

1. Power BI is perfect for handling large datasets and creating interactive visuals, while Excel is great for detailed calculations and flexible data work. Use Power BI for deep analysis and Excel for more specific, hands-on tasks.

2. Data modelling in Power BI is all about organizing your data so it's easy to analyse. You set up tables, define how they relate to each other, and create calculations to get the insights you need.

3. Power BI lets you connect to your data in different ways, like importing it, querying it directly, or using a mix of both. The best option depends on your data size and whether you need real-time updates.

4. In Power BI, you clean and prepare your data using the Power Query Editor. This involves tasks like removing duplicates, renaming columns, and merging tables to get your data ready for analysis.

5. DAX (Data Analysis Expressions) is a powerful formula language in Power BI that helps you create custom calculations and dynamic reports. It's essential for performing complex data analysis and handling time-based data, making your reports more insightful and interactive.

6. Calculated columns are like adding new columns to your data table, storing values for each row. Measures, on the other hand, are dynamic calculations that update based on the filters and context of your report.

7. In Power BI, you connect tables by defining how they relate to each other, like linking a sales table to a products table using a product ID. You set the type of relationship, decide how filters should work between tables, and use DAX functions to make the most of these connections.

8. A Power BI Gateway acts like a secure bridge, connecting your on-premises data sources to the Power BI service. This allows you to access and update your data in real-time without needing to move it to the cloud.

9. To schedule a data refresh in Power BI Service, go to your dataset's settings, enable the scheduled refresh option, and set how often and when you want it to refresh. This way, your data stays up-to-date automatically.

10. Row-level security (RLS) in Power BI lets you control who sees what data by setting up roles with specific filters. This way, users only see the data that's relevant to them, keeping everything secure and organized.

11. Power BI Desktop is like your personal workspace where you create and design reports on your computer. Power BI Service is the online platform where you share those reports with others and collaborate. Desktop is great for building, while Service is perfect for sharing and teamwork.

12. Direct Query in Power BI lets you connect straight to your data source, so you're always seeing the latest information without having to import it. It's perfect for handling large datasets, but you need a fast data source to keep things running smoothly.

13. Power BI templates are like ready-made blueprints for your reports. They help you quickly create consistent and efficient reports by reusing layouts and data models, saving you time and ensuring everything looks and works the same way every time.

14. Incremental data refresh in Power BI means you only update the new or changed data instead of refreshing everything. This makes the process quicker and keeps your reports running smoothly, even with large datasets.

15. Power Query in Power BI is like your data's personal assistant. It helps you connect to different data sources, clean up and organize the data, and get it ready for analysis. This way, your data is always in great shape for creating insightful reports and visualizations.

16. Calculated columns are like adding extra details to your existing tables, while calculated tables are like creating brand new tables from your data. Both help you better organize and analyse your information.

17. To create custom visuals in Power BI, you start by setting up your tools like Node.js and Power BI Visuals Tools. Then, you build your visual using HTML, CSS, and JavaScript, test it to make sure it works, and finally package it up to share with others. This lets you create unique, interactive visuals that fit your specific needs.

18. To keep your Power BI reports running smoothly, simplify your data models, use efficient formulas, refresh only the new data, and avoid too many complex visuals. Also, make sure your queries are optimized and your setup is configured for the best performance.

19. You can connect Power BI with Azure to analyze real-time data, handle big data, and add predictive analytics. With Office 365, you can embed Power BI reports in Teams, Excel, SharePoint, PowerPoint, and Outlook, making it easy to share and collaborate on your data.

20. In Power BI, aggregations simplify data by summarizing it with functions like sum or average, making insights clearer and reports faster to generate. This approach helps in managing and analysing large datasets more efficiently.