

What is the best tool we can use for descriptive analytics? R, Power BI or MS Excel ?

Some differences between these tools:

Main usage & applications:

Excel: Most of people could use. Not able to connect to data models. Quite good for reports. Mainly used for analyst to analyze historical data, in-depth driver analysis. Easiest in these tools to learn.

PowerBI: More advanced than Excel for reports. Data models and some programming languages are supported (R, Python). Very good for reports. Mainly used to crunch data from varies of data sources; could be used for cleaning data. Easier than R to learn.

R: Mostly used by researchers in academic. Dashboard is not officially supported and limited. Very good for main analytics objectives. Mainly used for tremendous amounts of analysis. Most difficult to learn at beginning.

Pricing:

Excel: commercial app (Microsoft Office).

PowerBI: Free of use (Windows version), but some are not available in free version.

R: Open-source.

Application Type:

Excel & PowerBI: BI Tool

R: Programming Language

Conclusion:

- In cases reports and visualization are needed, PowerBI / Excel is suitable.
- If we want to do more advanced analytics, such as modeling, parallel computing, R (or Python) should be used as its scalabilities of programming language. R is also supported to integrate within PowerBI.