**ABOUT THIS PROJECT**

**Overview:**

This dashboard gives a complete summary of passenger satisfaction during airline travel. It shows important details like the total number of passengers, the average distance of flights, the overall satisfaction score, and the typical delays during arrivals and departures. The dashboard also gives insights into factors that affect passenger satisfaction, such as the class of service, type of customer, reason for travel, food and drink options, service on board, cleanliness, check-in experience, and comfort of seats. By looking at these different aspects, the dashboard aims to provide a thorough understanding of the overall passenger experience and find areas that can be improved.  
  
**About the dataset:**

This dataset contains feedback from more than 120,000 airline passengers, where they rated their satisfaction with the airline. It also includes additional information about each passenger's flight, the purpose of their travel, and evaluations of different factors like cleanliness, comfort, service, and the overall experience.  
  
**Need for analysis:**

Anfield Airlines is struggling with an overall passenger satisfaction score below 50%. In order to find out the causes/reasons affecting the overall satisfaction score, I carried out some analysis and tried answering the following questions (which would help in problem solving):

1. What is the percentage of satisfied airline passengers, and does it differ by customer type or type of travel?
2. What are the characteristics of a frequent airline passenger's customer profile?
3. Does the flight distance impact customer preferences or travel behaviour?
4. Which factors have the most significant impact on customer satisfaction, and which ones lead to dissatisfaction?

**Data exploration and data manipulation:**

I made use of the power of SQL to extract valuable insights from the passenger satisfaction data. And used it to understand the data at deeper level to get an overall idea about the dataset. **NOTE: I’ve documented the queries I used during the data exploration process. Please connect with me on LinkedIn or visit my GitHub profile to know further details.**

**ETL and Data Modelling:**

I took a dataset with feedback from more than 120,000 airline passengers, where they rated factors like class, customer type, travel type, food and drink options, onboard service, gender, cleanliness, check-in service, and seat comfort. To get it ready for analysis, I used excel to clean up and remove extra stuff, making the data neat and easy to work with in Power BI.

**Key Insights:**

* Out of a total of 129,880 passengers, just 43.35% indicated that they were satisfied with the airline's services.
* Typically, individuals aged 40-59 who are returning customers tend to choose medium-distance flights (ranging from 932 to 2485 miles) for business-related purposes. This passenger group prefers traveling in the business class, and their overall satisfaction score is 78.94%. However, there are areas for enhancement identified in the airline's in-flight Wi-Fi service, online booking process, and gate location.
* Among all passengers, 70,678 individuals, representing 54%, choose short-distance flights covering up to 932 miles. This group typically travels in economy class and consists mainly of young adults aged 20-39 and middle-aged individuals aged 40-59, with an average age of 39. However, their overall satisfaction score is 33.12%, highlighting areas that need improvement. These aspects include the quality of in-flight Wi-Fi service, entertainment options, cleanliness, online booking experience, gate location, and online boarding procedures.
* Based on these findings, it is advisable for the airline to focus on making improvements in the identified areas to improve the travel experience for passengers.