

Capstone Project Proposal

Topic:

Indian Personal Finance and Spending Habits

1. Executive Summary:

This project aims to analyze personal finance and spending habits in India by creating an interactive and insightful Power BI dashboard. By leveraging detailed financial and demographic data for 20,000 individuals, the dashboard will provide actionable insights into income distribution, expenditure patterns, and savings potential across diverse categories. This will empower stakeholders to understand financial trends and promote better personal financial management.

2. Problem Statement:

Background:

Efficient personal financial management is crucial for improving quality of life. However, limited understanding of income allocation and spending patterns often leads to suboptimal financial decisions, such as overspending or insufficient savings.

Objective:

The objective is to create a Power BI dashboard that:

- Visualizes income distribution and demographics.
- Highlights spending trends across various expense categories.
- Identifies potential areas for savings to encourage better financial planning.

Scope:

The project will focus on:

- Analyzing income and expense patterns across different demographics.
 - Exploring disposable income and savings behavior.
 - Providing actionable insights through interactive visuals.
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3. Data Sources:

KAGGLE LINK :

- ★ [Indian Personal Finance and Spending Habits](#)
- ★ <https://www.kaggle.com/datasets/shriyashjagtap/indian-personal-finance-and-spending-habits>

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Dataset Overview:

The dataset contains detailed financial and demographic data for 20,000 individuals, encompassing:

1. Income & Demographics:

- **Income:** Monthly income in currency units.
- **Age:** Age of the individual.
- **Dependents:** Number of dependents.
- **Occupation:** Job role or employment type.
- **City_Tier:** Categorical variable for living area tier (e.g., Tier 1, Tier 2).

2. Monthly Expenses:

- Categories such as Rent, Loan_Repayment, Insurance, Groceries, Transport, Eating_Out, Entertainment, Utilities, Healthcare, Education, and Miscellaneous.

3. Financial Goals & Savings:

- Desired_Savings_Percentage and Desired_Savings.
- Disposable_Income.

4. Potential Savings:

- Estimates for potential savings across various spending areas.

Potential Data Challenges:

- Ensuring data cleanliness and consistency, handling missing or incomplete data, Addressing any biases in the demographic representation.
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4. Methodology:

1. Data Integration:

- Import and clean the dataset to remove inconsistencies or errors.
- Perform exploratory data analysis (EDA) to understand data trends.

2. Dashboard Design:

- Collaborate with stakeholders to identify key metrics and visualization goals.
- Organize the dashboard into intuitive sections for income, expenses, savings, and demographics.

3. Dashboard Development:

- Use Power BI to create dynamic and interactive visuals.
- Include filters for drill-down analysis (e.g., by age group, city tier, or occupation).

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- Showcase trends in income, expense distribution, and savings potential.

4. Validation and Feedback:

- Validate insights by comparing with known financial trends or benchmarks.
 - Incorporate feedback from stakeholders to refine the dashboard.
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5. Expected Outcomes:

- **Interactive Dashboard:**
 - Comprehensive visuals on income, expenses, and savings.
 - Filters for customized analysis by demographics or financial goals.
 - **Insights:**
 - Identification of high-spending categories.
 - Recommendations for achieving desired savings goals.
 - Understanding income and savings variations across city tiers and occupations.
 - **Value Addition:**
 - Enhanced personal financial awareness and planning.
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6. Tools and Technologies:

- **Power BI:** For dashboard development.
 - **Python/Excel:** For data cleaning and exploratory analysis.
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7. Risks and Challenges:

1. **Data Quality:** Ensuring the dataset is complete and accurate.
 2. **Complexity:** Balancing detailed analysis with dashboard simplicity.
 3. **User Adoption:** Training stakeholders to interpret and use the dashboard effectively.
 4. **Scalability:** Adapting the dashboard for additional data or new analysis requirements.
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8. Conclusion:

This project aims to provide a clear and comprehensive view of Indian personal finance and spending habits through a Power BI dashboard. By leveraging data-driven insights, individuals and organizations can make informed decisions to improve financial health and achieve savings goals. The dashboard will serve as a powerful tool for visualizing trends and encouraging better financial practices.