



NovaMed Solutions

Project Analysis Done With: POWER BI



PRESENTED BY: YINKA SAMUEL FANIYI

Analysis on NovaMed Solutions



Business Overview

NovaMed Solutions is a leading pharmaceutical distributor catering to a broad and diverse healthcare sector across **North America, Europe, and Australia** — specifically operating in **Canada, Australia, Germany, the United Kingdom, France, and the United States**. With a focus on delivering high-quality medications to hospitals, clinics, and pharmacies, NovaMed manages a comprehensive portfolio of pharmaceutical products tailored to meet varying regional demands.

Business Problem

NovaMed Solutions, a leading pharmaceutical distributor, is at a critical crossroads in its growth journey. While the company plays a vital role in supporting a diverse healthcare sector by ensuring the consistent availability of essential medications, it is currently grappling with key operational challenges. These include **suboptimal sales performance, inventory inefficiencies,** and a **lack of precision in market targeting**. Gaps in demand forecasting, stock replenishment, and customer engagement are not only straining resources but also hindering NovaMed's ability to fully capitalize on emerging market opportunities. Addressing these inefficiencies is essential for unlocking the company's next phase of scalable, data-driven growth.

Aim of Project

To optimize operational strategy and customer engagement, NovaMed undertook a comprehensive sales performance analysis spanning January to December (2022 – 2024). This analysis aimed to:

- ❖ Evaluate **total revenue** and **profitability** trends across global regions.
- ❖ Identify **top-performing drugs** and analyze their contribution to total sales.
- ❖ Understand **monthly revenue fluctuations** to align marketing and logistics strategies.
- ❖ Pinpoint **top and bottom performing customers** to inform retention and acquisition strategies.
- ❖ Examine **customer demographics** such as age, gender, and buyer type to fine-tune personalization and service offerings.

This data-driven review equips NovaMed's leadership with actionable insights to **enhance profitability, streamline inventory, and improve customer targeting**, laying a foundation for smarter decision-making in future growth initiatives.

Data Description

Drug Information

- Drug ID** – Unique identifier for each drug.
- Regulatory Compliance ID** – Identifier for regulatory approval and compliance tracking.
- Drug Name** – Name of the drug.
- Unit Sales Price** – Selling price per unit of the drug.
- Cost Of Production** – Cost incurred to produce one unit of the drug.
- Treats**–The medical condition or illness the drug is used to treat.

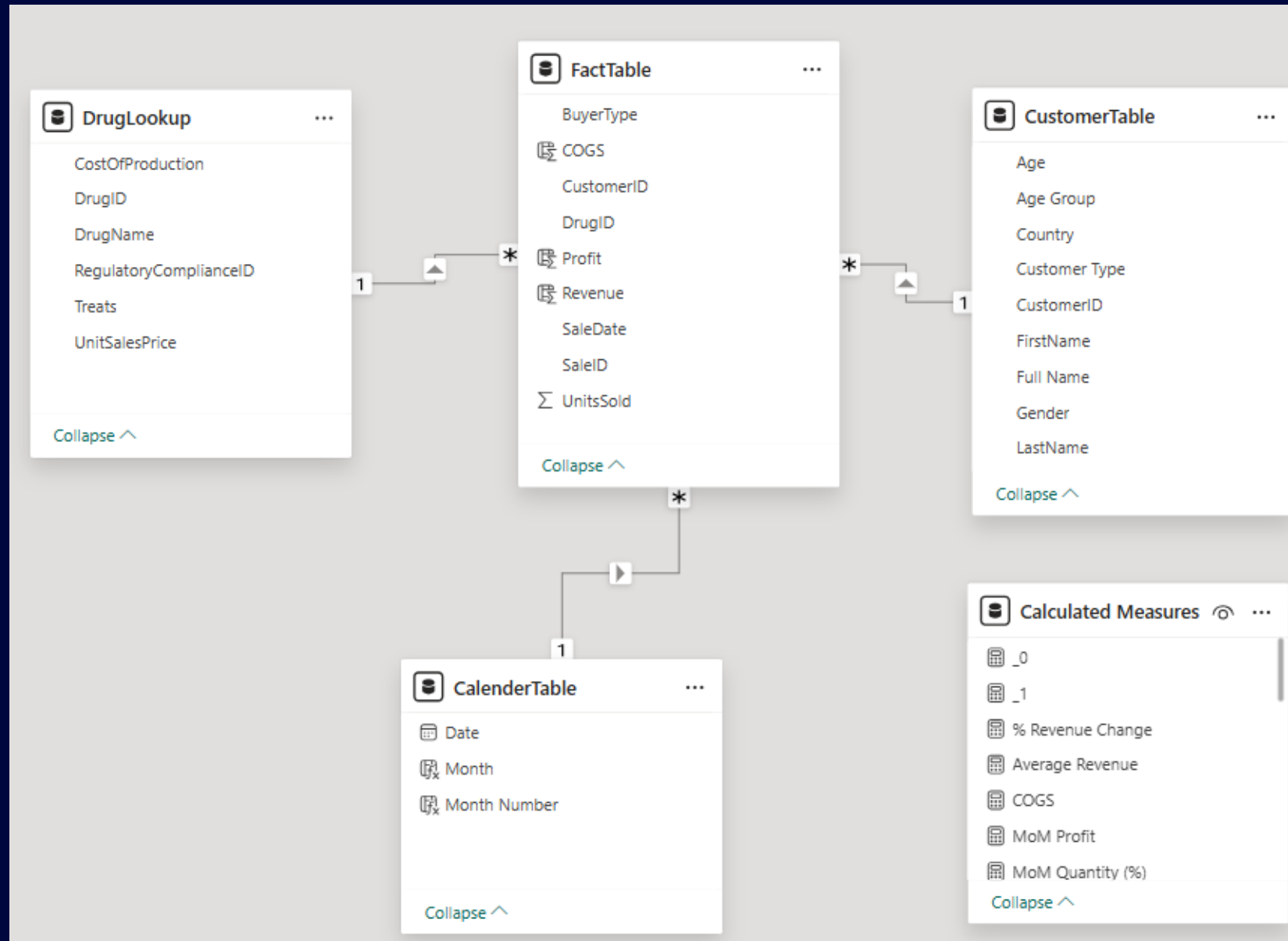
Sales Information

- Sale ID** – Unique identifier for each sales transaction.
- Drug ID** – Identifies the drug sold in the transaction.
- Customer ID** – Identifies the customer who made the purchase.
- Units Sold** – The quantity of the drug sold in the transaction.
- Sale Date** –The date on which the sale occurred.
- Buyer Type** – Classification of the buyer (e.g., individual, pharmacy, hospital).

Customer Information

- Customer ID** – Unique identifier for each customer.
- First Name** – Customer’s first name.
- Last Name** – Customer’s last name.
- Age** – Age of the customer.
- Gender** – Gender of the customer.
- Country** – The country where the customer is located.
- Other Customer Info** – Additional details about the customer.

Data Modelling (Showing Relationship between Tables)



CUSTOMER ANALYSIS



NovaMed Solutions

CUSTOMER ANALYSIS

Overview | Customer Analysis for Jan - Dec (2022 - 2024)

Year, Month

All

Customer Type

All

Total Customers

200

COGS \$12.85M

Avg Rev \$4,371

Total Quantity Sold

269K

PM Qty 269K

MoM Qty 0.02%

Total Revenue

\$71.31M

PM Rev \$71.29M

MoM Rev 0.03%

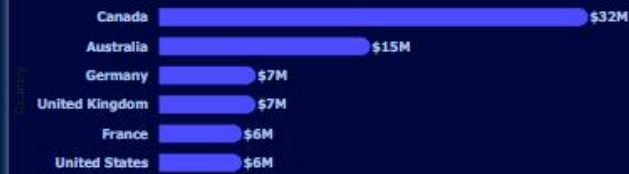
Total Profit

\$58.45M

PM Profit \$58.44M

MoM Profit 0.03%

Total Revenue by Country



Total Revenue by Customer Type

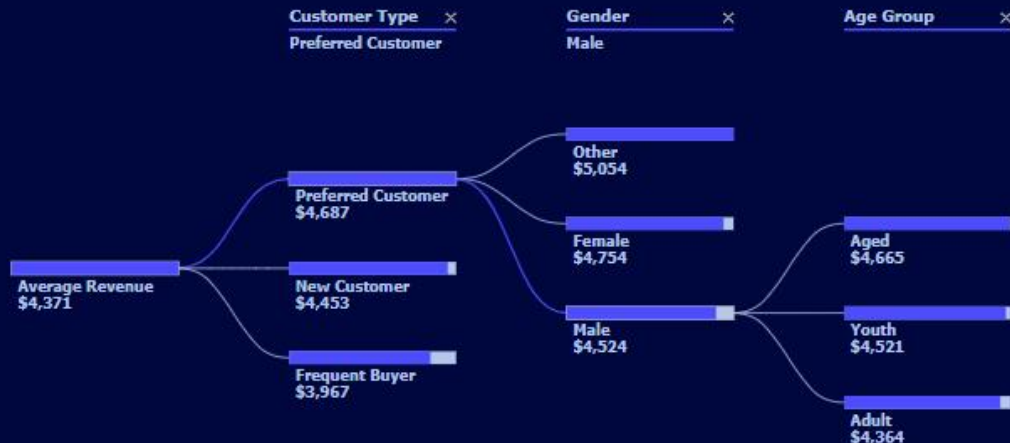


Total Revenue by Age Group and Gender

Female Male Other



Average Revenue by Customer Type, Gender and Age Group



Total Revenue by Country



DESCRIPTION OF TOOLS USED | CUSTOMER ANALYSIS

- ❖ **Cards (New):** To display Key Performance Indicators (KPI) such as Total Customers, Total Quantity Sold, Total Revenue and Total Profit.
- ❖ **Clustered Bar Chart:** To explain Revenue Distribution among Countries.
- ❖ **Donut Chart:** Showing Revenue Distribution among the Age Groups.
- ❖ **Clustered Column Chart:** Explaining Age Group and Gender contributions to the Total Revenue.
- ❖ **Decomposition Tree:** Breaking down Average Revenue Distribution by Customer Type, Gender and Age Group.
- ❖ **Map:** Showing Geographical Revenue Distribution.

CUSTOMER ANALYSIS CONTD

KEY INSIGHTS:

1. Revenue Overview

- **Total Revenue:** \$71.31M with a **Monthly Revenue Growth** of just **0.03% - 14.11%** and instances of **negative MoM Revenue**.
- **Total Profit:** \$58.45M (82% profit margin) indicates **strong profitability**.
- **Total Quantity Sold:** 269K units.

Insight: Despite high profits, revenue growth is **staggering** (0.03% to 14.11% and negative revenue changes MoM).

KEY INSIGHTS:

2. Customer Composition

- **Total Customers:** 200
- **Customer Type Breakdown:**
 - **Preferred Customer:** \$25.63M (35.9%)
 - **New Customer:** \$24.29M (34.0%)
 - **Frequent Buyer:** \$21.38M (30.0%)

Insight: Revenue is fairly **evenly distributed across customer types**, showing a balanced acquisition and retention effort.

KEY INSIGHTS:

3. Geographical Revenue

- **Top Countries by Revenue:**
- Canada: **\$31,667,202.53** Australia: **\$15,253,937.11**
- Germany: **\$6,618,489.61** United Kingdom: **\$6,605,118.37**
- France: **\$5,584,466.27** United States: **\$5,577,904.39**

Insight: Canada had the highest Total Revenue and was 467.73% higher than United States, which had the lowest Total Revenue at \$5,577,904.39. **Canada accounted for 44.41%** of Total Revenue, suggesting a need to diversify geographically.

CUSTOMER ANALYSIS CONTD



KEY INSIGHTS:

4. Revenue by Gender and Age

- **Male** had the highest Total Revenue at \$33,226,148.41, followed by Female at \$22,954,436.06 and Other at \$15,126,533.81.
- Male Adult made up 15.77% of Total Revenue. Male had the highest average Total Revenue at \$11,075,382.80, followed by Female at \$7,651,478.69 and Other at \$5,042,177.94.

Insight: **Male customers**, especially **older demographics**, are driving the most revenue.

KEY INSIGHTS:

5. Average Revenue by Customer Segment

- **Preferred Customers** generate the highest average revenue per customer (\$4,687).
- **Frequent Buyers** generate the least (\$3,467).

Insight: The **Preferred segment** is highly valuable; **Frequent buyers** may be under-leveraged or offer-driven rather than value-driven.

CUSTOMER ANALYSIS CONTD



RECOMMENDATIONS:

1. Boost Revenue Growth

- Introduce **seasonal campaigns** and **loyalty programs** to boost MoM growth.
- Invest in **customer retention journeys** to move new customers toward preferred status.

RECOMMENDATIONS:

2. Diversify Revenue Geographically

- Expand marketing in **United States, France, Germany and the UK**, where revenue is under \$7M.
- Localize offerings and optimize logistics for those regions.

RECOMMENDATIONS:

3. Maximize Male Customer Value

- Create targeted campaigns for **Adult and Aged Male** segments.

Introduce **health-conscious** or **premium-tier** products aligned with their preferences.

RECOMMENDATIONS:

4. Upsell to Frequent Buyers

- Assess why Frequent Buyers spend less on average.
- Offer **bundling discounts, exclusive products, or cross-sells** to increase cart size.

RECOMMENDATIONS:

5. Product & Service Optimization

- Track high-performing regions and customer types against product categories.
- Identify which campaign thrives in new regions before full-scale rollouts.

SALES ANALYSIS (TOP/BOTTOM ANALYSIS)



NovaMed Solutions

SALES ANALYSIS

Overview | Top/Bottom Analysis for Jan - Dec (2022 - 2024)

Year
All

Frequent Buyer

New Customer

Preferred Customer

Total Product
40

Total Orders
10K

Total Quantity Sold
269K

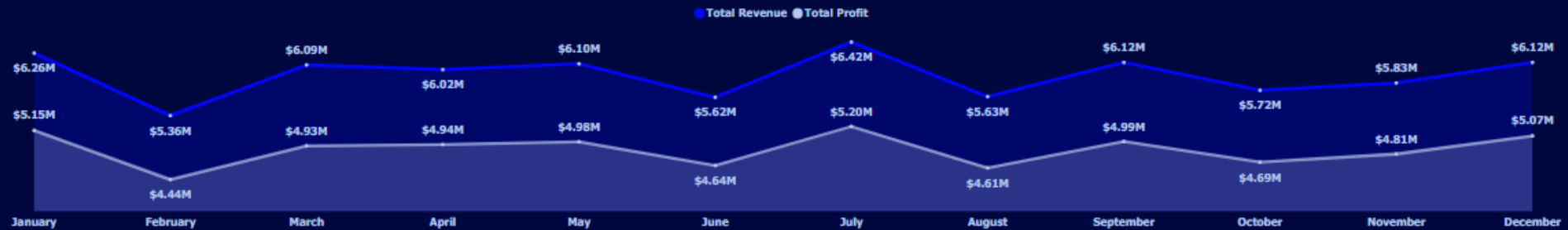
COGS
\$12.85M

Total Revenue
\$71.31M

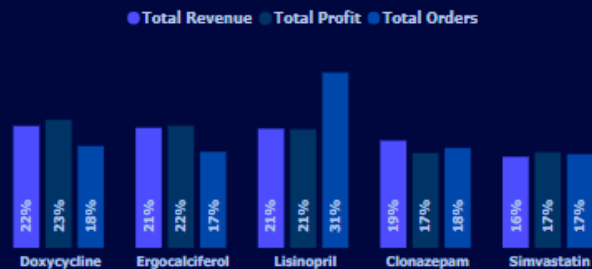
Total Profit
\$58.45M

Profit Margin
82%

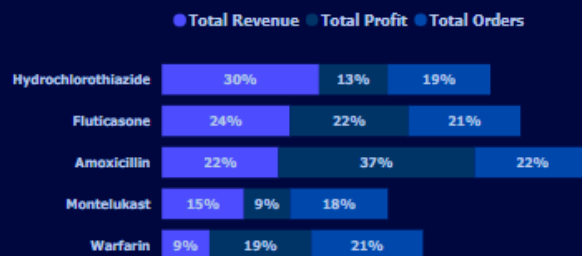
Revenue and Profit by Month



Top 5 Performing Drugs | Revenue, Profit and Orders



Bottom 5 Performing Drugs | Revenue, Profit and Orders



Top 10 Customers | Orders, Revenue and Profit

Customer Name	Total Orders	Total Revenue	Total Profit
David Johnson	538	\$3,943,315.16	\$3,236,304.99
Bob Williams	616	\$3,727,469.11	\$3,035,552.68
Jane Brown	538	\$3,309,477.00	\$2,668,118.02
Bob Smith	540	\$3,276,113.85	\$2,605,174.80
Bob Jones	521	\$3,110,993.41	\$2,600,262.76
Alice Smith	480	\$3,121,058.67	\$2,588,145.79
John Brown	418	\$3,017,246.57	\$2,488,461.24
Bob Johnson	468	\$3,001,273.04	\$2,448,461.30
John Smith	408	\$2,895,580.55	\$2,407,356.36
Alice Johnson	454	\$2,824,525.15	\$2,302,294.39

Bottom 10 Customers | Orders, Revenue and Profit

Customer Name	Total Orders	Total Revenue	Total Profit
Jane Jones	349	\$2,015,029.73	\$1,629,667.17
Carol Williams	319	\$1,944,507.73	\$1,583,160.08
Jane Johnson	289	\$1,839,128.76	\$1,487,204.50
Jane Williams	395	\$1,829,170.21	\$1,466,502.22
Alice Jones	223	\$1,649,008.94	\$1,372,256.35
Alice Brown	284	\$1,629,109.03	\$1,309,575.31
Alice Williams	336	\$1,547,364.21	\$1,291,870.22
Carol Jones	161	\$903,937.81	\$737,999.41
Jane Smith	65	\$606,665.90	\$497,245.67
Carol Smith	64	\$274,431.83	\$234,483.49

DESCRIPTION OF TOOLS USED | SALES ANALYSIS

- ❖ **Cards (New):** To display Key Performance Indicators (KPI) such as Total Product, Total Orders, Total Quantity Sold, Cost of Goods Sold (COGS), Total Revenue, Total Profit and Profit Margin.
- ❖ **Area Chart:** Showing relationship between Revenue and Profit.
- ❖ **Clustered Column Chart:** Explaining Product performance (Top 5 Products) in terms of Orders, Revenue and Profit.
- ❖ **Stacked Bar Chart:** Visualizing the Bottom 5 Products in terms of Orders, Revenue and Profit.
- ❖ **Matrix:** Visualizing Top and Bottom 10 Customers contributions to Orders, Revenue and Profit.

SALES ANALYSIS (TOP/BOTTOM ANALYSIS)

KEY INSIGHTS:

- ❖ **Top Products:** doxycycline generated the highest revenue and profit among top-performing drugs.
- ❖ **Revenue Trends:** Peak revenue months were **July** and **January** with \$6.42M and \$6.26M respectively in revenue; February and June were the weakest.
- ❖ **Top Customers:** David Johnson and Bob Williams contributed over **\$3M in profit** each.
- ❖ **Bottom Customers:** Jane Jones had high revenue but low profit due to low margin sales.
- ❖ **Sales Distribution:** 40 products generated 269K in quantity sales and \$71.31M in revenue, with a **high 82% profit margin**.

RECOMMENDATIONS:

- ❖ **Boost Sales of High-Margin Drugs:** Promote and stock up on Hydrochlorothiazide and Fluticasone which show strong margin performance.
- ❖ **Focus on High-Value Customers:** Strengthen loyalty programs for top 10 customers to ensure retention.
- ❖ **Review Pricing Strategy:** Investigate Jane Jones' sales to identify why high revenue yielded low profit — possible pricing or discount issues.
- ❖ **Capitalize on Peak Months:** Plan campaigns and promotions in **July and January** when customer activity is high.
- ❖ **Reassess Low-Performing Stocks:** Evaluate long-tail products contributing little to revenue but consuming resources.

THANK YOU

