Business Intelligence Dashboard: Global Startup Analysis (2000-2014)

PORTFOLIO ANALYSIS TASK USING TABLEAU

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INTRODUCTION

WHAT IS BI DASHBOARD

According to *Turban, Sharda, and Delen (2011), a Business Intelligence (BI) Dashboard is "a visual interface that provides at-a-glance views of key performance indicators (KPIs) relevant to business objectives. It integrates data from multiple sources and presents actionable insights to support decision-making

WHY THIS PORTFOLIO

This portfolio aims to analyze global startup trends (2000-2014) using Tableau, providing insights into funding, investors, and industry growth. It also helps to understand early-stage company growth, as this period marks the rapid expansion of startups following the dot-com bubble crash (2000-2002).

TOOLS USED

✅ Tableau – Interactive data visualization

✅ Excel/CSV Dataset – Source of startup data

*Turban, E., Sharda, R., & Delen, D. (2011). Decision Support and Business Intelligence Systems (9th ed.). Pearson.

DATASET OVERVIEW

SOURCE OF DATA

- The dataset used in this project comes from Crunchbase Monthly Export.
- It contains information about global startup trends from 2000 to 2014.
- Data includes funding rounds, investors, industries, and startup status.

DATASET STRUCTURED

The dataset consists of multiple columns, with key attributes as follows:

Column Name	Description
`startup_name`	Name of the startup
`founded_year`	Year the startup was established
`market`	Industry category (e.g., Biotech, E-commerce, Software)
`funding_total_usd`	Total funding received (in USD)
`funding_rounds`	Number of funding rounds received
`funding_type`	Type of funding (Venture, Seed, Private Equity, etc.)
`investor_count`	Total number of investors involved
`investor_name`	Name of investors backing the startup
`region`	Location of the startup
`startup_status`	Operating, acquired, or closed
`ipo_status`	Whether the startup has gone public (Yes/No)

DATA PREPARATION

1.DATA CLEANING

✅ Removing duplicate records

✅ Handling missing values (imputation or removal)

✅ Standardizing text formats (e.g., capitalization, spacing)

2.DATA TRANSFORMATION

✅ Converting financial figures into a standard currency (USD)

✅ Changing data types for numerical and categorical variables

✅ Extracting relevant information from unstructured data

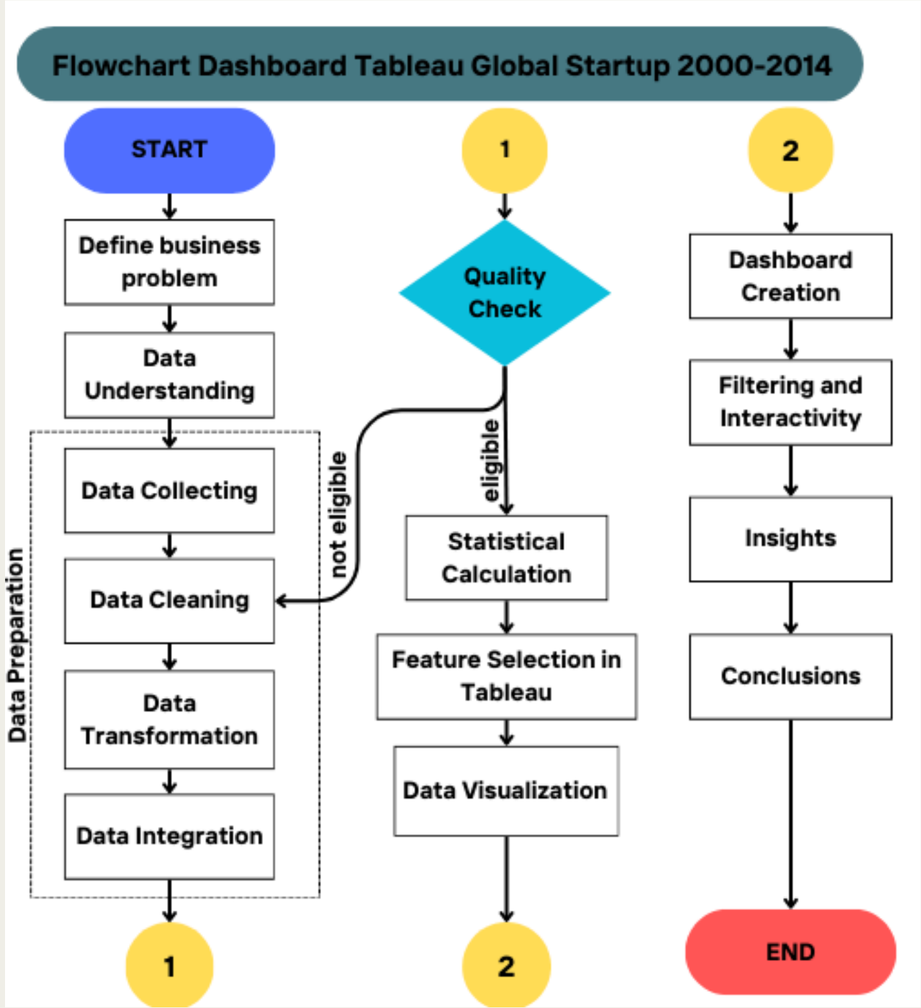
3.DATA INTEGRATION

✅ Selecting only relevant startups and investment data

✅ Grouping data by industry, funding type, and region

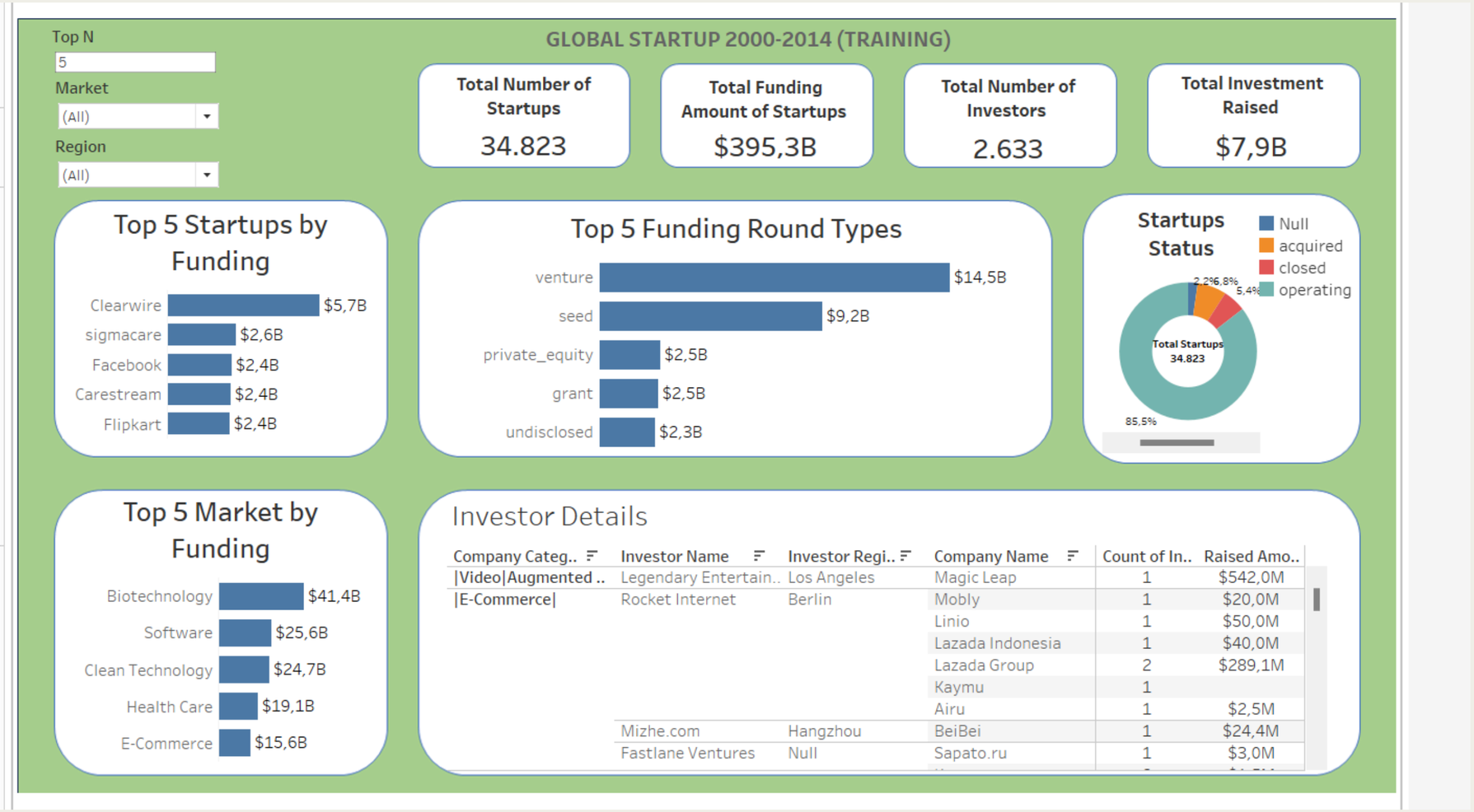
✅ Calculating total funding and average investment per industry

DATA FLOW & ARCHITECTURE



This flowchart represents the data processing and dashboard creation workflow in Tableau for analyzing global startup trends from 2000 to 2014

BI DASHBOARD



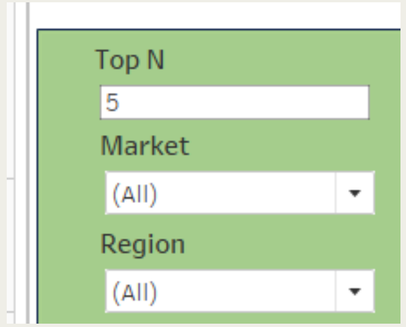
BI DASHBOARD AND INTERACTIVITY

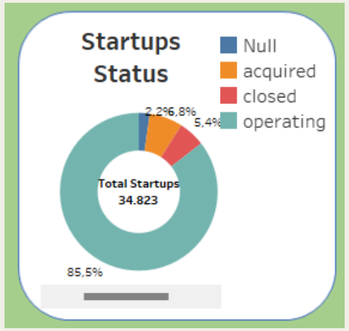
🔍 TABLEAU DASHBOARD OVERVIEW

The BI dashboard provides key insights into global startup trends (2000-2014), highlighting funding distribution, investor activity, and industry performance. Through interactive filters and dynamic visualizations, users can explore various aspects of startup investments and growth patterns.

🔧 KEY FEATURES

- ✅ Interactive Filters – Filter data by year, funding type, industry, and region.
- ✅ Drill-Down Analysis – Explore startup performance and investor trends in detail.
- ✅ Dynamic Charts & KPIs – Visualize funding trends, investor activity, and startup status.
- ✅ Startup Lifecycle Tracking – Monitor operating, acquired, and closed startups over time.
- ✅ User-Friendly Navigation – Intuitive layout for seamless exploration.





📊 KEY INSIGHTS FROM THE ANALYSIS

📈 Top-Funded Startups
Clearwire received the highest funding at $5.7 billion, followed by Sigmacare, Facebook, Carestream, and Flipkart.

💰 Dominant Funding Type
Venture Capital accounted for the majority of investments, totaling $14.5 billion, indicating investor preference for high-growth startups.

🏭 Industries with the Highest Funding
Biotechnology led with $41.4 billion, followed by Software ($25.6B) and Clean Technology ($24.7B).

🚀 Startup Status Distribution
85.5% of startups remained operational, while 5.4% were acquired and 2.3% shut down, demonstrating strong survival rates.

🌍 Investor Distribution
Investors came from various global regions, showing increased international interest in startup investments.

🔮 RECOMMENDATIONS & FUTURE ENHANCEMENTS

📈 Startup Success Prediction
Implement machine learning models to predict startup success or failure based on funding patterns, industry, and other factors.

📊 Investor Segmentation
Use clustering techniques to group investors by their investment behavior and sector preferences.

🔍 Funding Recommendation System
Develop an AI-powered funding recommendation system to match startups with the most suitable investors.

⚠️ Historical Data Limitation
Since the dataset only covers 2000-2014, insights are not reflective of current trends. The dashboard is best used for training and historical analysis, rather than real-time decision-making.

📡 Dataset Update
Incorporate newer datasets to analyze recent startup trends and investment patterns for more relevant insights.

📢 CONCLUSION & FINAL THOUGHTS

📌 KEY TAKEAWAYS:

✅ Venture capital dominated as the primary funding type, with a total of $14.5 billion invested.
✅ Biotechnology, Software, and Clean Technology were the industries with the highest funding.
✅ 85.5% of startups remained operational, while 5.4% were acquired and 2.3% shut down.
✅ The dashboard enables data-driven decision-making for investors, entrepreneurs, and analysts.
✅ Future improvements can include machine learning models, investor segmentation, and real-time data integration.

🚀 FINAL THOUGHTS

- BI dashboards play a crucial role in analyzing business trends and supporting strategic decisions.
- Expanding the dataset and incorporating predictive analytics will enhance future insights.
- This dashboard serves as a foundation for further research and improvements in startup analysis.

❓ Q&A - ANY QUESTIONS?

Feel free to ask any questions regarding the BI dashboard, data analysis, or insights from this portfolio

🙏 THANK YOU!

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