

An analytic approach towards management of cricketing ecosystem

Abstract

Cricket is not only a popular game boasting of more than billion followers across the world but also its commercialization has created many competing interests. This study has identified three primary stakeholders viz. Administrators, Players and Spectators each having their own ambitions. In order for convergence of these ambitions, it has prescribed the networked governance in place of hierarchic governance for the game's apex body.

The length of the game is getting reduced at an alarming rate with each new format. This study aims at creating a balance between formats that each country should play. There is as much dearth of academic research on this as there is abundance of individual viewpoints from professionals related to the game. Hence at the outset, the study has created a baseline of research paradigms by analyzing these viewpoints against ICC action points and has underlined the lack of convergence with present way of governance. This research work addresses four research questions emanating out of these research paradigms.

While T20 and specifically IPL has been hailed by many for popularizing the game and their commercial success, the traditionalists are finding it a big threat for survival of test match, the oldest and the longest format. This study has created a meta-metric framework for formative assessment of influence across formats. In order to assess the influence of T20 on test matches and on India's performance, a comparison between pre-IPL period (1998-2007) and post-IPL period (2008-2017) using the framework has been done. It has revealed that "Batting contribution of tail-enders" is showing positive trend whereas "Runs scored per wicket" has gone down significantly. It has broken the popular myths or perceptions i.e. i) "Length of test matches" has gone down, ii) "Runs Per Over" has gone up, iii) "Draw percentage" has diminished and iv) "Percentage score in boundaries" has increased.

Sports provide a high risk, high consequent environment where each sportsperson aspire to earn entire life's livelihood during the playing span. By analyzing the career pattern of Indian test debutants during the period April 1, 2000 to March 31, 2016, the study shows that cricketers who are successful in Test cricket generally get a successful stint in T20 as well; the rest can embrace T20 as an alternative career

option and continue playing for 15-16 years. IPL and the deluge of cricket as such proved to be an important catalyst for worthy and lengthy career.

The study has modeled fans' expectation by devising the construct REST (comprising of Result-orientedness, Excitement, Skill and Time and Money). The finding suggests that the older generation is finding lack of skill component in T20 and the younger generation misses excitement in test with ODI being the most balanced format. By modeling the overall liking on this construct for all three formats, it is seen that Result-orientedness and Skill are not significant influencers for test and T20 respectively whereas for ODI all are significant. This indicates that the apex body may try to infuse more Result-orientedness and Skill in test and T20 respectively to make them more appealing across generations.

Keeping the viewpoint in mind that any future plan should not be devoid of test made by the connoisseurs of the game, the study delves into finding out the optimum cricket mix. The study proposes to have three tiers each of four homogeneous teams rather than the existing single tier WTC with pronounced focus on test, ODI and T20 for the highest to lowest maturity levels respectively. Finally, the study provides a platform for the policy makers to carry out sensitivity analysis on the cricket mix by tweaking value creation and value appreciation matrices to meet their targets.

Keywords: Analytic Hierarchy Process, ANCOVA, ANOVA, Confirmatory Factor Analysis, Data Pre-processing using SQL, Data Visualization, Evidence Based Assessment, Fans' preference, Game of Cricket, Hierarchical Cluster Analysis, ICC, IPL, Java Programming, Longitudinal Analysis, Markov Chain, Meta-metrics, ODI, Python Programming, R Programming, Semantic Analytics, Sports Governance, Stakeholder Analysis, Steady State Equilibrium, Structural Equation Model, T10, T20I, Test match, Testing of Hypothesis, Text Summarization, Two-sample t-test, Value based heuristics, Web scraping, sensitivity analysis, χ^2 test

A handwritten signature in blue ink that reads "Subhasis Ray". The signature is written in a cursive, flowing style.