**Beyond the Myths Dashboard Insight Analysis**

To investigate the question whether teams perform better at their Home stadium versus when they visit an Away stadium, I decided to make use of Power BI in order to facilitate this analysis.

To begin with this is an interactive dashboard in which clicking a specific team’s name would filter the data to only display the results pertaining to the team selected. When no team is selected, the data within the dashboard is aggregated.

In order to determine how well a team has performed we have used the following metrics:

* Wins (%)
* Goals Scored (%)
* Expected Goals (xG)
* Shots Taken (%)
* Shots Taken on Target (%)

For the metrics which have the (%) suffix, we have decided to convert them into a percentage in order to make the comparative clearer. For example, for the Wins metric we have summed the total wins of the Home teams and Away teams and have calculated the percentage split.

**Win (%) and Goals Scored (%)**

To begin with if we look at the summary cards at the top of the dashboard, we can see that see that the aggregate win percentage of when teams play at Home is 62.43% compared to the win percentage of Away teams of 37.57%. This clearly indicates to us that Home teams have the lion share of the total wins within the Premier League across the last 10 seasons. Adjacent to the win summary cards, the data shows us that the Goals Scored percentage split is very much so in favour for the Home team 80.42% vs 19.58% - this further proves that historically, teams perform better at their Home stadium.

**Expected Goals (xG)**

Now onto the charts, starting with the xG chart. To provide additional context, as per Sky Sports definition, xG can be defined as the measure of the quality of a chance by calculating the likelihood it will be scored from a particular position on the pitch during a particular phase of play. This value is based on several factors from before the shot was taken. Based on this, it is clear to see why xG would be a good determinant in whether a team is playing well or not.  
  
Historically teams generate a higher xG when they’re at their Home stadium compared to when they’re at an Away stadium, This is the case for every team except from Leicester which can be seen as an outlier.

**Shots Taken (%) & Shots Taken on Target (%)**

Shots Taken refers to the number of shots that the team has taken against their opponent while Shots on Target refer to the Shots Taken that would be a goal if there wasn’t any intervention by a player.   
  
I decided to use these metrics as typically there is a high correlation between Shots Taken, Shots Taken on Target and the chance of winning hence a team can be seen to be performing well if they have had a lot of shots. Based on the results from the dashboard we can see in almost every case, there is a higher proportion of Shots & Shots on Target when a team is playing at their Home stadium.

**Conclusion**

It is very evident to see that when a team is playing at their Home stadium, they perform better than when they’re at an Away stadium. This phenomenon can be explained by a variety of reasons.  
  
Firstly, when a team plays at their Home stadium, the lion share of the supporters in the stadium will be supporting the Home team due to the ticketing rules. Fan support can provide an emotional boost which can uplift morale and energy.   
  
Another possible reason is, there is an increased familiarity with the pitch when a team plays at Home. In a season a team will play 19 games on their Home pitch and once at every other away stadium within the Premier League, this allows the team to become very familiar with the nuances of their Home pitch which will eventually allow them to perform better.