

TabPro Inc. FY2020-2022 Analysis Report

Project Title: Sales/Customer Performance Analysis and Optimization Strategy for TabPro Inc.

Client Name: TabPro Inc.

Date: 29th March, 2025

Prepared by: Damilola Idowu

Order of Content

1. Executive Summary
2. Introduction
3. Business Objective
4. Functional Requirement
5. Data Collection and Processing
6. Data Exploration and Cleaning
7. Data visualization and Business Intelligence
8. Key Findings
9. Insights
10. Recommendations
11. Conclusion

Executive Summary

Our data analysis reveals a significant decline in TabPro Inc.'s sales performance in 2022, with a 47.7% reduction in total sales compared to 2021. This decline is also reflected in the quantity of products ordered (47.1% reduction) and total profit (48.8% reduction). In contrast, 2021 saw a remarkable increase in sales, quantity and profit compared to 2020. Our analysis details a comprehensive overview conducted on TabPro Inc. sales data, customer behaviour and profit generation patterns within the fiscal year of 2020 to 2022, highlighting key trends, insights and recommendations to inform TabPro Inc.'s strategic decision-making.

Introduction

TabPro Inc., a multinational brand with presence in 10 countries, has experienced a significant decline in sales following the global pandemic. In response to the decline in sales following the global pandemic, TabPro Inc. management team engaged our data analytics firm to conduct a comprehensive analysis of their sales data, customer behavior and market trends. This report presents the key findings and insights from our analysis, highlighting opportunities for growth, optimization and strategic decision-making. Our objective is to provide TabPro Inc. with actionable recommendations to inform their business strategy and drive revenue growth in the post-pandemic market.

Business Objective

To identify data-driven insights and opportunities to reverse the decline in sales, and develop a strategic plan to increase revenue by at least 15% in 2nd quarter (Q2) of FY2023, while improving operational efficiency and enhancing customer engagement across all TabPro Inc. markets in the United States of America.

Functional Requirement

1. **Comprehensive Sales Data Analysis Report:** A detailed report outlining key findings, insights, and recommendations.
2. **Interactive Sales/Customer Dashboard:** A dynamic and interactive dashboard providing real-time visibility into sales performance.
3. **Actionable Insights and Recommendations:** A set of actionable insights and recommendations to improve sales strategies and tactics.
4. **KPI Overview:** Display a summary of total sales, profits and quantity for the years
5. **Sales Trend:** Present the data for each KPI on a monthly basis for the year and identify months with the highest and lowest sales
6. **Product Category Comparison:** Comparing sales performance by different categories for the years
7. **Geographical Analysis:** Understand the demographic impact on customer activities
8. **Customer Behavior:** Understand the role of diverse factors affecting customer behavior

Data Collection and Processing

The data for this project was obtained from the TabPro Inc., Customer Relationship and Management (CRM) and Sales team on the 14th of March, 2025. The file data saved as "Sales_FY2020-2022" had the following columns:

1. **order_id:** A unique identifier for each order
2. **order_date:** The date customer placed order
3. **Status:** The status of order (Canceled, closed, cash on delivery(cod), completed, holded, order refunded, paid, payment reviewed, pending, pending paypal, processing, received, refund)
4. **Item_id:** A unique identifier for items sold
5. **SKU:** The number/code assigned to products in stock
6. **qty_ordered:** Quantity of products ordered
7. **Price:** The monetary value of product in dollars
8. **Sale:** The total sale amount of each transaction

9. **value:** The cost price of products
10. **Profit:** Net profit earned from each sale
11. **discount_amount:** Amount deducted from original sale price
12. **total:** Cost value of product
13. **category:** Classification of products by type
14. **payment:** Mode of payment by customer
15. **bi_st:** Billing status of customer, whether valid, gross or net
16. **cust_id:** The unique identifier for a customer
17. **year:** The year customer ordered/product sold
18. **month:** The month customer ordered/product sold
19. **refnum:** reference number for customer transaction
20. **Name Prefix:** The title of the customer
21. **First name:** First name of customer
22. **Last name:** Second name of customer
23. **Gender:** Customer gender classification (male or female)
24. **Age:** Age of customer
25. **Full name:** The full name of the customer
26. **Email:** Customer email address
27. **Customer since:** Length of time customer has been active
28. **SSN:** Customers social security number for customer verification
29. **Phone number:** Customers call contact
30. **Place name:** City of the customer
31. **County:** County of the customer
32. **City:** City of the customer
33. **State:** State of the customer
34. **Zip:** Zip code of the customer
35. **Region:** Region of the customer
36. **Username:** Unique name assigned to a customer

Data Exploration and Cleaning

The data was explored using the following tools: Excel, Jupyter notebook (Python). The sales data had 514,108 rows and 36 columns. The data was reviewed for data quality issues by checking for inconsistent formatting, missing and duplicate values.

Data visualization and Business Intelligence

This was carried out using Tableau v.2024.3

Key Findings

1. **Decline in Sales Performance (2022 vs. 2021):** Total sales decreased by 47.7% to \$259 million, with a corresponding decline in quantity of products ordered (47.1% reduction to 454,000) and total profit (48.8% reduction to \$124 million).
2. **Exceptional Growth in 2021:** Total sales increased by 212.8% to \$496 million, with a significant rise in quantity of products ordered (278.5% increase to 858,000) and total profit (200.1% increase to \$243 million) compared to 2020.
3. **Product Sales Contribution:** Mobiles and tablets contributed the most to sales in 2022 (\$73 million), followed by appliances (\$20 million).
4. **Profitability:** Mobiles and tablets generated the highest profit in 2021 (\$139 million) going higher by 203.4% compared to 2020, with appliances contributing \$38 million.
5. **Weekly Sales Trends:** Sales peaked within week 13 to week 18 (2022) and week 18 (2021), with notable declines in sales and quantity of products ordered in subsequent weeks.

6. Seasonal Fluctuations: Highest sales and quantity of products ordered were observed in week 18 and week 52 (2021), indicating a potential seasonal demand surge. In 2022, sales reached a peak of \$15 million in week 18, surpassing the average annual sales of \$6 million. Notably, week 18 also saw a significant surge in product orders, with 75,000 units sold, exceeding the average of 11,000 units observed throughout the year. In contrast, 2021 saw sales peak at \$28 million in week 13, followed by a sharp decline to \$12 million in week 15. Sales then rebounded to \$27 million in week 16. Week 24 recorded sales of \$23 million, while the highest sales figure for the year was \$65 million in week 53. In terms of product orders, 2021 saw a peak of 87,000 units of products ordered in week 18, followed by a steep decline to 6,000 units in week 19. The highest quantity ordered in 2021 was 92,000 units in week 52.

7. Customer Demographics and Profit Generation

● Male Customer Population by State

In 2022, the top three states with the highest male customer population were Illinois (0.39 billion), Texas (0.36 billion), and California (0.31 billion). In 2021, Texas led with 0.67 billion customers, followed by California (0.60 billion) and New York (0.58 billion). In 2020, Texas had the highest number of male customers (0.20 billion), followed by California (0.17 billion) and New York (0.16 billion).

● Female Customer Population by State

In 2022, California had the highest female customer population (0.31 billion), followed by Texas, Pennsylvania and New York (each with 0.28 billion). In 2021, California led with 0.60 billion customers, followed by Texas (0.58 billion) and Pennsylvania (0.53 billion). In 2020, California and Texas tied for the highest number of female customers (0.17 billion each), followed by Pennsylvania (0.15 billion).

Insights

1. Our comprehensive analysis of sales data for 2021 and 2022 reveals a notable trend, specifically both years exhibit a peak in sales and quantity orders during week 13 to 18 (beginning of 2nd quarter), followed by a subsequent decline, however a secondary peak is observed in week 52 and 53, indicating a resurgence in sales and quantity orders towards the end of each year (end of 3rd quarter).

2. Mobiles and Tablets produced the highest sales for the company both in 2021 and 2022, generating 40.79% of total sales in 2022, and 42.67% of total sales in 2021, indicating about half of TabPro Inc. annual profit inflow is from Mobiles and Tablets.

3. Profit Generation by Customer

● Male Customer Profit generation: Interestingly, the states with the highest male customer population (California, Texas and New York) did not necessarily translate to the highest profit generation for TabPro Inc. The top profit-generating customers in 2022 were Bhatt Graham from Indiana (\$1,401,976) and Dobbins Everette from Mississippi (\$1,154,208), despite having relatively smaller customer populations (0.15 billion and 0.08 billion, respectively). Similar trends were observed in 2021 and 2020, where same Bhatt Graham from Indiana (\$1,455,739) and Scanlon Erasmo from Oklahoma (\$191,014) from smaller states generated the most significant profits respectively.

● Female Customer Profit Generation: A similar pattern emerged among female customers, where Cobb Joleen from Mississippi generated \$1,033,606 in 2022 from a customer population of 0.07 billion. Beebe Hortencia from Vermont contributed \$1,299,827 in profit in 2021 from a customer population of 0.08 billion. Garza Steven from North Carolina generated \$354,894 in profit in 2020 from a customer population of 0.08 billion. These findings suggest that profit generation is not solely dependent on the size of the customer population, but rather on other factors such as customer behavior, purchasing habits and loyalty.

4. The top four states for customer activity by gender were Illinois, California, Texas and New York for males, and California, Texas, Pennsylvania, and New York for females, with male customers comprising 50.80%, 50.85%, and 50.98% of the total customer population in 2020, 2021 and 2022, respectively.

Sales Data Analysis Recommendations

1. Analyze Market Trends

Investigate external factors contributing to the decline in sales, such as changes in consumer behavior, market competition or economic conditions.

2. Optimize Product Portfolio

Reassess TabPro Inc. product in the market to ensure alignment with changing market demands and consumer preferences, while focusing on the product generating highest revenue (Mobiles & Tablet)

3. Enhance Marketing Strategies

Develop targeted marketing campaigns to capitalize on seasonal demand surges and promote high-margin TabPro Inc. products on diverse sale and marketing platforms.

4. Monitor and Evaluate

Continuously track sales performance and market trends to inform data-driven decisions and drive business growth.

Customer Data Analysis Recommendations

1. Diversify Marketing Efforts

While California, Texas and New York have large customer populations, they do not necessarily generate the highest profits. TabPro Inc. Management team should consider diversifying marketing efforts to target smaller states with high-profit generating customers such as Indiana, Mississippi and Vermont.

2. Customer Segmentation

Segment customers based on their purchasing behavior, loyalty and profitability. This will help identify high-value customers and tailor marketing strategies to target similar customers in other states.

3. Personalized Marketing

Develop personalized marketing campaigns targeting high-profit generating customers, such as Bhatt Graham and Beebe Hortencia. This could include loyalty programs, special offers and tailored communication.

4. Expand Presence in High-Profit States

Consider expanding TabPro Inc.'s presence in states with high-profit generating customers, such as Indiana, Mississippi, and Vermont. This could include opening new locations, increasing marketing efforts or partnering with local businesses.

5. Emerging Market

The state of Illinois experienced a sudden surge in male customer activity in 2022, surpassing high customer population in the usual male dominated states (California, Texas and New York), potentially indicating Illinois as an emerging market for TabPro Inc., and marketing campaigns can be directed towards increasing sales and profit generation in this emerging market space.

6. Analyze Customer Behavior

Conduct further analysis to understand the behavior and purchasing habits of high-profit generating customers. This will help identify opportunities to increase sales and improve customer satisfaction.

Conclusion

The comprehensive sales analysis of TabPro Inc. operations between the FY2020 and FY2022 reveals a significant decline in sales performance in 2022, with a corresponding decrease in quantity of products ordered and total profit. In contrast, 2021 saw exceptional growth in sales, quantity, and profit. The analysis highlights key trends, including the importance of mobiles and tablets to sales, the need for optimized product portfolios and marketing strategies, and seasonal fluctuations in customer behavior. This trend suggests that there may be underlying factors, such as seasonal demand or promotional activities, that are driving these fluctuations in sales and quantity orders. Further investigation is warranted to fully understand the root causes of this trend and to inform business strategies that can capitalize on these opportunities.

To reverse the decline in sales and drive sustainable growth from the first quarter (Q1) of 2023, TabPro Inc. must address the insights and recommendations outlined in this report. By analyzing market trends, optimizing product portfolios, enhancing marketing strategies, improving operational efficiency and continuously monitoring performance, the company can develop a comprehensive strategy to navigate challenges, capitalize on opportunities, optimize its sales and operational planning to ultimately drive growth and profitability in the competitive market.