High-Demand Product Analysis: SaaS Dataset Insights

Analyzing Sales, Profit, and Customer Trends for Strategic Decision-Making



Business Context

SaaS company looking to optimize product portfolio and investment.

Key questions:

- Which products are driving revenue?
- → Which products are most profitable?
- → Where should the business focus growth efforts?

The dataset

Data includes sales, quantity, discount, profit, and customer information.

Focus on sales, profit, and geographic data for analysis.

Key features: Products, sales, profit margins, discounts, and customer segments.





Key Objectives

- → Identify top-performing products based on sales and profit.
- Analyze demand from key customers, segments, and industries.
- Examine geographic variations in demand.
- Conduct correlation analysis to investigate relationships between sales, discounts, and profit margins.

Methodology

EDA

Examined distributions of key features: Sales, profit, quantity, discounts.

Identified outliers and correlations.

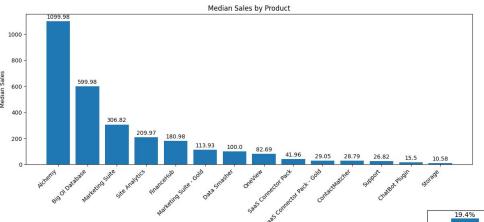
Visualizations

Used heatmaps, bar charts, and scatter plots to identify patterns and relationships.

Business Context

Focused on actionable insights that align with business goals (increasing profit and targeting key customer segments).

Key Insights: Top Product (Sales and Profit)

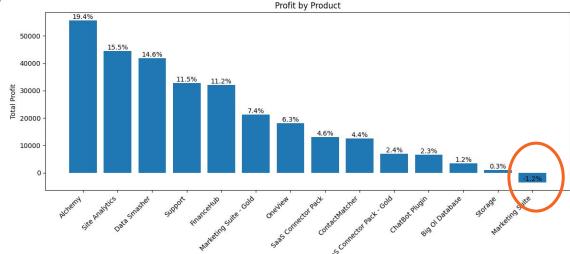


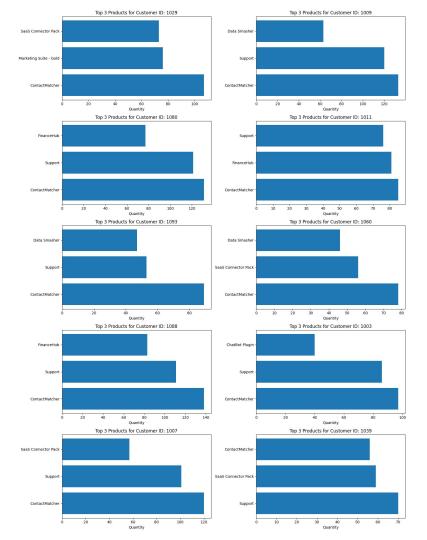
Top performers by median sales: Alchemy, Big Ol Database, and Marketing Suite

Big OI Database and Marketing Suite have low profits → high sales does not necessarily mean high profits.

Top performers by profit:

Alchemy, Site Analytics, Data Smasher



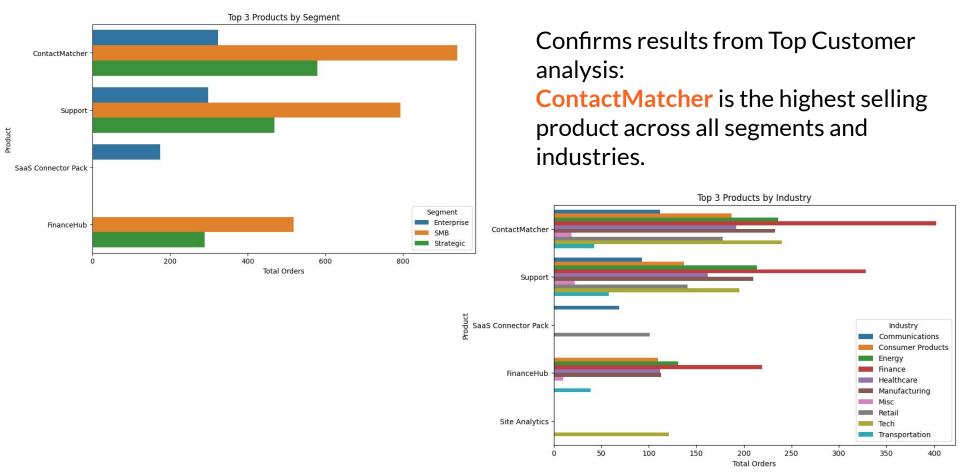


Key Insights: Top Customer Demand

Analysis of top 10 customers

- Common traits: SMBs in Finance,
 Healthcare, and Manufacturing
- ContactMatcher is the most frequently purchased product among top customers.
 - Key product for customer loyalty
 - Opportunity for upselling

Key Insights: Top Product (Segment and Industry)



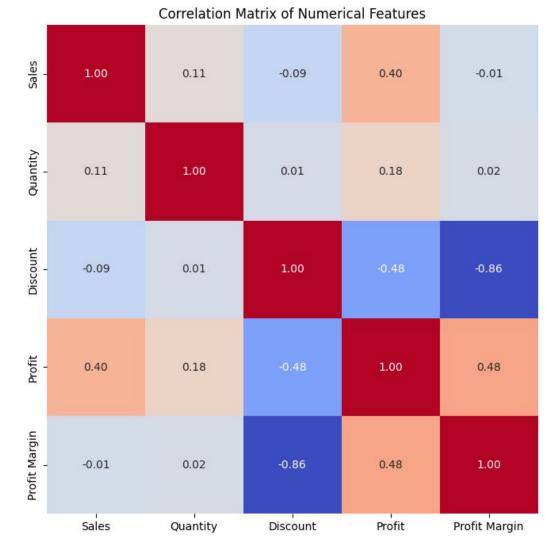


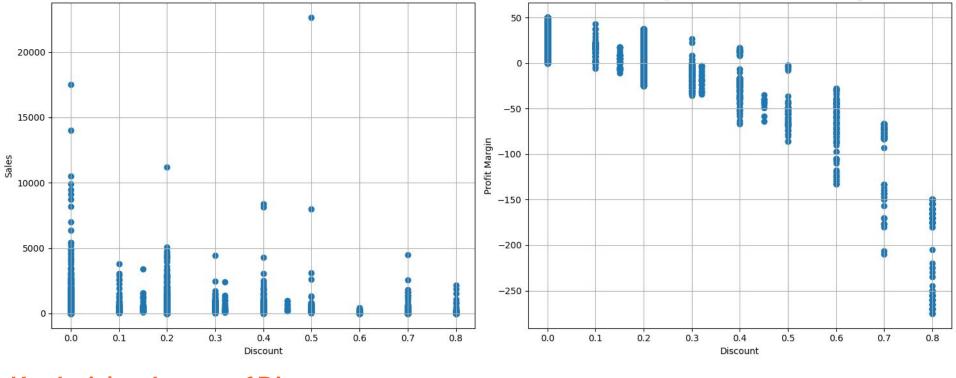
Key Insights: Geographic Demand

- High-performing regions:
 - US, UK, and Japan have the strongest sales performance
 - ContactMatcher drives the sales in these regions
 - Focus on these regions for further sales efforts
- Low-performing regions:
 - Denmark, Qatar, and Iceland have the lowest sales performance.

Key Insights: Correlation

- Discounts negatively affects both profit and profit margin, with a particularly strong impact on margins.
- Discounts also have a weak correlation with sales and quantity, meaning that it also does not boost them.
- Sales are moderately correlated with profit, but the effect is not overwhelming.





Relationship between Discounts and Profit Margin

Key Insights: Impact of Discount

Relationship between Discounts and Sales

Discounts not only fail to boost sales, but higher discounts even may slightly reduce sales volume. More importantly, discounts strongly erode profit margins, creating a significant tradeoff between attempting to increase sales through discounting and the detrimental effect on profitability.

Business Recommendations

Focus on High-Performing Products

- o Prioritize Alchemy, Site Analytics, and Data Smasher (top revenue and profit drivers).
- Prioritize ContactMatcher that has consistently perform well across segments and industries.

Capitalize on Key Customer Segments

- Target SMBs in Finance, Healthcare, and Manufacturing for high demand.
- Leverage ContactMatcher to boost customer loyalty and explore upselling opportunities.

Geographic Focus for Growth

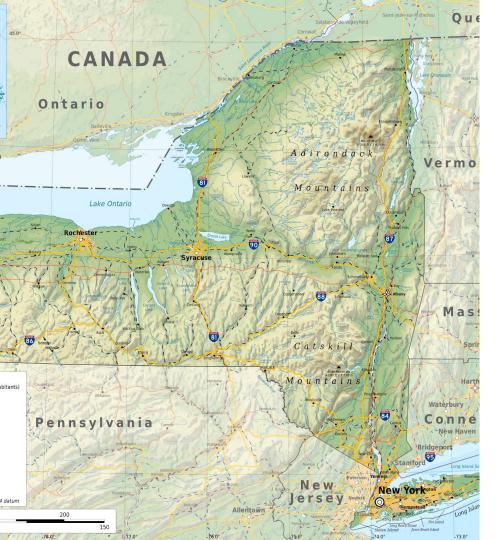
Strengthen sales in US, UK, and Japan where ContactMatcher performs well.

Refine Discount Strategy

- Minimize heavy discounting as it reduces profit margins and has little effect on sales volume.
- Focus on value-based pricing, bundling, and limited-time offers instead.

Optimize Profitability Over Volume

- Shift focus from sales volume to profitability.
- Sell high-margin products and target high-value customers to ensure long-term growth.



Conclusion

- Focus on top-performing products, key customer segments, and high-growth regions
- Minimize the impact of discounts



Thank you for your attention!

For more details about the project, feel free to check out the project <u>here</u>.

