LESSONS LEARNED

04/03/2025

| Project Title: Player Performance Analysis in Cricket | Date Prepared: |
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Project Performance Analysis

| | What Worked Well | What Can Be Improved |
|--|---|---|
| Requirements definition and management | Well-defined initial requirements helped align the project scope and objectives | Periodic validation of evolving requirements could have helped avoid late adjustments. |
| Scope definition and management | Clear definition and agreement on project boundaries ensured focused execution. | More detailed breakdown of deliverables in early planning (e.g., specific analytics outputs and dashboard features) would have improved clarity and tracking. |
| Schedule development and control | Adherence to milestone-based timelines ensured smooth progression. | Some activities like data cleaning and feature engineering took more time which could be controlled. |
| Cost estimating and control | \$185,000) | Minor costs like additional subscriptions for dashboards caused little inconvenience. |
| Quality planning and control | Consistent model evaluation metrics ensured prediction reliability. | Early testing wasn't detailed enough—we should do more checks like cross-validation earlier on. |

| Human resource availability, team development, and performance | Everyone worked well together, and tasks were shared clearly. | Little more expertise needed for Power BI |
|--|---|--|
| Communication management | Weekly meetings helped the team stay on the same page. | More detailed documentation would be better to stay on the same line. |
| Stakeholder management | The sponsor and other important people stayed involved and gave useful feedback. | We could have shown more model evaluation ideas earlier to get their input sooner. |
| Reporting | Reports were clear and explained everything that was done. | Having a live dashboard to show real-time progress would be helpful in future projects. |
| Risk management | The team found and handled big risks early, like data quality issues. | We should write more detailed risk plans and update them often during the project. |
| Procurement planning and management | All tools used (like Power BI and ML libraries) were planned properly and easy to access. | It's better to have backup options for tools or data in case something isn't available later like having a tableau license in case of failure of Power BI. |
| Process improvement information | We improved the work step-by-step based on feedback. | Writing down lessons after each big phase would help in future. |
| Product-specific information | The Power BI dashboard helped a lot with showing player insights clearly. | Real-Time analytic dashboards could be better optimized. |

| Other | Model evaluation and accuracy were excellent (97%) | More time is taken to balance and normalize the dataset. |
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Risks and Issues

| Risk or Issue Description | Response | Comments |
|--|--|--|
| Bad or messy data made the model less accurate | Data cleansing and feature engineering techniques were applied | More checking and filtering could still help improve the model |
| Bias in dataset leading to skewed player predictions | Bias detection and correction methods implemented | Continuous monitoring recommended |
| Issues Regarding Visualizations | Extensive Power BI training implemented | Continuous learning is recommended |

Quality Defects

| Defect Description | Resolution | Comments |
|---|---|-----------------------------|
| Minor inaccuracies in player classification | Algorithm tuning and additional training | Achieved Targeted threshold |
| Visualization inconsistencies in Power BI | I tested and learned the UI to visualize better | Improved visualizations |

Vendor Management

| Vendor | Issue | Resolution | Comments |
|----------|------------------|---------------------|---|
| Power BI | No issues caused | No issues caused | Free Licensing |
| Tableau | Expired license | Renewed the license | Had a backup license in place of power BI |

Other

| Areas of Exceptional Performance | Areas for Improvement |
|---|--|
| Effective data preprocessing improved model accuracy. | Earlier risk assessment for integration challenges. |
| Clear project scope minimized major changes. | More effective way to pre-process and clean and prepare the data |