**Aurora Bank Insights**

**Challenge Description:**

Welcome to the Aurora Bank Data Challenge! As a data analyst at one of the most dynamic financial institutions, you're tasked with uncovering critical insights from data on customers, transactions, cards, and merchant categories. Aurora Bank is counting on you to solve pressing challenges and deliver actionable insights.

**Your Mission:**

* **Understand Customer Profiles:** Explore customer demographics, financial health and behaviors to unlock new opportunities for engagement.
* **Analyze Spending Trends:** Uncover patterns and growth opportunities in transaction data.
* **Identify Risks:** Spot potential red flags in rising debt, transaction errors and fraudulent activity.
* **Create Impactful Dashboards:** Use Power BI to present your insights visually, telling Aurora Bank’s data story.

Aurora Bank relies on you to guide them with data-driven decisions.

**Choose the analytical direction that excites you most or take inspiration from these two key focus areas:**

**Customer Profiling & Segmentation**

Gain a deep understanding of customer demographics, financial health, and behaviors to enable personalized marketing strategies and assess customer risk levels.

**Focus Areas**:

* **Customer Demographics:** Analyze the age, gender, and geographical distribution of customers.
* **Credit Score Analysis:** Explore the distribution of credit scores and the factors influencing them (e.g., income, debt, age).
* **Financial Health:** Calculate debt-to-income ratios and identify high-risk customers.
* **Card Ownership:** Assess the number of credit/debit cards per customer and usage trends by demographic.

**Transaction and Risk Analysis**

Understand customer spending behaviors while enhancing fraud detection and ensuring compliance with regulations to minimize risks.

**Focus Areas:**

* **Spending Patterns:** Evaluate transaction volumes by merchant categories (MCC) or locations.
* **Geographical Trends:** Identify high-spending regions or locations prone to failed transactions.
* **Error Trends:** Monitor transaction errors (e.g., bad PIN entries) to enhance user experience.
* **High-Value Transactions:** Flag unusually high-value transactions for potential fraud detection.
* **Credit Risk:** Identify customers at risk of default based on debt-to-income ratios and credit score trends.
* **Debt Levels:** Analyze the distribution of total debt across customers for portfolio risk management.