

Data Analysis Project - ValueFrenzy

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Agenda



- Company Overview
- > Problem Statement
- Project Scope and Timeline
- > Key Stakeholders
- > Assumptions & Constraints
- ➤ Key Performance Indicators (KPIs)
- ➤ Insights and Recommendations
- **➤** Conclusion

ValueFrenzy Supermarket Chain Overview



- > Founded in 2006, specializing in FMCG.
- > Operations in the **USA**, **Mexico**, and **Canada** with 100+ stores.
- ➤ Product range: low-tier (groceries), medium-tier (household goods), high-tier (electronics).
- > Strong focus on private label brands and affordability
- > Omnichannel strategy: Seamless integration of physical stores and online shopping
- > Committed to operational efficiency and sustainable growth.



A Call for Help: Analyzing ValueFrenzy's Decline



- ➤ 2021-2023: Revenue and profit decline, especially in the USA.
- > Sarah Jamieson, COO, reached out for an urgent data analysis.
- ➤ Goal: Examine KPIs—Revenue, Profit, Quantity Sold, Transactions, and Average Transaction Value (ATV) segmented by regions and product-tiers.
- ➤ Objective: Pinpoint gaps, analyze customer behavior, and recommend improvements.

What's Included in the Analysis?



In-Scope

- ➤ KPIs: Revenue, Profit, Quantity Sold, Transactions, ATV (2021-2023).
- > Analyze by product tiers: Low, Medium, High.
- > Track trends and identify seasonal patterns.
- > Examine regional differences in sales and customer behavior.
- > Recommend actions to recover ATV, boost gross profits, and drive medium and high-tier product sales.
- ➤ Propose targeted promotions, loyalty programs, and region-specific marketing to improve customer engagement.
- > Suggest operational improvements to cut supply chain costs and boost profitability in Canada.

Out-of-Scope:

- ➤ No Customer Surveys (qualitative data).
- > No Detailed Supply Chain or operational analysis.

Four Phases, Four Weeks



1. Week 1

Stakeholder Meetings, Finalize KPIs, Data Collection, Initial Preparation

2. Week 2

Data Cleaning, Transformation, Preliminary Analysis, Feedback

3. Week 3

Detailed Data Analysis, Insights Development, Feedback & refinement

4. Week 4

Draft Dashboard, Internal review, Dashboard refinement, Presentation

The People Behind the Project



- Sarah Jamieson Chief Operating Officer (COO)
- David Lee Chief Financial Officer (CFO)
- Amanda Cole Head of Sales and Marketing
- Michael Rogers Regional Manager, USA
- Isabella Martinez Regional Manager, Mexico
- Ethan Carter Regional Manager, Canada
- Karen Blake Head of Product and Strategy
- Nitin Kunigal Data Analyst (Consultant)

Assumptions



- Regional Consistency: Consumer preferences remained stable in the USA, Mexico, and Canada.
- ➤ Comparable Store Performance: Similar product availability and pricing across all stores.
- Macroeconomic Factors: Inflation and supply chain issues affected performance across regions.
- > Stable Market Share: Sales trends reflect internal factors, not external competition.
- > Product Portfolio: No major new product lines introduced between 2021-2023.

Constraints



- > Time Frame: Limited to data from 2021-2023.
- > Stakeholder Availability: Dependent on timely input from key stakeholders.
- > Data Granularity: Limited promotional or inventory details i.e. limited breakdowns.
- Regional Differences: Consumer behavior varies, limiting global recommendations.
- > External Market Conditions: No access to competitor performance or external market data.

Key Performance Indicators



1. Total Revenue

Generated across all regions and product categories.

2. Gross Profit

Deducting COGS (Cost of Goods Sold) from Total Revenue.

3. Quantity Sold

Total units sold across all regions.

4. Total Transactions

Number of customer transactions across all regions.

5. Average Transaction Value (ATV)

Average amount spent per transaction.



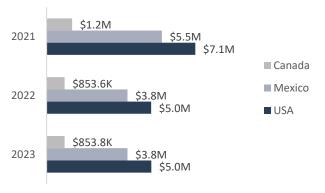
Insights and Recommendations

Total Revenue (2021-2023)

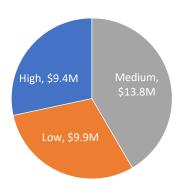


Revenue (Across all Regions): \$33.1M – USA (51%), Mexico (40%), Canada (9%)





Low and High-Tier contribute SIMILAR
Revenue and need Granular Attention



REVENUE DECLINED From \$13.8M in 2021 to \$9.7M in 2022 & 2023, impacted by ATV DROP. Specifically, REVENUE DECLINED from \$1.4M to \$793.6K between Dec-2021 & Jan-2022

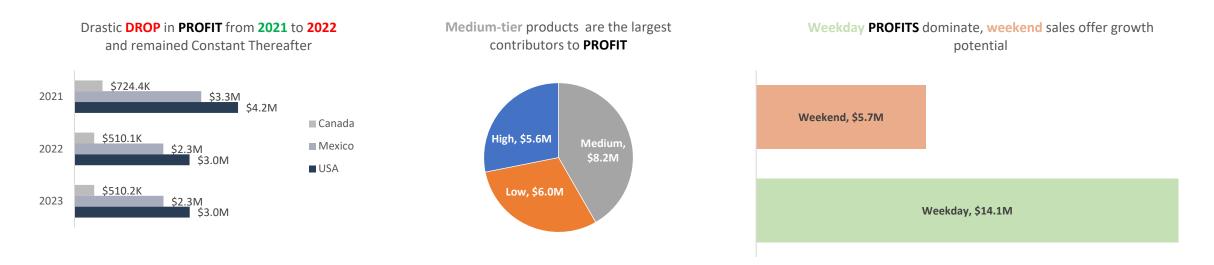


Jan Feb Mar Apr Jun Jul Aug Sep Oct Nov	Jan Feb Mar Apr May Jun Jul Aug Sep Oct	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
2021	2022	2023

Gross Profit (2021-2023)



Profit (Across all Regions): \$19.8M – USA (51%), Mexico (40%), Canada (9%)



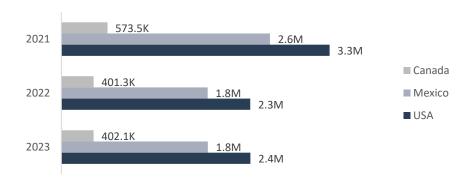


Quantity Sold (2021-2023)

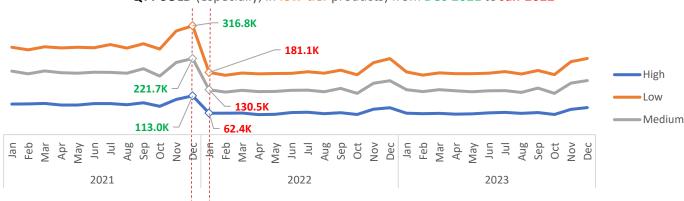


Total Quantity Sold (Across all Regions): 15.7M – USA (51%), Mexico (40%), Canada (9%)

Drastic **DECLINE** in **QTY SOLD** from **2021** to **2022** and remained Constant Thereafter

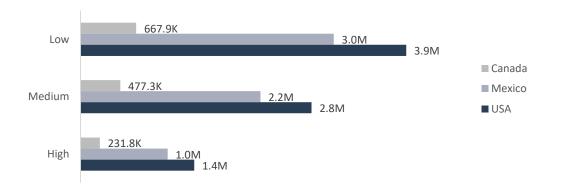


High Tier Products contribute towards **LOWEST QTY SOLD**. A significant **DROP** in the Overall **QTY SOLD** (especially, in **low-tier** products) from **Dec-2021** to **Jan-2022**

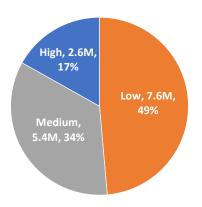


Mexico (40%) has Great Potential Competing with the USA (51%).

Medium-Tier (34%) show Great potential while High-Tier Needs Attention



17% of **High-Tier** units sold, despite having the highest ATV, Needs Granular Attention

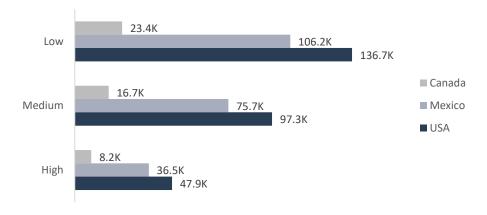


Total Transactions (2021-2023)

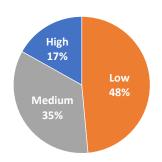


Total Transactions: 548,649 – No Change in YoY Transaction Volume across regions and product tiers

Strong Customer Engagement in Mexico (40%) despite its Market Size. Medium-Tier (35%) shows Great potential While High-Tier Needs Attention



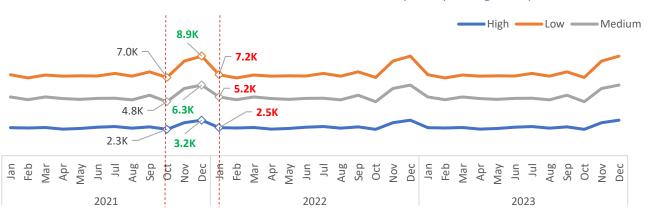
Low-tier (48%) dominate, medium-tier (35%) stable, high-tier (17%) low volume but high value and needs attention



Sharp **DECLINE** in transaction volume from late 2021 to early 2022 (mainly, in the USA). Mexico showed SEASONAL PEAKS in Nov-Dec as Opposed to the USA



DROP in transaction volume from late 2021 into 2022, especially for high-tier products



Average Transaction Value/ ATV (2021-2023)

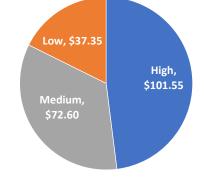


ATV (Across Regions): Canada (\$60.45), USA (\$60.40), Mexico (\$60.33)





Low-tier products have the LOWEST ATV,
high-tier products the HIGHEST, but with
FEWER Transactions



Sharp ATV DROP from \$75.30 to \$53.13 between Q4-2021 to Q1-2022. ATV remained consistent across regions and product tiers due to STABLE PURCHASING PATTERNS. Despite a TRANSACTION INCREASE in late 2021, ATV remained steady, driven by FREQUENT low-tier purchases



Insights and Recommendations



Insight 1

Declining Revenue and Gross Profit:

- ➤ Insight: ValueFrenzy's revenue dropped from \$13.8M in 2021 to \$9.7M in 2022 and 2023, alongside a decline in gross profit from \$8.2M to \$5.8M.
- ➤ Root Cause: Reduced high-tier product sales, especially in the USA, due to economic constraints and lower ATV after Q4 2021.

Recommendation 1

Address Declining Revenue and Gross Profit:

- Focus on targeted promotions and pricing strategies for high-tier products, especially electronics and furniture, to revive sales in the **USA**.
- > Introduce flexible financing or installment plans to encourage purchases of higher-value items.



Insight 2

Stable Quantity Sold but Shifting Product Mix:

- ➤ Insight: 15.7M units sold, with groceries making up 60% of sales. High-tier product sales declined significantly.
- Root Cause: Economic pressures led customers to prioritize essential goods like groceries, reducing demand for high-tier items.

Recommendation 2

Optimize Product Mix and Encourage High-Tier Sales:

- ➤ Shift marketing focus toward medium and high-tier products in regions like Mexico and Canada, where potential for growth remains.
- ➤ Launch product bundles and cross-selling initiatives to increase spending on higher-margin categories.



Insight 3

High Transaction Volume but Lower Average Transaction Value:

- ➤ Insight: Transaction volume remained steady, but ATV dropped from \$75+ in 2021 to \$53+ in 2022-2023.
- ➤ Root Cause: Fewer high-value transactions and more frequent low-cost purchases caused the sharp drop in ATV.

Recommendation 3

Boost Average Transaction Value (ATV):

- > Implement loyalty programs and personalized discounts to increase the ATV, particularly for frequent customers.
- > Encourage customers to add higher-value products to their carts through targeted upselling at checkout.



Insight 4

Regional Disparities in Performance:

- Insight: USA saw the largest revenue drop, while Mexico and Canada showed better stability.
- ➤ Root Cause: Economic challenges in the USA drove the steep decline in high-tier sales, while Mexico and Canada were less affected.

Recommendation 4

<u>Improve Regional Performance with Tailored Strategies</u>:

- ➤ Develop region-specific marketing campaigns to address the unique needs of each market (USA, Mexico, and Canada).
- ➤ Invest in localized market research to better understand customer behavior and adapt product offerings accordingly.



Insight 5

<u>Impact of Macroeconomic Conditions on Purchasing Patterns:</u>

- Insight: A significant drop in ATV, especially in the USA, indicated a shift toward lower-cost, essential goods.
- ➤ Root Cause: Inflation and changing consumer behavior led to fewer purchases of high-value products like electronics.

Recommendation 5

Adapt to Macroeconomic Conditions:

- ➤ Leverage ValueFrenzy's private label brands to provide customers with affordable, high-quality alternatives.
- ➤ Enhance operational efficiency to mitigate rising costs and pass savings on to consumers through competitive pricing.

CONCLUSION



- ➤ The analysis of ValueFrenzy's performance from 2021 to 2023 highlighted key challenges in revenue, profit, and regional sales.
- > By identifying these issues and understanding customer behavior, we now have a clear path to improve performance and drive future growth.
- ➤ By implementing these strategic recommendations, ValueFrenzy is well-positioned to recover lost ground, enhance profit margins, and stay competitive in the FMCG market.