

IPL AUCTION 2022-23

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Abstract : The IPL auction is a yearly event conducted by BCCI to auction the cricket players to various franchisees. A dedicated auctioneer controls the proceedings of this multi-day event. IPL franchises fiercely bid for the listed players. The auction ends with a settled squad for every IPL team. Teams complete the pre-auction analysis and work on the strategy to be employed during the auction. The remaining budget, the type of player needed, players' international commitment, injury history, his equation with the coach, everything matters when a franchise decides to bid for a player.

The analysis of IPL Auction 2022-23 using machine learning techniques has provided valuable insights into player valuation, team strategy, and the evolving dynamics of T20 cricket team building. The project report's findings serve as a powerful resource for IPL franchise owners, team management, and cricketing enthusiasts, offering data-driven guidance to optimize player acquisition decisions and enhance team performance in the fiercely competitive world of IPL cricket.

Keywords—*auction, franchise, data analysis*

I. INFORMATION ABOUT DATASET

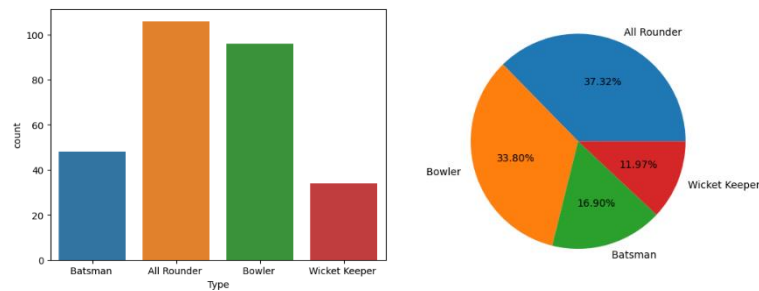
The dataset serves as a valuable resource for analyzing the trends in player valuations, identifying the distribution of nationalities among the players, understanding the preferred types of players for each team, and exploring the relationship between auction prices and player performance throughout the IPL 2022-23 season.

#	Column	Non-Null Count	Dtype
0	Season	284 non-null	int64
1	Name	284 non-null	object
2	Nationality	284 non-null	object
3	Type	284 non-null	object
4	Team	284 non-null	object
5	Price	284 non-null	int64

dtypes: int64(2), object(4)

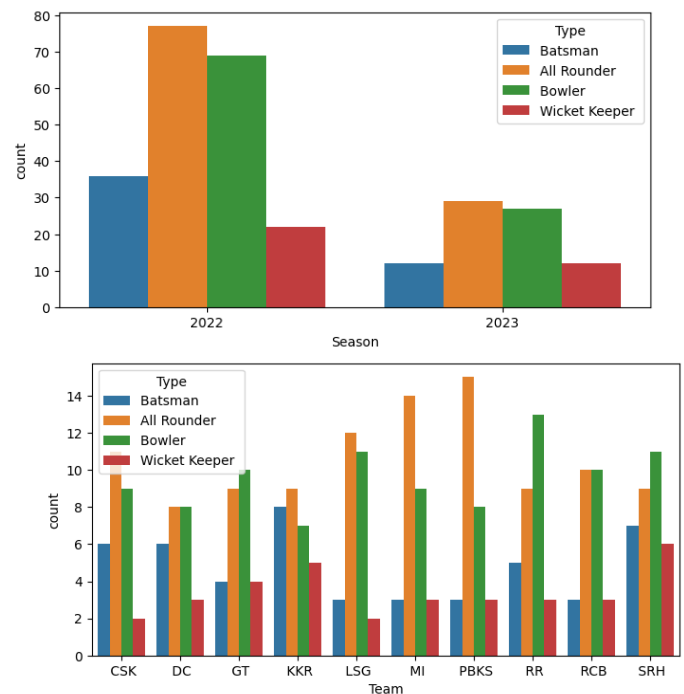
II. ANALYSIS OF NUMBER OF PLAYERS BELONGING TO A UNIQUE TYPE

From the dataset by analyzing the players type by matplotlib.pyplot we can see through barplot and pie chart that 37.32% of All Rounder, 33.80% of Bowler, 16.90% Batsman and 11.97% Wicket Keeper.



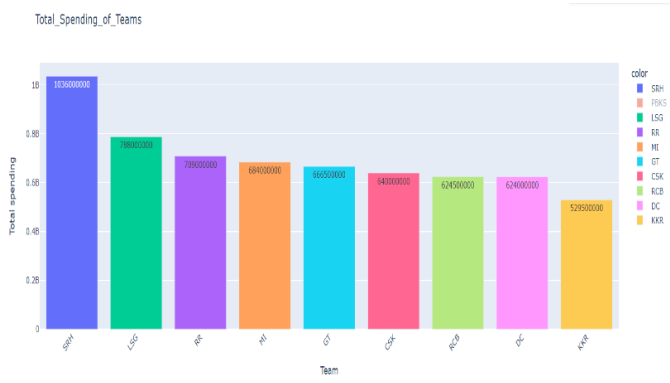
i) ANALYSIS OF NUMBER OF PLAYERS BELONGING TO A UNIQUE TYPE IN EACH SEASON(2022-23) & EACH TEAM

the analysis of the number of players belonging to a unique type in each season (2022-23) and each team provides a comprehensive understanding of team composition strategies and player preferences.

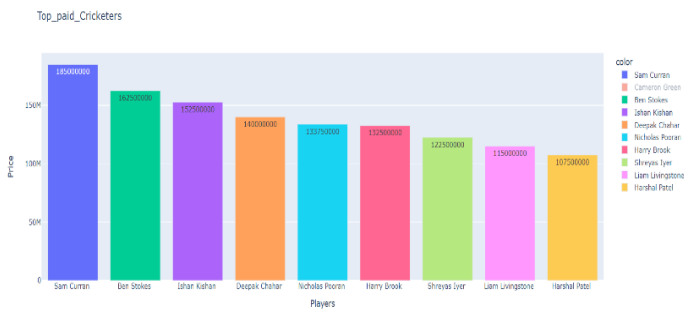


III. ANALYSIS OF TEAM WISE INVESTMENT IN BOTH THE SEASONS

The analysis of team-wise investment in both seasons (2022 and 2023) of the IPL Auction provides crucial insights into each franchise's financial strategies and spending patterns. By closely examining the dataset, we were able to uncover how different teams allocated their budgets in pursuit of building competitive squads. We can see that SRH spent more money in 2022-2023 and KKR spent the least amount .



IV. ANALYSIS OF TOP AND LEAST PAID CRICKETERS

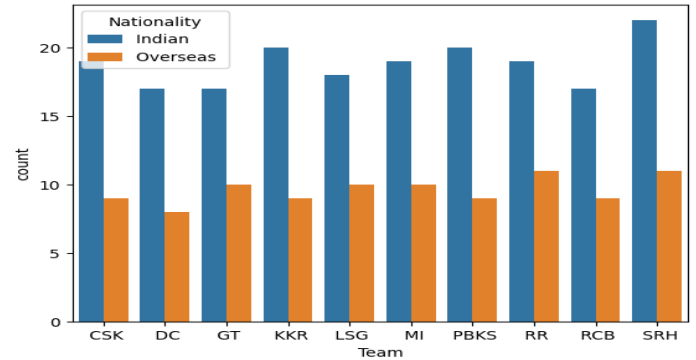


The IPL auction for the season 2022 and 2023 witnessed intense bidding wars as franchises vied to secure the services of the most sought-after cricketers. The fervor reached unprecedented heights, resulting in ten players earning astronomical paychecks. Topping the list was the swashbuckling opener from the overseas, Sam Curran whose exceptional leadership skills and prolific run-scoring abilities earned him a staggering contract. The above bar-plot mentions the name of the top 10 paid super extraordinarily talented cricketers. There were many players who received a lower contract . The chart below mentions the name of least 10 paid players .



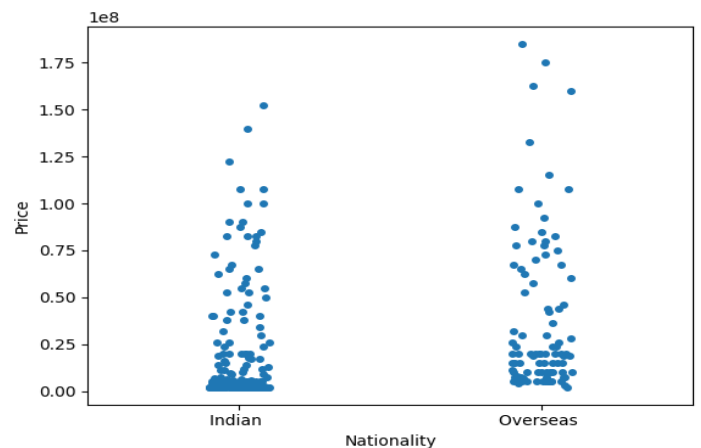
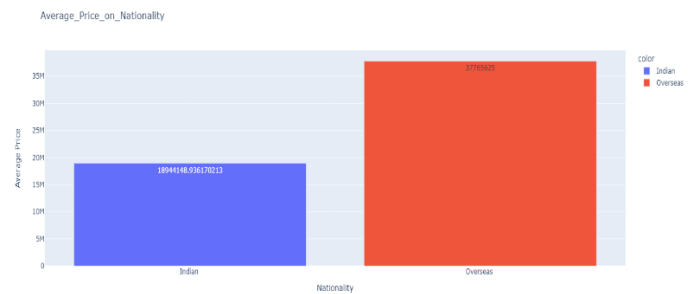
V. ANALYSIS OF NATIONALITY OF PLAYERS IN EACH TEAM

From the visualization of the bar graph we can easily conclude that in every team , Indian players were more than overseas players .



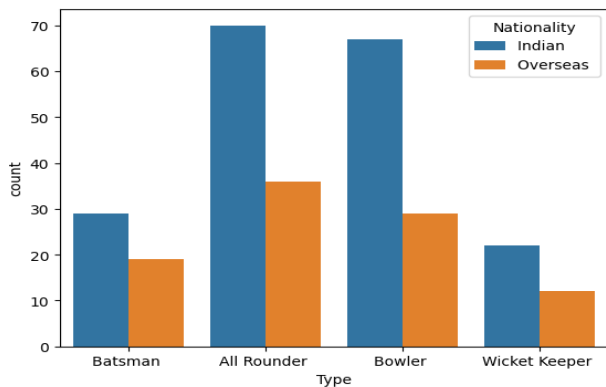
VI. ANALYSIS OF PLAYERS PRICE ACCORDING TO NATIONALITY

From the visualization of the graphs we can conclude that the average price of the overseas players is more than that of the Indian players . We can also visualize the price distribution among the Indian and overseas players .



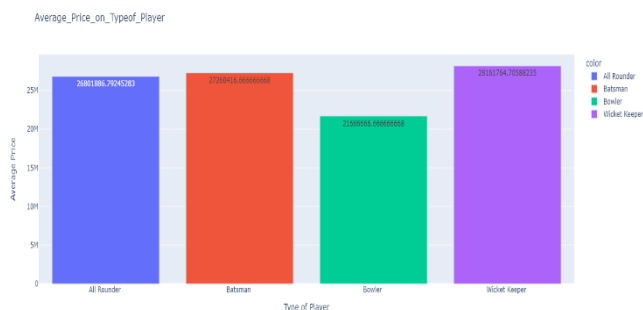
VII. ANALYSIS OF THE TYPE OF PLAYER WITH RESPECT TO NATIONALITY

From the visualization of the bar graph we can conclude that, in each unique type , Indian players are more than overseas players .



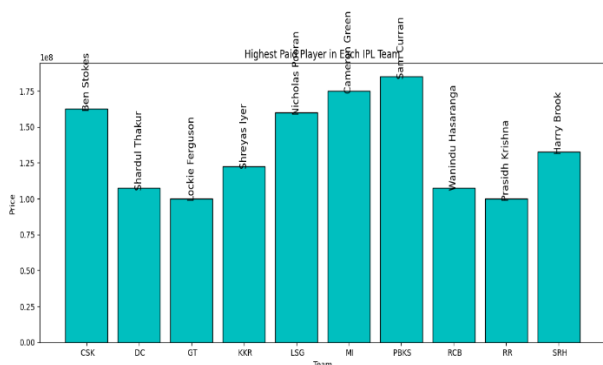
VIII. ANALYSIS OF AVERAGE PLAYER PRICE ACCORDING TO THE PLAYER TYPE

From the bar graph we can visualize that the average amount spent on wicket keepers is highest followed by batsman, all-rounders and at last bowlers who's average price is the least.



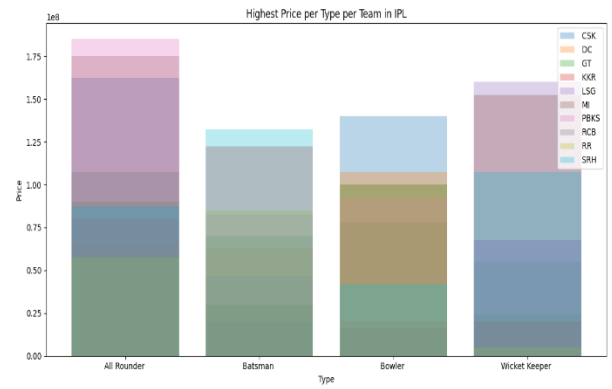
IX. ANALYSIS OF THE HIGHEST PAID PLAYERS IN EACH TEAM

	Team	Name	Price
0	CSK	Ben Stokes	162500000
1	DC	Shardul Thakur	107500000
2	GT	Lockie Ferguson	100000000
3	KKR	Shreyas Iyer	122500000
4	LSG	Nicholas Pooran	160000000
5	MI	Cameron Green	175000000
6	PBKS	Sam Curran	185000000
7	RCB	Wanindu Hasaranga	107500000
8	RR	Prasidh Krishna	100000000
9	SRH	Harry Brook	132500000



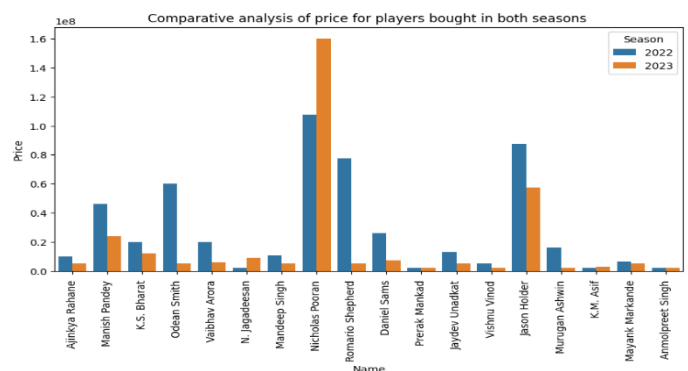
X. ANALYSIS OF THE AMOUNT SPENT ON EACH PLAYER TYPE BY EACH TEAM

From the graph we can visualize how different teams have spent their money for buying different types of player, like we can easily visualize that CSK has spent more money on bowlers where as SRH has spent more money on batsman than any other team and so on.



XI. COMPARATIVE ANALYSIS OF PRICE OF PLAYERS BROUGHT IN BOTH 2022 AND 2023

From the bar plot we can visualize that, except Nicolas Pooran, all other players were brought in lower price in 2023 as compared to their price in 2022.



ACKNOWLEDGEMENT

We would like to express my deepest gratitude and appreciation to all those who have contributed to the successful completion of this project working on the IPL auction dataset. Without their support, dedication, and expertise, this endeavour would not have been possible.

First and foremost, we extend my heartfelt thanks to my project supervisor and mentors for their invaluable guidance, encouragement, and constructive feedback throughout the journey. Their expertise and insights have been instrumental in shaping the direction of this project and ensuring its quality and relevance.

We are also grateful to the creators and maintainers of the IPL auction dataset for making this valuable resource available to researchers and enthusiasts. Their efforts in collecting and

organizing the data have been instrumental in the successful execution of our analyses and findings .

CONCLUSION

In conclusion, the IPL auction dataset serves as a valuable resource for cricket enthusiasts, team strategists, and analysts alike. It exemplifies the excitement, passion, and competitiveness that surround the Indian premier league, and how each auction cycle reshapes the fortunes of the teams and players involved. As the league continues to evolve, this data will remain a vital tool for understanding the ever-changing dynamics of the IPL and its impact on the world of cricket .

REFERENCES

- [1] <https://www.kaggle.com/search?q=ipl+dataset>
- [2] <https://seaborn.pydata.org/>
- [3] <https://www.tableau.com/learn/articles/data-visualization>

PORTFOLIO LINK

https://colab.research.google.com/drive/14f2MXW1G-YfBG3QaR0hwZf7rrdVe_CIF?usp=drive_link#scrollTo=Aae9h1x9jiGx