

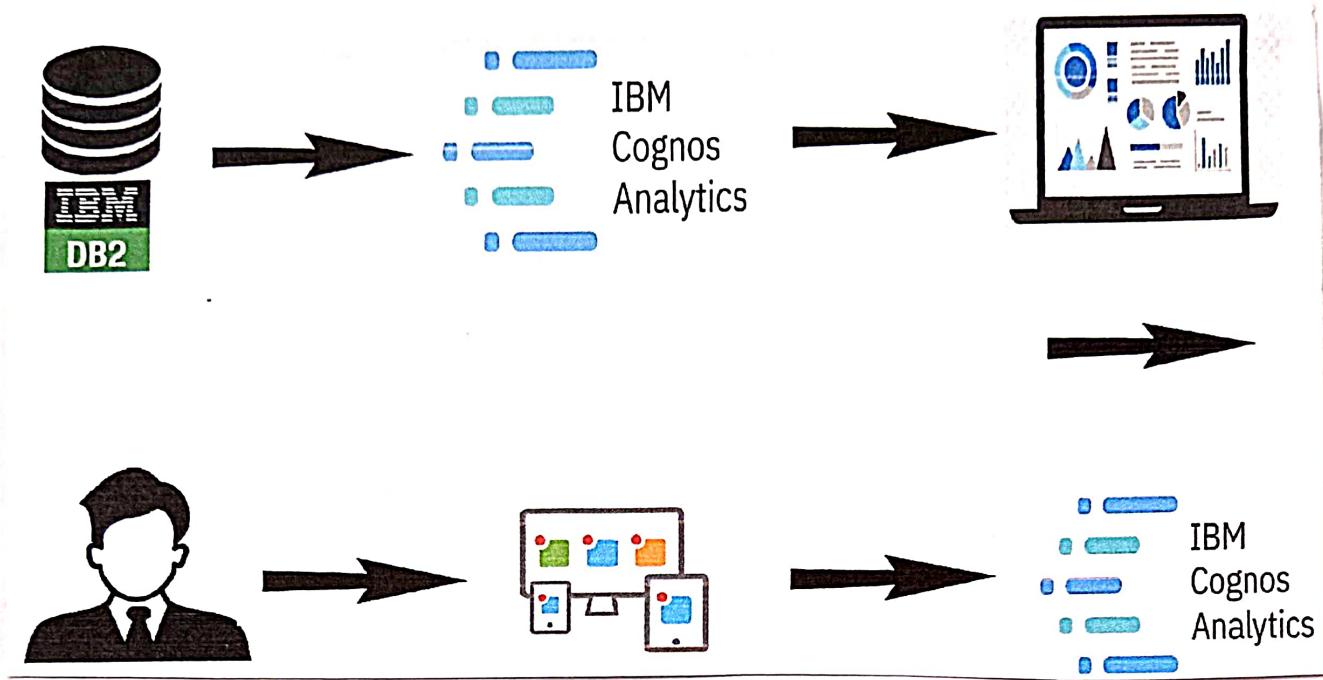
## Path to Prosperity: A Comprehensive Analysis of Financial Independence based on data taken from reddit

Financial independence is the status of having enough income or wealth sufficient to pay one's living expenses for the rest of one's life without having to be employed referred to as passive income. Others define financial independence differently according to their own goals.

Reddit is an American social news aggregation, content rating, and discussion website. Registered users (commonly referred to as "redditors") submit content to the site such as links, text posts, images and videos, which are then voted up or down by other members.

Financial Independence, Retire Early (FIRE) is a movement of people devoted to a program of extreme savings and investments that aims to allow them to retire far earlier than traditional budgets and retirement plans would permit.

## Technical Architecture:



## Milestone 1: Define Problem/Problem Understanding

Activity 1: Specify the business problem

Refer Project Description

Activity 2: Business requirements

The business requirements for this project would likely include

Data collection: The first requirement is to collect data from Reddit that is relevant to financial independence. This may include such as discussions on personal finance, saving and investing, and retirement planning.

Data cleaning and preparation: The collected data must be cleaned and processed to ensure it is suitable for analysis. This may involve removing irrelevant information, correcting inconsistencies and missing values, and transforming the data into a format that is compatible with the analysis tools.

Data analysis: The data must be analysed to uncover meaningful insights into financial independence. This could involve meanings such as descriptive statistics, regression analysis, and data visualization to gain a deeper understanding of the data.

Report creation: The insights and findings from the data analysis must be presented in a comprehensive report that includes visualizations and data tables. The report must be well organized and easy to understand.

### Activity 3: Literature Survey

A literature survey for a project titled "The Path to Prosperity: A Comprehensive analysis of Financial Independence based on Data taken from Reddit" would involve a review of existing research and studies related to financial independence and personal finance. The objective of the literature survey would be understand the current state of knowledge in this area and identify any gaps in the existing research that the project can address. Overall, the literature survey would provide a comprehensive overview of the current state of knowledge in the field of financial independence and personal finance, and would provide a foundation for the analysis and report creation aspects of the project.

#### Activity 4: Social or Business Impact.

Social Impact: The findings from the project could help people in better planning their finances and other assets.

Business Mode/Impact: A high level of financial independence for people indicates healthy economic conditions for the country.

## Milestone 2: Data Collection and Extraction from Database

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypothesis, and evaluate outcomes and generate insights from the data.

### Milestone 3: Data Preparation

#### Activity 1: Prepare the Data for Visualization.

Preparing the data for visualization involves cleaning the data to remove irrelevant or missing data, transforming the data into a format that can be easily visualized, exploring the data to identify patterns and trends, filtering the data to focus on specific subsets of data, preparing the data for visualization software, and ensuring the data is accurate and complete. The process helps to make the data easily understandable and ready for creating visualizations to gain insights into the performance and efficiency.

#### • Activity 1.1: Preparing a Data Module.

(10 min)

IBM Cognos Analytics with Watson

1 item open

New

Data module

Upload data

Content

Recent

Manage

Explore

Present

Dashboard

Report

Story

Select tables

Available sources

Search

WWD30186

REDDIT

WTID

WTID3

WTID4

WTID\_2



Select tables from the available sources  
Use the checkboxes in the source tree to make a selection.

Search

WWD30186

REDDIT

GENDER

AGE

HOW\_MANY\_INCOME

RELATIONSHIP\_STATUS

ARE\_YOUR\_COMBINED

Do you have... children?

CHILDREN

ARE\_YOU\_EVER\_DENTAL

OCCUPATION

HOUSING\_SITUATION

COUNTRY

WHAT\_IS\_DONMENT

Male	26	1	In a relationship, but not married	Yes	Plan
Male	37	2	In a relationship, but not married	Yes	Have
Male	20	1	Single, never married	Yes	Unde
Male	26	1	Single, never married	Yes	Unde
Male	24	1	In a relationship, but not married	No	Unde
Male	30	1	Married	Yes	Have
Male	29	2	Married	Yes	Do not have child
Male	25	1	Single, never married	Yes	Unde

Previous

Cancel

OK

## Milestone 4: Data Visualization

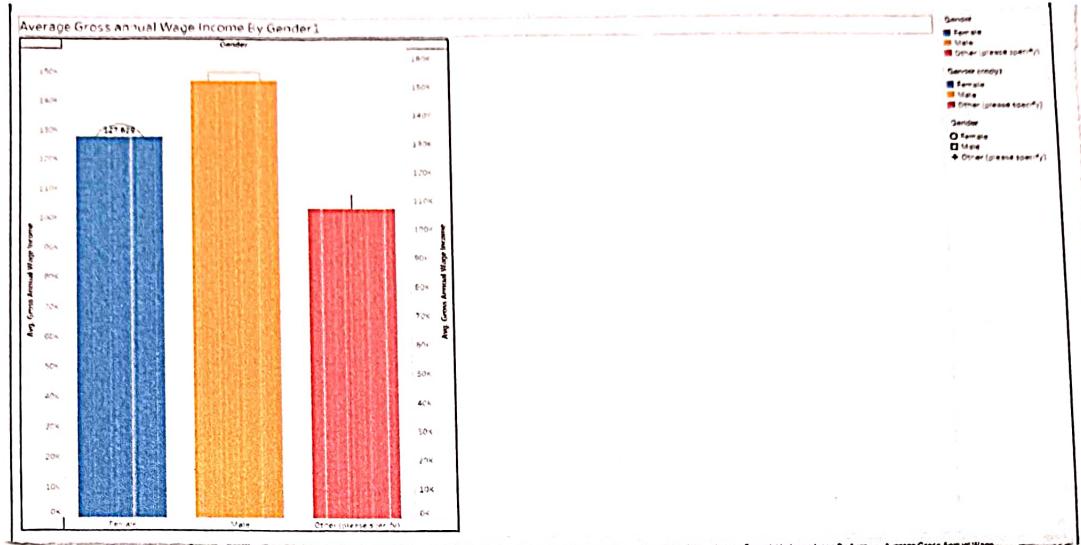
Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret. By using visual elements such as charts, graphs, and maps, data visualization can help people quickly identify patterns, trends and outliers in the data.

### Activity 1: No of Unique Visualizations

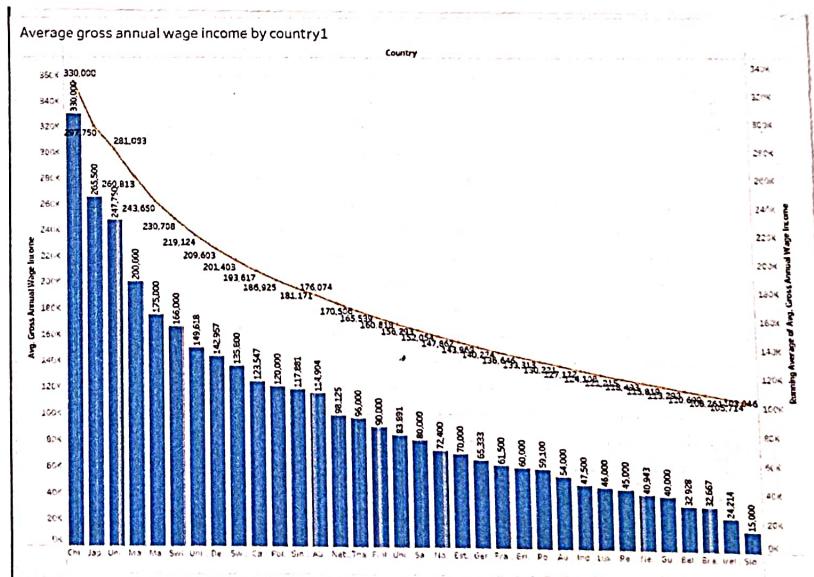
The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyse the Reddit Financial Independence data include bar charts, line charts, heat maps, scatter plots, pie charts, maps etc. These visualizations can be used to compare performance, track changes over time, show distribution, and relationships between variables.

Activity 2: Line chart and pie chart

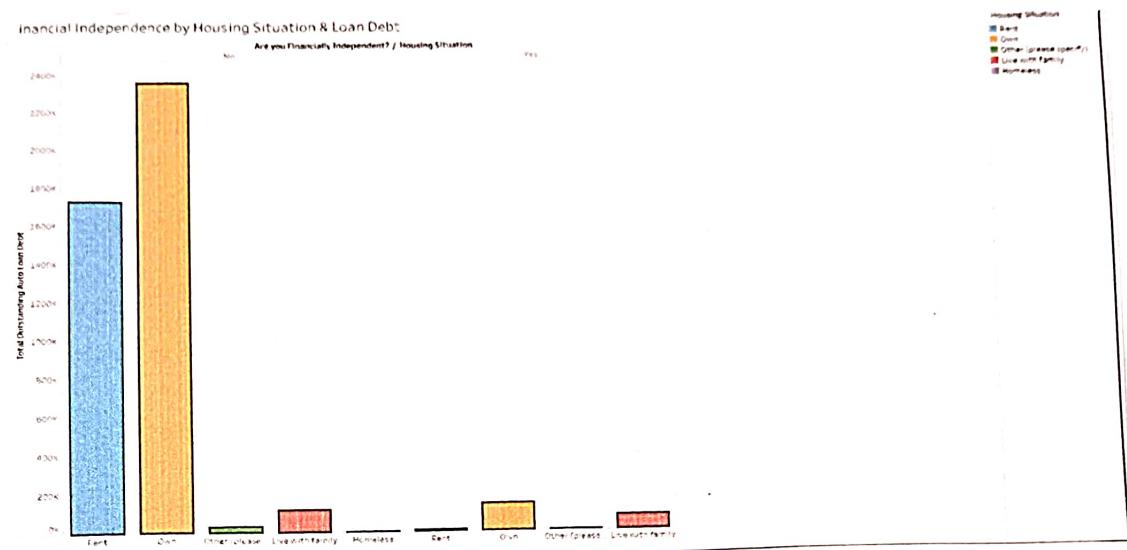
## Activity 1.1: Financial Independence by Average gross annual wage income by Gender.



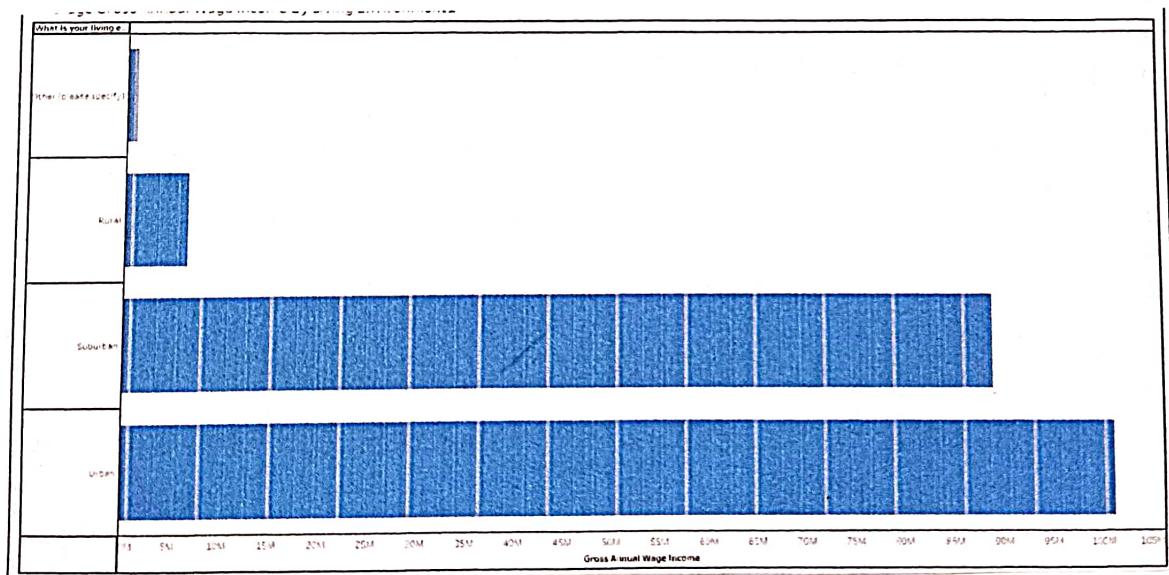
## Activity 1.2: Average wage by country 1



## Activity 1.3: Financial Independence by Housing Situation & Loan Debt.



## Activity 1.4: Average Wage by Living Environment 1



## Milestone 5: Dashboard

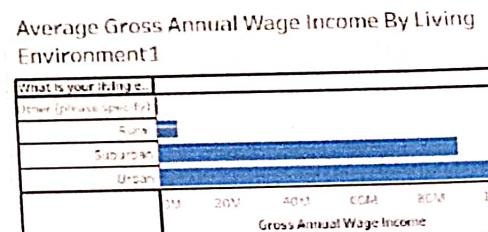
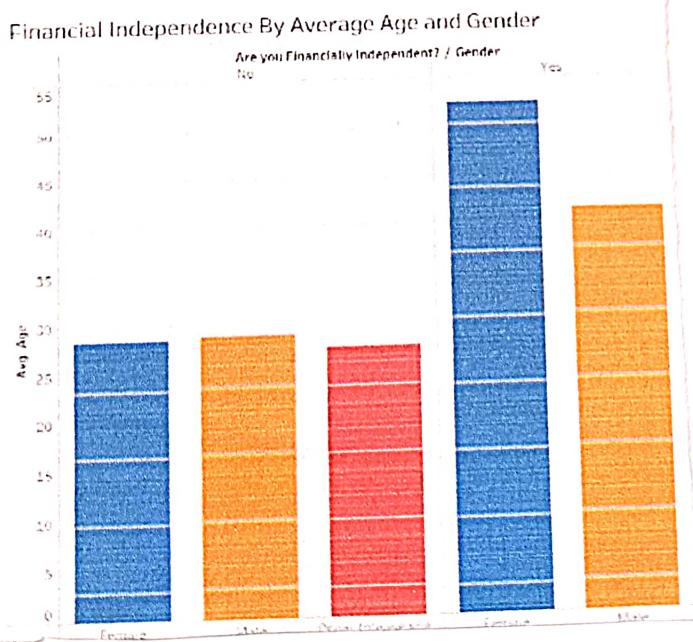
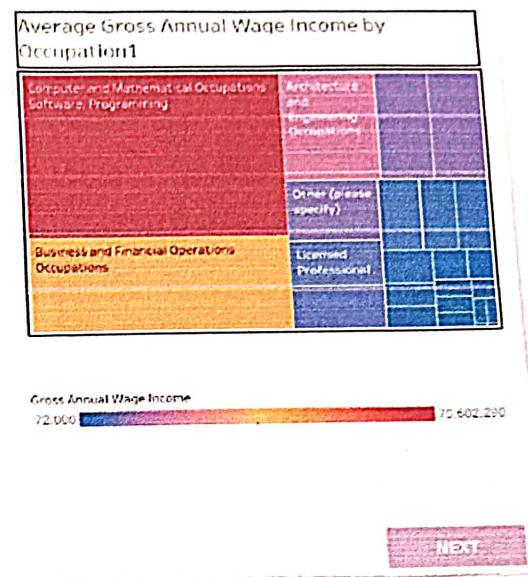
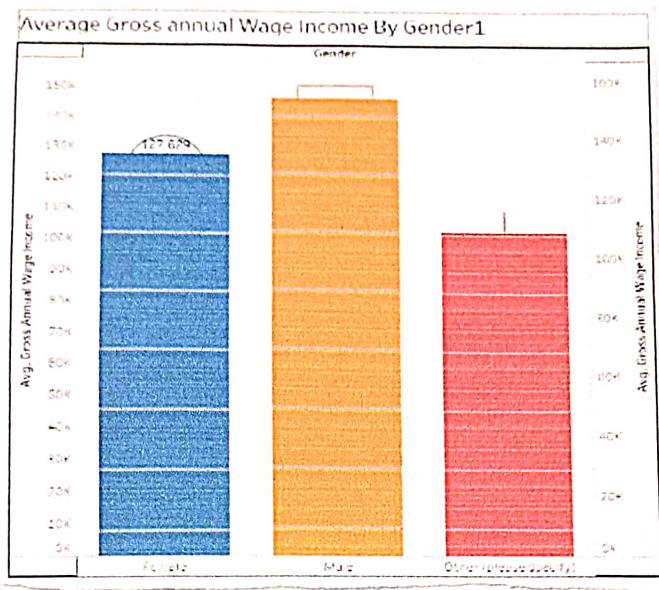
A dashboard is a graphical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data, and are typically assigned for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performance indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs and tables.

### Activity 1: Responsive and Design of Dashboard.

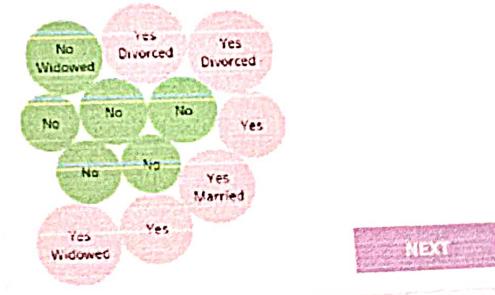
The responsiveness and design of a dashboard for analysing the factors important for Financial Independence is crucial to ensure that the information is easily understandable and actionable. Key considerations for designing a responsive and effective dashboard include user-centred design, clear and concise information, interactivity, data-driven approach, accessibility, customization and security.

Once you have created views on different sheets in IBM Cognos, you can pin them and pull them into a dashboard.

## Financial Independence by Avg age and Gender



## Financial Independence By Average Age And Relationship Status1



## Milestone 6: Story

A data story is a way of presenting data and analysis in a narrative format, with the goal of making the introduction that sets the stage and explains the context of the data, a body that represents the data and analysis in a logical and systematic way, and a conclusion that summarizes the key findings and highlights their implications. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations, and videos.

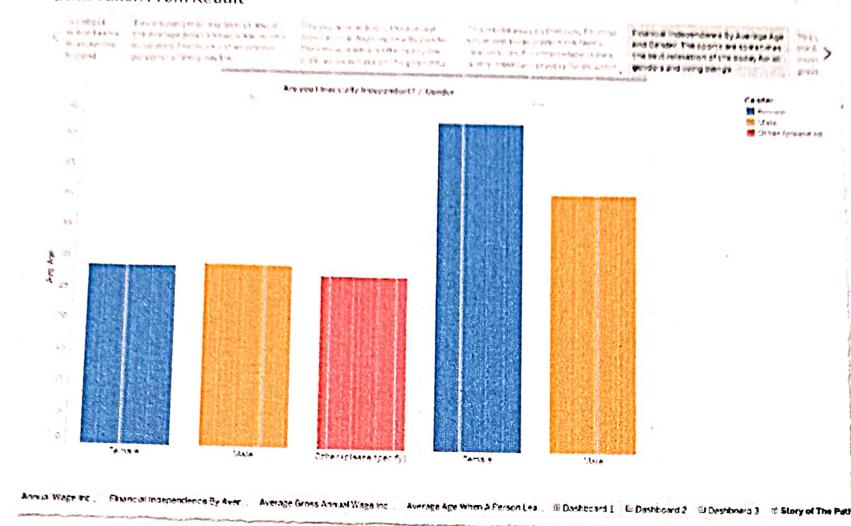
### Activity 1: No of Scenes of Story

The number of scenes in a storyboard for a data visualization analysis of the factors affecting the financial independence, will depend on the complexity of the analysis and the specific insights that are trying to be conveyed. A storyboard is a visual representation of the data analysis process and it breaks down the analysis into a series of steps or scenes.

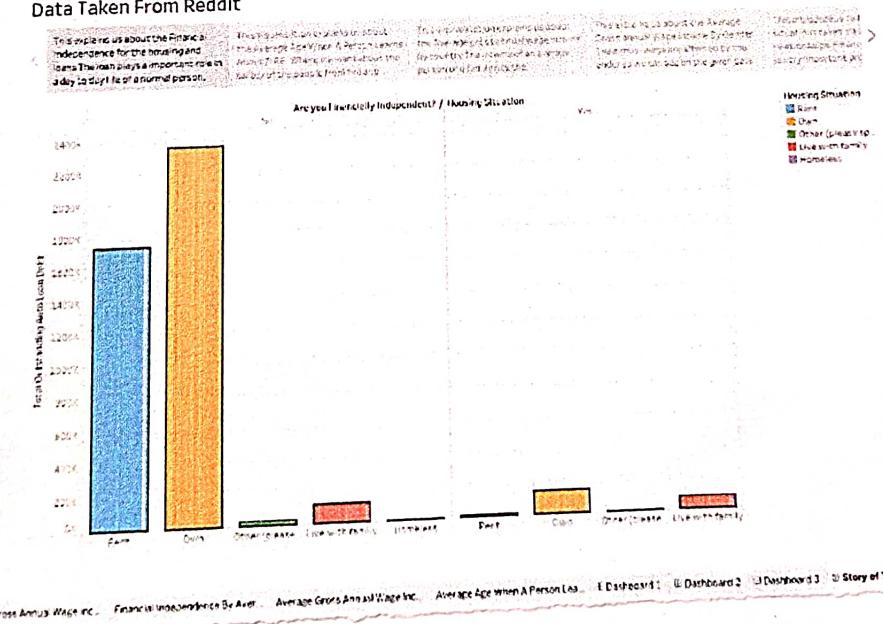
link - 1  
pic - 3.

# Financial Independence by avg age and gender

Story of The Path To Prosperity: A Comprehensive Analysis Of Financial Independence Based On Data Taken From Reddit

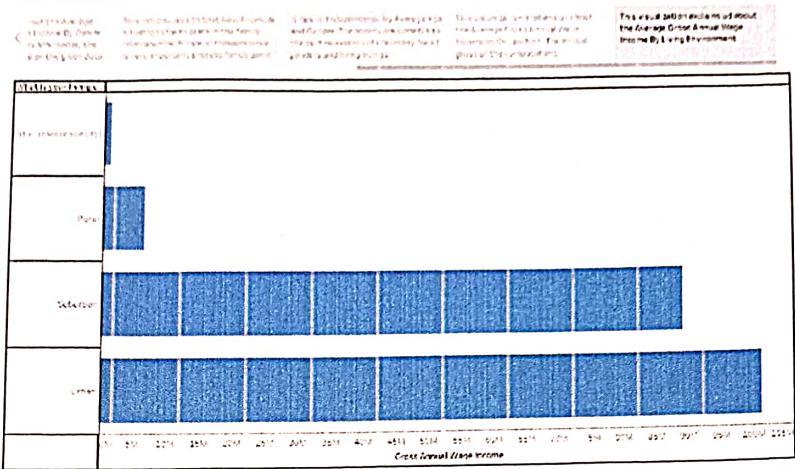


Story of The Path To Prosperity: A Comprehensive Analysis Of Financial Independence Based On Data Taken From Reddit

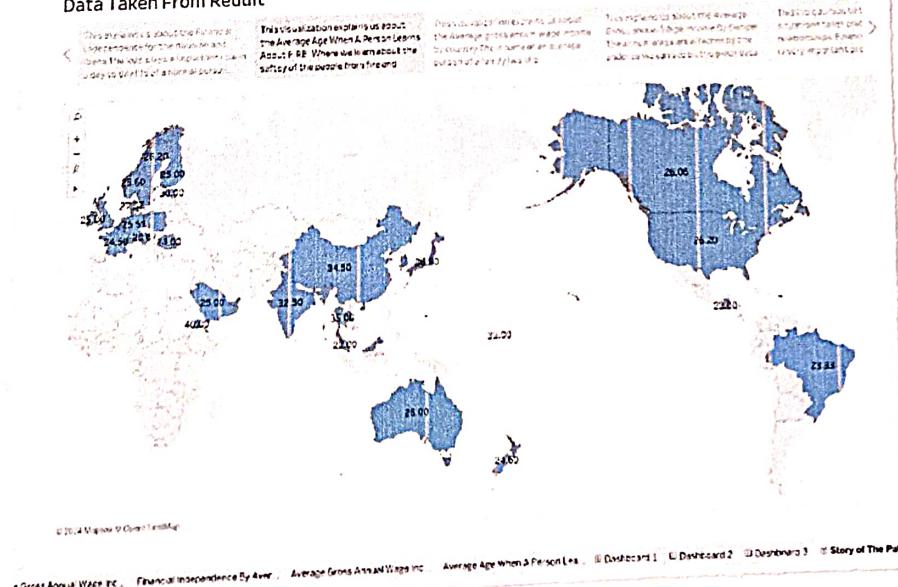


# GROSS ANNUAL AGE INCOME

Story of The Path To Prosperity: A Comprehensive Analysis Of Financial Independence Based On Data Taken From Reddit



Story of The Path To Prosperity: A Comprehensive Analysis Of Financial Independence Based On Data Taken From Reddit



## Milestone 8: Performance Testing

### Activity 1: Utilization of Data Filters



**GROSS\_ANNUAL\_SIDE\_GIG\_INCOME**

File: Top or bottom  
Number of results (1 - 100)  
A 10

Show: Top count (radio button selected)

Color: Click or drag data here

Repeat (column): Click or drag data here

**GROSS\_ANNUAL\_INVESTMENT\_INCOME**

File: Top or bottom  
Number of results (1 - 100)  
A 10

Show: Top count (radio button selected)

Color: Click or drag data here

Repeat (column): Click or drag data here

### Activity 2: No of Calculation Fields.

- ▶ abc GENDER
- └ AGE
- ▶ # HOW-MA...NCOME
- ▶ abc RELATIO...STATUS
- ▶ abc ARE\_YO...MBINED
- ▶ abc Do you h...hildren?
- └ CHILDREN
- ▶ abc ARE\_YO...NDENT
- ▶ abc OCCUPATION

- ▶ abc HOUSING...ATION
- ▶ Ⓛ COUNTRY
- ▶ abc WHAT-...NMENT.
  - └ GROSS....INCOME

- ▶ abc WHAT-...NMENT.

- └ GROSS...INCOME
- └ GROSS...INCOME
- └ GROSS...PROPERTY
- └ GROSS...INCOME
- └ GROSS...INCOME

- └ TOTAL-OWN-DEBT

- └ TOTAL...N-DEBT
- └ AT-WHA...ERATE
- └ AT-WHAT...FI-RE-

### Activity 3: No of Visualizations/ Graphs

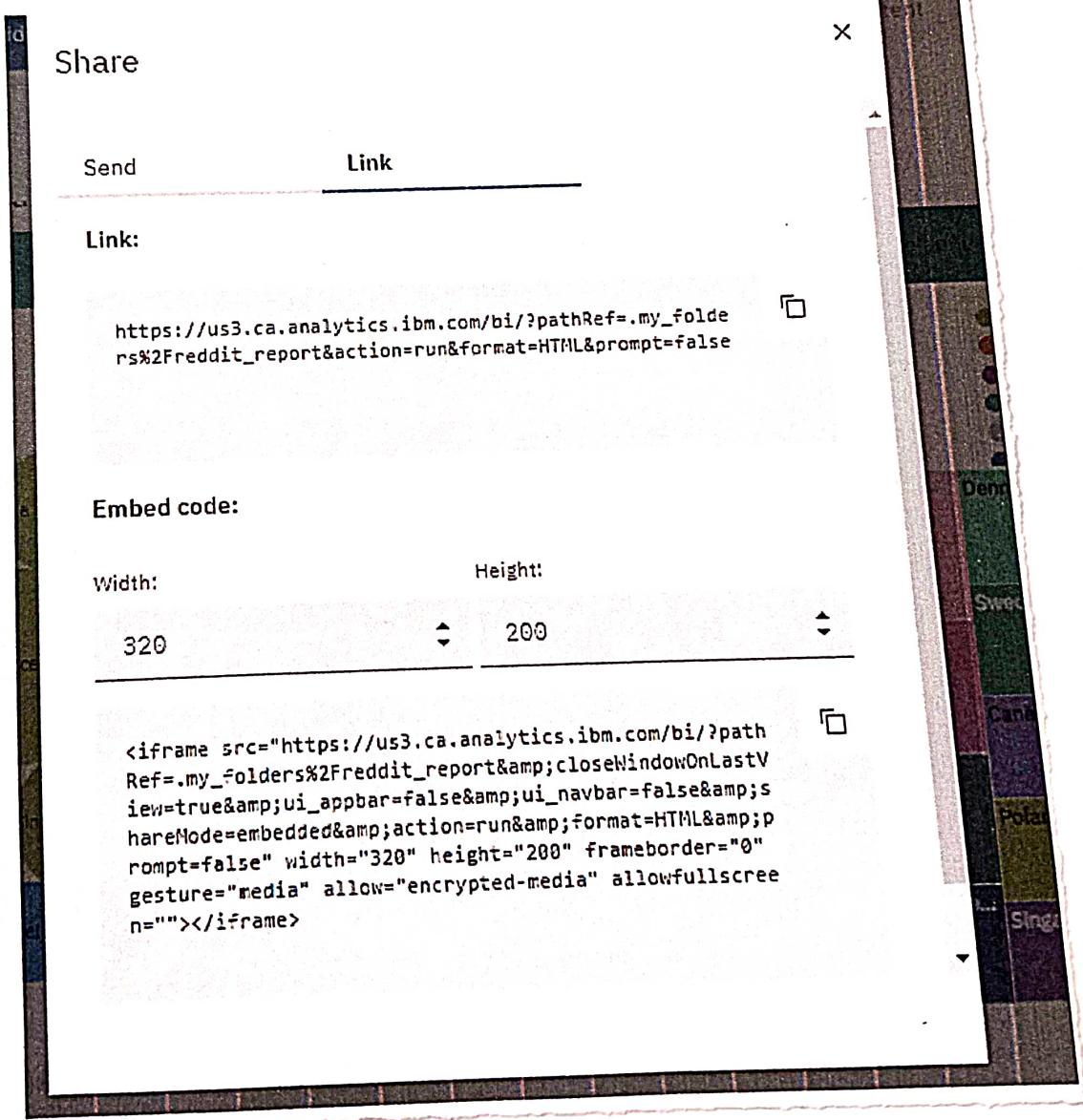
1. Financial independence by average age and gender
2. Average annual wage income by gender
3. Average gross wage income by living environment
4. Financial Independence by relationship status
5. Top 10 Countries by annual side gig income
6. Top 10 Countries by annual investment income
7. Top paying occupations
8. Top 10 Countries by annual wages.
9. Financial independence by loan debt.

## Milestone : Web Integration

Publishing helps us to track and monitor key performance metrics, to communicate results and progress helps a publisher stay informed, make better decisions, and communicate their performance to others.

Integrating dashboard/reports/stories to web.

Step-1: Go to Dashboard/report/story , click on share button on the top ribbon



Copy the 'Embed Code'

## Milestone : Project Demonstration and Documentation

Below mentioned deliverables to be submitted along with other deliverables.

Activity 1: Record explanation video for project end to end solution

Activity 2: Project Documentation-Step by step project development procedure.

Create document as per the template provided.