ValueFrenzy - Project Charter

1. Project Title
ValueFrenzy Data Analysis Project

2. Project Overview
The ValueFrenzy Data Analysis Project aims to leverage three years of sales data (2021-2023) from the company's operations across the USA, Mexico, and Canada to extract key business insights. The primary objective is to analyze regional sales trends, product tier performance, and customer purchasing behavior, in order to optimize pricing strategies and improve overall revenue and profitability. The outcome of the project will be an interactive dashboard for decision-makers, coupled with a comprehensive report on business opportunities and strategic recommendations.

3. Project Objectives
- **Data Transformation and Cleaning:** To convert raw sales data into a structured, analyzable format using Excel tools (Power Query, Power Pivot, DAX), ensuring accuracy and completeness.
- **Trend Identification:** To identify sales patterns and trends across different regions (USA, Mexico, Canada) and product tiers (low, medium, high), focusing on revenue and profit.
- **Strategic Recommendations:** To propose actionable recommendations based on insights, such as optimizing underperforming regions and enhancing promotions for high-tier products.
- **Interactive Dashboard Creation:** To create an interactive dashboard in Excel that visually presents the findings and enables stakeholders to explore insights in real time for data-driven decision-making.
- **Stakeholder Engagement:** To present findings to key stakeholders (Sarah, COO and David, CFO) for feedback and validation, ensuring alignment with business needs.

4. Project Scope and Timeline

Scope of the Project:

In-Scope:
- **Data Analysis:**
  - <u>Performance Analysis:</u> Evaluate Total Revenue, Gross Profit, Quantity Sold, Total Transactions, and Average Transaction Value (ATV) across the USA, Mexico, and Canada from 2021 to 2023.
  - <u>Segment Analysis:</u> Break down performance by product tiers (low, medium, high) to assess the contribution of each category to overall revenue and profit.
  - <u>Trend Identification:</u> Detect year-over-year trends, uncover seasonal patterns, and highlight significant periods of decline.
  - <u>Regional Insights:</u> Examine regional differences in sales performance and customer behavior, identifying potential growth opportunities.

- Recommendations:
  - <u>ATV and Profit Recovery:</u> Provide data-driven recommendations to recover ATV and improve gross profits, with an emphasis on increasing sales of medium- and high-tier products.
  - <u>Customer Engagement Strategies:</u> Suggest regional marketing strategies, promotional offers, and loyalty programs to enhance customer engagement.
  - <u>Operational Improvements:</u> Identify opportunities to reduce supply chain costs and improve profitability in lower-performing regions like Canada.

<u>Out of Scope:</u>
- Customer Survey Data: The project will not include qualitative data (e.g., customer satisfaction surveys) unless specifically provided by ValueFrenzy.
- Supply Chain Optimization: Detailed analysis of logistics or supply chain optimization strategies is outside the project scope, although operational cost reduction is considered in a general sense.
- Internal Operations: Data related to internal operations, staffing, or infrastructure will not be included unless it directly impacts sales or profitability.

Timeline:
The project was completed over FOUR PHASES, spanning four weeks from September 4, 2024, to October 2, 2024.

Phase 1- Requirements Gathering, Data Collection, and Initial Preparation (Sep 9 – Sep 13, 2024)
- <u>Stakeholder Meetings:</u> Held meetings with Sarah Jamieson (COO) and other key stakeholders to understand business objectives and project goals. Engaged in discussions to refine key performance indicators (KPIs) that would reflect ValueFrenzy's performance.
- <u>Finalized KPIs:</u> Collaborated with stakeholders to finalize the KPIs (Total Revenue, Gross Profit, Quantity Sold, Total Transactions, ATV) and determined segmentation criteria by region and product tier.
- <u>Data Collection:</u> Collected historical sales data from the USA, Mexico, and Canada for the years 2021, 2022, and 2023.
- <u>Initial Data Exploration:</u> Conducted a quick review of the raw data to assess its quality, completeness, and relevance for further analysis.

Phase 2- Data Cleaning, Transformation, and Preliminary Analysis (Sep 16 – Sep 20, 2024)
- <u>Data Cleaning:</u> Addressed issues such as missing values, duplicates, and inconsistencies in the data. Transformed and structured the data to make it analysis-ready, creating time-series data and cleaning up product categories.
- <u>Data Transformation:</u> Utilized Power Query to handle messy data and ensured the transformed data aligned with the project's objectives (e.g., segmenting by region and product tier).
- <u>Stakeholder Feedback Loop:</u> Shared the cleaned and prepared data with Sarah and other key stakeholders to ensure accuracy and alignment with business requirements.
- <u>Preliminary Analysis:</u> Conducted exploratory analysis to identify initial trends and ensure data soundness for further insights.

Phase 3- In-Depth Data Analysis and Insights Development (Sep 23 – Sep 27, 2024)

- <u>Detailed Data Analysis:</u> Performed a comprehensive analysis of key KPIs using Data Modeling and DAX in Power Pivot. Segmented data by region, product tier, and time period.
- <u>Trend Identification:</u> Identified trends such as revenue fluctuations, profitability gaps, and changes in ATV. Highlighted growth periods and areas of concern.
- <u>Drafted Insights:</u> Presented early findings to stakeholders and gathered feedback. Refined analysis based on input to align with business priorities.
- <u>Feedback and Refinement:</u> Shared initial insights with Sarah and key team members. Revised and updated the analysis based on feedback, ensuring focus on actionable business outcomes.

Phase 4- Report/Dashboard Creation and Presentation (Sep 30 – Oct 4, 2024)

- <u>Report and Dashboard Creation:</u> Compiled final findings, insights, and recommendations into a comprehensive report, and created a visually intuitive dashboard using Excel.
- <u>Internal Review:</u> Shared the draft report and dashboard with Sarah and key stakeholders for review and feedback. Made revisions to address any outstanding business concerns.
- <u>Presentation Preparation:</u> Prepared a polished presentation for the executive team, highlighting key trends, insights, and actionable recommendations (e.g., strategies to recover ATV, boost revenue, etc.).
- <u>Final Presentation:</u> Delivered the final report and dashboard to Sarah and the stakeholder group, facilitating discussion and follow-up questions. Linked insights to strategic business decisions to ensure value-driven outcomes.

5. Assumptions and Constraints

Assumptions:

- **Business Continuity:** It is assumed that ValueFrenzy operated without major interruptions (e.g., store closures, large-scale logistical issues, or changes in regional policies) that would affect sales over the period of 2021-2023, except during the noted drop in ATV from Q4-2021 to Q1-2022.
- **Macroeconomic Factors:** External factors such as inflation, supply chain disruptions, and changes in consumer behavior post-2021 have influenced sales performance. These factors are assumed to be consistent across all regions but are not unique to ValueFrenzy.
- **Regional Consistency:** It is assumed that consumer preferences across the USA, Mexico, and Canada remained stable throughout the three-year period, with no major shifts in demographics impacting sales patterns.
- **Comparable Store Performance:** Store performance within each region is assumed to be relatively consistent across outlets, with similar product availability, pricing strategies, and promotions.
- **Market Share Stability:** ValueFrenzy's market share is assumed to have remained stable over the 2021-2023 period, with sales trends being primarily influenced by internal factors (product performance, pricing, promotions) rather than changes in competition.
- **No Major New Product Introductions:** It is assumed that no major new product lines were introduced in the 2021-2023 period that could significantly skew performance data or sales trends.

- **Predictable Consumer Behavior:** Consumer behavior is assumed to remain relatively predictable, with low-tier products seeing higher volume sales, and medium- and high-tier products contributing more to profitability, consistent with industry patterns in FMCG.

Constraints:
- **Limited Time Frame:** The analysis is constrained to the years 2021-2023. Long-term trends before or after this period are excluded, and KPIs are only evaluated within this time frame.
- **Granularity of Data:** The dataset may lack detailed information such as specific promotions, marketing activities, or granular product performance metrics, limiting the depth of some analyses (e.g., promotional impacts).
- **Regional Differences:** Differences in consumer behavior, economic conditions, and regulations across regions (USA, Mexico, and Canada) may limit the comparability of KPIs (e.g., ATV and gross profit) across regions. This may constrain the ability to apply uniform recommendations.
- **Data Processing Limitations:** The analysis is conducted using Microsoft Excel, which may limit the scale and complexity of data processing. Advanced data cleaning or analysis requiring more powerful tools (e.g., SQL, Python) is outside the scope of this project.
- **Operational Data Exclusion:** Operational data such as supply chain efficiency, staffing, or inventory management is not included in this analysis and is out of scope for the recommendations.
- **External Economic and Market Data:** The analysis is constrained by the lack of access to detailed external data (e.g., competitor performance, market growth rates, inflation data), which could provide additional context for understanding ValueFrenzy's performance trends.
- **Stakeholder Availability:** The project timeline is dependent on the availability of key stakeholders for feedback and validation. Delays in stakeholder responses (e.g., from Sarah Jamieson or regional managers) may impact the project's progress.
- **Unforeseen Events:** Unpredictable events (e.g., natural disasters, pandemics, or political changes) that may have impacted consumer behavior during the 2021-2023 period are not accounted for in this analysis, unless explicitly noted in the dataset.
- **No Access to External Consumer Data:** The project does not include external consumer data (e.g., loyalty programs, foot traffic insights, competitor analysis) unless it is provided by ValueFrenzy.

By addressing these assumptions and constraints, the project will focus on providing actionable insights from the internal sales data of ValueFrenzy. These insights are intended to help the company address its revenue and profitability challenges across regions.

6. Key Stakeholders
- **Sarah Jamieson (COO):** Project Sponsor, providing overall direction and approval.
- **David Lee (CFO):** Oversees financial analysis and reviews profitability recommendations.
- **Amanda Cole (Head of Sales and Marketing):** Provides sales data input and evaluates marketing impact.
- **Regional Managers (Michael, Isabella, Ethan):** Provide region-specific insights, ensuring recommendations align with local market needs.
- **Karen Blake (Head of Product Development):** Evaluates product-tier analysis and aligns recommendations with strategic goals.

- **Nitin Kunigal (Data Analyst Consultant) and Team:** Leads data analysis efforts, delegates tasks to his team, facilitates stakeholder engagement, and delivers the final insights.

Stakeholder Roles and Responsibilities

Sarah Jamieson – Chief Operating Officer (COO)
Role: Project Sponsor
As the COO, Sarah is the primary project sponsor and ultimate decision-maker for the ValueFrenzy data analysis project. She is responsible for ensuring the project's alignment with the company's strategic goals, particularly in improving operational efficiency and profitability across regions. Sarah will provide final approvals for key deliverables, including the data insights report, and act as an escalation point for project risks or issues.

David Lee – Chief Financial Officer (CFO)
Role: Financial Oversight
David's role focuses on providing financial oversight for the project, especially in terms of cost analysis and profitability insights. He will work closely with the project team to review the financial performance of different product tiers and regions, offering feedback on budgetary constraints and helping to assess the financial impact of the recommendations. David also ensures the data analysis aligns with ValueFrenzy's broader financial objectives.

Amanda Cole – Head of Sales and Marketing
Role: Sales and Marketing Input
Amanda will provide key insights into sales trends and customer behavior, helping the data analysis project team understand the dynamics behind sales performance in different regions and across product tiers. Her feedback will be crucial in interpreting the data's impact on marketing strategies, customer engagement, and pricing decisions. Amanda will also play a role in implementing the recommendations related to sales optimization.

Michael Rogers – Regional Manager, USA
Role: Regional Performance Evaluation (USA)
Michael is responsible for providing operational insights and feedback for the USA region, the largest revenue contributor for ValueFrenzy. He will support the project by sharing region-specific data and helping to interpret the analysis in terms of operational challenges and market-specific trends. Michael will also be involved in reviewing regional performance recommendations to ensure they are feasible and effective.

Isabella Martinez – Regional Manager, Mexico
Role: Regional Performance Evaluation (Mexico)
Isabella will focus on the analysis and performance evaluation of the Mexico region, which contributes significantly to ValueFrenzy's revenue. Her role involves interpreting how market trends in Mexico, particularly the lower-tier product sales, impact the overall business. Isabella will help the project team by reviewing the insights and contributing to discussions about regional sales strategies and customer preferences.

Ethan Carter – Regional Manager, Canada
Role: Regional Performance Evaluation (Canada)

Ethan oversees ValueFrenzy's operations in Canada and will contribute to evaluating the sales and profitability trends in this smaller but valuable market. His input is vital for understanding the regional nuances that might influence the average transaction value (ATV) and overall profitability in Canada. Ethan will ensure the recommendations for Canada are actionable and consider the unique market conditions of the region.

Karen Blake – Head of Product Development and Strategy
Role: Product Strategy and Innovation
Karen plays a critical role in shaping the product mix and developing strategies to maximize product profitability. She will work closely with the data analyst to review the insights related to product-tier performance (low, medium, and high). Karen's feedback will help guide the team on how product development can be aligned with the insights to support better decision-making, improve inventory management, and refine product pricing strategies.

Nitin Kunigal - Data Analyst Consultant
Role: Project Lead and Data Analysis
Nitin is the data analyst responsible for conducting the analysis, deriving insights, and presenting recommendations to the key stakeholders. As the project lead for data analysis, he will gather, clean, and transform the raw sales data, identify key performance indicators (KPIs), and provide actionable recommendations to improve ValueFrenzy's sales, profitability, and operational efficiency. Nitin will facilitate discussions between stakeholders, ensuring their feedback is integrated into the final report and dashboard.

7. Stakeholder Analysis: Power-Interest Mapping
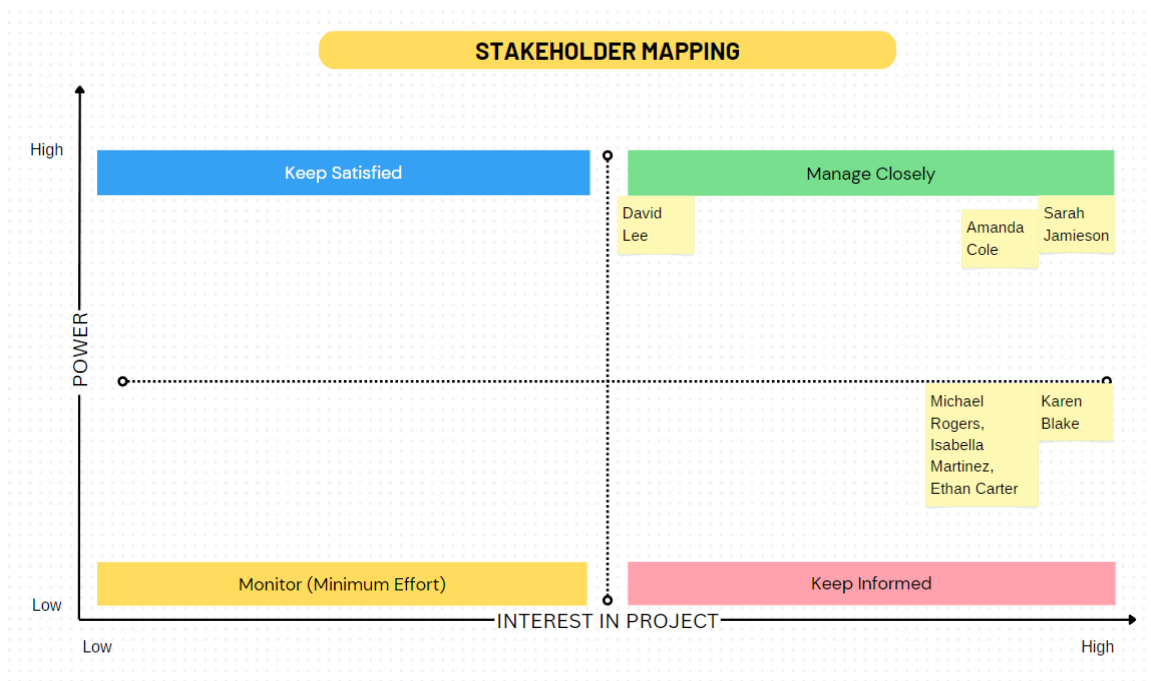
We'll divide stakeholders into four quadrants based on their Power and Interest in the Project:

- High Power, High Interest (Manage Closely): These stakeholders are critical and have the ability to influence the project significantly. They should be actively managed and engaged regularly.
- High Power, Low Interest (Keep Satisfied): These stakeholders are influential but have little direct impact on the day-to-day operations or project outcomes. They should be kept informed but not overwhelmed with details.
- Low Power, High Interest (Keep Informed): These stakeholders may not have decision-making power but are very interested in the project. You'll need to keep them informed and updated on progress.
- Low Power, Low Interest (Monitor): These stakeholders have little power or interest in the project. They don't need much attention, but you should still monitor their status and be aware of any changes in their engagement.

Stakeholder Mapping: Power-Interest Grid
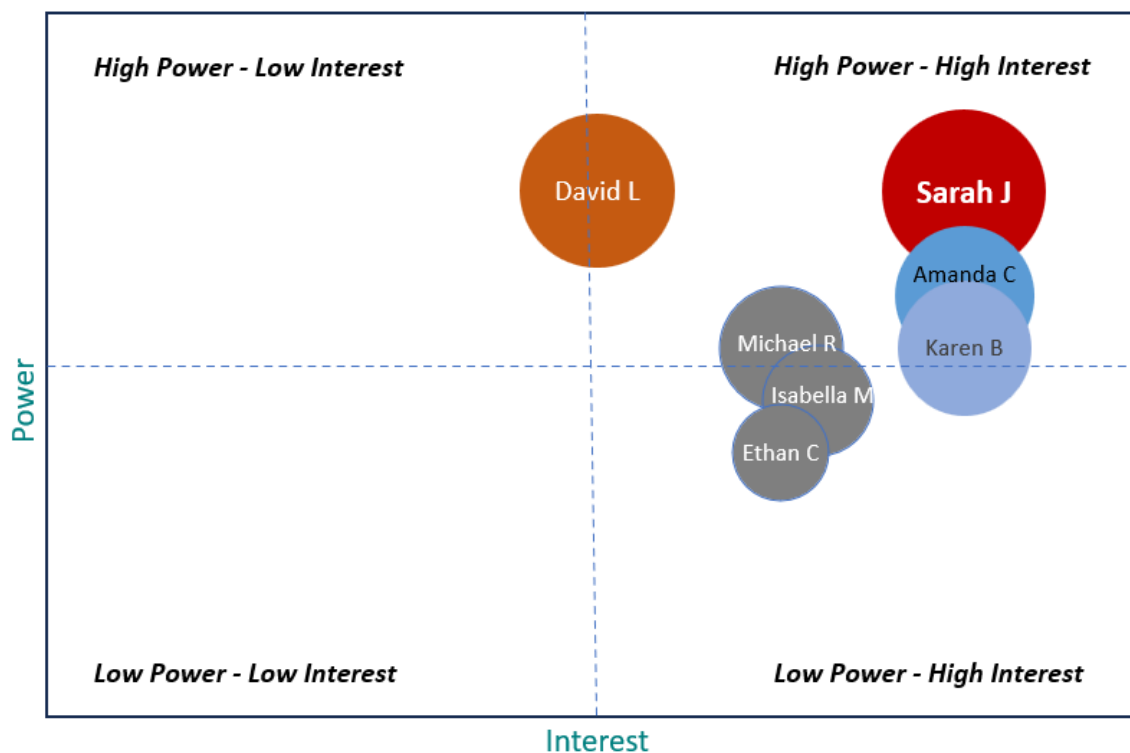
Stakeholder	Power	Interest	Quadrant	Engagement Strategy
Sarah Jamieson (COO)	5	5	Manage Closely	Provide regular briefings and progress updates; ensure alignment with company vision and goals.
David Lee (CFO)	5	3	Keep Satisfied	Deliver financial summaries and insights on ROI, but minimize day-to-day updates. Focus on key financial KPIs such as revenue and profit margins.
Amanda Cole (Head of Sales and Marketing)	4	5	Manage Closely	Involve in critical decisions; share marketing strategies and product-level performance analysis.
Michael Rogers (Regional Manager, USA)	3	5	Keep Informed	Provide region-specific insights; involve in sales strategy discussions for the USA market.
Isabella Martinez (Regional Manager, Mexico)	3	5	Keep Informed	Share insights into Mexico-specific sales performance; highlight regional challenges for improvement.
Ethan Carter (Regional Manager, Canada)	3	5	Keep Informed	Provide insights into Canadian sales performance; ensure any regional issues are addressed promptly.
Karen Blake (Head of Product Development and Strategy)	4	5	Keep Informed	Keep informed on product-specific analysis; highlight product performance trends and recommendations.

Power: "1" = Low, "3-4" = Medium, "5" = High
Impact: "1" = Low, "3-4" = Medium, "5" = High

8. Deliverables

- Cleaned and Transformed Sales Data: An organized dataset ready for in-depth analysis.
- Excel Dashboard: An interactive Excel dashboard that provides visual insights into key KPIs like revenue, gross profit, quantity sold, and average transaction value (ATV) across regions and product tiers.
- Final Project Report: A detailed report summarizing key findings, insights, and business strategies based on the analysis.
- Stakeholder Presentation: A visual presentation of findings and strategic recommendations for ValueFrenzy's senior management team, including actionable steps to address identified challenges.

9. Budget and Resources

- **Software & Tools:** Microsoft Excel (with Power Query, Power Pivot, DAX) is the primary tool used, alongside internal resources for project execution. No additional software purchases or subscriptions are necessary, as all required tools are readily available.
- **Estimated Effort:** The project is estimated to require approximately 80-90 hours of total effort, including data cleaning, analysis, dashboard creation, stakeholder engagement, and final reporting.

Task	Estimated Hours	Reason
Excel Setup & Analysis	40-50	Data cleaning and transformation is complex in Excel. More time for this foundational work is needed. Also, Data Modeling & DAX Calculations require considerable amount of time.
Stakeholder Engagement & Reporting	15-20	Regular engagement is important, but constrained by stakeholders' availability.
Dashboard Creation & Refinements	15-20	Dashboard creation and testing in Excel is time-intensive, especially with interactivity and refinement.

- **Resources:**
  - Nitin Kunigal (Data Analyst) and Team
  - Internal team members will assist with data preparation and provide feedback during analysis and reporting stages.
  - No external budgetary or software expenses are required since Excel and existing internal systems will suffice for the project's scope.

Total Effort: 70 to 90 hours

- **Why this Range?**
  - The effort required varies depending on how clean the data is, how complex the insights are, how fast stakeholders provide feedback, and how many revisions are needed on the dashboard.
  - Excel Setup & Analysis will always be one of the most time-consuming tasks.
  - Stakeholder Engagement & Reporting can vary based on the availability of stakeholders, frequency of meetings and revisions, but usually stays around 15-20 hours. There will be an initial kick-off meeting to discuss project scope, regular check-ins to confirm progress and gather feedback, and final presentation of findings and strategic recommendations.
  - Dashboard Creation often requires more time than anticipated, especially for a polished, professional final product.

10. Risk Management

- **Data Quality Issues:** Potential gaps, inconsistencies, or missing data could compromise the analysis.
  - o <u>Mitigation:</u> Implement robust data cleaning techniques using Power Query, and consult the IT team to ensure data completeness and integrity.
- **Stakeholder Availability:** Limited availability of key stakeholders could delay critical feedback and approval processes.
  - o Mitigation: Schedule regular meetings and pre-book time slots with key stakeholders (e.g., Sarah Jamieson and David Lee) to ensure timely feedback and decision-making.
- **Tool Limitations:** Excel has limitations when dealing with large datasets, which could slow down processing and analysis.
  - o Mitigation: Break down the analysis into smaller data chunks, if necessary, and optimize calculations to handle larger data efficiently. Consider adjusting analysis complexity if necessary.

11. Project Success Criteria

- **Interactive Dashboard:** Successful delivery of an interactive Excel dashboard that allows stakeholders to explore data insights and make informed decisions.
- **Insightful Analysis:** The project identifies key sales trends and provides actionable business recommendations that support growth strategies.
- **Stakeholder Approval:** Positive feedback from stakeholders regarding the accuracy of data, the usability of the dashboard, and the quality of recommendations for improving revenue and profitability.
- **Business Impact:** Clear alignment of the project's findings with business objectives, ensuring that recommendations lead to practical actions that can enhance ValueFrenzy's performance in the market.

12. Project Authorization

This project has been authorized by:

- Sarah Jamieson, COO of ValueFrenzy

The approval ensures the project will proceed as outlined, with continued oversight and involvement from key stakeholders to ensure alignment with business goals.