**Startup Investment Analysis – Shark Tank US Data**

**Introduction**

The "Startup Investment Analysis" project explores entrepreneurial trends and investor behaviors on the reality show *Shark Tank US*. Using historical pitch data, the goal is to discover which startup industries attract the most funding, what types of founder teams succeed more often, and how gender may influence investment outcomes. This analysis aids in understanding patterns that define success on the show.

**Abstract**

This project uses real-world data from Shark Tank US to analyze:

* Investment patterns by industry
* Founder success rates based on gender and team size
* Insights into investor behavior and startup valuation

We cleaned, processed, and visualized the data using Python, Excel, and Tableau. The outcome is a visual dashboard showing industry-wise investments and founder patterns, along with summary tables for decision-making insights.

**Tools Used**

* **Python (Pandas)** – Data cleaning, summarization, CSV export
* **Excel** – Initial data review and formatting
* **Tableau Public** – Dashboard for interactive visualization

**Steps Involved in Building the Project**

1. **Data Loading and Exploration**
   * Loaded the Shark Tank US dataset using Python
   * Displayed structure, missing values, and key columns
2. **Data Cleaning**
   * Handled missing values in relevant fields
   * Focused on key columns: INDUSTRY, GOT\_DEAL, PITCHERS\_GENDER, MULTIPLE\_ENTREPRENEURS, TOTAL\_DEAL\_AMOUNT
3. **Data Analysis**
   * Created 3 summary tables:
     + Industry-wise total investments
     + Founder gender success rate
     + Solo vs Team pitch success
4. **Exporting for Visualization**
   * Exported summaries as:
     + industry\_summary.csv
     + gender\_success.csv
     + team\_success.csv
5. **Dashboard Creation in Tableau**
   * Built 3 charts:
     + **Bar Chart**: Total Investment by Industry
     + **Pie/Bar Chart**: Success Rate by Founder Gender
     + **Bar Chart**: Team vs Solo Founder Success
   * Arranged charts in an interactive dashboard

**Conclusion**

The analysis revealed that **Food & Beverage**, **Lifestyle/Home**, and **Fashion/Beauty** industries receive the highest investments. Founders working in **teams** show a notably higher success rate than solo founders. Also, **mixed-gender teams** receive more deals than male-only or female-only teams. These insights can help future entrepreneurs understand how to increase their chances of success on *Shark Tank*.