

IPL Data Analysis Project

```
In [1]: import pandas as pd  
import plotly.graph_objects as go  
import plotly.express as px
```

```
In [2]: data = pd.read_csv("IPL 2022.csv")
```

In [3]: data

Out[3]:

	match_id	date	venue	team1	team2	stage	toss_winner	toss_decision	first_ings_score	first_ings_wkts	second_ings_score	second_ings_wkts	match_winner	won_by	m
0	1	March 26,2022	Wankhede Stadium, Mumbai	Chennai	Kolkata	Group	Kolkata	Field	131	5	133	4	Kolkata	Wickets	
1	2	March 27,2022	Brabourne Stadium, Mumbai	Delhi	Mumbai	Group	Delhi	Field	177	5	179	6	Delhi	Wickets	
2	3	March 27,2022	Dr DY Patil Sports Academy, Mumbai	Banglore	Punjab	Group	Punjab	Field	205	2	208	5	Punjab	Wickets	
3	4	March 28,2022	Wankhede Stadium, Mumbai	Gujarat	Lucknow	Group	Gujarat	Field	158	6	161	5	Gujarat	Wickets	
4	5	March 29,2022	Maharashtra Cricket Association Stadium,Pune	Hyderabad	Rajasthan	Group	Hyderabad	Field	210	6	149	7	Rajasthan	Runs	
...	
69	70	May 22,2022	Wankhede Stadium, Mumbai	Hyderabad	Punjab	Group	Hyderabad	Bat	157	8	160	5	Punjab	Wickets	
70	71	May 24,2022	Eden Gardens, Kolkata	Gujarat	Rajasthan	Playoff	Gujarat	Field	188	6	191	3	Gujarat	Wickets	
71	72	May 25,2022	Eden Gardens, Kolkata	Banglore	Lucknow	Playoff	Lucknow	Field	207	4	193	6	Banglore	Runs	
72	73	May 27,2022	Narendra Modi Stadium, Ahmedabad	Banglore	Rajasthan	Playoff	Rajasthan	Field	157	8	161	3	Rajasthan	Wickets	
73	74	May 29,2022	Narendra Modi Stadium, Ahmedabad	Gujarat	Rajasthan	Final	Rajasthan	Bat	130	9	133	3	Gujarat	Wickets	

74 rows × 20 columns



In [4]:

data.head()

Out[4]:

	match_id	date	venue	team1	team2	stage	toss_winner	toss_decision	first_ings_score	first_ings_wkts	second_ings_score	second_ings_wkts	match_winner	won_by	ma
0	1	March 26,2022	Wankhede Stadium, Mumbai	Chennai	Kolkata	Group	Kolkata	Field	131	5	133	4	Kolkata	Wickets	
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The dataset contains all the information needed to summarize the story of IPL 2022 so far. So let’s start by looking at the number of matches won by each team in IPL 2022

Number of Matches Won by each Team in IPL 2022

```
In [5]: figure = px.bar(data, x = data['match_winner'], title = "number of matches won in IPL 2022")
figure.show()
```



So, currently, Gujrat is leading the tournament by winning eight matches. It is an achievement as a new team for Gujrat in IPL. Now let’s see how most of the teams win. Here we will analyze whether most of the teams win by defending (batting first) or chasing (batting second):

Number of Matches Won by Defending or Chasing

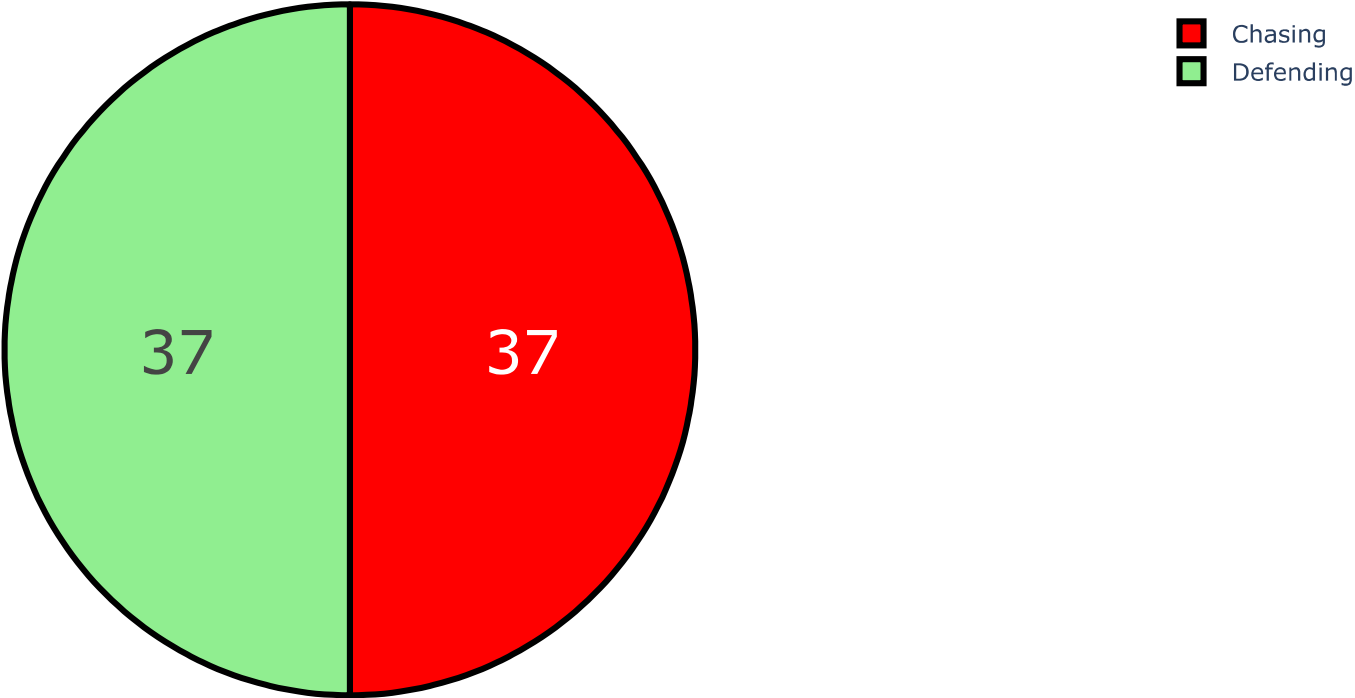
```
In [6]: #pie chart
data['won_by'] = data['won_by'].map({'Wickets': 'Chasing', 'Runs': 'Defending'})

won_by = data['won_by'].value_counts()
label = won_by.index
counts = won_by.values

colors = ["red", "lightgreen"]

fig = go.Figure(data = [go.Pie(labels = label, values = counts)])
fig.update_layout(title_text = "Number of matches won by Chaseing Or defending")
fig.update_traces(hoverinfo = 'label+percent', textinfo = 'value', textfont_size = 30,
                  marker = dict(colors = colors, line = dict(color = 'black', width = 3)))
fig.show()
```

Number of matches won by Chaseing Or defending



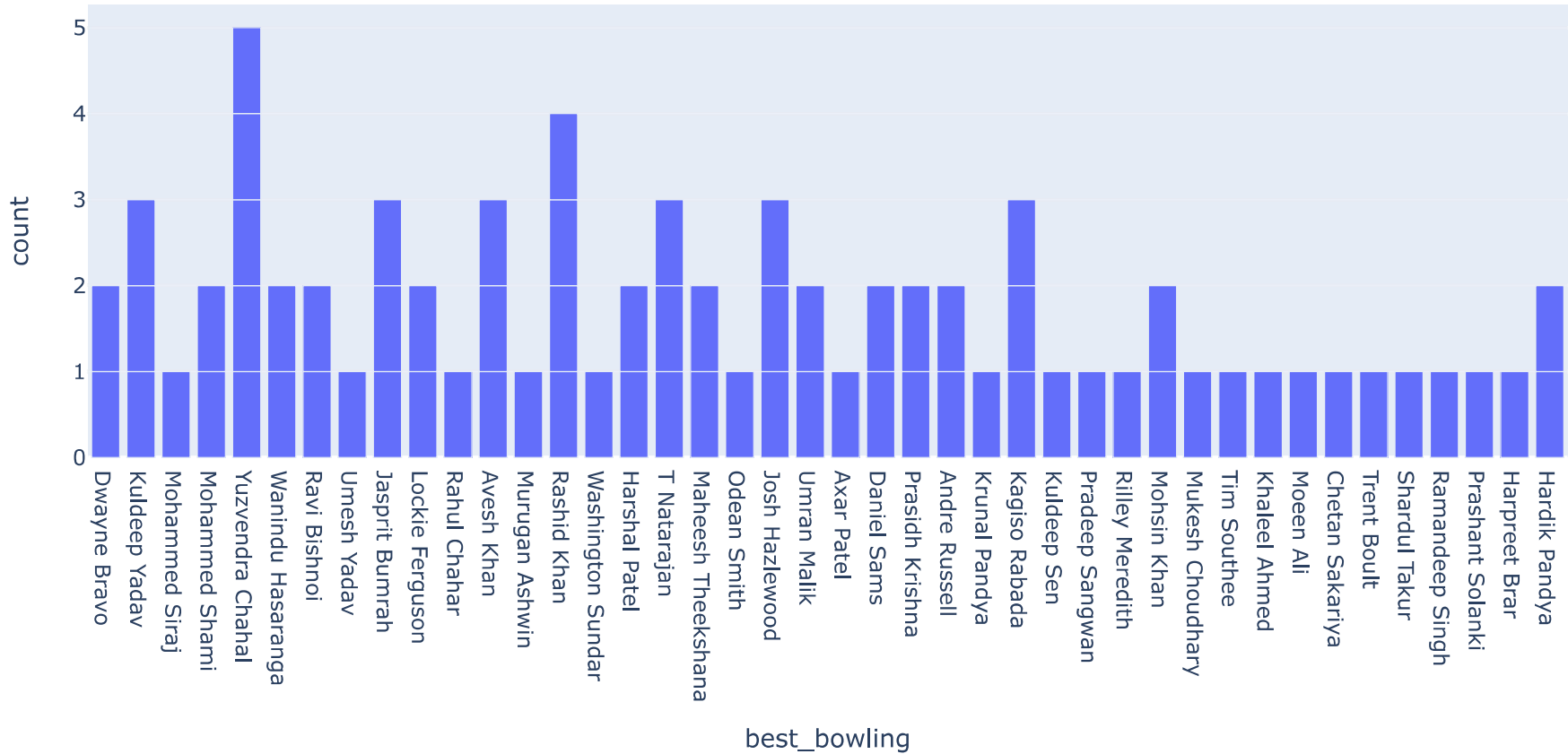
37 matches are won while chasing the target and 377 matches are won while defending the target.

Now let's have a look at the bowlers with the best bowling figures in most of the matches:

Best Bowler

```
In [7]: figure = px.bar(data, x = data['best_bowling'], title = "best bowler of ipl 2022")
figure.show()
```

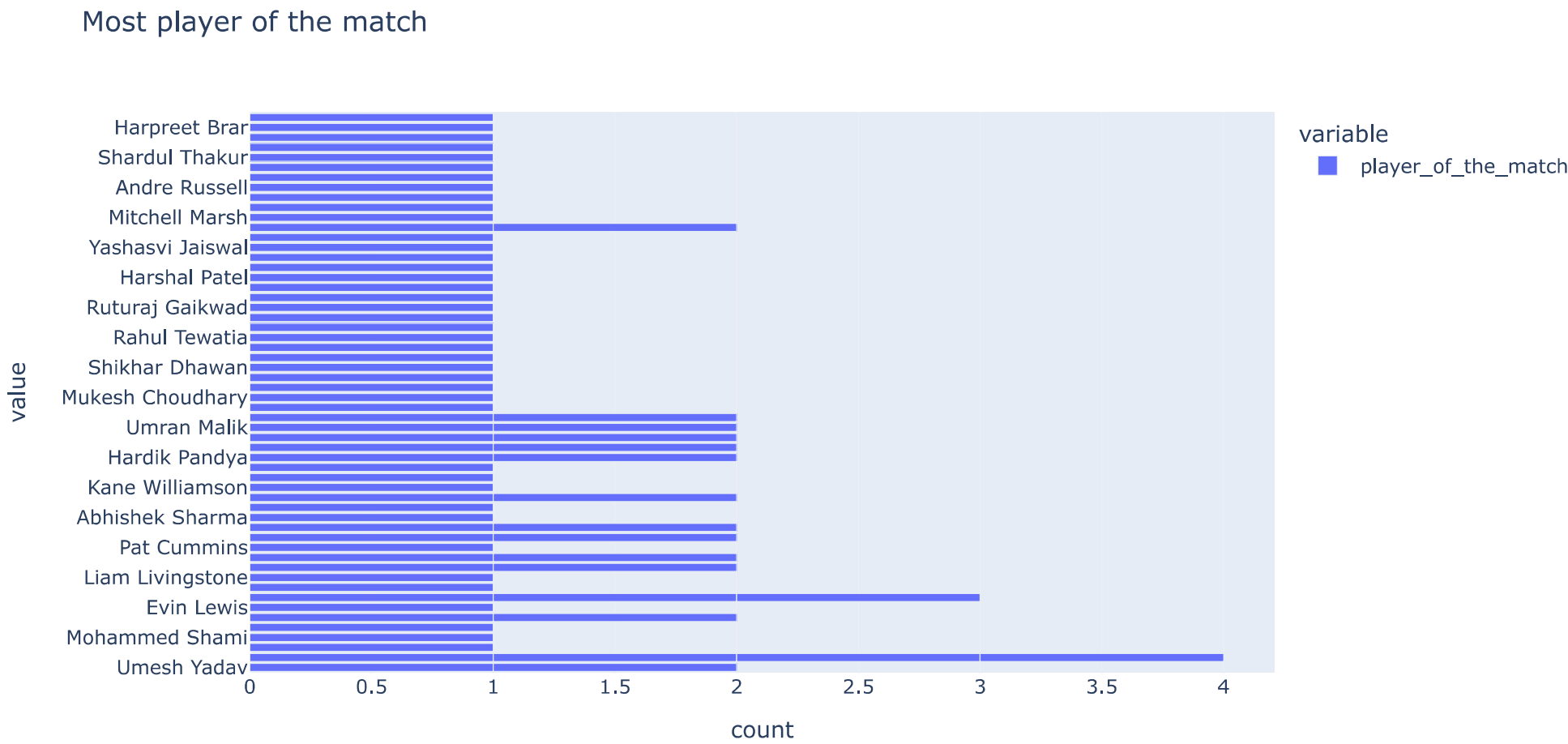
best bowler of ipl 2022



Yuzvendra Chahal having the best bowling figures in IPL 2022

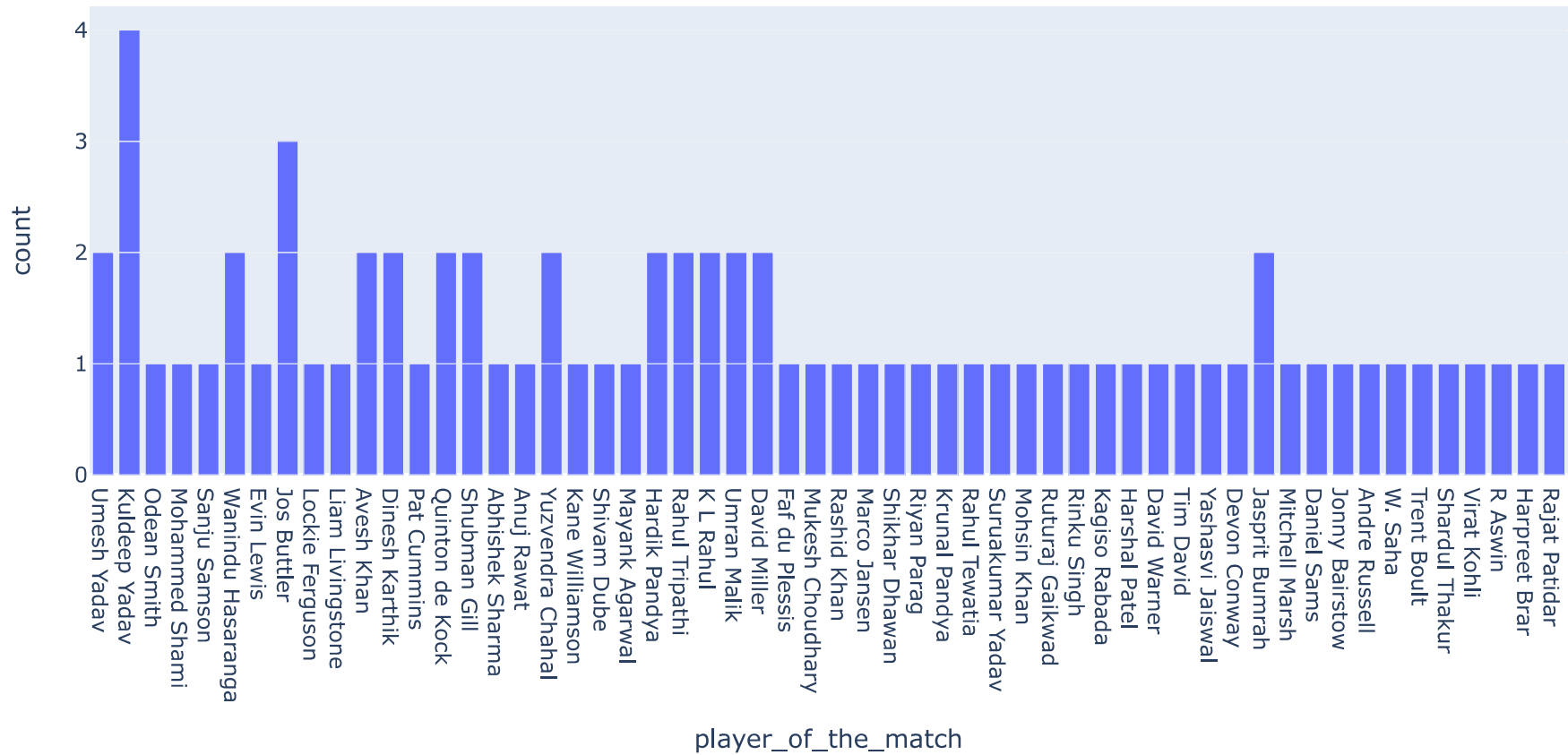
Now let’s have a look at the most player of the match awards in IPL 2022

```
In [8]: figure = px.bar(data, x = ['player_of_the_match'], title = " Most player of the match" )
figure.show()
```




```
In [9]: figure = px.bar(data, x = data['player_of_the_match'], title = " Most player of the match" )
figure.show()
```

Most player of the match

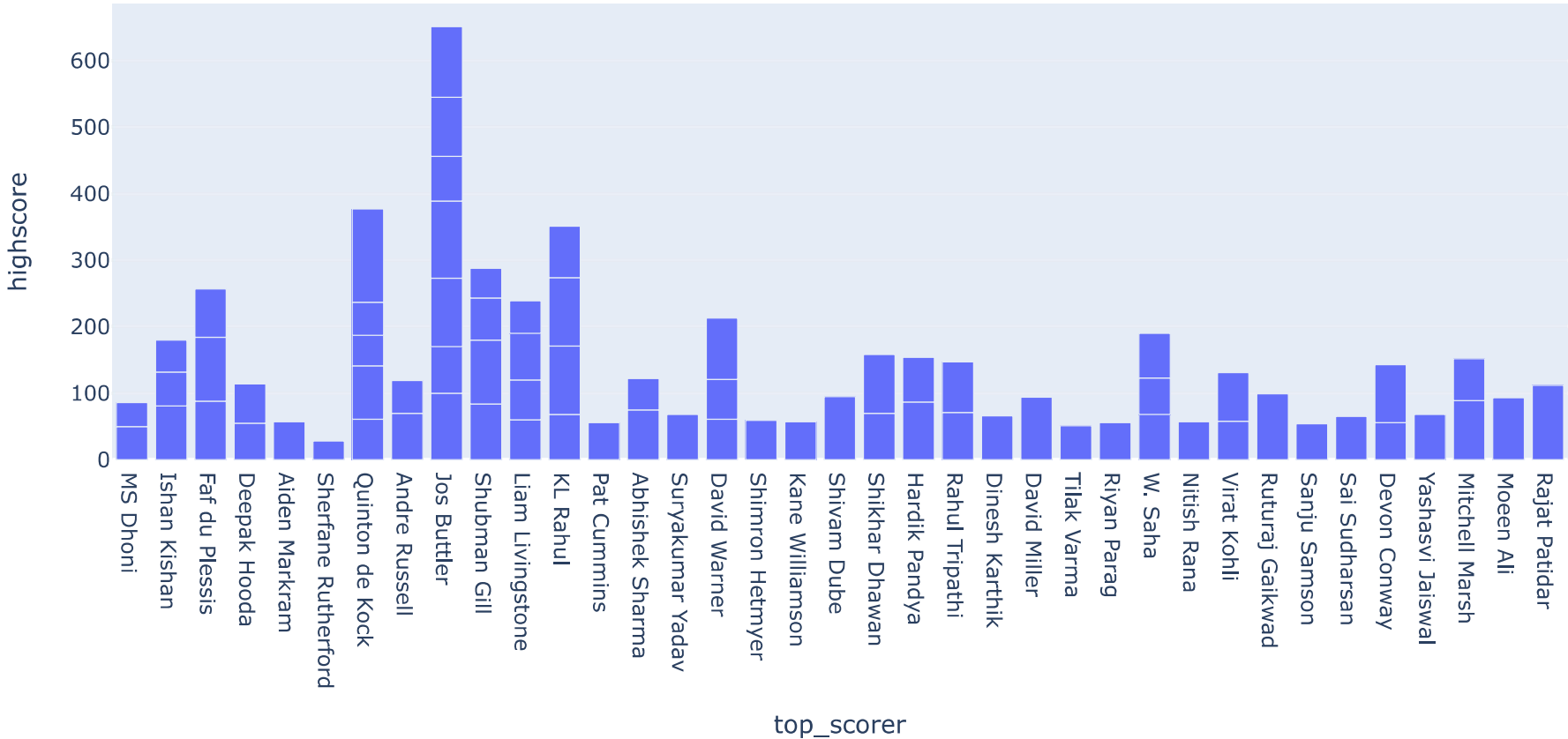


So Kuldeep Yadav has won the most player of the match in IPL 2022

Now let’s see the top scorers of most IPL 2022.

```
In [10]: figure = px.bar(data, x = data['top_scorer'], y = data['highscore'], title = "Top scorer of the match")
figure.show()
```

Top scorer of the match

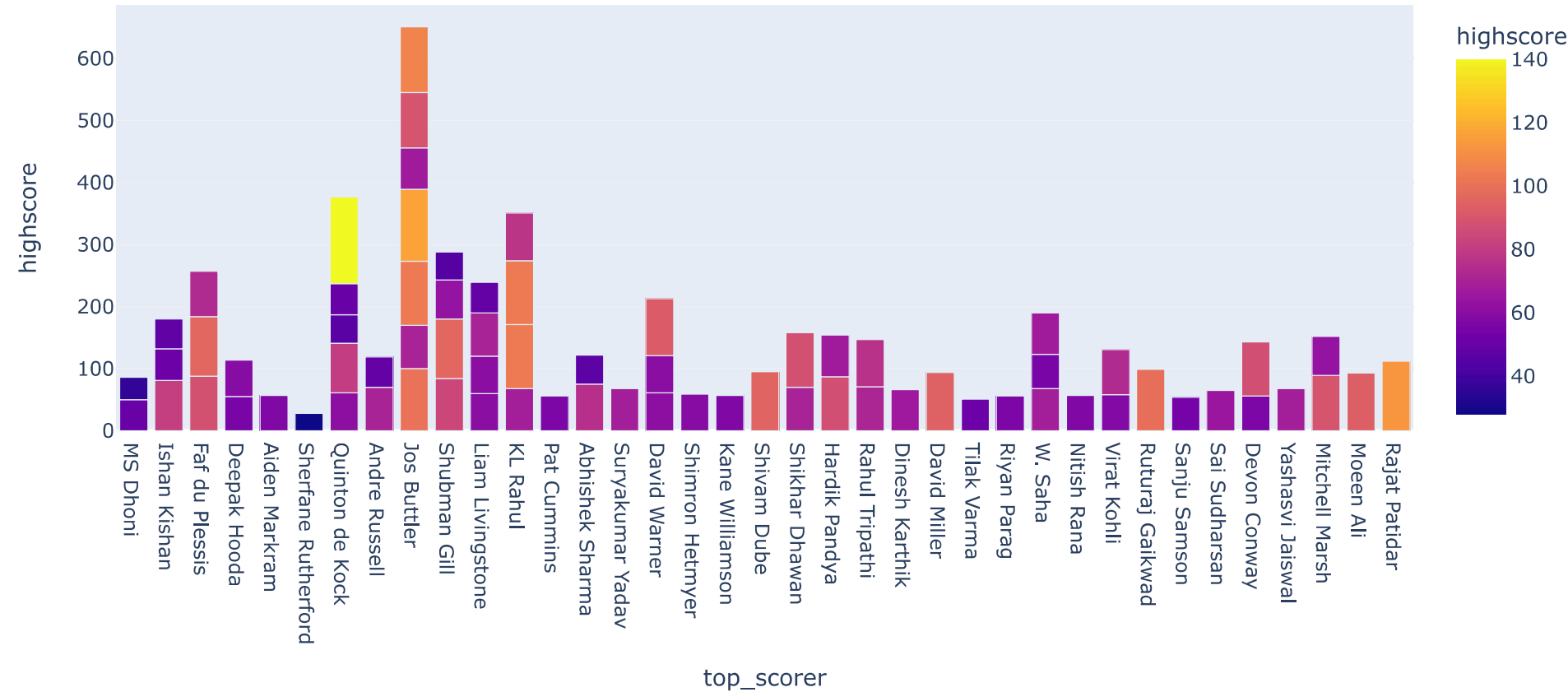


Jos Buttler is the top scorer of IPL 2022.

Let’s analyze it deeply by including the runs scored by the top scorers:

```
In [11]: figure = px.bar(data, x = data['top_scorer'], y = data['highscore'],
                        color = data['highscore'],title = "Top scorer of IPL 2022")
figure.show()
```

Top scorer of IPL 2022



In []:

In []: