

FINAL PHASE PROJECT- STARTUP INVESTMENT ANALYSIS - US (Shark Tank Data)

INTRODUCTION:

Startups play an important role in economic growth and developing innovations. It is a kind of Television show which, provide entrepreneurs to pitch their ideas and receive funds from the investors. Each pitch generates data on funding amount, industries, loans and more on. By analyzing this data provides insights into investment pattern, trends. The goal is to analyze the Shark tank US dataset to understand trends in the industry and finding patterns, investment growth through dashboard and creating reports. This makes the investors to predict the growth.

ABSTRACT:

The performance of the project focuses on data-driven analysis of startup investment using Shark tank US dataset from Kaggle. The data is cleaned and processed to remove some incorrect data from the raw dataset, followed by EDA to uncover patterns in valuations, profiles and amount.

The project done with the help of Excel, Python, Tableau, which shows:

- Most high invested by investors
- In which season, most high industry is funded.

The report is done by Tableau dashboard for interactive insights and easy to understand.

TOOLS USED:

Each tools have connective for dataset and different functions.

- Excel: used for data cleaning, handling incorrect values and quick EDA.
- Python (pandas, seaborn, matplotlib): for EDA and data preprocessing. To create charts in the jupyter notebook.
- Tableau: for creating interactive dashboard and finding patterns, trends.

STEPS INVOLVED IN BUILDING THE PROJECT:

1. Data collection & cleaning:

Collected data from Kaggle dataset website. Unzipped the file and opened the Excel for cleaning data. Identified some incorrect values, datatype and duplicates, it has been cleaned and saved for further use.

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2. Data Exploration (EDA):

This process is done fully in Jupyter notebook for data cleaning and importing libraries for creating some visualization to understand the analysis. Python plays a vital role in EDA and also data cleaning is done again for reference. There are some concepts loaded in this method:

- Import libraries: pandas, matplotlib, seaborn
- Data cleaning
- Visual EDA: scatterplot, barplot, piechart

3. Data Visualization

Visual is generated from Tableau, which have more advance and used for larger dataset. There are some features applied in the dashboard for insights:

- KPI cards: Loans, deals accepted, asked amount for investment.
- Bar chart: growth of industry trends, predict high growth in gender.
- Scatterplot: for viewership from US.
- Table bar: list of industry deal.
- Slicers: makes more interactive visual more and more.

4. Summary report:

This final report gives for reference in anytime. Snapshot of the visual is attached in the form of PDF summary report.

CONCLUSION:

Industries such as tech, food & beverage, and consumer goods consistently attracted higher investments. This project demonstrates how **data analytics tools like Excel, Python, and Tableau** can be leveraged to transform raw startup pitch data into actionable insights for entrepreneurs, investors, and researchers. The dashboard and report provide a view of investment trends and industry, loans, profit predict to understand both market and investors in startup world.