[While%20many%20other&text=Specifically%2C%20the%20data%20showed%20in,it%20is%207%20billion%20USD](https://marketreport.io/e-commerce-2020-vietnam#:~:text=The%20Vietnamese%20eCommerce%20market,-While%20many%20other&text=Specifically%2C%20the%20data%20showed%20in,it%20is%207%20billion%20USD)

Appendix

Appendix – 1:**Table 7:**

Dataset information: Volume sales of The Laughing Cow in 2020 and 2021 (Unit: Kilograms)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
2020	77,684	88,083	73,557	83,906	93,377	102,962	62,052	83,777	95,006	91,401	80,856	75,849	1,008,511
2021	73,537	52,559	78,333	82,657	82,170	53,734	63,459	79,490	68,396	82,850	87,251	78,802	883,239
Grand Total	151,221	140,642	151,890	166,564	175,547	156,696	125,511	163,267	163,402	174,251	168,107	154,652	1,891,751

Appendix – 2:**Table 8:**

Dataset information: Sales contribution by SKU (Unit: Kilograms)

SKU	2020	% Contribution	2021	% Contribution
BELCUBE - 15C - PLAIN	37,888.82	4%	39,801.28	5%
BELCUBE - 24C - PLAIN	27,776.25	3%	36,181.96	4%
TLC - 16P - PLAIN	347,005.24	34%	254,383.35	29%
TLC - 8P - PLAIN	592,574.45	59%	550,155.60	62%
TLC - SLICES - 10S - BURGER/ CHEDDAR	2,435.68	0%	1,708.70	0%
TLC - SLICES - 10S - LIGHT	830.86	0%	1,008.24	0%
TLC - SLICES - 10S - SANDWICH	0.08	0%	0.00	0%
TLC - SLICES - 10S - TOAST	0.08	0%	0.00	0%
Grand Total	1,008,511	100%	883,239	100%

Appendix – 3:**Table 9:**

Dataset information: Sales volume of 8P and 16 P in 2020 and 2021 (Unit: Kilograms)

Year/SKU	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
2020	71,406	82,683	65,305	76,993	86,955	96,839	56,566	78,789	90,331	86,898	75,489	71,324	939,580
TLC - 16P - PLAIN	14,194	29,297	26,721	18,253	34,285	38,439	17,998	29,170	36,264	45,986	37,103	19,295	347,005
TLC - 8P - PLAIN	57,212	53,386	38,584	58,740	52,670	58,400	38,568	49,619	54,067	40,912	38,386	52,029	592,574
2021	68,329	48,649	73,313	74,499	73,531	46,251	58,959	72,711	63,336	74,286	79,704	70,971	804,539
TLC - 16P - PLAIN	26,495	10,855	29,510	36,530	24,751	13,892	18,272	14,967	11,509	19,191	20,739	27,672	254,383
TLC - 8P - PLAIN	41,834	37,794	43,803	37,969	48,780	32,360	40,687	57,744	51,827	55,094	58,965	43,299	550,156
Grand Total	139,735	131,332	138,618	151,492	160,486	143,090	115,526	151,501	153,667	161,184	155,193	142,295	1,744,119

Appendix – 4:**Table 10:**

Dataset information: Sales Value in 2020 and 2021 by channel (Unit: USD)

Channel	2020	% Contribution	2021	% Contribution
E-commerce	58,207	1%	14,893	0%
Offline	9,575,715	99%	8,391,457	100%
Grand Total	9,633,922	100%	8,406,350	100%

Appendix – 5:**Table 11:**

Dataset information: Sales Value in 2020 and 2021 by region (Unit: USD)

Year	Central	Ha Noi City	Ho Chi Minh City	Mekong	North Province	South East
2020	1,521,962	462,844	2,789,867	1,342,749	651,860	2,864,639
2021	1,396,832	522,017	2,668,612	1,042,360	547,946	2,228,583
% Growth	-8%	13%	-4%	-22%	-16%	-22%

Appendix – 6:**Table 12:**

Dataset information: Production volume in the first half of 2021 (Unit: Kilograms)

TLC - 8P - PLAIN	Jan	Feb	Mar	Apr	May	Jun
Demand Volume (Kg)	64,077.30	42,709.13	44,372.01	41,118.09	47,403.40	40,879.87
Production Volume (Kg)	40,320.00	29,680.00	43,989.12	37,968.00	42,336.00	39,312.00
% Supplied	62.9%	69.5%	99.1%	92.3%	89.3%	96.2%

TLC - 16P - PLAIN	Jan	Feb	Mar	Apr	May	Jun
Demand Volume (Kg)	24,130.59	11,718.83	29,927.18	38,331.52	27,427.67	15,375.52
Production Volume (Kg)	26,342.40	6,720.00	31,360.00	42,291.20	23,609.60	12,566.40
% Supplied	109.2%	57.3%	104.8%	110.3%	86.1%	81.7%

Appendix – 7:**Table 13:**

Dataset information: The number of customer satisfaction in 2020 and 2021 (Unit: people)

Segment	2020	2021	%
Dissatisfied	25,496	33,297	31%
Satisfied	36,092	34,995	-3%

Appendix – 8:**Table 14:**

Dataset information: Comparative Balance Sheet for the years 2020 and 2021

LAUGHING COW CHEESE COMPANY (A Vietnam Joint Stock Company) BALANCE SHEET (All Amounts in U.S. Dollars (\$) unless otherwise stated)			
		Year ended 31 December	
	Notes	2021	2020
<u>ASSETS</u>			
Cash and cash equivalents	6	14,550,708	11,284,693
Inventory	7	4,703,426	1,326,750
Accounts Receivables	8	12,895,812	3,413,857
Prepayments and other receivables	9	2,514,436	1,937,291
Deferred Tax Asset	10	9,006	-
Property and equipment, net	11	18,466,404	20,655,804
TOTAL ASSETS		53,139,793	38,618,396
<u>LIABILITIES AND EQUITY</u>			
<u>LIABILITIES</u>			
Accounts Payable	12	9,701,572	12,851,006
Accruals and other payables	13	4,259,940	8,984,838
Taxes payable		459,634	511,164
TOTAL LIABILITIES		14,421,147	22,347,009
<u>SHAREHOLDERS' EQUITY</u>			
Share capital	21	20,000,000	20,000,000
Retained Earnings		18,718,646	18,618,396
TOTAL SHAREHOLDERS' EQUITY		38,718,646	38,618,396
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		53,139,793	38,618,396

The accompanying notes from 1 to 23 form an integral part of these financial statements.

Appendix – 9:**Table 15:**

Dataset information: Comparative Statement of Profit & Loss for the years 2020 and 2021

LAUGHING COW CHEESE COMPANY (A Vietnam Joint Stock Company) STATEMENT OF PROFIT & LOSS (All Amounts in U.S. Dollars (\$) unless otherwise stated)			
		<u>Year ended 31 December</u>	
	Notes	<u>2021</u>	<u>2020</u>
Revenue	14	8,391,457	9,575,715
Cost of Goods Sold	15	6,671,208	7,277,543
Gross Profit		1,720,249	2,298,172
Selling and distribution expenses	16	1,105,541	987,746
General and administrative expenses	17	154,504	170,036
Operating Profit		460,203	1,140,390
Finance Cost	18	6,897	27,009
Net Profit Before Tax		453,306	1,113,381
Income Tax - Current	19	344,050	459,634
Income Tax - Deferred	20	9,006	(2,200)
Net Profit / (loss) for the period / year		100,250	655,947

The accompanying notes from 1 to 23 form an integral part of these financial statements.

Appendix – 10:**Table 16:**

Dataset information: Comparative Cost of Goods Manufactured Statement for the years 2020 and 2021

LAUGHING COW CHEESE COMPANY (A Vietnam Joint Stock Company) COST OF GOODS MANUFACTURED STATEMENT (All Amounts in U.S. Dollars (\$) unless otherwise stated)		
	<u>Year ended 31 December</u>	
	<u>2021</u>	<u>2020</u>
Direct Material		
Beginning Inventory	298,940	299,280
Plus: Raw Material Purchases	3,946,078	3,411,789
Plus: Freight In	438,453	179,568
Less: Raw Material Ending Inventory	207,595	224,460
Direct Material Used	<u>4,475,876</u>	<u>3,666,177</u>
Add: Direct Labour	<u>3,471,087</u>	<u>2,843,158</u>
Add: Manufacturing Overhead		
Indirect Labor	932,170	763,538
Manufacturing Rent	415,617	340,431
Manufacturing Utilities	664,987	544,689
Manufacturing Insurance	243,433	199,395
Depreciation (Manufacturing equipment)	118,748	97,266
Total Manufacturing Overhead	<u>2,374,955</u>	<u>1,945,319</u>
Total Manufacturing Cost For the Period	<u>10,321,918</u>	<u>8,454,654</u>
Add: Work in Process (Beginning)	274,033	224,460
Total Work in Process Inventory	<u>10,595,951</u>	<u>8,679,113</u>
Less: Work in Process (Ending)	548,066	448,920
Cost of Goods Manufactured	<u>10,047,885</u>	<u>8,230,194</u>

The accompanying notes from 1 to 23 form an integral part of these financial statements.

Appendix – 11:**Table 17:**

Dataset information: Comparative breakdown of Cost of Goods Sold for the years 2020 and 2021

15 COST OF GOODS SOLD	2021	2020
Finished Goods Inventory (Beginning)	1,326,750	374,100
plus: Cost of Goods Manufactured	10,047,885	8,230,194
Cost of Goods Available for Sale	11,374,635	8,604,294
Less: Finished Goods Inventory (Ending)	4,703,426	1,326,750
Cost of Goods Sold	6,671,208	7,277,543

Appendix – 12:**Table 18:**

Dataset information: The dissatisfaction of customers in 5 levels in 2021

Level	Dissatisfaction with Price	Dissatisfaction with Taste	Dissatisfaction with Promotion	Dissatisfaction with Packaging	Grand Total
1	7,428	6,996	6,950	6,348	27,722
2	11,961	11,383	11,055	6,377	40,776
3	9,196	8,782	8,556	6,636	33,170
4	4,712	4,633	4,560	7,193	21,098
5	-	444	1,248	6,743	8,435
Grand Total	33,297	32,238	32,369	33,297	131,201