

Startup Investment Analysis (Shark Tank Data)

Introduction

This project analyzes startup investment trends and founder success patterns using *Shark Tank India* data. It focuses on understanding which industries attract the most funding, how investors make decisions, and what factors drive startup success.

By using **Excel**, **Python**, and **Power BI**, the project transforms raw data into insights through cleaning, analysis, and interactive visualization. The goal is to identify investor behavior, top-performing sectors, and funding preferences that influence startup growth and investment opportunities.

Abstract

The *Startup Investment Analysis* project provides a detailed understanding of funding distribution across industries and investor preferences. It involves cleaning and preparing data with Excel and Python, followed by building an interactive Power BI dashboard to visualize trends.

The dataset contains information such as startup names, industries, deal amounts, valuations, and investor participation. Using Excel for basic structuring, Python for advanced analysis, and Power BI for dashboard creation, the project uncovers clear patterns in investor interests and funding behavior.

The study highlights that technology, consumer-based, and sustainability-focused startups are the most attractive to investors, while smaller sectors like EdTech and Lifestyle continue to grow steadily.

Tools Used

- **Excel:** Data cleaning, formatting, and preparation using pivot tables.
 - **Python:** Data transformation and trend analysis using `pandas` and `numpy`.
 - **Power BI:** Dashboard creation with visuals such as bar charts, pie charts, and line charts to show funding patterns and investor activity.
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Steps Involved in Building the Project

1. **Data Collection:**
Gathered data from Shark Tank India datasets containing startup, industry, deal, and investor details.
2. **Data Cleaning (Excel & Python):**
Removed duplicates, standardized industry names, filled missing values, and converted columns like deal amount into numeric formats.
3. **Data Transformation (Python):**
Created calculated fields for total deals, investor count, and funding averages by industry.
4. **Visualization (Power BI):**
Built visuals such as:
 - *Pie Chart:* Industry-wise startup share
 - *Bar Chart:* Funding vs. non-funding startups
 - *Line Chart:* Investment trends across episodes
 - *Treemap:* Investor distribution by domain
5. **Insights & Interpretation:**
 - **Miscellaneous** startups received the most deals, showing investor openness to innovation.
 - **Food & Beverages** and **Tech/AI** dominated total funding.
 - **Sustainability** and **EdTech** sectors showed long-term investor confidence.

Conclusion

The *Startup Investment Analysis* reveals that investors prioritize technology-driven, innovative, and scalable businesses. Using **Excel**, **Python**, and **Power BI**, the project created a complete workflow—from raw data cleaning to final visualization—showing clear investment patterns across industries.

Tech-focused and consumer-centric startups attract higher funding, while sustainable ventures gain gradual momentum. The Power BI dashboard provides an intuitive visual summary of investor behavior, making the analysis valuable for entrepreneurs, data analysts, and investors seeking to understand market dynamics.