

# Airline Data Management and Performance Analysis Dashboard in Power BI

Prepared and Cleaned Data

## Flight Details

PowerBIandPowerBIServiceFinalProject008

File

Home

Transform

Add Column

View

Tools

Help

Close & Apply

New

Recent

Enter Data

Data source settings

Manage Parameters

Refresh Preview

Properties

Advanced Editor

Choose Columns

Remove Columns

Keep Rows

Remove Rows

Sort

Split Column

Group By

Replace Values

Data Type: Whole Number

Use First Row as Headers

Merge Queries

Append Queries

Combine Files

Text Analytics

Vision

Azure Machine Learning

Combine

AI Insights

Queries [4]

flight\_information

passenger\_informa...

ticket\_information

ticket\_info

123 FlightID

FlightNumber

Airline

Destination

Status

1	1001	FL1102	Airline D	Houston	On Time
2	1002	FL1435	Airline B	Chicago	On Time
3	1003	FL1860	Airline A	New York	Cancelled
4	1004	FL1270	Airline C	Chicago	Delayed
5	1005	FL1106	Airline C	New York	Delayed
6	1006	FL1071	Airline A	Phoenix	On Time
7	1007	FL1700	Airline C	Los Angeles	Cancelled
8	1008	FL1020	Airline C	Los Angeles	Delayed
9	1009	FL1614	Airline A	Los Angeles	Cancelled
10	1010	FL1121	Airline D	Chicago	Cancelled
11	1011	FL1466	Airline A	Phoenix	On Time
12	1012	FL1214	Airline D	New York	Delayed
13	1013	FL1330	Airline C	Houston	On Time
14	1014	FL1458	Airline C	New York	Delayed
15	1015	FL1087	Airline C	Houston	Delayed
16	1016	FL1372	Airline B	New York	Delayed
17	1017	FL1099	Airline D	Phoenix	Delayed
18	1018	FL1871	Airline B	Houston	Delayed
19	1019	FL1663	Airline B	Chicago	Cancelled
20	1020	FL1130	Airline A	New York	On Time
21					

Query Settings

PROPERTIES

Name

flight\_information

All Properties

APPLIED STEPS

Source

Navigation

FilterNullAndWhitespace

Removed Other Columns

Promoted Headers

Changed Type

Removed Duplicates

Removed Blank Rows

Changed Type1

Added Conditional Column

Duplicated Column

Inserted Text After Delimiter

Removed Columns

Inserted Text After Delimit...

Removed Columns1

Renamed Columns

7 COLUMNS, 200 ROWS

Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 00:05

30°C

Haze

Search

ENG IN

10-05-2025

## Passenger Details

PowerBlandPowerBIServiceFinalProject008

FileHomeTransformAdd ColumnViewToolsHelp

Close & ApplyClose

New SourceNew Query

Recent Sources

Enter Data

Data source settingsData Sources

Manage ParametersParameters

Refresh PreviewQuery

PropertiesAdvanced EditorManage

Choose ColumnsManage Columns

Remove Columns

Keep RowsReduce Rows

Remove Rows

Sort

Split Column

Group By

Replace Values

Data Type: Whole NumberUse First Row as HeadersTransform

Merge QueriesCombine

Append Queries

Combine Files

Text Analytics

Vision

Azure Machine Learning

AI Insights

Queries [4]

flight\_information

passenger\_informa...

ticket\_information

ticket\_info

123 PassengerID

123 FlightID

ABC SeatNumber

1		1	1161	38A
2		2	1157	24D
3		3	1141	30B
4		4	1046	17E
5		5	1035	29D
6		6	1134	10A
7		7	1082	10A
8		8	1115	20E
9		9	1197	34E
10		10	1047	2E
11		11	1153	43C
12		12	1194	48C
13		13	1010	47A
14		14	1056	23C
15		15	1030	16D
16		16	1109	40D
17		17	1005	25C
18		18	1119	32C
19		19	1033	27E
20		20	1118	32B
21		21	1065	19E

= Table.TransformColumnTypes(#"Removed Blank Rows",{{"PassengerID", Int64.Type}, {"FlightID", Int64.Type},

Query Settings

PROPERTIES

Name

passenger\_information

All Properties

APPLIED STEPS

Source

Navigation

FilterNullAndWhitespace

Removed Other Columns

Promoted Headers

Changed Type

Removed Duplicates

Removed Blank Rows

Changed Type1

3 COLUMNS, 100 ROWS

Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 00:05

30°C Haze

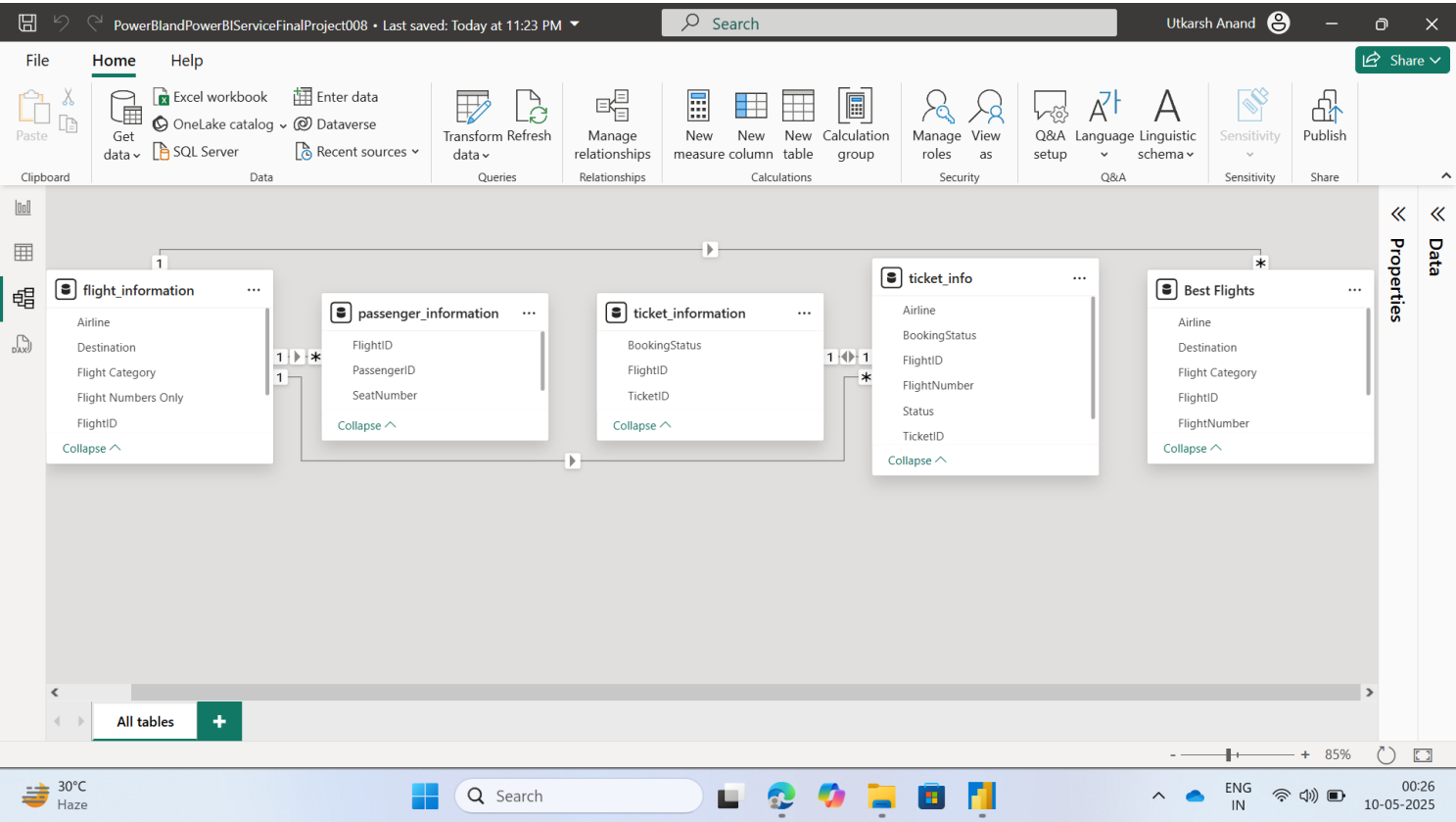
Search

ENG IN

10-05-2025



# Data Modeling



Enhanced Data Insights

Best Flight Details

PowerBIandPowerBIServiceFinalProject008 • Last saved: Today at 11:23 PM

Utkarsh Anand

Share

FileHomeHelpTable tools

NameBest Flights

Manage relationships

New measure

Quick measure

New column

New table

Mark as date table

StructureCalculationsCalendars

1 Best Flights = FILTER(flight\_information, flight\_information[Flight Category] = "Best")

FlightID	FlightNumber	Airline	Destination	Status	Flight Category	FlightNumber Only
1001	FL1102	Airline D	Houston	On Time	Best	1102
1002	FL1435	Airline B	Chicago	On Time	Best	1435
1006	FL1071	Airline A	Phoenix	On Time	Best	1071
1011	FL1466	Airline A	Phoenix	On Time	Best	1466
1013	FL1330	Airline C	Houston	On Time	Best	1330
1020	FL1130	Airline A	New York	On Time	Best	1130
1023	FL1769	Airline A	Chicago	On Time	Best	1769
1025	FL1491	Airline D	Phoenix	On Time	Best	1491
1027	FL1805	Airline D	Chicago	On Time	Best	1805
1028	FL1385	Airline D	Chicago	On Time	Best	1385
1029	FL1191	Airline D	Los Angeles	On Time	Best	1191
1030	FL1955	Airline B	Phoenix	On Time	Best	1955
1031	FL1276	Airline B	New York	On Time	Best	1276
1033	FL1459	Airline D	New York	On Time	Best	1459
1034	FL1313	Airline B	Phoenix	On Time	Best	1313
1036	FL1252	Airline D	Phoenix	On Time	Best	1252
1039	FL1560	Airline B	Chicago	On Time	Best	1560
1043	FL1681	Airline C	Houston	On Time	Best	1681
1044	FL1475	Airline B	Phoenix	On Time	Best	1475
1046	FL1975	Airline D	Chicago	On Time	Best	1975
1048	FL1189	Airline A	New York	On Time	Best	1189

Table: Best Flights (82 rows)

Data

Search

Best Flights

Airline

Destination

Flight Category

FlightID

FlightNumber

FlightNumber Only

Status

flight\_information

passenger\_information

ticket\_info

ticket\_information

30°C Haze

Search

ENG IN

00:25 10-05-2025

Calculations Using DAX

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Search

Utkarsh Anand

Share

FileHomeInsertModelingViewOptimizeHelp

PasteCutCopyFormat painterClipboard

Get dataExcelOneLakeSQLEnter dataDataverseRecent sourcesData

Transform dataRefreshQueries

New visualText boxMore visualsInsert

New visual calculationNew measureQuick measureCalculations

SensitivitySensitivityShareCopilot

100  
Total Passengers for Selected Flight

50  
Total Tickets Booked

Count of PassengerID by Airline

FlightNumber	Airline	Status	Flight Category
FL1004	Airline C	On Time	Best
FL1014	Airline D	On Time	Best
FL1020	Airline C	On Time	Best
FL1027	Airline C	On Time	Best
FL1032	Airline B	On Time	Best
FL1040	Airline C	On Time	Best
FL1047	Airline B	On Time	Best
FL1071	Airline A	On Time	Best
FL1091	Airline B	On Time	Best
FL1095	Airline B	On Time	Best
FL1102	Airline D	On Time	Best
FL1128	Airline C	On Time	Best
FL1130	Airline A	On Time	Best
FL1134	Airline A	On Time	Best
FL1166	Airline B	On Time	Best
FL1189	Airline A	On Time	Best
FL1191	Airline D	On Time	Best
FL1216	Airline A	On Time	Best
FL1243	Airline B	On Time	Best
FL1251	Airline B	On Time	Best
FL1252	Airline D	On Time	Best
FL1276	Airline B	On Time	Best
FL1313	Airline B	On Time	Best
FL1330	Airline C	On Time	Best
FL1345	Airline A	On Time	Best
FL1366	Airline C	On Time	Best
FL1378	Airline C	On Time	Best
FL1385	Airline D	On Time	Best
FL1389	Airline A	On Time	Best
FL1391	Airline A	On Time	Best
FL1418	Airline D	On Time	Best

Question 4 - DAX Calculations

Question 5 - Visualizations and Interactions

Question 6 - Final Dashboard and Power BI ...

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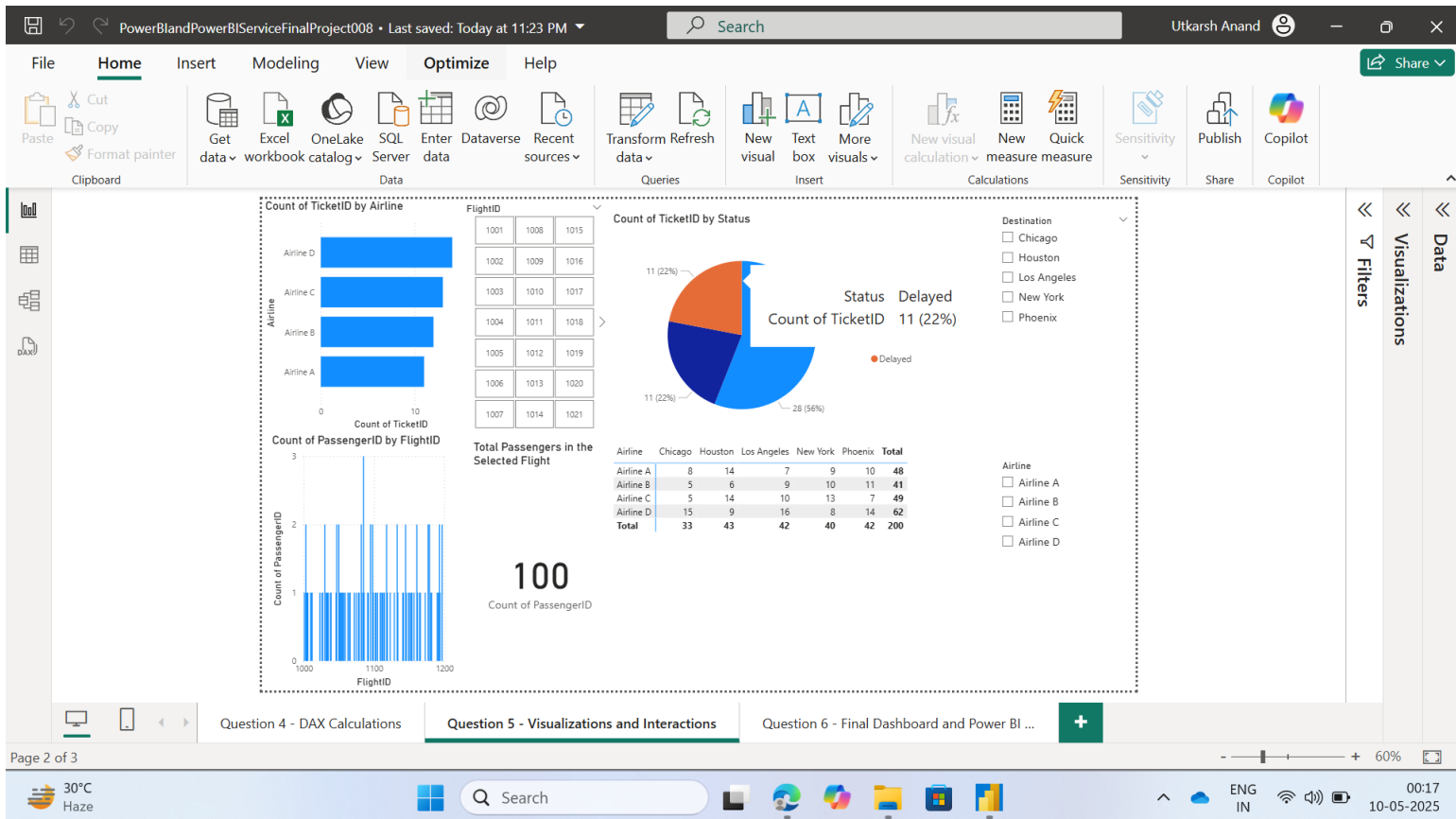
30°C Haze

Search

ENG IN

00:17 10-05-2025

## Visualizations and Interactive Features







Power BI Pro Project > Row-Level Security

Home Create Browse OneLake catalog Apps Metrics Monitor Learn Real-Time Workspaces Pro Project Power BI

Row-Level Security

Airline A Information Viewer (1)

Members (1)

People or groups who belong to this role

Enter email addresses

Add

Nitin Kumar

Save Cancel

Power BI Pro Project

Viewing: PowerBlandPowerBIServiceFin... Now viewing as: Nitin Kumar

This user does not have access to the dataset or report.

Question 4 - DAX Calculations

Question 5 - Visualizations

Question 6 - Final Dashboard

Count of PassengerID: 30

Count of FlightID: 48

Count of TicketID: 11

Count of TicketID and Count of FlightID by BookingStatus

Count of FlightID by Destination and Airline

Count of FlightID and First Destination by Airline

BookingStatus: Cancelled, Pending, Confirmed

Airline: Airline A

BookingStatus: Cancelled, Confirmed, Pending

**Project Introduction and Key Findings:**

[https://drive.google.com/drive/folders/1y3kNLfGKXq\\_wMHtZDtEAHAwhAzq3UI\\_T?  
usp=sharing](https://drive.google.com/drive/folders/1y3kNLfGKXq_wMHtZDtEAHAwhAzq3UI_T?usp=sharing)

**Report Deliverables by Utkarsh Anand**

**Thank you for your attention and for reviewing this report.**

**Thank You**