Scouting Dossier: India's New Batting Core for the England Test Series

Prepared by: Aadit Pahuja
Analysis Type: Contextual Performance Scouting & Monte Carlo Simulation
Scope: Test Batting Assessment for England Tour

Overview

With India's senior batting core (Virat Kohli, Rohit Sharma) absent, the upcoming Test tour of England marks a definitive transition. This report evaluates the readiness and projected output of India's emerging Test batters in English conditions—markedly seam-friendly and tactically unforgiving.

Batters Covered

- Shubman Gill
- Yashasvi Jaiswal
- KL Rahul
- Rishabh Pant
- Karun Nair
- Nitish Kumar Reddy *(dark horse)*

Methodology

1. Contextual Region-Based Analysis

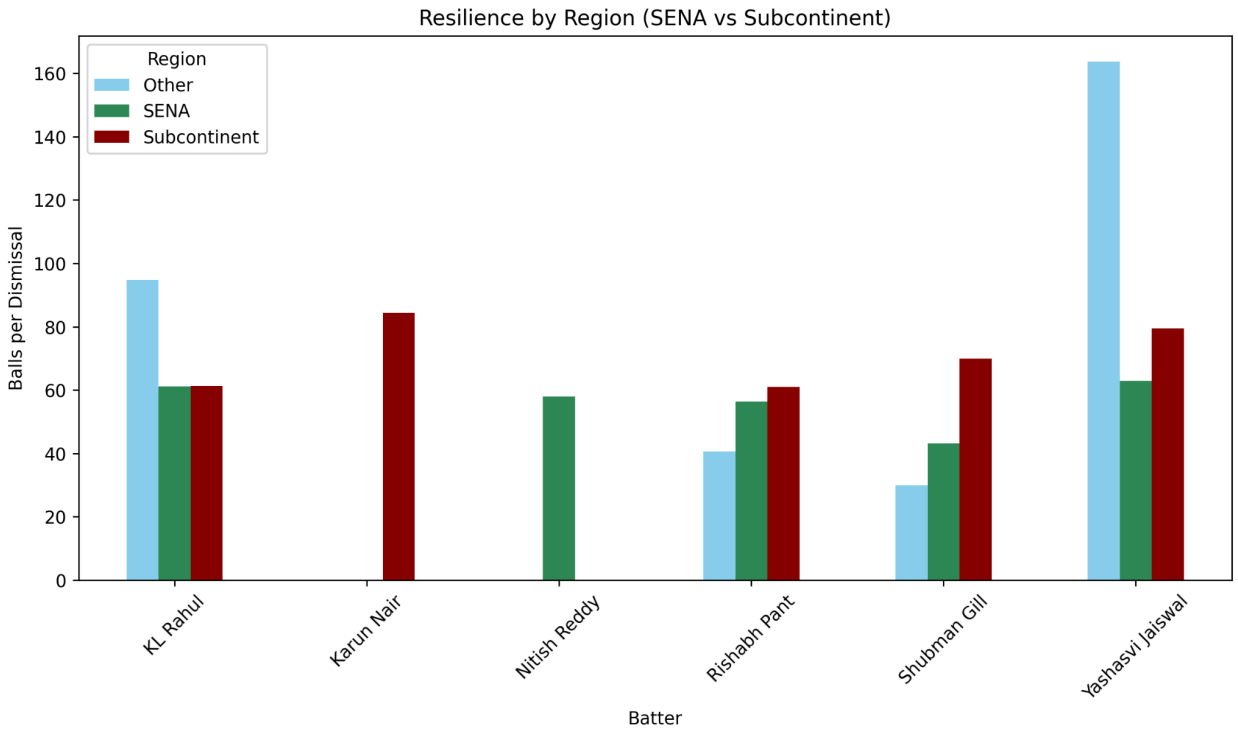
Each player's Test record was parsed by geography:

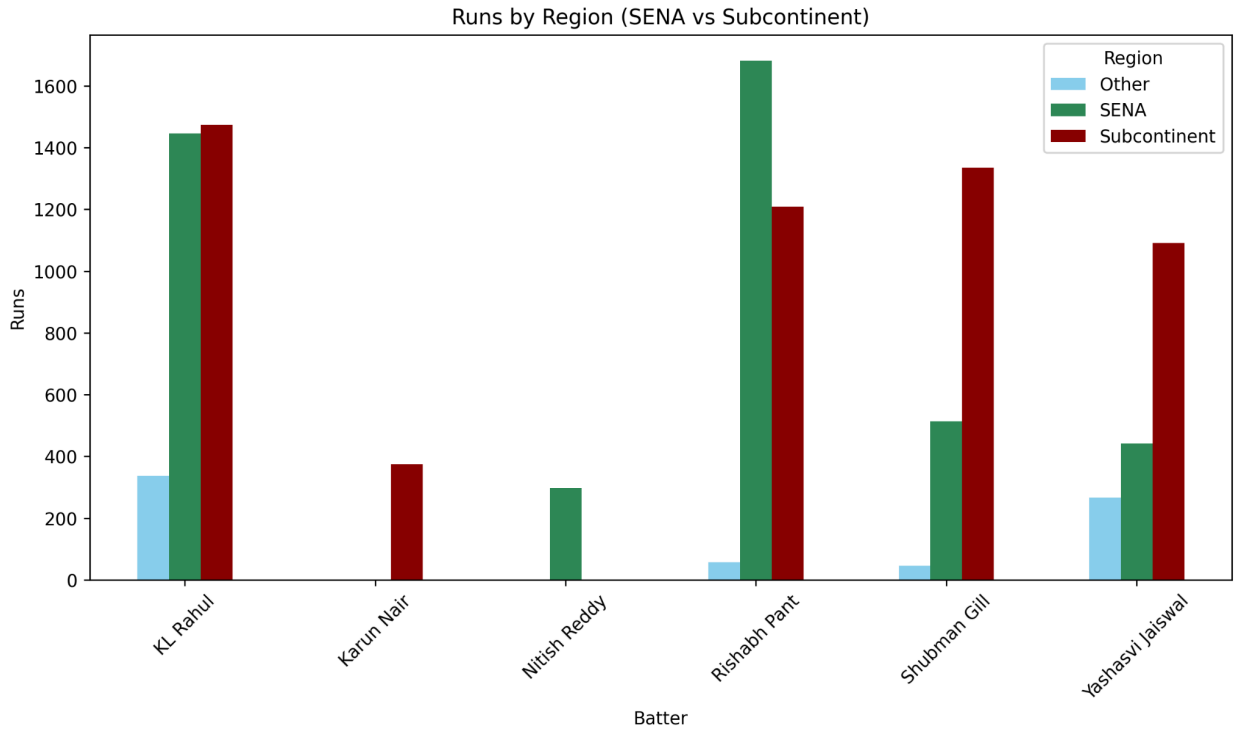
- **SENA** – South Africa, England, New Zealand, Australia
- **Subcontinent** – India, Sri Lanka, Bangladesh, Pakistan
- **Other** – UAE, West Indies, Zimbabwe, etc.

Key metrics included:

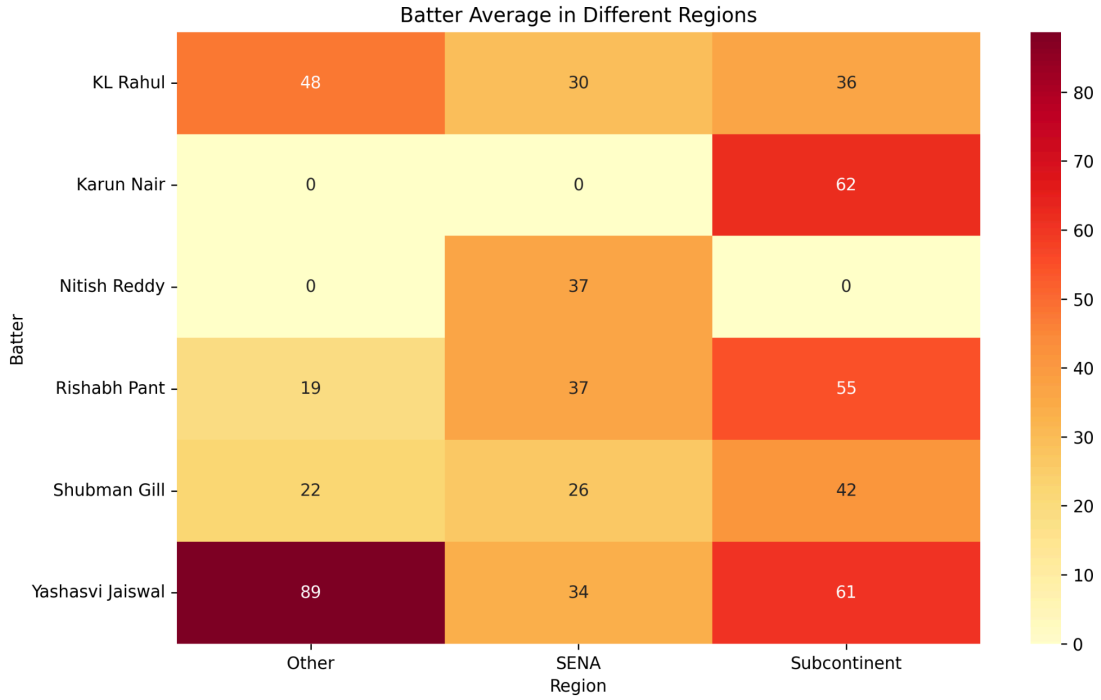
- Aggregate Runs
- Batting Average
- Strike Rate
- Balls Faced per Dismissal (Resilience Index)
- 100s / 50s

→ **Visualisation:** *Grouped bar charts* for runs and balls per dismissal across regions.


Resilience by Region (SENA vs Subcontinent)
Region
Other
SENA
Subcontinent
Balls per Dismissal
0
20
40
60
80
100
120
140
160
KL Rahul
Karun Nair
Nitish Reddy
Rishabh Pant
Shubman Gill
Yashasvi Jaiswal
Batter


Runs by Region (SENA vs Subcontinent)
Region
Other
SENA
Subcontinent
Runs
0
200
400
600
800
1000
1200
1400
1600
KL Rahul
Karun Nair
Nitish Reddy
Rishabh Pant
Shubman Gill
Yashasvi Jaiswal
Batter

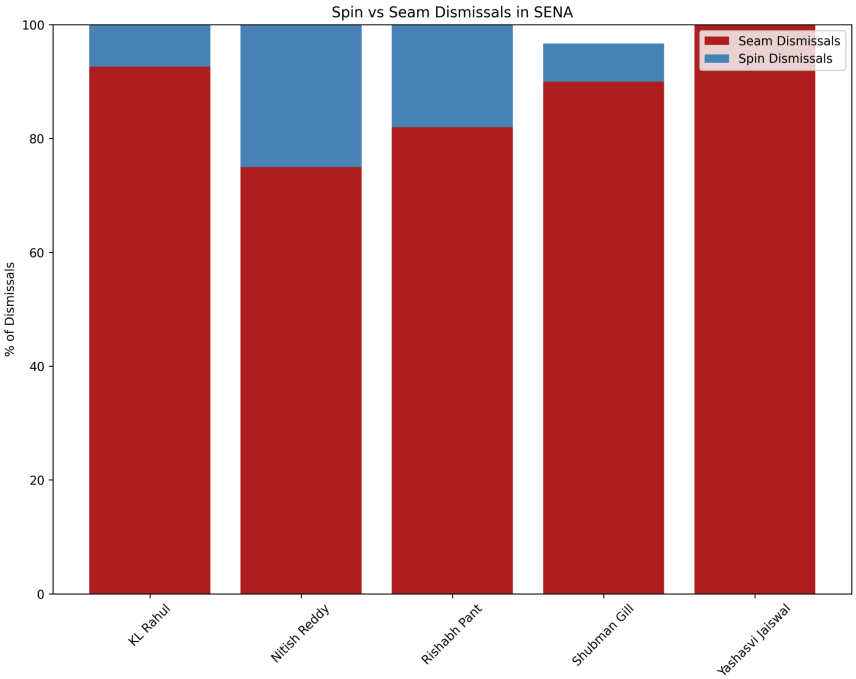
→ **Visualisation:** *Heatmap* for batter average across regions.



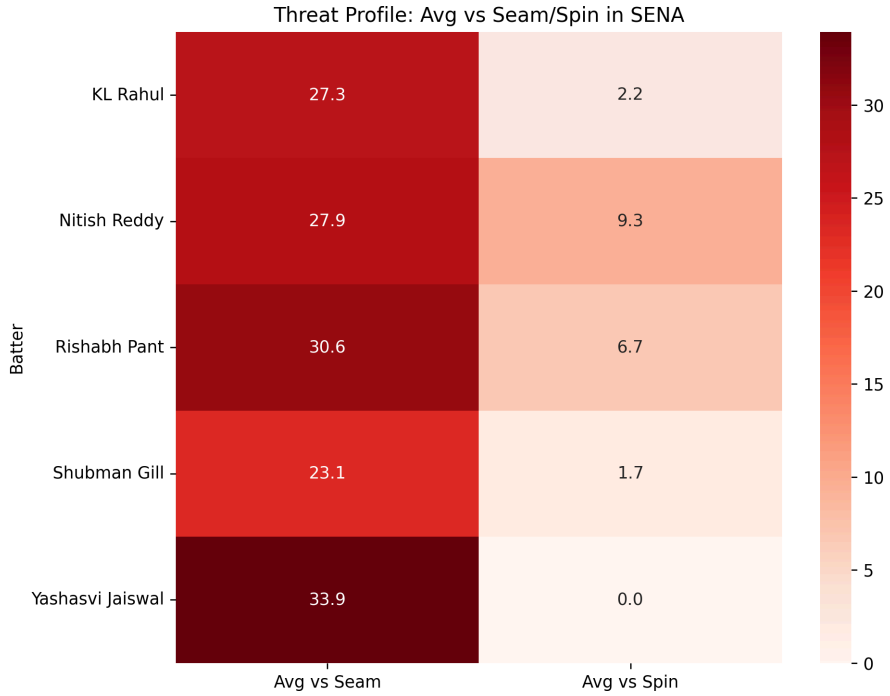
2. Spin vs Seam Threat Profiling

We evaluated seam vs spin dismissal % for each player in SENA conditions—highlighting their tactical vulnerabilities.

→ **Visualisation:** *Stacked bar chart* showing seam/spin dismissal split.



→ **Visualisation:** *Heatmap* mapping average performance vs seam/spin.



3. Monte Carlo Simulations: Expected Series Output

To estimate each batter's projected performance over a 5-Test (10-innings) series in England, we ran **1,000 innings-wise simulations** using:

- A **log-normal distribution** for balls faced (to capture skew)
- A **normal distribution** for strike rate
- **Contextual seam-threat penalties** based on historical dismissal profiles

Each simulation estimated:

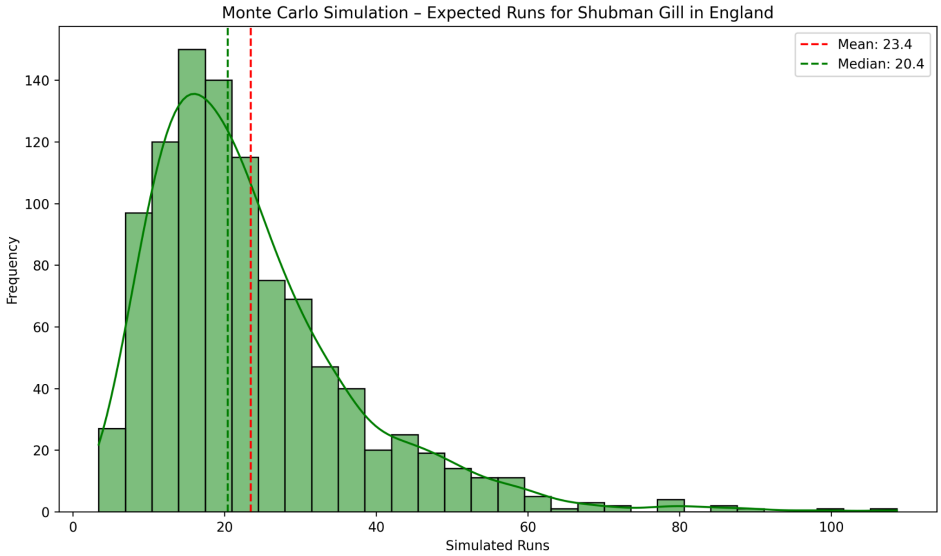
```
Score = (Balls Faced × Adjusted Strike Rate) / 100
```

4. Seam Threat Adjustment

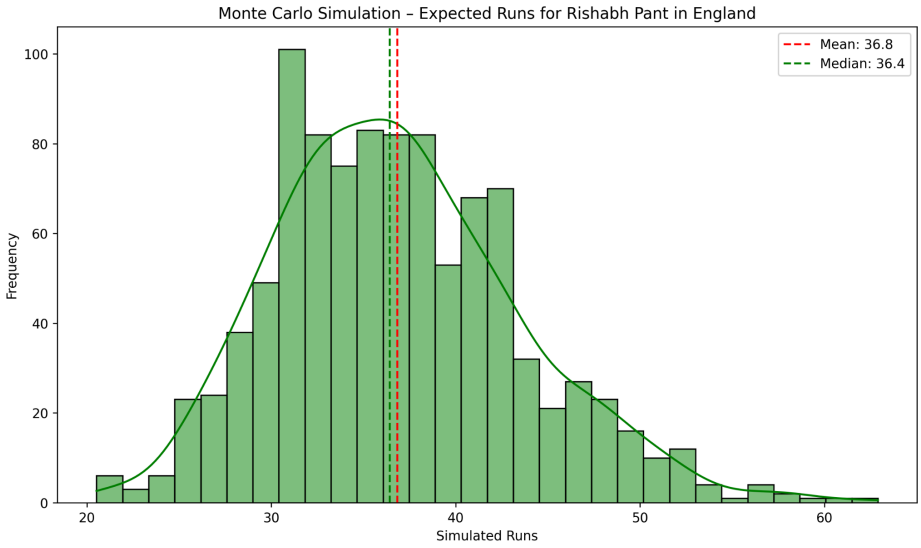
Given England's expected pace-heavy attack (Woakes, Carse, Tongue, Stokes), we factored in a **strike rate penalty** based on each batter's historical seam-dismissal profile.

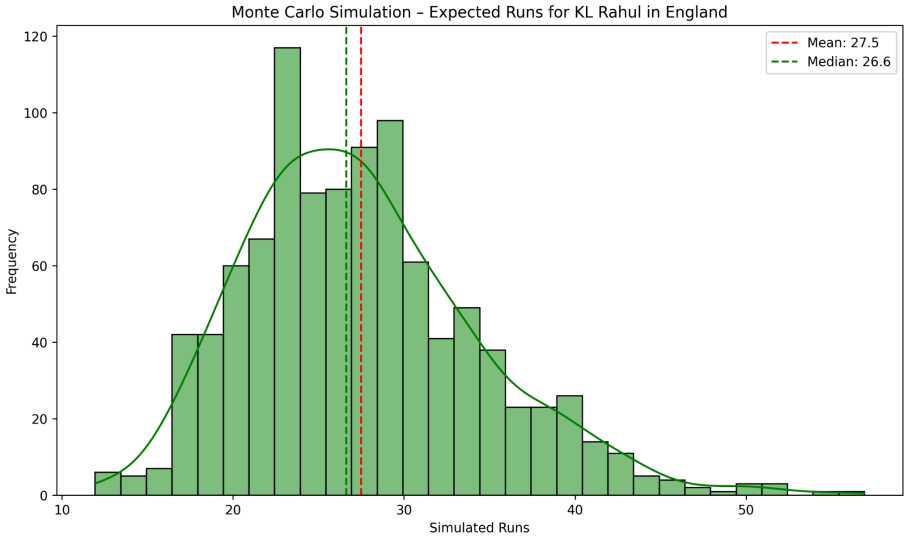
- Gill: 90% seam dismissals → 5% SR penalty
- Jaiswal: 100% seam dismissals → 10% SR penalty
- Pant, Nitish Reddy: No penalty (proven record)

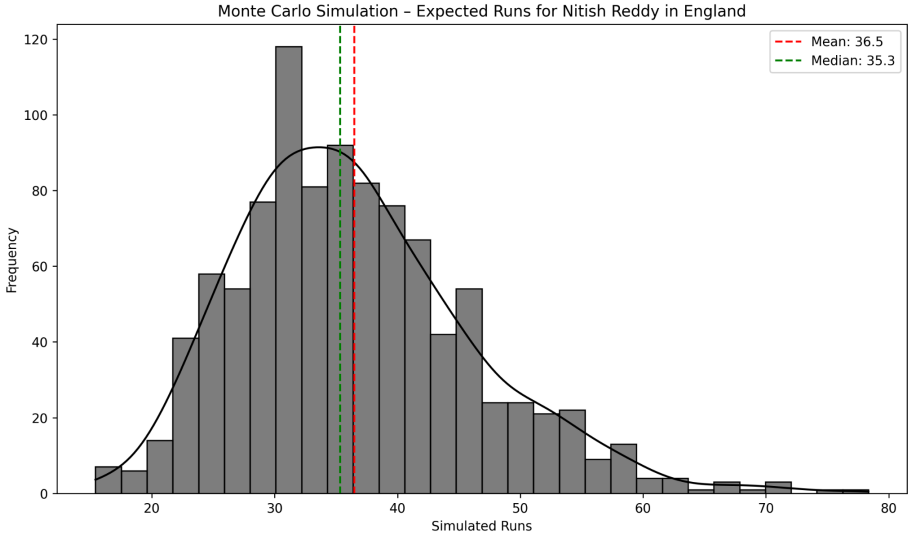
→ **Visualisation:** *Distribution plots* for each player's simulated innings scores


Monte Carlo Simulation – Expected Runs for Shubman Gill in England
Mean: 23.4
Median: 20.4
Frequency
Simulated Runs

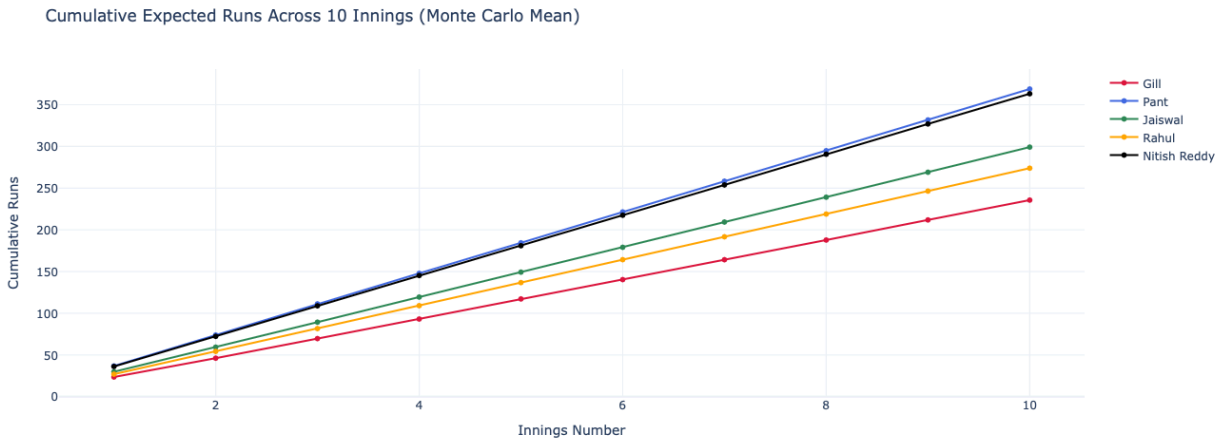

Monte Carlo Simulation – Expected Runs for Yashasvi Jaiswal in England
Mean: 29.9
Median: 29.1
Frequency
Simulated Runs


Monte Carlo Simulation – Expected Runs for Rishabh Pant in England
Mean: 36.8
Median: 36.4
Frequency
Simulated Runs





→ **Visualisation:** *Line chart* projecting cumulative runs over the full Test series



Key Tactical Takeaways

- **Gill**: Technically compact and capable of building long innings, but highly susceptible to seam: 90% of his dismissals in SENA have come against pace. Needs to address movement off the pitch and stay at the crease for longer. Captaincy might allow him to step up more.
- **Jaiswal**: Aggressive and dominant against spin, but currently displays complete vulnerability to seam (100% SENA dismissals to pace). May require adjustment in shot selection and backfoot technique. However, with a great IPL season and a promising recent record, Jaiswal might do much better than the stats say.
- **Pant**: Brings unorthodox flair, but his consistency in SENA (especially against pace) suggests he may be India's best bet in terms of counter-attacking resilience. Could be the x-factor.
- **Rahul**: The most experienced of the lot, but remains inconsistent—particularly poor average vs seam in SENA. May be suited to opening but must manage loose drives outside off.
- **Nitish Reddy**: Very limited sample size, but early data points to technical adaptability and temperament. A high-variance but high-upside pick who brings with him experience from Australia and may handle English conditions better than expected.

This scouting dossier is designed to provide actionable insight into the likely performance profiles of India's new-generation batters, incorporating historical patterns, opposition-specific threats, and simulated projections to guide tactical planning.

For more context, data, or to explore code and visual workflows, refer to the project repository.

GitHub Repo: https://github.com/aadit1412/India_vs_England_2025

Full Notebook:
https://colab.research.google.com/drive/14dFCDaAAKK-8VodsA3CGa4j7DZNkTMBu?usp=sharing

Contact: aaditpahuja@gmail.com

LinkedIn: https://www.linkedin.com/in/aaditpahuja
