

Shark Tank India Data Analysis Project

Introduction

Shark Tank India is an Indian Hindi-language business reality television series on Sony Entertainment Television, a franchise of the American show Shark Tank. The show follows entrepreneurs pitching their business ideas to a panel of investors or "sharks" who decide whether to invest in their company. The show aired from **December 2021 to February 2022** and again from **January 2023 to March 2023**. The show features a panel of potential investors who judge the business concepts and products and decide whether to invest their money.

The show gained immense popularity for its unique concept and the high-stakes negotiations that took place between the entrepreneurs and the sharks. Rannvijay Singh hosted the first season, while Comedian Rahul Dua hosted the second season. Both hosts brought their unique styles and energy to the show, making it an entertaining and informative experience for both entrepreneurs and viewers alike.

Agenda for the Analysis

The analysis aims to identify the investment patterns of the various sharks throughout the show. Another parameter focused on during the analysis is the industry into which the various start-ups fall. For example, some sharks may be more likely to invest in technology startups, while others may be more interested in consumer goods or healthcare. The analysis will also look at the startups with the highest and the lowest investments, as well as the presenters' demographics. For example, are there certain types of people who are more likely to pitch their ideas to the sharks? Finally, the analysis will look at individual shark investment preferences and patterns. For example, does one shark tend to invest more in early-stage companies, while another prefers to invest in later-stage companies?

The analysis will be based on a dataset of all the episodes of Shark Tank India for the 2 seasons aired. The dataset will include information such as the name of the startup, the industry it belongs to, the amount of money invested, the shark who made the investment, and the presenter's demographics. The analysis will be conducted using a variety of statistical and machine-learning techniques.

The results of the analysis will provide valuable insights into the investment patterns of the sharks on Shark Tank. This information can be used by entrepreneurs to improve their chances of getting an investment from the sharks. The analysis can also be used by investors to better understand the investment preferences of the sharks.

Data Collection & Cleaning

The dataset for this analysis was obtained from Kaggle and includes information on various companies featured on Shark Tank India. Notable participants include:

- ❖ Bluepine Industries
 - The company operates in the segment of Frozen momos.

- ❖ Heat up my Sleeves
 - Detachable sleeves can help you elevate your fashion and styling game without overstocking on outfits.
- ❖ qZense Labs
 - Food Freshness Detectors to detect the freshness of food items.
- ❖ Menstrupedia
 - Creates comics to increase menstrual awareness.
- ❖ Gearhead Motors
 - Works in the segment of providing affordable electric bicycles and tricycles.
- ❖ Haqdarshak
 - Availing Government Schemes
- ❖ Dobiee
 - Candy manufacturers
- ❖ Nish Hair
 - Hair Extensions for Women.

Data Cleaning

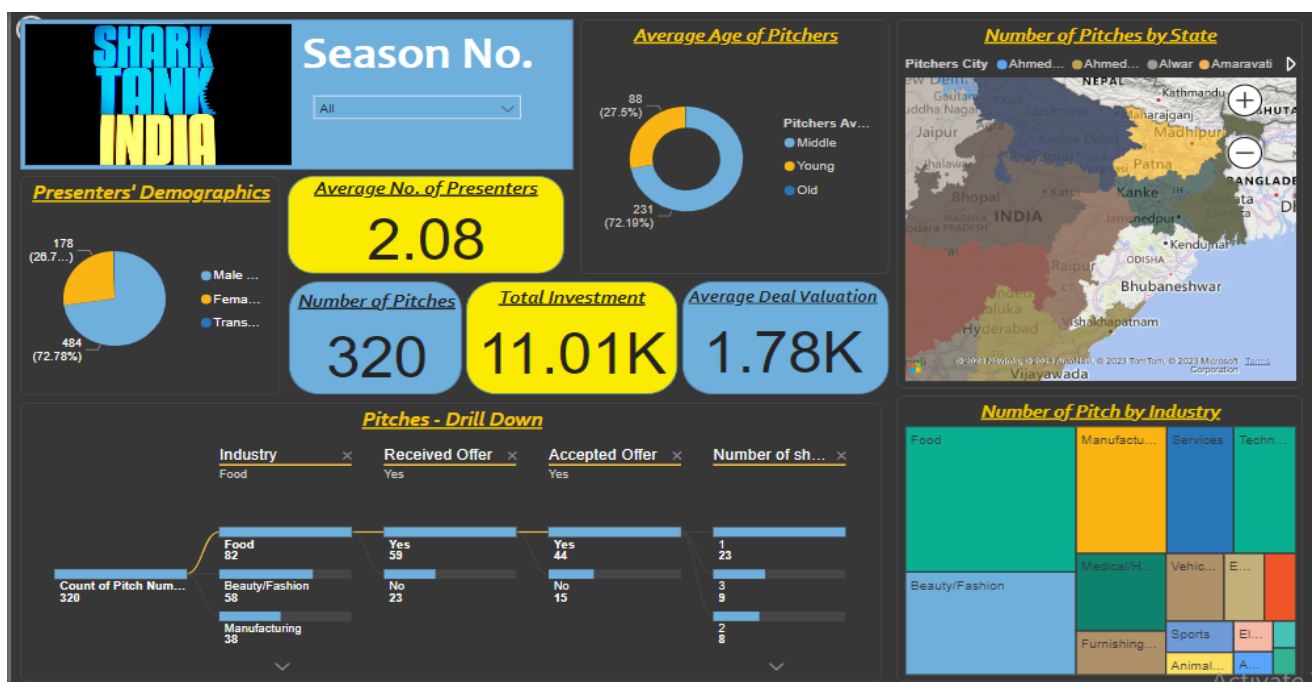
In preparation for the analysis of Shark Tank India data, a comprehensive data cleaning process was conducted to ensure the accuracy and reliability of the dataset. The key steps undertaken are as follows:

- ❖ Handling Missing Values:
 - Identified and addressed missing values in relevant fields by either imputing values based on contextual information or excluding incomplete records.
- ❖ Duplicate Entry Removal:
 - Scrutinized the dataset for duplicate entries, ensuring that each company's information is unique and eliminating redundancies.
- ❖ Standardizing Formats:
 - Standardized formats for categorical variables, ensuring consistency in data representation across the dataset.
- ❖ Correcting Data Types:
 - Verified and corrected data types for different variables, aligning them with their respective characteristics to prevent any inconsistencies during analysis.
- ❖ Ensuring Data Integrity:
 - Conducted thorough checks to ensure data integrity, validating the accuracy of entries against known parameters and expectations.
- ❖ Handling Inconsistencies:
 - Addressed any inconsistencies or discrepancies in the dataset, rectifying errors in entries or values.
- ❖ Conforming to Analytical Requirements:
 - Aligned the dataset structure with the specific analytical requirements, ensuring compatibility with the planned analyses.

By rigorously implementing these data-cleaning measures, I have established a robust and reliable foundation for subsequent analyses, ensuring that the insights drawn from the dataset are accurate and meaningful.

The Exploratory Data Analysis phase involved a comprehensive examination of the Shark Tank India dataset to uncover patterns, trends, and meaningful insights. Some of the key insights drawn from the EDA process include:

- ❖ Number of Pitches:
 - Season 1: 168
 - Season 2: 183
- ❖ Received Offer:
 - Season 1: 96
 - Season 2: 120
- ❖ Offer Accepted:
 - Season 1: 70
 - Season 2: 106 (8 have conditions)
- ❖ Total Amount Invested:
 - Season 1: 42 Cr
 - Season 2: 69 Cr
- ❖ Average Deal Valuation:
 - Season 1: 8.3 Cr
 - Season 2: 24 Cr
- ❖ Average Deal Amount:
 - Season 1: 57 Lakhs
 - Season 2: 66 Lakhs
- ❖ Most Presenters belong to:
 - Season 1: Maharashtra
 - Season 2: Maharashtra



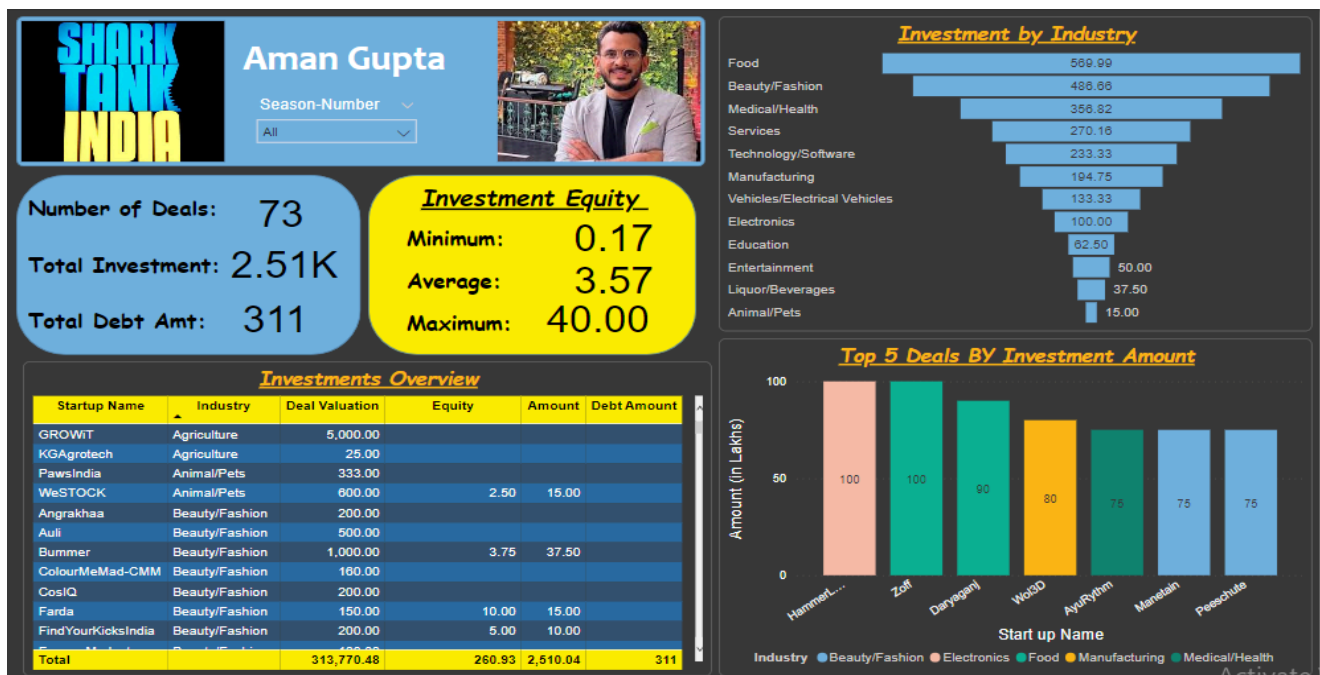
The EDA process serves as a crucial foundation for more advanced analyses, providing a comprehensive understanding of the dataset's characteristics and guiding subsequent modelling and interpretation efforts.

Investor Preferences Analysis:

In this section, I delved into understanding the preferences of investors participating in Shark Tank India. The analysis focused on discerning patterns and tendencies exhibited by investors when evaluating and choosing investment opportunities. Key insights include:

❖ Aman Gupta

- Total Investment Amount
 - Season 1: 9 Cr
 - Season 2: 16 Cr
- Total Debt Amount
 - Season 1: 50 Lakhs
 - Season 2: 2.6 Cr
- Most Preferred Industry
 - Season 1: Food
 - Season 2: Beauty/Fashion
- Deal with the Highest Investment
 - Season 1:
 - Start-up Name: Hammer Lifestyle
 - Industry: Electronics
 - Business Description: Smart Audio Products
 - Investment Amount: 1 Cr
 - Season 2:
 - Start-up Name: Zoff
 - Industry: Food
 - Business Description: Cool Grind Technology Indian spices
 - Investment Amount: 1 Cr



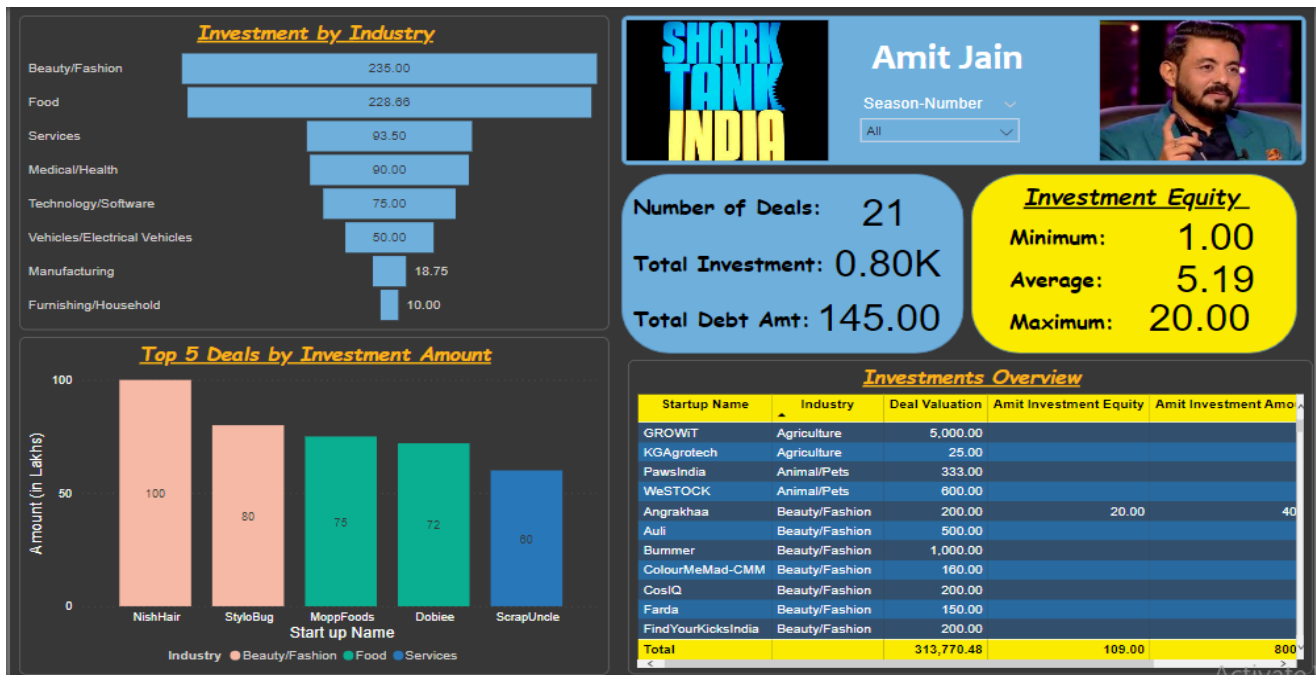
❖ Amit Jain

- Total Investment Amount
 - Season 1: N/A
 - Season 2: 8 Cr
- Total Debt Amount
 - Season 1: N/A
 - Season 2: 1.4 Cr
- Most Preferred Industry
 - Season 1: N/A
 - Season 2: Beauty/Fashion
- Deal with the Highest Investment
 - Season 1:

- Start-up Name: N/A
- Industry: N/A
- Business Description: N/A
- Investment Amount: N/A

■ Season 2:

- Start-up Name: Nish Hair
- Industry: Beauty/ Fashion
- Business Description: 100% Human Hair Extensions
- Investment Amount: 1 Cr



❖ **Anupam Mittal**

➤ Total Investment Amount

■ Season 1: 5.4 Cr

■ Season 2: 9.1 Cr

➤ Total Debt Amount

■ Season 1: 15 Lakhs

■ Season 2: 82 Lakhs

➤ Most Preferred Industry

■ Season 1: Manufacturing

■ Season 2: Beauty/ Fashion

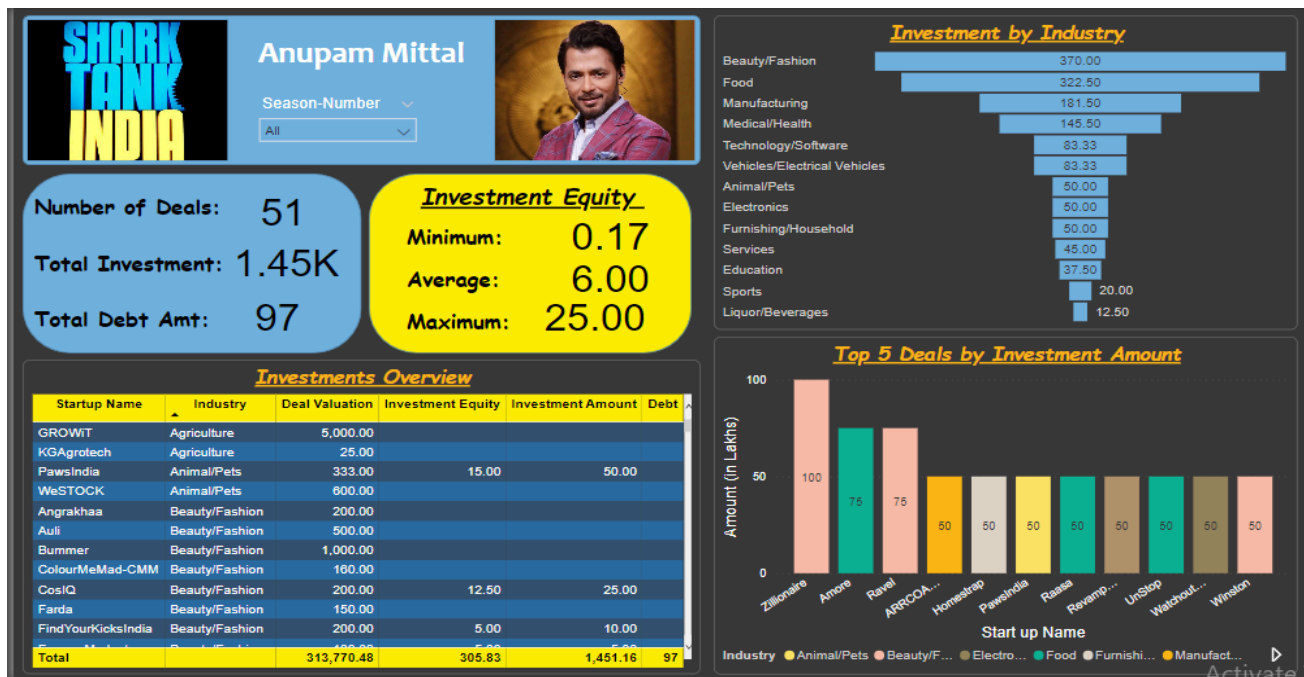
➤ Deal with the Highest Investment

■ Season 1:

- Start-up Name: ARRCOAT Surface Textures
- Industry: Manufacturing
- Business Description: Wall Building Surface Textures
- Investment Amount: 500 Lakhs

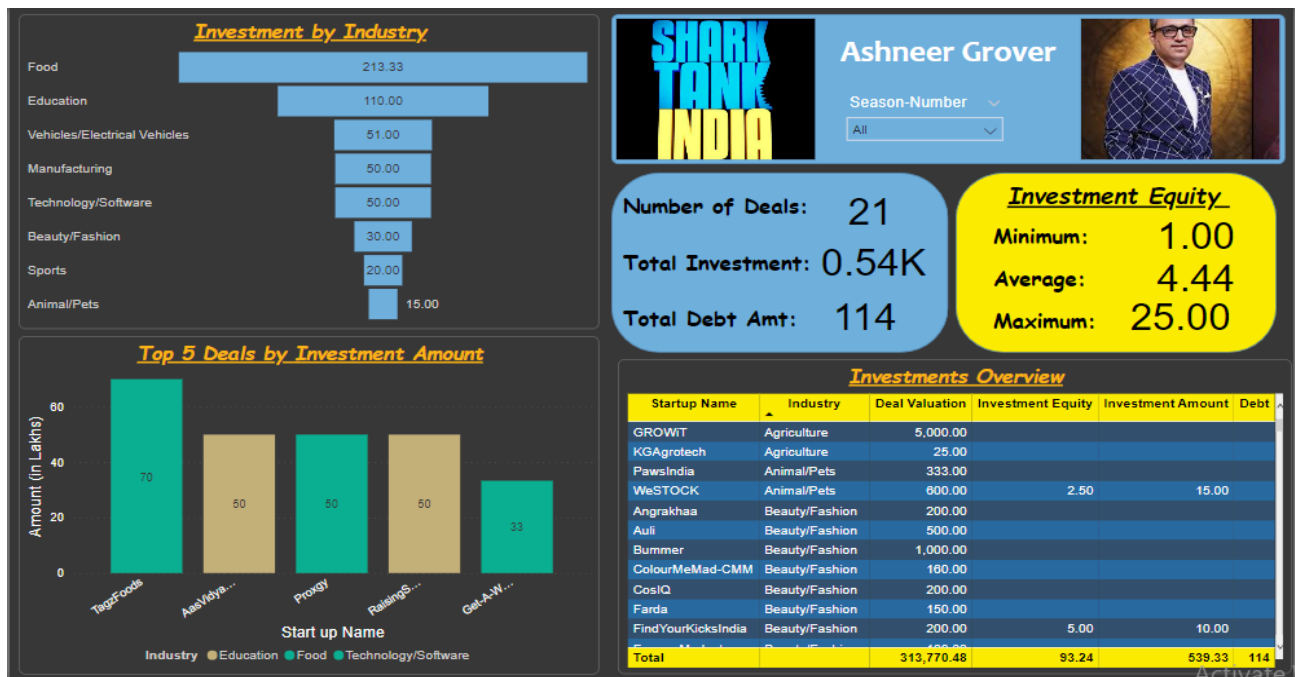
■ Season 2:

- Start-up Name: Zillionaire
- Industry: Beauty/ Fashion
- Business Description: Unique Styles of Stones & Jewels
- Investment Amount: 1 Cr



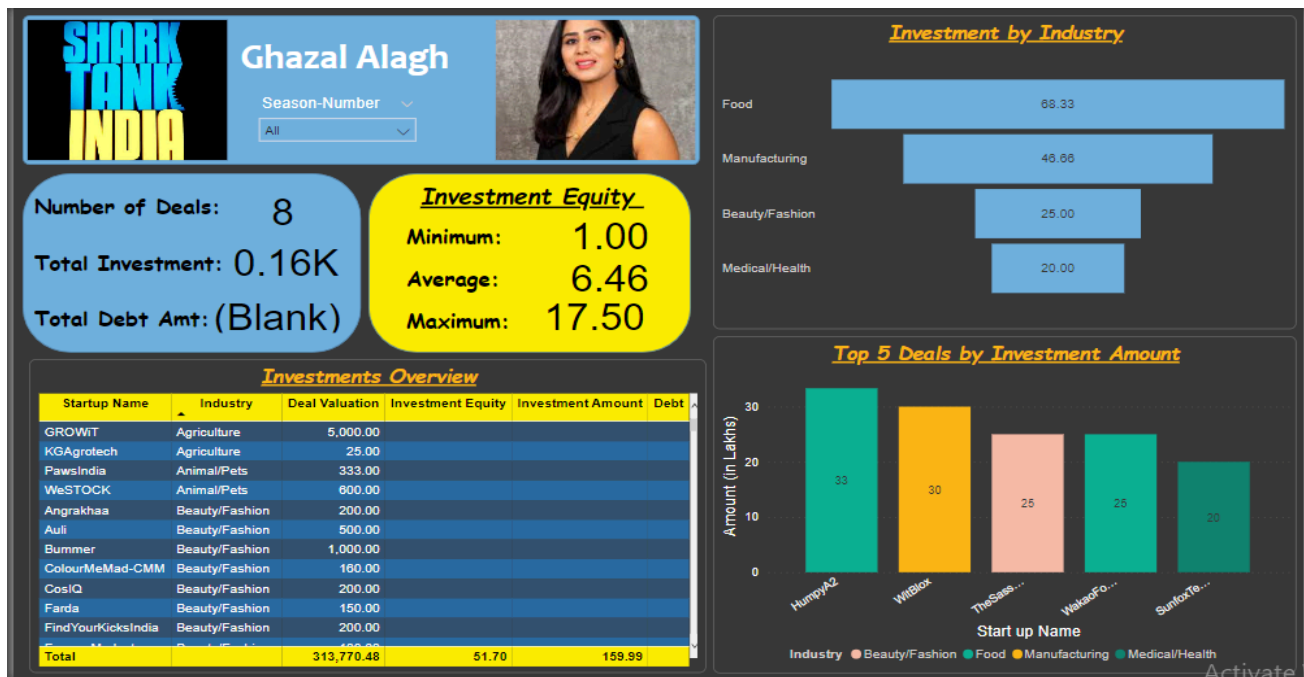
❖ Ashneer Grover

- Total Investment Amount
 - Season 1: 5.4 Cr
 - Season 2: N/A
- Total Debt Amount
 - Season 1: 1.14 Cr
 - Season 2: N/A
- Most Preferred Industry
 - Season 1: Food
 - Season 2: N/A
- Deal with the Highest Investment
 - Season 1:
 - Start-up Name: TagzFoods
 - Industry: Food
 - Business Description: Healthy Potato Chips Snacks
 - Investment Amount: 70 Lakhs
 - Season 2:
 - Start-up Name: N/A
 - Industry: N/A
 - Business Description: N/A
 - Investment Amount: N/A



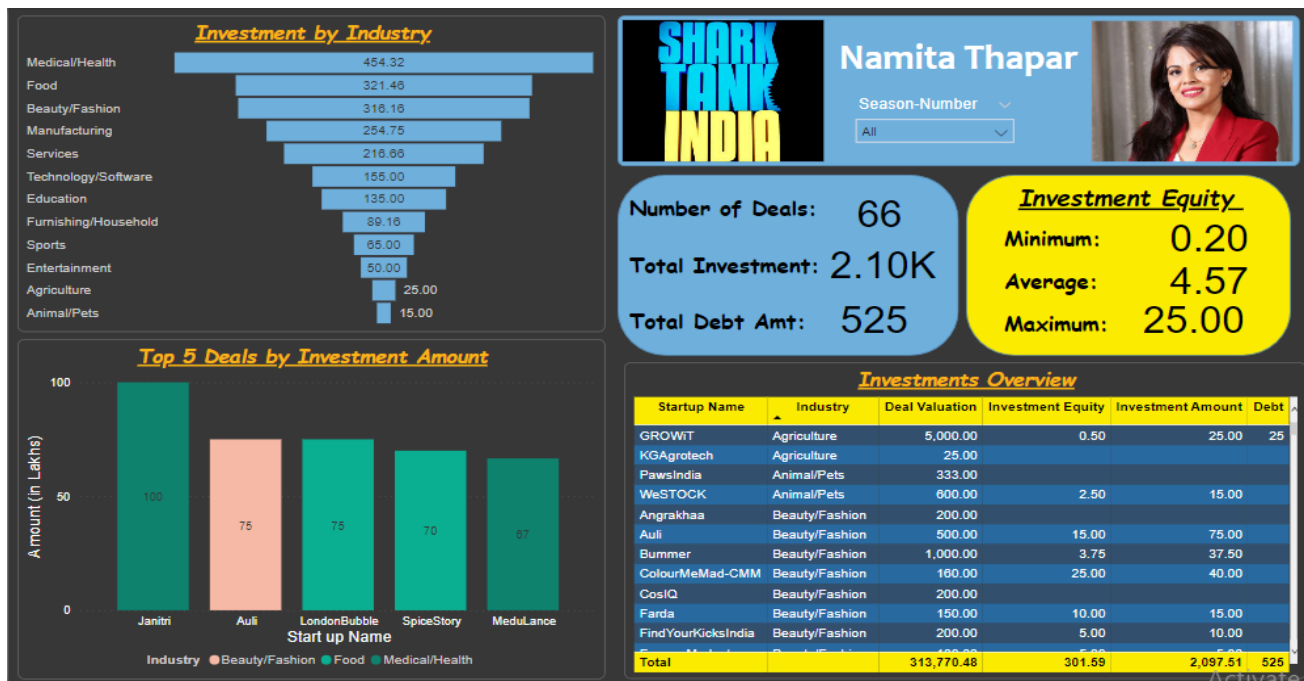
❖ Ghazal Alagh

- Total Investment Amount
 - Season 1: 1.6 Cr
 - Season 2: N/A
- Total Debt Amount
 - Season 1: Nil
 - Season 2: N/A
- Most Preferred Industry
 - Season 1: Food
 - Season 2: N/A
- Deal with the Highest Investment
 - Season 1:
 - Start-up Name: HumpyA2
 - Industry: Food
 - Business Description: Organic Milk A2 Products
 - Investment Amount: 33.33 Lakhs
 - Season 2:
 - Start-up Name: N/A
 - Industry: N/A
 - Business Description: N/A
 - Investment Amount: N/A



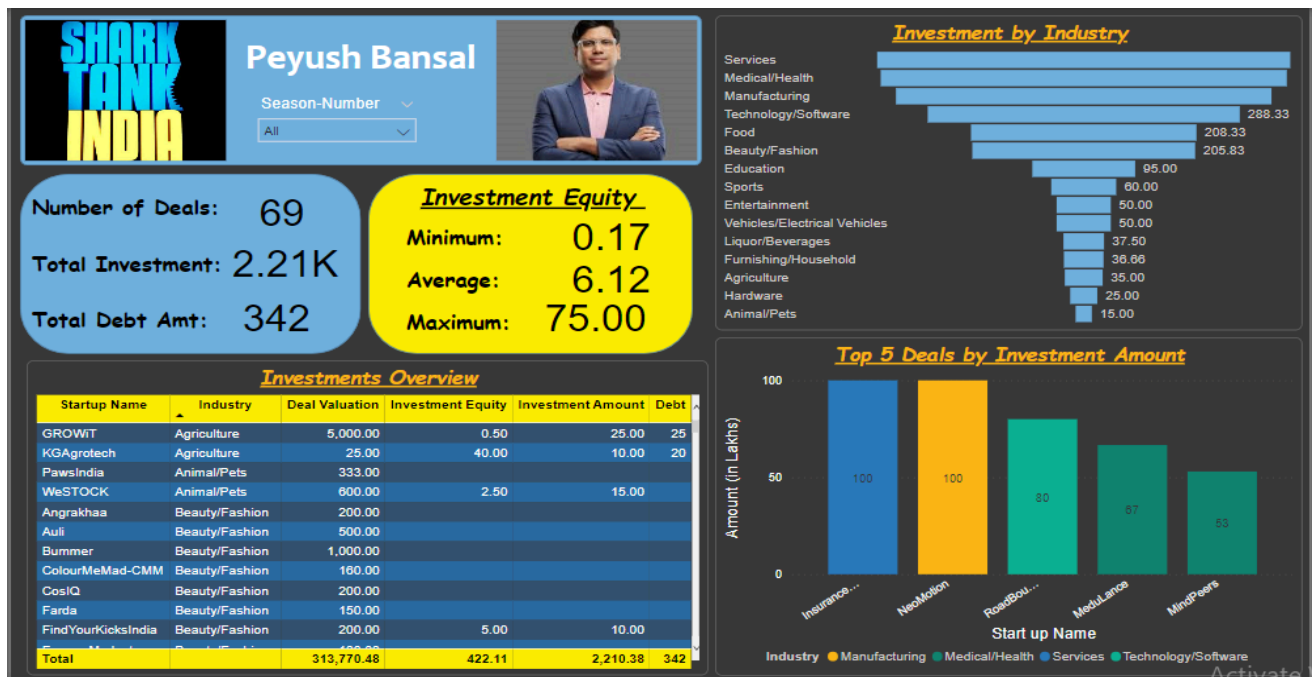
❖ Namita Thapar

- Total Investment Amount
 - Season 1: 7.1 Cr
 - Season 2: 13.9 Cr
- Total Debt Amount
 - Season 1: 25 Lakhs
 - Season 2: 5 Cr
- Most Preferred Industry
 - Season 1: Beauty/ Fashion
 - Season 2: Medical/ Health
- Deal with the Highest Investment
 - Season 1:
 - Start-up Name: Auli
 - Industry: Beauty/ Fashion
 - Business Description: Ayurvedic Products Skincare Lifestyle
 - Investment Amount: 75 Lakhs
 - Season 2:
 - Start-up Name: Janitri
 - Industry: Medical/ Health
 - Business Description: Pregnancy Monitoring Systems
 - Investment Amount: 1 Cr



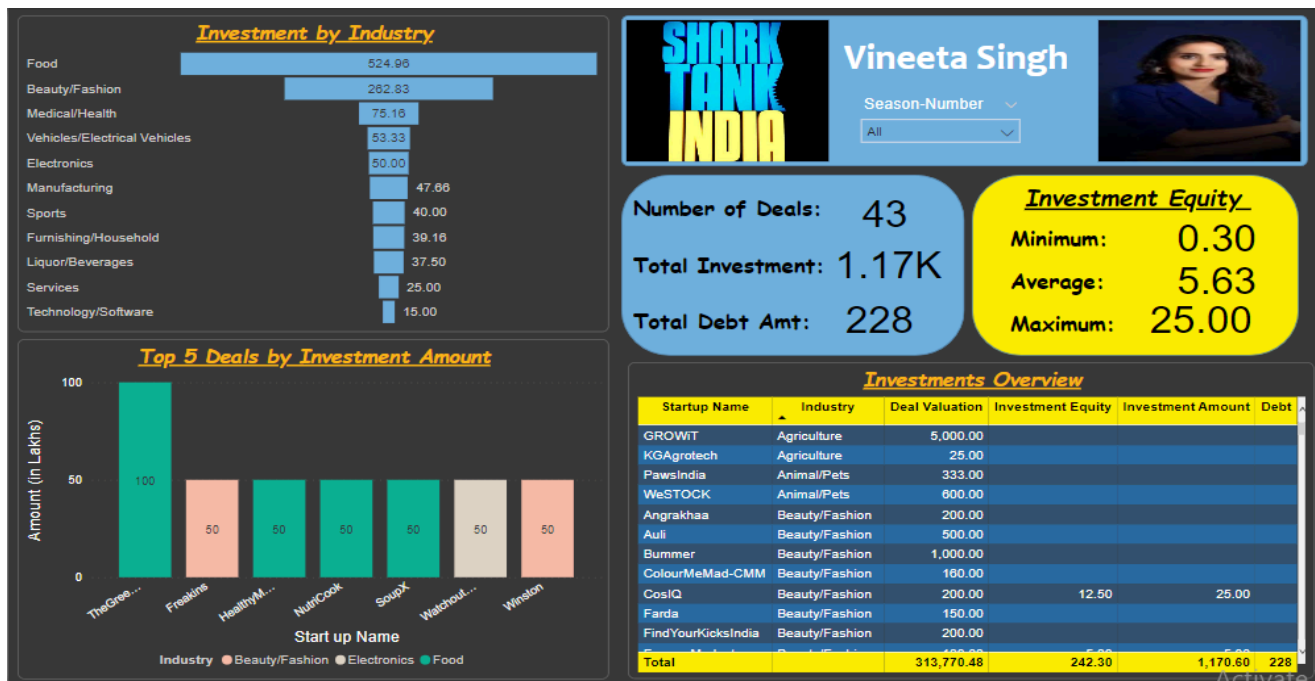
❖ Peyush Bansal

- Total Investment Amount
 - Season 1: 8.2 Cr
 - Season 2: 13.9 Cr
- Total Debt Amount
 - Season 1: 1.17 Cr
 - Season 2: 2.25 Cr
- Most Preferred Industry
 - Season 1: Technology/Software
 - Season 2: Medical/ Health
- Deal with the Highest Investment
 - Season 1:
 - Start-up Name: Insurance Samadhan
 - Industry: Services
 - Business Description: Insurance Solutions
 - Investment Amount: 1 Cr
 - Season 2:
 - Start-up Name: NeoMotion
 - Industry: Manufacturing
 - Business Description: Wheelchairs
 - Investment Amount: 1 Cr



❖ Vineeta Singh

- Total Investment Amount
 - Season 1: 3.6 Cr
 - Season 2: 8.1 Cr
- Total Debt Amount
 - Season 1: 30 Lakhs
 - Season 2: 1.98 Cr
- Most Preferred Industry
 - Season 1: Food
 - Season 2: Food
- Deal with the Highest Investment
 - Season 1:
 - Start-up Name: Kabaddi Adda
 - Industry: Sports
 - Business Description: All Kabaddi App
 - Investment Amount: 40 Lakhs
 - Season 2:
 - Start-up Name: The Green Snack Snack
 - Industry: Food
 - Business Description: Healthy Snacks Online
 - Investment Amount: 1 Cr



By understanding these investor preferences, stakeholders gain valuable insights into the factors that drive investment decisions on Shark Tank India, facilitating better alignment between entrepreneurs and potential investors.

Conclusion

In conclusion, the analysis of Shark Tank India data has provided valuable insights into the dynamics of entrepreneurial ventures and investor interactions within the show. Here are the key takeaways:

- ❖ **Most Lucrative Industries:**
 - It has been seen that *Food* and *Beauty/Fashion* are the two most lucrative industries attracting the maximum amount of investments from the sharks.
- ❖ **Investor Preferences over the Seasons:**
 - Investors' preferences shifted from the *Food* industry in Season 1 to *Beauty/Fashion* and *Medical/Health* in Season 2.
- ❖ **Geographical Trends:**
 - In both Seasons 1 & 2, The maximum number of Presenters belonged to *Maharashtra*. It comes to highlight because Bangalore is considered the Start-up hub of India.
- ❖ **Global Impact:**
 - The show serves as a platform for businesses to gain visibility and attract investment not only locally but also globally, fostering collaborations and partnerships beyond regional boundaries.
- ❖ **Impact on Entrepreneurial Ecosystem:**
 - Shark Tank India contributes significantly to the entrepreneurial ecosystem by providing a platform for startups to showcase innovation, secure funding, and receive mentorship.

This analysis is a foundation for continued exploration and understanding of the evolving landscape of entrepreneurship and investment in the Indian context. As the show

progresses, further analyses and insights will continue to shape the narrative of entrepreneurial journeys on Shark Tank India.

Recommendations

Thorough Preparation:

- Invest time in comprehensive preparation for your pitch. Anticipate questions, understand your financials, and be ready to articulate the unique value proposition of your business.

Know Your Numbers:

- Have a solid understanding of your financial metrics. Be prepared to discuss revenue, expenses, profit margins, and other key financial indicators confidently.

Understand Investor Preferences:

- Research and understand the preferences of the Sharks or potential investors. Tailor your pitch to align with their interests and investment criteria.

Showcase Traction:

- If applicable, highlight any traction your business has gained. This could include customer testimonials, sales figures, partnerships, or any other indicators of market acceptance.

Demonstrate Scalability:

- Clearly illustrate how your business can scale. Investors are often interested in ventures with the potential for significant growth.

Strategic Use of Funding:

- Clearly articulate how you plan to use the funding. Investors want to know that their investment will be used wisely to drive the growth of the business.

Legal and Regulatory Compliance:

- Ensure that your business operations are in compliance with legal and regulatory requirements. This builds trust with investors and demonstrates a commitment to ethical business practices.

The attached file documents the same analysis, utilizing the **Structured Query Language (SQL)**.

 Shark Tank India SQL Queries

The following are snippets of analysis insights derived from data analysis using the **Microsoft Excel** spreadsheet software:

| SHARK TANK INDIA ANALYSIS REPORT | | | | | | | | | |
|----------------------------------|-------------------------|-------------|-------------|--|--|------------------------------|-----------------------|----------|----------|
| | | Season1 | Season 2 | | | Shark | Column1 | Season 1 | Season 2 |
| No. of Episodes aired | | 36 | 51 | | | Ashneer | No. of Deals | 21 | 0 |
| No. of Unseen Pitches | | 30 | 0 | | | | Total Amount Invested | 539.33 | 0 |
| No. of Presenters | Total | 314 | 351 | | | | Total Debt | 114 | 0 |
| | Males | 220 | 264 | | | | Min Equity Taken | 1 | 0 |
| | Females | 92 | 86 | | | | Max Equity Taken | 25 | 0 |
| | Transgenders | 2 | 1 | | | Namita | No. of Deals | 25 | 41 |
| Couples Among Presenters | | 32 | 27 | | | | Total Amount Invested | 708.63 | 1388.88 |
| Average No. of Team Members | | 2 | 2 | | | | Total Debt | 25 | 500.16 |
| Age of Most Presenters | Young | 53 | 35 | | | | Min Equity Taken | 1 | 0.2 |
| | Middle | 98 | 133 | | | | Max Equity Taken | 25 | 25 |
| | Old | 1 | 0 | | | Anupam | No. of Deals | 25 | 26 |
| Most Presenters belong to State | | Maharashtra | Maharashtra | | | | Total Amount Invested | 536.33 | 914.83 |
| No. of Pitches | Total | 168 | 183 | | | | Total Debt | 15 | 82.5 |
| | Offered | 96 | 120 | | | | Min Equity Taken | 0.75 | 0.166 |
| | Unoffered | 56 | 48 | | | | Max Equity Taken | 17.5 | 25 |
| Offers | Total | 96 | 120 | | | Vineeta | No. of Deals | 17 | 26 |
| | Accepted | 70 | 106 | | | | Total Amount Invested | 363.62 | 806.98 |
| | Rejected | 26 | 14 | | | | Total Debt | 30 | 199.16 |
| Accepted Offers | Total | 70 | 106 | | | | Min Equity Taken | 1.2 | 0.3 |
| | With Conditions | 0 | 8 | | | | Max Equity Taken | 25 | 18 |
| | Without Conditions | 70 | 98 | | | Aman | No. of Deals | 30 | 43 |
| | Involved | 0 | 4 | | | | Total Amount Invested | 896.99 | 1613.05 |
| | Without Conditions | 70 | 98 | | | Aman | No. of Deals | 30 | 43 |
| Patents | Involved | 0 | 4 | | | | Total Amount Invested | 896.99 | 1613.05 |
| | Not Involved | 70 | 102 | | | | Total Debt | 50 | 261.16 |
| Deals Involving all Sharks | | 4 | 4 | | | | Min Equity Taken | 0.75 | 0.166 |
| Highest Equity Taken by Sharks | | 75 | 25 | | | | Max Equity Taken | 40 | 10 |
| Debt Offers | Total | 9 | 30 | | | Peyush | No. of Deals | 29 | 40 |
| Annual Revenue | Average Revenue | 431.36 | 365.22 | | | | Total Amount Invested | 819.65 | 1390.73 |
| | Maximum Revenue | 7200 | 5100 | | | | Total Debt | 117 | 225 |
| | Minimum Revenue | -1 | -1 | | | | Min Equity Taken | 1 | 0.166 |
| Monthly sales | Average Sales | 17.21 | 69.98 | | | | Max Equity Taken | 75 | 10 |
| | Maximum Sales | 200 | 700 | | | Ghazal | No. of Deals | 8 | 0 |
| | Minimum Sales | 0.002 | 0 | | | | Total Amount Invested | 159.99 | 0 |
| Gross Margin | Average Margin | 53.45 | 53.53 | | | | Total Debt | 0 | 0 |
| | Maximum Margin | 150 | 90 | | | | Min Equity Taken | 1 | 0 |
| | Minimum Margin | 3 | 20 | | | | Max Equity Taken | 17.5 | 0 |
| Business Starting Year | Earliest | 2005 | 2006 | | | Amit | No. of Deals | 0 | 21 |
| | Latest | 2022 | 2022 | | | | Total Amount Invested | 0 | 800.91 |
| Valuation Requested | Average Valuation Asked | 4207.52 | 6003.22 | | | | Total Debt | 0 | 145 |
| | Maximum Valuation Asked | 120000 | 60000 | | | | Min Equity Taken | 0 | 1 |
| | Minimum Valuation Asked | 0 | 0 | | | | Max Equity Taken | 0 | 20 |
| Deal Valuation | Average Valuation | 862.26 | 2429.87 | | | Vikas (Guest) | No. of Deals | 0 | 2 |
| | Maximum Valuation | 6667 | 25000 | | | | Total Amount Invested | 0 | 65.5 |
| | Minimum Valuation | 0 | 0 | | | | Total Debt | 0 | 47 |
| Deal Amount | Average Amount | 57.49 | 66.49 | | | | Min Equity Taken | 0 | 0.5 |
| | Maximum Amount | 150 | 200 | | | | Max Equity Taken | 0 | 2.5 |
| | Minimum Amount | 0.00005 | 0 | | | Vikas (Guest) | No. of Deals | 0 | 2 |
| Deal Valuation | Average Valuation | 862.26 | 2429.87 | | | | Total Amount Invested | 0 | 65.5 |
| | Maximum Valuation | 6667 | 25000 | | | | Total Debt | 0 | 47 |
| | Minimum Valuation | 0 | 0 | | | | Min Equity Taken | 0 | 0.5 |
| Deal Amount | Average Amount | 57.49 | 66.49 | | | | Max Equity Taken | 0 | 2.5 |
| | Maximum Amount | 150 | 200 | | | | | | |
| | Minimum Amount | 0.00005 | 0 | | | Industry | Season 1 | Season 2 | |
| Original Ask Amount | Average Amount | 263.28 | 83.97 | | | Agriculture | 2 | 1 | |
| | Maximum Amount | 30000 | 1000 | | | Animal/Pets | 4 | 1 | |
| | Minimum Amount | 0.00005 | 0 | | | Beauty/Fashion | 27 | 31 | |
| Valuation Difference | Average Difference | -1506.66 | -3760.55 | | | Education | 9 | 0 | |
| | Maximum Difference | -9900 | -48888.89 | | | Electronics | 3 | 1 | |
| | Minimum Difference | 507 | 0 | | | Entertainment | 1 | 1 | |
| | | | | | | Food | 41 | 41 | |
| | | | | | | Furnishing/Household | 0 | 13 | |
| | | | | | | Hardware | 2 | 0 | |
| | | | | | | Liquor/Beverages | 1 | 6 | |
| | | | | | | Manufacturing | 21 | 17 | |
| | | | | | | Medical/Health | 9 | 14 | |
| | | | | | | Services | 13 | 15 | |
| | | | | | | Sports | 2 | 5 | |
| | | | | | | Technology/Software | 12 | 14 | |
| | | | | | | Vehicles/Electrical Vehicles | 5 | 8 | |