

# Y COMBINATOR ANALYTICS DASHBOARD REPORT



# Project Work Flow

1. Project objective
2. Data Cleaning with Python
3. Exploratory Data Analysis
4. Dashboard Making
5. Collecting Insights





# Project Objective

To develop a comprehensive Startup Analytics Dashboard that provides real-time insights into key trends across Y Combinator-backed startups, enabling stakeholders to monitor and analyze startup growth, industry shifts, and success patterns effectively.





# Data Cleaning with Python

1. Converted date columns and extracted year, batch information for timeline analysis
2. Removed empty rows, duplicates, and standardized missing fields like industry and status
3. Parsed categorical fields (e.g., Industry, Status) for better grouping and visualization
4. Cleaned text fields, dropped irrelevant columns, and structured data for dashboard integration





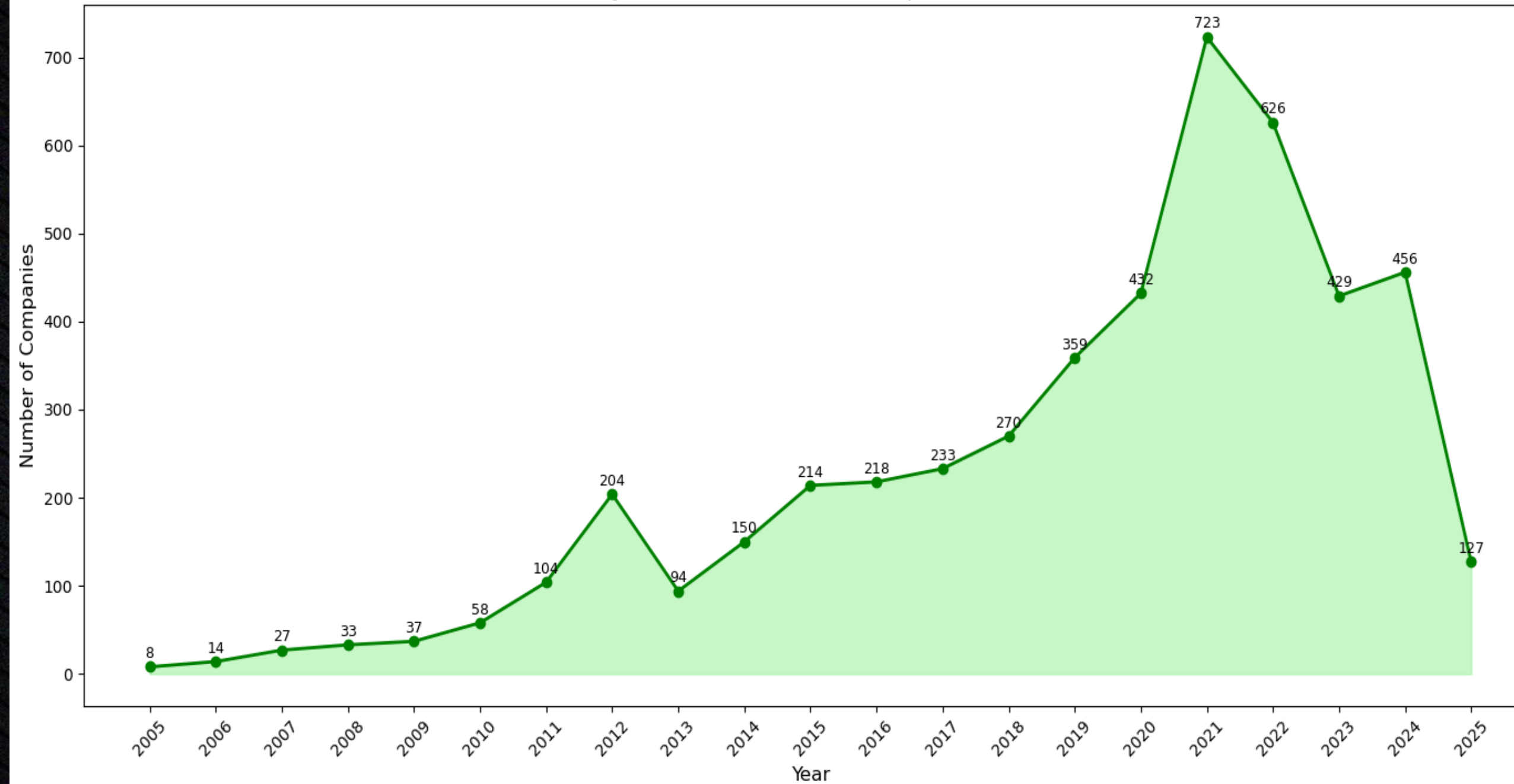
# EXPLORATORY DATA ANALYSIS

## Yearly Startup Enrollments

```
yearly_counts = df['batch_year'].value_counts().sort_index()
years = yearly_counts.index.astype(int)
counts = yearly_counts.values
plt.figure(figsize=(14, 7))
plt.fill_between(years, counts, color='lightgreen', alpha=0.5)
plt.plot(years, counts, color='green', marker='o', linewidth=2)
for i, count in enumerate(counts):
    plt.text(years[i], count + 10, str(count), ha='center', fontsize=9)
plt.title("Analysis of Y Combinator Startup Enrollments", fontsize=14)
plt.xlabel("Year", fontsize=12)
plt.ylabel("Number of Companies", fontsize=12)
plt.xticks(ticks=years, labels=years, rotation=45)
plt.tight_layout()
plt.show()
```



Analysis of Y Combinator Startup Enrollments





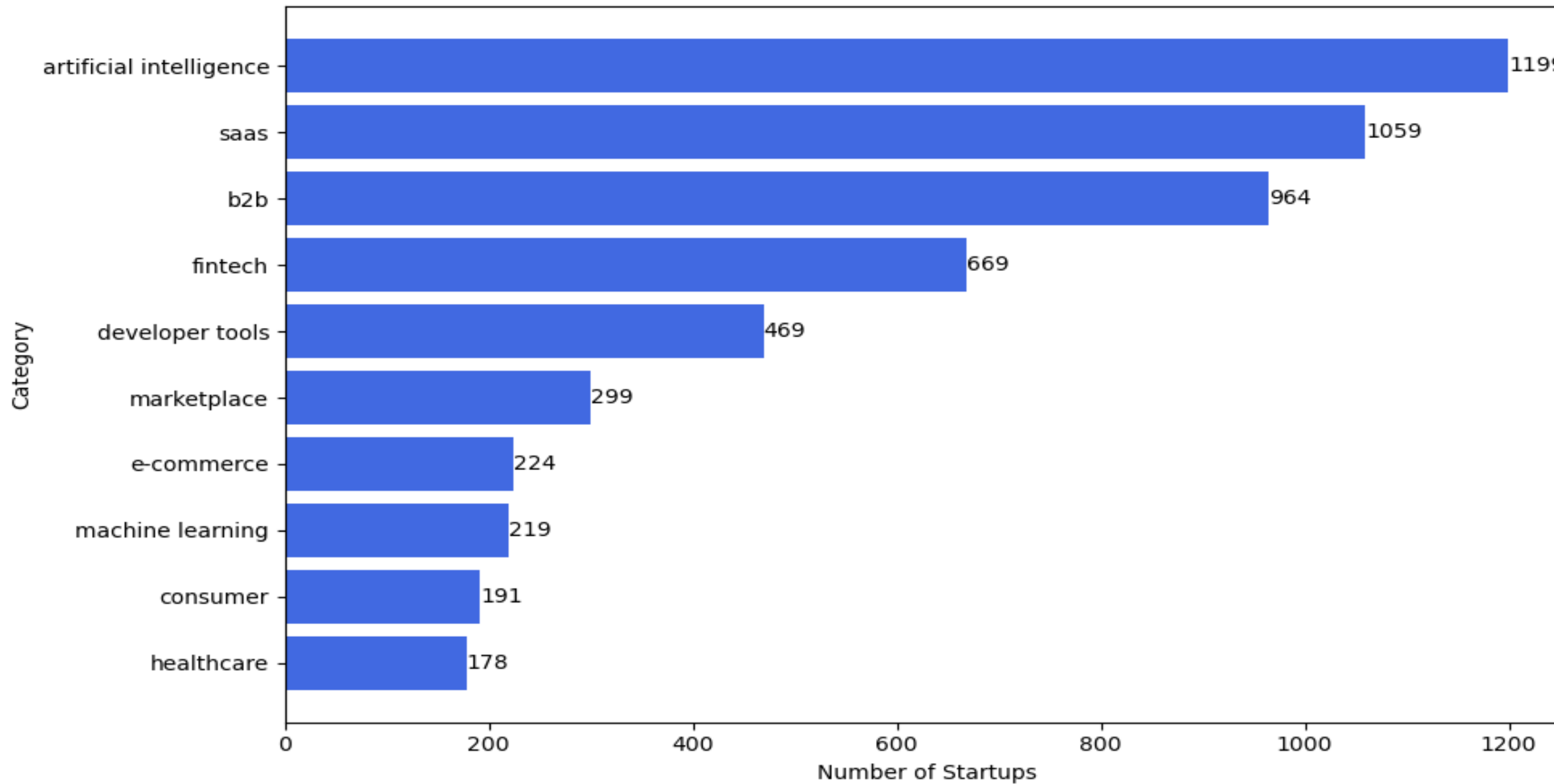
# EXPLORATORY DATA ANALYSIS

## Analysis of Top Industry Tags for Y Combinator Startups

```
all_tags = [tag for tags in df['tags'] for tag in tags]
tag_counts = Counter(all_tags)
top_tags = tag_counts.most_common(10)
categories, counts = zip(*top_tags)
plt.figure(figsize=(10,6))
plt.barh(categories, counts, color='royalblue')
plt.xlabel('Number of Startups')
plt.ylabel('Category')
plt.title('Analysis of Top Industry Tags for Y Combinator Startups')
plt.gca().invert_yaxis()
for index, value in enumerate(counts):
    plt.text(value, index, str(value), va='center')
plt.grid(False)
plt.tight_layout()
plt.show()
```



Analysis of Top Industry Tags for Y Combinator Startups





# EXPLORATORY DATA ANALYSIS

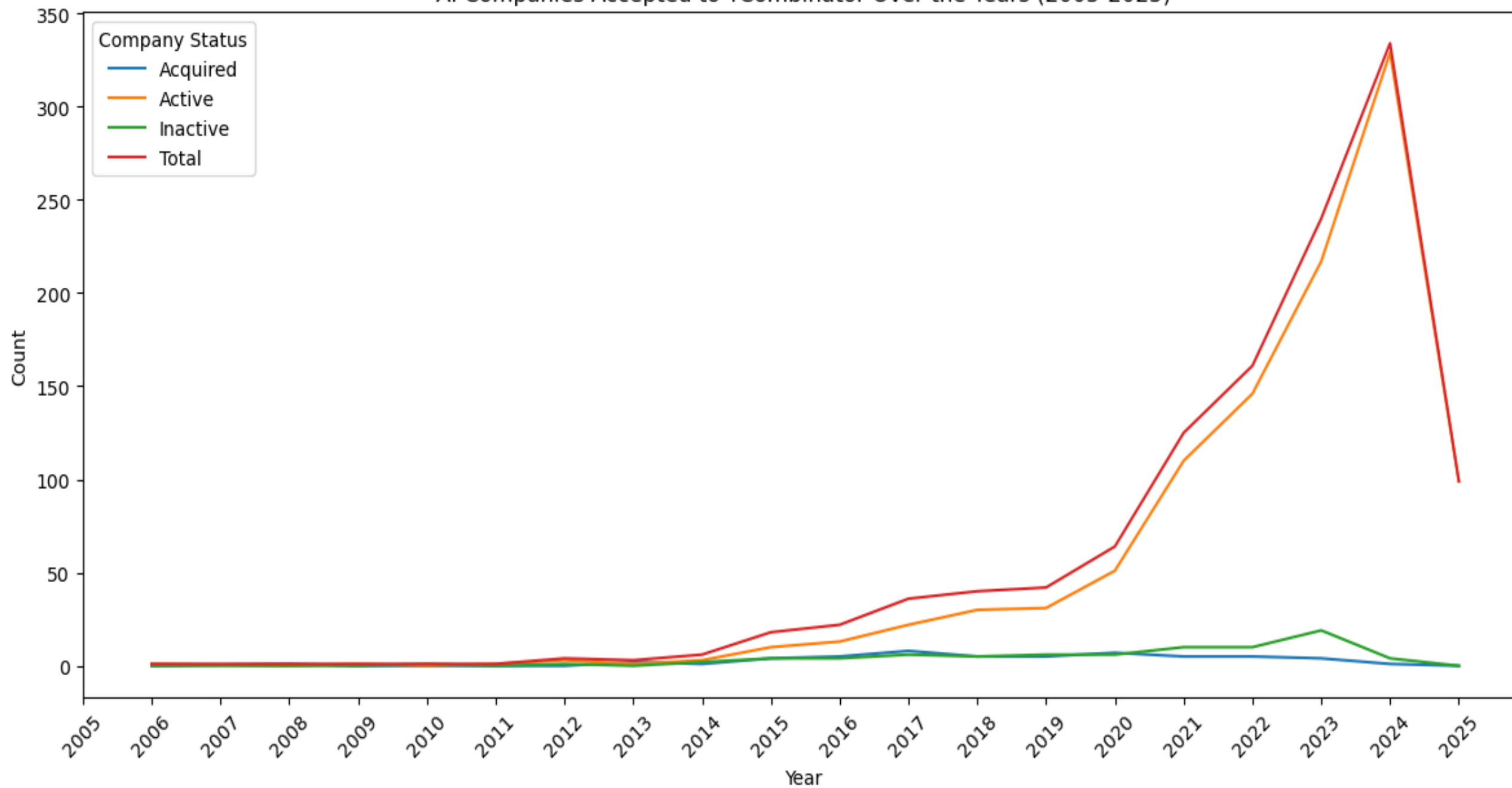
## AI Companies Accepted to YCombinator Over the Years (2005-2025)

```
ai_df = df[df['tags'].apply(lambda tags: 'artificial intelligence' in tags)]4
grouped = ai_df.groupby(['batch_year', 'status']).size().unstack(fill_value=0)
grouped['Total'] = grouped.sum(axis=1)
grouped = grouped.sort_index()
plt.figure(figsize=(12, 6))
for column in grouped.columns:
    plt.plot(grouped.index, grouped[column], label=column)

plt.title('AI Companies Accepted to YCombinator Over the Years (2005-2025)')
plt.xlabel('Year')
plt.ylabel('Count')
plt.xticks(ticks=years, labels=years, rotation=45)
plt.legend(title='Company Status')
plt.tight_layout()
plt.show()
```



AI Companies Accepted to YCombinator Over the Years (2005-2025)





# DAX QUERIES

Total AI Startups =

```
CALCULATE(  
    COUNTROWS(companies_data),  
    SEARCH("artificial intelligence", companies_data[tags], 1, 0) > 0  
)
```





# DAX QUERIES

B2B Industry Count =

```
CALCULATE(  
    COUNTROWS(companies_data),  
    SEARCH("B2B", companies_data[tags], 1, 0) > 0  
)
```





# DAX QUERIES

B2B with AI % =

```
DIVIDE(  
    CALCULATE(  
        COUNTROWS(companies_data),  
        companies_data[industry] = "B2B",  
        SEARCH("artificial intelligence", companies_data[tags], 1, 0) >  
0  
    ),  
    [Total B2B Startups],  
    0  
)
```





# DAX QUERIES

Active Startups = `CALCULATE(COUNTROWS(companies_data), companies_data[status] = "Active")`

Total Startups = `COUNTROWS(companies_data)`

Total B2B Startups = `CALCULATE(COUNTROWS(companies_data), companies_data[industry] = "B2B")`





# POWER BI DASHBOARD

## Y COMBINATORS ANALYSIS DASHBOARD

Total Startups  
**3976**

Total B2B Startups  
**1935**

Total AI Startups  
**1158**

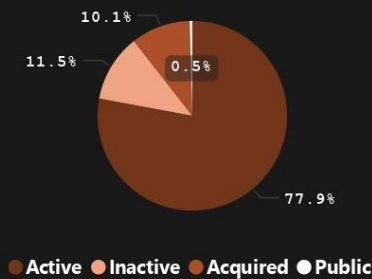
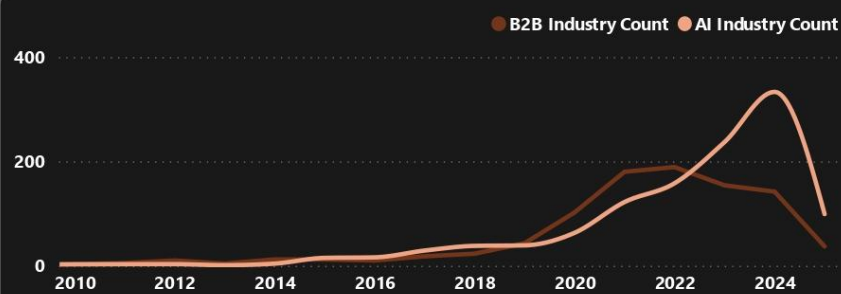
B2B With AI  
**39.33%**

Acquired

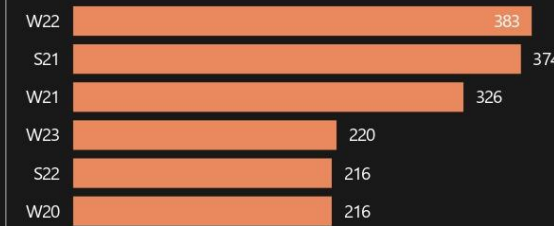
Active

Inactive

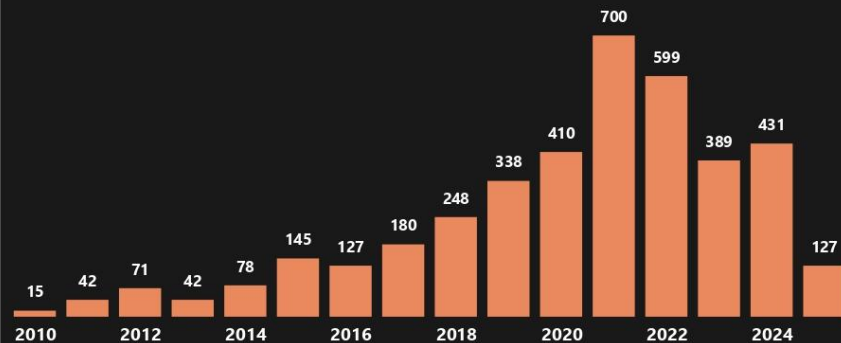
Public



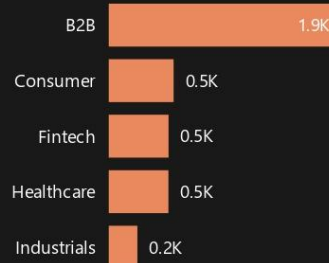
### Total Startups by Batch



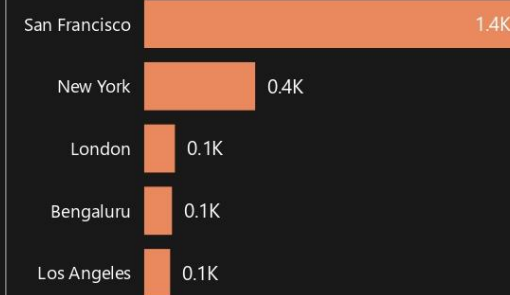
### Startups per Year



### Total Startups by Industry



### Total Startups by Location





# POWER BI DASHBOARD

## Y COMBINATORS COMPANY DASHBOARD

DreamCraft Entertainment, I... ▼

Team Size

23

Batch

S18

Location

Redwood City

Industry

Consumer

Status

Active



DreamCraft Entertainment, Inc.

DreamCraft enables anyone to create, publish, and monetize video games. The company's core product is a code-free game creation platform, bundled with high quality art assets. DreamCraft is backed by March Capital, Makers Fund, Tencent Corporation, Y Combinator, and other top investors in the gaming space. The company was founded in 2018 and now has a global team of 20+ people with half remote and half based in Silicon Valley.





# PROJECT INSIGHTS

- Massive surge in startup numbers, peaking with **700+ startups** in 2021.
- B2B startups make up nearly **50%** of all Y Combinator companies.
- **39.33%** of B2B startups are AI-driven, reflecting strong tech adoption.
- Job postings dropped by 50% from August to September
- **San Francisco** remains the #1 hub, housing over **1.4K startups**, followed by New York and London.
- About **77.9%** of Y Combinator startups are still active, showing strong survival rates.
- Apart from B2B, major industries include Consumer Tech, Fintech, and Healthcare.
- **W22** (Winter 2022) produced the largest number of startups (383), indicating a post-COVID entrepreneurial boom.

