AIRLINE ANALYSIS
USING POWER BI

Submitted by

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IN

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1. INTRODUCTION:

The Airline industry is a highly competitive market, and needs to have access to accurate and up-to-date information to make informed decisions. Power BI provides a comprehensive solution for airline data analysis, allowing passengers to gain valuable insights into various aspects of an airline such as demand for flight, which month can profit to book flights,what types and flights can travel country to country. With its interactive dashboard and decomposition tree feature, Power BI provides airline investigators with the tools they need to make data-driven decisions that will improve their airline operations and attract more passengers.

In this analysis, Power BI presents a clear and concise overview of the ski resort industry, making it a must-have tool for ski-resort managers.

2. META DATA:

Data on airline analysis around the world, including details on their flight name, type, passengers,freight count who went out of India and came to India, year and month travel data.

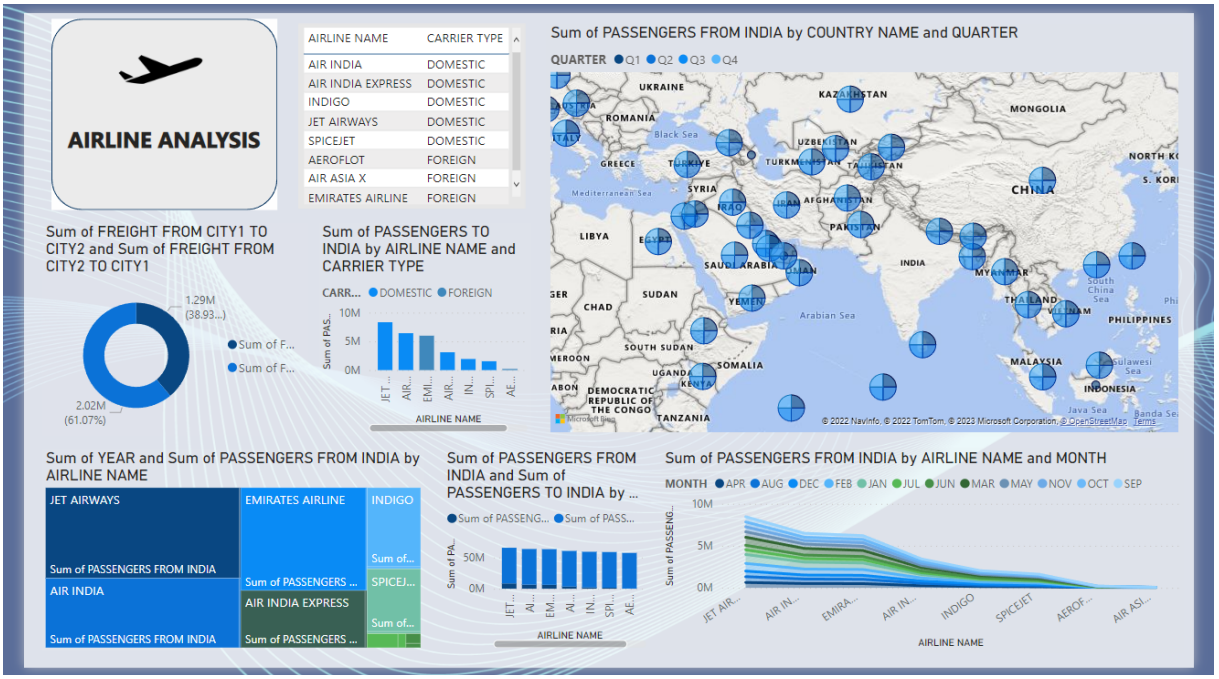
3. PREVIEW OF DATASET:

YEAR	MONTH	QUARTER	AIRLINE NAME	CARRIER TYPE	PASSENGERS TO INDIA	PASSENGERS FROM INDIA	FREIGHT TO INDIA	FREIGHT FROM INDIA
2015	AUG	Q3	TAJIK AIR	FOREIGN	167	192	0	1.494
2015	AUG	Q3	TRANSAERO AIRLINES	FOREIGN	1842	2454	0	82.564
2015	AUG	Q3	YEMENIA AIRWAYS	FOREIGN	11	270	0	1.133
2015	SEP	Q3	SPICEJET	DOMESTIC	39802	48743	0	295.256
2015	SEP	Q3	AIR AUSTRAL	FOREIGN	211	169	0	4.941
2015	SEP	Q3	KAM AIR	FOREIGN	2400	1000	0	42.774
2015	SEP	Q3	TURKMENISTAN AIRLINES	FOREIGN	2375	3224	0	24.834
2015	SEP	Q3	YEMENIA AIRWAYS	FOREIGN	10	157	0	0.161
2015	OCT	Q4	ARIANA AFGHAN	FOREIGN	969	805	0	45.718
2015	OCT	Q4	IRAQI AIRWAYS	FOREIGN	0	377	0	1.271
2015	OCT	Q4	KAM AIR	FOREIGN	0	0	0	57.854
2015	OCT	Q4	TAJIK AIR	FOREIGN	206	122	0	1.824
2015	NOV	Q4	KAM AIR	FOREIGN	0	0	0	47.8
2015	NOV	Q4	NEPAL AIRLINES CORPORATION	FOREIGN	3843	4099	0	40.906
2015	NOV	Q4	TAJIK AIR	FOREIGN	187	108	0	2.287
2015	NOV	Q4	THOMAS COOK AIRLINES U.K.	FOREIGN	4863	2502	0	70.745
2015	NOV	Q4	TURKMENISTAN AIRLINES	FOREIGN	3127	3622	0	7.119
2015	NOV	Q4	YEMENIA AIRWAYS	FOREIGN	44	174	0	0.076
2015	DEC	Q4	BANGKOK AIRWAYS	FOREIGN	4880	4829	0	44.834
2015	DEC	Q4	KAM AIR	FOREIGN	3709	3233	0	49.449
2015	DEC	Q4	NEPAL AIRLINES CORPORATION	FOREIGN	2009	3459	0	60.714
2015	DEC	Q4	TAJIK AIR	FOREIGN	165	154	0	3.198
2015	DEC	Q4	TURKMENISTAN AIRLINES	FOREIGN	4303	3026	0	15.583
2015	DEC	Q4	YEMENIA AIRWAYS	FOREIGN	0	200	0	2.213
2016	JAN	Q1	AIR MANAS	FOREIGN	721	727	0	13.9
2016	JAN	Q1	KAM AIR	FOREIGN	4360	3896	0	164.8
2016	JAN	Q1	NEPAL AIRLINES CORPORATION	FOREIGN	3450	3512	0	41.7
2016	JAN	Q1	TAJIK AIR	FOREIGN	437	316	0	4.5

2017	Q1	TURKEY	55231	64228	2591.2	3213.4
2017	Q1	UNITED ARAB EMIRAT	2232638	2480816	22876.4	67074.1
2017	Q1	UNITED KINGDOM	311543	337464	13194.9	19492.1
2017	Q1	UNITED STATES	120375	142848	1666.3	2412.2
2017	Q1	UZBEKISTAN	12585	14158	949.6	1360.3
2016	Q1	AFGHANISTAN	39719	38601	200.3	1409.5
2016	Q1	AUSTRALIA	16981	20040	109.5	328.7
2016	Q1	AUSTRIA	10892	13463	453.9	588.4
2016	Q1	BAHRAIN	131984	143946	217.1	2148.7
2016	Q1	BANGLADESH	83989	89379	656.9	771.3
2016	Q1	BELGIUM	18265	20635	1149	930.9
2016	Q1	BHUTAN	9083	9821	3.9	15.9
2016	Q1	BURMA	9006	9252	0.9	28.8
2016	Q1	CANADA	28745	29291	867.2	522.9
2016	Q1	CHINA	74935	78472	3253.2	2069.8
2016	Q1	EGYPT	3328	3932	17.2	12.5
2016	Q1	ETHIOPIA	17222	18439	370	1241.1
2016	Q1	FINLAND	13214	14747	474.4	937.6
2016	Q1	FRANCE	97136	100758	5108	4674.4
2016	Q1	GERMANY	158643	173794	12322	15096.1
2016	Q1	HONG KONG	162482	176957	22901.4	15207.1
2016	Q1	IRAN	10990	9990	25.6	221.5
2016	Q1	ISRAEL	7683	8489	188.7	333.2
2016	Q1	ITALY	15948	21316	317.4	340.9
2016	Q1	JAPAN	39045	45569	2123.4	2551.6
2016	Q1	KAZAKHSTAN	9072	10674	3.1	57.8
2016	Q1	KENYA	20720	26766	33.2	477.1

YEAR	QUARTER	CITY1	CITY2	PASSENGERS FROM CITY1 TO CITY2	PASSENGERS FROM CITY2 TO CITY1	FREIGHT FROM CITY1 TO CITY2	FREIGHT FROM CITY2 TO CITY1	C
2016	Q3	DON MUEANG	KOLKATA	1950	2552	0	0	
2016	Q3	DUBAI	CHANDIGARH	13586	12807	0	0	
2016	Q3	DUBAI	MADURAI	14367	15686	0	0	
2016	Q3	DUBAI	PUNE	18892	20592	0	0	
2016	Q3	DUBAI	TIRUCHIRAPALLY	11398	11219	0	0	
2016	Q3	FRANKFURT	PUNE	3510	2610	0	0	
2016	Q3	JEDDAH	LUCKNOW	15189	15024	0	0	
2016	Q3	KANDAHAR	DELHI	1318	1099	0	0	
2016	Q3	KARACHI	DELHI	30	54	0	0	
2016	Q3	KATHMANDU	VARANASI	141	144	0	0	
2016	Q3	KUALALUMPUR	AMRITSAR	7369	8205	0	0	
2016	Q3	KUNMING	DELHI	4405	4392	0	0	
2016	Q3	KUWAIT	KOZHIKODE	8231	7872	0	0	
2016	Q3	KUWAIT	MANGALORE	3436	2860	0	0	
2016	Q3	MASHHAD	DELHI	728	625	0	0	
2016	Q3	MEDINA	HYDERABAD	592	0	0	0	
2016	Q3	MEDINA	MUMBAI	4926	2338	0	0	
2016	Q3	MOSCOW	HYDERABAD	183	0	0	0	
2016	Q3	MUSCAT	MANGALORE	4822	4346	0	0	
2016	Q3	NARITA	MUMBAI	10055	9550	0	0	
2016	Q3	PARIS	CHENNAI	2052	1024	0	0	
2016	Q3	RANGOON	GAYA	8481	7092	0	0	
2016	Q3	RANGOON	VARANASI	3465	2677	0	0	
2016	Q3	RASALKHAMA	KOZHIKODE	5207	3014	0	0	
2016	Q3	RIYADH	LUCKNOW	10408	9976	0	0	
2016	Q3	SALALAH	KOCHI	1273	1281	0	0	
2016	Q3	SALALAH	KOZHIKODE	1926	1996	0	0	
2016	Q3	SALALAH	TRIVANDRUM	389	807	0	0	

4. DASHBOARD:



5. SUMMARY OF DASHBOARD:

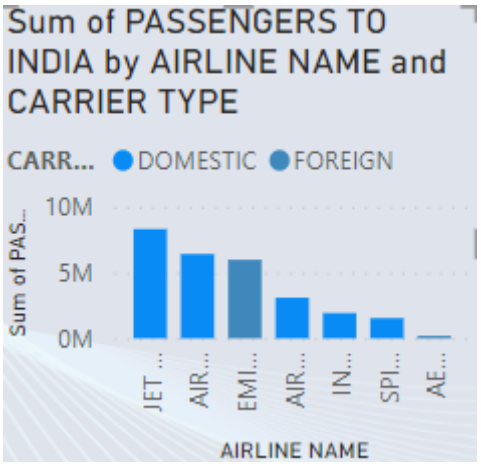
- This airline analysis using Power BI provides a comprehensive overview of the airline in India, enabling a deep dive into the various aspects of the airline. The dashboard presents the sum of passengers travelled out and came to india.
- The dashboard also highlights the maximum number of passengers travelled in respected months.
- This map provides an insight into the passenger travelled by country shown in 4 quarters of year.
- The Stacked area chart is shown as the number of passengers travelled over respected airways classified into months.
- The dashboard is equipped with filters on the continent and provides information about major airways flying in and out of the country.
- Overall, this Power BI dashboard serves as a valuable tool for airline investigators and passengers, providing them with critical insights to make informed decisions.

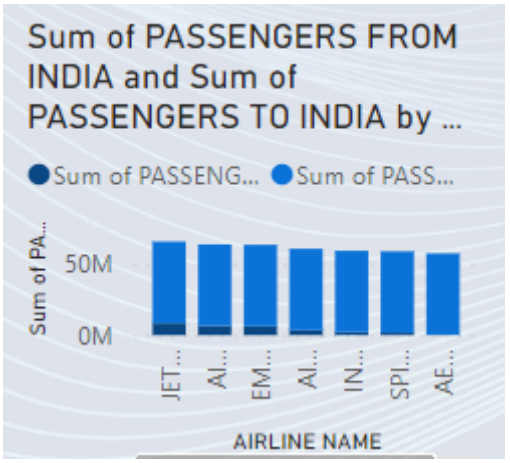
6. VISUALIZATION DESCRIPTION

6.1. CARDS

- The card in this Power BI dashboard presents a compact, yet informative representation of the respected dataset analysis.

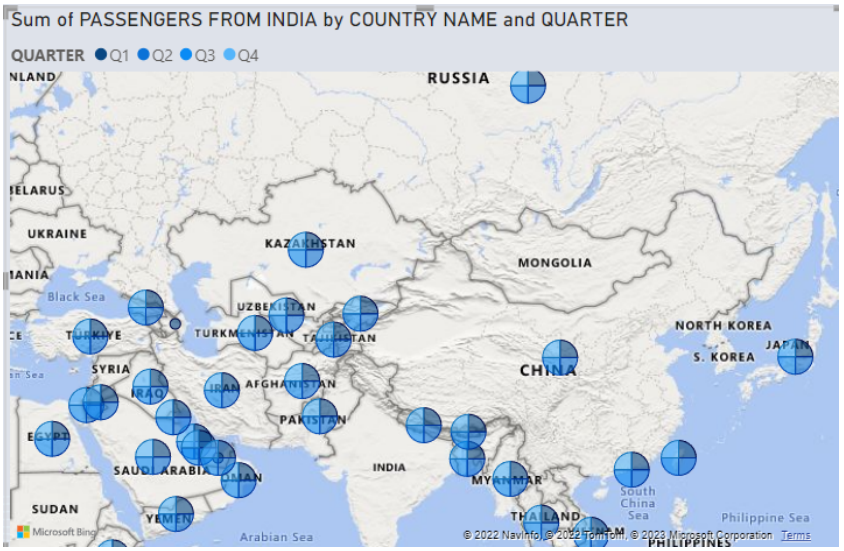
6.2. CLUSTERED BAR CHART





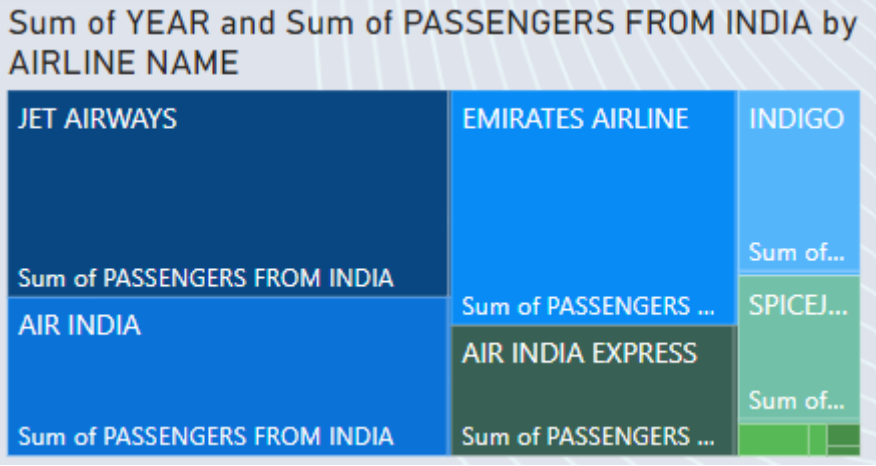
- The clustered bar chart in this PowerBI dashboard provides an overview of the sum of passengers travelled in and out of India with respected airways.
- This chart highlights the count of passengers where respected airways can compare themselves.
- The chart presents the information in a clear and concise manner, allowing for quick comparison of different airways. The chart provides a visual representation of the airways infrastructure, making it easier for passengers and airways investigators to understand the potential of their own company.

6.3. MAP



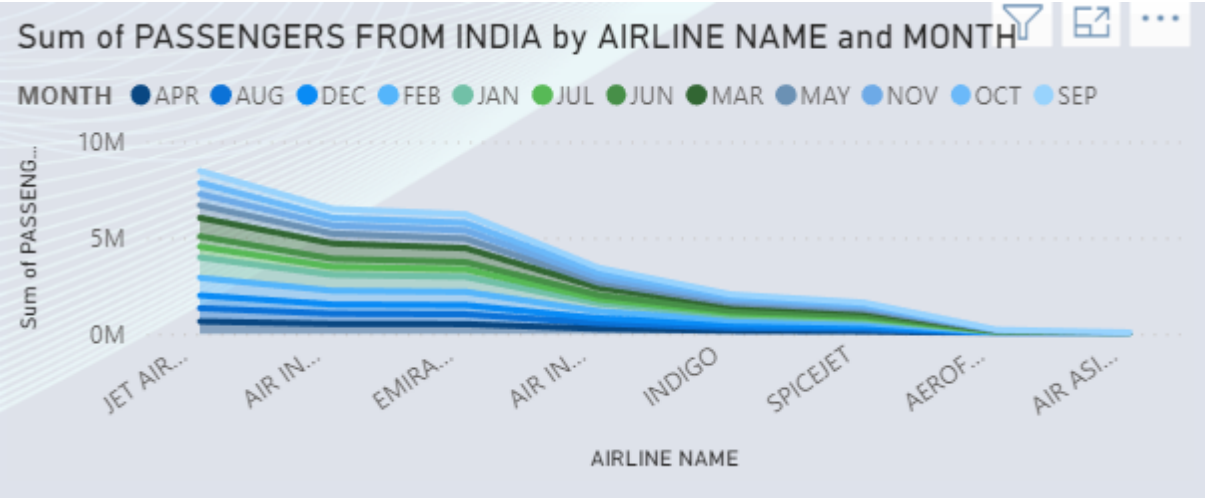
- The map in this Power BI dashboard provides a visual representation of the total count of people by country.
- The map uses various encircles to represent the count of passengers travelled from respected countries over 4 quarters of period.

6.4. TREE MAP:



- The tree feature in this Power BI dashboard provides a visual representation of year wise passengers count from India in a respective airways.
- The tree displays the airways in a hierarchical structure, allowing for a clear understanding of the demand for these airways in different countries.
- The tree feature is a valuable tool for passengers and airways authority to understand the demand for flight and make informed decisions about their authority..

6.5. STACKED AREA CHART:



- The Stacked area chart in this Power BI dashboard provides a visual representation of passengers count from India in a respective airways in the following month.
- From this visualization it is easy for the passengers to notice which month tickets have sold more and they can buy tickets.

7. CONCLUSION:

The Power BI dashboard helps passengers and airways authority stay ahead of the competition by providing a comprehensive view of the airline industry. By having this information readily available, airways authority can make data-driven decisions that will improve the bottom line and increase profits. In short, the Power BI dashboard provides a powerful tool for the airline industry to make informed decisions about their airways and stay ahead of the competition.