

Hotel Bookings

A graduation project dissertation

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Introduction

The Hotel Bookings dataset offers a rich repository of information encompassing hotel reservations, cancellations, and guest demographics. With its extensive coverage of booking details, guest characteristics, and reservation statuses, this dataset serves as a valuable resource for gaining insights into the dynamics of the hospitality industry.

This dataset allows for a multifaceted analysis, enabling exploration at various levels. Researchers and analysts can delve into specific hotels across different timeframes, examining trends over months and weeks to discern seasonal preferences among guests from diverse countries. Moreover, comparisons between different booking types, such as adult-only versus family-oriented bookings, provide insights into the varying preferences and behaviors of distinct guest segments.

Key aspects covered in the dataset include the type of hotel, guest demographics (including the number of adults, children, and babies per booking), length of stay, meal plans, country of origin, and market segment designation. Additionally, it provides detailed information on reservation statuses, room assignments, deposit types, travel agency involvement, waiting list durations, customer classifications, average daily rates, parking requirements, and special requests.

By analyzing this comprehensive dataset, stakeholders in the hospitality industry can gain valuable insights into customer preferences, optimize operational processes, enhance service offerings, and make informed decisions to improve overall guest satisfaction. This dataset holds immense potential for uncovering trends, patterns, and correlations that can drive strategic initiatives aimed at enhancing hotel services and maximizing business performance.



Purpose:

The purpose of analyzing the Hotel Bookings dataset is multifaceted and encompasses various objectives aimed at improving hotel services, optimizing operations, and understanding customer preferences within the hospitality industry. Here are some key purposes of analyzing this dataset:

- 1. Customer Segmentation:** By analyzing guest demographics, market segments, and booking patterns, hotels can segment their customers effectively. This segmentation allows for targeted marketing efforts, personalized services, and tailored experiences to meet the diverse needs of different guest groups.
- 2. Demand Forecasting:** Understanding booking trends, seasonal variations, and reservation statuses enables hotels to forecast demand accurately. This information is crucial for optimizing pricing strategies, managing inventory effectively, and ensuring optimal occupancy rates throughout the year.
- 3. Enhancing Guest Experience:** Insights from the dataset can help hotels identify areas for improvement in guest experience. By analyzing feedback, special requests, and previous cancellations, hotels can address pain points, streamline processes, and enhance overall satisfaction levels.
- 4. Operational Efficiency:** Analyzing room assignments, lead times, and waiting list durations allows hotels to optimize operational processes. This includes efficient room allocation, effective resource utilization, and minimizing turnaround times for booking confirmations.
- 5. Revenue Management:** Detailed information on average daily rates, deposit types, and ancillary services (such as parking requirements) enables hotels to implement effective revenue management strategies. This includes dynamic pricing, upselling opportunities, and maximizing revenue per available room (RevPAR).
- 6. Risk Mitigation:** By monitoring cancellation patterns, identifying potential fraud, and analyzing booking trends, hotels can mitigate risks associated with overbooking, revenue loss, and fraudulent activities.
- 7. Competitive Analysis:** Benchmarking against competitors and industry standards allows hotels to identify strengths, weaknesses, and opportunities for differentiation. This analysis informs strategic decisions related to pricing, marketing, and service offerings.



8.Sustainability Initiatives: Analyzing guest preferences for eco-friendly practices, such as reducing laundry services or opting for sustainable meal options, can inform hotels' sustainability initiatives and contribute to environmental conservation efforts.

Overall, the primary purpose of analyzing the Hotel Bookings dataset is to leverage data-driven insights to enhance guest satisfaction, optimize operational efficiency, and drive strategic decision-making within the hospitality industry.

Dataset Features:

Certainly! Here are some key features (or feathers, as you mentioned) that might be included in the Hotel Bookings dataset:

1.Hotel Type: Indicates the type of hotel (e.g., resort, business hotel, boutique hotel).

2.Guest Demographics: Includes the number of adults, children, and babies per booking, as well as their age groups.

3.Length of Stay: Provides information on the duration of stay in both weekend nights (Saturday or Sunday) and weekdays (Monday to Friday).

4.Meal Plan: Specifies the meal plan chosen by guests (e.g., room-only, bed and breakfast, half board, full board).

5.Country of Origin: Indicates the country of origin of the guests making the booking.

6.Market Segment: Designation of the market segment to which the booking belongs (e.g., corporate, leisure, group, transient).

7.Reservation Status: Includes whether a booking was canceled or not, along with updates on reservation status.

8.Lead Time: Indicates the lead time between booking date and arrival date.

9.Week Number and Arrival Day: Specifies the week number and day of the arrival date.



10. Customer Type: Indicates if a guest is a repeated visitor or a new customer.

11. Room Assignments: Includes reserved room types (initially requested) and assigned room types (room actually allocated).

12. Booking Changes: Details any changes made to bookings, along with previous cancellations made by guests.

13. Deposit Type: Specifies the type of deposit made for each booking.

14. Travel Agency ID: Includes ID numbers for travel agencies used in making reservations.

15. Waiting List Duration: Indicates the number of days spent on waiting lists before confirmation.

16. Customer Classification: Specifies if the booking is transient or group.

17. Average Daily Rate (ADR): Calculated based on lodging transactions divided by total staying nights.

These features collectively provide a comprehensive view of hotel bookings, cancellations, guest details, and various aspects related to reservation management and guest services. Analyzing these features can yield valuable insights for improving hotel operations, enhancing guest satisfaction, and optimizing revenue generation strategies..

Methodology

- **MS-SQL Server**

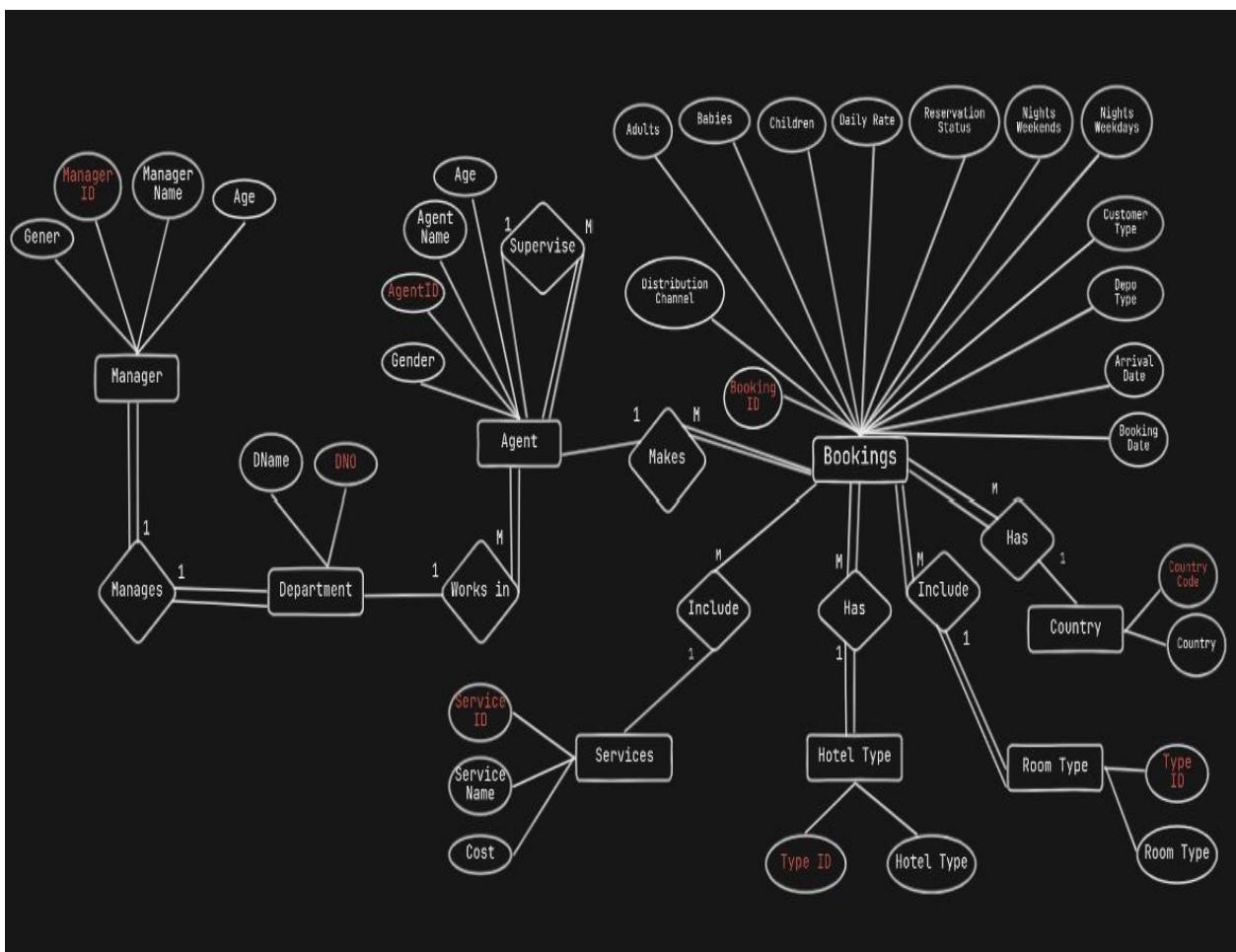
1- Identify the data requirements.

The first step in creating a database for an Booking Hotel project is to identify the data requirements. This includes determining what data needs to be stored, how it should be organized, and what relationships exist between different data entities.

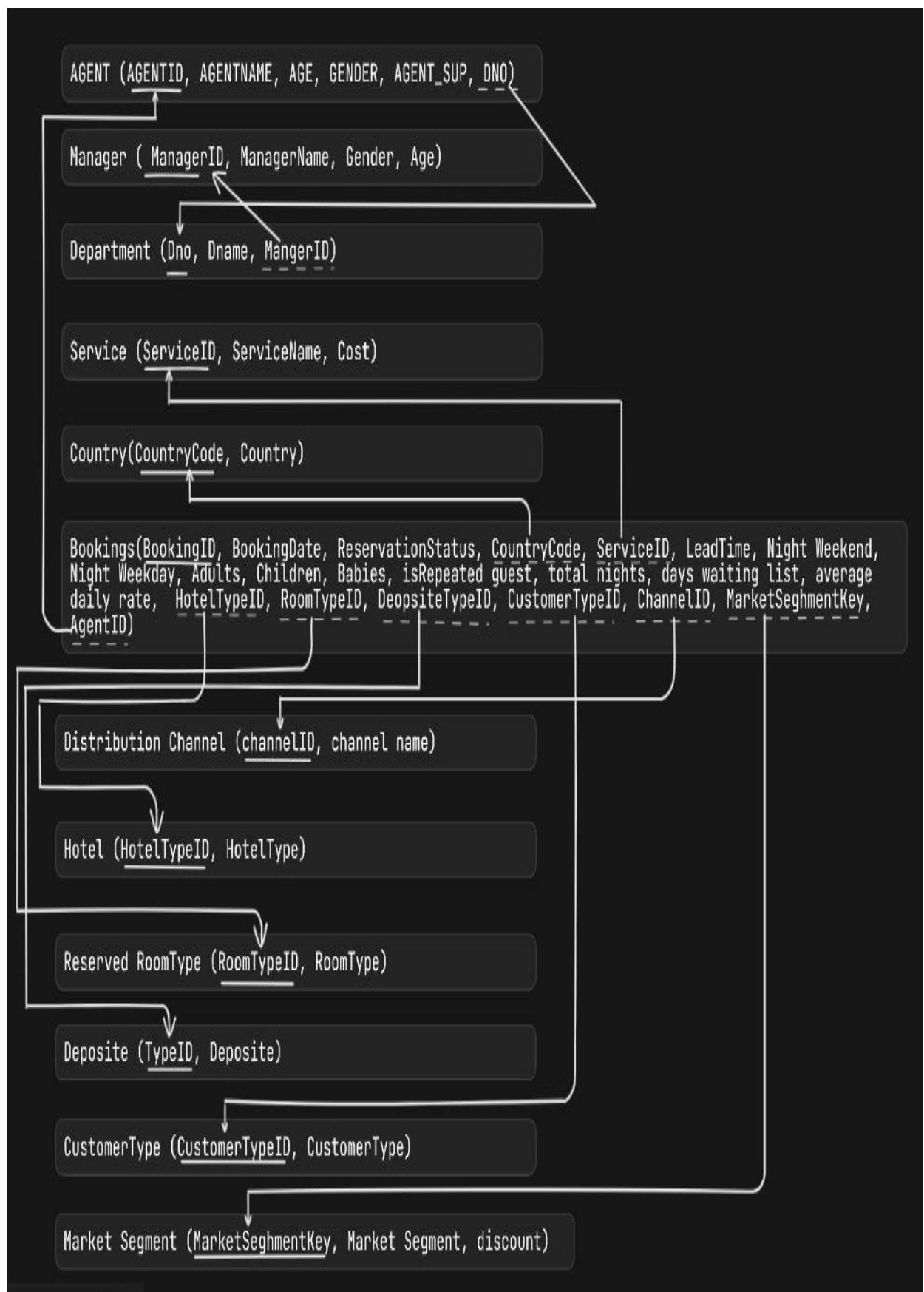
-We decided to have 8 entities.

- 1- Booking
- 2- Rome Type
- 3- Hotel Type
- 4- country
- 5- Services
- 6- Agent
- 7- Department
- 8- Manager

2-Create an entity-relationship diagram(ERD).



3- Design the database schema.

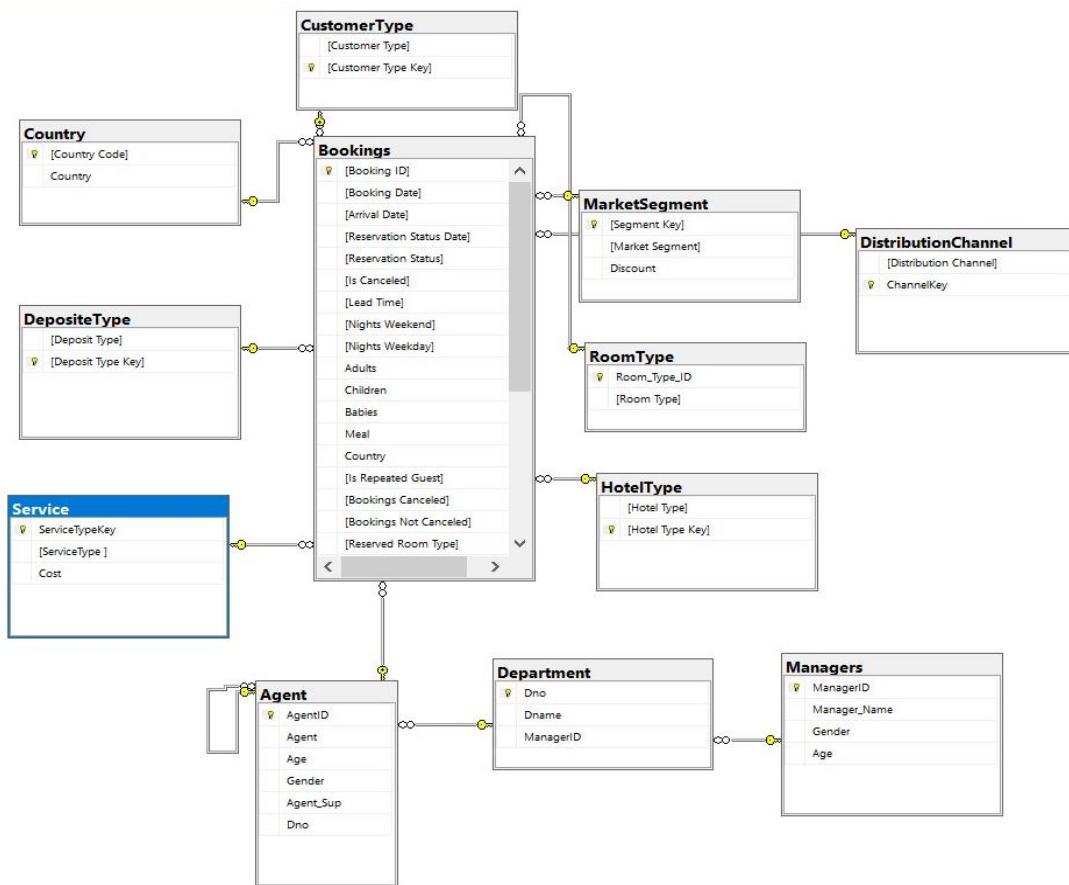


During mapping and for normalization purpose we had 12 tables.

1. Booking
2. Rome Type
3. Hotel Type
4. country
5. Services
6. Agent
7. Department
8. Managers
9. Market Segment
10. Customer Type
11. Deposit Type
12. Distributional Channel

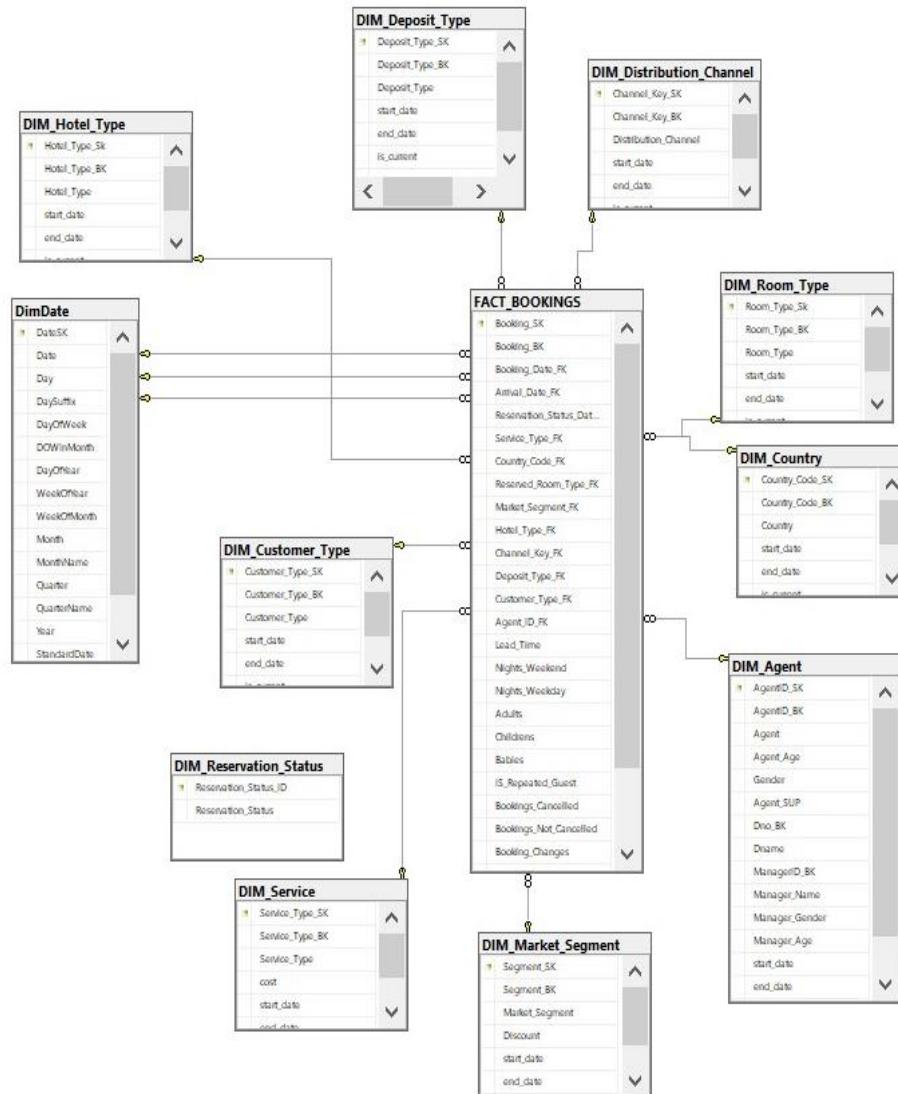
4- Create the database.

The final physical schema



5- Create the Data Warehouse.

The final physical schema



6-SQL_Analysis_Questions:

```
142  
143 --12 how many each customer type make bookings ?  
144  
145 SELECT customer_type , COUNT(booking_bk) FROM  
146 dbo.DIM_Customer_Type JOIN dbo.FACT_BOOKINGS  
147 ON FACT_BOOKINGS.Customer_Type_FK = DIM_Customer_Type.Customer_Type_SK  
148 GROUP BY Customer_Type  
149 ORDER BY COUNT(booking_bk) DESC  
150  
151
```

Results Messages

customer_type	(No column name)
Transient	101472
Transient-Party	32594
Contract	6747
Group	772


```
122  
123 --10 What is the total number of adults and children across all Bookings ?  
124  
125 SELECT SUM(Adults) AS [Number of Adults] , SUM(childrens) AS [Number of Children]  
126 FROM dbo.FACT_BOOKINGS  
127  
128  
129
```

Results Messages

Number of Adults	Number of Children
262240	13825


```
131  
132 --11 what is the average number of nights (Weekend and Weeday) spent by guests for each room type ?  
133  
134 SELECT Room_type , AVG(Nights_Weekend) AS [AVG Number of Weekend Nights] ,  
135 AVG(Nights_Weekday) AS [AVG Number of Weekday Nights]  
136 FROM dbo.DIM_Room_Type JOIN dbo.FACT_BOOKINGS  
137 ON FACT_BOOKINGS.Reserved_Room_Type_FK = DIM_Room_Type.Room_Type_SK  
138 GROUP BY Room_Type  
139  
140  
141
```

Results Messages

Room_type	Avg Number of Weekend Nights	Avg Number of Weekday Nights
Connecting Rooms	1	3
Deluxe Suite	1	3
Executive Suite	1	3
Family Room	1	2
Garden View Room	0	1
Junior Suite	1	3
Loft Suite	0	0
Presidential Suite	1	2
Standard Double Room	0	2
Standard Single Room	0	2



```
114 --9 how many Bookings in each status ?  
115  
116 SELECT RS.Reservation_Status , COUNT(Booking_BK) AS [Numner of Bookings]  
117 FROM dbo.DIM_Reservation_Status RS JOIN dbo.FACT_BOOKINGS B  
118 ON B.Reservation_Status = RS.Reservation_Status_ID  
119 GROUP BY RS.Reservation_Status  
120  
121
```

101 %

Results Messages

	Reservation_Status	Numner of Bookings
1	Canceled	50917
2	Check-Out	89198
3	No-Show	1470

```
92  
93  
94  
95  
96 --7 what is the highest and lowest lead time for booking ?  
97  
98 SELECT MAX(lead_Time) AS [Highest Lead Time], MIN(Lead_Time) AS [Lowest Lead Time]  
99 FROM dbo.FACT_BOOKINGS  
100  
101
```

101 %

Results Messages

	Highest Lead Time	Lowest Lead Time
1	737	0

```
102  
103  
104 --8 what are the market segment type for Bookings ?  
105 SELECT Market_Segment , COUNT(Booking_BK) AS [Number of Bookings]  
106 FROM dbo.DIM_Market_Segment JOIN dbo.FACT_BOOKINGS  
107 ON Segment_SK = Market_Segment_FK  
108 GROUP BY Market_Segment  
109 ORDER BY COUNT(Booking_BK) desc  
110  
111  
112
```

101 %

Results Messages

	Market_Segment	Number of Bookings
1	Online TA	62840
2	Offline TA/TO	30379
3	Groups	25755
4	Direct	14971
5	Corporate	6486
6	Complementary	913
7	Aviation	237
8	Undefined	4



```
81
82
83 --6 How many Bookings fall in a Weekend vs in a Weekday ?
84
85
86
87 SELECT
88     SUM(CASE WHEN Nights_Weekend > 0 THEN 1 ELSE 0 END) AS [Number OF Bookings in Weekend],
89     SUM(CASE WHEN Nights_Weekday > 0 THEN 1 ELSE 0 END) AS [Number OF Bookings in Weekday]
90 FROM
91     dbo.FACT_BOOKINGS;
```

Results	
	Number OF Bookings in Weekend Number OF Bookings in Weekday
1	79880 132704

```
46
47 --4 What is the Number of Bookings in a year ?
48
49 CREATE OR ALTER PROCEDURE Num_of_Bookings @year int
50 AS
51 BEGIN
52
53     SELECT COUNT (booking_bk) AS [ Number OF Bookings ]
54     FROM dbo.FACT_BOOKINGS B JOIN dbo.DimDate D
55     ON D.DateSK = B.Booking_Date_FK AND D.Year = @year
56     ORDER by COUNT (booking_bk) DESC
57
58
59     End
60
61 EXECUTE Num_of_Bookings 2017
```

Results	
	Number OF Bookings
1	2457

```
62
63
64 --5 What is the Number of Booking in each hotel type in a year ?
65
66 CREATE PROCEDURE Booking_in_each_hotel_type @year INT
67 As
68 BEGIN
69     SELECT H.Hotel_Type, COUNT(B.booking_bk) AS Number_of_Bookings
70     FROM dbo.FACT_BOOKINGS B INNER JOIN dbo.DIM_Hotel_Type H
71     ON H.Hotel_Type_Sk = B.Hotel_Type_FK
72     JOIN dbo.DimDate D ON B.Booking_Date_FK = D.DateSK
73     AND D.Year = @year
74
75     GROUP BY H.Hotel_Type
76
77     End
78
79 EXECUTE Booking_in_each_hotel_type 2017
80
```

Results	
Hotel_Type	Number_of_Bookings
1 City Hotel	2330
2 Resort Hotel	127



```
8 --2 What is the Top N most popular Room Types among guests ?
9
10
11
12 CREATE OR ALTER PROCEDURE TOP_Room_Types @N int
13 AS
14 BEGIN
15
16     SELECT TOP(@N) R.Room_Type , COUNT (booking_bk) AS [Number of Bookings]
17     FROM dbo.FACT_BOOKINGS B JOIN dbo.DIM_Room_Type R
18     ON R.Room_Type_Sk = B.Reserved_Room_Type_FK
19     GROUP BY R.Room_Type
20     ORDER by COUNT (booking_bk) DESC
21
22
23
24 EXECUTE TOP_Room_Types 4
25
26
27
28
29 --3 What is the Top N most popular Service among guests ?
30
31 CREATE OR ALTER PROCEDURE TOP_Services @N int
32 AS
33 BEGIN
34
35     SELECT TOP(@N) S.Service_Type , COUNT (booking_bk) AS [Number of Bookings]
36     FROM dbo.FACT_BOOKINGS B JOIN dbo.DIM_Service S
37     ON S.Service_Type_SK = B.Service_Type_FK
38     GROUP BY S.Service_Type
39     ORDER by COUNT (booking_bk) DESC
40
41
42
43 EXECUTE Top_Services 3
44
45
46
```

Results

Room_Type	Number of Bookings
Standard Single Room	103762
Executive Suite	21453
Junior Suite	7530
Family Room	3279

Results

Service_Type	Number of Bookings
Bed & Breakfast	109516
Half Board	18402
Self Catering	11067



```
1 --1 What is the Total Number of Bookings ?
2
3
4
5 SELECT COUNT(booking_bk) AS [Total Number of Bookings] FROM dbo.FACT_BOOKINGS AS [Total Number of Bookings]
6
```

101 %

Results Messages

Total Number of Bookings
141585


```
153 --13 What is the Top N most popular Country has Bookings ?
154
155 CREATE OR ALTER PROCEDURE TOP_Countries @N int
156     AS
157     BEGIN
158
159         SELECT TOP(@N) C.Country , COUNT(booking_bk) AS [Number of Bookings]
160         FROM dbo.FACT_BOOKINGS B JOIN dbo.DIM_Country C
161         ON C.Country_Code_SK = B.Country_Code_FK
162         GROUP BY C.Country
163         ORDER by COUNT (booking_bk) DESC
164
165
166
167 EXECUTE TOP_Countries 8
168
```

101 %

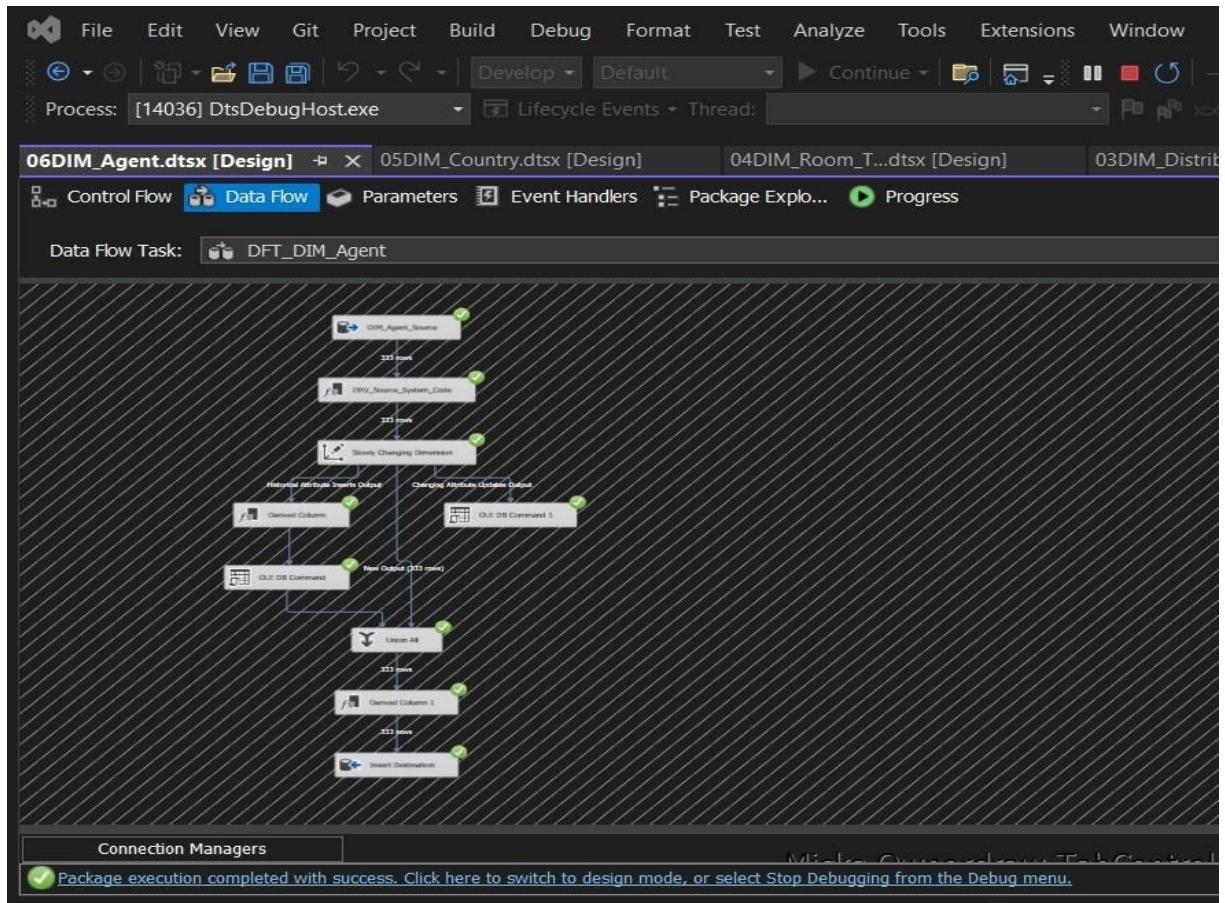
Results Messages

Country	Number of Bookings
Portugal	62022
United Kingdom	13487
France	11792
Spain	10519
Germany	7813
Italy	4321
Ireland	3860
Belgium	2554

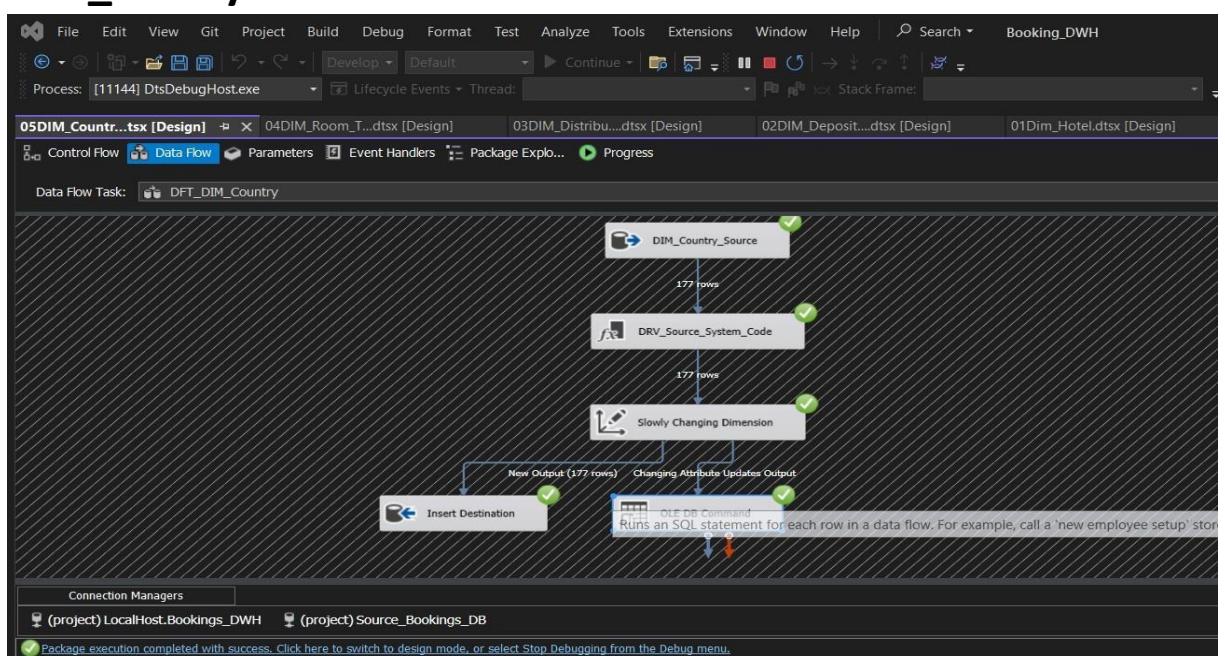
- SQL BI

1. ETL Process

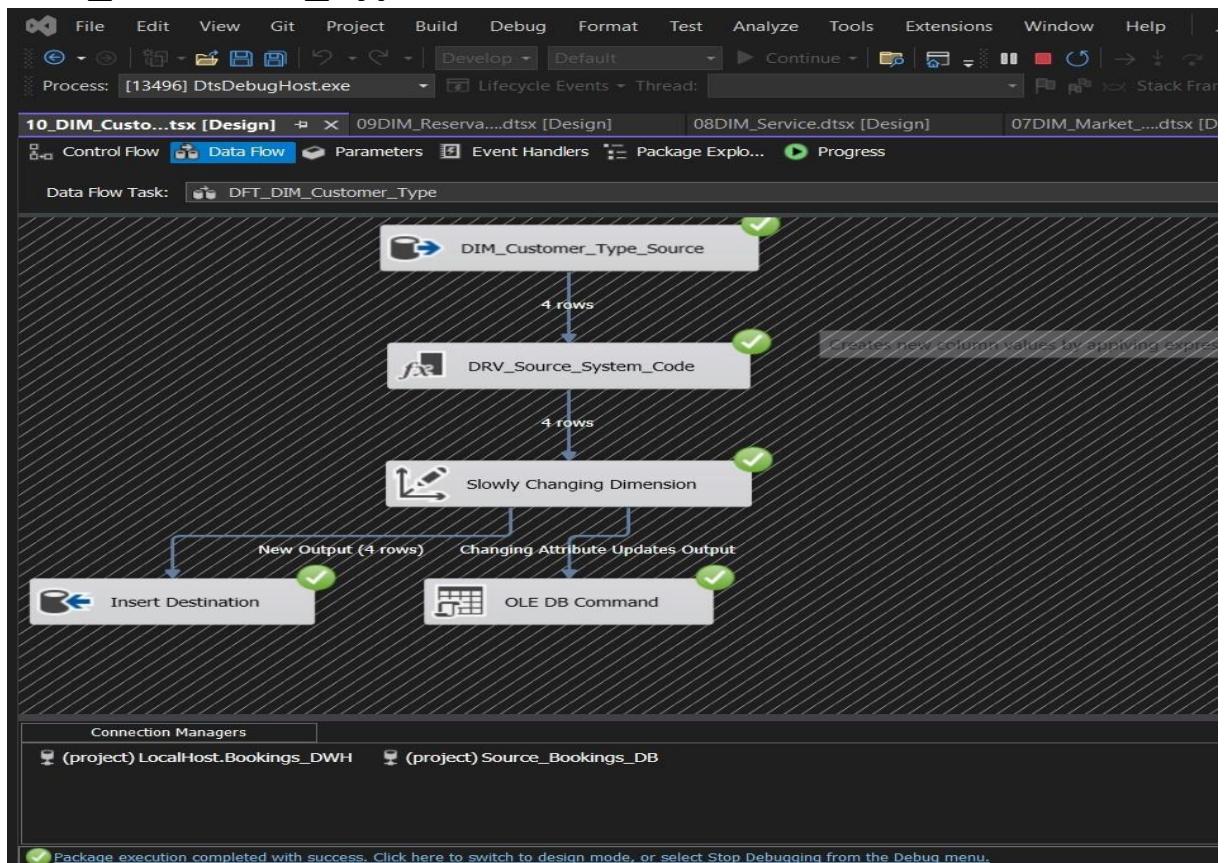
1. Dim_Agent



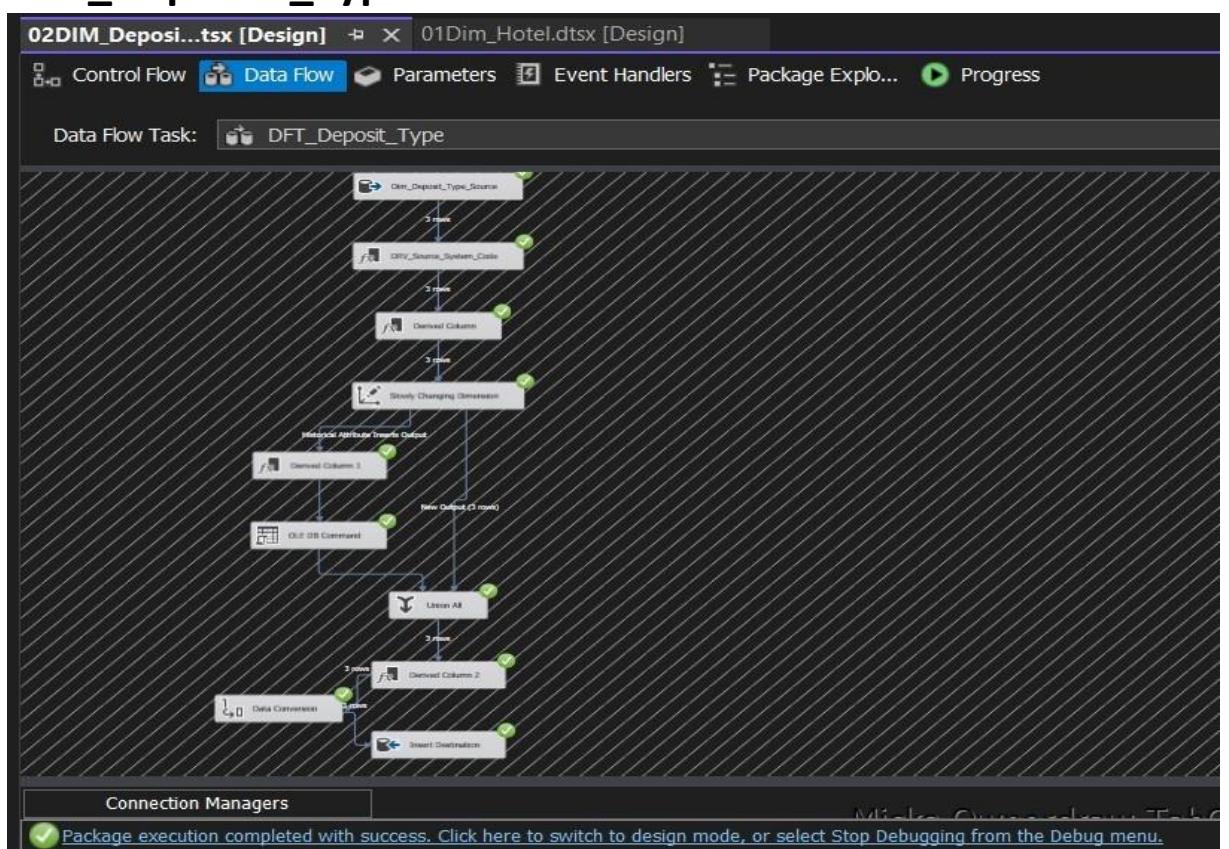
2. Dim_Cuntry



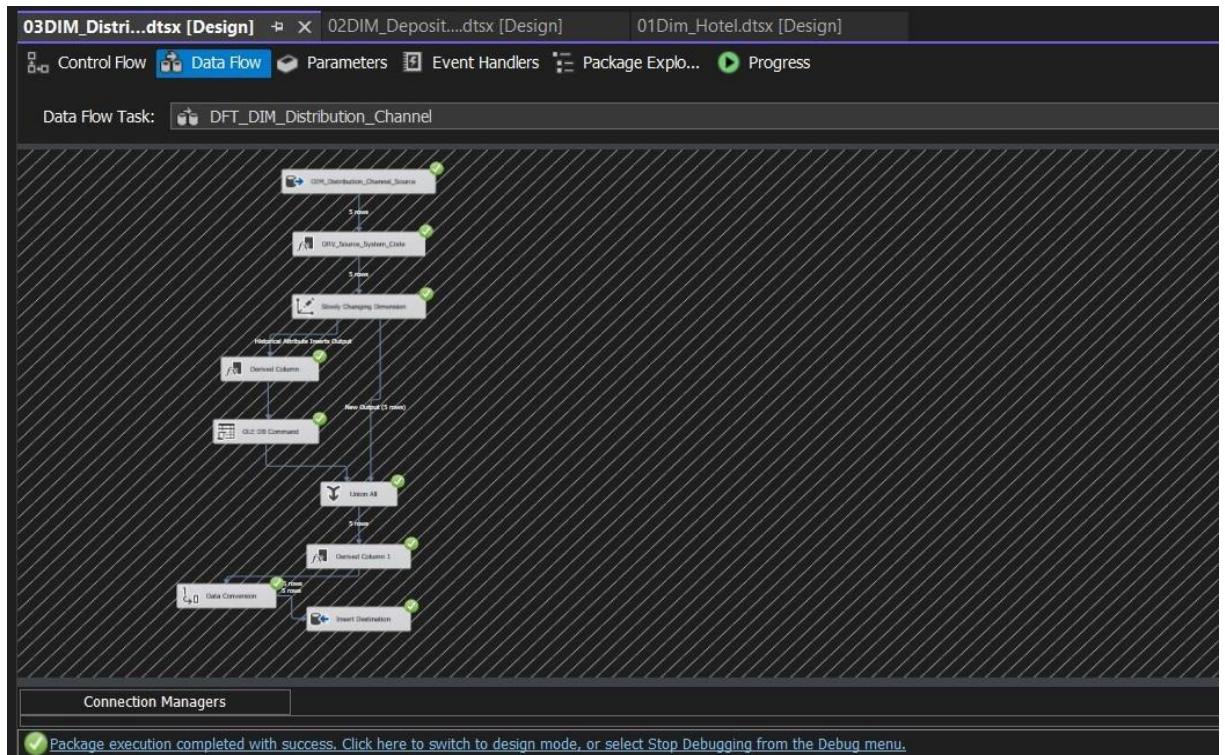
3. Dim_Customer_Type



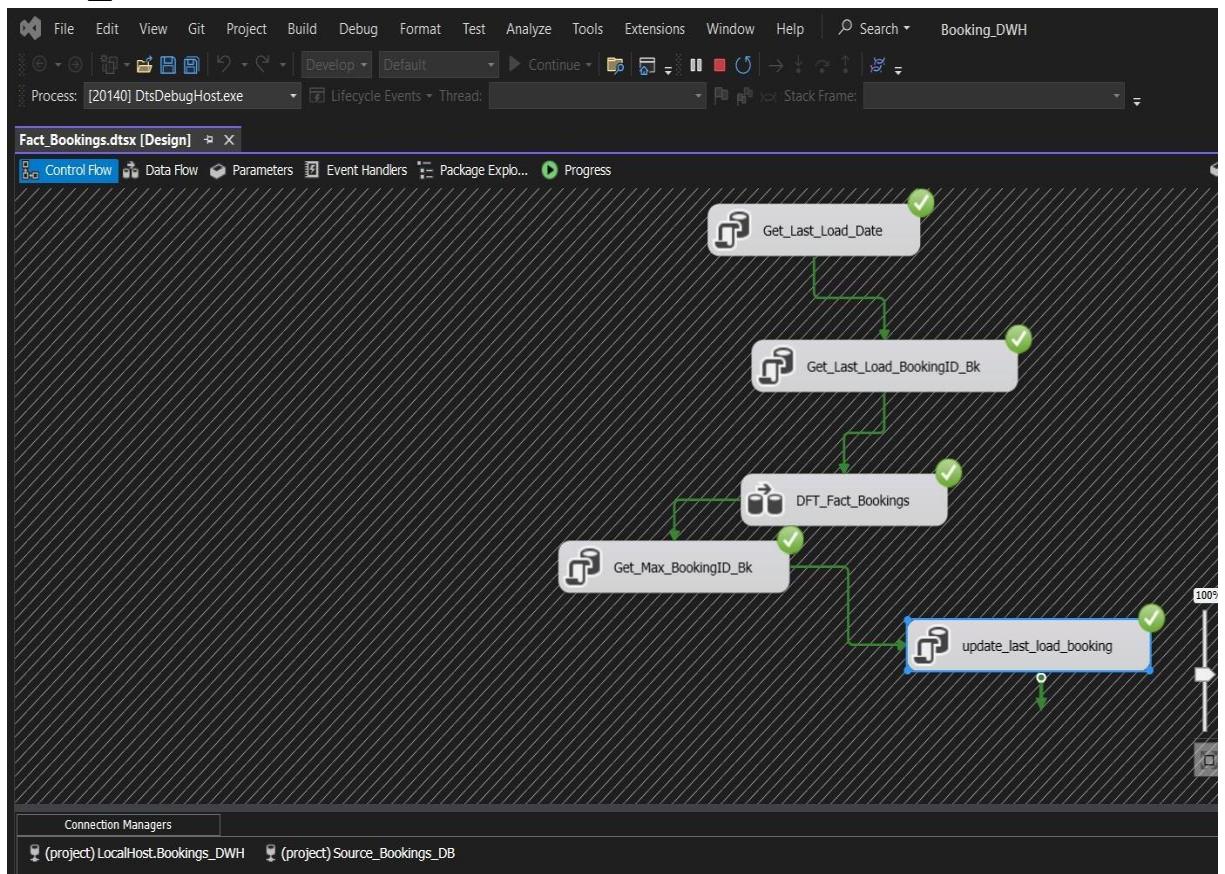
4. Dim_Deposit_Type



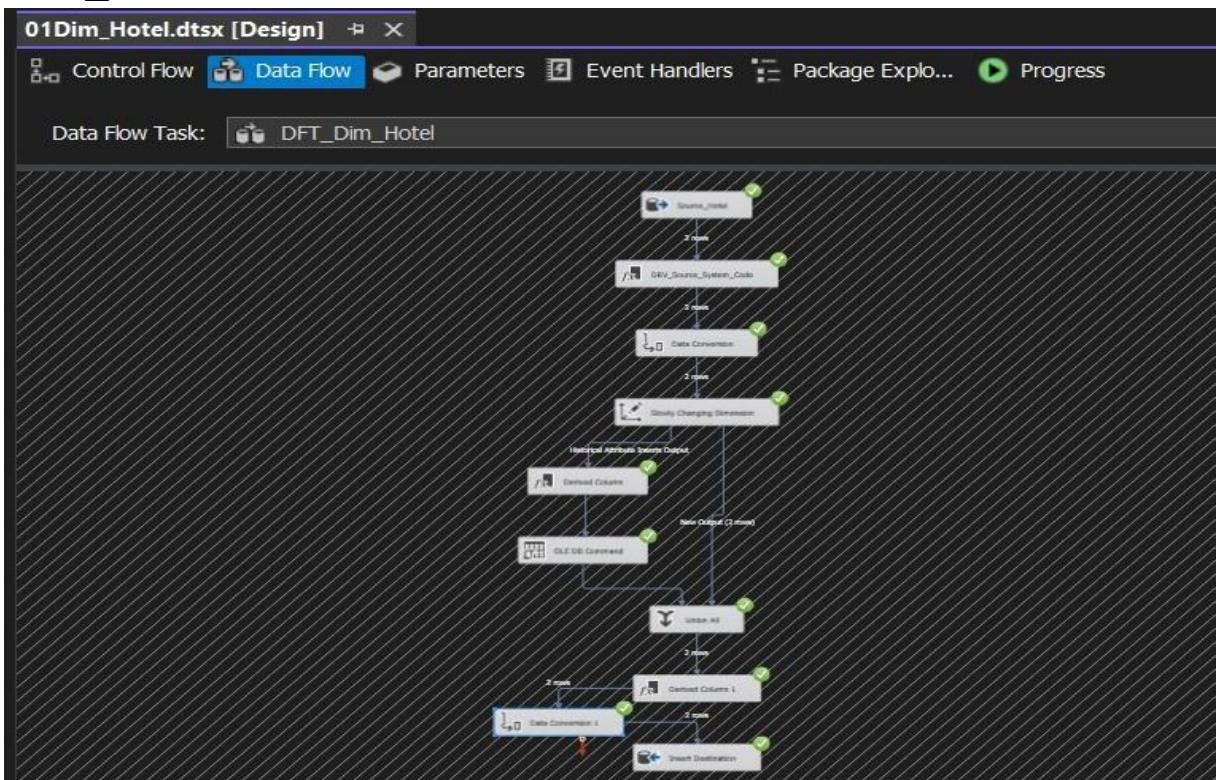
5. Dim_Distribution_Channel



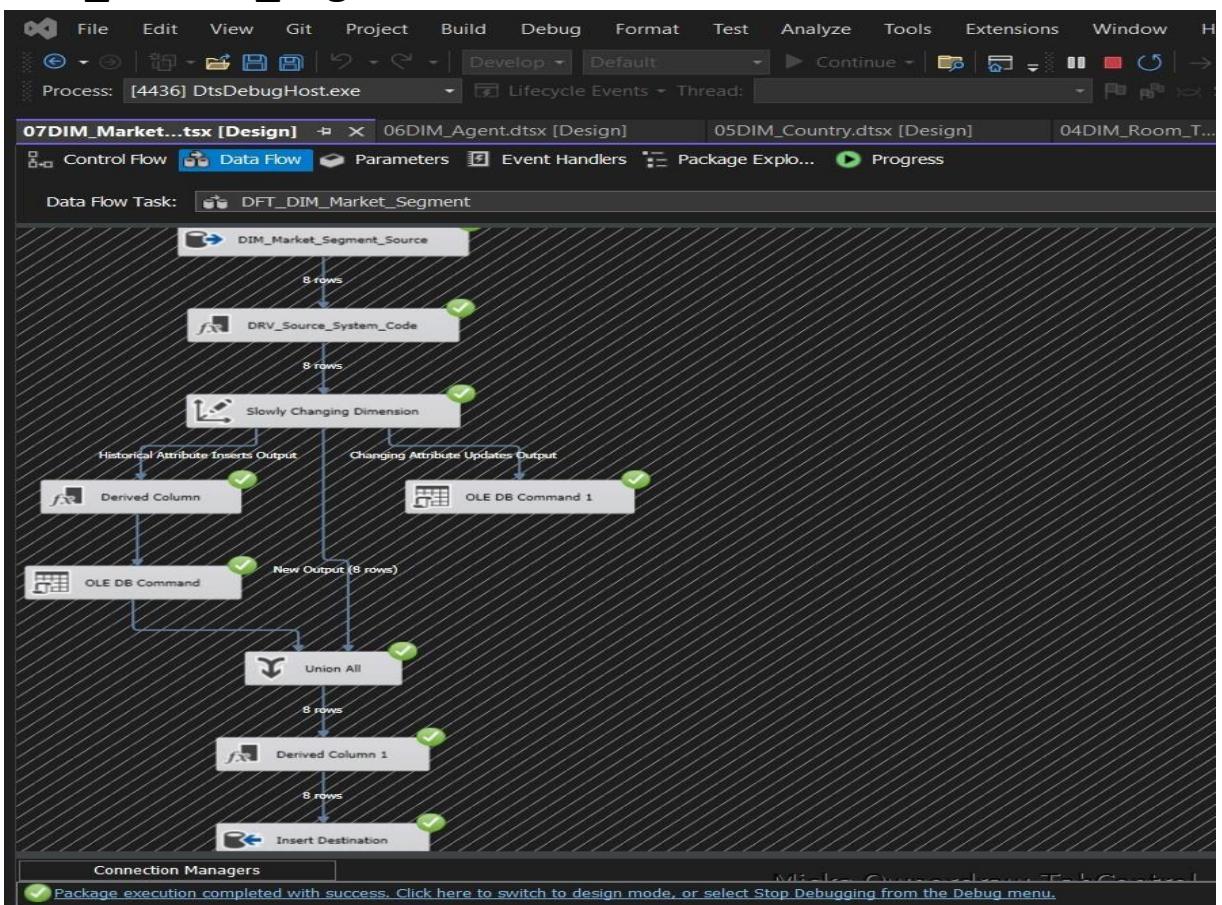
6. Dim_Fact



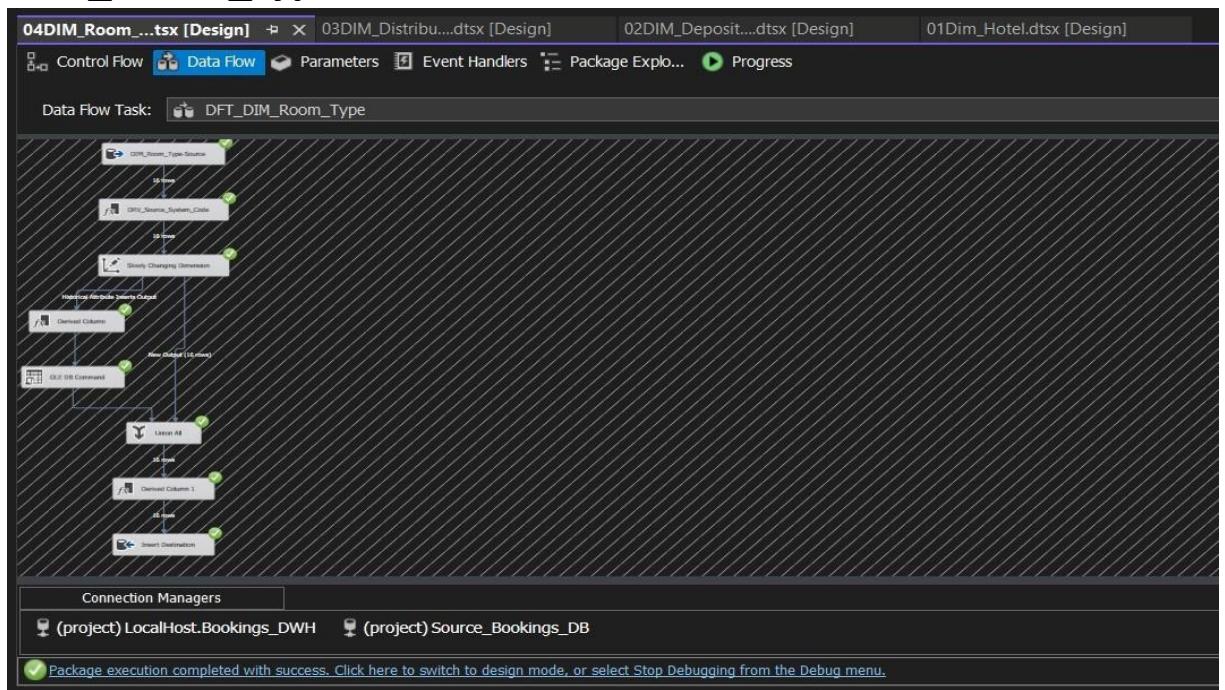
7. Dim_Hotel



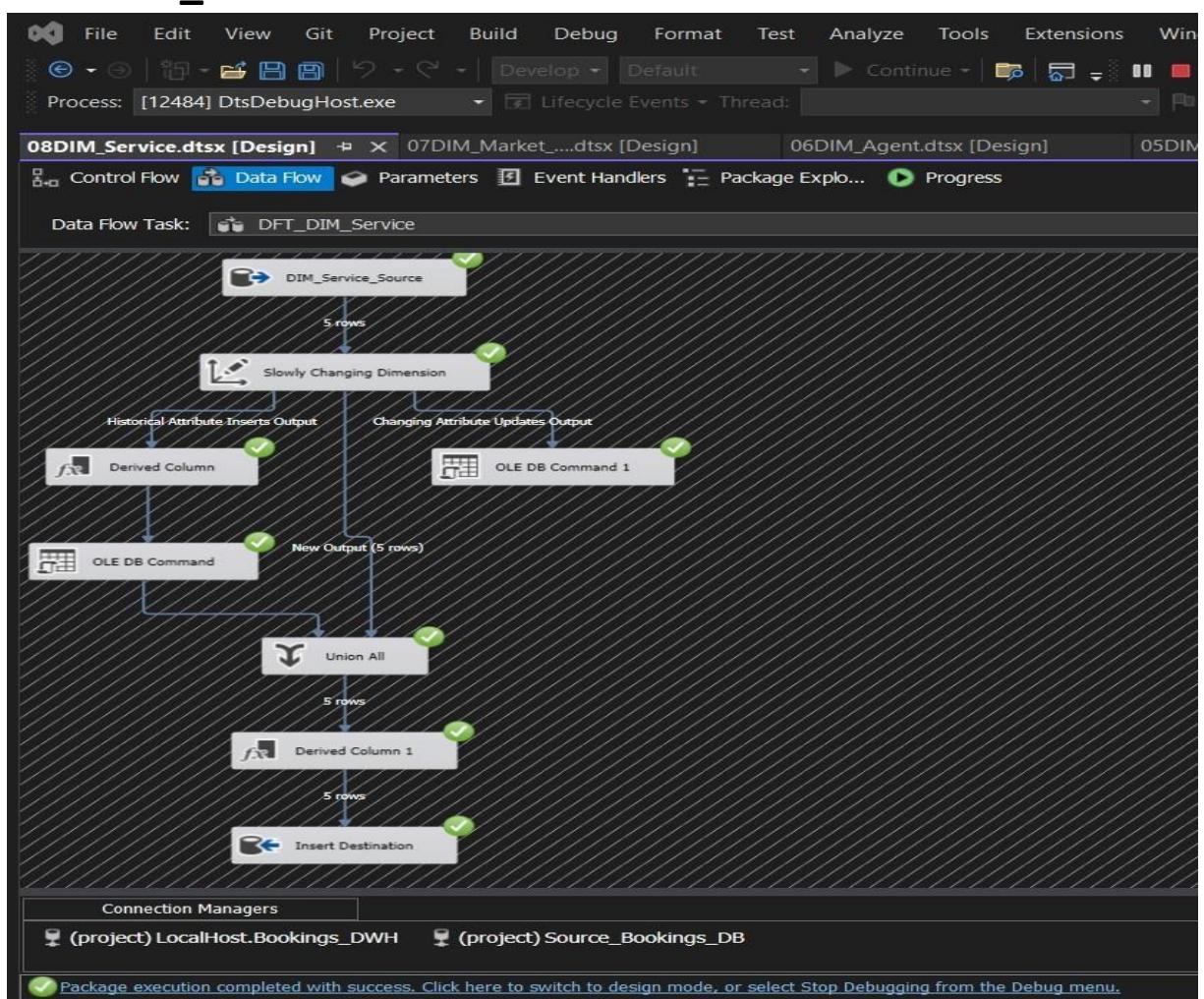
8. Dim_Market_Segmant



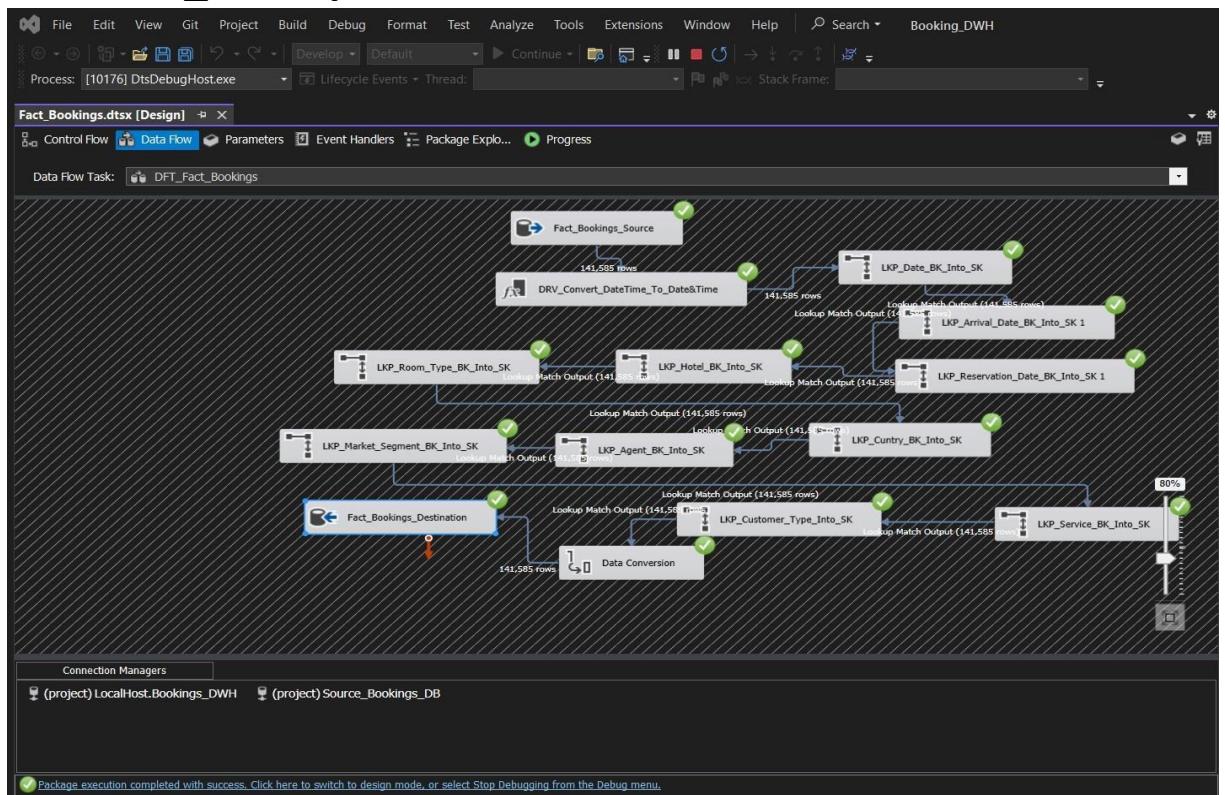
9. Dim_Rome_type



10. Dim_Services



11. Fact_Lookup



12. Fact_Table

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left lists database objects such as tables, views, and stored procedures. The central pane displays a query window with the following T-SQL code:

```

SELECT TOP (1000) [Booking_SK]
      ,[Booking_BK]
      ,[Booking_Date_FK]
      ,[Arrival_Date_FK]
      ,[Reservation_Status_Date_FK]
      ,[Service_Type_FK]
      ,[Country_Code_FK]
      ,[Reserved_Room_Type_FK]
      ,[Market_Segment_FK]
      ,[Hotel_Type_FK]
      ,[Channel_Key_FK]
      ,[Deposit_Type_FK]
      ,[Customer_Type_FK]
      ,[Agent_ID_FK]
      ,[Lead_Time]
      ,[Nights_Weekend]
      ,[Nights_Weekday]
      ,[Adults]
      ,[Childrens]
      ,[Babies]
      ,[IS_Repeated_Guest]
      ,[Bookings_Cancelled]
      ,[Bookings_Not_Cancelled]
      ,[Booking_Changes]
      ,[Company]
      ,[AVG_Daily_Rate]
  
```

The results grid below shows 1,000 rows of booking data. The Properties pane on the right provides details about the current connection, including the connection name, elapsed time, and session tracing ID.

13. Meta_Control_Fact_Booking_Load

```
SQLQuery6.sql - D...aleh Mohamed (84)  X SQLQuery5.sql - D...aleh Mohamed (82)  SQLQuery4.sql - D...aleh Mohamed (70)*
SELECT TOP (1000) [id]
    ,[Booking]
    ,[Last_Load_Date]
    ,[Last_Load_BookingID_Bk]
FROM [Bookings_DWH].[dbo].[Meta_Control_Fact_Booking_Load]
```

Results

	id	Boking	Last_Load_Date	Last_Load_BookingID_Bk
1	1	Booking	2024-03-15 14:48:06.000	141585

14. SlolyChanging

Object Explorer

- External Resources
- Synonyms
- Programmability
- Query Store
- Service Broker
- Storage
- Security
- Bookings_DWH**
 - Database Diagrams
 - dbo.Booking_DWH_Diagram
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - Graph Tables
 - dbo.DIM_Agent
 - dbo.DIM_Country
 - dbo.DIM_Customer_Type
 - dbo.DIM_Deposit_Type
 - dbo.DIM_Distribution_Channel
 - dbo.DIM_Hotel_Type
 - dbo.DIM_Market_Segment
 - dbo.DIM_Reservation_Status
 - dbo.DIM_Room_Type
 - dbo.DIM_Service
 - dbo.DimDate
 - dbo.FACT_BOOKINGS
 - Dropped Ledger Tables
 - Views

Results

```
SELECT TOP (1000) [Hotel_Type_Sk]
    ,[Hotel_Type_BK]
    ,[Hotel_Type]
    ,[start_date]
    ,[end_date]
    ,[is_current]
    ,[source_system_code]
FROM [Bookings_DWH].[dbo].[DIM_Hotel_Type]
```

	Hotel_Type_Sk	Hotel_Type_BK	Hotel_Type	start_date	end_date	is_current	source_system_code
1	1	1	City Hotel	2024-03-14 15:19:38.000	2024-03-14 15:23:50.000	0	1
2	2	2	Resort Hotel	2024-03-14 15:19:38.000	NULL	1	1
3	3	1	City Hotel City	2024-03-14 15:23:50.000	NULL	1	1

Query executed successfully.

2. SSAS

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t to the

Dimension Hierarchy Operator Filter

Dimension	Hierarchy	Operator	Filter
Arrival Date	Arrival Date.Year	Equal	
<Select dimension>			

Reservation Status FACT BOOKINGS C...

Canceled	50917
Check-Out	89198
No-Show	1470

Calculated Members

Dimension Hierarchy Operator Filter Expression

Dimension	Hierarchy	Operator	Filter Expression
Arrival Date	Arrival Date.Year	Equal	
<Select dimension>			

Market Segment Hotel Type FACT BOOKINGS C...

Aviation	City Hotel	237
Complementary	City Hotel	677
Complementary	Resort Hotel	236
Corporate	City Hotel	3552
Corporate	Resort Hotel	2934
Direct	City Hotel	7076
Direct	Resort Hotel	7895
Groups	City Hotel	18565
Groups	Resort Hotel	7190
Offline TA/TO	City Hotel	20795
Offline TA/TO	Resort Hotel	9584
Online TA	City Hotel	41837
Online TA	Resort Hotel	21003
Undefined	City Hotel	4

Calculated Members



Language: Default | MDX |                               

Booking Etl

Metadata

Search Model

Measure Group:

<All>

- Booking BK
- Booking Changes
- Bookings Cancelled
- Bookings Not Cancelled
- Childrens
- Company
- Days In Waiting List
- FACT BOOKINGS Count
- IS Repeated Guest
- Lead Time
- Nights Weekday

Calculated Members

Arrival Date

Hierarchy: Arrival Date.Year

Operator: Equal

Filter Expression

Customer Type	Childrens	Babies	Adults	FACT BOOKINGS C...
Contract	493	47	12900	6747
Group	45	8	2079	772
Transient	12388	998	190824	101472
Transient-Party	899	123	56437	32594

Booking Etl

Model

Group:

Country

Country

Country Code SK

Customer Type

Customer Type

Customer Type SK

Deposit Type

Deposit Type

Deposit Type SK

Distribution Channel

Channel Key SK

Arrival Date

Hierarchy: Arrival Date.Year

Operator: Equal

Filter Expression

Hotel Type	Customer Type	FACT BOOKINGS C...
City Hotel	Contract	4398
City Hotel	Group	438
City Hotel	Transient	64771
City Hotel	Transient-Party	23136
Resort Hotel	Contract	2349
Resort Hotel	Group	334
Resort Hotel	Transient	36701
Resort Hotel	Transient-Party	9458



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Booking Etl

Metadata

Search Model

Measure Group:

<All>

- Customer Type SK
- DIM Deposit Type
- Deposit Type
- Deposit Type SK
- DIM Distribution Channel
- DIM Hotel Type
- DIM Market Segment
- Discount
- Market Segment
- Segment SK
- DIM Reservation Status

Calculated Members

Dimension Hierarchy Operator Filter Expr

Arrival Date	Arrival Date.Year	Equal	
<Select dimension>			

Deposit Type	FACT BOOKINGS C...
No Deposit	123034
Non Refund	18385
Refundable	166

Edit as Text Import... MDX

Dimension Hierarchy Operator Filter Expression

Arrival Date	Arrival Date.Year	Equal	
<Select dimension>			

Market Segment	FACT BOOKINGS C...
Aviation	237
Complementary	913
Corporate	6486
Direct	14971
Groups	25755
Offline TA/TO	30379
Online TA	62840
Undefined	4



The image shows two separate reports within the Analysis Studio interface, both titled "Booking Etl".

Report 1 (Top):

- Measure Group:** <All>
- Calculated Members:** KPIs
- Filter Expression:** Dimension: Arrival Date, Hierarchy: Arrival Date.Year, Operator: Equal, Value: <Select dimension>
- Data:** A table showing bookings categorized by Customer Type (Contract, Group, Transient, Transient-Party) across Weekday and Weekend nights, along with a total column.

Customer Type	Nights Weekday	Nights Weekend	FACT BOOKINGS C...
Contract	23299	8694	6747
Group	1633	659	772
Transient	255777	95854	101472
Transient-Party	72795	26455	32594

Report 2 (Bottom):

- Measure Group:** <All>
- Calculated Members:** None
- Filter Expression:** Dimension: Arrival Date, Hierarchy: Arrival Date.Year, Operator: Equal, Value: <Select dimension>
- Data:** A table showing bookings categorized by Customer Type (Contract, Group, Transient, Transient-Party) across different Deposit Types.

Customer Type	Deposit Type	FACT BOOKINGS C...
Contract	No Deposit	5657
Contract	Non Refund	1088
Contract	Refundable	2
Group	No Deposit	764
Group	Refundable	8
Transient	No Deposit	86291
Transient	Non Refund	15161
Transient	Refundable	20
Transient-Party	No Deposit	30322
Transient-Party	Non Refund	2136
Transient-Party	Refundable	136

3. SSRS:

Customer Type & Bookings Count



Customer Type	Bookings Count
Contract	6747
Group	772
Transient	101472
Transient-Party	32594



dept=Customer Service Department



Agents

Agent ID	Agent Name	Age	Gender	Dno
510	Alexander Davis	18	Male	2
191	Olivia Perez	19	Male	2
414	William Davis	19	Female	2
42	Matthew Clark	20	Male	2
162	Sophia Harris	20	Female	2
52	Zoey Hill	21	Female	2
77	Amelia Baker	21	Male	2
114	Ella Thompson	22	Female	2
143	Gabriel Harris	22	Female	2
2	Emma Smith	23	Male	2
21	Evelyn Garcia	23	Female	2
47	Chloe Lopez	23	Male	2
121	Alexander Davis	23	Male	2
306	Harper Clark	23	Male	2
531	Michael Wilson	23	Female	2
13	Lucas Jackson	24	Male	2
173	Mia Brown	24	Male	2
425	Madison Harris	24	Male	2
39	Riley Baker	25	Male	2
192	Gabriel Lewis	25	Male	2
406	Abigail Jones	25	Male	2
30	William Carter	26	Male	2
33	Hannah Wright	26	Male	2
193	Evelyn Taylor	26	Female	2
219	Joshua Wilson	27	Male	2
310	James Harris	27	Female	2
480	Aria Wilson	27	Female	2
211	Scarlett Miller	28	Female	2
50	Carter Scott	29	Female	2
64	Jackson Martinez	29	Male	2
98	David Thompson	29	Male	2
348	Oliver Harris	29	Male	2

Customer Type & Distribution Channel



Customer Type	Distribution Channel	Bookings Count
Contract	Corporate	54
Contract	Direct	36
Contract	TA/TO	6657
Group	Corporate	39
Group	Direct	158
Group	TA/TO	575
Transient	Corporate	4971
Transient	Direct	14849
Transient	GDS	194
Transient	TA/TO	81456
Transient	Undefined	2
Transient-Party	Corporate	3103
Transient-Party	Direct	2491
Transient-Party	TA/TO	26992
Transient-Party	Undefined	8



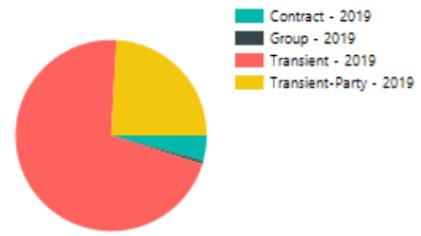
Booking Per Year

Customer Type	BookingsCount	Year
Contract	662	2020
Group	218	2020
Transient	33791	2020
Transient-Party	6016	2020



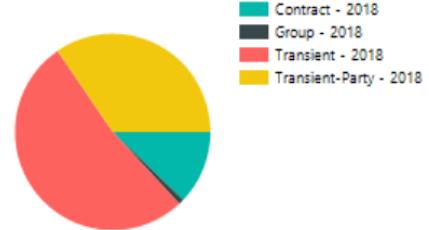
Booking Per Year

Customer Type	BookingsCount	Year
Contract	3427	2019
Group	362	2019
Transient	56251	2019
Transient-Party	19043	2019



Booking Per Year

Customer Type	BookingsCount	Year
Contract	2658	2018
Group	192	2018
Transient	11430	2018
Transient-Party	7535	2018



Hotel Type & Bookings

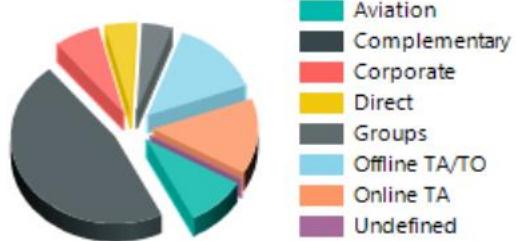


Hotel Type	Customer Type	Bookings Count
City Hotel	Contract	4398
City Hotel	Group	438
City Hotel	Transient	64771
City Hotel	Transient-Party	23136
Resort Hotel	Contract	2349
Resort Hotel	Group	334
Resort Hotel	Transient	36701
Resort Hotel	Transient-Party	9458

Market Segment & Discount



Market Segment& Discount





Service



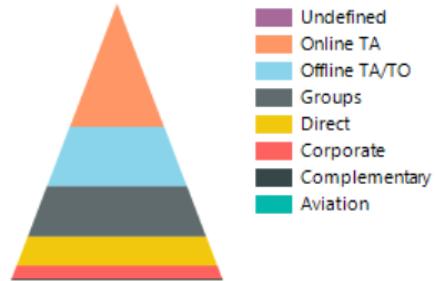
Service Type Key	Service Type	Cost
BB	Bed & Breakfast	12.9900
FB	Full Board	21.9900
HB	Half Board	17.9900
SC	Self Catering	35.0000
Undefined	Undefined	0.0000



Customer Type	Nights Weekday	Nights Weekend	Total Nights	IS Repeated Guest
Contract	23299	8694	31993	51
Group	1633	659	2292	168
Transient	255777	95854	351631	3440
Transient-Party	72795	26455	99250	433

Market segment & Bookings count

Market Segment	Bookings Count
Aviation	237
Complementary	913
Corporate	6486
Direct	14971
Groups	25755
Offline TA/TO	30379
Online TA	62840
Undefined	4



Customer Type	Adults	Childrens	Babies	Bookings Count
Contract	12900	493	47	6747
Group	2079	45	8	772
Transient	190824	12388	998	101472
Transient-Party	56437	899	123	32594

Room Type & Total nights



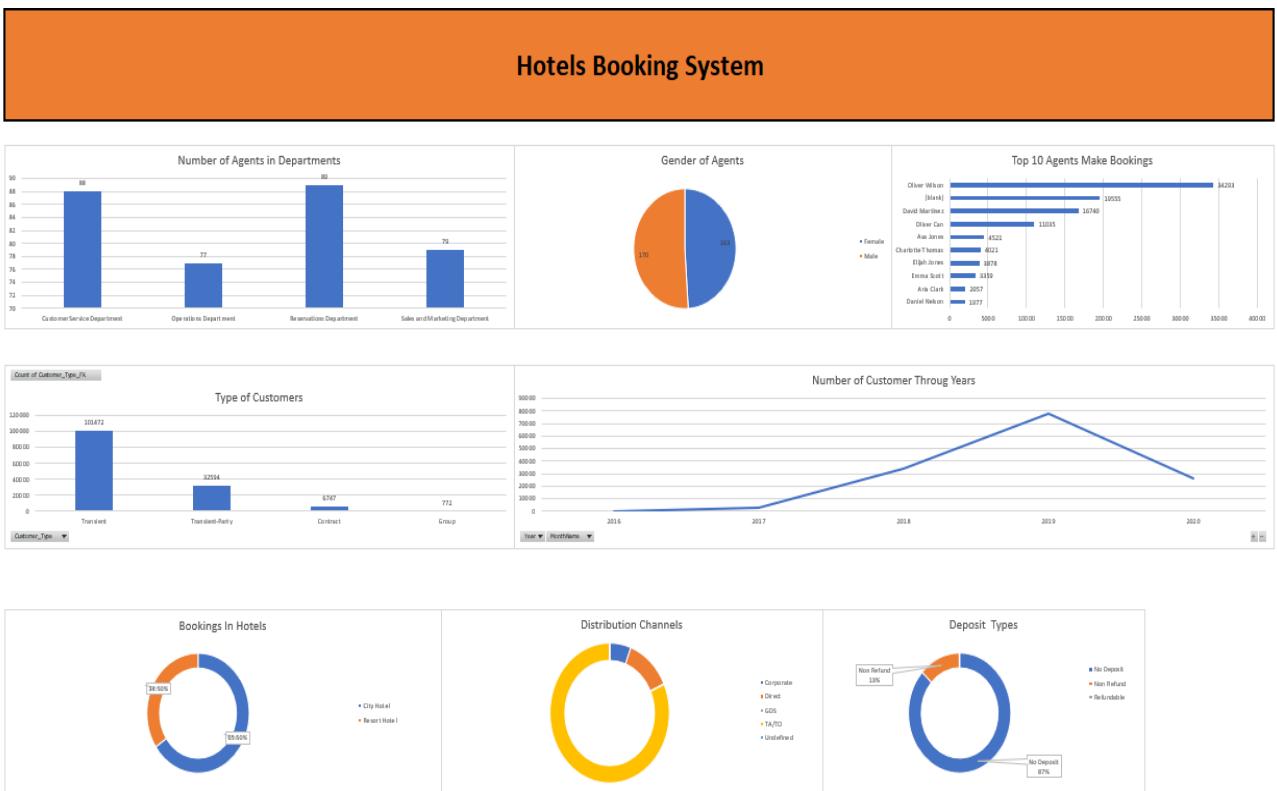
Room Type	Total Nights
Connecting Rooms	10279
Deluxe Suite	5187
Executive Suite	89590
Family Room	12138
Garden View Room	14
Junior Suite	36170
Loft Suite	15
Presidential Suite	2802
Standard Double Room	4627
Standard Single Room	324344

Countries & Bookings

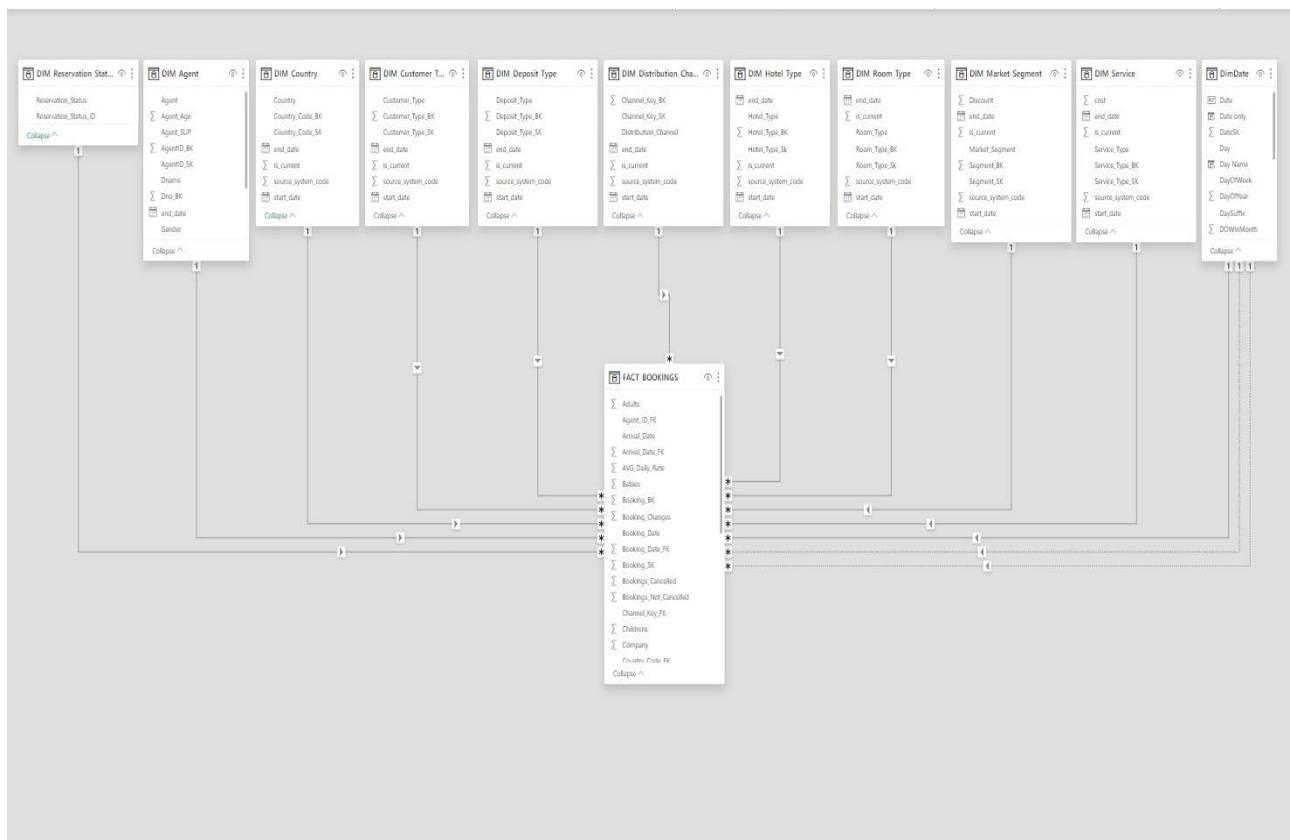


Country	Bookings Count
Albania	14
Algeria	129
American Samoa	1
Andorra	7
Angola	412
Anguilla	1
Antarctica	2
Argentina	228
Armenia	9
Aruba	2
Australia	453
Austria	1372
Azerbaijan	19
Bahamas	1
Bahrain	5
Bangladesh	12

• Excel Dashboard:



• Power bi Schema



• Power bi Dashboards

• Overview



- Agents

KSAA Hotels Booking									
	Overview	Agents	Guests	Reservations	Revenue	Growth Plan			
# Agents	Reservations by Agents			Canceled Reservations by Agents			Average No of Booking Changes		
333	120K			7K			0.22		
Dname	Total Reservations	Canceled Reservations	% Cancellations	Avg. Days In Waiting List	Average No of Booking Changes	Net Revenue	Service Revenue		
Operations Department	34291	603	1.8%	0.00	0.20	\$11,453,312.0	\$2,009,661.17		
Oliver Wilson	34291	603	1.8%	0.00	0.20	\$11,453,312.0	\$2,009,661.17		
Charlotte Thomas	4020	71	1.8%	0.00	0.35	\$1,651,190.7	\$184,962.45		
Aria Clark	2049	2	0.1%	0.00	0.13	\$790,671.7	\$132,684.77		
Daniel Nelson	1977	8	0.4%	0.00	0.07	\$462,142.3	\$92,710.10		
Scarlett Young	867	204	23.5%	26.78	0.25	\$250,035.2	\$31,892.96		
Avery Miller	694	4	0.6%	0.16	0.16	\$231,571.6	\$50,580.94		
Scarlett Hall	670	134	20.0%	0.16	0.17	\$246,544.7	\$56,201.78		
Charlotte Scott	583	5	0.9%	0.00	0.07	\$138,992.8	\$29,782.82		
Ella Hall	541	2	0.4%	0.00	0.09	\$138,672.5	\$29,548.28		
Liam Williams	417	82	19.7%	4.63	0.20	\$173,399.8	\$26,522.81		
Maya Davis	392			6.48	0.08	\$75,038.3	\$12,578.59		
Aiden Davis	284			0.00	0.28	\$88,382.9	\$17,521.53		
Amelia Martinez	272	5	1.8%	0.00	0.13	\$90,123.4	\$17,261.09		
Olivia Hall	267	58	21.7%	0.00	0.15	\$152,666.1	\$27,598.38		
Charlotte Harris	247			0.10	0.00	\$90,224.5	\$12,314.52		
Isabella Parker	241	52	21.6%	3.59	0.13	\$59,483.2	\$9,349.18		
Ava Davis	214			0.00	0.12	\$56,448.7	\$11,689.63		
Anthony Baker	212			2.34	0.10	\$88,547.4	\$18,676.22		

- Guests



The dashboard provides a comprehensive overview of guest data across various categories and metrics.

Repeated Guests: 6K

Adults: 257K

Children: 14K

Babies: 1K

Guest by Hotel Type:

- Resort Hotel
- City Hotel

Guests by Reservation Status:

- Canceled
- Check-Out

Guests by Distribution Channel:

Channel	Guests
TA/TO	226K
Direct	35K
Corporate	11K
GDS	0K

Guests by Customer Type:

Type	Guests
Transient	203K
Transient-Party	55K
Contract	12K
Group	2K

Guest by Deposit Type:

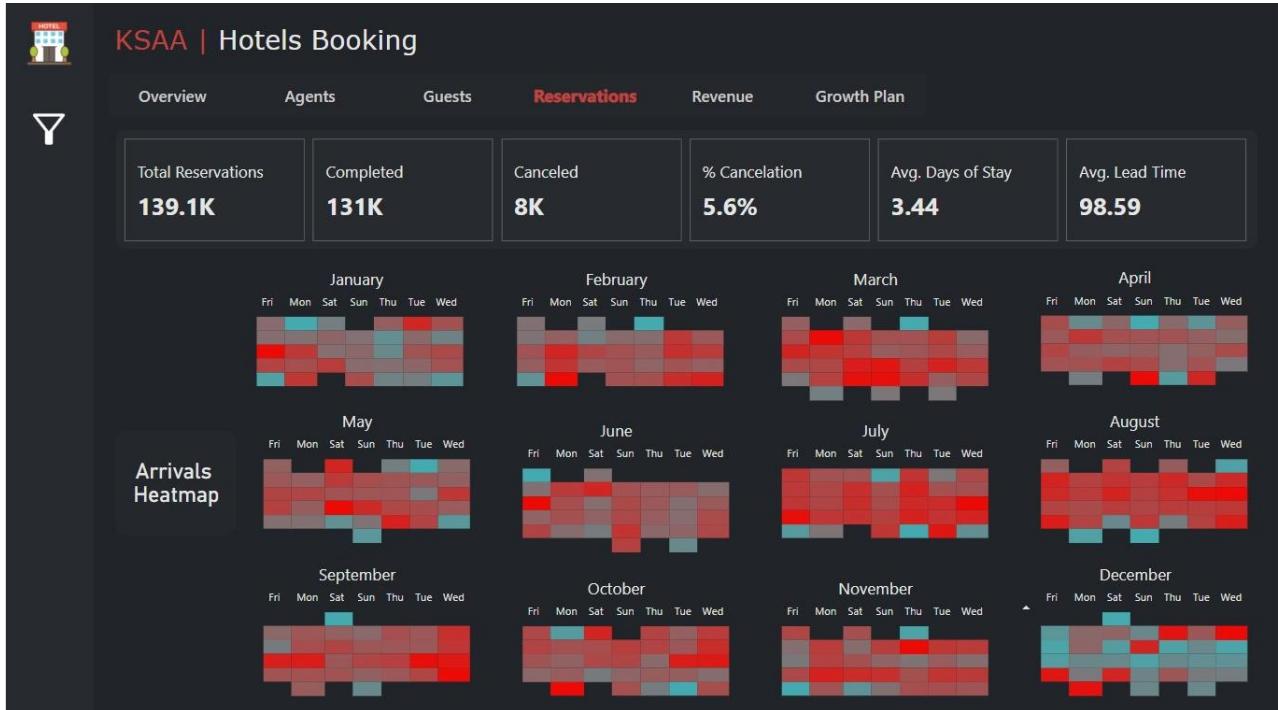
Type	Guests
No Deposit	241K
Non Refund	30K
Refundable	0K

Guest by Hotel Type:

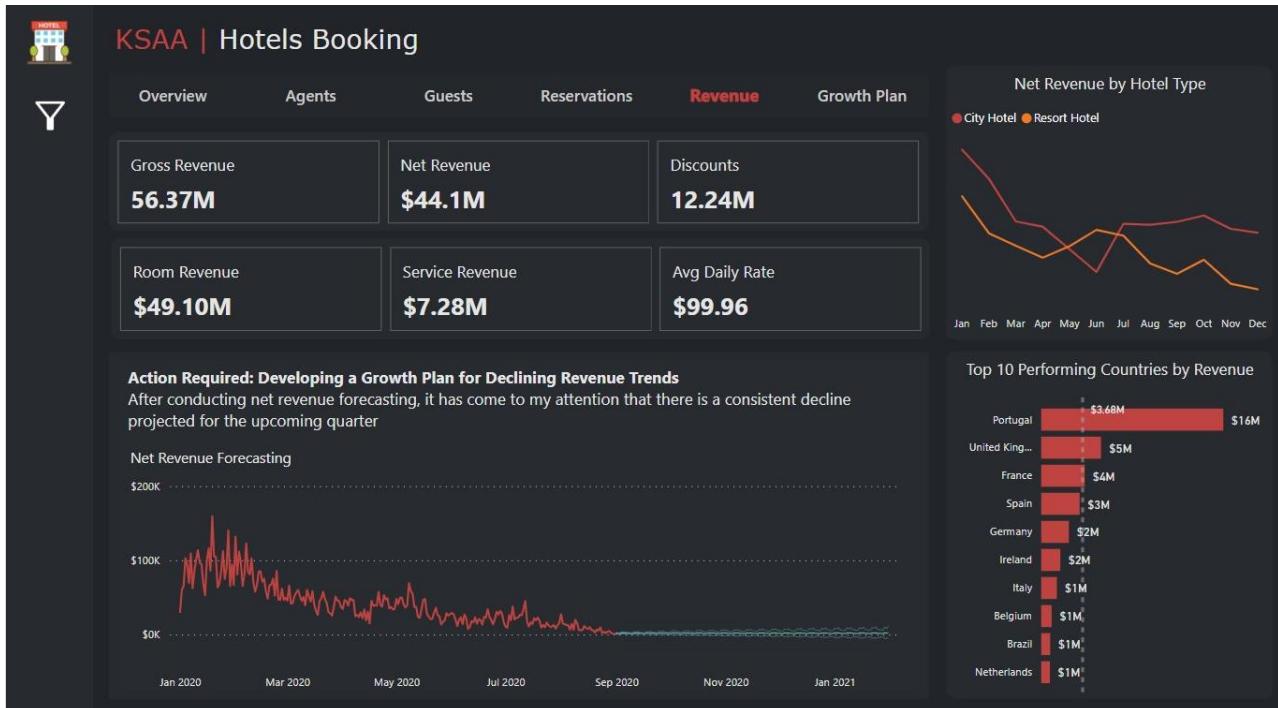
Country	Adults	Children	Babies	Guests Check-Out	Guests Canceled	No-Show
Albania	25	0	1	22	4	
Algeria	200	11	0	168	40	3
American	2	0	0	2		
Samoa						
Andorra	15	4	0	7	12	
Angola	641	86	5	359	274	99
Anguilla	2	2	0	4		
Antarctica	2	0	0	2		
Argentina	456	30	1	360	125	2
Armenia	17	3	0	17	3	
Aruba	5	0	0	5		
Australia	869	45	1	693	222	
Austria	2581	109	0	2184	499	7
Azerbaijan	38	8	0	22	24	
Bahamas	2	0	0	2		
Bahrain	9	3	0	2	10	
Bangladesh	28	3	0	6	25	



• Reservations

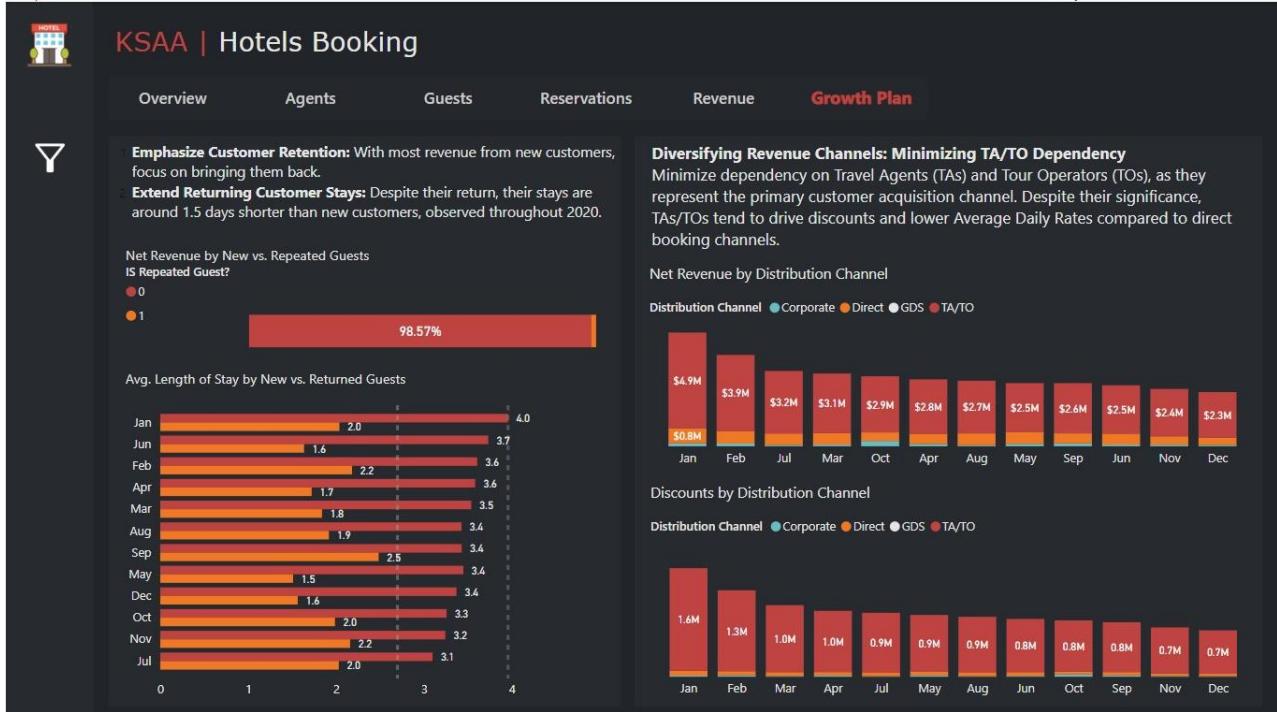


• Revenue

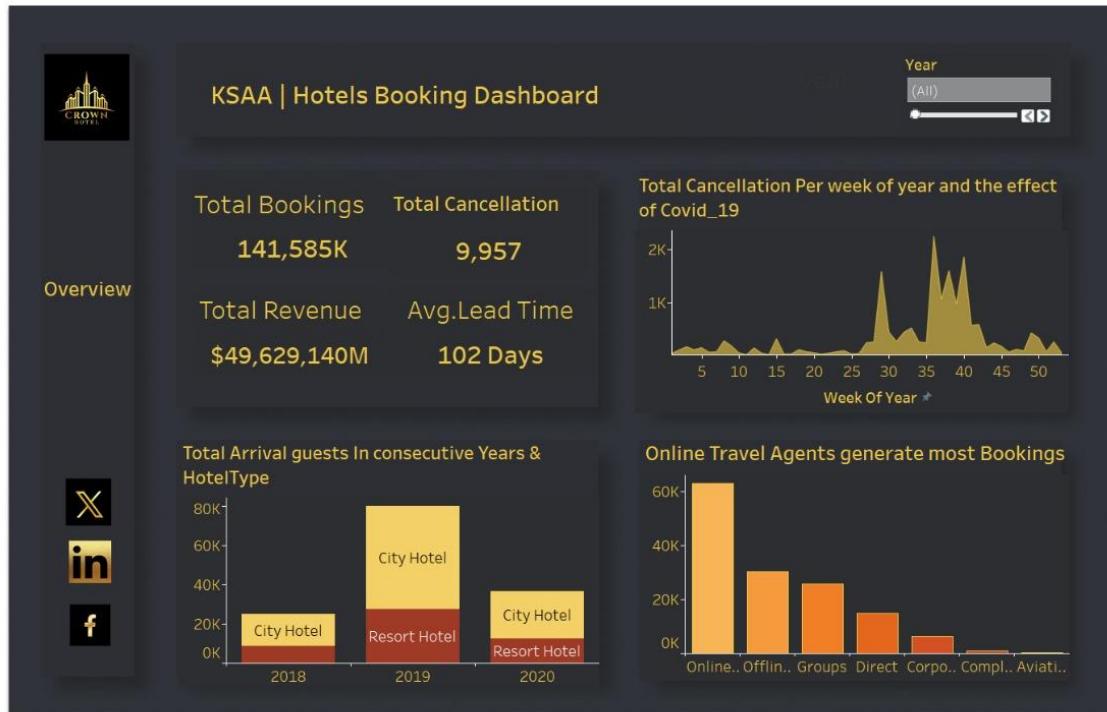




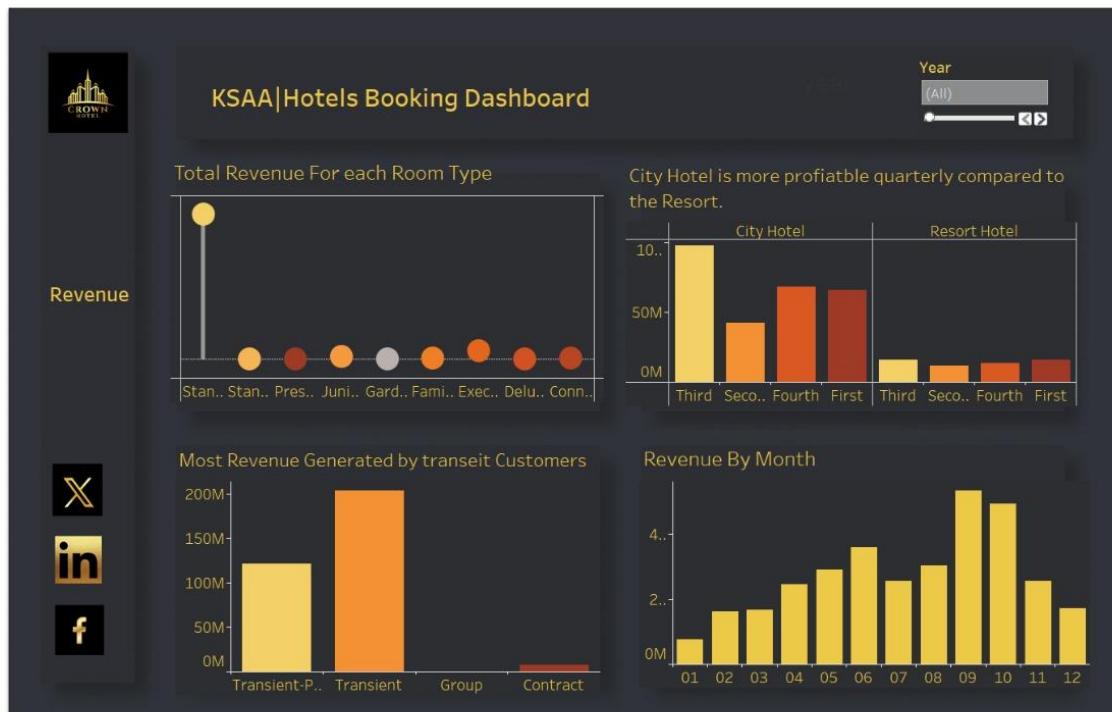
• Growth Plan



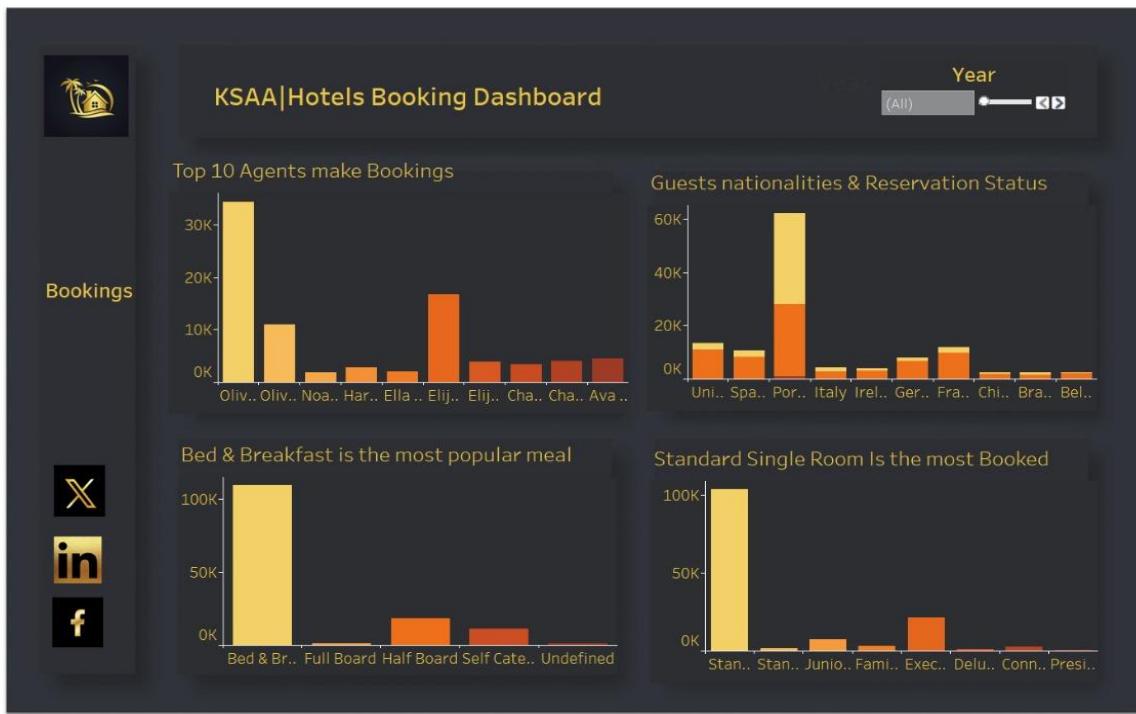
- Power bi Tableau
- OverView



- Booking



- Revenue



• Guests

