

Report on Football Strategy Dashboard

Introduction

This report delves into the comprehensive analysis based on the **Football Strategy Dashboard**, created using Power BI. The dashboard aggregates a wide range of data points, offering a granular view of *how different play options are evaluated and executed* during games. The data provided was cleaned in Power BI itself.

In the highly competitive world of football, where split-second decisions can determine the outcome of a game, understanding the underlying patterns and confidence levels behind these decisions is crucial. This dashboard not only highlights which strategies are most commonly employed but also provides insight into the confidence and trust that teams place in each option. By analyzing these metrics, we can identify trends, uncover potential areas for improvement, and make data-driven recommendations that can enhance on-field performance and decision-making processes.



Key Metrics

1. Total Scenarios:

The dashboard reflects analysis across 3,700 different football scenarios.

2. Number of Judgements:

A total of 22,800 judgments were made across these scenarios.

3. Average Confidence Level:

The average confidence level for the decisions made is 0.76, suggesting a relatively high level of certainty in the judgments rendered.

Detailed Insights

1. Confidence Levels by Decision Type:

- The majority of decisions show higher confidence levels for passing and running plays, with passing being the most frequent and confident decision.
- Other decisions, such as "kick a field goal" and "punt," have lower confidence levels, indicating uncertainty in these choices.
- Less confident decisions include "kneel down" and "Don't know/It depends," which are less frequently chosen.

2. Frequency of Each Decision:

- The pie chart reveals the distribution of decisions made:
 - **Pass:** 35%
 - **Run:** 31%
 - **Kick a Field Goal:** 16%
 - **Punt:** 11%
 - **Don't know/It depends:** 3%
 - **Kneel down:** 4%
- Passing and running dominate the decision-making process, making up over 66% of the total decisions.

3. Total Trusted Judgments by Antecedent:

- The line graph shows that "pass" judgments are the most trusted, followed by "run."
- There is a notable decline in trusted judgments for more defensive or cautious strategies like "punt" and "kick a field goal."
- The lowest trust is observed in "kneel down" and uncertain judgments, indicating these are seen as last-resort or situationally dependent strategies.

4. Judgment Analysis:

- The bar chart further illustrates that "pass" and "run" are the most trusted judgments across various scenarios.
- There is a significant drop in trust for "kick a field goal" and "punt," which may reflect a preference for offensive strategies over conservative plays.

- Decisions like "kneel down" and "Don't know/It depends" have minimal trust and frequency, reinforcing the view that these are situational strategies.

Key Findings

1. Preference for Offensive Strategies:

There is a clear preference for offensive plays, specifically passing and running. These are not only the most frequently chosen but also carry the highest confidence and trust. The data suggests that teams are more confident and trusting when taking offensive actions rather than conservative ones like punting or kicking a field goal.

2. Lower Confidence in Defensive or Cautious Plays:

Decisions like "punt" and "kick a field goal" have significantly lower confidence levels and trust. This could indicate a perception that these plays are less likely to result in favourable outcomes. The low confidence in "kneel down" suggests that this strategy is only used in very specific situations, likely when preserving a win is the sole priority.

3. Situational Dependency:

The "Don't know/It depends" option, although infrequently chosen, reflects scenarios where the decision is highly context-dependent. These could be scenarios where situational factors, such as game clock, score, or field position, play a critical role.

Recommendations

1. Focus on Offensive Play Improvement:

Given the high confidence and trust in passing and running plays, teams should continue to refine and develop these strategies, ensuring that they remain the cornerstone of their offensive strategy.

2. Re-evaluate Conservative Plays:

There appears to be a general lack of confidence in conservative strategies such as punting and kicking field goals. Teams should consider analyzing these plays in more depth to determine whether this lack of confidence is justified or if these strategies need refinement.

3. Training for Decision-Making Under Uncertainty:

The data shows that "Don't know/It depends" decisions, while rare, are inevitable. Training coaching staff and players to make better judgments under these uncertain conditions could lead to improved outcomes in close or unpredictable games.

Conclusion

The Football Strategy Dashboard offers valuable insights into the decision-making processes and confidence levels associated with various football strategies. By focusing on offensive plays and re-evaluating the effectiveness of more conservative strategies, teams can enhance their overall performance. Additionally, scenario-specific training and better judgment under uncertainty will be critical for success in more unpredictable game situations.