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 or dependent on others. Income earned without having to work a job is commonly known ~~suffered~~ referred to as passive income. Others define financial independence differently according to their own goals.

Reddit is an Americal social news aggregation, content rating and discussion website. Registered users (commonly reffered 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 monement of people denotid to a program of extreme savings and investment that aims to allow them to retire far earlier than traditional budgets and retirement plans would permit.

Project Flow

To accomplish this, we have to complete all the activities listed below.

* Define Problem / Problem understanding
  - → Specify the bussiness problem
  - → Business requirement
  - → Literature survey
  - → Social ~~of~~ or business Impact
* Data collection and extraction from Database
  - → Collect the database
  - → Connect IBM DB 2 with IBM Cognos
* Data preparation
  - → Prepare the data for visualization
* Data visualization
  - → No of unique visualizations
* Dashboard
  - → Responsive and design of dashboard
* Story
  - → No. of scenes of story
* Report
  - → Creating a report
* Performance Testing
  - → Amount of data Rendered to DB
  - → Utilization of data filters.
  - → No. of Calculation fields
  - → No. of visualizations / Graphs.

* Web integration
  → Dashboard and ~~stoey~~ story embed with UI with flask

* Project Demonstration and Documentation
  → Record explanation video for project end to end solution
  → Project Documentation - Step-by-step project development procedure.

MILESTONE 1 : Define Problem / Problem understanding

Activity 1 - Specify the business problem

Activity 2 - Business requirements

The business requirements for this project would likely include

- Data collection
- Data cleaning and preparation
- Data analysis
- Report creation

Activity 3 - Literature survey

A literature survey would involve a review of existing research and studied related to financial independence and personal finance. 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 projects.

Activity 4 - Social or business impact

Social impact :- The findings from this project could help people in better planning in their finances and other assets.

Business model / Impact :- A high level of financial independence for people indicate, 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 systemic fashion that enables one to answer stated research questions, test hypotheses and evaluate outcomes and generate insights from the data.

Activity 1 : Collection of dataset

Activity 1.1 : Understand the data

Activity 2 : Connect IBM DB2 with IBM cognos.

MILESTONE 3 : Data Preparation

Activity 1 : Prepare the Data viatizations

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 data subsets of data.

DATA MODULE

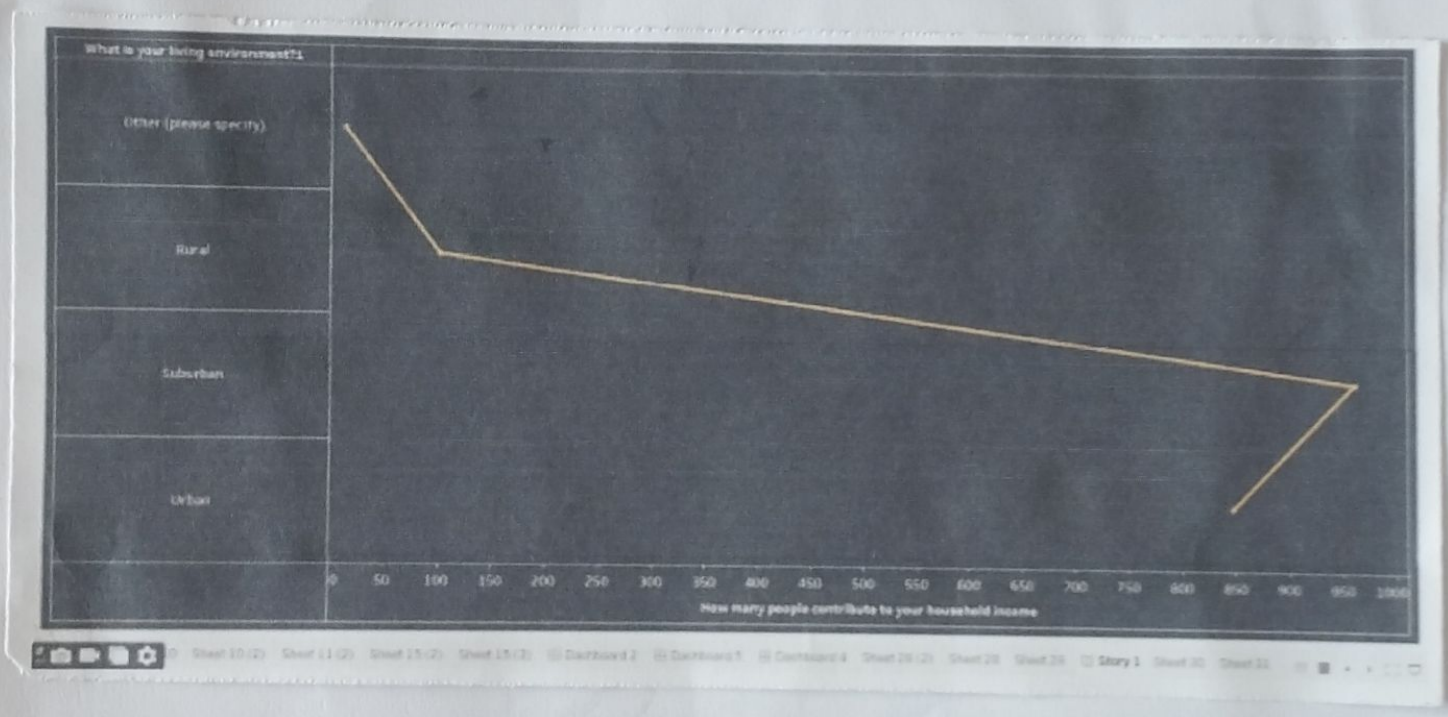
MILESTONE 4 : Data visualisations

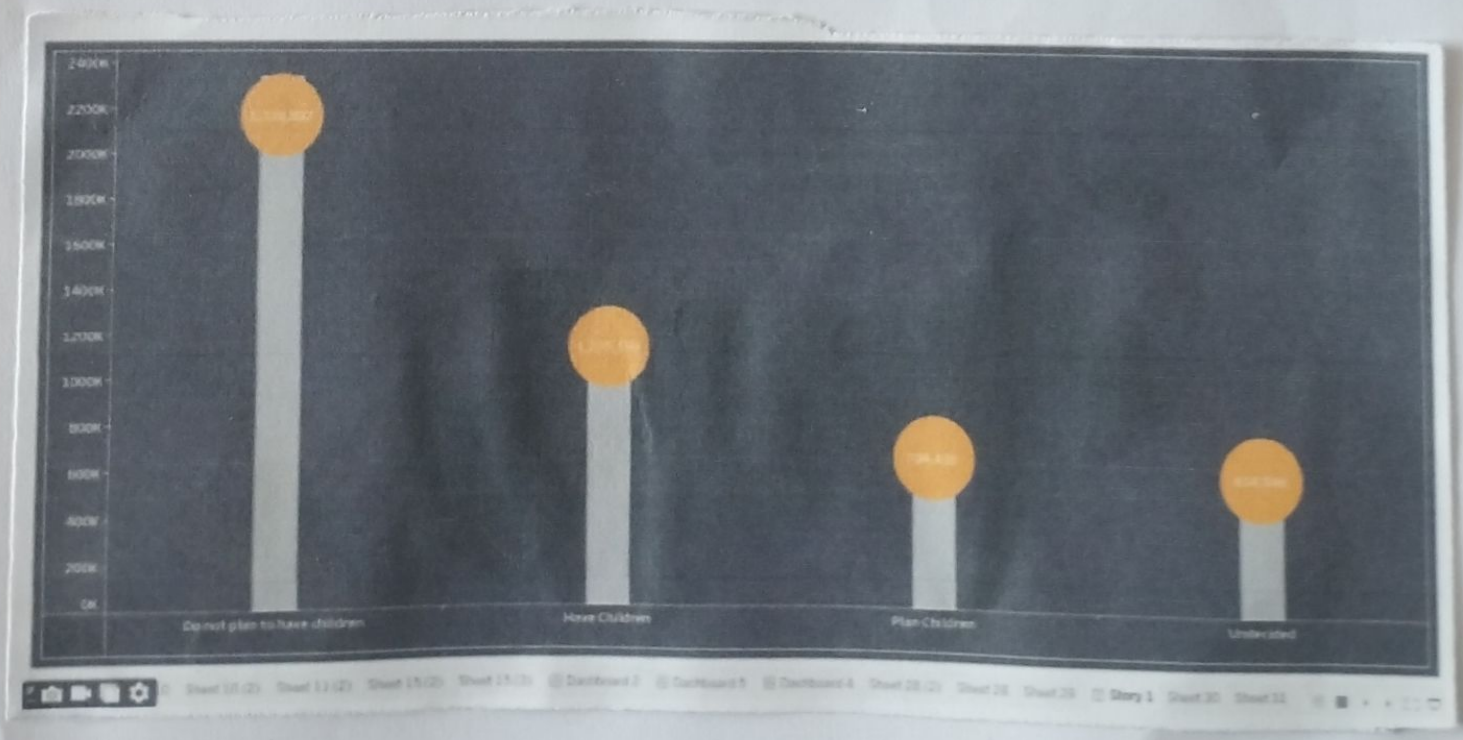
Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goals of data visualization is to make complex data sets more accessible, intutive, and easier to interpret. By using visual elements such as charts, graphs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

Activity 1 : No. of unique visualizations

The no. of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyze the Reddit financial independence data include bar charts, line charts heat maps, scatter plots, etc. These visualizations are used to compare relation between variables.

Avg. Gross Annual Wage Income
140K
120K
100K
80K
60K
40K
20K
0K
127,629
146,672
Female
Male
Other (please specify)
Gender5
Female
Male
Other (please spec...
Gender (copy)
Female
Male
Other (please spec...
Gender5
Female
Male
Other (please spec...


What is your living environment?1
Other (please specify)
Rural
Suburban
Urban
0
50
100
150
200
250
300
350
400
450
500
550
600
650
700
750
800
850
900
950
1000
How many people contribute to your household income


2400K
2200K
2000K
1800K
1600K
1400K
1200K
1000K
800K
600K
400K
200K
0K
Do not plan to have children
Have Children
Plan Children
Undecided

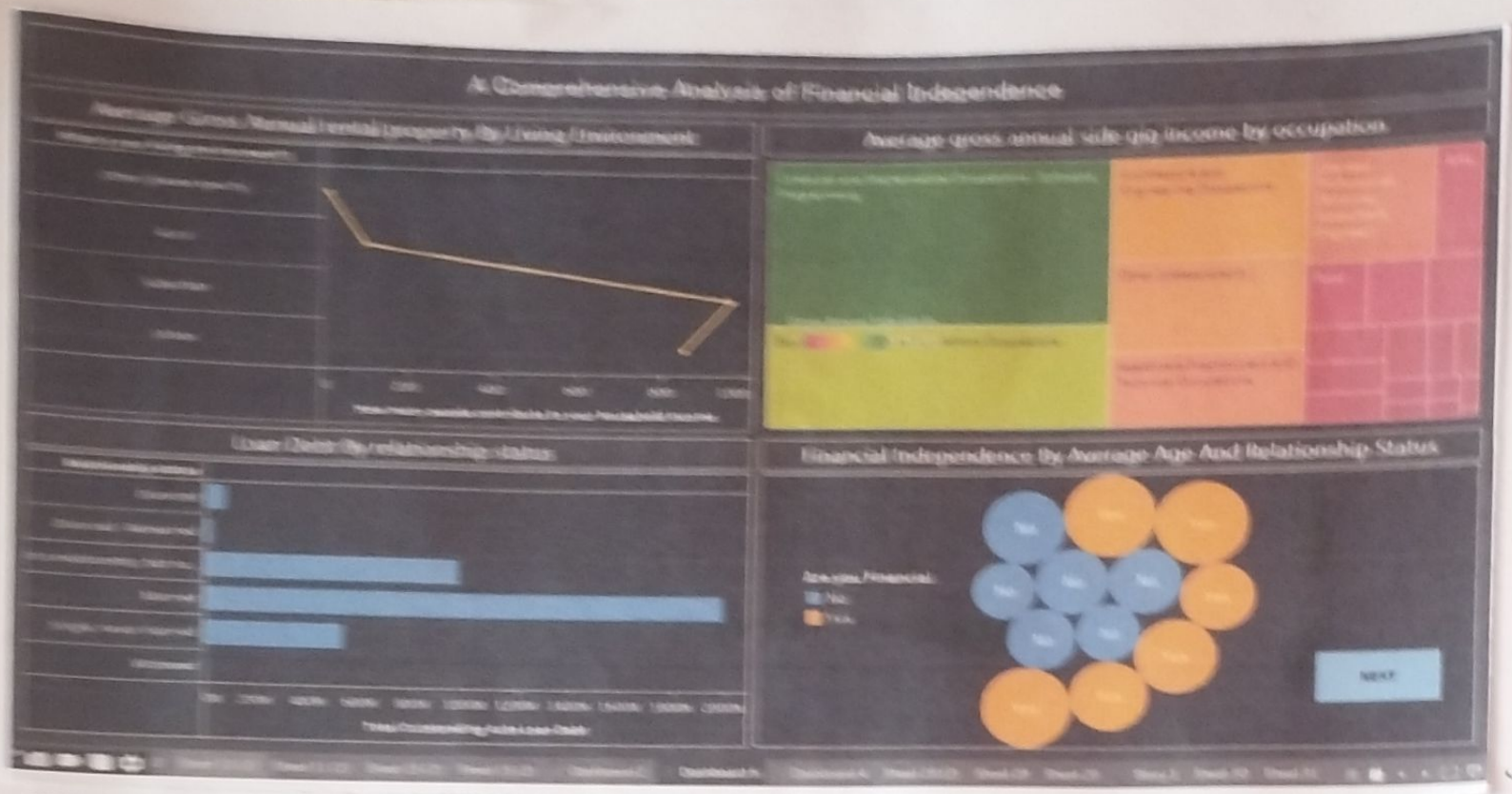
MILESTONE 5 : DASHBOARD

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 designed for a specific purpose or use case. Dashboards can be used in variety of settings such as business, finance, manufacturing, healthcare and many other industries.

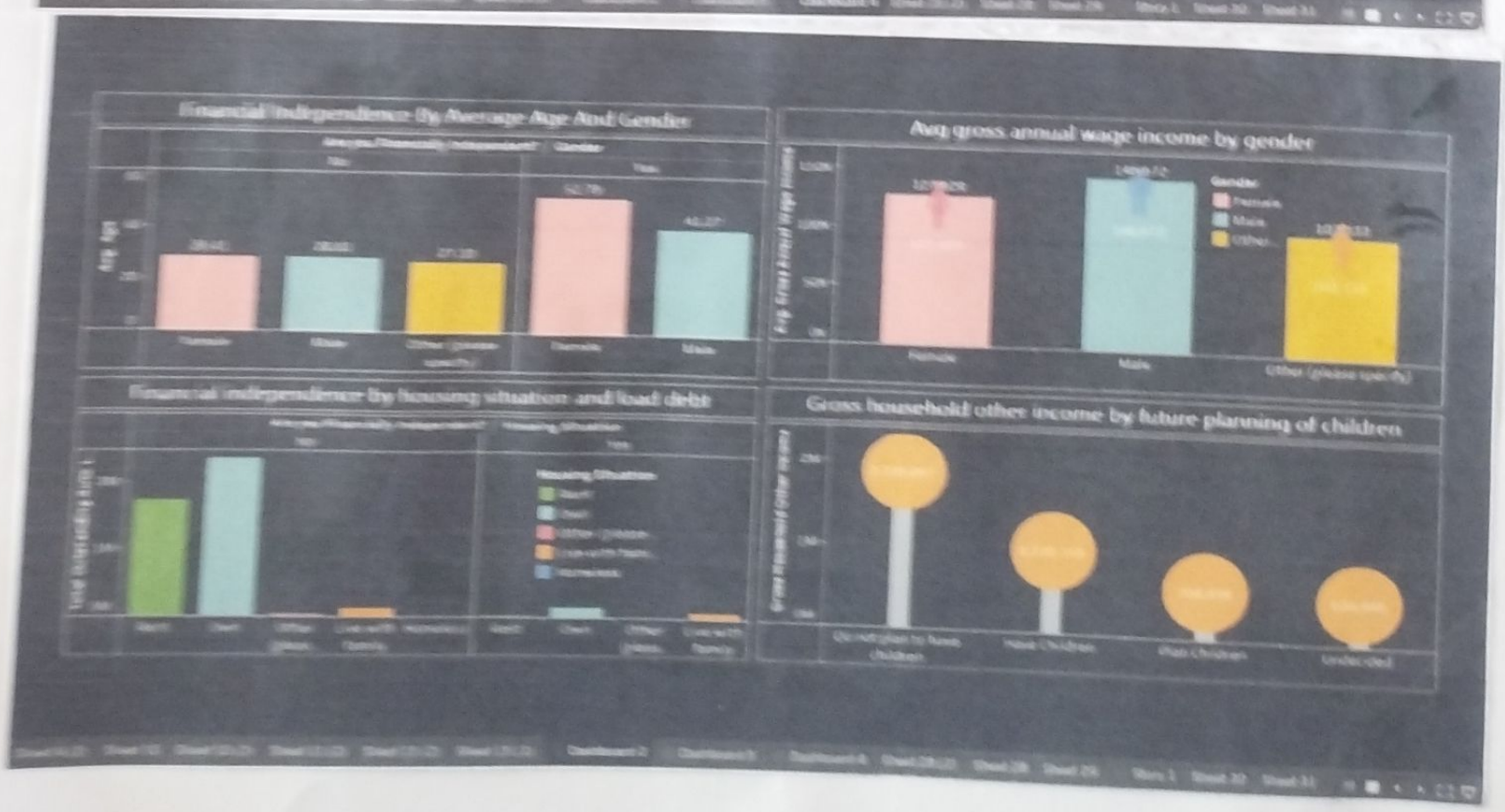
Activity : 1 - Responsive and design of Dashboard

The responsiveness and design of a dashboard for ~~anything~~ analysing the factors important for financial independence is crucial to ensure that the information is easily understandable and ~~accom~~ actionable. The goal is to creat a dashboard that is user-friendly interactive and data driven, providing actionable insights.

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


A Comprehensive Analysis of Financial Independence
Average gross annual side gig income by occupation
Financial Independence By Average Age And Relationship Status
NEXT

Avg gross annual wage income by country
Average Age When A Person Becomes Financially Literate


Financial Indepenedence By Average Age And Gender
Avg gross annual wage income by gender
Financial independence by housing situation and load debt
Gross household other income by future planning of children

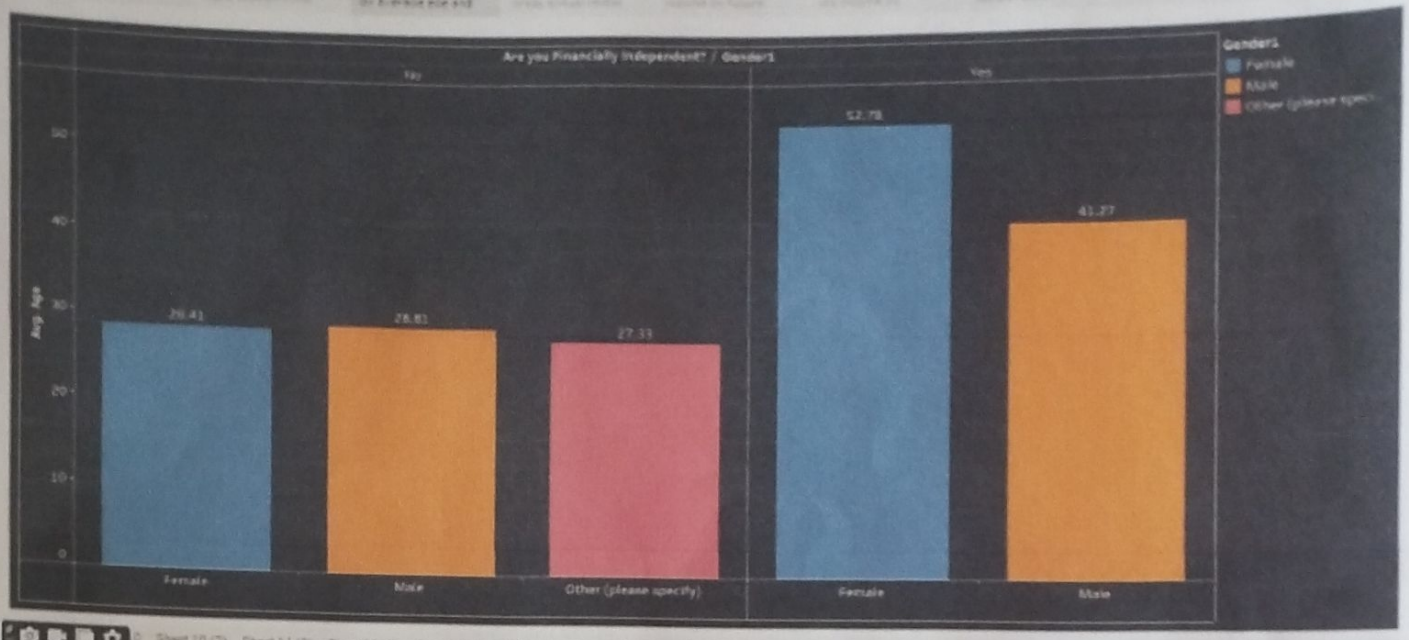
MILESTONE 6 : STORY

A data story is a way of presenting data and analysing in a narrative format, with the goal of making the information more engaging and easier to understand. A data story typically includes a clear introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and ~~syste~~ systematic way, and a conclusion that summa-rizes the key findings and highlight their impli-cations. Data stories can be told using a variety of mediums, such as reports, presentations, interactive visualizations and videos.

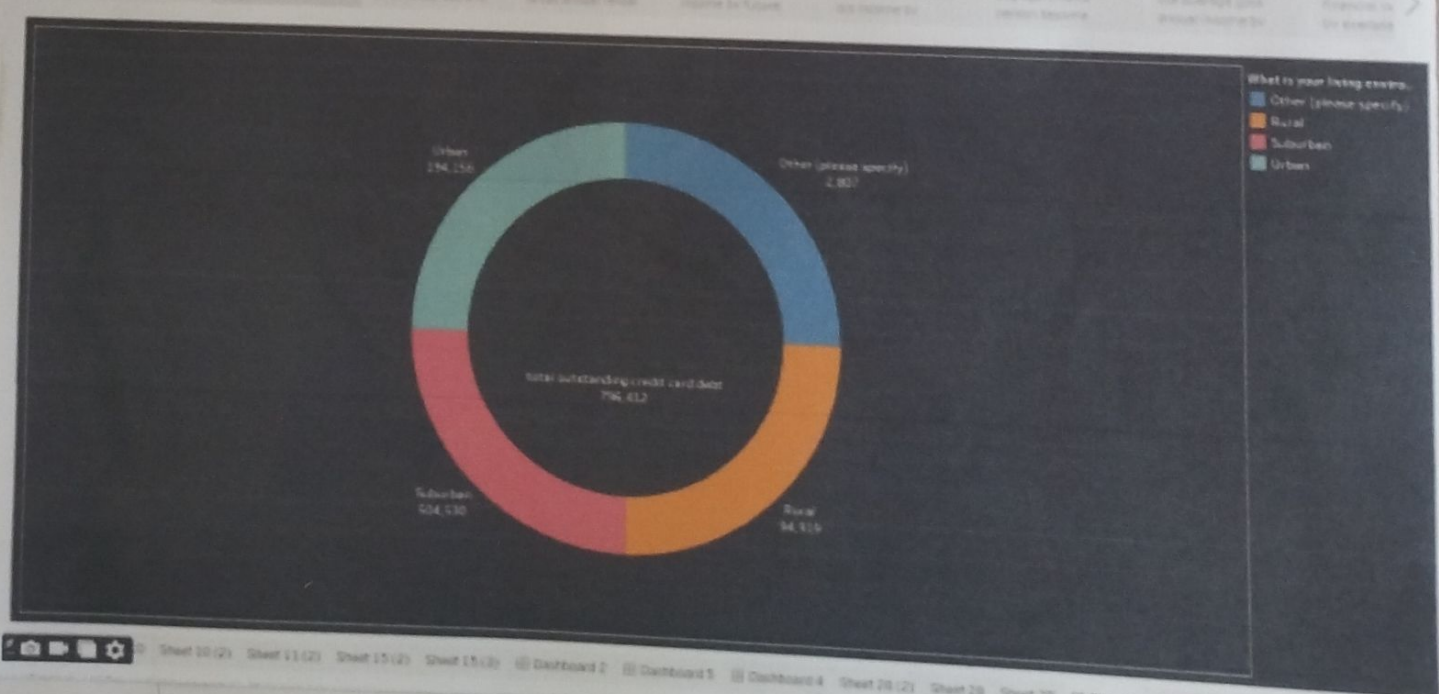
Activity -1 : No. of Scenes of story

The no. of scenes in a story board 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 story board is a visual representation of the data analysis process and it breaks down the analysis into a series of steps or scenes.

Story 1



Story 1



MILESTONE 7 : REPORT

A report is a document that presents information in a specific format and layout, usially based on data from a database or other data source. A report in IBM cognos can contain various elements such as tables charts, graphs and images as well as text and data elements, and it is designed to be used by business users to help them better understand their data and make informed decisions. There are several different types of reports available in IBM cognos, including listreports, crosstab reports, chart reports, and report studio reports, among others. The type of report that you choose will depend on the specific needs and requirements of yourorganisation as well as the data that you need to present.

Activity 1: Creating a report

MILESTONE 8 : Performance testing

Activity - Utilization of data filters

Activity 2 : No. of calculation Fields.

Activity 3 : No. of Visualizations / Graphs.

1. Financial Independence by average Age and gender
2. Averag Gross annual wage by occupation
3. Financial independence by housing situation and load debt.
4. Average gross annual income by gender.
5. Average gross annual rental property by living environment.
6. Average gross annual side gig income by occupation.

7. Average gross annual wage income by country
8. Loan debt by relationship status
9. Financial independence by average age and relationship status.
10. Gross household other income by future planning of children
11. Total credit card bedebt by living envi-ronment
12. Average age when a person becomes financially literate

MILESTONE 9 : Web Integration

Web integration for data analytics involves connecting and collection of data from various web sources to analyze and derive insights. The following are the steps:

1. Identify data Sources –

Determine which websight or web-based platforms contain the data you need for analysis

2. Choose Integration method –

Decide on the best approach to acess and extract data from these sources. This could involve using API's, web scraping tools or integration platforms.

3. Access Data –

Implement the choosen method to retriene data from the websources. This may involve writing scripts, configuring API requests, or using integration platforms like webgration.

4. Data cleaning and Preprocessing –

cleanse and preprocess the collected data to ensure its quality and consistency.

5. Data Storage – Store the processed data in a suitable storage solution such as a database or data warehouse

6. Data Analysis – Analyze the integrated data using statistical methods, machine learning algorithms or other analytical techniques.

7. Visualization and Reporting –
Visualize the analysis results using charts graphs, and dashboards to make them more understandable and actionable.

8. Monitoring and Maintenance :-
Continuously monitor the web integration process to ensure data accuracy and reliability. Update integration methods and data processing pipelines as needed to adapt to changes in web sources or business requirements.

By following these steps, organizations can effectively integrate web data into their analytics workflows to make data-driven decisions and gain competitive advantages.

MILESTONE 10 : Project demonstration and Documentation.

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

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