



Clarification Questions from Client



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1. How do Azure Blob Storage and SQL Server Database differ, and why can't Microsoft Power BI connect directly to Blob Storage? What advantages does SQL Server offer in this context?

Azure Blob Storage is like a big online folder where you can store files, like pictures, documents, or raw data. It's made for saving things, not really for working with or analyzing the data directly.

SQL Server is different. It stores data in tables, with rows and columns, kind of like an organized spreadsheet. It helps you search, filter, and connect different pieces of data easily.

Power BI can't connect directly to Blob Storage because the data there is not in a ready-to-use form. Blob Storage is just files sitting there, while SQL Server organizes the data and makes it easier to work with.

SQL Server works better with Power BI because it lets you run queries, join data together, and prepare it for making dashboards. It basically helps get everything ready before you build your reports.

2. What is the primary function of relationships between tables in Microsoft Power BI? Describe a situation where you might use a 'One-to-Many' relationship and how it benefits the data model.

Relationships in Power BI connect different tables so that they can work together. This way, you don't need to put everything into one big table. It's like linking two Excel sheets using a common column.

A 'One-to-Many' relationship happens when one item in one table is connected to many items in another table. For example, *one* customer in a Customers table might have *many* orders in a Sales table.

Using relationships makes reports smarter. It helps you easily answer questions like "What's the total sales for this customer?" It also keeps your data clean and makes reports easier to build and understand.

3. What is a DAX measure in Microsoft Power BI, and how does it differ from a calculated column?

A DAX measure is a formula you create to do math in Power BI reports. It works only when you view or filter your report. It's not stored with the data—it gives you results only when you need them. For example, you might use a measure to calculate total sales or average profit.

A calculated column is different. It creates a new column in your data that's always there. It's calculated once every row when the data is loaded.

4. How does the semantic data model relate to Microsoft Power BI dashboard development, and why is it crucial?

The semantic data model is the setup behind your Power BI dashboard that makes your data easier to use and understand. It gives friendly names to your tables and fields, shows how different pieces of data are connected, and helps create formulas to get the numbers you want.

Why is this important? Without it, the dashboard would feel confusing. You might see strange names like "cust_id" instead of "Customer ID" or get wrong results if the data isn't connected properly.

The semantic model makes sure everything works the way it should. It makes your reports clean, easy to use, and clear for everyone, even people who aren't data experts.