PROJECT OF ANALYSING DATA FOR IPL 2024 AUCTION USING PYTHON

In order to put up competitive teams, cricket teams carefully bid for players in the IPL (Indian Premier League) 2024 auction, which was an exciting event. Using the techniques employed in a Python-based analysis, I have presented intriguing findings extracted from the auction data in this investigation.

Data Exploration and Analysis

Exploring the Dataset:

I started my investigation by looking at a large dataset that compiles important details regarding players purchased during the IPL 2024 auction. This information provides insight into player demographics, club acquisitions, player kinds, and the financial investments made by each franchise. It is derived from the official records of the Indian Premier League.

Dataset:

https://github.com/DIVERGE646/IpI_2024_auction_data_analysis/blob/main/IPL2024_Auction.csv

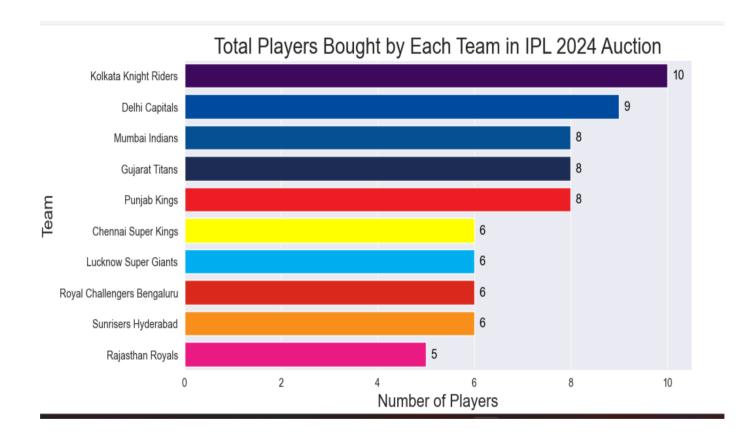
[23]:		PLAYER	NATIONALITY	ТҮРЕ	TEAM	PRICE PAID
	0	Daryl Mitchell	Overseas	All-Rounder	Chennai Super Kings	140000000
	1	Sameer Rizvi	Indian	Batter	Chennai Super Kings	84000000
	2	Shardul Thakur	Indian	All-Rounder	Chennai Super Kings	40000000
	3	Mustafizur Rahman	Overseas	Bowler	Chennai Super Kings	20000000
	4	Rachin Ravindra	Overseas	All-Rounder	Chennai Super Kings	18000000
	67	Travis Head	Overseas	Batter	Sunrisers Hyderabad	68000000
	68	Jaydev Unadkat	Indian	Bowler	Sunrisers Hyderabad	16000000
	69	Wanindu Hasaranga	Overseas	All-Rounder	Sunrisers Hyderabad	15000000
	70	Jhathavedh Subramanyan	Indian	Bowler	Sunrisers Hyderabad	2000000
	71	Akash Singh	Indian	Bowler	Sunrisers Hyderabad	2000000

Distribution of Players Across Teams

The allocation of players (72 total) to the various teams is a key component of team-building in the IPL. Data visualisation techniques allow us to see which teams purchased how many players.

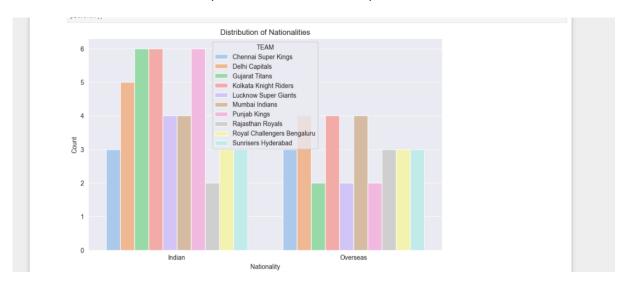
Total players bought in auction by different teams

[23]:	TEAM		
	Kolkata Knight Riders	10	
	Delhi Capitals	9	
	Gujarat Titans	8	
	Mumbai Indians	8	
	Punjab Kings	8	
	Chennai Super Kings	6	
	Lucknow Super Giants	6	
	Royal Challengers Bengaluru	6	
	Sunrisers Hyderabad	6	
	Rajasthan Royals	5	
	Name: count, dtype: int64		



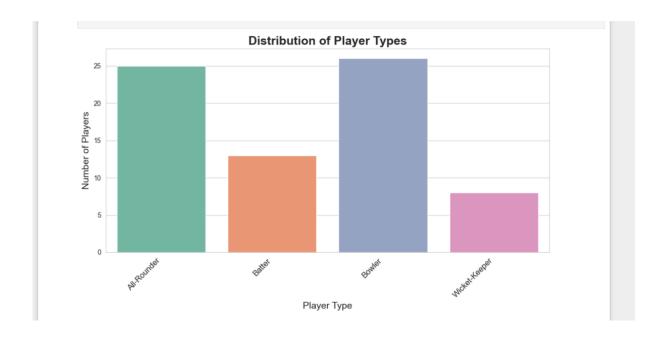
Nationality Distribution of Players (Indian or Overseas)

Teams in the IPL 2024 include a wide range of Indian and foreign players, which gives the competition a more international feel. Players from other countries contribute special talents, enhancing the competition with world-class cricket. This combination emphasises the IPL's contribution to cross-cultural cooperation and talent development.



Players by Type: Bowler, All-Rounder, Batter, and Wicket-Keeper

Teams were searching for players for the following important positions in the IPL 2024 auction: bowlers, all-rounders, batters, and wicketkeepers. All-rounders are excellent at both bowling and batting, while bowlers concentrate on limiting runs and taking wickets. Fielding behind the stumps is handled by wicketkeepers, while batters are essential for scoring runs. The auctions are an engaging demonstration of talent acquisition and team building because of the variety of player categories that provide team strategies depth.



Total Auction Amount Spent by Each Team

The financial expenditures made by teams during the auction are shown in a bar chart that shows the total amount spent by each club in the IPL 2024. The total money spent by a team on player acquisitions is shown by each bar. The auction amounts in Indian Rupees (INR) are displayed on the x-axis with clear tick labels. The expenditures of several teams are graphically compared in the bar chart, which highlights noteworthy investments and includes annotations inside each bar that provide the precise amount spent. This graphic highlights the financial dynamics and competitiveness of the IPL auction process in addition to offering information into team spending trends.



The total amount paid in the IPL 2024 auction is valued at ₹2,304,500,000.00 in Indian Rupees, which converts to approximately \$27,588,890.22 in US Dollars or \$27.59 million USD. This substantial expenditure reflects the significant financial transactions involved in acquiring players for the teams. The conversion into USD highlights the global scale and economic impact of the IPL auction, demonstrating the substantial investments made by teams to build competitive squads for the season.

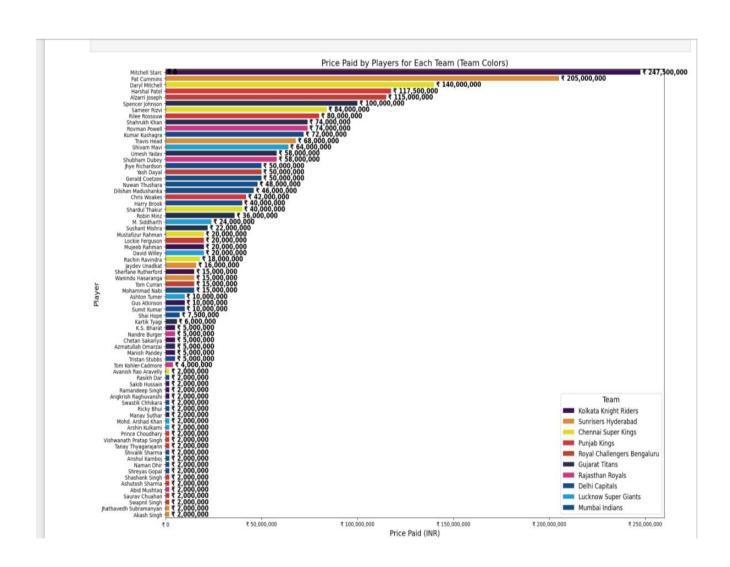
Total Price PAID value in INR: ₹ 2304500000.00 Total Price PAID value in USD: \$ 27588890.22 Total Price PAID value in Million USD: \$ 27.59

The amount paid by each team for every player.

The IPL 2024 auction was a thrilling occasion where teams spent big to enhance their squads for the upcoming season. The choices of players made by each team and the money spent on them demonstrate strategic planning to create a strong team. An example is Mitchell Starc's unprecedented purchase by Kolkata Knight Riders for ₹24.75 crore, highlighting the importance of fast bowlers in T20 cricket.

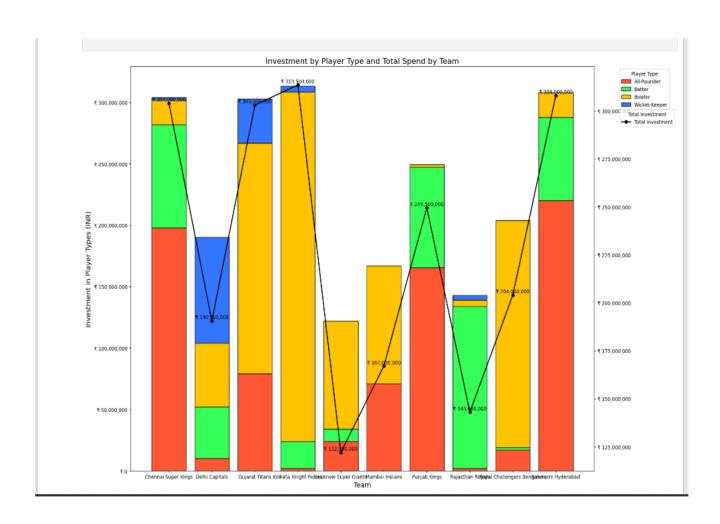
The emphasis on all-rounders and fast bowlers highlights their significance in the T20 format, where being versatile and having the ability to win matches are crucial. Teams were ready to spend a lot of money on seasoned players who had shown they could succeed in the IPL. Unexpected purchases, like Chennai Super Kings' acquisition of Daryl Mitchell for ₹14 crore, brought excitement to the auction.

In general, the IPL 2024 auction displayed teams making clever purchases of players, paving the way for exciting cricket games and fierce rivalries during the entire season. It will be interesting to observe how the player choices and financial investments affect the performance and results of each team during the tournament.



Show the player's pricing by type: batter, wicketkeeper, and all-rounder.

Insights into the value of particular skill sets in T20 cricket are provided by the IPL 2024 price display for players categorised by their kinds, such as All-Rounder, Batter, and Wicket-Keeper. Because of their versatility on the field, All-Rounders, who were renowned for their ability to contribute with both bat and ball, command high fees. Their significance in the game was highlighted by the high value placed on batters, who are essential for scoring runs and sustaining innings. Wicket-Keepers, who field behind the stumps, attracted notice for their tactical contribution to the team. You may learn more about team tactics and player values in the IPL 2024 auction by looking at the prices paid for players according to their kinds.



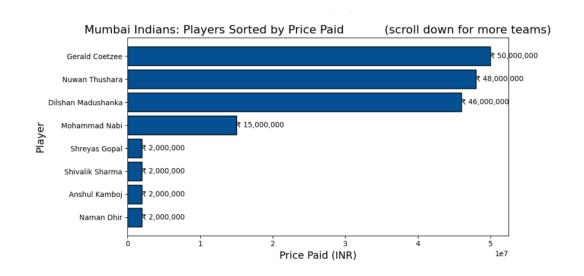
Show players with the highest and lowest prices paid by team.

The player price paid display, arranged from highest to lowest by team, provides insightful information on player values and team investments. This arrangement displays the players that each team believes are most valuable to their individual teams, ranking the top acquisitions made by each side according to financial commitment. A comprehensive image of each team's priorities and tactics when putting together their squads for the forthcoming season can be obtained by looking at the list from highest to lowest price paid. In addition to highlighting the auction's financial dynamics, this research provides context for comprehending the competitive environment and individual contributions within each IPL 2024 club.

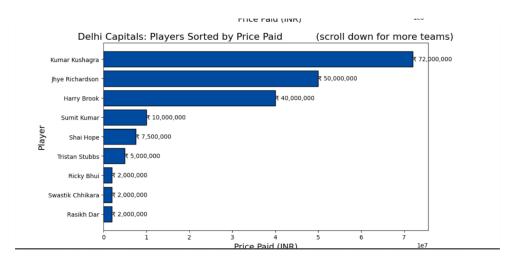
Chennai Super kings PlayChers sorted by price paid



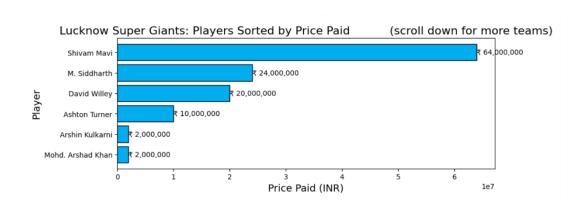
Mumbai Indians Players sorted by price paid



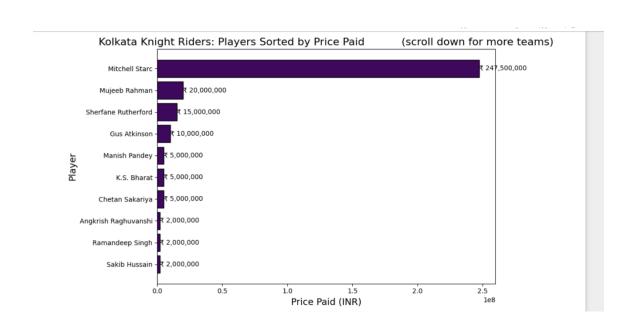
Delhi Capitals Players sorted by price paid



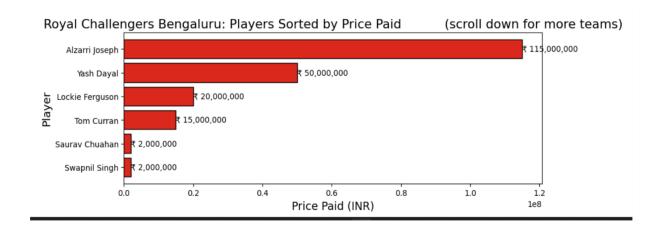
Lucknow Super Giants Players sorted by price paid



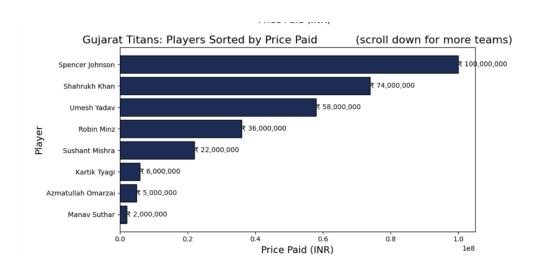
Kolkata Knight Riders Players sorted by price paid



Royal Challengers Bangalore Players sorted by price paid



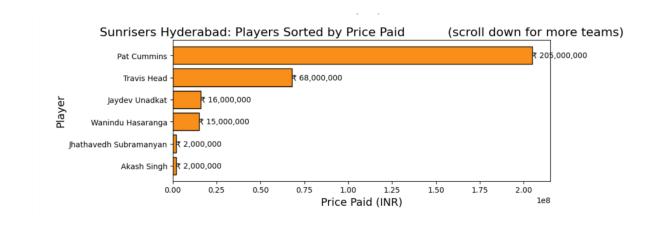
Gujarat Titans Players sorted by price paid



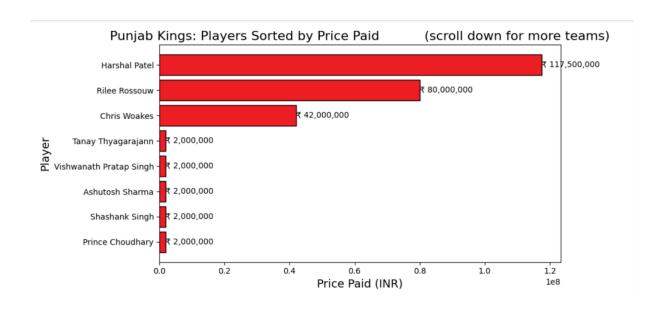
Rajasthan Royals Players sorted by price paid



Sunrisers Hyderabad Players sorted by price paid



Punjab Kings Players sorted by price paid



CONCLUSION

To summarize, the IPL 2024 auction insights present an intriguing story about team-building methods and the diversity found in global cricket. This examination, driven by data analysis techniques using Python, sheds light on the ever-changing environment of the league and the strategic approaches taken by various franchises.

Each team's tactic, whether emphasizing particular player categories or making well-thought-out investments, showcases their determination to excel in the forthcoming season.

The data indicates a vibrant blend of domestic and overseas players, as teams strategically position themselves to acquire individuals who can significantly impact the game. As the season progresses, it will be captivating to observe how these strategies manifest in actual performance on the field.

Ultimately, the IPL auction information provides insight into the construction of cricket teams, highlighting the league's popularity and the intelligence of team managers. This is particularly noteworthy during the current IPL 2024 season, which promises thrilling matches and fierce rivalry. Stay tuned to witness how events unfold in this season filled with excitement and competitive play!