AIR INDIA MONTHLY PASSENGER TRAFFIC (INTERNATIONAL)

Documentation

1. Data Dictionary

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| **Variable** | **Variable Name** | **Measurement Unit** | **Allowed**  **Values** | **Description** |
| Month | Month | Text, e.g., "APR" for April | JAN-DEC | The month in which the data was recorded. |
| DEPARTURES | DEPARTURES | Integer | 0-5000 | The number of flights that departed during the month in question. |
| HOURS | HOURS | Hours (Float) | >=0 | Hours flown by the airline during the month, indicating fleet utilization. |
| Passengers carried by the airline | PASSENGERS CARRIED | Integer | 0-999999 | Number of passengers carried by the airline during a given month. |
| Seat kilometers available measured in thousands | AVAILABLE SEAT KILOMETRE(TH) | Kilometers (Thousands) | >=0 | Seat kilometers available on the airline's flights during the month, measured in thousands. |
| Percentage of available seats occupied | PAX.LOAD FACTOR (IN %) | Percentage (%) | 0% - 100% | Percentage of available seats that were occupied by passengers during the month. A key metric for airlines. |
| Fiscal Year | FY | Text, e.g., "FY14 | FY14-FY23 | Fiscal Year, indicating the financial year for which the data is reported |

1. Data Collection Methodology

* The "Air India Monthly Passenger Traffic" dataset, authored by Nishant Bhardwaj and sourced from Kaggle, provides quantitative insights into Air India’s monthly operations and performance over ten financial years (FY14-23). The data, originating from official reports, spans from JAN 2014 to APRIL 2023, with annual updates to maintain data relevance.
* The dataset's data collector maintains a strong focus on accuracy, employing cross-referencing and quality checks. Ethical considerations, detailed documentation, and the reliability of the data underscore its utility for performance analysis.

1. Why does this data set intrigue

me ?

This dataset intrigues me for two primary reasons:

* **Real-World Relevance**: The "Air India Monthly Passenger Traffic" dataset provides a tangible and real-world application of analytics in the aviation industry. Its significance lies in its richness as a comprehensive source of quantitative data, spanning Air India’s monthly operations over ten years. Analyzing the performance data of a well-known airline like ‘Air India’ allows me to apply analytical techniques to practical, industry-specific challenges, making it a valuable learning experience.
* **Diverse Analytical Opportunities:** This dataset offers a wealth of data encompassing various performance metrics, including departures, hours flown, passenger loads, and more. Exploring trends, seasonality, and patterns over an extended period offers a deeper understanding of how various factors influence airline operations, economic impact and passenger behavior. It allows me to assess the economic impact of the airline on the regions it serves. Moreover, the comparison of Air India’s performance with industry benchmarks lends a broader context for evaluating the airline's competitiveness.