**Mitron Bank's Future Informed by Analytics**

**Data-Driven Strategy for Mitron Bank's New Credit Card Line**

**Problem Statement:**

Mitron Bank, a well-established financial institution, is considering the introduction of a new line of credit cards to expand its product offerings and market reach. However, the strategy director, Mr. Bashnir Rover, is cautious and has requested a pilot project with a sample dataset of 4000 customers. Peter Pandey, a data analyst at AtliQ Data Services, has been assigned the task of analyzing this sample data to provide actionable insights that will guide the tailoring of credit cards to customer needs and market trends. The successful acquisition of the project depends on Peter's ability to deliver data-driven recommendations that impress Mr. Bashnir Rover and his team.

**Objective:**

The objective of this data analysis project is to provide Mitron Bank's strategy team with key insights and actionable recommendations based on the analysis of the provided sample dataset. The focus is on demographic classification, income utilization, spending patterns, identification of key customer segments, and recommendations for credit card features. The analysis should be presented through a well-designed dashboard that is self-explanatory and easy for top-level management and the product strategy team to understand.

**Insight Ideas from Tony**

**1. Demographic Classification:**

How can we effectively classify customers based on demography, including age group, gender, and occupation, to gain meaningful insights into their preferences and behaviors?

**2. Avg Income Utilization %:**

What steps should be taken to calculate the average income utilization percentage of customers (spends/avg\_income), and how can this key metric be used to assess the likelihood of credit card usage?

**3. Spending Insights:**

Where do customers tend to spend the most, and how can we analyze the impact of spending patterns based on occupation, gender, city, and age? How can these insights inform the addition of relevant credit card features for specific target groups?

**4. Key Customer Segments:**

Building on the demographic classification and spending insights, how can we identify and profile key customer segments that are likely to be the highest-value users of the new credit cards? This involves understanding their demographics, spending behaviors, and financial preferences.

**5. Credit Card Feature Recommendations:**

What key features should be recommended for the new credit cards to improve the likelihood of usage? How can these recommendations be backed by insights derived from the provided data and supplemented by secondary research on the internet?

**6. Additional Thoughts and Deep Dive:**

Considering the initial insights and recommendations, how can we delve deeper into the data to uncover more valuable insights? What specific areas or aspects should be explored further to enhance the richness of our analysis and recommendations?

Questions

**Demographic aspects**

Q\_1) What is the distribution of customers based on gender?

Q\_2) How are customers distributed across different age groups?

Q\_3) What is the breakdown of customers by occupation?

Q\_4) How does marital status vary among customers?

Q\_5) How are customers distributed across different cities?

**Income Utilization**

Q\_1) What is the average income utilization percentage for each age group?

Q\_2) How does the average income utilization percentage vary across different payment types?

Q\_3) What is the average income utilization percentage for each spending category?

Q\_4) How does the average income utilization percentage differ among various occupations?

Q\_5) What is the average income utilization percentage for each month?

Q\_6) How does the average income utilization percentage vary across different cities?

**Spending Insights**

Q\_1) Are there specific spending categories that are more prevalent among certain occupations?

Q\_2) Are there payment types that are more commonly used for certain spending categories?

Q\_3) Are there specific spending patterns unique to certain cities?

Q\_4) Are there spending categories that show significant variation among different age groups?

Q\_5) Are there specific spending categories where the behavior differs significantly between married and single individuals of different genders?

Q\_6) Are there months with notable increases or decreases in overall spending?

Q\_7) Can we identify the top-spending categories based on the provided dataset?