

## About Mitron Bank

Mitron Bank is a long-standing financial institution with its headquarters situated in Hyderabad. The institution seeks to expand its product portfolio and market presence by introducing a new range of credit cards. This strategic initiative aims to diversify its offerings and extend its reach within the financial market.

## Objective of the Project

The primary objective is to analyze the provided data comprehensively and derive actionable insights grounded in data. These insights will serve as the foundation for formulating recommendations to guide Mitron Bank in customizing the new line of credit cards to align with customer preferences and evolving market trends.

## Problem Statement

### Demographic Classification:

- Classify customers based on demographic factors such as age group, gender, occupation, etc. Analyze the data to provide insights into the distribution of customers across these categories. This segmentation will better understand the bank's customer base and enable targeted marketing strategies.

### Average Income Utilization %:

- Calculate customers' average income utilization percentage by dividing the average spending by the average income. This metric is a crucial indicator of customers' credit card use. A higher average income utilization percentage suggests a greater likelihood of credit card usage among customers.

### Spending Insights:

- Identify the primary spending categories where customers allocate their funds. Explore any variations in spending patterns based on factors such as occupation, gender, city, and age. By analyzing these spending insights, discern whether there are correlations between spending behaviors and demographic attributes. This analysis will inform the addition of relevant credit card features tailored to specific target groups.

## Key Customer Segments:

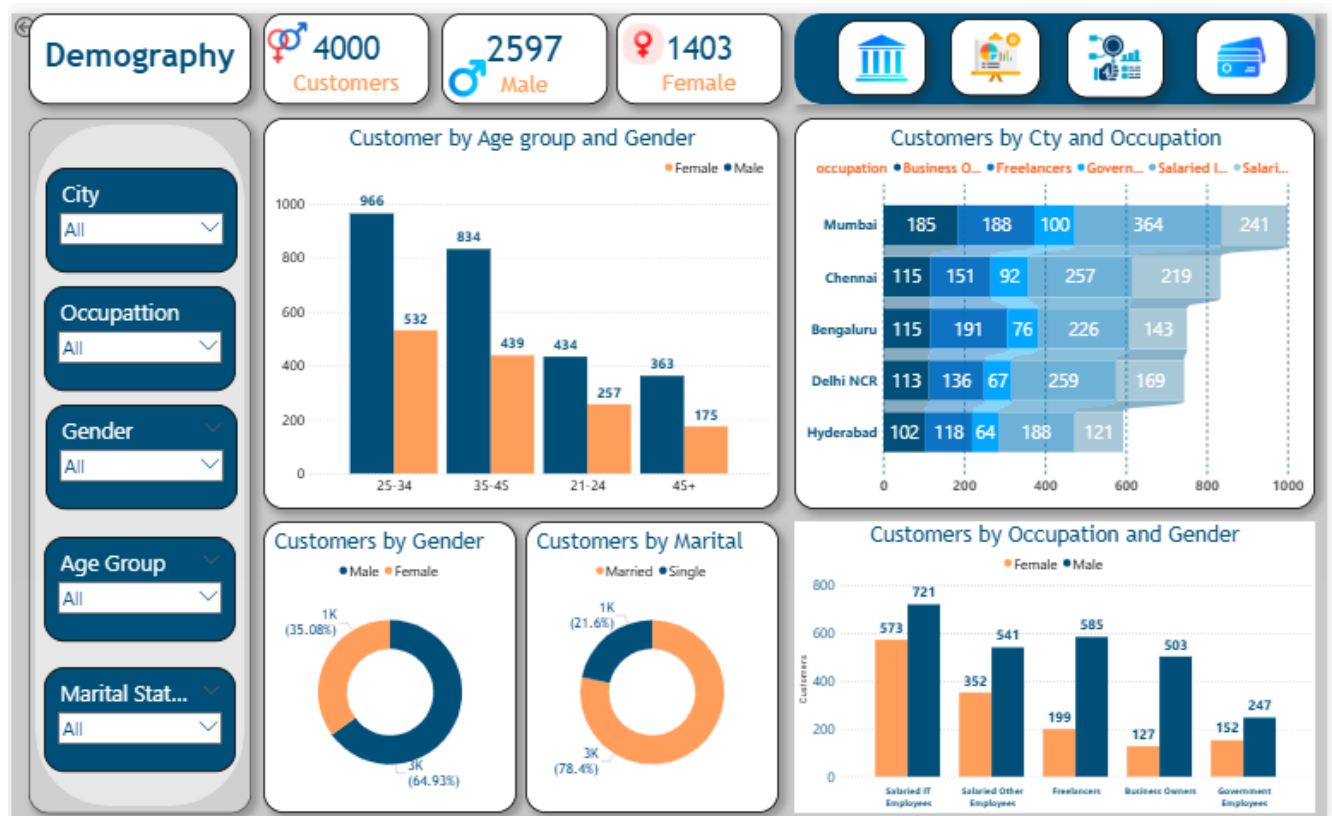
- Utilize the demographic classifications and spending insights to identify and profile key customer segments likely to be high-value users of the new credit cards. This entails understanding these segments' demographics, spending behaviors, and financial preferences. By delineating these segments, the bank can devise targeted marketing campaigns and product offerings to cater to their needs.

## Credit Card Feature Recommendations:

- Based on the insights derived from the data analysis and supplemented by secondary research, recommendations for incorporating crucial features into credit cards are provided. These recommendations should be aligned with customer preferences and market trends. Consider factors such as rewards programs, cashback offers, travel benefits, and concierge services to enhance the attractiveness and utility of the credit cards.

## Demographic Classification:

A comprehensive customer demographic analysis was conducted using Power BI for demographic classification. The key findings are summarized below:

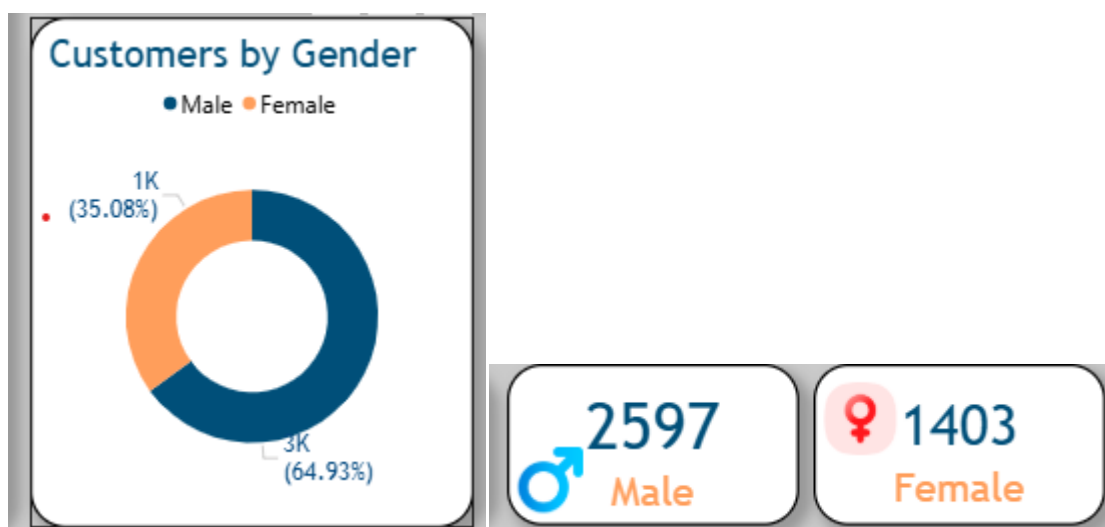


## Total Customers:



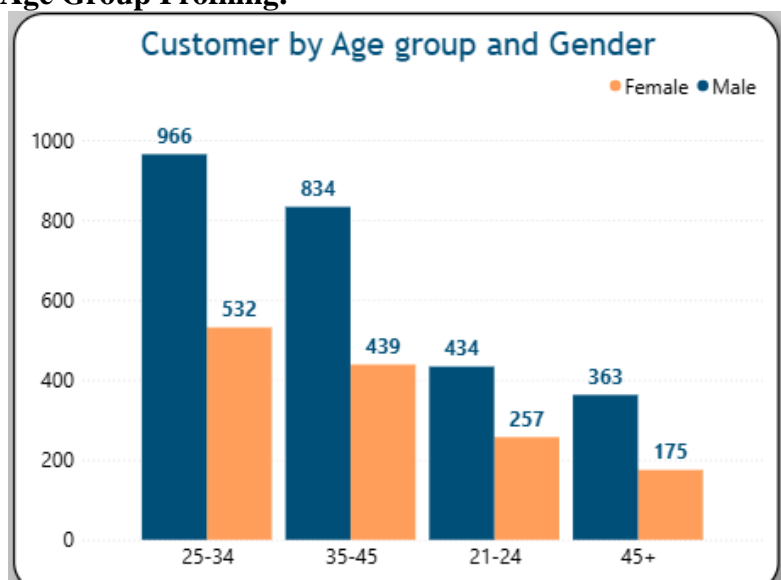
The dataset encompasses a substantial pool of 4000 customers, forming the foundation of our analysis.

## Gender dynamics



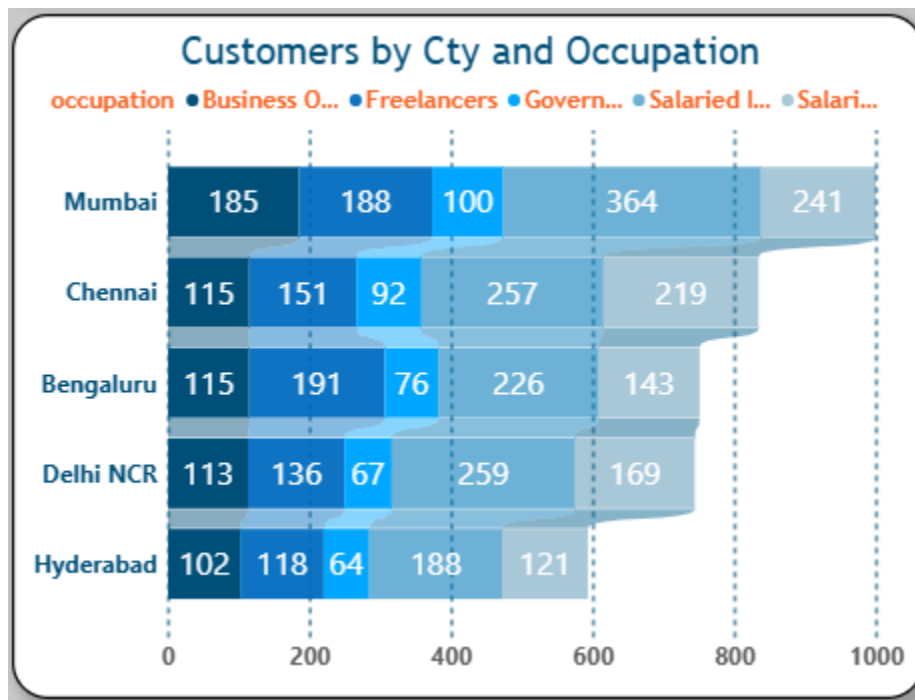
- Most of our customer base comprises males, accounting for 64.93%, indicating a slightly male-dominated demographic.
- However, the substantial presence of females (35.08%) highlights a diverse customer landscape.

## Age Group Profiling:



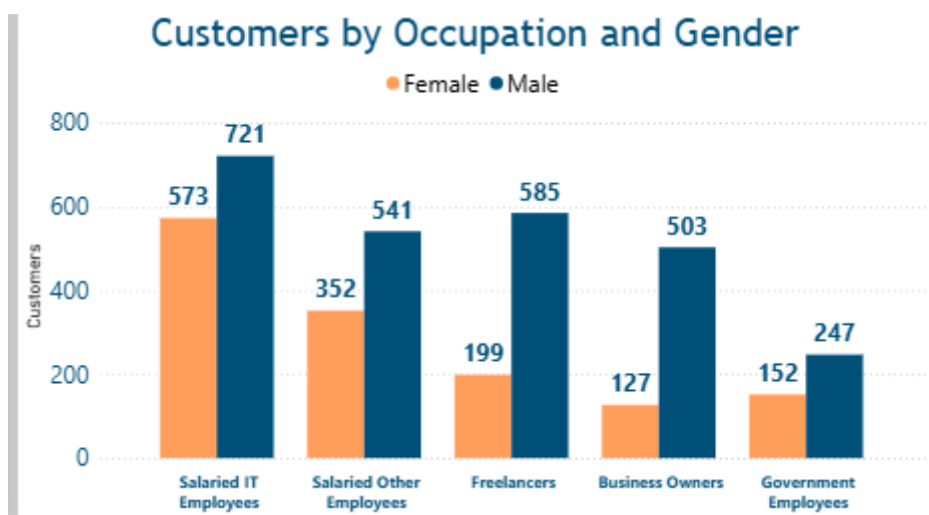
- The age group 25-35 emerges as the most significant segment, with 1498 customers. This group, especially males, exhibits a strong presence.
- Customers aged 35-45 also form a substantial portion (1273), demonstrating a balanced distribution between genders.
- The 45+ age group, while more minor, remains a noteworthy segment that should be noticed.

### City Wise Distribution



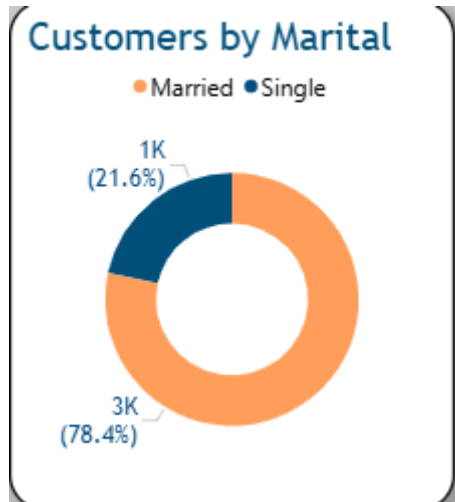
- Mumbai takes the lead in customer concentration, with 1078 customers, predominantly males.
- Other major cities like Chennai, Bangalore, and Delhi NCR contribute significantly to our customer base.

### Occupational Insights



- Salaried IT Employees represent many of our customers (1294), showcasing a tech-centric demographic.
- The diversity in occupations, including freelancers and business owners, presents an opportunity to tailor services for varied professional needs.

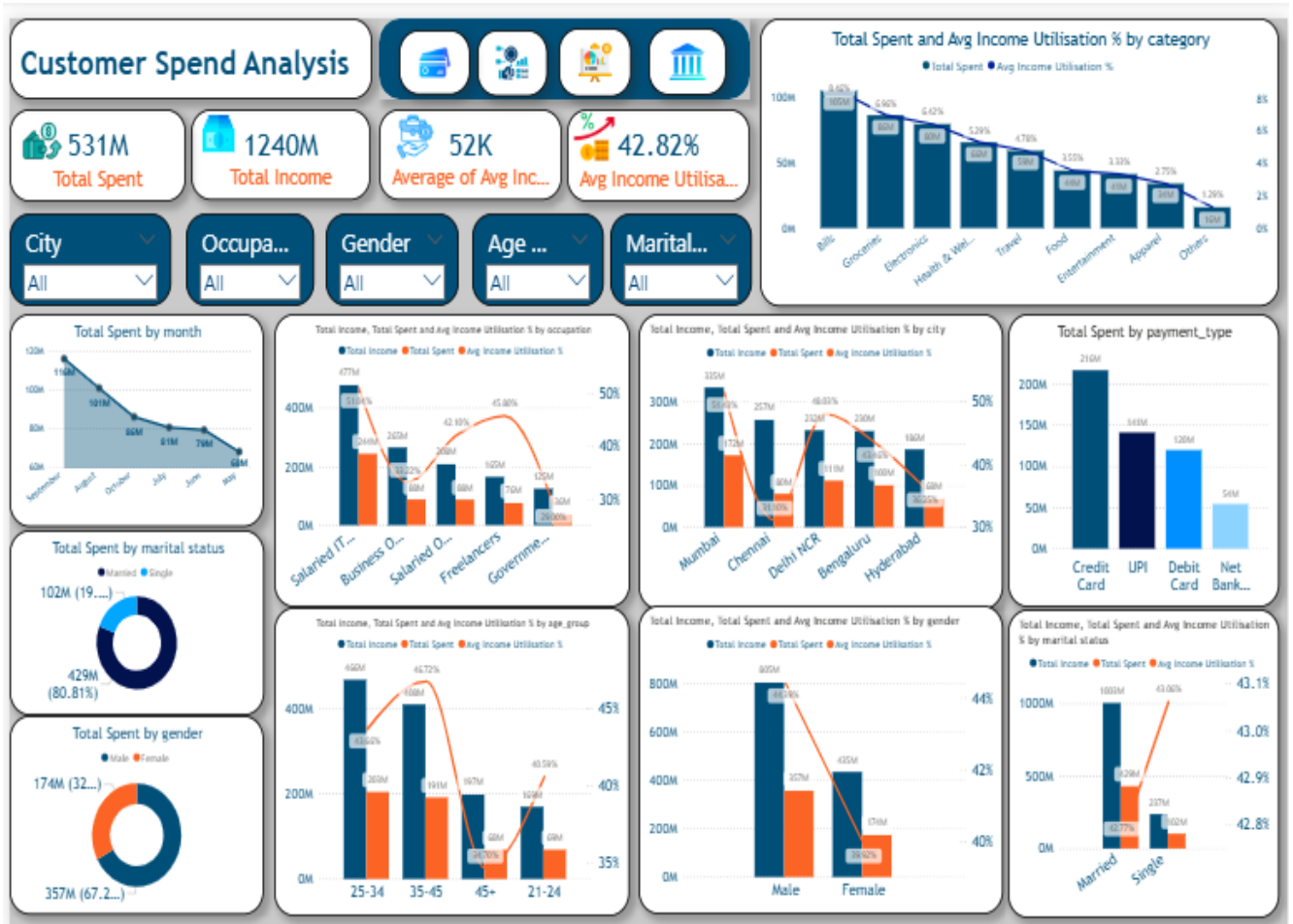
### **Marital Status Overview:**



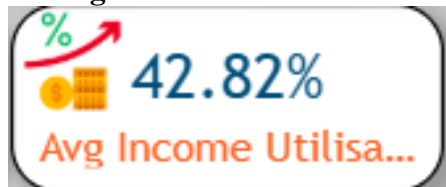
- Most of our customers are married (78.41%), emphasizing the importance of considering family-centric financial solutions.
- Unmarried customers, though a smaller segment, still constitute 21.6% of our customer base.

## **Income Utilization & Spending Analysis**

We have embarked on a dedicated analytical exploration to gain essential insights into customer spending behaviors and analyze the average income utilization across various segments. We have meticulously developed a custom "Customers Spend Analysis" page within Power BI to facilitate a thorough understanding. This page is the focal point for unraveling intricate details, featuring various Key Performance Indicators (KPIs) and insightful charts and graphs.



### Average income utilization

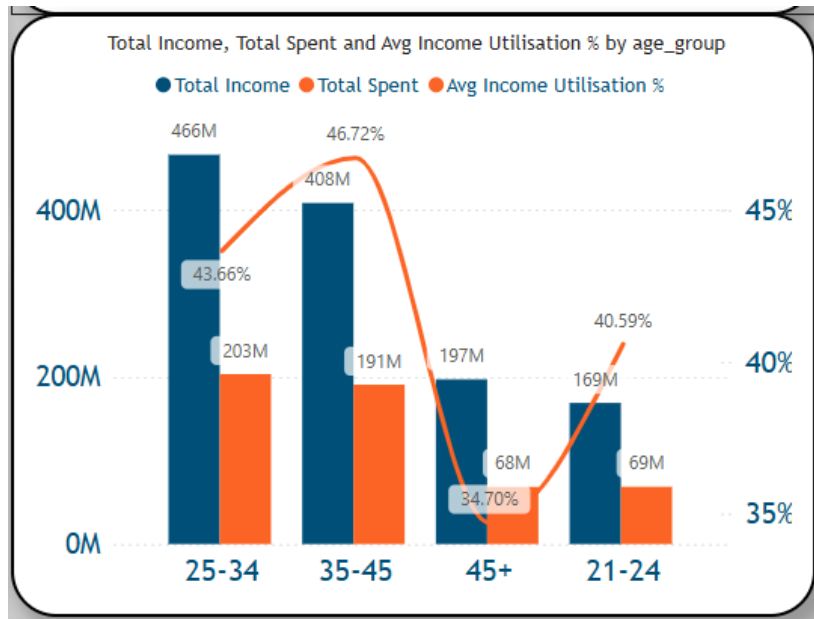


### Key metrics



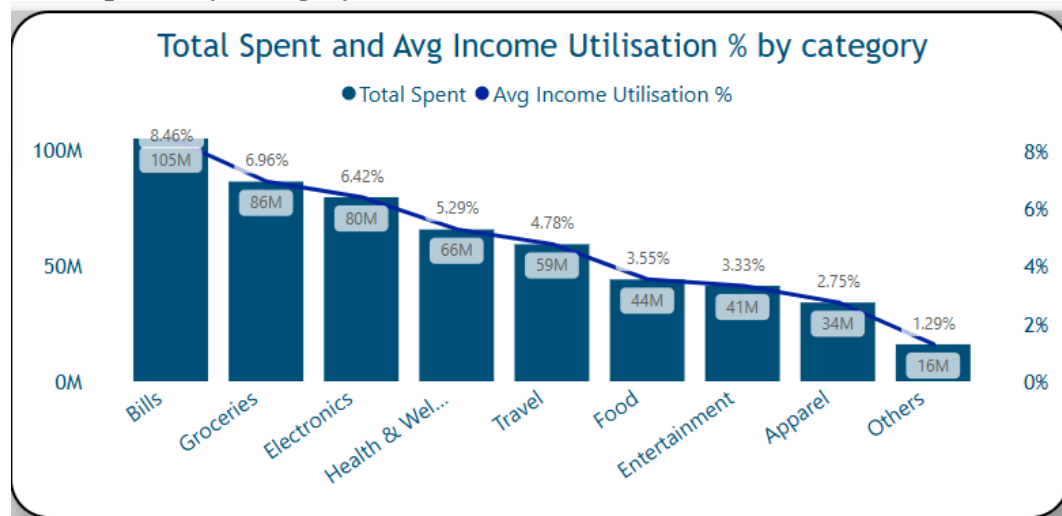
- Total Income in 6 months: \$1240M
- Total Spends in 6 months: \$531M

### Income, Spend, Utilization by Age Group:



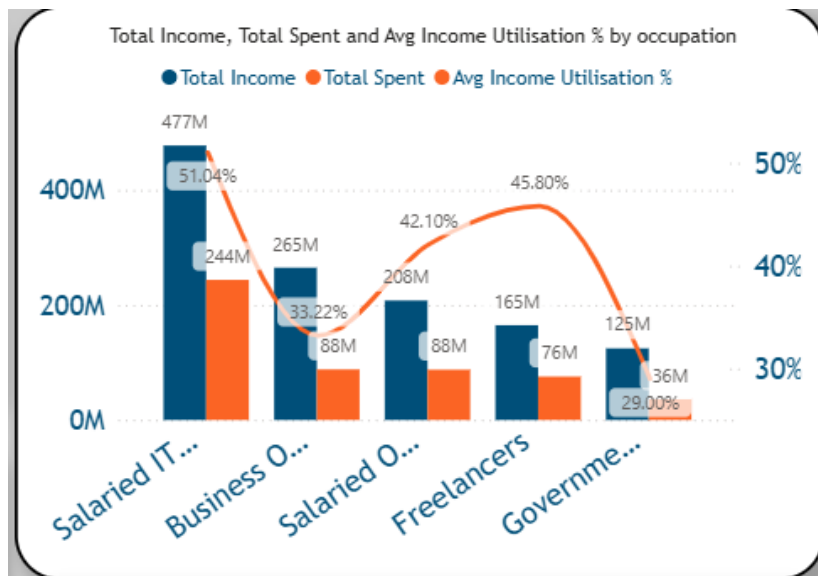
- The age group 25-34 exhibits the highest income, spending, and utilization (43.66%).
- The second-highest is the 35-45 age group, with a utilization rate of 46.72%.

### Total Spends by Category:



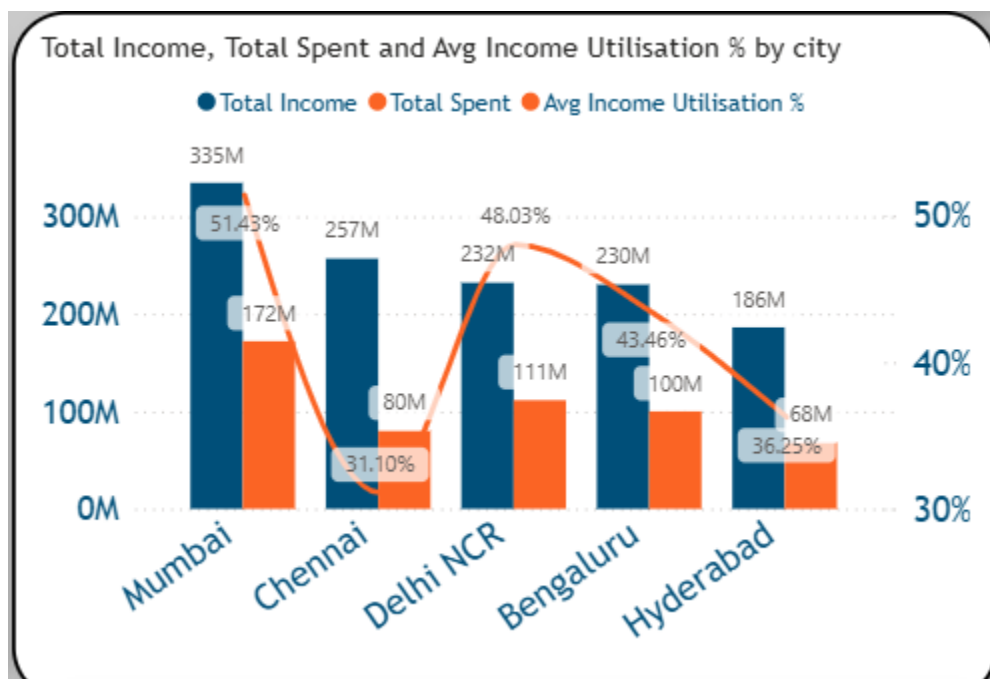
- Highest spending in the bills category (\$105M) with an average utilization of 46%.
- Other significant categories: Grocery (\$86M), Electronics (\$80M), and the least in Others category (\$16M).

### Income, Spend, Utilization by Occupation:



- Salaried IT employees lead in income (\$477M), spending (\$244M), and utilization (51.04%).
- Business Owners show an income of \$265M, a spend of \$88M, and a utilization rate of 33.22%.
- Government employees have the lowest utilization at 29%.

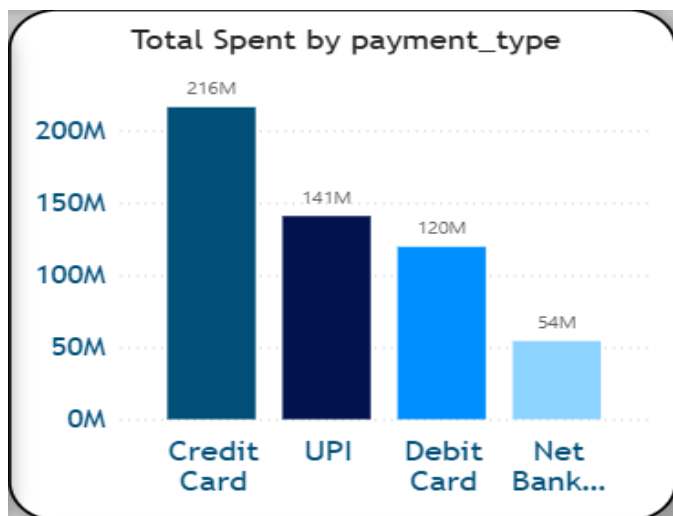
### Income, Spend, Income Utilization by City:



- Mumbai outshines with the highest income and spending, resulting in a utilization rate of 51.43%.
- Chennai, Delhi NCR, Bengaluru, and Hyderabad follow with varying utilization rates.

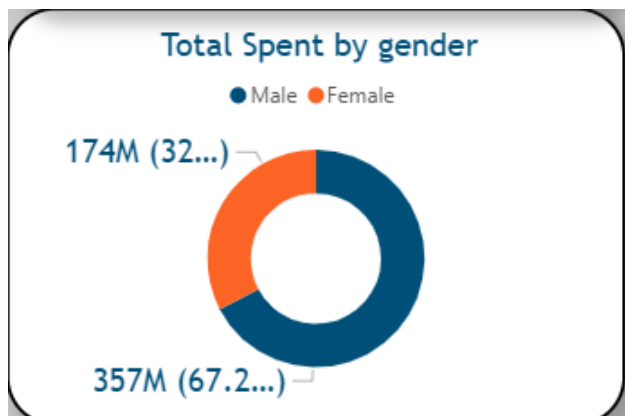


### Total Spend by Payment Type:



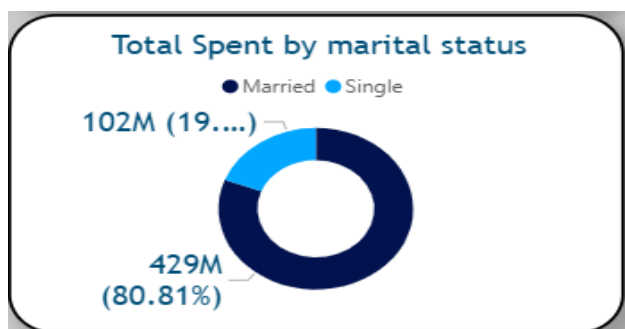
- Credit cards dominate spending, accounting for \$216M with a utilization rate of 17.45%.
- Other payment types include UPI, debit cards, and net banking.

### Total Spend by Gender:



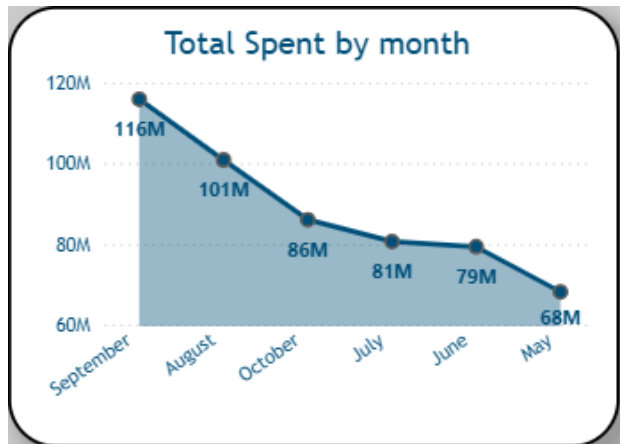
- Males spend \$357M, while females contribute \$154M.

### Spend by Marital Status:



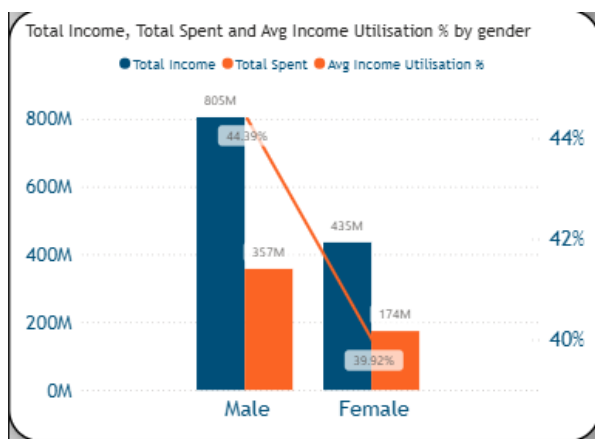
- Married individuals top the spending charts with \$429M, surpassing unmarried individuals at \$102M.

### Total Spend by Month:



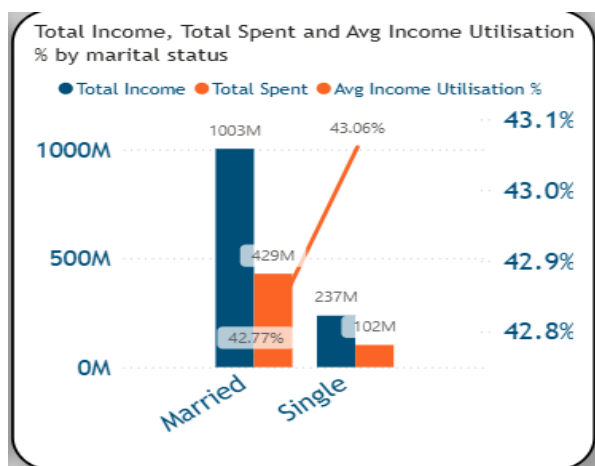
- September has the highest spending, accounting for \$116M, constituting 21.84%.

### Income Utilization by Gender:



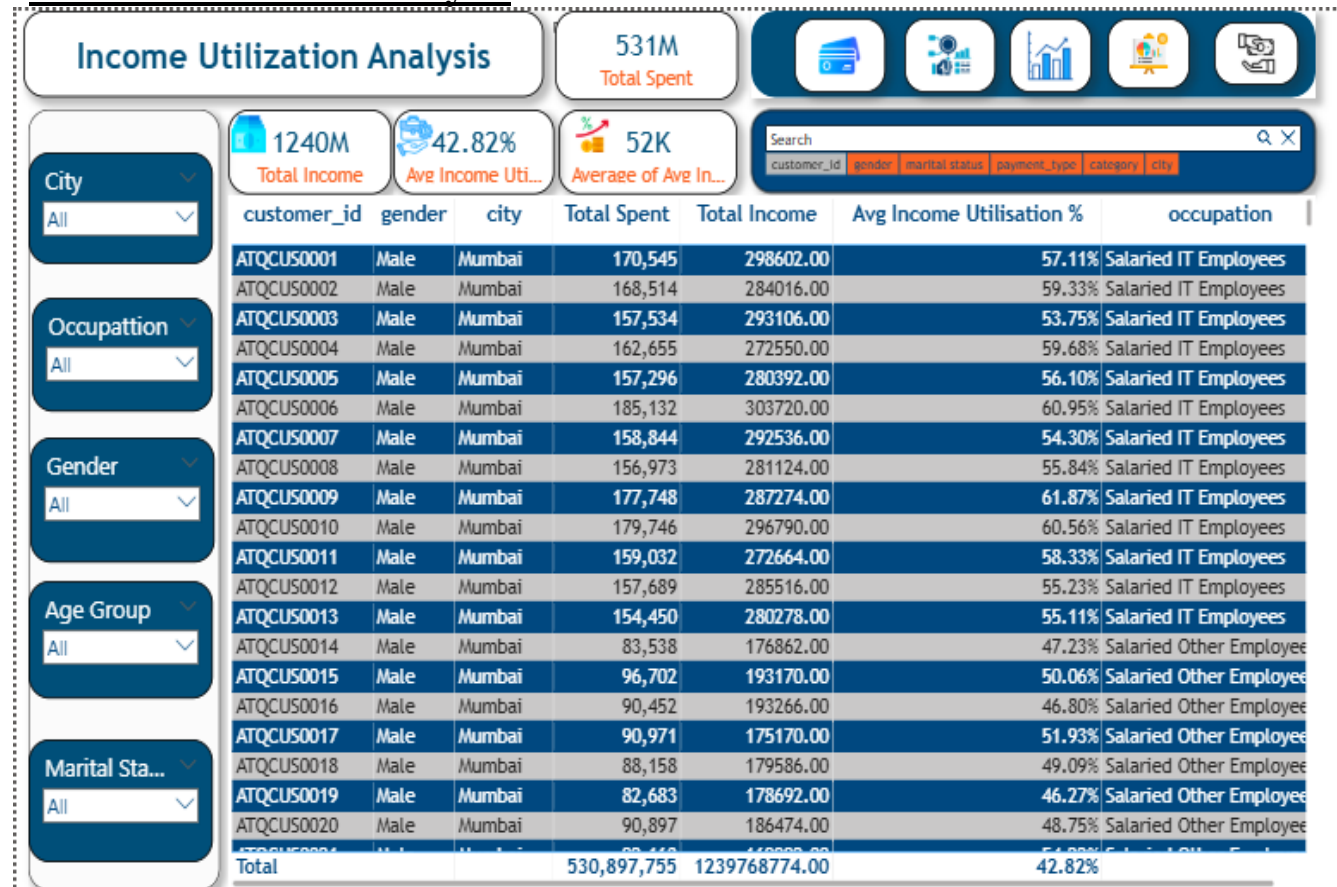
- Males exhibit a higher income utilization rate at 44.39%, compared to females at 39.92%.

### Income Utilization by Marital Status:



Singles show a utilization rate of 43.06%, slightly surpassing married individuals at 42.77%.

## Income Utilization Analysis



## Recommendation for Next Credit Card

To enhance the likelihood of credit card usage among salaried employees, self-employed individuals, and freelancers, the following key features could be incorporated into the credit card:

### Tailored Rewards Program:

- Develop a rewards program tailored to match the spending habits of salaried employees, self-employed individuals, and freelancers. This program could offer cashback incentives on common categories such as groceries, dining, and business-related expenses, aligning with their typical spending patterns.

### Flexible Payment Options:

- Provide flexible payment options catering to the target customers' diverse income structures. Offer customizable monthly payment plans, allowing users to adjust their payment schedules based on their cash flow and financial preferences.

### Expense Tracking and Budgeting Tools:

Integrate expense tracking and budgeting tools directly into the credit card platform or collaborate with popular budgeting apps. These tools will assist users, especially freelancers and self-employed individuals with variable incomes, in effectively managing their expenses, categorizing spending, and setting budget goals.

**Competitive Annual Fees and Interest Rates:**

Maintain competitive annual fees and attractive interest rates to incentivize customers to use the credit card. Consider providing introductory offers, loyalty benefits, or promotional rates for specific spending categories to enhance the card's appeal.

**Contactless and Mobile Payment Support:**

- Ensure that the credit card supports contactless payments and seamlessly integrates with popular mobile payment platforms. This feature enhances convenience and accessibility for users who prefer digital and contactless transactions, promoting increased card usage.

**Robust Security Measures:**

- Implement advanced security features such as real-time fraud detection, biometric authentication, and virtual card numbers to safeguard users' transactions and personal information. Communicate these security measures to instill confidence and trust among users, reassuring them of the safety and reliability of the credit card.

Thanks,

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[Github](#)

[My Workspace](#)