**Module Challenge 1 Data Analysis**

**Outcomes by Goals**

For this scenario, the data was filtered by the subcategory of plays, allowing us to fine tune and see categorical results. This was done by checking goal amount with outcome. First, no plays were canceled which made the data easier to read in terms of successful or failed. Second, when the results were graphed using a line chart, it was clear that over time failed plays increased than successful plays. Third, the goal amounts affected outcome of the play, thus, successful shows were not able make adequate goals.

**Outcomes by Launch Date**

For this scenario, a pivot table and chart were used to filter by the theater category and compared with launch dates. It was imperative to perform date conversion to properly chart the data with months. Similarly, to the above chart, the amount of successful, failed, and canceled events was examined. First, the months of May, June, and July were extremely successful for theater events. Second, the number of failed shows was considerably high, but better than the data in the Outcomes by Goals Scenario. Third, canceled shows continued to be in the same range throughout the whole year showing that it was inevitable to have some shows not continue.

**Limitations of the Data**

Both interpretations of the data helped us determine different factors, however, there were limitations to this. Outcomes by Goals scenario only focused on goal amount and the outcomes involved. Even when presenting the scenario, the dataset was filtered by “plays” as a subcategory to fine tune the results. Thus, the analysis that we found was missing more elements and categorical data. For the Outcomes by Launch Date scenario, the final pivot chart was filtered by theater, thus it was specific data that was analyzed. Although the parameters and filters can be changed for the chart, the scope of the data analysis is still narrow if only one category is selected. If all categories are selected, then it can provide a big picture which might be more useful when large success or progress needs to be evaluated. Thus, it can be concluded that both scenarios and analysis had limitations by narrowing down the search instead of expanding it.

**Conclusion**

Overall, both scenarios were done by filtering data by different factors. When filtering by goal amounts and outcomes, the data was more quantitative as it resulted in percentages. This is useful when wanting to observe profit and financial success. However, the second scenario of filtering by launch date and outcomes, showed months in which shows were favored versus not. This is a direct observation of popularity in terms the time of year. In conclusion, both scenarios can be used to make long term decisions about the longevity of the events, their success or failure, and their financial payoff.