Sri Lanka Institute of Information Technology



Data Warehousing & Business Intelligence

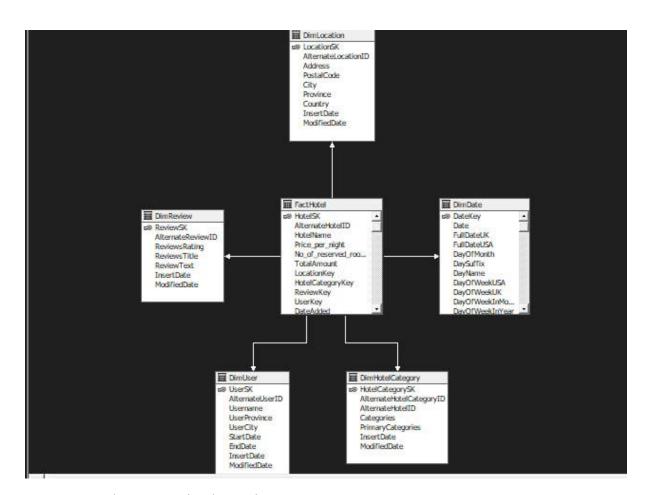
Assignment 02
IT22918192
Rathnayaka S J
Year 03 semester 2- WE.DS.01.02

01. Data Source

 Hotel_DW as Data warehouse which implemented in last Assignment (Assignment1).

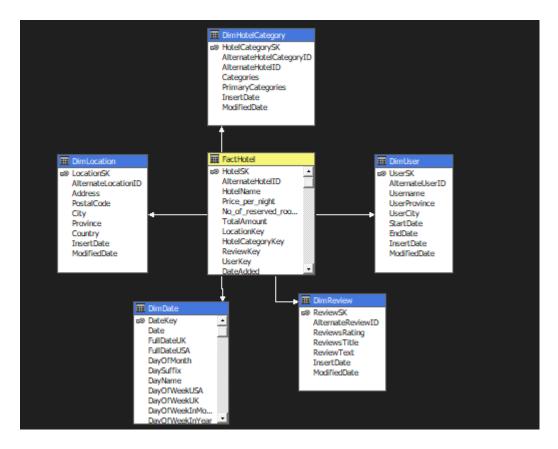
02. SSAS Cube Implementation

The first step in the cube creation process involves building a **Data Source View (DSV)**, which includes the dimensions and fact table that were previously designed and implemented.

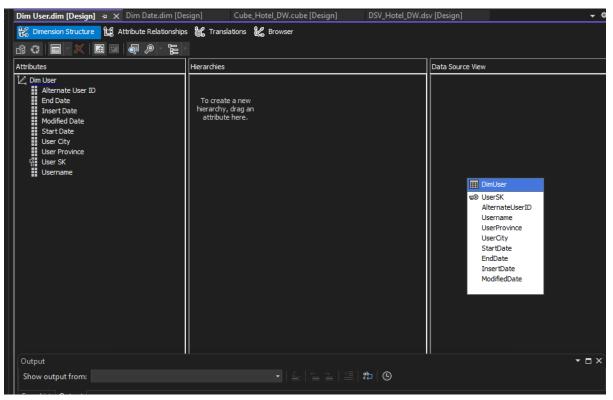


Next, proceed to create the data cube.

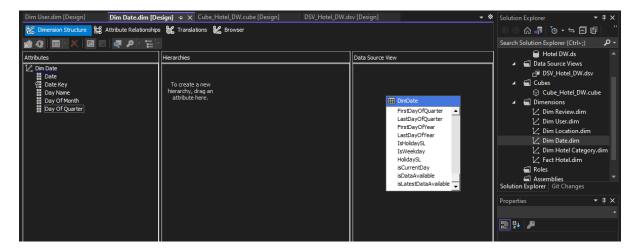
In this step, select **FactHotel** as the **measure group**, and use **DimDate**, **DimLocation**, **DimHotelCategory**, **DimUser**, and **DimReview** as the **associated dimensions**.



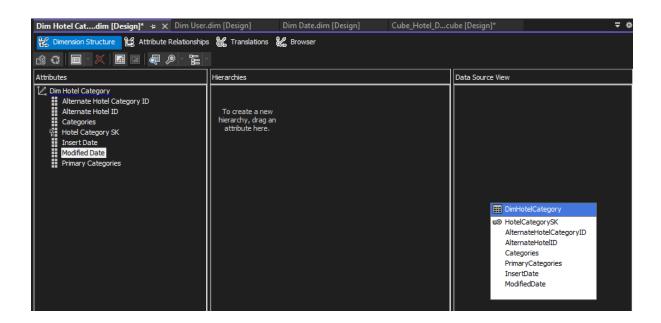
- o Configuring all the dimensions
- dimUser



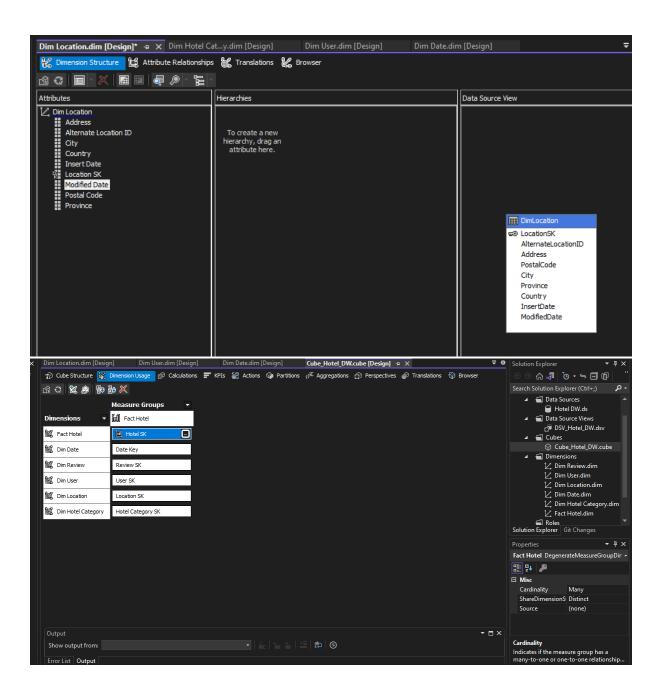
dimDate

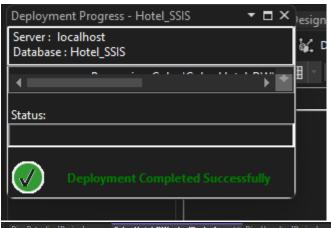


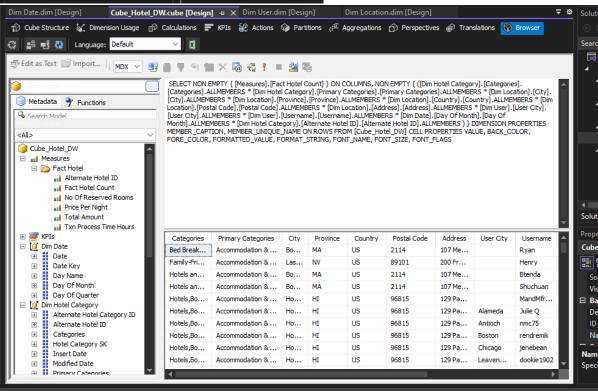
dimHotelcategory

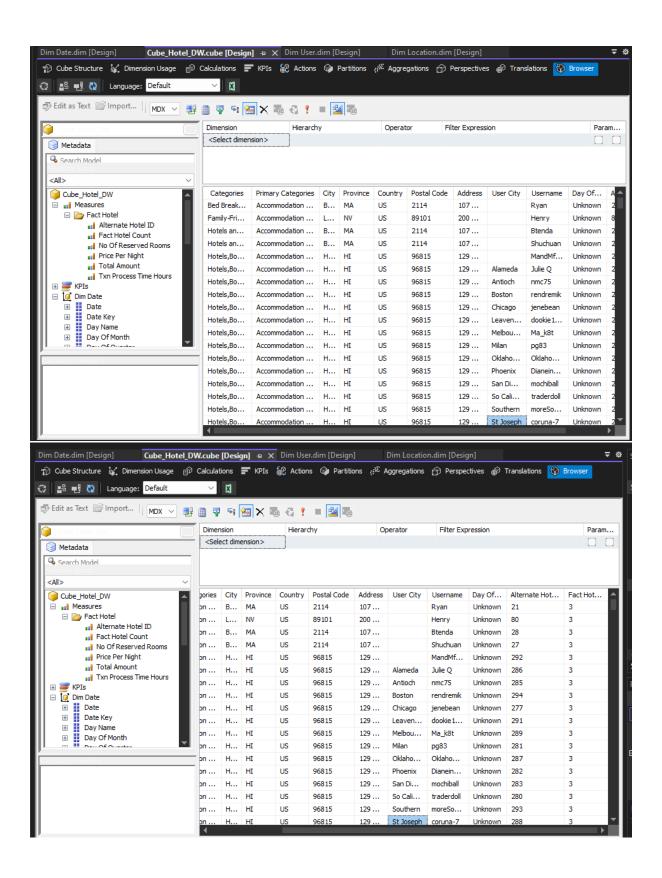


DimLocation







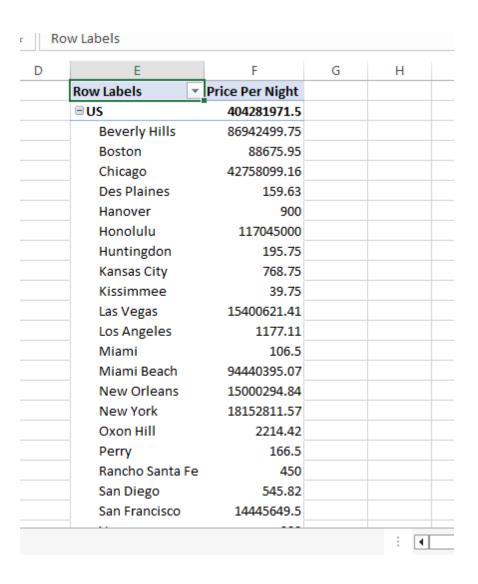


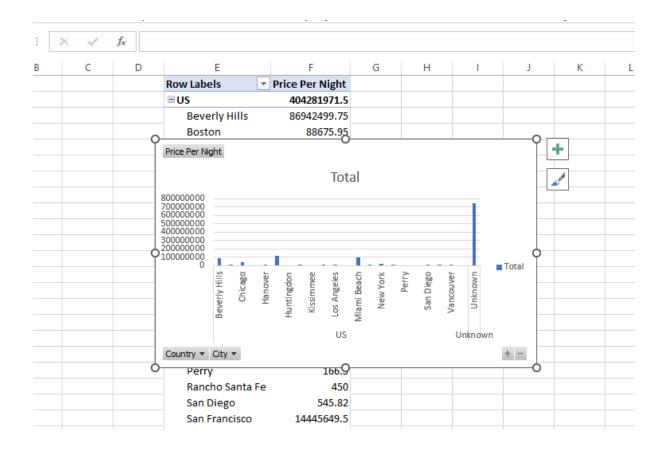
03.OLAP Operation

Using Excel Power Pivot, we can do all OLAP operation

Roll Up

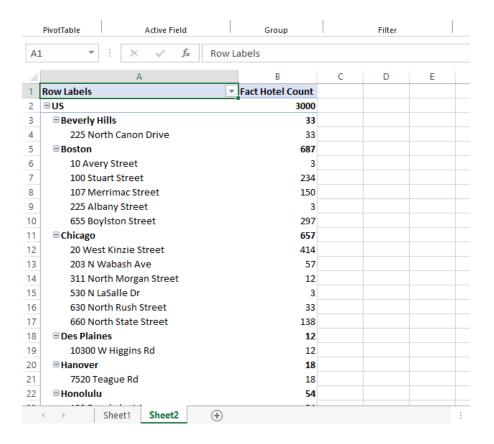
The roll-up process summarizes data within a cube by grouping it into a higher-level category, either by moving up within a hierarchy or by reducing the level of detail.





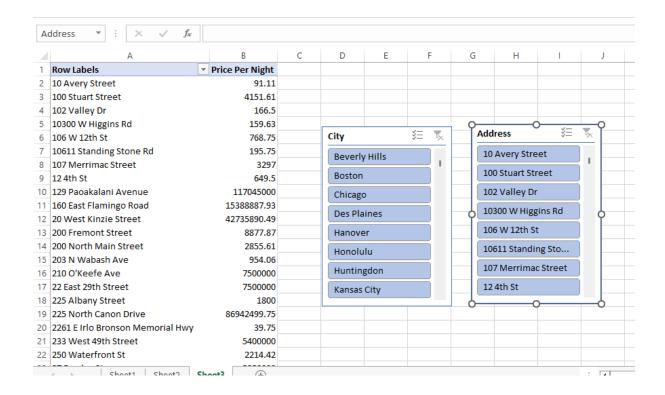
Drill-Down

Drill-down is the opposite of roll-up. It allows users to explore data at a more granular level, moving from summarized information to more detailed insights.



Slicing

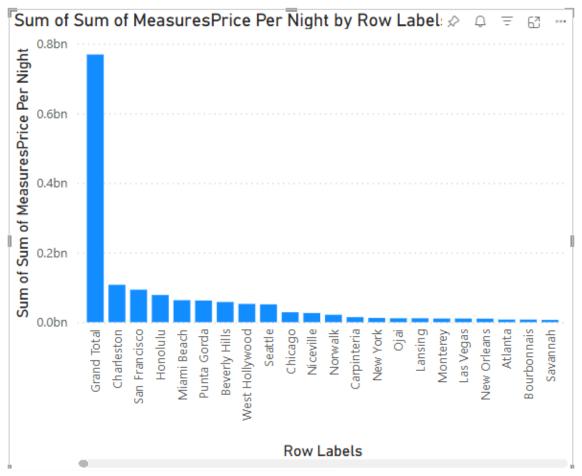
The slice operation selects a single value for one dimension of a data cube, producing a smaller cube that focuses on that specific perspective.



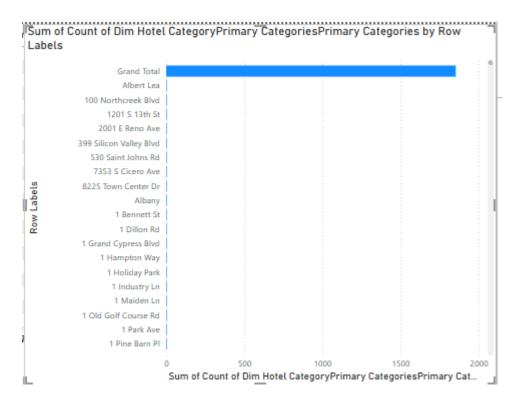
PowerBI Reports

Report 1:

Row Labels	Sum of Sum of MeasuresPrice Per Night
Abilene	1,007.23
Abingdon	1,241.17
Acworth	1,060.00
Aiken	4,150.00
Ainsworth	12.92
Airway Heights	672.16
Akron	6,200.00
Albany	6,785.39
Albert Lea	4,947.42
Albuquerque	59,872.00
Alexandria	726.92
Algoma	1.751.25
Total	1,538,048,616.39



Row Labels	Sum of Count of Dim Hotel CategoryPrimary CategoriesPrimary Categories	5
1 Bennett St	1	1
1 Dillon Rd	1	1
1 Grand Cypress Blvd		1
1 Hampton Way	1	1
1 Holiday Park		1
1 Industry Ln	1	1
1 Maiden Ln		1
1 Old Golf Course Rd	1	1
1 Park Ave		1
1 Pine Barn Pl	1	1
1 Ridgedale Ave N	1	1
10 Avery Street	1	1
10 Campanelli Dr		1
10 Century Blvd	1	1
10 Flight Rd	1	1
10 Lafayette Sq	1	1
10 Nw Minnesota Ave		1
100 Chestnut Ridge Rd	1	1
100 E Jefferson St		1
100 Eden St	1	1
100 F Ave NW		1
Total	3706	5



Report 2:

Report with more than one parameter this report has

3 parameters

- Row labels
- Sum of count of DimLocation
- Sum of price

Row Labels	Sum of Count of Dim LocationCityCity	Sum of Sum of MeasuresPrice Per Niight
1 Bennett St	1	9,370.00
1 Dillon Rd	1	257.6
1 Grand Cypress Blvd	1	11,910.0
1 Hampton Way	1	3,180.0
1 Holiday Park	1	3,056.7
1 Industry Ln	1	64.24
1 Maiden Ln	1	1,760.0
1 Old Golf Course Rd	1	10,400,000.0
1 Park Ave	1	3,636.00
1 Pine Barn Pl	1	2,120.00
1 Ridgedale Ave N	1	23.12
10 Avery Street	1	60.7
10 Campanelli Dr	1	2.74
10 Century Blvd	1	8,686.0
10 Flight Rd	1	6,300.00
10 Lafayette Sq	1	9.980.0
10 Nw Minnesota Ave	1	1,852.12
100 Chestnut Ridge Rd	1	1,396.4
100 E Jefferson St	1	1,564.93
100 Eden St	1	104.93
100 F Ave NW	1	412.0
100 Hotel Rd	1	5,147.6
100 Lakeside Ave E	1	30,000.0
100 Main St	1	15,136.0
100 N Road 11	1	210.00
100 N West St	1	1.0
100 Northcreek Blvd	2	2,715.9
100 S Washington St	1	50.80
100 Soscol Ave	1	22,045.0
100 Stuart Street	1	2,768.1
100 Westbank Expy	1	36.16
1000 9th Ave S	1	5,686.77
1000 Commons Blvd	1	333.5
1000 S Euclid St	1	1,920.0
Total	3706	1,538,048,616.39

Sum of Count of Dim LocationCityCity and Sum of Sum of MeasuresPrice Per Night by Row Labels

