

Task 1

Data Preparation and Cleaning

- 1) Set first row as header
- 2) Remove unnecessary Columns
- 3) Remove Duplicates
- 4) Change Data types
- 5) Handle missing values (nulls) and format columns

Data cleaning was performed for all three datasets using Power Query Editor.

Flight_Information table cleaned in Power Query – removed duplicates, fixed data types, and removed nulls and ensured only valid rows remain.

Screenshot shows Power Query after cleaning.

The screenshot displays the Power Query Editor interface. The ribbon at the top includes tabs for Home, Transform, Add Column, View, Tools, and Help. The main area shows a table with the following columns: FlightID, FlightNumber, Airline, Destination, and Status. The table contains 24 rows of data. The right-hand pane shows the Query Settings for 'flight_information' and a list of applied steps, including 'Changed Type2'.

Queries [3]

flight_information
passenger_information
ticket_information

Table.TransformColumnTypes(#"Filtered Rows",{{"FlightNumber", type text}})

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	1021 FL1661	Airline B	New York	Cancelled
22	1022 FL1308	Airline A	Houston	Delayed
23	1023 FL1769	Airline A	Chicago	On Time
24	1024 FL1343	Airline B	Chicago	Delayed

5 COLUMNS. 200 ROWS Column profiling based on entire data set

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Passenger_Information table cleaned in Power Query – removed duplicates, fixed data types, and removed nulls and ensured only valid rows remain.

Screenshot shows Power Query after cleaning.”

Queries [3]

- flight_information
- passenger_information
- ticket_information

Formula Bar: `= Table.Distinct(#"Changed Type", {"PassengerID"})`

	PassengerID	FlightID	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
22	22	1146	5B
23	23	1177	28B
24	24	1011	22E

3 COLUMNS, 100 ROWS Column profiling based on entire data set

Query Settings

- PROPERTIES
 - Name: passenger_information
- APPLIED STEPS
 - Source
 - Navigation
 - Promoted Headers
 - Removed Other Columns
 - Changed Type
 - Removed Duplicates

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Ticket_Information table cleaned in Power Query – removed duplicates, fixed data types, and removed nulls and ensured only valid rows remain.

Screenshot shows Power Query after cleaning.”

Home Transform Add Column View Tools Help

Close & Apply Close New Source Recent Sources Enter Data Data source settings Data Sources Manage Parameters Parameters Refresh Preview Query Properties Advanced Editor Manage Choose Columns Remove Columns Manage Columns Keep Rows Remove Rows Reduce Rows Sort Split Column Group By Use First Row as Headers Replace Values Transform Merge Queries Append Queries Combine Files Text Analytics Vision Azure Machine Learning AI Insights

Queries [3] flight_information passenger_information ticket_information

Table.SelectRows(#"Removed Duplicates", each true)

TicketID	FlightID	BookingStatus
Valid 100%	Valid 100%	Valid 100%
Error 0%	Error 0%	Error 0%
Empty 0%	Empty 0%	Empty 0%
1	5001	1178 Pending
2	5002	1078 Confirmed
3	5003	1117 Cancelled
4	5004	1120 Cancelled
5	5005	1137 Cancelled
6	5006	1162 Pending
7	5007	1076 Pending
8	5008	1035 Cancelled
9	5009	1001 Cancelled
10	5010	1040 Cancelled
11	5011	1064 Pending
12	5012	1150 Cancelled
13	5013	1060 Cancelled
14	5014	1064 Confirmed
15	5015	1093 Confirmed
16	5016	1072 Pending
17	5017	1011 Cancelled
18	5018	1105 Cancelled
19	5019	1014 Confirmed
20	5020	1060 Pending
21	5021	1030 Confirmed
22	5022	1035 Confirmed
23	5023	1165 Confirmed
24	5024	1005 Confirmed

Query Settings

PROPERTIES

Name

ticket_information

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Removed Other Columns

Changed Type

Filtered Rows

Removed Duplicates

Filtered Rows1

3 COLUMNS, 50 ROWS Column profiling based on entire data set

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Task 2

Data Modeling

- In this task, I created relationships between the three tables using the common column **FlightID**. I connected **flight_information** (main table) with both **ticket_information** and **passenger_information** using one-to-many relationships.
- This model allows Power BI to link flight details with ticket bookings and passenger data for better analysis.

Data Modeling

Untitled - Power BI Desktop

File Home Help

Clipboard: Paste, Cut, Copy

Data: Get data, Excel workbook, OneLake catalog, SQL Server data, Enter data, Dataverse, Recent sources

Queries: Transform data, Refresh data

Relationships: Manage relationships

Calculations: New measure, New column, New table, Calculation group

Parameters: New parameter

Security: Manage roles, View as

Q&A: Q&A setup, Language, Linguistic schema

Sensitivity: Sensitivity

Share: Publish

ticket_information

- BookingStatus
- FlightID
- Σ TicketID
- Collapse ^

flight_information

- Airline
- Destination
- FlightID
- FlightNumber
- Status
- Collapse ^

passenger_information

- FlightID
- Σ PassengerID
- SeatNumber
- Collapse ^

Properties

Data

Tables Model

Search

- > flight_information
- > passenger_information
- > ticket_information

All tables +

100%

Task 3

Enhanced Data Insights

Step-1 Add *Conditional Column*

- In this task, added a conditional column **FlightRating** to classify flights based on their status.
- Flights marked '**On Time**' are categorized as '**Best**', while all others are marked '**To Be Improved**'.

Step-2 Add Column using *Column from Examples*

- In this task, used 'Column From Examples' in Power Query to extract only the numeric part of the **FlightNumber** field (e.g., FL1102 → 1102).

Setting up conditional logic

Home Transform **Add Column** View Tools Help

Column From Custom Invoke Custom Conditional Column Index Column Duplicate Column General

Format Merge Columns Extract Parse General

Statistics Standard Scientific Rounding Information From Number

Date Time Duration From Date & Time

Text Analytics Vision Azure Machine Learning AI Insights

Queries [3] \times \checkmark f_x = Table.TransformColumnTypes("#Filtered Rows",{{"FlightNumber", type text}})

flight_infor
passenger_
ticket_infor

Add Conditional Column

Add a conditional column that is computed from the other columns or values.

New column name
FlightRating

	Column Name	Operator	Value	Output
If	Status	equals	On Time	Then Best

Add Clause

Else
To Be Improved

OK Cancel

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	1021	FL1661	Airline B	New York	Cancelled
22	1022	FL1308	Airline A	Houston	Delayed
23	1023	FL1769	Airline A	Chicago	On Time
24	1024	FL1343	Airline B	Chicago	Delayed

Query Settings

PROPERTIES

Name
flight_information

All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Removed Columns
- Removed Other Columns
- Removed Duplicates
- Changed Type1
- Filtered Rows
- ✕ Changed Type2

Added Conditional Column – FlightRating

HomeTransformAdd ColumnViewToolsHelp

Column From Examples

Custom Column

Invoke Custom Function

Conditional Column

Index Column

Duplicate Column

Format

ABC123

Extract

Parse

Statistics

Standard

Scientific

From Number

Trigonometry

Rounding

Information

From Date & Time

Date

Time

Duration

From Date & Time

Text Analytics

Vision

Azure Machine Learning

AI Insights

Queries [3]

flight_information

passenger_information

ticket_information

123

FlightID

FlightNumber

Airline

Destination

Status

FlightRating

Valid

Error

Empty

100%

0%

0%

Valid

Error

Empty

100%

0%

0%

Valid

Error

Empty

100%

0%

0%

Valid

Error

Empty

100%

0%

0%

Valid

Error

Empty

100%

0%

0%

Valid

Error

Empty

100%

0%

0%

1	1001	FL1102	Airline D	Houston	On Time	Best
2	1002	FL1435	Airline B	Chicago	On Time	Best
3	1003	FL1860	Airline A	New York	Cancelled	To Be Improved
4	1004	FL1270	Airline C	Chicago	Delayed	To Be Improved
5	1005	FL1106	Airline C	New York	Delayed	To Be Improved
6	1006	FL1071	Airline A	Phoenix	On Time	Best
7	1007	FL1700	Airline C	Los Angeles	Cancelled	To Be Improved
8	1008	FL1020	Airline C	Los Angeles	Delayed	To Be Improved
9	1009	FL1614	Airline A	Los Angeles	Cancelled	To Be Improved
10	1010	FL1121	Airline D	Chicago	Cancelled	To Be Improved
11	1011	FL1466	Airline A	Phoenix	On Time	Best
12	1012	FL1214	Airline D	New York	Delayed	To Be Improved
13	1013	FL1330	Airline C	Houston	On Time	Best
14	1014	FL1458	Airline C	New York	Delayed	To Be Improved
15	1015	FL1087	Airline C	Houston	Delayed	To Be Improved
16	1016	FL1372	Airline B	New York	Delayed	To Be Improved
17	1017	FL1099	Airline D	Phoenix	Delayed	To Be Improved
18	1018	FL1871	Airline B	Houston	Delayed	To Be Improved
19	1019	FL1663	Airline B	Chicago	Cancelled	To Be Improved
20	1020	FL1130	Airline A	New York	On Time	Best
21	1021	FL1661	Airline B	New York	Cancelled	To Be Improved
22	1022	FL1308	Airline A	Houston	Delayed	To Be Improved
23	1023	FL1769	Airline A	Chicago	On Time	Best
24	1024	FL1343	Airline B	Chicago	Delayed	To Be Improved

Query Settings

PROPERTIES

Name

flight_information

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Removed Columns

Removed Other Columns

Removed Duplicates

Changed Type1

Filtered Rows

Changed Type2

Added Conditional Column


COLUMNS, 200 ROWS


Column profiling based on top 1000 rows


PREVIEW DOWNLOADED AT 02:32 P


Logic for Adding Column from Examples


HomeTransformAdd ColumnViewToolsHelp


Column From Examples


Custom Column


Invoke Custom Function


Conditional Column


Index Column


Duplicate Column


Format


Merge Columns


Extract


Parse


Statistics


Standard


Scientific


Trigonometry


Rounding


Information


Date

Time

Duration

Text Analytics

Vision

Azure Machine Learning

General

General

From Number

From Date & Time


AI Insights

Queries [3]

flight_information

passenger_information

ticket_information

Add Column From Examples

Enter sample values to create a new column (Ctrl+Enter to apply).

OK

Cancel

	FlightID	FlightNumber	Airline	Destination	Status	Column1
1	1001	FL1102	Airline D	Houston	On Time	1102
2	1002	FL1435	Airline B	Chicago	On Time	FL1102 (FlightNumber)
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	1021	FL1661	Airline B	New York	Cancelled	
22	1022	FL1308	Airline A	Houston	Delayed	
23	1023	FL1769	Airline A	Chicago	On Time	

Query Settings

PROPERTIES

Name

flight_information

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Removed Columns

Removed Other Columns

Removed Duplicates

Changed Type1

Filtered Rows

Changed Type2

Added Conditional Column

Column From Examples

COLUMNS: 300 ROWS: 23

Column profile based on top 1000 rows

PREVIEW DOWNLOADED AT 02:22 PM

Added Column – FlightCode – using Column from Examples

HomeTransformAdd ColumnViewToolsHelp

Column From Examples

Custom Column

Invoke Custom Function

Conditional Column

Index Column

Duplicate Column

Format

ABC 123 Extract

Parse

Statistics

Standard

Scientific

Information

Trigonometry

Rounding

Information

Date

Time

Duration

Text Analytics

Vision

Azure Machine Learning

Use examples to create a new column in this table. (Ctrl+E)

General

General

From Number

From Date & Time

AI Insights

Queries [3]

flight_information

passenger_information

ticket_information

fx

= Table.AddColumn("#Added Conditional Column", "FlightCode", each Text.AfterDelimiter([FlightNumber], "L"), type text)

FlightID	FlightNumber	Airline	Destination	Status	FlightRating	FlightCode
Valid	100%	Valid	100%	Valid	100%	Valid
Error	0%	Error	0%	Error	0%	Error
Empty	0%	Empty	0%	Empty	0%	Empty
1	1001 FL1102	Airline D	Houston	On Time	Best	1102
2	1002 FL1435	Airline B	Chicago	On Time	Best	1435
3	1003 FL1860	Airline A	New York	Cancelled	To Be Improved	1860
4	1004 FL1270	Airline C	Chicago	Delayed	To Be Improved	1270
5	1005 FL1106	Airline C	New York	Delayed	To Be Improved	1106
6	1006 FL1071	Airline A	Phoenix	On Time	Best	1071
7	1007 FL1700	Airline C	Los Angeles	Cancelled	To Be Improved	1700
8	1008 FL1020	Airline C	Los Angeles	Delayed	To Be Improved	1020
9	1009 FL1614	Airline A	Los Angeles	Cancelled	To Be Improved	1614
10	1010 FL1121	Airline D	Chicago	Cancelled	To Be Improved	1121
11	1011 FL1466	Airline A	Phoenix	On Time	Best	1466
12	1012 FL1214	Airline D	New York	Delayed	To Be Improved	1214
13	1013 FL1330	Airline C	Houston	On Time	Best	1330
14	1014 FL1458	Airline C	New York	Delayed	To Be Improved	1458
15	1015 FL1087	Airline C	Houston	Delayed	To Be Improved	1087
16	1016 FL1372	Airline B	New York	Delayed	To Be Improved	1372
17	1017 FL1099	Airline D	Phoenix	Delayed	To Be Improved	1099
18	1018 FL1871	Airline B	Houston	Delayed	To Be Improved	1871
19	1019 FL1663	Airline B	Chicago	Cancelled	To Be Improved	1663
20	1020 FL1130	Airline A	New York	On Time	Best	1130
21	1021 FL1661	Airline B	New York	Cancelled	To Be Improved	1661
22	1022 FL1308	Airline A	Houston	Delayed	To Be Improved	1308
23	1023 FL1769	Airline A	Chicago	On Time	Best	1769

Query Settings

PROPERTIES

Name

flight_information

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Removed Columns

Removed Other Columns

Removed Duplicates

Changed Type1

Filtered Rows

Changed Type2

Added Conditional Column

Inserted Text After Delimiter

7 COLUMNS, 200 ROWS Column profiling based on top 1000 rows

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Task 4

Calculations Using DAX

Calculated

- 1) Total passengers for a specific flight .
- 2) Total tickets booked.
- 3) Filtered table showing "Best" flights only

Create measure to calculate (Total passengers for a specific flight)

The screenshot displays the Microsoft Power BI Desktop interface. The top ribbon includes tabs for File, Home, Insert, Modeling, View, Optimize, Help, Table tools, and Measure tools. The 'Measure tools' tab is active, showing options for Name (TotalPassengers), Format (Whole number), Data category (Uncategorized), and a 'New measure' button.

The main workspace shows a DAX measure formula bar with the following formula:

```
1 TotalPassengers = COUNT(passenger_information[PassengerID])
```

Below the formula bar, a table titled 'Flight Passengers' is displayed, showing the total number of passengers for each flight ID. The table has two columns: 'TotalPassengers' and 'FlightID'.

TotalPassengers	FlightID
3	1085
2	1003
2	1030
2	1047
2	1050
2	1082
2	1095
2	1098
2	1118
2	1133
2	1145
2	1161
2	1177
2	1179
2	1193

Below the table, a large number '100' is displayed, representing the total number of passengers across all flights. The label 'TotalPassengers' is positioned below the number.

The right-hand side of the interface features three panes: 'Format', 'Build', and 'Data'. The 'Data' pane shows a list of data sources, including 'flight_information', 'passenger_information', and 'ticket_information'. The 'passenger_information' source is expanded, showing fields like 'FlightID', 'PassengerID', 'SeatNumber', and 'TotalPassengers'.

The bottom status bar indicates 'Page 1 of 1' and a zoom level of 69%.

Create measure to calculate (Total tickets booked)

The screenshot displays the Microsoft Power BI Desktop interface. At the top, the ribbon includes tabs for File, Home, Insert, Modeling, View, Optimize, Help, Format, Data / Drill, Table tools, and Measure tools. The 'Measure tools' tab is active, showing options for Name, Home table, Format, Data category, and Calculations.

The formula bar at the top shows the DAX measure definition:

```
1 Total_Tickets_Booked = COUNT(ticket_information[TicketID])
```

The main visual area displays a card chart with the value 50, labeled 'Total_Tickets_Booked'.

The right-hand pane contains three sections:

- Format**: Includes a search bar and options for Visual, Properties, Size and style, Title, Callout value, and Category label.
- Build**: Includes a search bar and a list of suggestions for visualizations and fields.
- Data**: Includes a search bar and a list of data sources and fields.

The 'Data' pane shows the following fields:

- flight_information
- passenger_information
- ticket_information
 - BookingStatus
 - FlightID
 - TicketID
 - Total_Tickets_B...

The bottom status bar indicates 'Page 2 of 2' and 'Page 2' is selected.

Create measure to calculate (Filtered table showing "Best" flights only)

File Home Insert Modeling View Optimize Help Format Data / Drill Table tools

Name: BestFlights

Manage relationships | New visual calculation | New measure | Quick measure column | New table | Mark as date table | Calendars

Structure

```
1 BestFlights =  
2 CALCULATETABLE(  
3     flight_information,  
4     flight_information[FlightRating] = "Best"  
5 )  
6
```

Airline	Destination	FlightCode	FlightID	FlightNumber	FlightRating	Status
Airline A	Chicago	1216	1124	FL1216	Best	On Time
Airline A	Chicago	1769	1023	FL1769	Best	On Time
Airline A	Houston	1389	1092	FL1389	Best	On Time
Airline A	Houston	1683	1168	FL1683	Best	On Time
Airline A	Los Angeles	1986	1171	FL1986	Best	On Time
Airline A	New York	1130	1020	FL1130	Best	On Time
Airline A	New York	1134	1155	FL1134	Best	On Time
Airline A	New York	1189	1048	FL1189	Best	On Time
Airline A	New York	1345	1072	FL1345	Best	On Time
Airline A	New York	1508	1081	FL1508	Best	On Time
Airline A	Phoenix	1071	1006	FL1071	Best	On Time
Airline A	Phoenix	1391	1145	FL1391	Best	On Time
Airline A	Phoenix	1466	1011	FL1466	Best	On Time
Airline A	Phoenix	1504	1057	FL1504	Best	On Time
Airline A	Phoenix	1775	1082	FL1775	Best	On Time
Airline B	Chicago	1435	1002	FL1435	Best	On Time
Airline B	Chicago	1560	1039	FL1560	Best	On Time
Airline B	Houston	1095	1200	FL1095	Best	On Time
Airline B	Houston	1251	1113	FL1251	Best	On Time
Airline B	Houston	1719	1117	FL1719	Best	On Time
Airline B	Los Angeles	1032	1160	FL1032	Best	On Time
Airline B	Los Angeles	1166	1064	FL1166	Best	On Time

Format

Visual Properties

Build

Suggestions

Columns

Airline

Destination

FlightCode

FlightID

FlightNumber

FlightRating

Status

+Add data

Data

BestFlights

Airline

Destination

FlightCode

FlightID

FlightNumber

FlightRating

Status

flight_information

passenger_information

ticket_information

BookingStatus

FlightID

TicketID

Total_Tickets_B...

Page 1 Page 2 Page 3

Task 5

Visualization and Interactive Feature

Created Visuals for

- 1) Passenger count by airline
- 2) Ticket booking statuses.
- 3) Flights by airline and destination.

Added interactive features for

- 1) Destination and Airline.
- 2) Quick views.
- 3) Airline-specific pages.

Create Visuals (Bar chart)

(Passenger counts by Airlines)

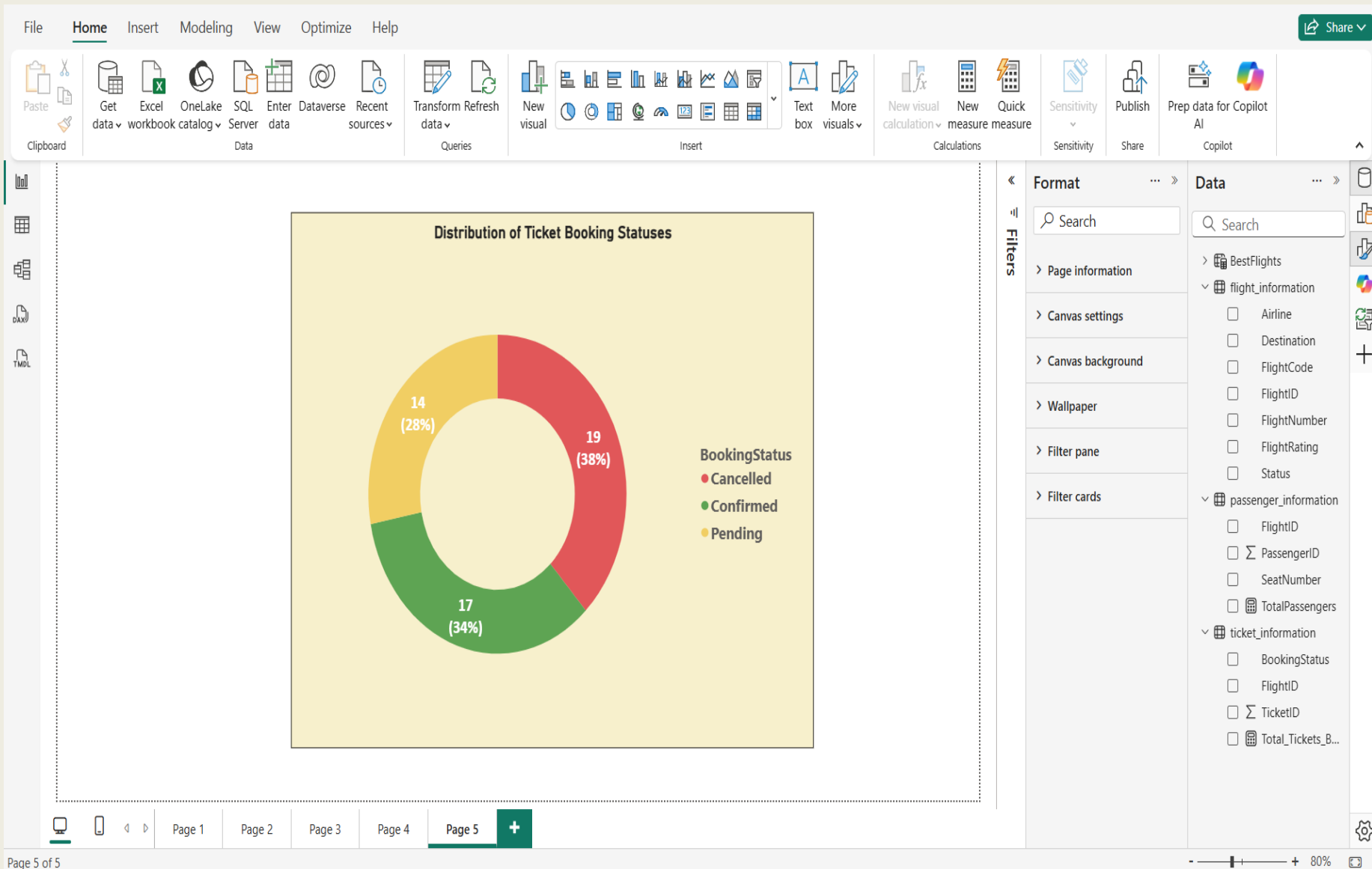
The screenshot displays the Microsoft Power BI Desktop interface. The main canvas shows a horizontal bar chart titled "Total Passengers by Airline" with a subtitle "Click to filter by Airline". The chart lists four airlines and their respective passenger counts:

Airline	Passenger Count
Airline A	30
Airline D	28
Airline C	22
Airline B	20

The interface includes a top ribbon with tabs: File, Home, Insert, Modeling, View, Optimize, and Help. The right-hand pane shows the "Format" and "Filters" sections. The bottom status bar indicates "Page 4 of 4" and a zoom level of 80%.

Create Visuals (Donut Chart)

(Ticket booking status)



Create Visuals (Clustered Bar Chart)

(Flights by Airline and Destination)

Airline Project Power BI • Last saved: Yesterday at 10:54 PM

File Home Insert Modeling View Optimize Help

Clipboard Get data Excel OneLake SQL Server Enter data Datawarehouse Recent sources Transform Refresh data Queries New visual Insert Text box More visuals Calculations Sensitivity Publish Prep data for Copilot AI Copilot

Distribution of Flights by Airline and Destination

Airline	Chicago	Houston	Los Angeles	New York
Airline D	15	9	16	8
Airline C	5	14	10	13
Airline A	8	14	7	9
Airline B	5	6	9	10

Format Data

Search

Page information

Canvas settings

Canvas background

Wallpaper

Filter pane

Filter cards

BestFlights

flight_information

- ☐ Airline
- ☐ Destination
- ☐ FlightCode
- ☐ FlightID
- ☐ FlightNumber
- ☐ FlightRating
- ☐ Status

passenger_information

- ☐ FlightID
- ☐ PassengerID
- ☐ SeatNumber
- ☐ TotalPassengers

ticket_information

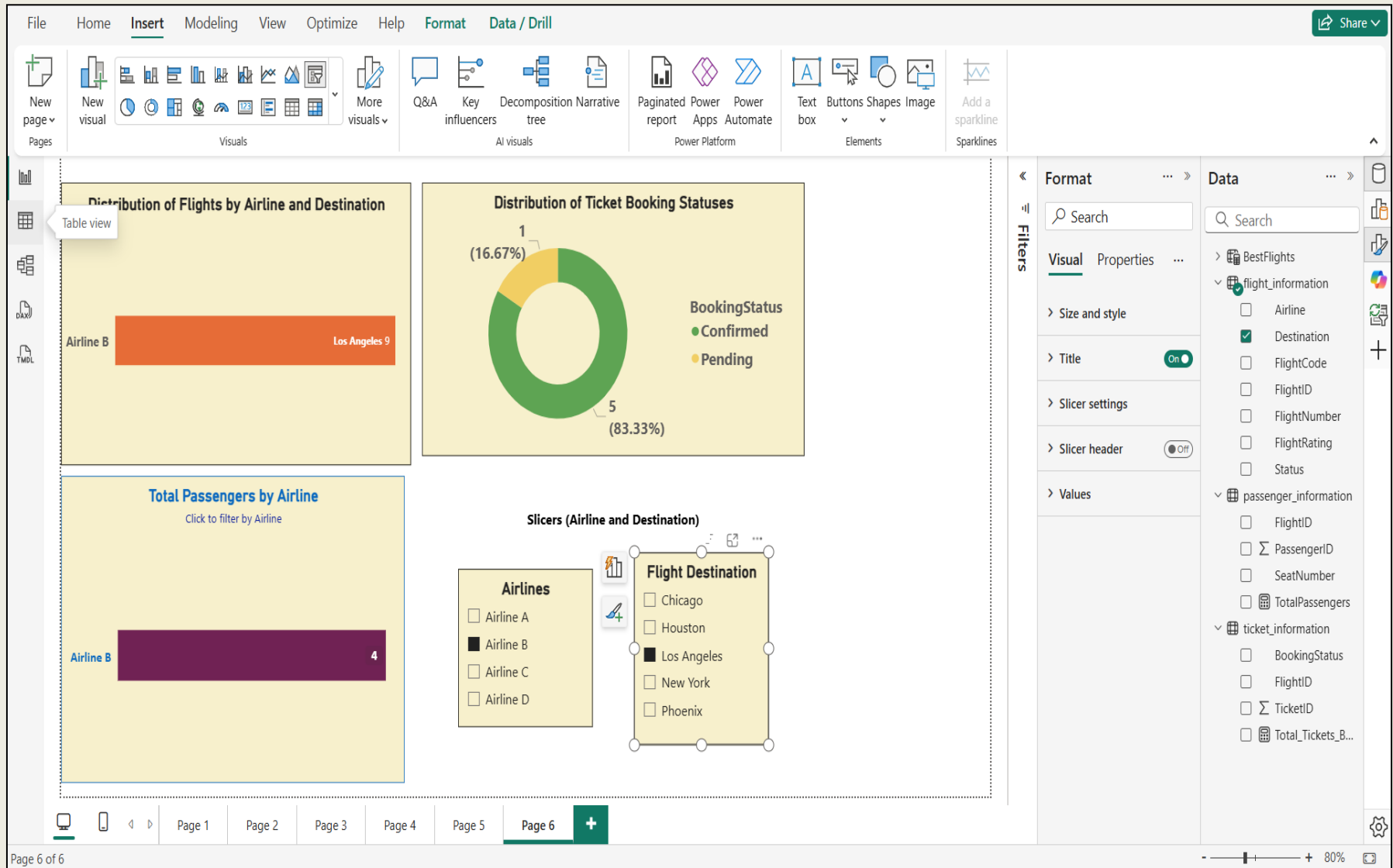
- ☐ BookingStatus
- ☐ FlightID
- ☐ TicketID
- ☐ Total_Tickets_B...

Page 1 Page 2 Page 3 Page 4 Page 5 Page 6

Page 6 of 6

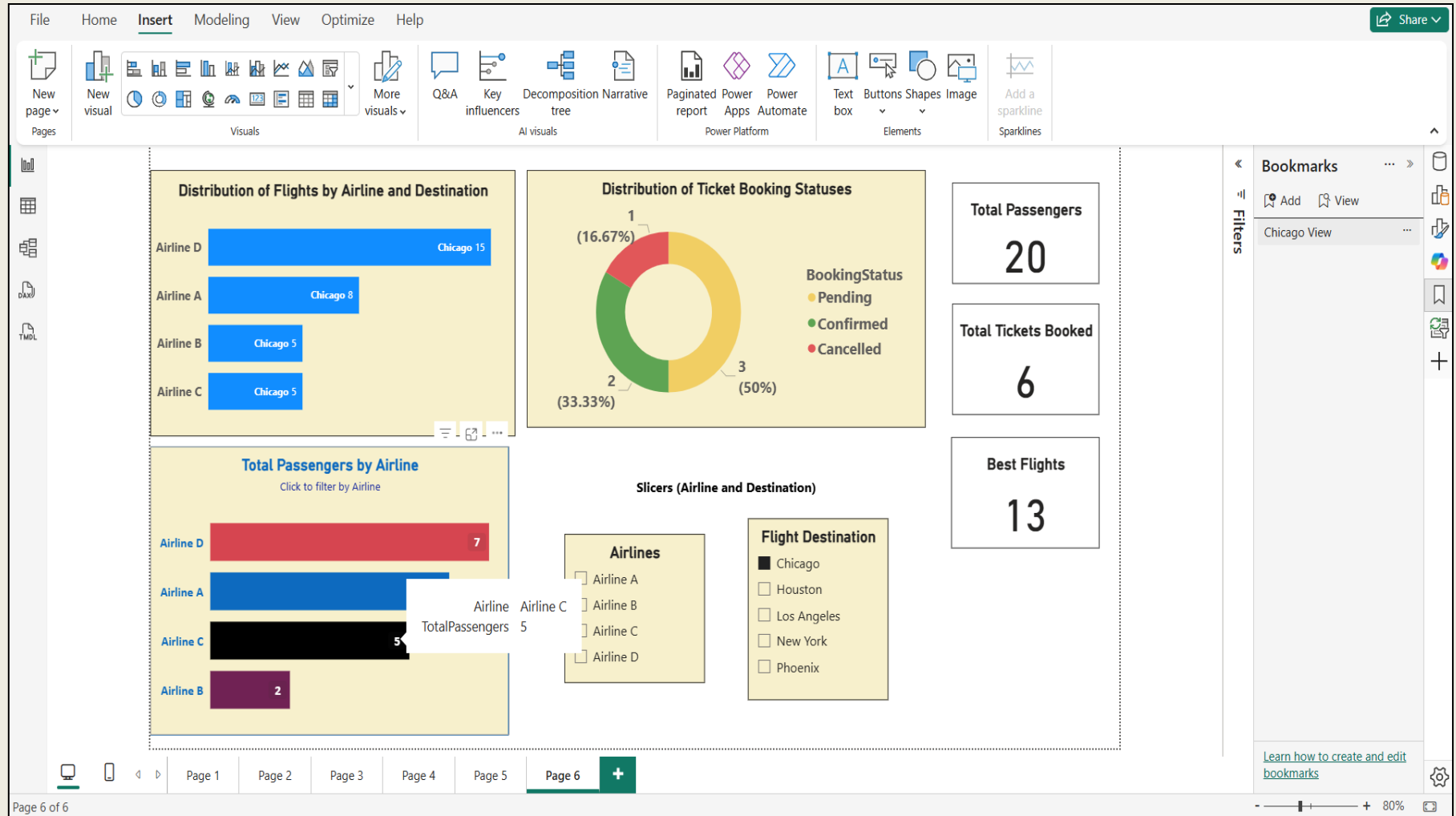
Added Slicer as interactive feature

(Destination and Airline- shown filtered data on visuals)



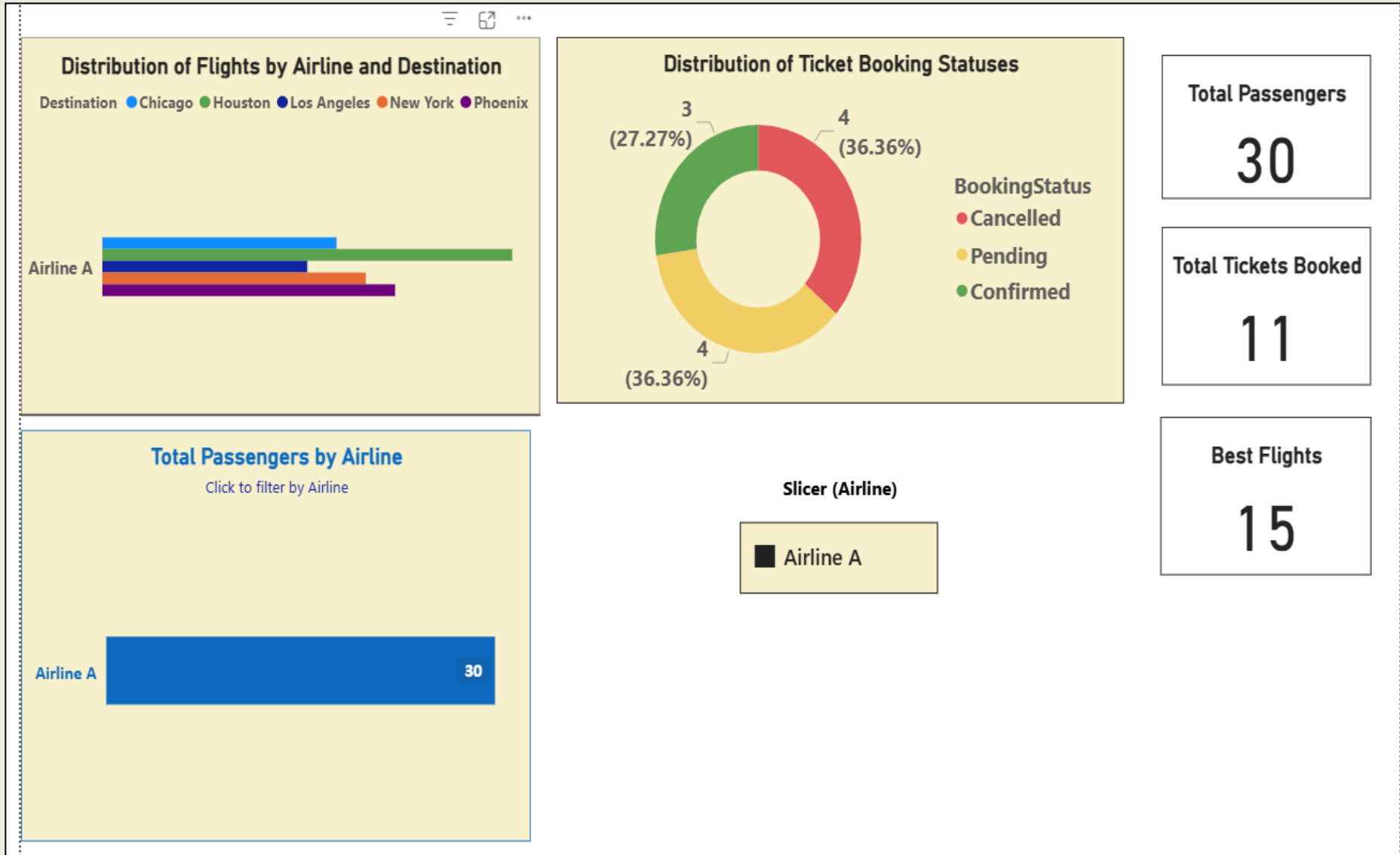
Added Bookmark, Cards and Tooltip for Quick View

(Quick views - shown filtered data on visuals)



Added Airline Pages

(Airline A – View Page)



Added Airline Pages

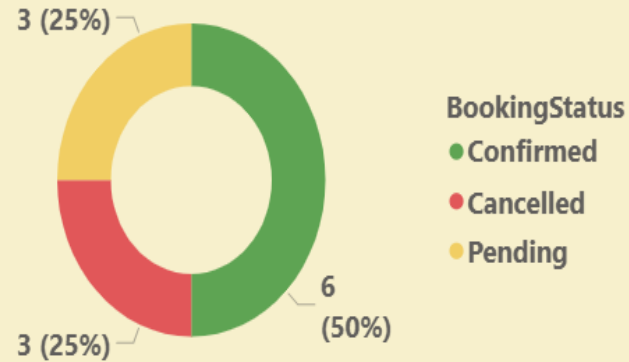
(Airline B – View Page)

Distribution of Flights by Airline and Destination

Destination ● Chicago ● Houston ● Los Angeles ● New York ● Phoenix



Distribution of Ticket Booking Statuses



Total Passengers

20

Total Tickets Booked

12

Total Passengers by Airline

Click to filter by Airline

Airline B

20

Slicer (Airline)

■ Airline B

Best Flights

22

Added Airline Pages

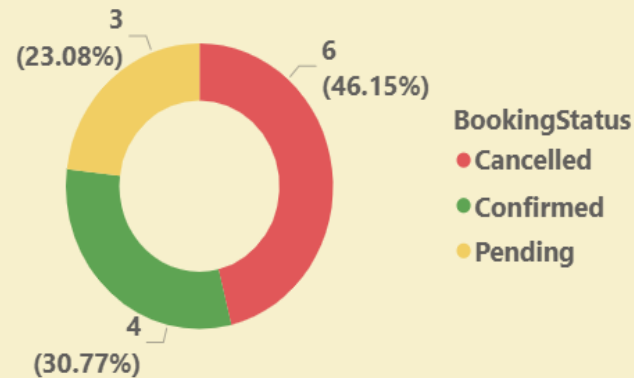
(Airline C – View Page)

Distribution of Flights by Airline and Destination

Destination ● Chicago ● Houston ● Los Angeles ● New York ● Phoenix



Distribution of Ticket Booking Statuses



Total Passengers

22

Total Tickets Booked

13

Best Flights

19

Total Passengers by Airline

Click to filter by Airline

Airline C

22

Slicer (Airline)

■ Airline C

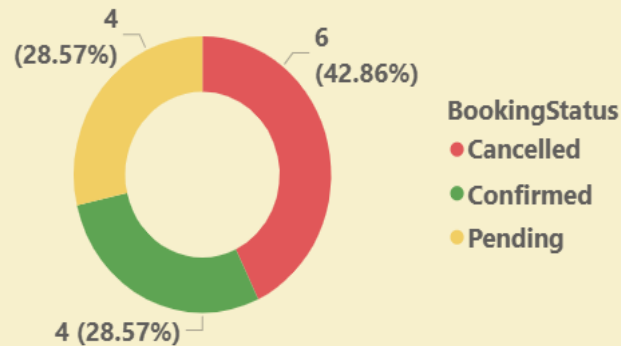
Added Airline Pages

(Airline D – View Page)

Distribution of Flights by Airline and Destination



Distribution of Ticket Booking Statuses



Total Passengers

28

Total Tickets Booked

14

Best Flights

26

Total Passengers by Airline

Click to filter by Airline

Airline D



Slicer (Airline)

■ Airline D

Total Passengers by Airline

Booking Status

Flights by Airline and Destination

Slicer and cards

Airline A Page

Airline B Page

Airline C Page

Airline D Page

Final Dashboard

Airline Data Management Dashboard

Total Passengers

100

Tickets Booked

50

Best Flights

82

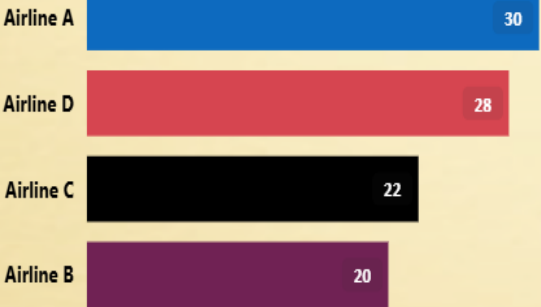
Flight Destination

- ☐ Chicago
- ☐ Houston
- ☐ Los Angeles
- ☐ New York
- ☐ Phoenix

Airlines

- ☐ Airline A
- ☐ Airline B
- ☐ Airline C
- ☐ Airline D

Total Passengers by Airline

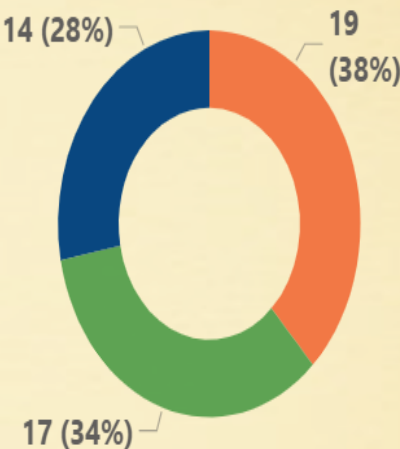


Distribution of Flights by Airline and Destination

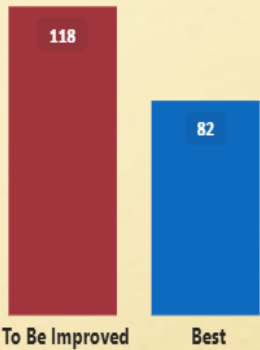


Distribution of Ticket Booking Status

Cancelled Confirmed Pending



Flight Ratings



Created **Airline A Access** RLS on Power BI Desktop

Manage security roles

Create new security roles and use filters to define row-level data restrictions.

Roles

- + New
- Airline A Access

Select tables

- BestFlights
- flight_informat...
- passenger_inf...
- ticket_informat...

Filter data

Switch to default editor

```
1 [Airline] = "Airline A"
```

Filter the data that this role can see by entering a DAX filter expression that returns a True/False value. For example: [Entity ID] = "Value"

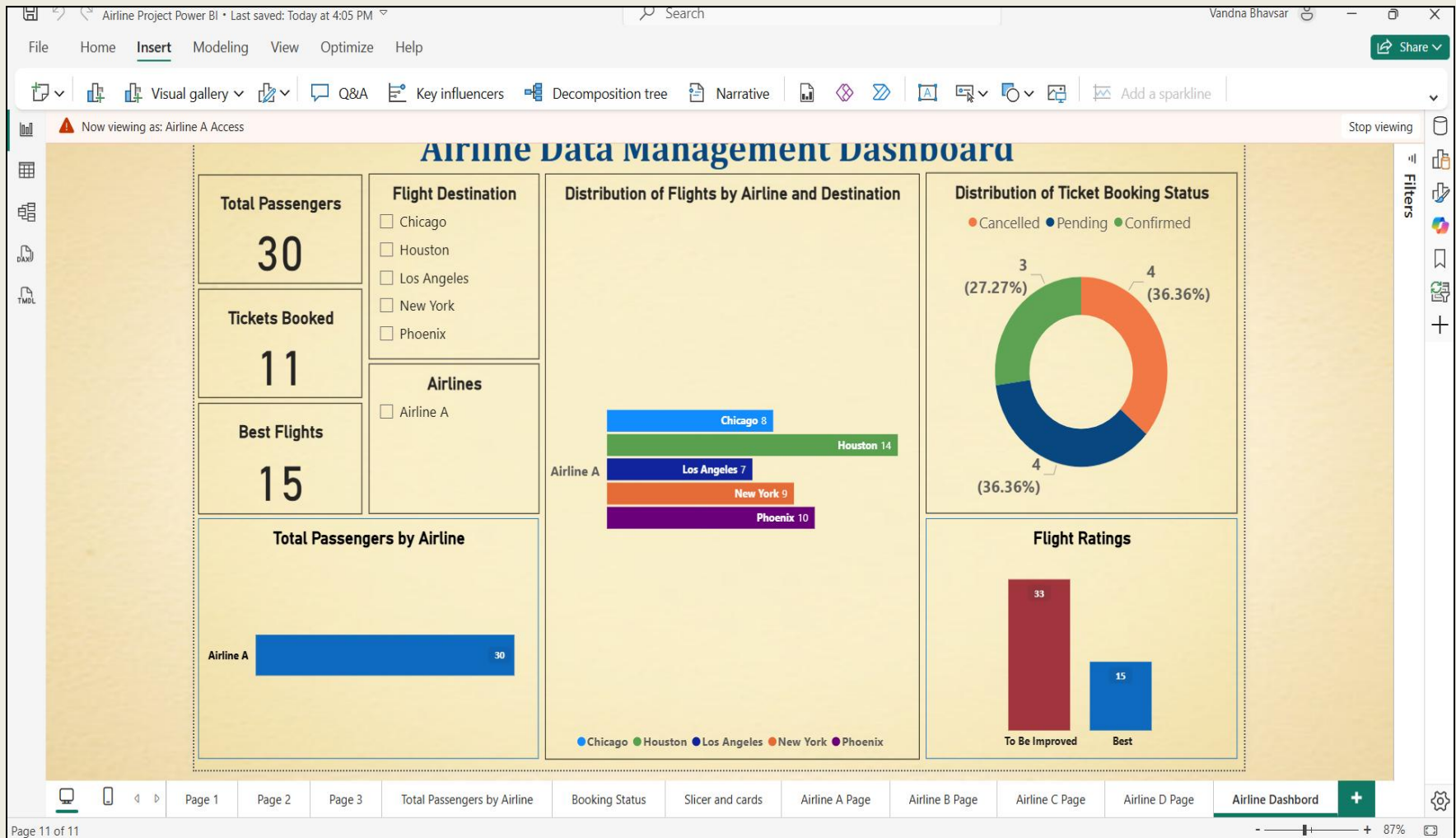
Save Close

Applying view as roles - Airline A Access - RLS on Power BI Desktop

The screenshot displays the Power BI Desktop interface with the 'View as roles' dialog box open. The dialog box contains a search bar with the text 'None' and a list of roles. The role 'Airline A Access' is selected, indicated by a checkmark. The background shows a data model with four tables: 'ticket_information', 'flight_information', 'passenger_information', and 'BestFlights'. The 'ticket_information' table has columns 'BookingStatus', 'FlightID', and 'TicketID'. The 'flight_information' table has columns 'Airline', 'Destination', 'FlightCode', 'FlightID', 'FlightNumber', 'FlightRating', and 'Status'. The 'passenger_information' table has columns 'FlightID', 'PassengerID', and 'SeatNumber'. The 'BestFlights' table has columns 'Airline', 'Destination', 'FlightCode', 'FlightID', and 'FlightNumber'. A warning banner at the top of the workspace area states: 'Now viewing as: Airline A Access. Object-level security is not applied in the Model View.' The 'View as roles' dialog box has 'OK' and 'Cancel' buttons at the bottom.

View as Airline A Access only

All pages have only **Airline A** data access



Applied Row-Level Security(RLS) to Members on Power Bi Service

The screenshot shows the Power BI web interface for configuring Row-Level Security (RLS). The browser address bar shows the URL: `app.powerbi.com/groups/me/rowlevelsecurity/4983935?experience=power-bi`. The page title is "Row-Level Security". On the left sidebar, the "Airline A Access (1)" role is selected. The main content area is titled "Members (1)" and includes the instruction "People or groups who belong to this role". Below this is a text input field labeled "Enter email addresses" and an "Add" button. A list of members is shown, containing the entry "Vandna Bhavsar" with a close button (X) to its right. At the bottom of the configuration area are "Save" and "Cancel" buttons. The top navigation bar includes the Power BI logo, "My workspace", and "Row-Level Security". The top right corner displays a trial status: "Trial: 59 days left".

Power BI Row-level security (RLS) with Po x +

app.powerbi.com/groups/me/rowlevelsecurity/4983935?experience=power-bi

Power BI My workspace > Row-Level Security Search

Trial: 59 days left

Row-Level Security

Airline A Access (1)

Members (1)

People or groups who belong to this role

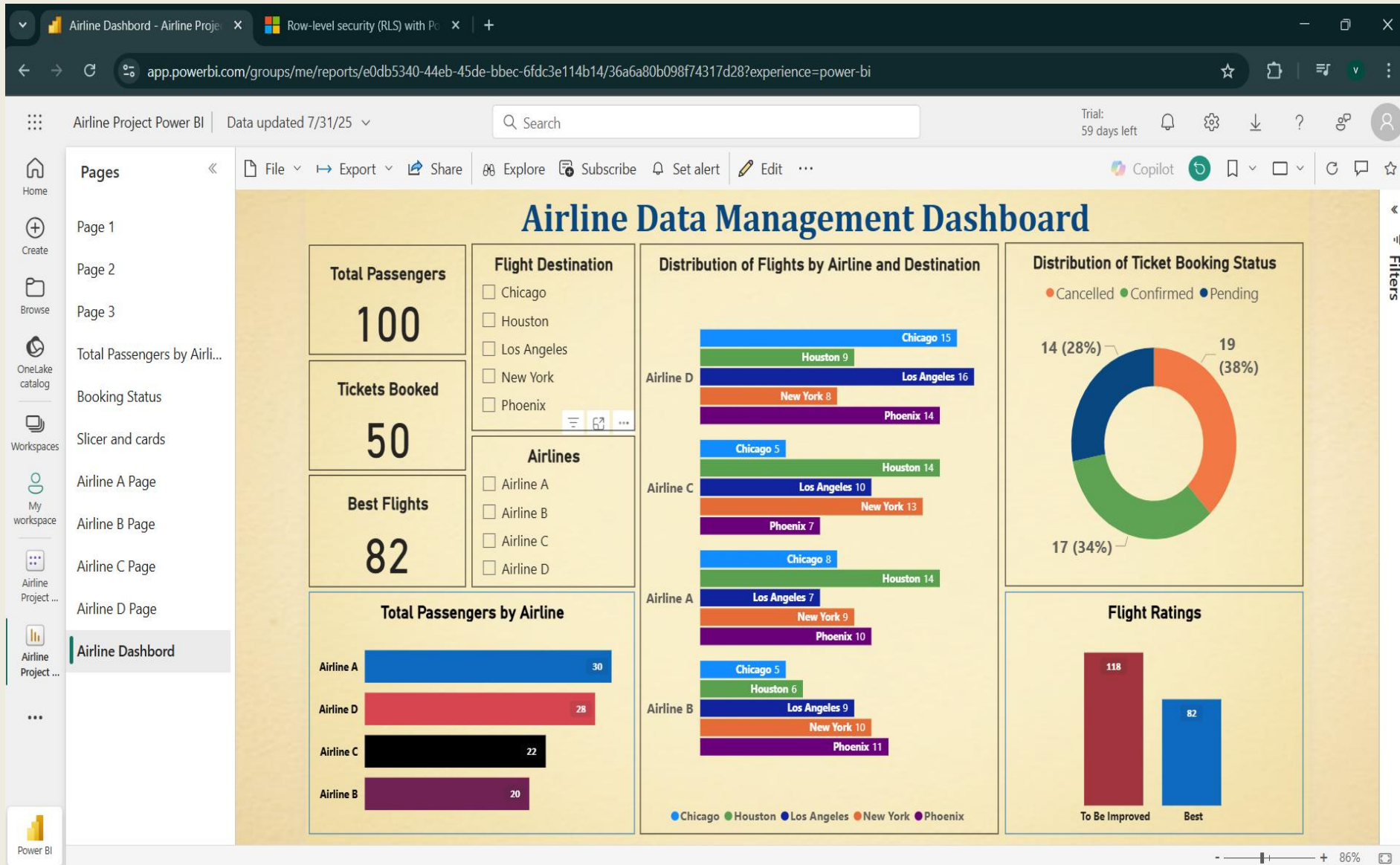
Enter email addresses

Add

Vandna Bhavsar X

Save Cancel

All pages Shared on Power Bi Service



Set up a schedule refresh at 5 PM daily

The screenshot shows the Power BI web interface with the 'Refresh' settings for a specific dataset. The browser address bar shows the URL: `app.powerbi.com/groups/me/settings/datasets/e9675390-6382-4f8c-ad30-dd5827a54bcc?experience=power-bi`. The left sidebar contains navigation icons for Home, Create, Browse, OneLake catalog, Workspaces, My workspace, and a list of projects. The main content area is titled 'Refresh' and includes the following settings:

- Time zone:** A dropdown menu showing '(UTC+05:30) Chennai, Kolkata, Mumbai'.
- Configure a refresh schedule:** A section with a 'Learn more' link and a toggle switch set to 'On'.
- Refresh frequency:** A dropdown menu set to 'Daily'.
- Time:** A time picker set to '5:00 PM'.
- Send refresh failure notifications to:** A section with a checked checkbox for 'Semantic model owner' and an unchecked checkbox for 'These contacts:'. Below the checkboxes is a text input field labeled 'Enter email addresses'.

At the bottom of the settings panel are two buttons: 'Apply' (in green) and 'Discard'.

Applied Set up a schedule refresh at 5 PM daily

The screenshot shows the Power BI web interface. The browser address bar displays the URL: `app.powerbi.com/groups/me/settings/datasets/e9675390-6382-4f8c-ad30-dd5827a54bcc?experience=power-bi`. The left sidebar contains navigation icons for Home, Create, Browse, OneLake catalog, Workspaces, My workspace, and a list of datasets including 'Airline Project ...'. The main content area is titled 'Parameters' and 'Refresh'. Under 'Refresh', the 'Time zone' is set to '(UTC+05:30) Chennai, Kolkata, Mumbai'. The 'Configure a refresh schedule' section shows the refresh is 'On' with a frequency of 'Daily' and a time of '5:00 PM'. A notification bubble in the top right corner states: 'Airline Project Power BI refresh schedule updated. Your updates to the Airline Project Power BI refresh schedule changes have been applied'. At the bottom, there are 'Apply' and 'Discard' buttons.

Power BI My workspace

Search: Data source credentials

Trial: 59 days left

Parameters

Refresh

Time zone

① Time zone configuration is applied not only to determine the schedule refresh time but also to establish the current date and time for incremental refresh models during on-demand and API refreshes. [Learn more](#)

(UTC+05:30) Chennai, Kolkata, Mumbai

Configure a refresh schedule

Define a data refresh schedule to import data from the data source into the semantic model. [Learn more](#)

On

Refresh frequency

Daily

Time

5:00 PM

[Add another time](#)

Send refresh failure notifications to

☒ Semantic model owner

☐ These contacts:

Enter email addresses

Apply Discard

Airline Project Power BI refresh schedule updated
Your updates to the Airline Project Power BI refresh schedule changes have been applied

Loom Video Link for Project Explanation

<https://www.loom.com/share/9263f6fe69df45b3bdd0ee04155f24ca?sid=52804afe-292a-417e-bbee-85c23800b273>

Thank you