

VILLA PROPERTY MANAGEMENT DATABASE

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Mulia is a villa property management that located in Bali, Denpasar – Indonesia. The owner is trying to gain insight about the business' operations for the purpose of profit maximization. Here is the list of the problems that I would like to address for this project:

1. Identify the number of booking count based on country.
2. Identify the guests' last name based on their membership level, country, number of stays, discount, total spending and discount if applicable.
3. Identify quarterly earnings based on villa type.
4. Identify which quarter has the highest and lowest earnings.

The questions above will give us some meaningful facts that we can generate effective marketing strategy and eventually boost the management's return on investment (ROI) in the long run.

Before choosing the dimensions, I set couple objectives what problems that I would like to solve. This helps me to cut down the time of going back and forth such as redesign the 'factBooking' table and so on. These dimensions respectively will allow me to discover the problems that the management has been encountering. Hence, there are five dimensions including the hierarchy rank that I will be using for this project:

- Guest Info (Country, State, Zip Code, Last Name, First Name)
- Booking Detail (Number of Nights, Check-in Date, Check-out Date)
- Membership Level (Status)
- Villa Type (Villa Type, Beds, Price/Night)
- Time (Year, Quarter, Month)

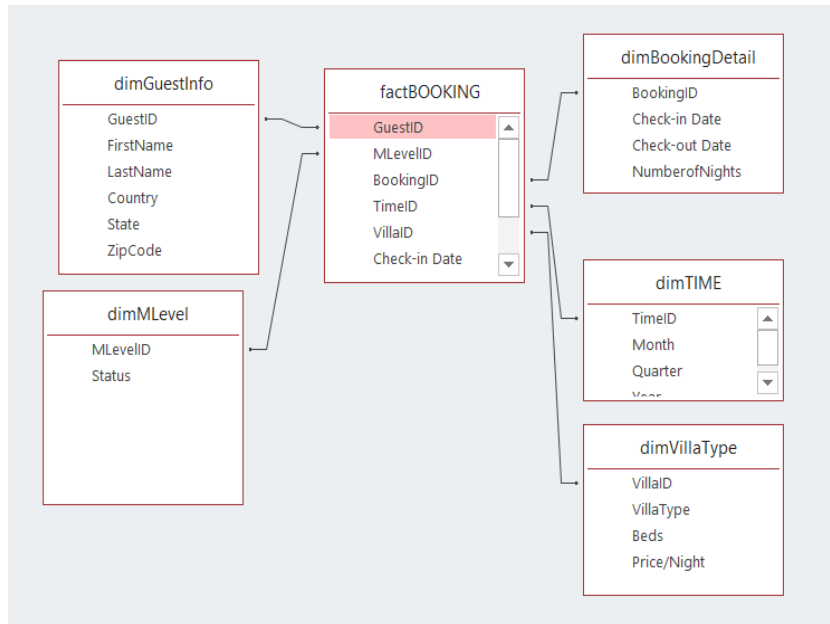


Figure 1. EER Diagram

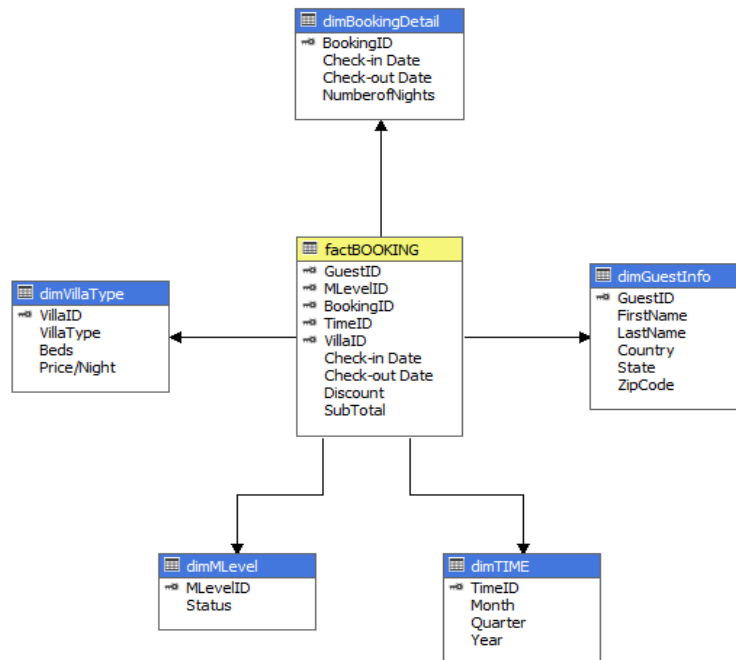


Figure 2. Snowflake Diagram

Reviewing LaBrie's building CUBE tutorial looks easy; but, when I am building the CUBE based on my former Access DB. I was having a lot of unexpected trouble that I did not want to. **What did not go well?** I was having trouble when converting .accdb files to .mdb files; for some reasons, Access did not allow me as an error-message popped up. So, I decided to google around how to import/export this to a SQL server with .accdb files and downloaded MS 2010 Redistribute. After I used that as my data source, it worked perfectly until I was trying to process the CUBE. Another error message popped out. I thought I missed something, and I tried to rebuild the CUBE. I kept getting the same error messages. I was devastated and afraid that I might not be able to finish up the project, but then LaBrie suggested to reinstall the SQL server.

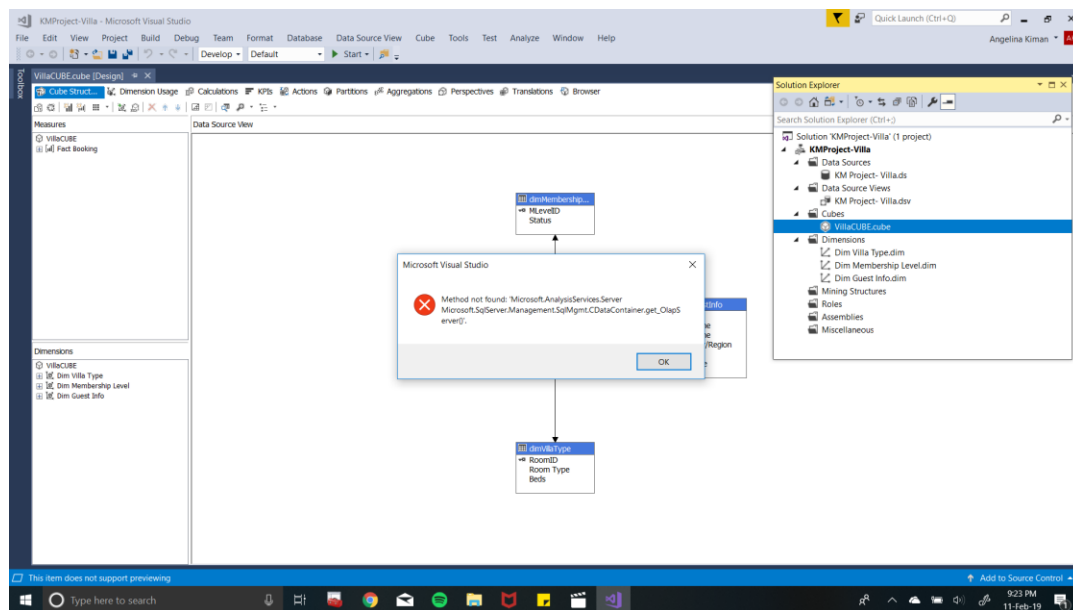


Figure 3. SQL Server Error

What went well? I did not want to risk this project. Nevertheless, I made another copy of my former DB project based on the tables and queries that I would like to use only; and save it on .mdb files. Besides, after reinstalling the SQL server, it worked out. It did not give any error message and ran smoothly. **What would I do different next time?** I would make a 'test' process on the CUBE before deploying it and waiting it for the last minute. I also realized when I renamed my Access DB file, it corrupted the CUBE which it did

not execute the queries. Lesson learned! Never ever renamed the file that you have used for import/export. It messed up.

As I have rebuilt the CUBE for more than 10+ times, I absorbed very well. I can make a CUBE without looking at the tutorial and increase my trouble shooting skills. It is a valuable experience after all. This project helps prepare me for the future by investing these skills that I can transfer in my future career.

APPENDIX – RESULTS

1. Identify the number of booking count based on country.

	A	B	C
1	Country ▼	Fact BOOKING Count	
2	⊕ Australia	14	
3	⊕ Hong Kong	7	
4	⊕ Indonesia	3	
5	⊕ Russia	6	
6	⊕ Singapore	3	
7	⊕ USA	17	
8	Grand Total	50	
9			
10			

2. Identify the guests' last name based on their membership level, country, number of stays, discount, total spending and discount if applicable.

Guest Name	Sub Total	Discount
Classic		
Australia		
2		
Baker	\$900.00	\$0.00
Seagal	\$675.00	\$225.00
4		
Hemsworth	\$1,150.00	\$450.00
Hong Kong		
2		
Rivera	\$900.00	\$0.00
Indonesia		
2		
Widjaja	\$1,200.00	\$0.00
Russia		
1		
Kramarov	\$337.50	\$112.50
2		
Tabakov	\$900.00	\$0.00
USA		
2		
Caldwell	\$1,200.00	\$0.00
Odgen	\$900.00	\$0.00
Roberts	\$1,200.00	\$0.00
Elite		
Australia		
3		

3. Identify quarterly earnings based on villa type.

Guest Name	Sub Total	Discount	Fact BOOKING Count
Q1			
2019			
Garden Villa	\$4,050.00	\$450.00	5
Ocean Villa	\$8,640.00	\$960.00	7
Presidential Villa	\$35,370.00	\$7,830.00	4
Sanctuary Villa	\$24,900.00	\$5,100.00	7
Q2			
2019			
Garden Villa	\$2,205.00	\$45.00	3
Presidential Villa	\$6,480.00	\$1,620.00	1
Q4			
2018			
Garden Villa	\$5,875.00	\$1,125.00	7
Ocean Villa	\$8,820.00	\$780.00	7
Presidential Villa	\$10,800.00	\$2,700.00	2
Sanctuary Villa	\$3,825.00	\$675.00	1
2019			
Ocean Villa	\$3,630.00	\$570.00	2
Presidential Villa	\$6,480.00	\$1,620.00	1
Sanctuary Villa	\$9,000.00	\$1,500.00	3
Grand Total	\$130,075.00	\$24,975.00	50

4. Identify which quarter has the highest and lowest earnings.

	Guest Name ▾	Sub Total	Discount	Fact BOOKING Count
	Q1			
	2019	\$72,960.00	\$14,340.00	23
	Q2			
	2019	\$8,685.00	\$1,665.00	4
	Q4			
	2018	\$29,320.00	\$5,280.00	17
0	2019	\$19,110.00	\$3,690.00	6
1	Grand Total	\$130,075.00	\$24,975.00	50
2				