T20 DATA ANALYSIS

The Project Aims to analyze the T20 Teams Performances and individual player Historical T20 Data. The Data includes detailed information on teams, Matches played and Player Performances by Focusing on key metrics Such as Runs Scored, Strike Rates, Bowling Economy, Batting Positions & Match Winners.

Through data-driven insights, the project evaluates team strengths, identifying top-performing players and highlights trends in player efficiency. The analysis will assist data analysts in Understanding pattern, optimizing Strategies & making data-backed decisions

Key Objectives:

- Team Performance Analysis
- Batsman insights
- Bowler Efficiency
- Winning trends

Teams Performances:

1. India

Matches Played: 6Wins: 5 | Losses: 1Rank: 1st Place

Win Percentage: 83.33%Total Runs Scored: 966

• Average Strike Rate(Surya Kumar Yadav): 192.00

• Average Batting Positon: 4

• Average Bowler Economy (Bhuvaneshwar Kumar): 4.47

Recommended Strategies:

Batting Order:

- 1. **Rohit Sharma** Experienced opener, provides stability.
- 2. **Suryakumar Yadav** (**SKY**) Replaces KL Rahul as an opener for an aggressive start in the powerplay.
- 3. **Virat Kohli** Anchors the innings and builds partnerships.
- 4. **KL Rahul** Moves to No. 4 for stability and flexibility.
- 5. **Hardik Pandya** Middle-order hitter, adapts based on match conditions.

- **Powerplay:** Bhuvneshwar Kumar, Mohammed Shami, and Hardik Pandya to control runs and take early wickets.
- Middle Overs: Axar Patel and Ravichandran Ashwin to maintain pressure with spin.
- **Death Overs:** Opening pacers (Bhuvneshwar & Shami) return based on match conditions to take wickets and restrict runs

2. England

- Matches Played: 6Wins: 5 | Losses: 1Rank: 2nd Place
- Win Percentage: 83.33%Total Runs Scored: 798
- Average Strike Rate (Alex Hales): 131.93
- Average Batting Positon:2
- Average Bowler Economy (Sam Curran): 3.40

Recommended Strategies:

Batting Order:

- 1. Alex Hale and Jos Buttler Remians same in the Opening order for the Power play
- 2. **Ben Stokes** Replacing Phil salt to maintain Anchor the innings and builds partnerships.
- 3. **Phil Salt** Moves to No. 4 for stability and flexibility.
- 4. Harry Broke & Moeen Ali Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- **Powerplay:** Sam Carrun, Chris Jordon, Mark Wood to control runs and take early wickets.
- Middle Overs: Adil Rashid, Ben Stokes to maintain pressure with spin.
- **Death Overs:** Opening pacers (Sam Carrun & Chris Jordon) return based on match conditions to take wickets and restrict runs

3 . Australia:

- Matches Played: 4Wins: 3 | Losses: 1
- Ranking: 3rd Place
- Win Percentage: 75.00%
- Total Runs Scored: 577
- Average Strike Rate (Glenn Maxwell): 161.21
- Average Batting Positon: 5
- Average Bowler Economy (Glenn Maxwell): 5.7

Batting Order:

- 1. **Aaron Finch** and **Mitchell Starc** in the Opening order for the Power play
- 2. **Glenn Maxwell**—Replacing Mitchell March to maintain Anchor the innings and builds partnerships.
- 3. **David Warner** Moves to No. 4 for stability and flexibility.
- 4. **Marcus Stoinis & Tim David** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- **Powerplay:** Mitchell Starc, Pat Cummins, Jos Hazlewood to control runs and take early wickets.
- Middle Overs: Adam Zampa, Glenn Maxwell to maintain pressure with spin.
- **Death Overs:** Opening pacers (Mitchell Starc, Pat Cummins, Jos Hazlewood) return based on match conditions to take wickets and restrict runs

4. New Zealand:

- Matches Played: 5
- Wins: 3 | Losses: 2
- Ranking: 4th Place
- Win Percentage: 60.00%
- Total Runs Scored: 820
- Average Strike Rate (Finn Allen): 195.24
- Average Batsting Positon: 1
- Average Bowler Economy(Tim Southee): 5.29

Recommended Strategies:

Batting Order:

- 1. **Fin Allen** and **Kane williamson** in the Opening order for the Power play
- 2. **Devon Conway** Replacing Kane Williamson to maintain Anchor the innings and builds partnerships.
- 3. **Glenn Philips** Moves to No. 4 for stability and flexibility.
- 4. **Daryl Mitchell & James Neesham** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- **Powerplay:** Trent Boult, Lockie Ferguson, Tim Southee to control runs and take early wickets.
- Middle Overs: Mitchell Santner, Ish Sodhi to maintain pressure with spin.
- **Death Overs:** Opening pacers (Trent Boult, Lockie Ferguson, Tim Southee) return based on match conditions to take wickets and restrict runs

5. Pakistan:

- Matches Played: 7Wins: 4 | Losses: 3
- Ranking: 5th Place
- Win Percentage: 57.14%Total Runs Scored: 928
- Average Strike Rate (Mohammad Haris): 254.54
- Average Batting Positon: 4
- Average Bowler Economy (Naseem Shah): 5.70

Recommended Strategies:

Batting Order:

- 5. **Mohammad Rizwane** and **Mohammad Haris** in the Opening order for the Power play
- 6. **Shan Masood** Replacing Fakhar Zaman to maintain Anchor the innings and builds partnerships.
- 7. **Glenn Philips** Moves to No. 4 for stability and flexibility.
- 8. **Babar Azam & Shadab Khan** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- **Powerplay:** Shaheen Afridi, Naseem Shah, Haris Rauf to control runs and take early wickets.
- **Middle Overs:** Shadab Khan, Mohammad Nawaz , Iftikhar Ahmed to maintain pressure with spin.
- **Death Overs:** Opening pacers (Shaheen Afridi, Naseem Shah, Haris Rauf) return based on match conditions to take wickets and restrict runs

6. Netherland

- Matches Played: 8
- Wins: 4 | Losses: 4
- Ranking: 6th Place
- Win Percentage: 50.00%
- Total Runs Scored: 966
- Average Strike Rate (Paul Van Meekeren): 233.33
- Average Batting Positon: 11
- Average Bowler Economy (Colin Ackerman): 4.83

Recommended Strategies:

Batting Order:

9. Max O Dowd and Stephen myburgh in the Opening order for the Power play

- 10. **Scott Edwards** Replacing Tom cooper to maintain Anchor the innings and builds partnerships.
- 11. **Colin Ackwerman** Moves to No. 4 for stability and flexibility.
- 12. **Tom Cooper & Bas de leede** Middle-order hitter, adapts based on match conditions.

- Powerplay: Fred Klassen, Paul Van Meekeren, Logan van Beek to control runs and take early wickets.
- Middle Overs: Tim Pringle, Shariz Ahmad, Bas de Leede to maintain pressure with spin.
- Death Overs: Opening pacers (Fred Klassen, Paul Van Meekeren, Logan van Beek) return based on match conditions to take wickets and restrict runs

7. Sri Lanka

- Matches Played: 8
- Wins: 4 | Losses: 4
- Ranking: 7th Place
- Win Percentage: 50.00%
- Total Runs Scored: 1038
- Average Strike Rate (Bhanuka Rajapaka): 127.42
- Batting Position: 5
- Average Bowler Economy (Maheesh Theekshana): 6.95

Recommended Strategies:

Batting Order:

- 13. Bhanuka Rajapaka and Kusal Mendisa in the Opening order for the Power play
- 14. **Pathum Nissanka** Replacing Charith Asalanka to maintain Anchor the innings and builds partnerships.
- 15. **Charith Asalanka** Moves to No. 4 for stability and flexibility.
- 16. **Dhanujaya Disilva & Dasun sanaka** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- Powerplay: Dushmantha Chameera, Lahiru Kumara, Kasun Rajitha to control runs and take early wickets.
- Middle Overs: Wanindu Hasaranga de Silva, Maheesh Theekshana, Dhananjaya de Silva to maintain pressure with spin.
- **Death Overs:** Opening pacers (**Dushmantha Chameera**, **Lahiru Kumara,Kasun Rajitha**) return based on match conditions to take wickets and restrict runs

8. South Africa

- Matches Played: 8
- Wins: 4 | Losses: 4
- Ranking: 8th Place
- Win Percentage: 50.00%
- Total Runs Scored: 617
- Average Strike Rate (Heinrich klassen): 141.66
- Batting Positon: 6
- Average Bowler Economy (Anrich nortje): 5.34

Batting Order:

- 1. **Aden Marckram** and **Temba Bavuma** in the Opening order for the Power play
- 2. **Rilee Rossouw** Replacing Rilee Rossouw to maintain Anchor the innings and builds partnerships.
- 3. **Quinton de kock** Moves to No. 4 for stability and flexibility.
- 4. **David Miller & Klassen** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- Powerplay: Kagiso Rabada, Wayne Parnell, Lungi Ngidi to control runs and take early wickets.
- Middle Overs: Keshav Maharaj, Tabraiz Shamsi, Aiden Markram, Anrich Nortje to maintain pressure with spin.
- **Death Overs:** Opening pacers (**Kagiso Rabada, Wayne Parnell, Lungi Ngidi**) return based on match conditions to take wickets and restrict runs

9. Ireland

- Matches Played: 8
- Wins: 4 | Losses: 4
- Ranking: 9th Place
- Win Percentage: 42.85%
- Total Runs Scored: 989
- Average Strike Rate (George Dockrell): 126.32
- Batting Positon: 5
- Average Bowler Economy (Josh Little): 5.29

Recommended Strategies:

Batting Order:

- 1. **Paul Striling** and **George Dockrell** in the Opening order for the Power play
- 2. **Lorcan Tuckera** to maintain Anchor the innings and builds partnerships.
- 3. **Andy Balbirin** Moves to No. 4 for stability and flexibility.
- 4. **Curtis Camoher & Harry Tector** Middle-order hitter, adapts based on match conditions.

- Powerplay: Josh Little, Gareth delany, Mark Adair to control runs and take early wickets.
- Middle Overs: Simi singh ,Barry McCarthy to maintain pressure with spin.
- **Death Overs:** Opening pacers (**Josh Little,Gareth delany , Mark Adair**) return based on match conditions to take wickets and restrict runs

10. Zimbabwe

- Matches Played: 7Wins: 3 | Losses: 4
- Ranking: 10th Place
- Win Percentage: 42.85%Total Runs Scored: 923
- Average Strike Rate (Shikandar Raja): 126.33
- Batting Positon: 5
- Average Bowler Economy (Tendai Chatara): 6.06

Recommended Strategies:

Batting Order:

- 1. Craig Ervine and Shikandar Raza in the Opening order for the Power play
- 2. **Wessly Madhavere** to maintain Anchor the innings and builds partnerships.
- 3. **Andy Balbirin** Moves to No. 4 for stability and flexibility.
- 4. **Sean Williams & Ryan Burl** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- Powerplay: Richard Ngarava, Tendai Chatara, Blessing Muzarabani to control runs and take early wickets.
- Middle Overs: Sikandar Raza, Sean Williams to maintain pressure with spin.
- **Death Overs:** Opening pacers (**Richard Ngarava**, **Tendai Chatara**, **Blessing Muzarabani**) return based on match conditions to take wickets and restrict runs

11. Bangladesh

- Matches Played: 5
- Wins: 2 | Losses: 3
- Ranking: 1st Place
- Win Percentage: 40.00%
- Total Runs Scored: 629
- Average Strike Rate (Litton Das): 131.07
- Batting Positon: 3
- Average Bowler Economy (Nasum Ahmed): 3.50

Batting Order:

- 1. **Najmul Shanto** and **Litton Das** in the Opening order for the Power play
- 2. **Wessly Madhavere** to maintain Anchor the innings and builds partnerships.
- 3. **Afif Hossain** Moves to No. 4 for stability and flexibility.
- 4. **Soumya sarkar & Shakib** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- **Powerplay : Taskin Ahmed, Hasan Mahmud, Mustafizur** Rahman to control runs and take early wickets.
- Middle Overs: Shakib Al Hasan, Mosaddek Hossain, Mehidy Hasan Miraz, Nasum Ahmed to maintain pressure with spin.
- **Death Overs:** Opening pacers (**Taskin Ahmed, Hasan Mahmud, Mustafizur**) return based on match conditions to take wickets and restrict runs

12. Namibia

- Matches Played: 3
- Wins: 1 | Losses: 2
- Ranking: 2nd Place
- Win Percentage: 33.33%
- Total Runs Scored: 398
- Average Strike Rate (David Wiese): 124.26
- Batting Positon: 7
- Average Bowler Economy (Bernard Scholtz): 5.08

Recommended Strategies:

Batting Order:

- 1. **Jan Frylink** and **Stephan Board** in the Opening order for the Power play
- 2. **David Weise** to maintain Anchor the innings and builds partnerships.
- 3. **Afif Hossain** Moves to No. 4 for stability and flexibility.
- 4. **JJ smith & Erasmusc** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- Powerplay: Ben Shikongo, Ruben Trumpelmann, David Wiese Rahman to control runs and take early wickets.
- Middle Overs: Gerhard Erasmus, Bernard Scholtz, Jan Frylinck, JJ Smit to maintain pressure with spin.
- Death Overs: Opening pacers (Ben Shikongo, Ruben Trumpelmann, David Wiese Rahman) return based on match conditions to take wickets and restrict runs

13. Scotland

- Matches Played: 3
- Wins: 1 | Losses: 2
- Ranking: 3rd Place
- Win Percentage: 33.33%
- Total Runs Scored: 433
- Average Strike Rate (George Munsey): 115.20
- Batting Positon: 1
- Average Bowler Economy (Mark Watt): 3.88

Recommended Strategies:

Batting Order:

- 1. Calum Macleod and George Munsey in the Opening order for the Power play
- 2. **Richie Berrinton** to maintain Anchor the innings and builds partnerships.
- 3. **Micheal Jones** Moves to No. 4 for stability and flexibility.
- 4. **Chris Greaves & Micheal Leaks** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- Powerplay: Brad Wheal, Josh Davey, Safyaan Sharif to control runs and take early wickets.
- Middle Overs: Mark Watt, Michael Leask, Chris Greaves to maintain pressure with spin.
- **Death Overs:** Opening pacers (**Brad Wheal, Josh Davey, Safyaan Sharif**) return based on match conditions to take wickets and restrict runs

14. West Indies

- Matches Played: 3
- Wins: 1 | Losses: 2
- · Ranking: 4th Place
- Win Percentage: 33.33%
- Total Runs Scored: 385
- Average Strike Rate (Johnson charles): 133.33
- Batting Position: 2
- Average Bowler Economy (Jason Holder): 5.21

Recommended Strategies:

Batting Order:

- 1. **Brandon King and Evin lewis** in the Opening order for the Power play
- 2. **Johnson Charles** to maintain Anchor the innings and builds partnerships.
- 3. **Kyle Mayers** Moves to No. 4 for stability and flexibility.
- 4. **Jason Holder & Nicholas** Middle-order hitter, adapts based on match conditions.

- Powerplay: Kyle Mayers, Akeal Hosein, Alzarri Joseph to control runs and take early wickets.
- Middle Overs: Akeal Hosein, Jason Holder, Odean Smith to maintain pressure with spin.
- **Death Overs:** Opening pacers (**Kyle Mayers, Akeal Hosein, Alzarri Joseph**) return based on match conditions to take wickets and restrict runs

15. U.A.E

• Matches Played: 3

• Wins: 1 | Losses: 2

• Ranking: 5th Place

• Win Percentage: 33.33%

• Total Runs Scored: 312

• Average Strike Rate Rate (Basil Hameed): 103.91

• Batting Position: 6

• Average Bowler Economy (Zahoor Khan): 2.75

Recommended Strategies

Batting Order:

- 1. Muhammad Waseem and Rizwan in the Opening order for the Power play
- 2. Vriithya Aravind to maintain Anchor the innings and builds partnerships.
- 3. **Chirag Suri** Moves to No. 4 for stability and flexibility.
- 4. **Basil Hammed & Aayan** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- Powerplay: Junaid Siddique, Zahoor Khan, Kashif Daud to control runs and take early wickets.
- Middle Overs: Afzal Khan, Karthik Meiyappan, Basil Hameed, Aryan Lakra to maintain pressure with spin.
- **Death Overs:** Opening pacers (**Junaid Siddique**, **Zahoor Khan**, **Kashif Daud**) return based on match conditions to take wickets and restrict runs

16. Afghanistan

Matches Played: 3

• Wins: 0 | Losses: 3

• Ranking: 6th Place

• Win Percentage: 0.00%

• Total Runs Scored: 399

• Average Strike Rate (Najibulla Zadran): 11534

• Average Bowler Economy (Naveen ul-Hag): 5.25

Batting Order:

- 1. **Rahmanulla and Ibrahim** in the Opening order for the Power play
- 2. **Usman** to maintain Anchor the innings and builds partnerships.
- 3. Najibulla Zadran– Moves to No. 4 for stability and flexibility.
- 4. **Mohammad Nabi & Gulbadin Naib** Middle-order hitter, adapts based on match conditions.

Bowling Attack:

- Powerplay: Fazalhaq Farooqi, Azmatullah Omarzai, Mujeeb Ur Rahman to control runs and take early wickets.
- Middle Overs: Rashid Khan, Mohammad Nabi, Mujeeb Ur Rahman, Gulbadin Naib to maintain pressure with spin.
- Death Overs: Opening pacers (Fazalhaq Farooqi, Azmatullah Omarzai, Mujeeb Ur Rahman) return based on match conditions to take wickets and restrict runs

Conslusion: The recommended batting order is structured based on players' strike rates and aggressive boundary-hitting capabilities, ensuring an explosive start during the powerplay. This is followed by technically sound players who focus on anchoring the innings and building crucial partnerships, while the middle order is strategically positioned to adapt to match-specific conditions.

For bowling strategy, pace bowlers with low economy rates are prioritized during the powerplay to take early wickets and in the death overs to restrict runs. Meanwhile, spinners and medium pacers are deployed in the middle overs to maintain pressure and control the game by limiting scoring opportunities