# SPORTS ANALYTICS

**BEYOND THE SCOREBOARD:** DISCOVERING THE STORY BEHIND THE STATS.

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Computer Science & Engineering w/s Big Data Analytics





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Visualizing data in sports is key to unlocking its potential.

- CHATGPT



# THE GAME OF <u>CRICKET</u>

### **SOURCE DATA**

### Information about Data Source:

The date has been obtained from **ESPNcricinfo** website by using the technique of Web-scrapping, which is the ICC Men's T20 World Cup Fixtures and Results table and which can be further divided into many stats.

The dataset includes all the information of about 56 matches from Qualifiers to the Final match.

There are about seven attributes in the Results and Fixtures table. They are:

- 1. Team 1 and Team 2
- 2.Winner
- 3. Margin
- 4. Ground
- 5. Match Date
- 6.Scorecard

where, each attribute is divided into various other subcategories and all have been taken into consideration.



# EXPECTED OUTPUT - STORYTELLING



### **AIM OF THE STORY**

The **aim** of this project is to prepare a strong cricket team of 11 players that will be able to compete in the upcoming tournaments (suppose) Indian Premier League (IPL).

The focus will be on selecting the best players for each position in the team, including openers, middle-order batsmen, all-rounders, and specialist fast bowlers.

As a new team in the IPL, it is crucial to have a well-balanced and skilled team that can handle the pressure of playing against the best teams in the league. Through a thorough analysis of player performance data and a careful selection process, the aim is to create a team that has the best chance of success in the IPL. The goal is to provide a solid foundation for the team and set them up for a successful debut season.

In order to achieve this aim, we will be conducting an in-depth analysis of player statistics and performance data from past ICC Men's T20 World Cup (2022) as mentioned previously. We will be looking at various metrics (will be discussed in upcoming slides) to determine which players are the most suitable for each position in the team, when making our selections.

Additionally, we will be taking into account the team's overall balance, with a focus on ensuring that there is a good mix of experienced and new players, and that each player's skills complement those of their teammates. The team's captain and vice-captain will also be selected (if possible).

Our ultimate goal is to create a well-rounded and competitive team that has the potential to perform at the highest level in the IPL, and to give them the best possible chance of success in their debut season.



# THRESHOLD FOR THE TEAM

01

The team should be able to **score at least** *180* runs on an average.

02

The team should be to **defend** *150* runs on an average.

Now, lets have a look at the parameters to be considered for the players from next slide:

# **OPENERS**



# **PARAMETERS**

**Batting Average** 

Strike Rate

Innings Batted

**Boundary %** 

**Batting Position** 

# **DESCRIPTION**

Average runs scored in an innings

No of runs scored per 100 balls

**Total Innings batted** 

% of runs scored in boundaries

Order in which the batter played

# **CRITERIA**

> 30

> 140

> 3

> 50 <

4

# ANCHORS/MIDDLE ORDER



# **PARAMETERS**

**Batting Average** 

Strike Rate

**Innings Batted** 

Avg. Balls Faced

**Batting Position** 

# **DESCRIPTION**

Average runs scored in an innings

No of runs scored per 100 balls

Total Innings batted

Average balls faced by the batter in an innings

Order in which the batter played

# **CRITERIA**

> 40

> 125

> 3

> 20

> 2

# FINISHER/LOWER ORDER ANCHOR



## **PARAMETERS**

**Batting Average** 

Strike Rate

**Innings Batted** 

Avg. Balls Faced

**Batting Position** 

**Innings Bowled** 

## **DESCRIPTION**

Average runs scored in an innings

No of runs scored per 100 balls

Total Innings batted

Average balls faced by the batter in an innings Order In

which the batter played

Total Innings Bowled by the bowler

# **CRITERIA**

> 25

> 130

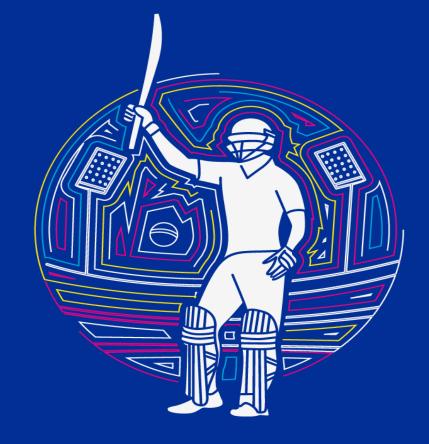
> 3

> 12

**> 4** 

> 1

# ALL-ROUNDERS/LOWER ORDER



## **PARAMETERS**

Batting Average

Strike Rate

Innings Batted

**Batting Position** 

Innings Bowled

**Bowling Economy** 

**Bowling Strike Rate** 

# **DESCRIPTION**

Average runs scored in an innings

No of runs scored per 100 balls

Total Innings batted

Order in which the batter played

Total Innings bowled

Average runs allowed per over

Average no. of balls required to take a wicket

# **CRITERIA**

> 15 >

140

> 2

> 4

**> 2** 

< 7

< 20

# SPECIALIST FAST BOWLERS



# **PARAMETERS**

**Innings Bowled** 

**Bowling Economy** 

**Bowling Strike Rate** 

**Bowling Style** 

**Bowling Average** 

Dot Ball %

# **DESCRIPTION**

Total Innings bowled

Average runs allowed per over

Average no. of balls required to take a wicket

Bowling style of the player

No. of runs allowed per wicket

% of dot balls bowled

# **CRITERIA**

> 4

< 7

< 16

= "%Fast%"

< 20

> 40

### WHO WILL BE INTERESTED?

# **Team Owners**

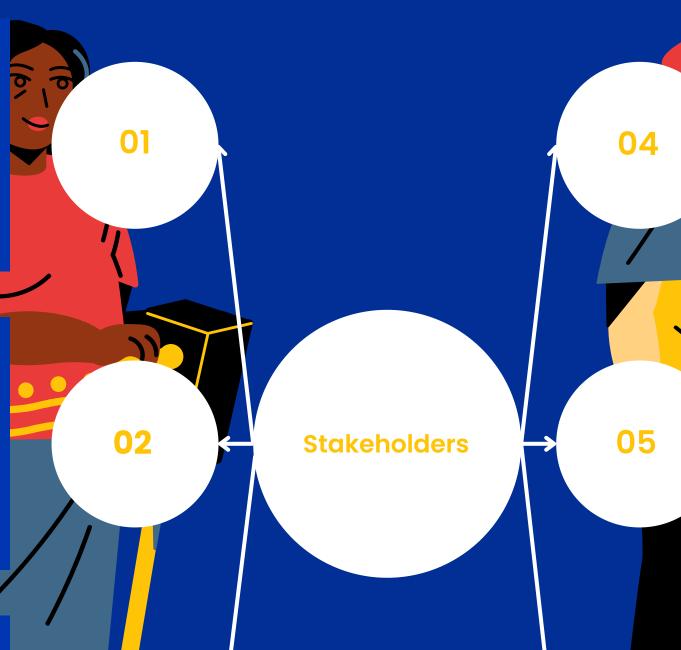
The owners of the new cricket team will be invested in the team's performance and will want to ensure that their investment is successful. They will be interested in the analytics behind player selection to ensure that the team has the best possible chance of success in the IPL.

# **Fans**

Cricket fans are passionate about their sport and are always interested in seeing their team perform well. Fans will be interested in the analytics behind player selection as they want to see the best players on the field and a team that is competitive.

# Coaches

The coaches of the cricket team will be interested in the analytics behind player selection to ensure that they have the best possible team to work with. They will be interested in the statistics and performance data of the players to help them make informed decisions about who to select for each position.



# **Sponsors**

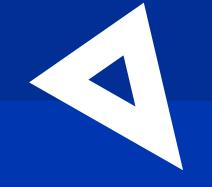
Sponsors of the cricket team will be interested in the team's performance and success in the IPL. They will want to see a well-balanced and competitive team, which can increase their brand exposure and help them reach a wider audience.

# Media

The media, including sports journalists and broadcasters, will be interested in the analytics behind player selection as they report on the team's performance and progress in the IPL. They will be interested in the reasons behind player selection, and the data-driven approach taken to create the team.

# Other Teams in an Event

Other teams may also be interested in the analytics behind player selection, as they will want to stay competitive and ensure that they have the best team possible to face off against the new team. They may also be interested in analyzing the new team's approach to analytics and incorporating similar strategies into their own team selection process.







# THANKYOU



So, in the world of sports, data is king. But it's only when we transform it into actionable insights that we truly reign supreme.

