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Apply these 5 rules to your Power BI
Data Model (you will thank me later):



Nabil Gharbi and **390** others



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1. Strive for star schema

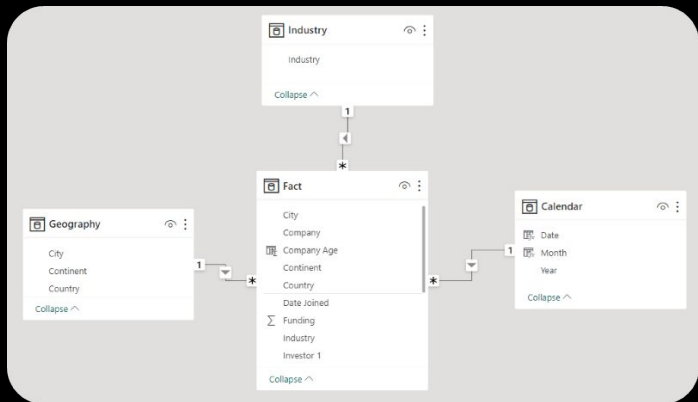
- It's a data model where Fact table is surrounded by Dimension tables
- Fact table stores information about events i.e. Sales transactions
- Dimensions tables describes Facts (information about: product, store etc.)



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Star schema example





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2. Use one to many relationships, avoid many to many relationships

- One to many relationships work great with star schema, your report should be lightning fast
- Many to many relationships are not a pure evil, they can be useful in **some** cases. If using consider risk of cross-filtering and ambiguity





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3. Push as many transformations and calculations as possible to data source

- Accordingly to Roche's Maxim of Data Transformation:

Data should be transformed as far upstream as possible, and as far downstream as necessary.

- This will reduce Power BI internal engine usage and accelerate performance



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Roche's Maxim of Data Transformation:





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4. When having one to one relationship between tables consider merge

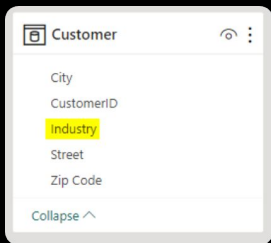
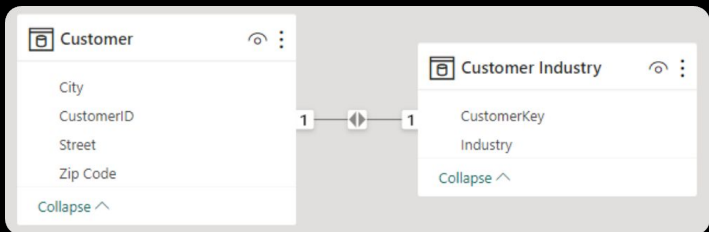
- Power BI data model tables **should not** be as normalized as SQL data warehouse
- If you have two tables connected with one to one relationship, consider merge



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Tables with one to one relationship merged





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5. Avoid complex DAX

- DAX is powerful, but it is double-edged sword
- It can give you fantastic results, but on the other hand it may kill performance
- Be careful when using iterator functions (SUMX, COUNTX etc.), iteration is good for table with thousands of rows, for millions it's a bad idea
- Pre calculations done in data source may reduce need to use complex DAX



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Thank You for reading!

If you found something useful, please share, so more people can benefit from that.

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All the best,
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