Sports Team Activity Analysis

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Background

This project aims to analyze customer engagement through the usage of a sports performance analysis platform. The company provides an application for coaches and players to review game footage and improve team performance across various sports. Understanding upload behavior, video consumption, and retention patterns among teams is critical for optimizing user engagement and tailoring product improvements.

Objective

The objective of this analysis is to answer key business questions related to customer behavior and product usage. Specifically, it seeks to provide insights into team activity levels, user engagement with video content, retention trends, and differences in performance across various team levels. By examining these factors, actionable recommendations can be made to enhance team engagement, drive retention, and improve customer satisfaction.

Business Question

The business questions this analysis aims to answer are listed below.

1. Team Upload Activity
    1.1. How many teams have uploaded 10 or more times in the past 60 days?
    1.2. How many teams have uploaded less than 10 times in the past 60 days?
    1.3. How many teams have never uploaded in the past 60 days?
    1.4. How many teams have uploaded but have 0 users watching video in the past 60 days?
    1.5. How many teams have more than 5 users watching video in the past 60 days?
2. Team Inactivity: If they were to email coaches and team administrators on the teams with 0 uploads the past 7 days, how many teams would this include? How many coaches and admins would this include?
3. Geographic Analysis: Which state has the lowest percentage of teams uploading in the past 30 days?
4. Retention Tracking: How can we track team retention across different time periods?
5. Team Level Behavior: How do upload behaviors differ across team levels?

Methodology

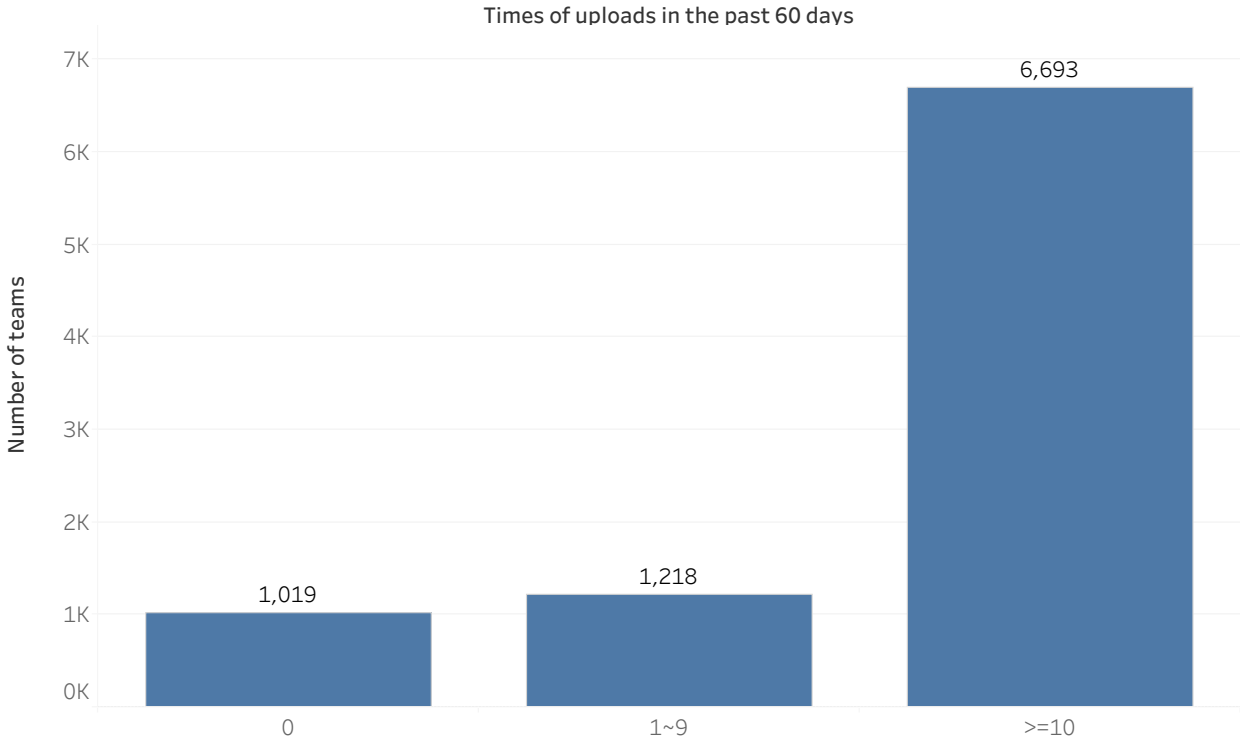
The raw data was first structured into tables and loaded into MySQL Workbench for processing. Data cleaning was performed on school-level data to ensure accuracy and consistency. SQL scripts were then written to retrieve the required metrics and explore additional insights. The retrieved data was further analyzed using Tableau to generate visualizations for each business question.

Results

Q1.1~1.3. Number of teams with uploads in the past 60 days

Out of 8,930 teams analyzed, 74.95% (6,693 teams) have uploaded content 10 or more times in the past 60 days, while 13.64% (1,218 teams) uploaded less than 10 times. The remaining 11.41% (1,019 teams) did not upload any content during this period.

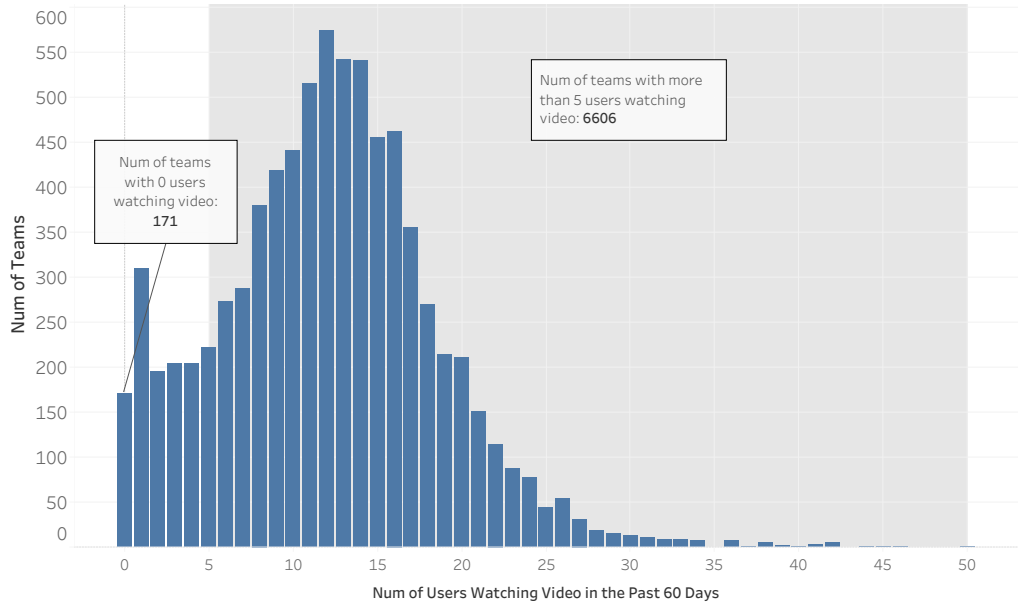
Number of Teams with Different Number of Uploads in the Past 60 Days



Q1.4~1.5. Number of teams with users watching videos in the past 60 days

Teams were grouped by the number of users watching videos. A total of 6,606 teams had more than 5 users watching videos, while 171 teams had 0 users watching videos. It was observed that most teams had between 10-15 users watching videos, with a noticeable increase in teams having exactly 1 user.

Number of Teams with Different Number of Users Watching Video in the Past 60 Days



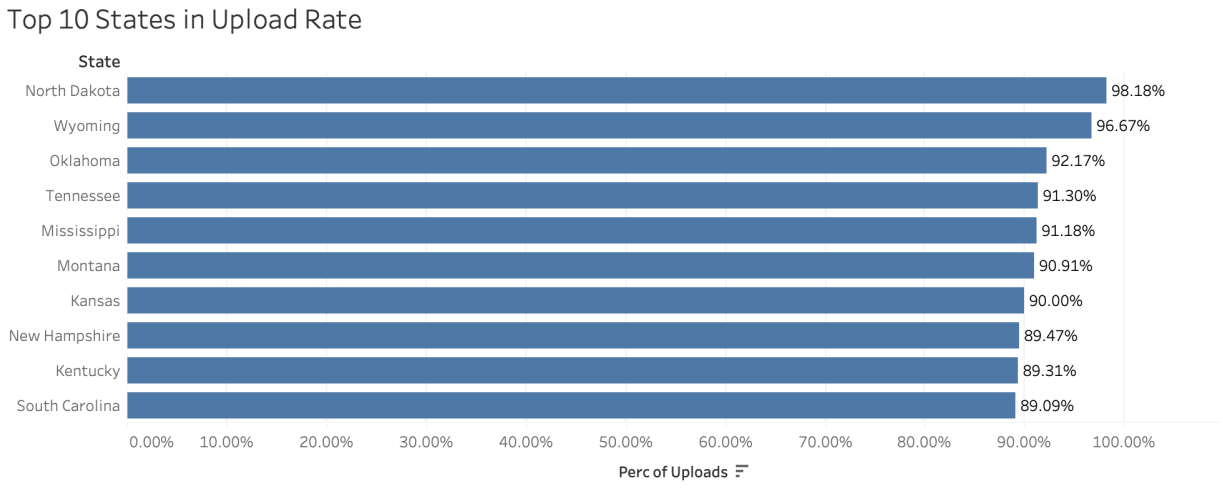
Q2. Number of teams and coaches & admins with 0 uploads in the past 7 days

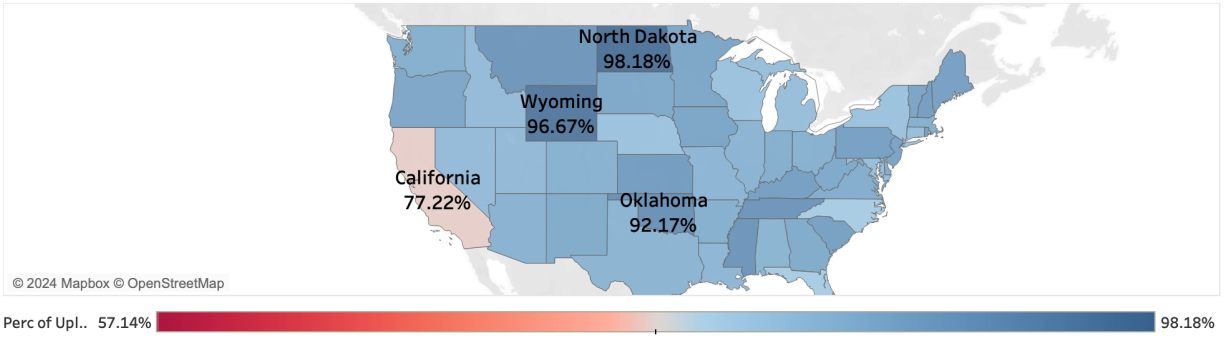
It was found that 1,998 teams had 0 uploads in the past 7 days. These teams were associated with 6,747 coaches and administrators.

Q3. Percentage of teams uploading in the past 30 days in states

The states with the top three states with the highest upload rates were North Dakota (98.18%), Wyoming (96.67%), and Oklahoma (92.17%). Based on the map, it can be concluded states with higher uploads are more clustered in Midwest and South region.

Upload by State Dashboard





Q4. Retention analysis

- **Summary**: The retention table shows the retention rate of teams that have uploaded starting at different times. Each row represents teams that have uploaded in the past certain days. Each column tracks the percentage of these teams that still upload at different times. Retention was tracked across teams that uploaded at different times, revealing a significant decrease in uploads over the last 7 days, with a drop of 6-7%. This trend suggests a need for further investigation to determine the factors contributing to this decrease.

- **Suggestion**: It is recommended to investigate the cause of the sharp decline in team uploads during the past 7 days and address potential barriers or challenges faced by users.

Cohort Retention Table

Teams	Perc of tea..	Perc of tea..	Perc of tea..	Perc of tea..	Perc of tea..	Perc of tea..
Teams uploaded 14d					100.00%	93.22%
Teams uploaded 30d				100.00%	97.33%	90.73%
Teams uploaded 60d			100.00%	96.57%	94.00%	87.62%
Teams uploaded 90d		100.00%	99.02%	95.63%	93.08%	86.77%
Teams uploaded 365d	100.00%	96.03%	95.10%	91.84%	89.39%	83.33%

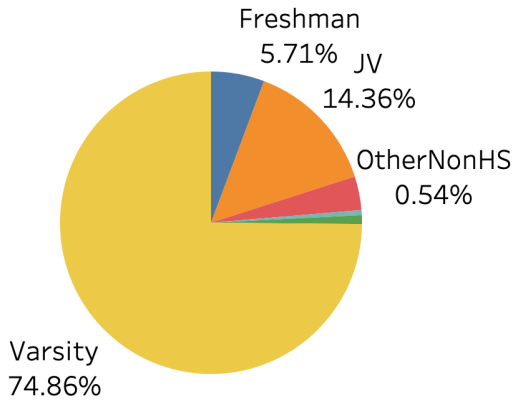
Measure Values

Q5. Team level analysis

- **Summary:** An analysis of team levels revealed that the varsity level comprises nearly 75% of the total teams and has the lowest percentage of 0 uploads. Junior varsity (JV) teams, while accounting for 14.36% of the population, had a higher percentage of 0 uploads (35.88%). Smaller team levels were found to have disproportionately high percentages of 0 uploads.
- **Suggestion**: Marketing efforts should be targeted toward increasing engagement among JV teams, which exhibit high levels of inactivity, while maintaining the strong upload activity seen from varsity teams.

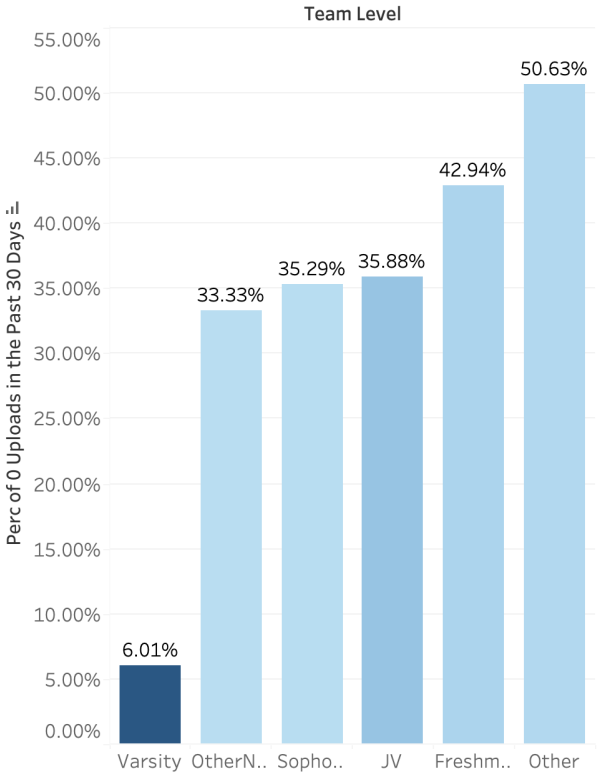
Team Level Breakdown Dashboard

Team Level Composition



Team Level
Freshman
JV
Other
OtherNonHS
Sophomore
Varsity

Perc of 0 Upload by Team Level



Number of teams
48 6,684