

# High Cloud Airlines

**Presented by group - 4**



# *Meet* **OUR TEAM!**



**Ms. Akshata G**



**Ms. Lakshimi  
Vijay**



**Ms. Jyoti S**

# INDEX

- Introduction
- Objective
- Business Overview
- Project scope
- Data model challenges
- Dashboard Overview
- Recommendations & Conclusion

# Introduction

A hand holding a magnifying glass over the word 'Introduction'. The magnifying glass is positioned over the 'tro' part of the word, making it appear larger and more prominent. The hand is on the left side of the image, and the magnifying glass is held at an angle, focusing on the text.

- **“To revolutionize the airline industry through data-driven insights and optimization”**
- **HighCloud Airline, a leading player in the aviation sector, has been at the forefront of providing seamless air travel experiences.**
- **Established with a commitment to excellence, HighCloud has consistently set industry standards in terms of reliability, safety, and customer satisfaction.**
- **Extensive network of routes spans across regions, connecting people and cultures, making HighCloud a preferred choice for millions of travelers globally.**
- **HighCloud embraces innovation and modern technology to enhance operational efficiency and stay at the forefront of the aviation landscape.**





# OBJECTIVE

To gain a comprehensive understanding of “High Cloud Airlines” operations through data analysis. This will involve investigating load factors, identifying top carrier names based on passenger preference, analyzing popular routes, and exploring other key metrics. The ultimate goal is to provide actionable recommendations that can enhance operational efficiency and profitability.

# **Business Overview**

**In today's competitive airline industry, data analysis plays a critical role in optimizing operations and maximizing profitability. By harnessing the power of data, High Cloud Airlines can gain valuable insights into various aspects of its business, allowing them to make data-driven decisions that can lead to**

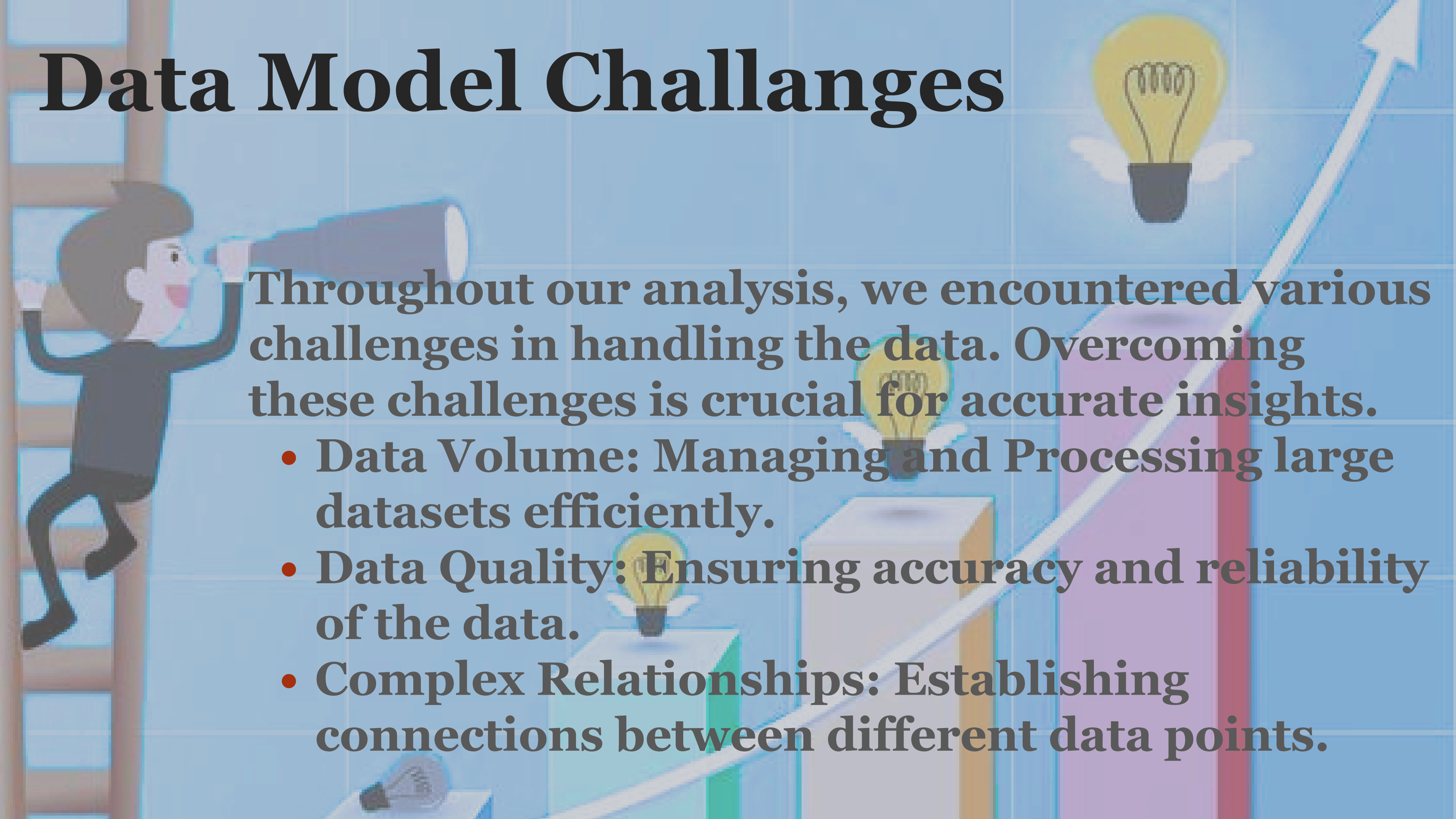
- Improved load factor**
- Enhance Passenger Experience**
- Optimized resource allocation**
- Data –Driven Decision Making**



The Project aimed to leverage the power of data analysis and extract valuable insights to optimize high cloud airline operations and performance. The specific scope of the project focused on analyzing key performance indicators (KPIs) to gain deeper understanding of:

- Load Factor
- Passenger Preferences
- Popular Routes
- Operational Efficiency

# Data Model Challenges

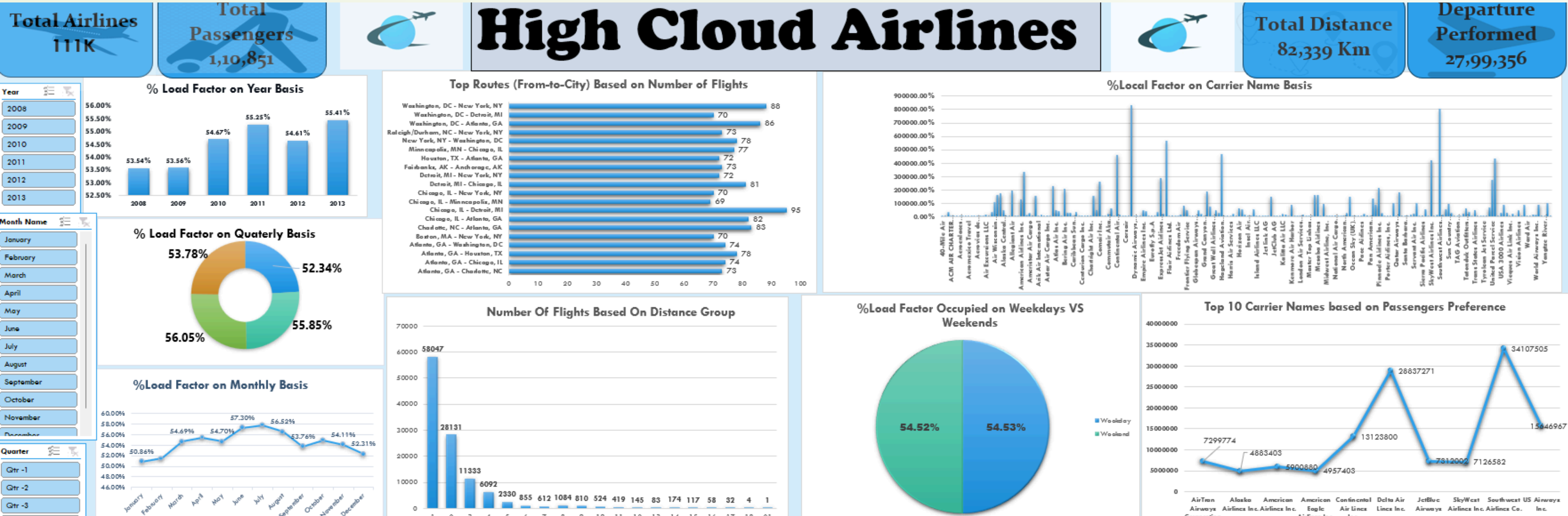


Throughout our analysis, we encountered various challenges in handling the data. Overcoming these challenges is crucial for accurate insights.

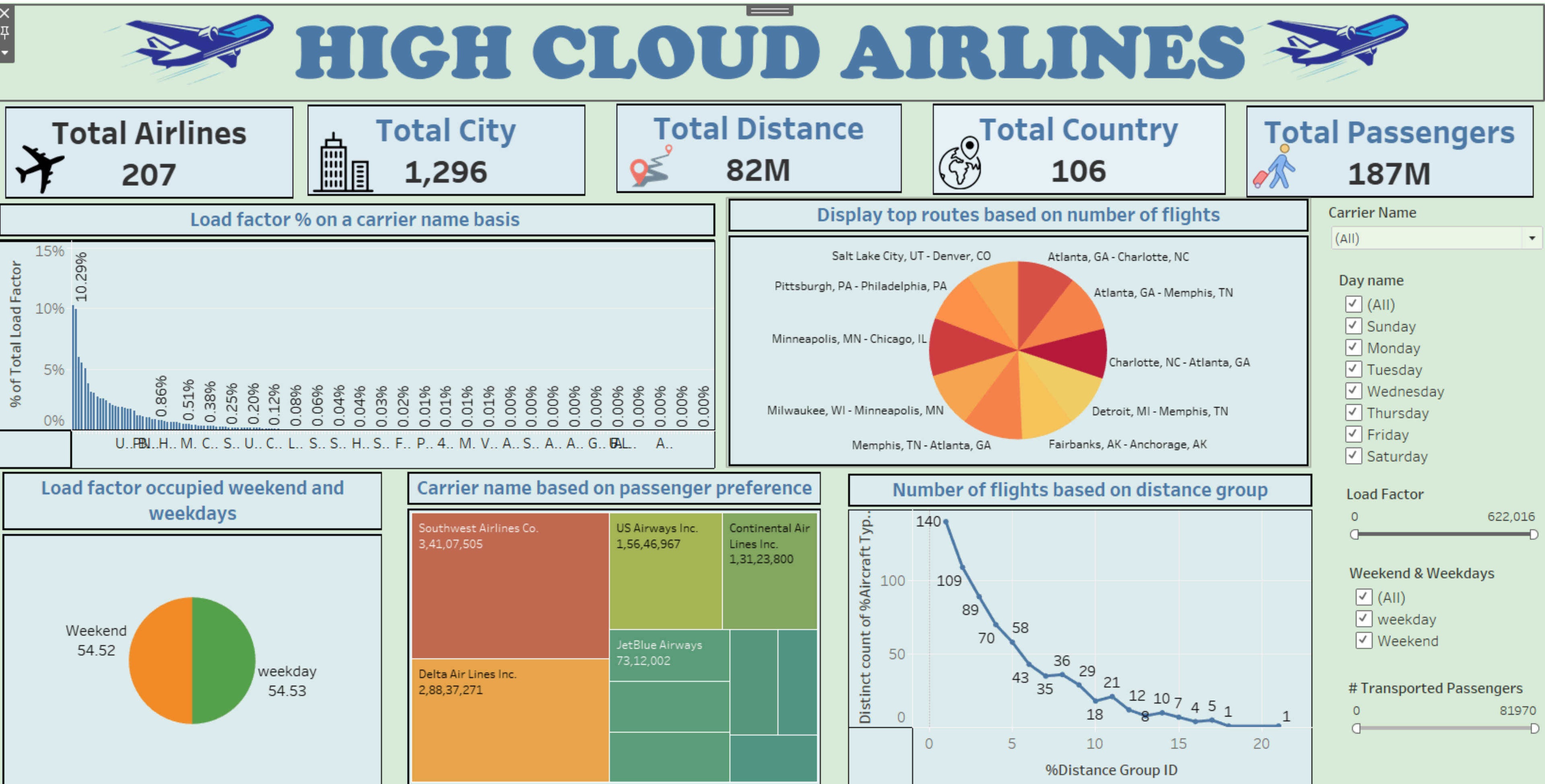
- **Data Volume:** Managing and Processing large datasets efficiently.
- **Data Quality:** Ensuring accuracy and reliability of the data.
- **Complex Relationships:** Establishing connections between different data points.



# Excel Dashboard



# Tableau Dashboard







# High Cloud Airlines



Dashboard

Load factor % on a yearly, quarterly, monthly basis

Year	Quarter	Mon..	
2008	Q1	February	
		January	75,657
		March	
	Q2	April	80,276
		May	
		June	87,111
	Q3	Septemb..	
		August	86,681
		July	
	Q4	November	
		Octomber	77,616
		December	
2009	Q1	January	70,868
		February	
		March	78,528
	Q2	April	79,820
		May	
		June	85,964
	Q3	Septemb..	
		August	85,825
		July	
	Q4	Octomber	76,857
		November	
		December	79,132
2010	Q1	January	
		February	78,311
		March	
	Q2	May	
		April	85,122
		June	
	Q3	Septemb..	
			0K 10K 20K 30K 40K 50K 60K 70K 80K 90K
			Load Factor

Date Sheet

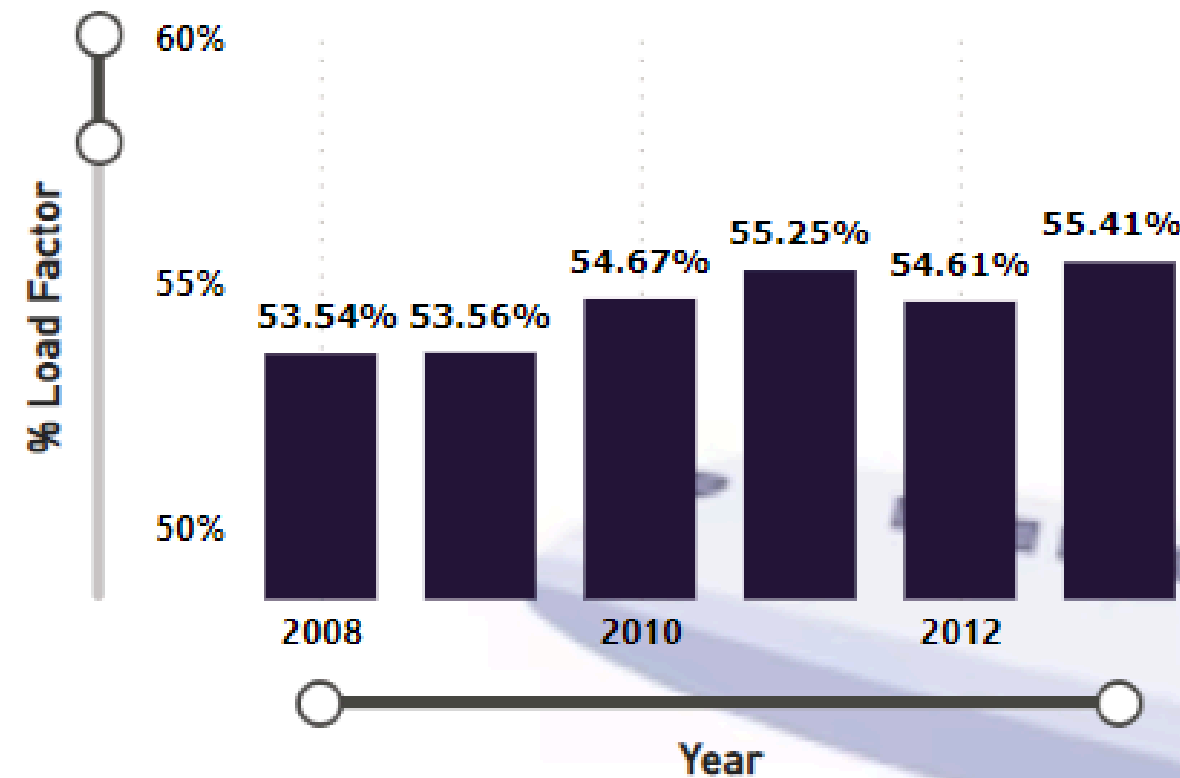
Date	Day	Year	Month	Month name	Financia..	Day name	Day Number	Weekend & Wee..
1/6/2010	1	2010	6	June	Q1	Tuesday	3	weekday
1/6/2011	1	2011	6	June	Q1	Wednesday	4	weekday
1/6/2012	1	2012	6	June	Q1	Friday	6	weekday
1/6/2013	1	2013	6	June	Q1	Saturday	7	Weekend
1/7/2008	1	2008	7	July	Q2	Tuesday	3	weekday
1/7/2009	1	2009	7	July	Q2	Wednesday	4	weekday
1/7/2010	1	2010	7	July	Q2	Thursday	5	weekday
1/7/2011	1	2011	7	July	Q2	Friday	6	weekday
1/7/2012	1	2012	7	July	Q2	Sunday	1	Weekend
1/7/2013	1	2013	7	July	Q2	Monday	2	weekday
1/8/2008	1	2008	8	August	Q2	Friday	6	weekday
1/8/2009	1	2009	8	August	Q2	Saturday	7	Weekend
1/8/2010	1	2010	8	August	Q2	Sunday	1	Weekend
1/8/2011	1	2011	8	August	Q2	Monday	2	weekday
1/8/2012	1	2012	8	August	Q2	Wednesday	4	weekday
1/8/2013	1	2013	8	August	Q2	Thursday	5	weekday
1/9/2008	1	2008	9	September	Q2	Monday	2	weekday
1/9/2009	1	2009	9	September	Q2	Tuesday	3	weekday
1/9/2010	1	2010	9	September	Q2	Wednesday	4	weekday
1/9/2011	1	2011	9	September	Q2	Thursday	5	weekday
1/9/2012	1	2012	9	September	Q2	Saturday	7	Weekend
1/9/2013	1	2013	9	September	Q2	Sunday	1	Weekend
1/10/2008	1	2008	10	Octomber	Q3	Wednesday	4	weekday
1/10/2009	1	2009	10	Octomber	Q3	Thursday	5	weekday
1/10/2010	1	2010	10	Octomber	Q3	Friday	6	weekday
1/10/2011	1	2011	10	Octomber	Q3	Saturday	7	Weekend
1/10/2012	1	2012	10	Octomber	Q3	Monday	2	weekday
1/10/2013	1	2013	10	Octomber	Q3	Tuesday	3	weekday
1/11/2008	1	2008	11	November	Q3	Saturday	7	Weekend
1/11/2009	1	2009	11	November	Q3	Sunday	1	Weekend
1/11/2010	1	2010	11	November	Q3	Monday	2	weekday
1/11/2011	1	2011	11	November	Q3	Tuesday	3	weekday
1/11/2012	1	2012	11	November	Q3	Thursday	5	weekday



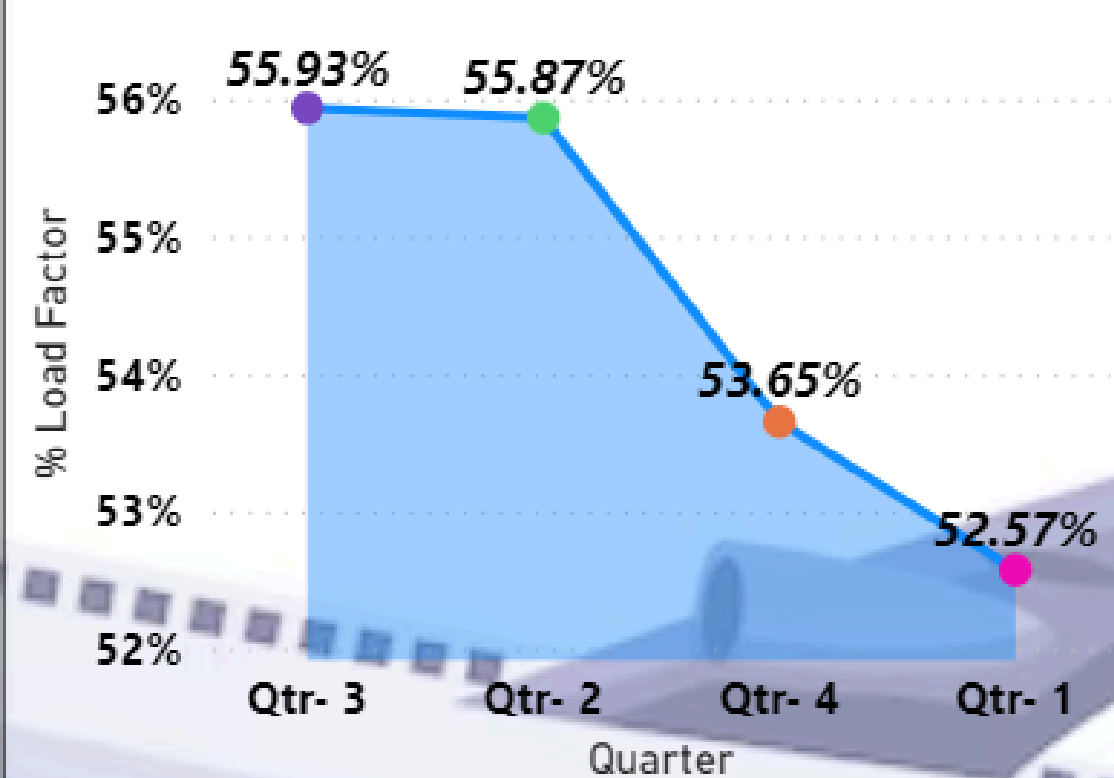
# HIGH CLOUD AIRLINES DASHBOARD



## % Load Factor by Year



## % Load Factor by Quarter



## % Load Factor by Weekend VS Weekday

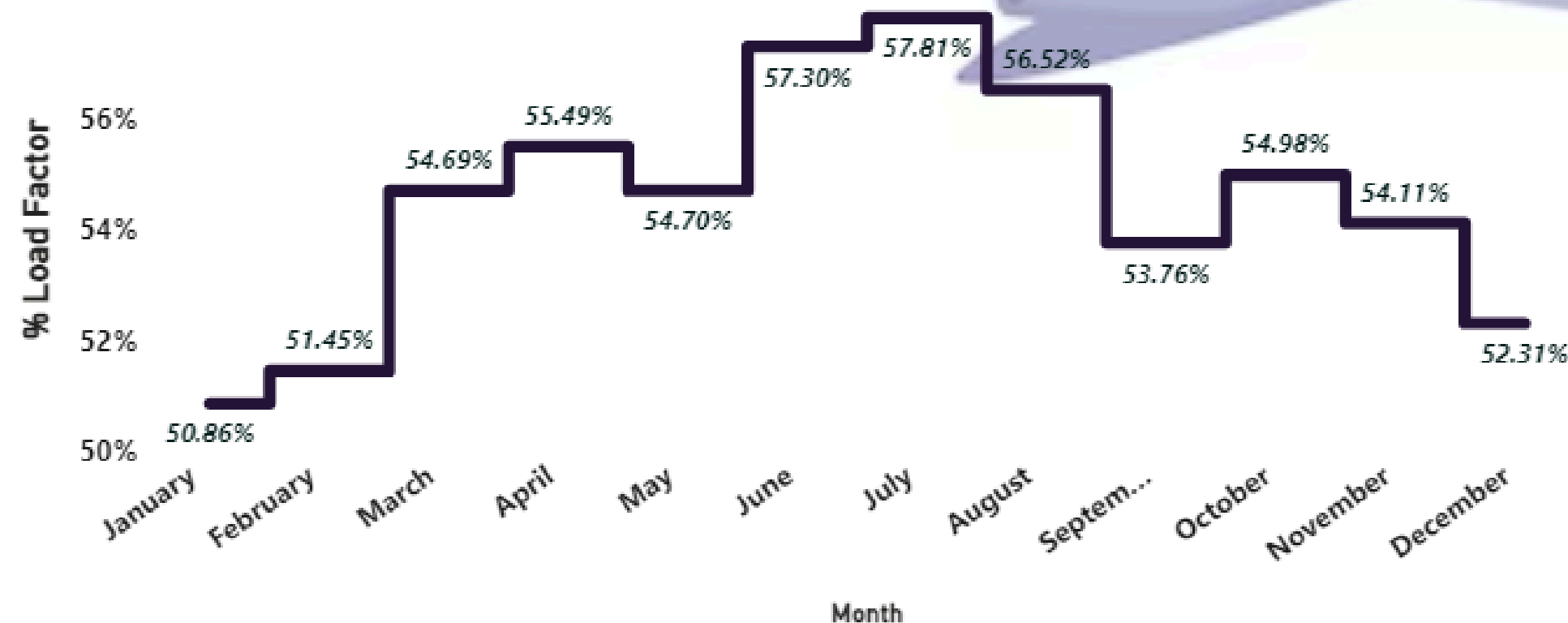


**Year**

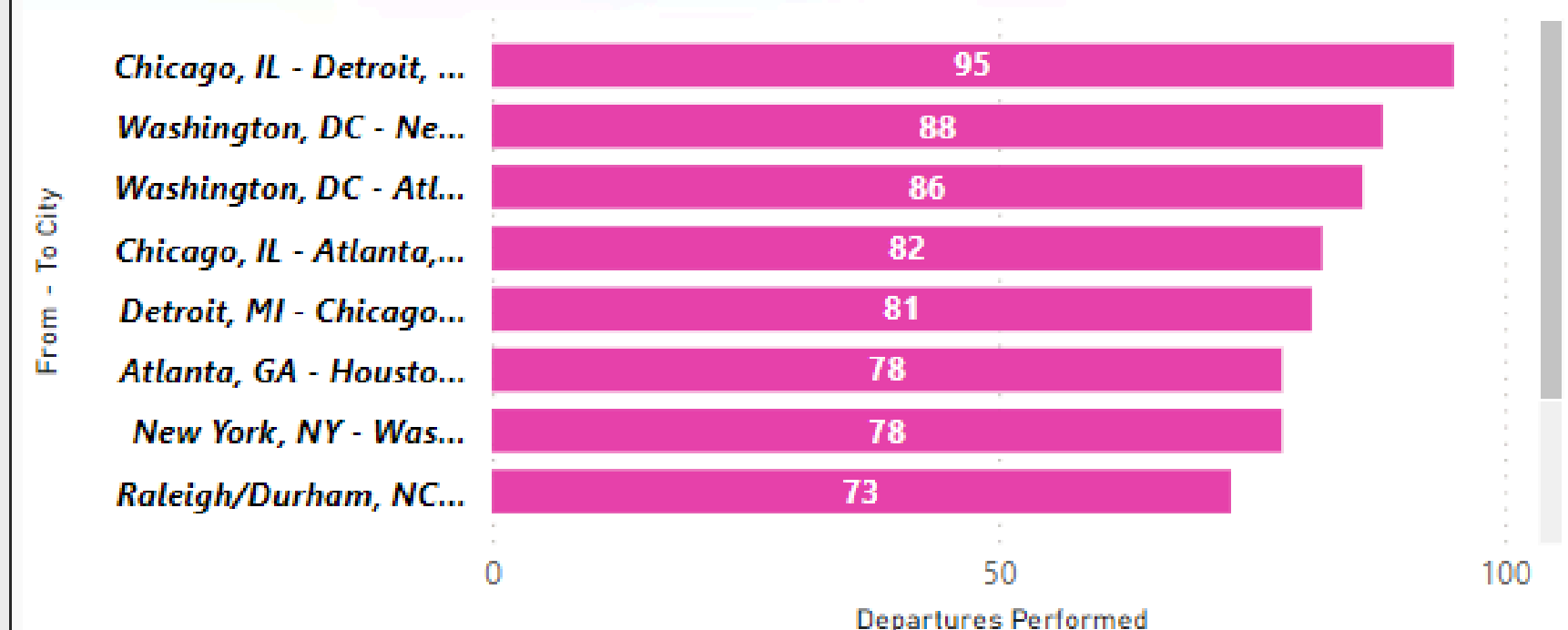
**Quarter**

**Month**

## % Load Factor by Month



## Top Routes (from-to City) based on Number of Flights





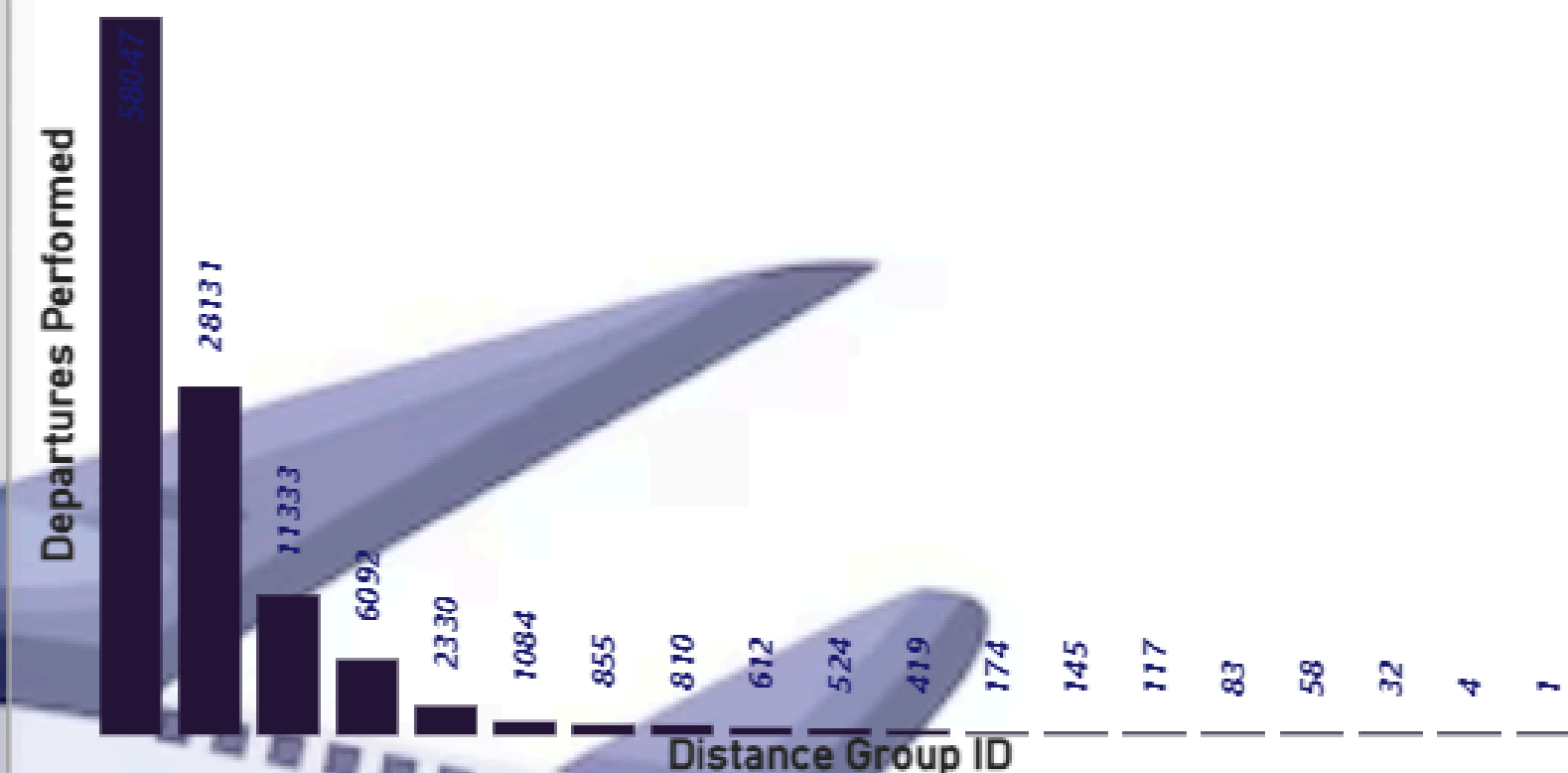


# HIGH CLOUD AIRLINES DASHBOARD



Year	Quarter	Month	Month No	Year-Month	WeekDay No	weekname	Financial Month	Financial Quarter
2008	Qtr 2	April	04	2008-04	1	Monday	1	Qtr- 1
2008	Qtr 2	April	04	2008-04	2	Tuesday	1	Qtr- 1
2008	Qtr 2	April	04	2008-04	3	Wednesday	1	Qtr- 1
2008	Qtr 2	April	04	2008-04	4	Thursday	1	Qtr- 1
2008	Qtr 2	April	04	2008-04	5	Friday	1	Qtr- 1
2008	Qtr 2	April	04	2008-04	6	Saturday	1	Qtr- 1
2008	Qtr 2	April	04	2008-04	7	Sunday	1	Qtr- 1
2009	Qtr 2	April	04	2009-04	1	Monday	1	Qtr- 1
2009	Qtr 2	April	04	2009-04	2	Tuesday	1	Qtr- 1
2009	Qtr 2	April	04	2009-04	3	Wednesday	1	Qtr- 1

Number of Flights Based On Distance Group ID



% of Load Factor by Carrier Name



Top 10 Carrier Names Based On Passengers Preference



# Recommendations

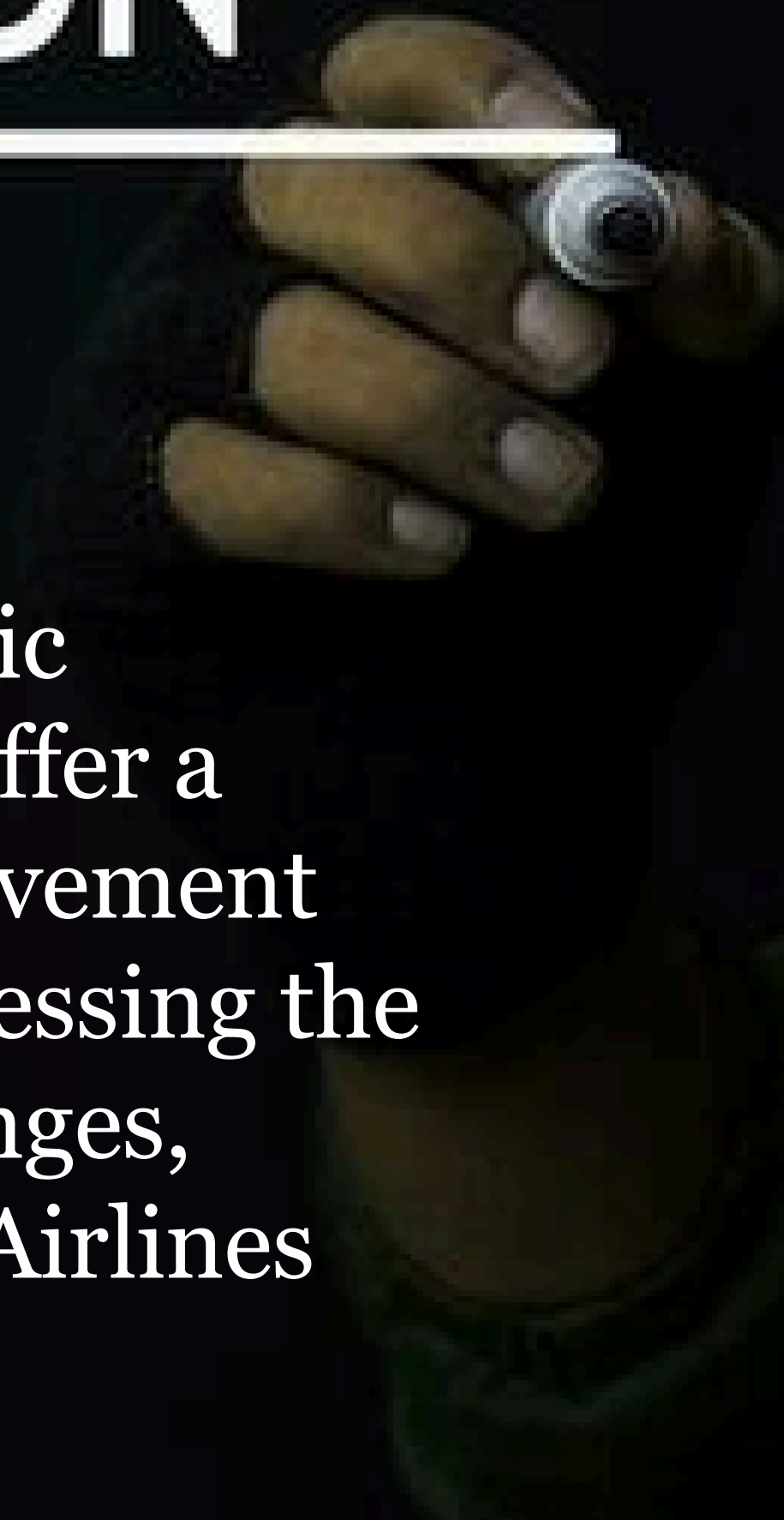
- Optimize Flight Routes: Utilize insights from up routes and flights to Optimize schedule and resource allocation.
- Enhance Load Factor: Leverage load factor analysis to identify trends and implement strategies for increased efficiency.
- Strategic Carrier Partnership: Collaborate with top carriers to maximize passenger transportation and enhance overall performance.
- Resource Allocation: Allocate resources strategically based on flight schedules and passenger volume data. This ensures efficient operation and minimizes wait times at airports with high passenger traffic.



# CONCLUSION

---

High Cloud Airlines empowers the aviation industry with actionable insights, forecasting efficiency, and strategic decision-making. The presented KPIs offer a glimpse into the vast potential for improvement and growth within the industry. By harnessing the power of data, we can drive positive changes, ensuring a bright future for High Cloud Airlines and its partners in the aviation sector.



A hand in a dark suit sleeve holds a circular sign with a white border. The sign has the words 'THANK YOU' in white, bold, sans-serif capital letters. The background is a blurred blue image of a person in a suit, overlaid with white circuit-like lines and dots.

**THANK  
YOU**