

# **Project Name**

09.04.20XX

# Your Name

Your Company 123 Your Street Your City, ST 12345

#### **Overview**

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## **Business Understanding**

### Background

- Football clubs are increasingly relying on data-driven insights to enhance team performance.
- There is a need to identify key statistics that contribute to success and pinpoint the players who excel in these areas.

#### **Business Goals**

- Identify statistically significant performance metrics that strongly correlate with success in football matches.
- Determine the top-performing players based on these key statistics.
- Provide actionable insights to football clubs for player recruitment, strategy development, and performance optimization.

#### **Business Success Criteria**

- Increase in team success rates, measured by improved match outcomes (wins, draws).
- Enhanced player performance, demonstrated by statistical metrics.
- Positive impact on recruitment decisions leading to improved team dynamics.

## **Situation Assessment**

## Inventory of Resources

- Identify football event data sources, such as databases, APIs, and historical match records.
- Assess the availability and expertise of football statisticians, analysts, and domain experts who can contribute insights.

• Evaluate the computing infrastructure and tools available for data processing and analysis.

#### Requirements, Assumptions, and Constraints

- Specify the technical requirements for collecting and storing football event data, considering factors like data formats, update frequency, and integration capabilities.
- Document assumptions about the consistency of event data across different sources and the relevance of selected performance metrics.
- Recognize constraints, such as the time frame for data collection and analysis, budget limitations, and potential restrictions on accessing certain datasets.

#### **Risks and Contingencies**

- Identify risks related to data quality, including inaccuracies or gaps in event data.
- Anticipate risks associated with unexpected variations in player performance due to injuries, transfers, or team strategy changes.
- Develop contingency plans for addressing identified risks, such as implementing data validation checks and incorporating robustness into the modeling approach.

#### **Terminology**

- Establish a standardized terminology for football event data, including key performance metrics, player positions, and match outcomes.
- Create a glossary that defines terms specific to the project, ensuring a shared understanding among team members and stakeholders.

#### Costs and Benefits

- Estimate the costs associated with acquiring, cleaning, and processing football event data.
- Consider the potential benefits, such as improved player scouting, enhanced team strategy, and increased match success rates.
- Conduct a cost-benefit analysis to ensure that the project aligns with the objectives
  of identifying the best players and success-describing statistics in the context of
  football matches.

## **Defining Data-Mining Goals**

### **Data-Mining Goals**

- Identify Key Performance Metrics: Determine the specific performance metrics that will be used to assess player excellence and match success. This may include goals scored, assists, possession percentages, and other relevant indicators.
- Discover Patterns and Trends: Uncover hidden patterns and trends within the football event data that contribute to a team's success. This could involve understanding correlations between certain player behaviors and favorable match outcomes.
- Ranking and Player Comparison: Develop a system for ranking players based on their performance metrics and compare players to identify those who consistently contribute to success.
- Team Success Prediction: Explore the possibility of predicting team success based on the aggregated performance of individual players and other contextual factors.

#### Data-Mining Success Criteria:

- Model Accuracy: Define the desired level of accuracy for models predicting player excellence and match outcomes.
- Relevance of Metrics: Ensure that the selected performance metrics align with the goals of identifying the best players and success-describing statistics.
- Actionable Insights: Assess the success of the data-mining process based on its
  ability to provide actionable insights for football clubs, such as recommendations for
  player recruitment, strategic adjustments, and training focus.
- Business Impact: Measure the impact of the data-mining results on improving team
  performance and achieving the defined business goals, such as increased match
  success rates and enhanced player evaluations.