

# **Google Data Analytics Capstone Project**

## **Single Women & Financial Wellness: A Data-Driven Analysis**

### **1. Business Task**

The goal of this analysis is to understand the financial behavior, spending patterns, satisfaction levels, and estimated savings of single women. This insight will help identify opportunities for targeted financial products, marketing strategies, and customer experience improvements.

Key business questions:

- How do income and spending compare among single women?
  - What patterns exist in estimated savings across age groups?
  - How satisfied are single women overall?
  - Does household size impact satisfaction levels?
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### **2. Stakeholders**

Primary stakeholders include:

- Marketing teams
- Product development teams
- Customer experience teams
- Business leadership and strategy teams

Secondary stakeholders:

- Financial planning services
  - Loyalty and membership program managers
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### **3. Data Source**

The dataset used in this analysis is a customer survey dataset containing demographic, financial, and behavioral information, including:

- Age
- Gender
- Income
- Average Spend
- Household Size
- Overall Satisfaction
- Employment Status
- Product Preferences
- Marital Status

The analysis focused specifically on **single women**.

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## 4. Data Cleaning & Preparation (Google Sheets)

Data cleaning and preparation were completed using Google Sheets. The following steps were taken:

1. **Removed duplicates** to ensure each respondent was only counted once.
2. **Standardized text values** (e.g., Female/Female, Single/Single) for consistency.
3. **Converted currency fields** (Income, Average Spend) from text to numeric values.
4. **Handled blank and null values** by reviewing and removing incomplete records.
5. **Created calculated fields**, including:
  - Estimated Savings = Income – Average Spend
6. **Created age group categories** for better segmentation:
  - 18–29: Young Adult
  - 30–44: Millennial
  - 45–64: Gen X
  - 65+: Senior
7. **Filtered the dataset** to include only single women.

This process ensured the dataset was clean, accurate, and analysis-ready.

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## 5. Analysis Process

The cleaned dataset was imported into Tableau for analysis and visualization. The following visualizations were created:

1. **Income Distribution (Single Women)**
2. **Estimated Savings Distribution (Single Women)**
3. **Overall Satisfaction Levels (Single Women)**
4. **Household Size vs Overall Satisfaction (Single Women)**

Each visualization was designed to answer a specific business question and support data-driven storytelling.

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## 6. Key Findings & Insights

### **Insight 1: Income vs Average Spending Shows Disciplined Financial Behavior**

Most single women demonstrate a consistent gap between income and average spending, indicating intentional saving behavior.

**Interpretation:** This suggests a financially responsible segment that values stability and planning.

### **Insight 2: Estimated Savings Vary by Age Group**

Women aged 45–64 (Gen X) show the highest estimated savings, while younger women (18–44) show tighter income-to-spend margins.

**Interpretation:** Peak earning years combined with controlled spending contribute to higher savings in older age groups.

### **Insight 3: Overall Satisfaction is Mixed to Low**

Despite positive saving behavior, satisfaction levels among single women are mixed, with fewer reporting high satisfaction.

**Interpretation:** Financial stability alone does not guarantee emotional or lifestyle fulfillment.

## **Insight 4: Larger Household Size Correlates with Lower Satisfaction**

Single women supporting larger households (3+ members) tend to report lower satisfaction levels.

**Interpretation:** Increased financial and emotional responsibilities may contribute to stress and reduced well-being.

## **Insight 5: Employment Status Indicates Financial Transition and Instability**

A significant portion of single women are part-time employed, self-employed, unemployed, students, or retired.

**Interpretation:** Many single women are navigating career transitions, which may impact financial security and satisfaction.

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## **7. Recommendations**

### **1. Develop Savings-Focused Products & Programs**

Create tools and incentives that support long-term financial planning and consistent saving.

### **2. Target Gen X Women with Premium Offerings**

Women aged 45–64 show higher savings and may respond well to higher-value products and services.

### **3. Support Younger Women with Flexible Options**

Offer payment plans, discounts, and entry-level products for women with tighter budgets.

### **4. Enhance Emotional & Lifestyle Branding**

Since satisfaction is mixed, invest in customer experience, community, and brand connection.

### **5. Provide Support for High-Responsibility Households**

Create programs or messaging that acknowledges and supports women caring for multiple dependents.

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## **8. Conclusion**

This analysis demonstrates how data can be used to understand not only financial behavior, but also emotional and lifestyle factors affecting single women. By combining demographic,

financial, and satisfaction data, meaningful insights were uncovered that can inform business strategy and customer engagement.

This project highlights skills in:

- Data cleaning and preparation (Google Sheets)
  - Data analysis and visualization (Tableau)
  - Business insight generation
  - Data storytelling
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## 9. Tools Used

- **Google Sheets:** Data cleaning, formatting, calculated fields, filtering
  - **Tableau:** Data visualization and dashboard creation
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## 10. Reflection

This project strengthened my ability to:

- Work with real-world, messy data
- Ask meaningful business questions
- Translate numbers into insights
- Communicate findings clearly to non-technical audiences

It demonstrates readiness for entry-level data analytics roles and a strong foundation in analytical thinking and problem solving.