# DATA ANALYST PORTFOLIO

**JUNE 2025** 

### **Professional background**

Due to the diversity in my professional background, I bring a wealth of experience across various sectors and industries. With excellent transferable skills, I have improved operations in the pharmaceutical, technological, and healthcare industries.

Through my education, personal development. and professional background, I have gained the knowledge and experience that position me as a business analyst, SOC analyst, and data analyst. I am a great team player with excellent communication skills and a strong attention to detail. These qualities have contributed to my success in roles such as quality control assistant and manager, technical support, ΙΤ consultant. cybersecurity analyst, and healthcare assistant.

Working in IT further fueled my passion for technology, prompting me to enhance my data analysis and programming skills. As a strong believer in self-development, and through my experience in information technology security, I fully understand the importance of safety and security in both technology and business. This has driven me to hone my cybersecurity skills, supported by several certifications.

With excellent analytical skills developed from my professional background and academic experience, I have further strengthened my knowledge by completing various certification courses. My data analytics skills developed through both professional experience and continuous self-development, combined with my cybersecurity expertise, form a rare blend of capabilities that are essential across all industries.

Taylor Concert Tours : Impact on Attendance

# **Project Description**

The goal of this project is to analyze and uncover insights that will help Taylor Swift and her team make informed decisions about planning. This dataset contains information about various concerts held across different cities and countries. Also included in the dataset are the venue, the opening act(s), the attendance (number of tickets sold and available), the revenue generated, and the name of the tour.

Analysis of this data will help us answer key questions that will help the swift concert team in future decision making. The questions answered in this project include:

- Which cities and countries have hosted the most concerts, and what were the average attendance and revenue figures in each location?
- What are the top opening acts in terms of attendance, and how many times have they performed?
- How do attendance and revenue figures vary across different tours, and what are the trends over time?
- What is the average percentage of tickets sold compared to available tickets for each venue?
- Are there any noticeable differences in attendance between weekdays and weekends?
- What are the patterns in ticket pricing, and how they relate to the total revenue generated

### **Data Analysis process**

The data collection process was relatively straightforward because the data was retrieved from Kaggle. This data was cleaned before being analyzed. The cleaning process involved using Excel capabilities to remove duplicates. After removing duplicates, i ensured to remove outliers that might skew the results. This process involved using filters to remove blank, incomplete data cells, and fixing unstructured data. The analysis was also done using Excel, with pivot tables, the VLOOK UP and other functions utilized in the analysis process. The results of the analysis have been visually represented by charts and tables in Excel.

Question 1: Which cities and countries have hosted the most concerts, and what were the average attendance and revenue figures in each location?

**Table 1: Number of Concerts by Country** 

Country	Count of Tours
Australia	22
Belgium	1
Canada	17
China	1
England	7
Germany	3
Hong Kong	1
Indonesia	1
Ireland	3
Italy	1
Japan	2
Malaysia	1
Netherlands	2
New Zealand	3
Northern Ireland	1
Philippines	2
Scotland	1
Singapore	2
Spain	1
United States	213

Table 1 shows that the country with the most concert was USA. The concerts held in United States was almost 10x as many as the concert held in Australia which was second in terms of the number of concerts held.

As indicated in Figure 1 below, the concerts held in USA makes up for 74.7 percent of the total concerts held

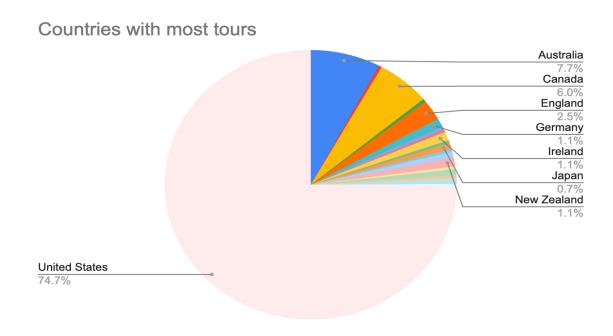


Figure 1: Percentage of concerts by country

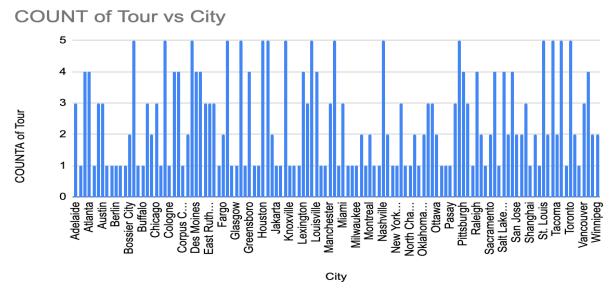


Figure 2: Number of tours by city

Figure two shows that the highest number of tours in a city was 5. The number varies across different cities. Cities like Nashville and Toronto were host to 5 concerts each while cities like Atlanta and Greensboro hosted 4 tours each. Similarly, cities like Adelaide and Chicago hosted 3 concerts each. Fargo and Montreal were hosts to 2 concerts each. Buffalo and Berlin with one concert held in each city, were some of the cities with the least number of concerts.

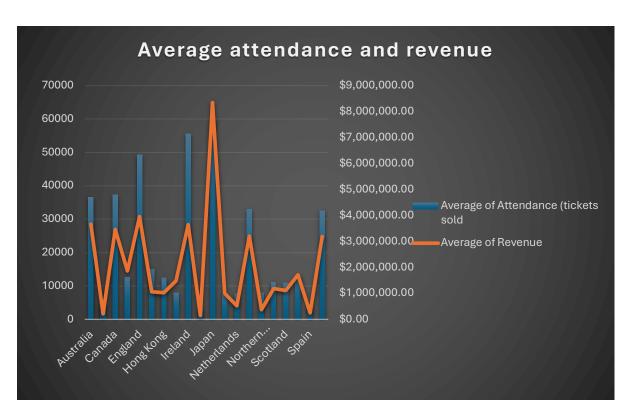


Figure 3: Average attendance and revenue

A clear indication from the charts above is that Attendance may have influenced the revenue turn over. However, there are other metrics that could have also influenced this. The price of tickets in certain countries could have influenced the revenue too. An example of this is in Japan were a high attendance resulted in high revenue. Ireland on the other hand, didn't yield as much despite its relatively high attendance.

**Question 2**: What are the top opening acts in terms of attendance, and how many times have they performed

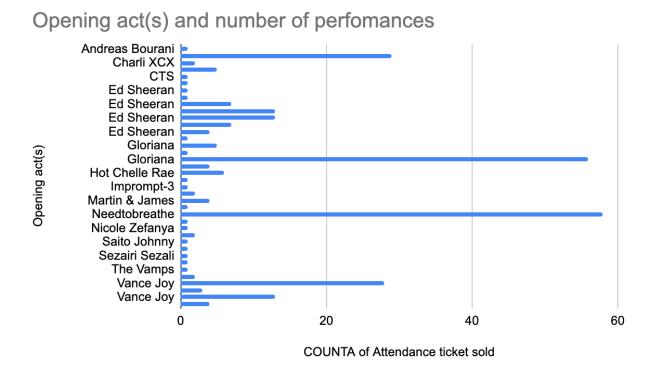


Figure 4: Number of opening acts across concerts

According to the charts in the figure above, Needtobreathe with almost 60 appearances, had the most opening acts appearance across concerts. Gloriana had the second most appearances. While CTS and Nicole Zefanya are among the opening acts with the least amount of appearances with 1 each.

Question 3: How do attendance and revenue figures vary across different tours, and what are the trends over time?

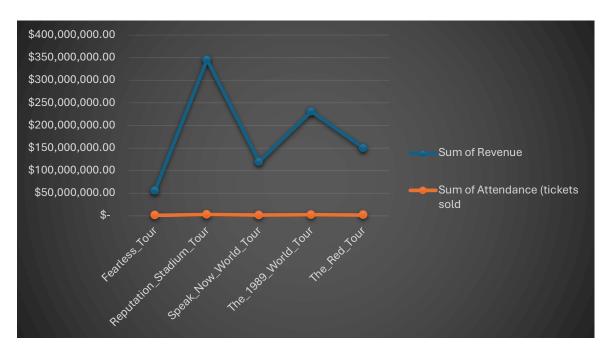


Figure 5 Attendance in relation to revenue across tours

From the above chart and the table below, the tours with the highest attendances yielded the most revenue. So, while the attendance across different locations influenced revenue generation, other factors also contributed. What is clear from this chart and table below is that tours with the highest attendance generated the most revenue.

Row Labels	Sum of Revenue	Sum of Attendance (tickets sold
Fearless_Tour	\$ 55,749,105.00	972764
Reputation_Stadium_Tour	\$ 345,508,465.00	2888916
Speak_Now_World_Tour	\$ 119,792,938.00	1605254
The_1989_World_Tour	\$ 231,011,352.00	2122843
The_Red_Tour	\$ 150,184,971.00	1702933

Grand Total	902246831	9292710	

#### Table 2: Attendance and Revenue across tours

Question 4: What is the average percentage of tickets sold compared to available tickets for each venue



The chart in Figure 6 shows that 99 percent of the available tickets were sold.

Figure 6: Average percentage of tickets sold compared to available tickets

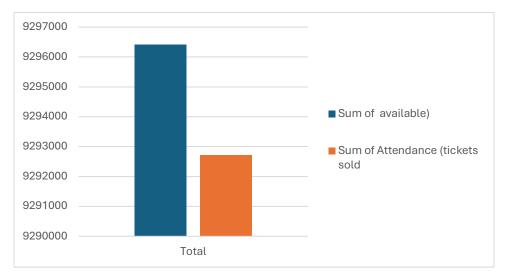


Figure 7: total sum of available tickets vs total tickets sold

#### Question 5: What is the noticeable difference in weekdays and weekends

The information in the datasets doesn't state any day of the week, hence the difference in weekdays and weekends can't be analyzed to state any noticeable difference.

Question 6: what are the patterns in ticket pricing, and how do they relate to the total revenue generated

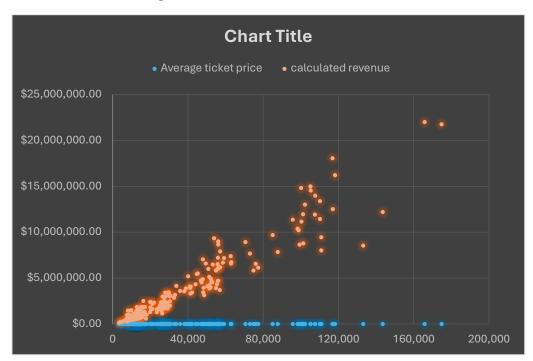


Figure 8: ticket price per tour to calculated revenue

The charts above and below indicates that ticket price influenced the overall revenue. Venues with high ticket price and high attendance yielded the most revenue. Tours with smaller attendance and a high-ticket price also yielded a lot of revenue. The ticket price from the chart isn't the sole contributor to the overall revenue, the attendance is also a key factor.

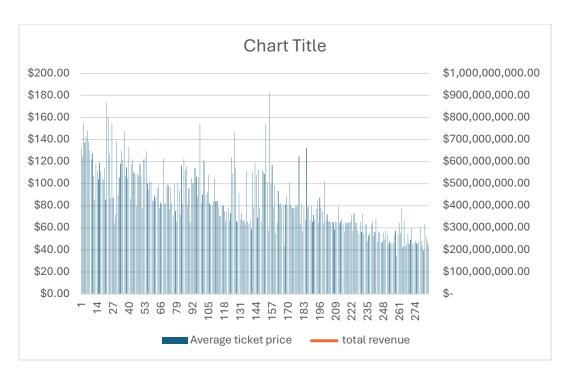


Figure 9: Average ticket price and revenue

#### **Actions & Recommendations**

Revenue: USA generated the most revenue, and this could be attributed to the relatively high number of concerts that were held in USA. To increase revenue further Swift and her team should increase the number of concerts in other countries. Countries like Japan would generate more revenue as the attendance and price there was high. Similarly, ticket prices could be increased for concerts held in countries with high attendance but yielded low revenue. An example of this is Ireland, the attendance there was over fifty-five thousand, but revenue was about three million USD which was almost the same as the revenue generated in New Zealand despite New Zealand having an attendance that was more than twenty thousand lower than the attendance in Ireland

**Attendance**: While attendance was high in some countries and low in others, the team can consider reducing the number of concerts held in the countries with low attendance. Fewer concerts will mean a higher attendance for the concerts held. This will also save the team some resources that should have been put into organizing these events. Similarly, more concerts could be held in countries with high attendance.

**Tours**: The Reputation\_Stadium\_Tour had the most attendance and consequently generated more revenue. In order to maximize the popularity of this tour, ticket prices for the Reputation\_Stadium\_Tour can be slightly increased to generate more revenue. Also, this concert should be held in countries with low attendance to increase the attendance in these countries and generate more revenue.

**Opening acts**: Needtobreathe had the most appearances for opening acts. The swift team should consider looking at various music charts across countries and consider the top artistes in each country and consider these artistes as opening acts for their events. This would increase the popularity of tours and increase the attendance.

## **THANK YOU**