Shark Tank India

EXPLORATORY DATA ANALYSIS

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PROJECT DETAILS

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Introduction

Shark Tank India is a Hindi-language business reality television series that airs on Sony Entertainment Television. The show is an Indian adaptation of the American television series Shark Tank. It shows entrepreneurs giving business presentations to a panel of investors or sharks who decide whether to invest in their company.

Objectives

The aim of Exploratory Data Analysis (EDA) can be summarized in five key points:

1. Understanding Data Structure: EDA helps to understand the overall structure, distribution, and patterns within the dataset, including missing values, outliers, and anomalies.

2. Hypothesis Generation: It assists in generating hypotheses by identifying trends, correlations, and relationships among variables, guiding further analysis or modeling.

3. Data Cleaning and Preprocessing: EDA helps detect and address data quality issues such as missing or inconsistent data, allowing for more accurate modeling and analysis.

4. Feature Selection: By exploring the dataset, EDA can reveal which features or variables are most important, aiding in dimensionality reduction and improving model performance.

5. Visualization: EDA uses visual techniques (e.g., plots, charts) to summarize and communicate key findings, making complex data more understandable and facilitating better decision-making.

Shark Gallery

Data Overview

Data Source: Kaggle

Data Variables

78 Attributes/Columns
Total 478 Records/Rows

Data Description

- Startup Name
- Pitch Details
- Season Telecast Details
- Industry name or type
- Business Description
- Presenter Details (Gender, Age, City, State)
- Monetary Details of Business (Sales, Revenue, EBITDA, Margins, Cash Burns)
- Ask Details(Money and equity asked vs offered)
- Equities/Debt/Valuation of each Pitch
- Deal Results(Grabbed or not)
- Total Deal Amount - Total Deal Amount, in lakhs INR
- Guests Present

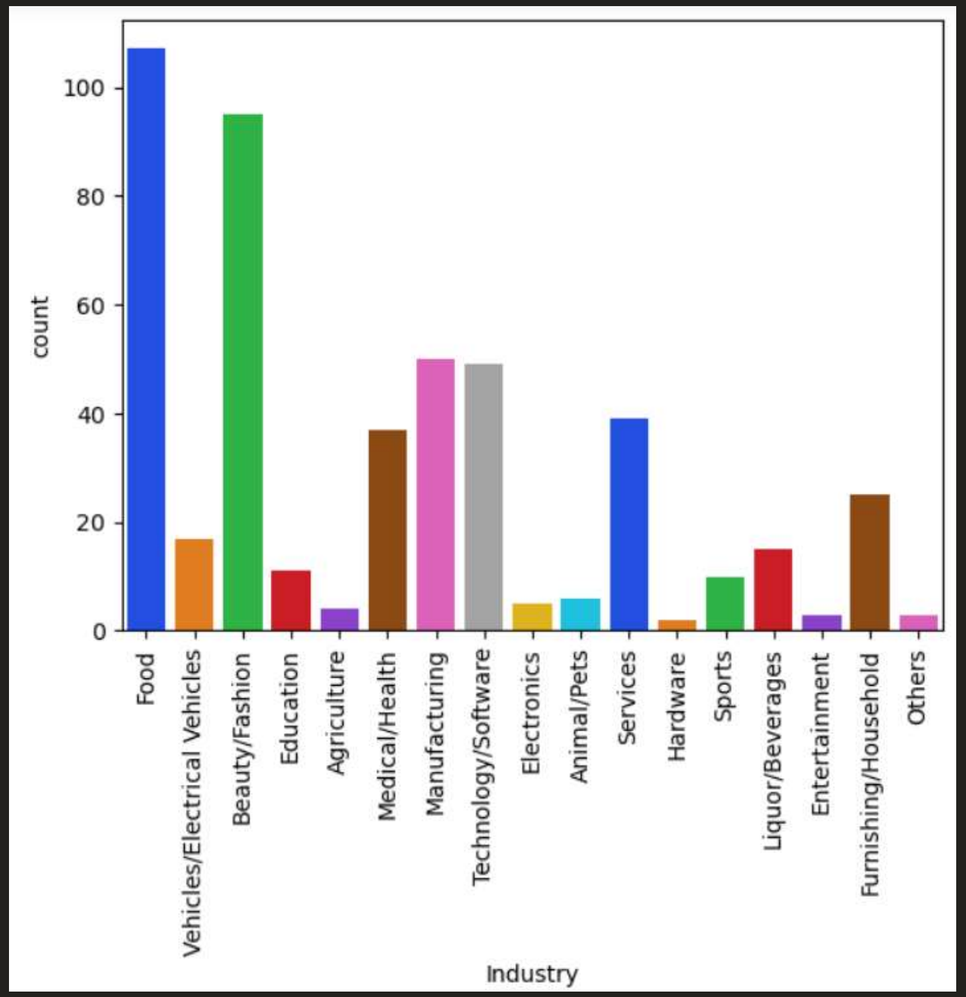
Data Cleaning and Preparation

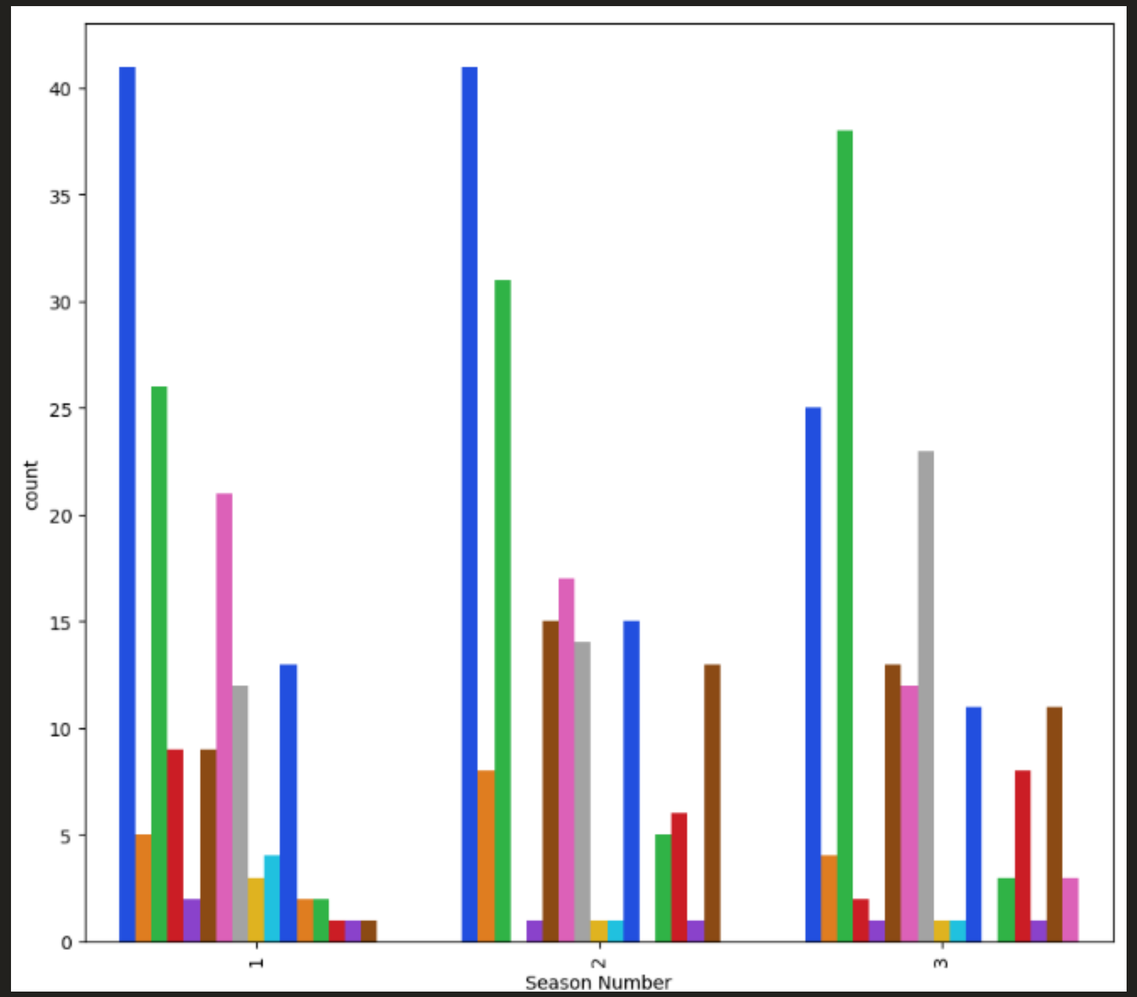
- Handled missing values.
- Removed duplicates.
- Transformed categorical variables (e.g., sector types).
- Created new variables (e.g.feature engineering for states, investment-to-request ratio).

Libraries Utilized:

- Numpy
- Pandas
- Seaborn
- Matplotlib

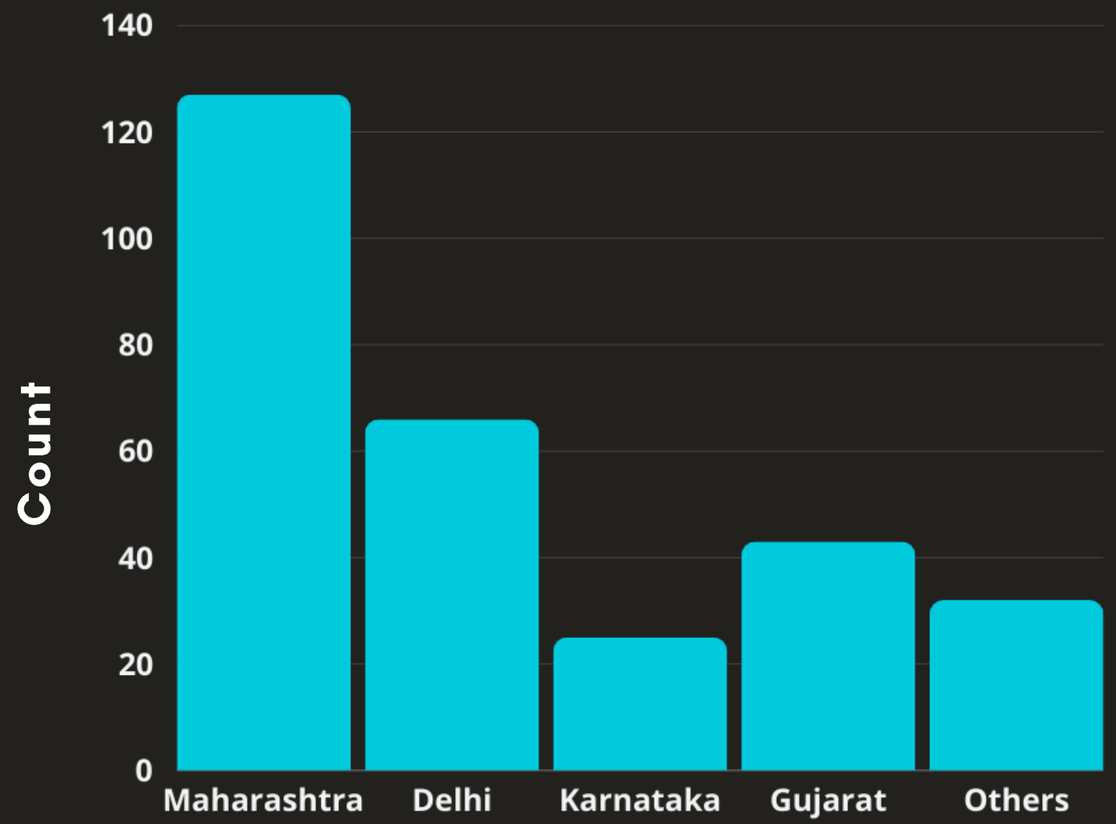
Industry and sector-wise distribution of companies



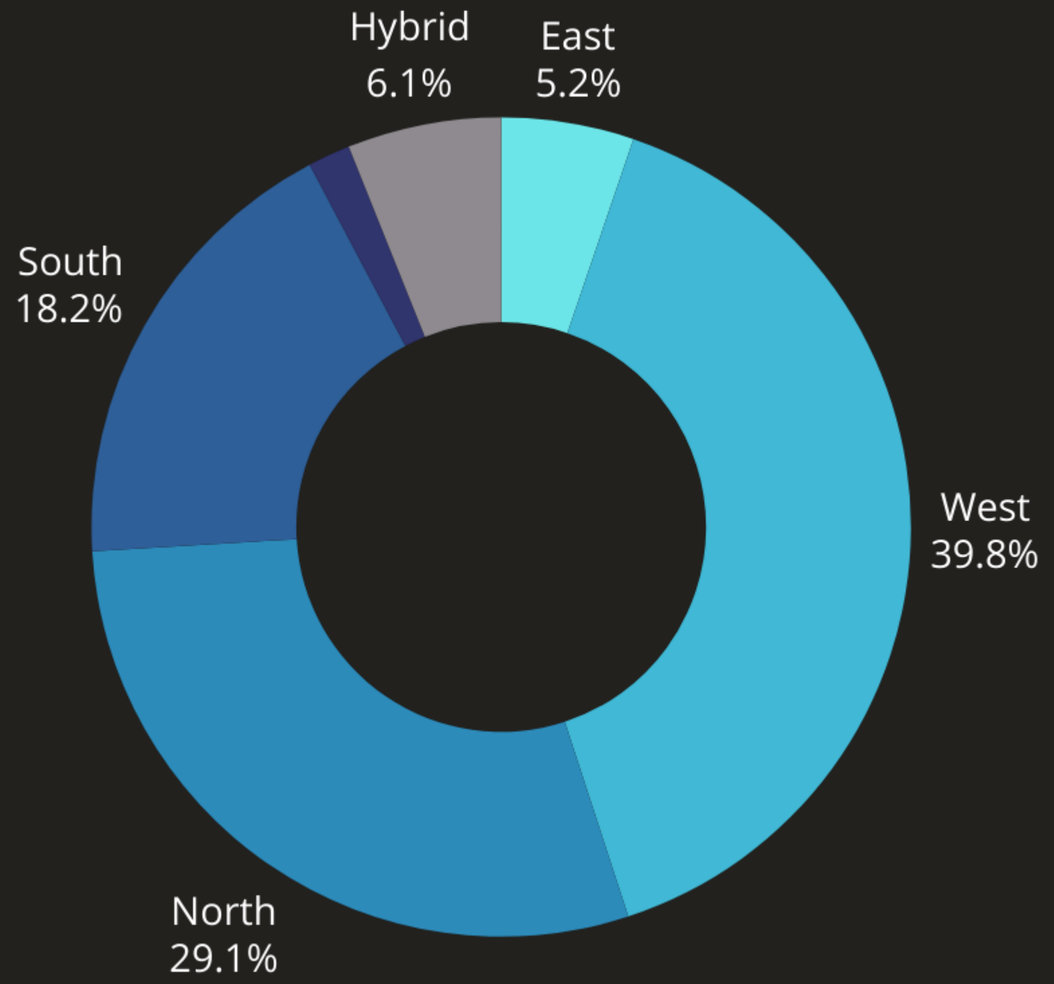


Distribution of Business ideas as per Industry seactor across Seasons

Industry and sector-wise distribution of companies

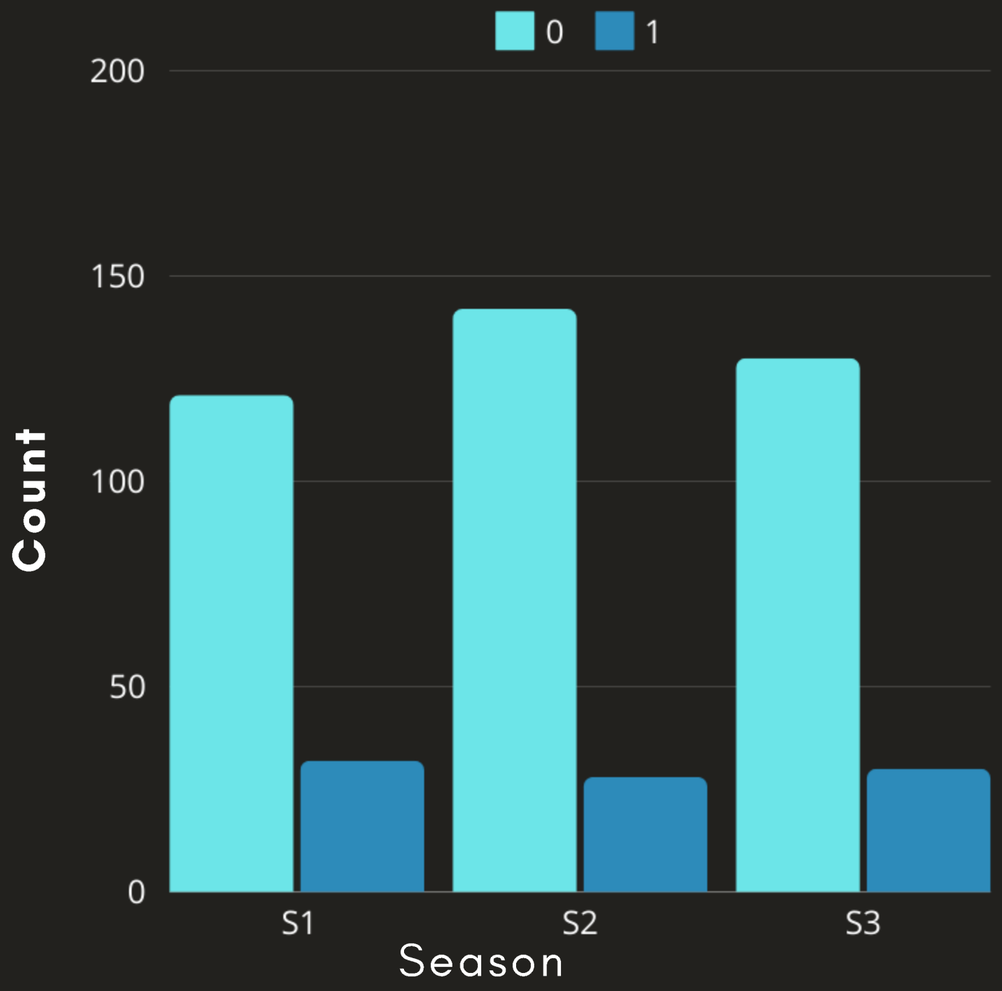


Top 5 participating States

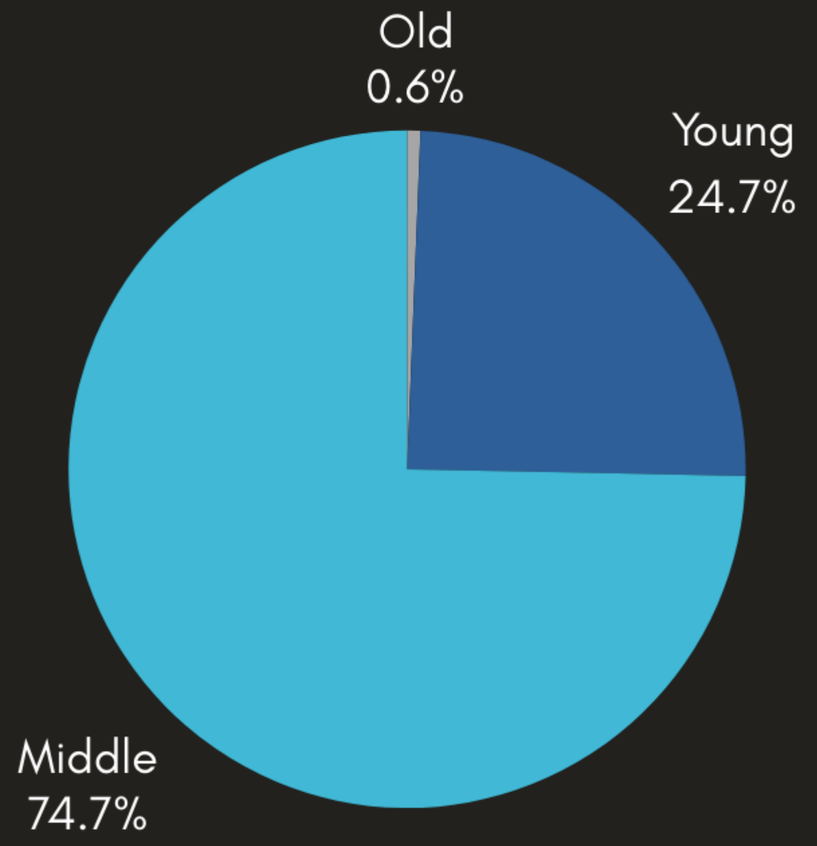


Zone-wise analysis of Pitches

Presenter Details

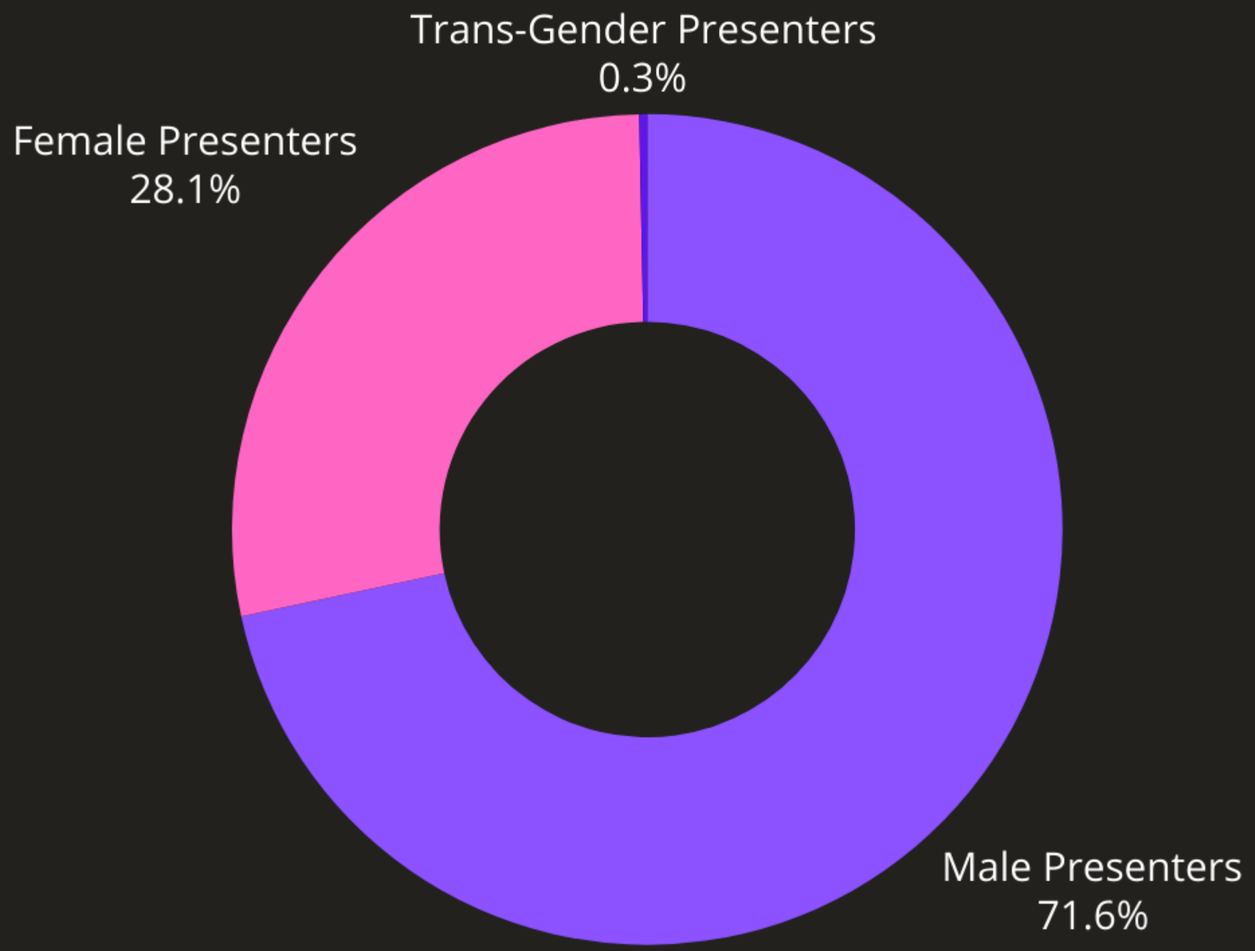


Couple presenters in each Season

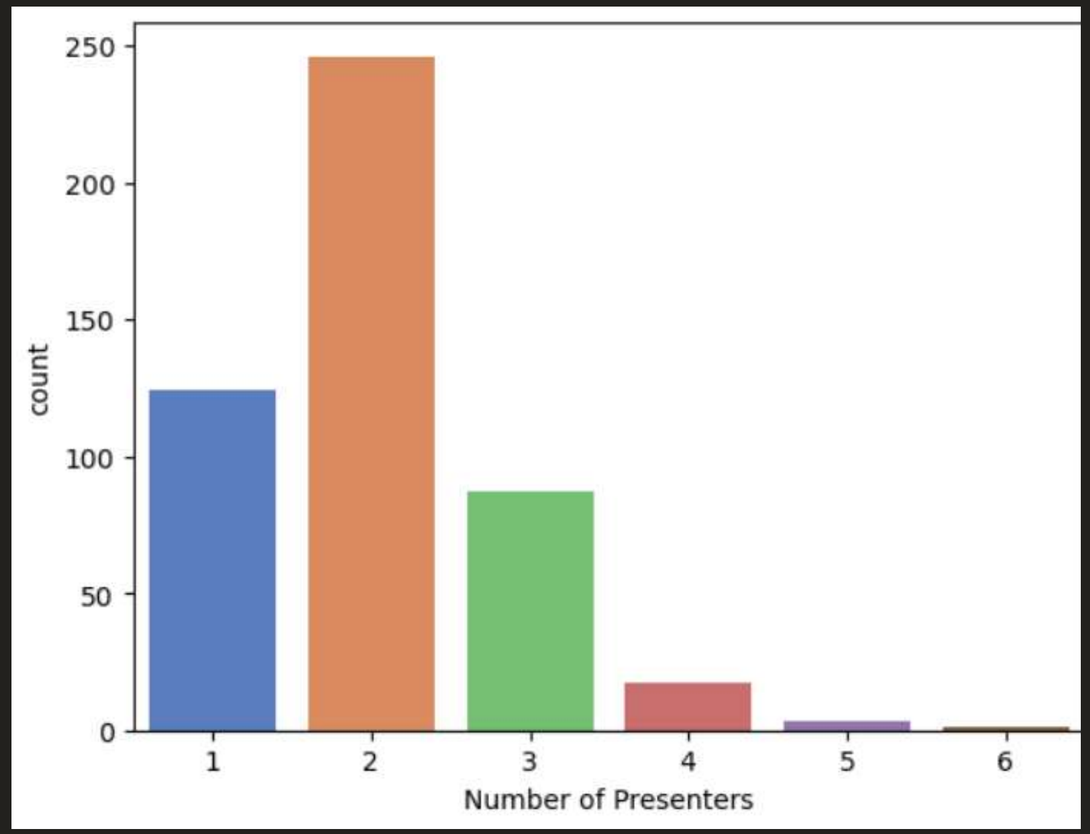


Age Dynamics of participants

Presenter Details

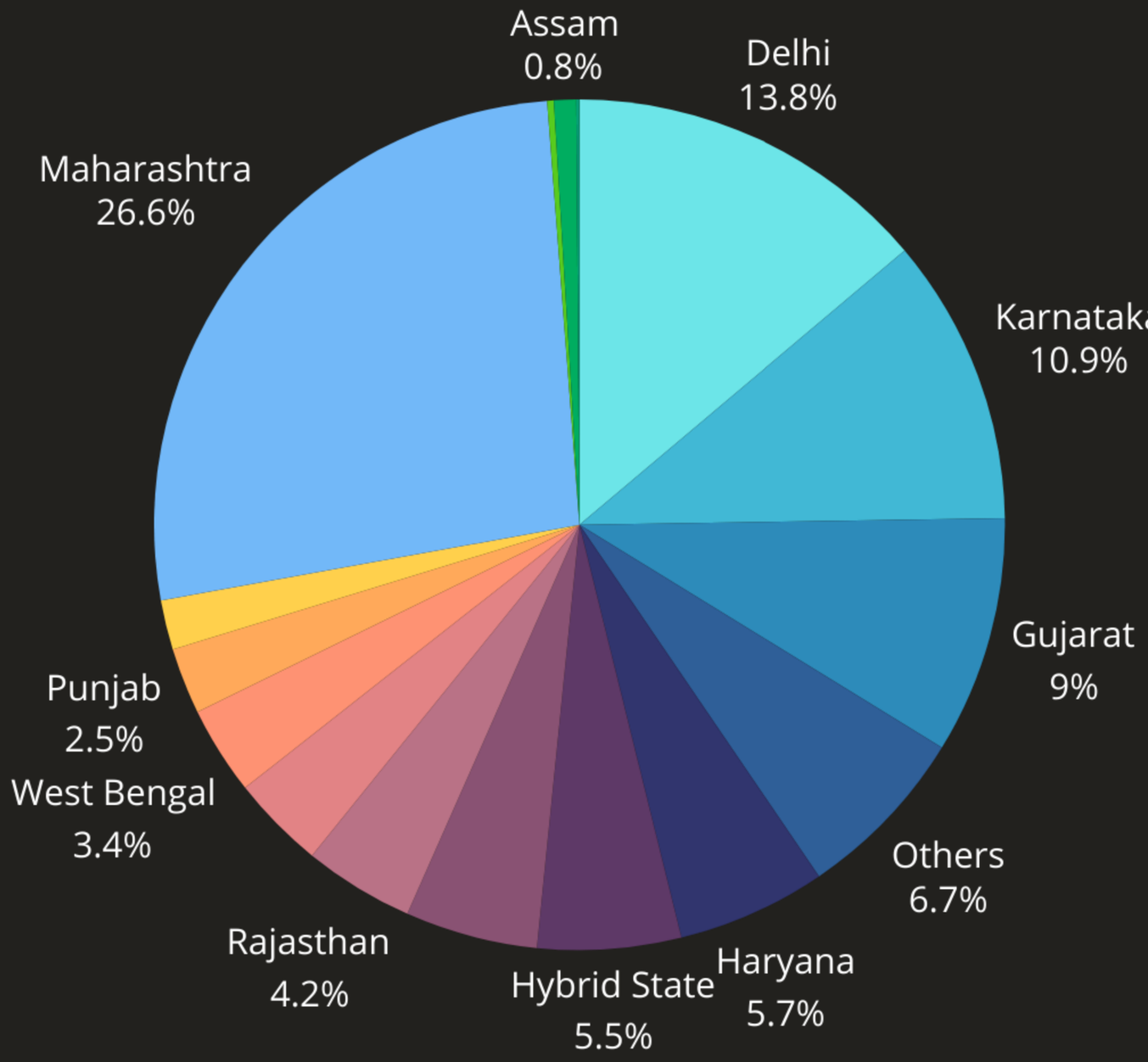


Gender-wise distribution of business presenter



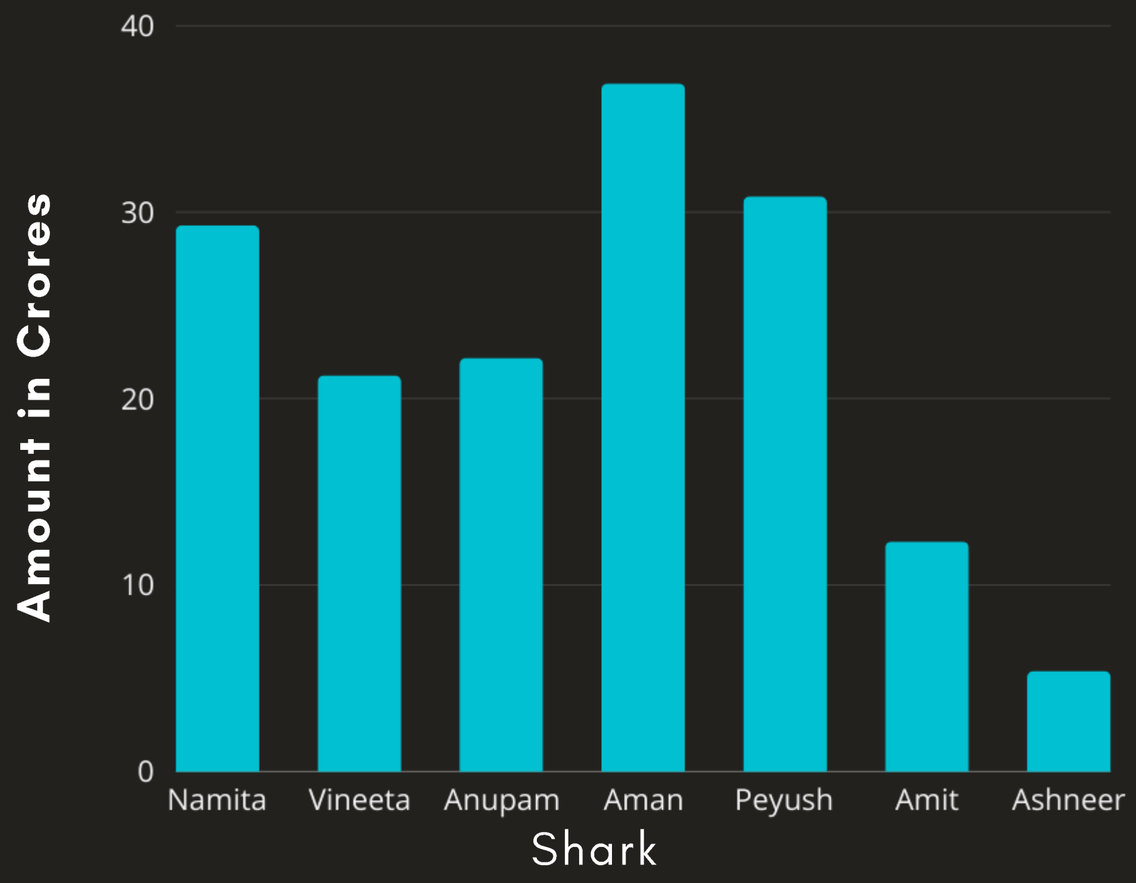
- Insight: Team size of 2 participated most

Presenter Details

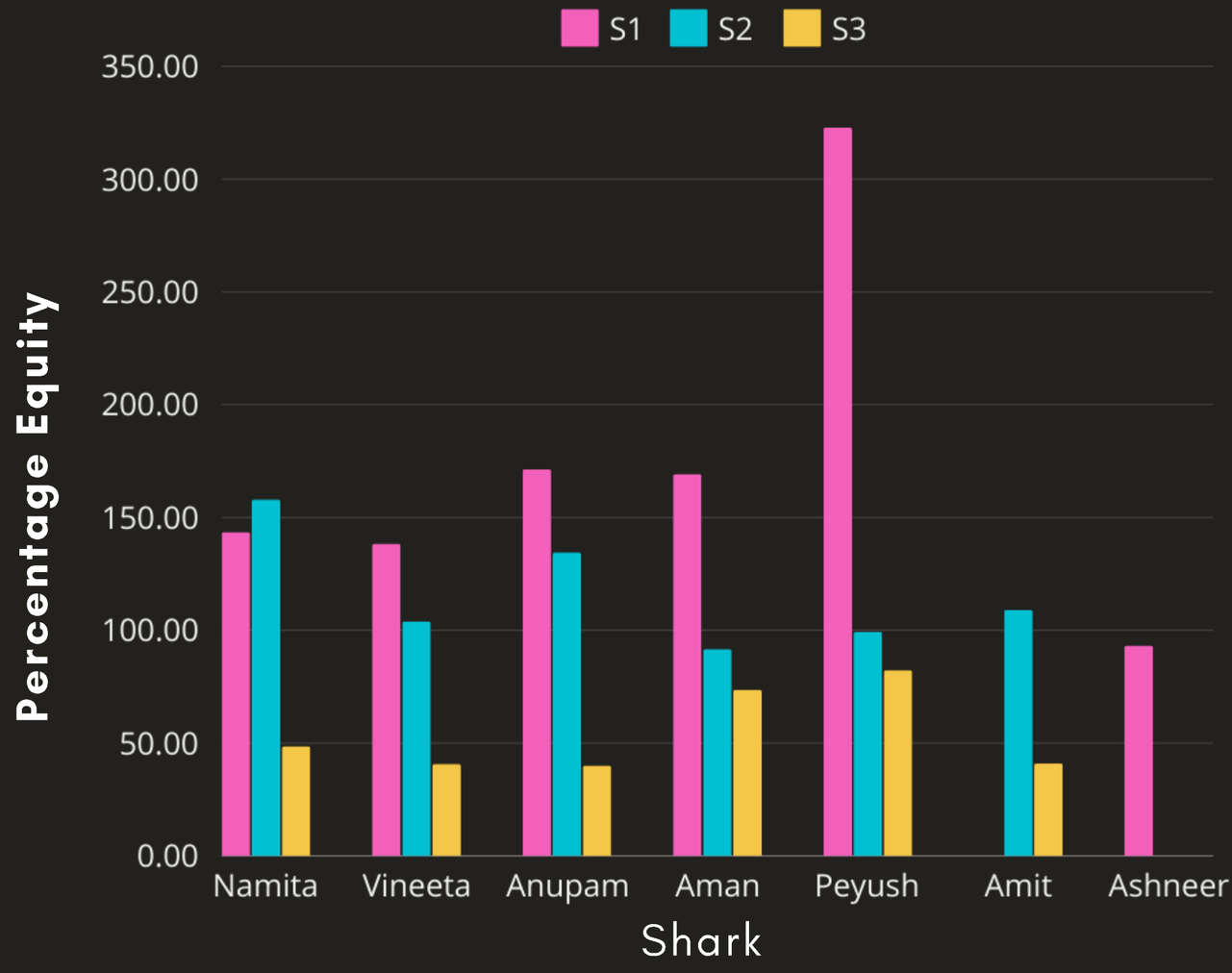


State-wise distribution of Business emerging

Shark Investment Details



Total Amounts Invested by each shark



Equities gained by each shark

Questions and findings !!

Q. How Many seasons of Shark Tank India were streamed?
Ans : Three
Q. Total number of episodes in each season ?
Ans : Season 1-36 , Season 2-51 , Season 3-52
Q. What was the total number of enterprenuers who presented their ideas in Shark tank India ?
Ans : 478
Q. What was the season-wise distribution of enterpreneurs who presented their idea ?
Ans : S1-152 , S2-169 , S3-157
Q. What was the observaion from sectoral analysis of the data ?
Ans : Entrpreneurs from food industry particpated most while from hardware and entertainment sectors were less.
Q. What can you comment on the team size of the pitchers across seasons ?
Ans : Team of 2 participated most in all season and only one or two team with 5 or 6 members participated in season 2,3 and season 1 respectively.
Q. How many deals were finalised ?
Ans : 230 deals were accepted 181 deals were rejected

Questions and findings !!

Q. Percentage of couple presenters ?

Ans : 17.57 %

Q. What can be concluded from the age distribution of enterpreneurs?

Ans : around 75% of pitchers were of middle age participated mostly middle age participated

Q. What can be concluded from the state origin of ideas and enterpreneurs?

Ans : Top 5 participating states:

- Mahrashtra
- Delhi
- Karnataka
- Gujarat
- others / miscellaneous

Q. Which were the least and most actively participating zones?

Ans : Most - West zone

Least - Central zone

Questions and findings !!

Q. How many enterprenurs patent their ideas ?
Ans : 435
Q. How many offers were rejected by pitchers ?
Ans : 53
Q. Find the highest deal amount that were accepted ?
Ans : 3 Crore
Q. Find the lowest deal amount that were accepted ?
Ans : It was for Rs. Zero and 100hrs of experience + 0.5% equity.
Q. Which were the most and least expensive episode ?
Ans : most expensive episode :
Episode 15 of season 3, Episode 20 of season 2, Episode 17 of season 1
least expensive episode :
Episode 17 of season 3, Episode 21 of season 2, Episode 18 of season 1
Q. How many sharks participated in this show and What were their names ?
Ans : 7. Namita, Vineeta, Anupam, Aman, Peyush, Amit, Ashneer

Questions and findings !!

Q. How much total amount each investers/sharks invested in the the deals?

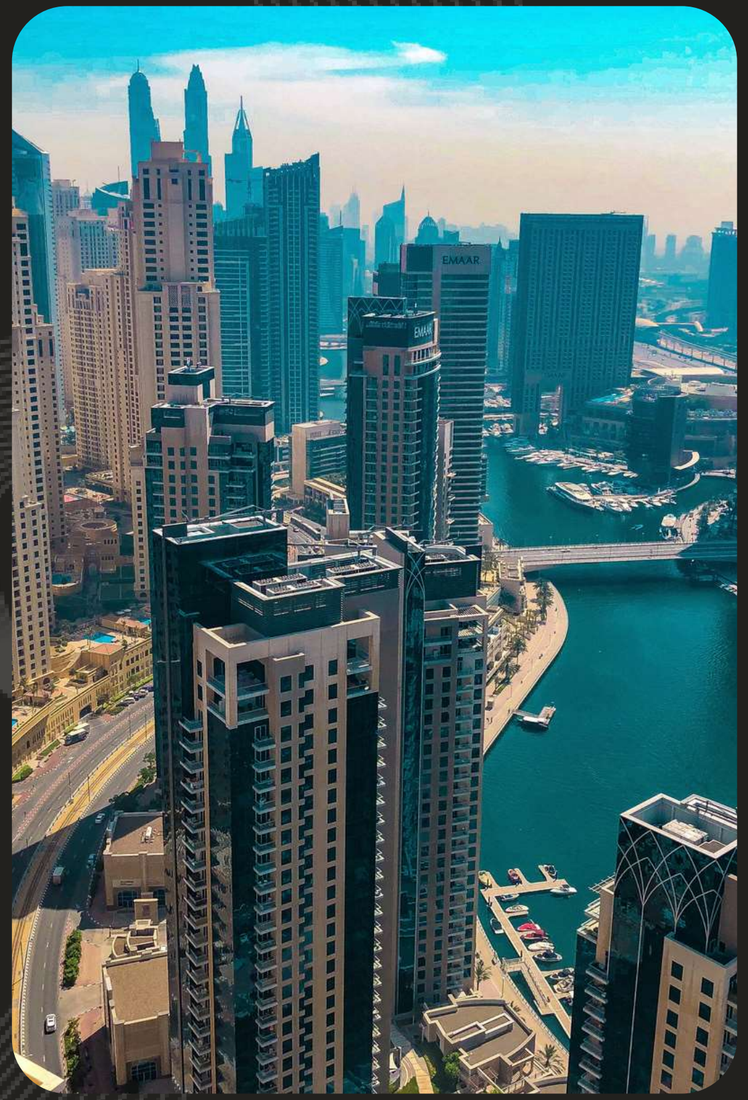
Ans : Namita- 29.3Cr , Vineeta- 21.24 Cr, Anupam- 22.19 Cr, Aman- 36.91 Cr, Peyush- 30.85 Cr, Amit- 12.34 Cr, Ashneer- 5.4 Cr

Q. Find the highest deal amount that were accepted ?

Ans : 4.17 % entrepreneurs got more amount than they asked

23.13 % entrepreneurs got less amount than they asked

62.68 % entrepreneurs got same amount as they asked



Conclusion

The thorough EDA conducted on the dataset yielded valuable insights about -

- the various business ideas emerging across different sectors
- behavioral trends of sharks investment as per industries and the equities gained
- season-wise investments into the business
- fundings provided to various businesses.

SHARK TANK
INDIA

Thank You

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