**Soccer Player Performance Analysis Report -**

**1. Executive Summary**

This report provides an in-depth analysis of player performance, market value, and key metrics based on Power BI insights. The objective is to evaluate top-performing players, identify value-for-money opportunities, analyze club rankings, assess age-related trends, and support scouting, contract negotiations, and transfer risk identification.

**2. Data Methodology**

* The dataset was preprocessed and cleaned in Excel to remove inconsistencies and missing values.
* CSV files containing player data were uploaded, and SQL queries were generated to extract insights.
* SQL query results were imported into Power BI for further analysis and visualization.
* Key performance indicators (KPIs) were calculated using SQL and Power BI to derive meaningful insights.
* Power BI dashboards were developed to visualize player performance, market value distribution, club rankings, wage distribution, and transfer risk assessment interactively.

**3. Key Insights and Findings**

**3.1 Top Performing Players**

* Cristiano Ronaldo holds the highest overall rating (94), followed closely by Lionel Messi (93) and Luis Suárez (92).
* These players consistently deliver top-tier performances, making them crucial assets for their respective clubs.
* The top 10 players by performance score include key players from top leagues, showcasing elite talent distribution.

**3.2 Best Value-for-Money Players**

* Players such as Marlos, Taison, and D. Srna have the best performance-to-wage ratio (0.08).
* Albirex Niigata emerges as the club with the best value-for-money acquisitions.
* Clubs with lower wage expenditures often discover hidden gems that offer high performance without financial strain.

**3.3 Club Performance Analysis**

* FC Barcelona leads in overall player performance, with an average rating of 82.56, followed by Real Madrid and Bayern Munich.
* The club also has the highest salary expenditure, reinforcing its commitment to maintaining a high-caliber squad.
* Analysis of **club performance rankings** shows how wage investment correlates with overall success.

**3.4 Market Value Analysis**

* Neymar is the most expensive player (€123M), followed by Messi (€105M) and Suárez (€97M).
* Market value distribution by nationality: Portugal, Spain, and Belgium rank highest.
* **Market value by age group** reveals that prime players (24-30) have the highest average market value (€15M), while young players (<23) are valued at an average of €5M.

**3.5 Age Group Performance Trends**

* Veteran players (30+ years) possess higher average ratings but exhibit lower growth potential.
* Young players (<23 years) demonstrate significant potential, making them key investment targets.
* Performance trends indicate that midfielders and wingers peak earlier in their careers, while defenders and goalkeepers sustain performance longer.

**3.6 Physical Attributes & Injury Prevention**

* Gelson Martins and Douglas Costa lead in agility and acceleration.
* Acceleration positively correlates with dribbling ability (correlation coefficient: 0.70).
* Clubs can optimize training regimens by focusing on age-related changes in agility and endurance.

**3.7 Transfer Risk Identification**

* Players with high wages but declining performance scores are at risk of transfer.
* New metric: **Transfer Risk Score** based on performance-to-wage ratio highlights players likely to be offloaded.
* Clubs should reassess high-cost, low-performing players to optimize budgets.

**3.8 Market Value vs. Performance Score**

* A scatter plot analysis shows undervalued high-performing players.
* Players with low market value but high performance should be prime targets for recruitment.
* Analysis highlights which clubs have the best scouting efficiency in acquiring undervalued talent.

**3.9 Salary vs. Performance Breakdown by Position**

* Strikers (ST) and Midfielders (CM) have the highest wage-to-performance efficiency.
* Overpaid low-performing players are potential transfer targets.
* Position-based wage trends help clubs allocate salary budgets efficiently.

**3.10 AI-Driven Performance Predictions**

* Forecasting analysis suggests a drop in performance for older players (>32) and an increase in young players’ market value over the next two seasons.
* Clubs should plan long-term investments based on predicted potential growth.
* AI models suggest players reaching peak performance windows between 24-28 years.

**4. Key Performance Analysis for Stakeholders**

* The analysis identifies the highest-rated players based on overall performance, with Cristiano Ronaldo, Lionel Messi, and Luis Suárez leading the rankings.
* The study calculates the average age distribution of players across different positions, showing trends in career longevity by role.
* Market value distribution among nationalities highlights Portugal, Spain, and Belgium as having the highest-valued players.
* Performance metrics across clubs indicate FC Barcelona as having the highest overall player rating, closely followed by other top European clubs.
* The most common positions among top-performing players include Striker (ST), Central Midfielder (CM), and Winger (LW/RW), reflecting key roles in team formations.
* Players excelling in acceleration and agility include Douglas Costa and Gelson Martins, making them crucial for fast-paced gameplay.
* Wage distribution across leagues demonstrates that the Premier League and La Liga have the highest average wages, affecting player transfers and contract negotiations.
* Performance trends over the past seasons indicate that veteran players maintain high ratings while younger players display strong growth potential.
* Potential versus overall rating analysis reveals that certain young players, such as A. Gomes and C. Gregory, have significantly higher potential scores, making them key scouting targets.
* Multi-position players such as A. Acosta and L. Modric contribute strategically to their teams due to their versatility.
* Correlation analysis between physical attributes and skill ratings establishes a strong relationship between acceleration and dribbling ability, aiding player development strategies.
* Market value assessment by age group identifies young players (<23) with an average market value of €5M, prime-age players (24-30) at €15M, and veterans (>30) at €8M.
* The study highlights elite free-kick specialists such as Andrea Pirlo, Hakan Çalhanoğlu, and Lionel Messi, who provide strategic set-piece advantages.
* Club performance comparisons provide insight into the top-performing clubs and their key statistical advantages over competitors.
* Transfer risk assessment identifies players at risk of being transferred based on declining performance metrics and high wage demands, using a calculated Transfer Risk Score metric.\*\* Identified based on high wages and declining performance scores using the **Transfer Risk Score metric**.

**5. Recommendations for Clubs and Scouts**

**5.1 Scouting Strategy**

* Prioritize young players with high potential ratings for long-term team development.
* Invest in undervalued players with high performance scores but low market value.
* Monitor player growth potential scores to predict future stars.

**5.2 Contract Negotiation**

* Players demonstrating high performance-to-wage ratios should be targeted for contract renewals.
* Avoid excessive wage contracts for players showing signs of performance decline.
* Clubs should factor in **position-based salary benchmarks** to make competitive offers.

**5.3 Transfer Market Strategy**

* Offload players identified as **high transfer risk** to optimize salary expenditures.
* Target players with **low market value but high potential growth**.
* Identify transfer opportunities where clubs are overpaying relative to performance.