

Future of International Cricket

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ABSTRACT

The Indian Premier League (IPL) and other T20 leagues' effects on world cricket are examined in this research report, along with any potential threats to established international formats. The study investigates how players' motivations are influenced by the lucrative nature and widespread attraction of franchise cricket, frequently prompting them to prioritise league play above national duty. It addresses issues with player fatigue, schedule problems, and the possible decline of Test and ODI cricket in addition to looking at the financial advantages, player development, and international reach of T20 leagues. The purpose of the research is to present a fair analysis of the changing dynamics between country and franchise cricket.

Keyword: - T20 Cricket Leagues Indian Premier League (IPL), Franchise for International Cricket Player Prioritization in Cricket, Athletic Finance, Threat for International Cricket, Future of Traditional Cricket

1. INTRODUCTION

With the launch of the Indian Premier League (IPL) in 2008, international cricket entered a revolutionary phase that brought with it unheard-of financial prospects and increased global awareness of the Twenty20 format. This study looks at how the Indian Premier League and other T20 leagues have changed the conventional format of international cricket. Although these leagues have greatly enhanced players' talent development and financial security, they have also brought up new difficulties. There are worries over the future of Test and One-Day International (ODI) cricket since more and more players are choosing their franchise obligations over their national responsibilities. This essay examines the financial advantages, player growth, and international appeal of T20 leagues in addition to concerns about player fatigue, scheduling problems, and the possible demise of cricket's conventional formats.

2. LITERATURE SURVEY

[1] Andy Clark et.al The paper examines how language symbols function in human cognition and reason, emphasizing how human-made structures shape spaces for reasoning and learning. It talks about surrogate scenarios—confined artificial contexts used to implement fundamental perception-action-reason processes in the absence of appropriate items. Diagrams, actual models, and tangible exterior symbols are a few examples. It is believed that language is the most powerful surrogate because it can be used to organize new spaces for fundamental learning and reason, as well as to substitute cheaply for undesirable behavioral consequences. The paper focuses on the upcoming difficulty of conceptualizing the function of symbols in dynamical cognitive processes and concerns the relevance of these new methods.

[2] Amlan Ghosh et.al The study suggests a novel method for choosing Indian players for the Indian Premier League (IPL) by looking at how well they fare in regional competitions. In sporting events like cricket, where the selection of players who perform better is critical, this is important for team selection. The goal of the study is to evaluate bowling and batting performance in order to guarantee that the right individuals are chosen.

[3] Haseeb Ahmad et.al In order to forecast future stars in cricket, particularly in the batting and bowling departments, this study employs machine learning approaches. Co-player, team, and opposing team ideas are all incorporated, and unique features and mathematical formulations are presented. For classification, two models are assessed and machine

learning techniques that are both discriminative and generative are employed. High accuracy in rising star prediction is demonstrated by the approach's experimental and category-wise validation. The International Cricket Council rankings are contrasted with the top 10 rising cricketers' rankings.

[4] Harsha P. Perera et.al The Duckworth-Lewis technique, which was first created for one-day cricket, has drawn criticism for being used to Indian Premier League games and international Twenty20 competitions. This study questions the applicability of the Duckworth-Lewis table for Twenty20 cricket and suggests an alternative resource table tailored particularly for the format. It also reveals notable discrepancies in scoring trends between Twenty20 cricket and One-Day cricket.

[5] Harshit Barot et.al This study examines the performance of batters and bowlers as well as team form in Indian Premier League (IPL) cricket matches. It includes variables like venue and toss in order to forecast match results. Using the Batting Index and Bowling Index, a fresh analysis of batting and bowling is suggested. Match predictions are made using machine learning techniques such as SVM, Logistic Regression, Random Tree, Random Forest, and Naive Bayes. The most accurate algorithms are Decision Tree and Logistic Regression, with 87% and 95% accuracy, respectively. The research emphasizes how crucial statistics and data are to cricket.

[6] Jhansi Rani P. et.al at order to estimate the price of a player's sale at the Indian Premier League Auction, this study used machine learning algorithms. Previous performance metrics were employed, including innings, wickets, runs, balls, and matches. Numerous models were tested, such as the Random Forest Regressor, K-Nearest Neighbors, Decision Tree Regressor, Linear Regression, Stochastic Logistic Regression, and Support Vector Regression. The algorithms support auctioneer judgements by providing quick, precise findings in less than three seconds.

[7] Mahmood Ul Haq et.al The study describes an augmented reality cricket broadcasting application that shows personal information about players based on facial recognition. The system employs a PAL-based model and the AdaBoost algorithm for face identification. It works better than other techniques like lighting and occlusion. Real-time player identification and statistics are provided by the technology, which improves cricket watching. Similar advantages might potentially be obtained by using it in other sports. The approach, findings, and consequences for sports broadcasting are covered in the paper.

[8] Nagaraj P et.al A well-known Twenty20 cricket competition featuring high-profile games and expensive contracts is the Indian Premier competition (IPL). In the ongoing discussion about IPL player compensation and performance, some contend that players are overpaid, while others defend their pay in light of the league's high level of competition and profitability. Using secondary sources, descriptive statistics, regression analysis, and regression analysis, this research study examines the link between compensation and performance in the IPL. The results, albeit they differ for each team, point to a beneficial link. This study adds to the current discussion and provides useful information for those involved in the cricket sector.

[9] P. Glaister et.al Through an examination of the connection between binomial distribution and cricket matches, this article hopes to spark interest in both sports, especially cricket, by concentrating on the scenario in which series results are predetermined and 'dead'.

[10] Philip Scarf et.al The timing of the third innings declaration in test cricket is examined in this essay. It uses information from recent matches to provide decision assistance tools. The tools use a multinomial logistic regression model to display match result probability depending on the match's location at a possible declaration point. The tools are offered for practical application in test matches after being implemented on a spreadsheet.

[11] Sarbani Roy et.al In a composite distributed environment, this research provides an alternative ranking system based on social network measurements and assessment. The rating of cricket players and nations by the cricket community using network centrality metrics is the main topic of this study. It suggests using Hadoop, a fully distributed framework, to facilitate graph processing and big data analysis. A well-liked programming paradigm for distributed data processing called MapReduce is ineffective when it comes to graph processing. For Hadoop, a different programming paradigm called Giraph is suggested. The importance of alternative ranking and the potency of the suggested framework in analyzing vast amounts of data are illustrated in the article through a real-world case study of the cricket community.

[12] Yogesh Kumar et.al A well-known Twenty20 cricket competition in India, the Indian Premier competition (IPL) takes place every year between March and May. Eight clubs from different Indian states or towns make up the league. As the most watched cricket league in the world, the IPL finished sixth in terms of average appearance in 2014. Machine learning techniques are applied to forecast outcomes and increase competitiveness. Twitter is a widely utilized social media network that is used to get feedback from 7 lakh users of the IPL-2020 website. The study analyses people's sentiments in three categories—neutral, positive, and negative—divides the comments into distinct teams according to hashtag features, and employs a number of algorithms to gauge accuracy. The study also assesses F1-score, precision, accuracy, and recall using 50,000 data points gathered from the 7 lakh tweets.

3. PROPOSED METHOD

3.1 Literature Review:

- Perform an exhaustive analysis of the body of research on the effects of the Indian Premier League and other T20 leagues on international cricket.
- Examine academic papers, business reports, and case studies to comprehend the cultural, developmental, and economic effects of T20 leagues.

3.2 Data Collection:

- Compile quantitative information from the IPL, other major T20 leagues, and international matches about player participation, earnings, and performance measures.
- To learn more about the opinions of players, coaches, and cricket board representatives on T20 leagues and international cricket, conduct qualitative data collection interviews with these individuals.

3.3 Economic Collection:

- To evaluate the financial effects of T20 competitions on players and cricket boards, examine financial records and player wage information.
- Compare T20 league income distribution and creation schemes to those of international cricket.

3.4 Player Performance Analysis:

- Compare player performance between international formats and T20 leagues using statistical approaches.
- Evaluate the impact that playing in T20 competitions has on players' performance in ODIs and Tests.

3.5 Surveys and Interviews:

- Survey cricket fans to find out how they feel about T20 leagues in comparison to older formats and what kind of matches they want to watch.
- To learn more about the reasons and experiences of the players who have opted to focus on T20 competitions, conduct in-depth interviews with a designated group of stakeholders.

3.6 Case Studies:

- Create case studies of well-known athletes who have chosen to play international cricket over T20 leagues.
- Examine these athletes' professional paths to see how their choices will affect them in the long run.

4. EXPERIMENTAL SETUP

4.1 Data Sources:

- **Player Performance Data:** Gather in-depth information on player performances from international cricket matches (ODIs and Tests) and other T20 leagues (such the PSL, CPL, BBL, and IPL).
- **Economic Data:** Acquire income data, salary information, and financial records from national cricket boards and franchise leagues.
- **Survey Data:** To obtain qualitative insights, poll players, coaches, cricket board officials, and fans.
- **Interviews:** Perform in-depth interviews with important cricket stakeholders, such as players who have competed internationally and in T20 competitions.

4.2 Performance Metrics:

- **Batting and Bowling Statistics:** Make use of performance indicators like average, economy rate, strike rate, and consistency in various forms.
- **Player Workload:** To evaluate the influence on performance and player fatigue, keep track of the number of games and hours played.

4.3 Economic Metrics:

- **Revenue Analysis:** Compare the money made by international cricket with that of T20 leagues.
- **Player Salaries:** Examine the variations in revenue between international matches and franchise leagues.

4.4 Survey and Interview Protocols:

- **Surveys:** Create surveys to find out people's opinions and preferences on international cricket and T20 leagues.
- **Interviews:** Create a semi-structured interview guide to investigate the viewpoints and experiences of authorities and players.

4.5 Statistical Tools:

- **Descriptive Statistics:** Describe and summarize the key elements of the information gathered.
- **Regression Analysis:** Analyze the connection between international cricket performance and involvement in T20 competitions.
- **Machine Learning Models:** For the purpose of forecasting patterns and player performance outcomes, utilize methods such as SVM, Random Forest, and Logistic Regression.

5. COMPARISON ANALYSIS**5.1 Player Performance Comparison:**

- **Performance in T20 Leagues vs. International Formats:** Players in T20 competitions can compare their batting and bowling statistics with their Test and ODI results.
- **Impact of League Participation on International Form:** Examine if and to what extent player performance in international cricket is impacted by involvement in T20 competitions.

5.2 Economic Impact Comparison:

- **Earnings from T20 Leagues vs. National Commitments:** Examine the salaries of players from international cricket and T20 competitions, paying particular attention to elite players and up-and-coming talent.
- **Revenue Distribution:** Compare the income sharing between cricket boards, players, and franchises in T20 competitions to that of international cricket.

5.3 Player Prioritization and Commitment:

- **Choice Analysis:** Examine the choices made by players who opt for T20 leagues over international cricket, taking into account aspects like as monetary rewards, longevity in the game, and individual preferences.
- **Impact on National Teams:** Analyze how player prioritization affects national teams' makeup and performance.

5.4 Policy Effectiveness:

- **Cricket Board Policies:** Examine the policies of various cricket boards with respect to player involvement in international cricket matches and T20 competitions.
- **Impact of Central Contracts:** Examine how well central contracts and other strategies work to keep players committed to playing for the national team.

5.5 Fan Engagement and Perceptions:

- **Viewership Trends:** T20 leagues and international cricket have different levels of fan involvement and viewership.
- **Survey Results:** Examine poll results to learn about fan inclinations and opinions on the relative significance of T20 leagues vs conventional formats.

6. TABLES AND GRAPHS

Comparison Between T20 Leagues and International Cricket			
Player	League	T20 League Earnings (USD)	International Earnings (USD)
Virat Kohli	Royal Challengers Bangalore (IPL)	\$2.4 million per season	\$1 million per year
Rohit Sharma	Mumbai Indians (IPL)	\$2.1 million per season	\$1 million per year
MS Dhoni	Chennai Super Kings (IPL)	\$2 million per season	Retired
Pat Cummins	Kolkata Knight Riders (IPL)	\$1.34 million per season	\$1.5 million per year
Glenn Maxwell	Royal Challengers Bangalore (IPL)	\$1.94 million per season	\$0.7 million per year
Rashid Khan	Gujarat Titans (IPL)	\$1.6 million per season	\$0.5 million per year
KL Rahul	Lucknow Super Giants (IPL)	\$2.1 million per season	\$0.7 million per year
Ben Stokes	Chennai Super Kings (IPL)	\$1.98 million per season	\$1.2 million per year
Jos Buttler	Rajasthan Royals (IPL)	\$1.38 million per season	\$0.8 million per year
Kieron Pollard	Mumbai Indians (IPL)	\$1.1 million per season	Retired

Figure 1

IPL Revenue by Year	
Year	Revenue (USD)
2023	\$1.4 billion
2022	\$1.1 billion
2021	\$900 million
2020	\$650 million
2019	\$800 million
2018	\$700 million
2017	\$500 million
2016	\$450 million
2015	\$420 million
2014	\$400 million

Figure 2

IPL Fan Engagement by Year				
Year	TV Viewership (Billion Impressions)	Digital Viewership (Billion Impressions)	Social Media Interactions (Billion)	Stadium Attendance (Million)
2023	3.5	1.8	1.2	4
2022	3.3	1.5	1	3.8
2021	3.6	1.4	0.9	0.0*
2020	3.3	1.2	0.8	0.0*
2019	2.7	0.9	0.6	3.5
2018	2.5	0.7	0.5	3.4
2017	2.4	0.5	0.4	3.3
2016	2.2	0.3	0.3	3.2
2015	2.1	0.2	0.2	3.1
2014	2	0.1	0.1	3

Figure 3

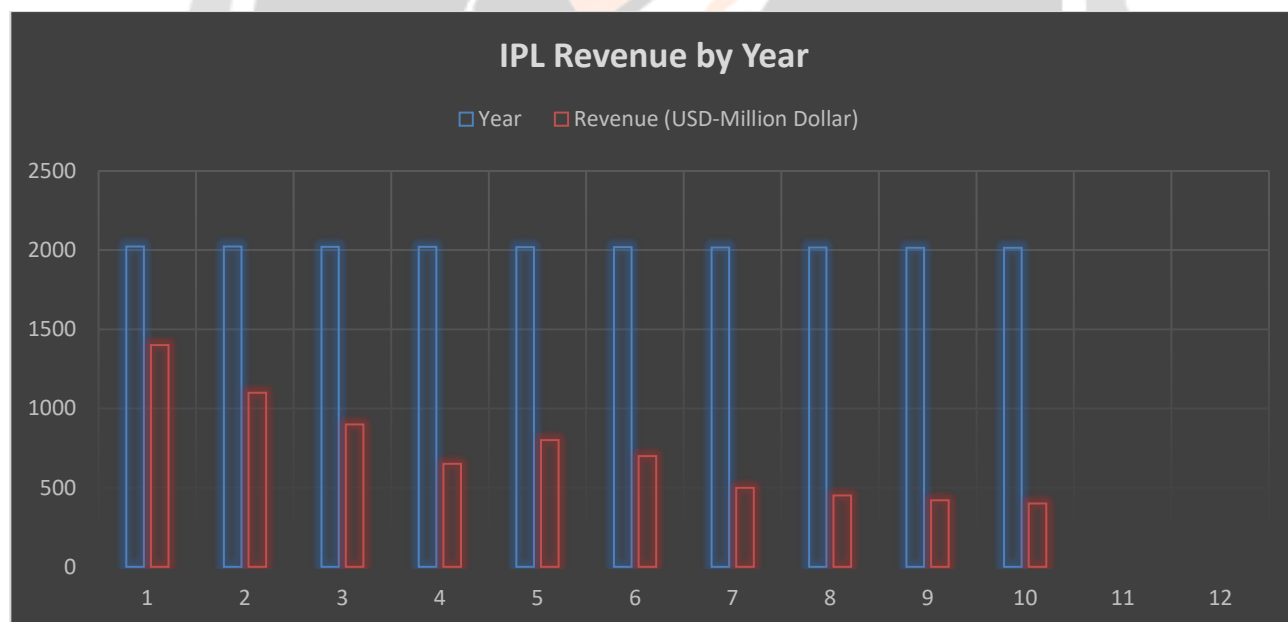


Figure 4

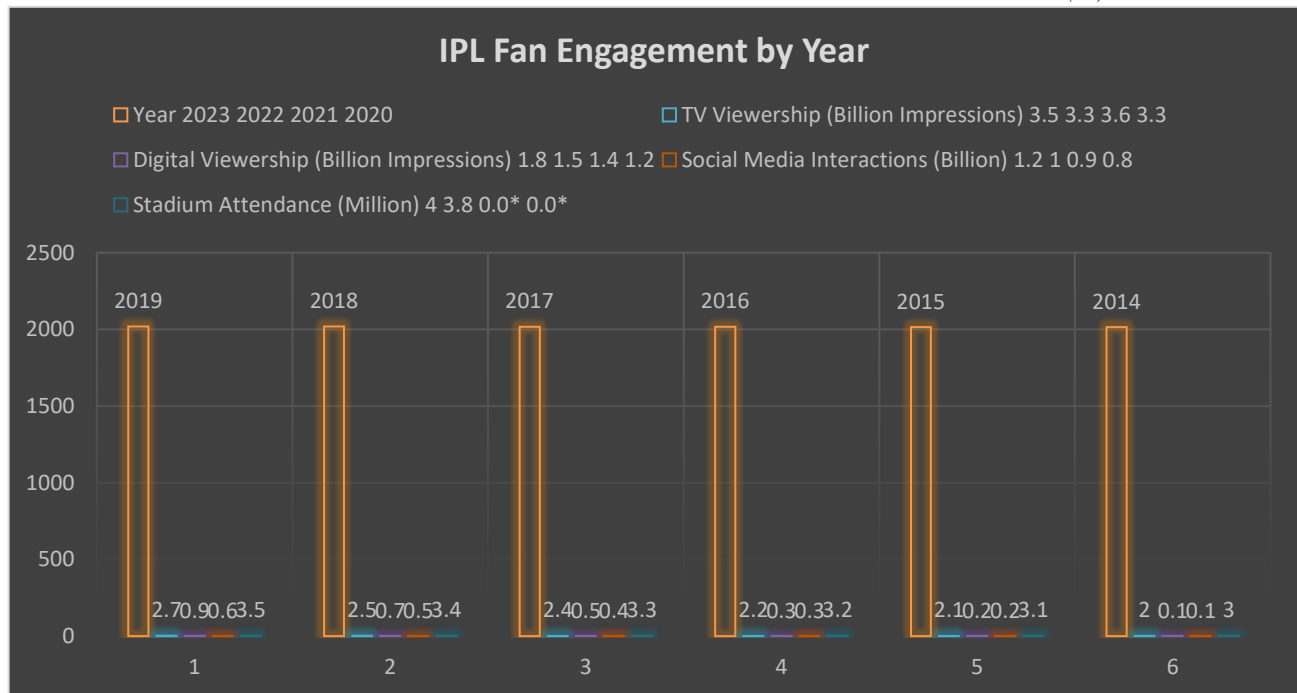


Figure 5

7. CONCLUSIONS

This study emphasises how the Indian Premier League (IPL) and other T20 leagues have had a big influence on cricket throughout the world. Traditional cricket formats face threats from these leagues, despite the fact that they have revolutionised the sport by offering significant financial rewards and prospects for player development. According to the report, players are frequently encouraged to choose league participation above national duty due to the lucrative nature of franchise cricket, which might possibly undermine the significance of Test and ODI cricket. T20 competitions, on the other hand, also help to spread cricket around the world by attracting new fans and encouraging intercultural dialogue. Cricket boards must implement deliberate policies and exercise strategic management in order to maintain the integrity of international cricket while preserving the financial benefits of T20 leagues. In the end, this study emphasises the necessity of a comprehensive strategy to guarantee the long-term coexistence of county cricket and T20 leagues, preserving the sport's rich history while embracing its changing dynamics.

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