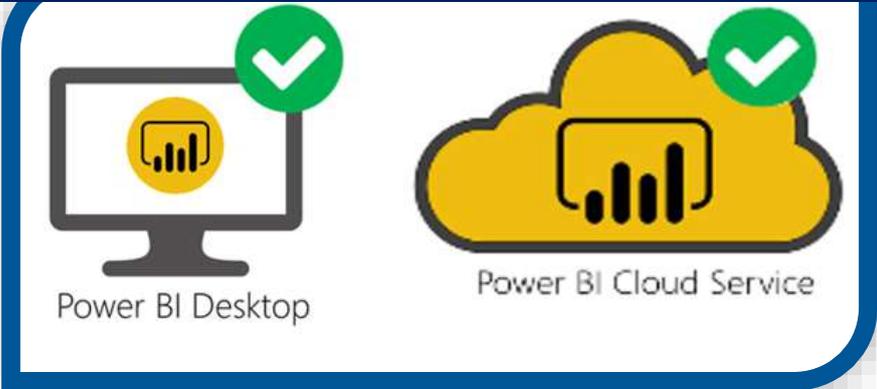


# Comparing Power BI Desktop and the Power BI service



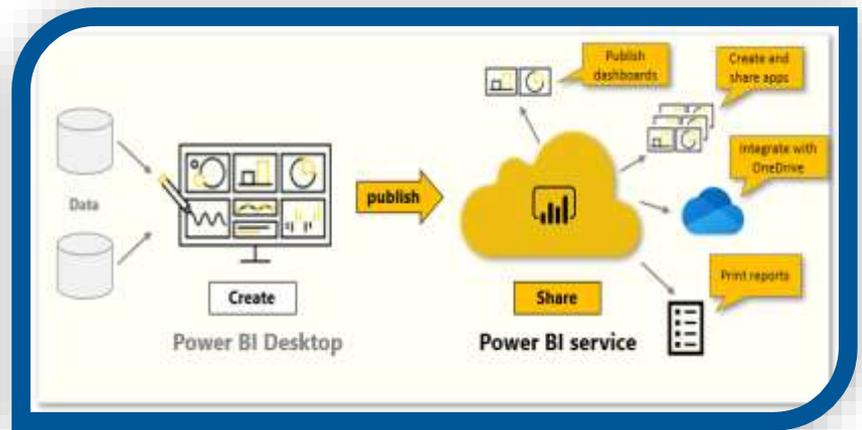
**Cognitive Convergence** is Subject Matter Expert in Office 365, Dynamics 365, SharePoint, Project Server, Power Platform: Power Apps-Power BI-Power Automate-Power Virtual Agents. We offer Power BI consulting services covering solution architecture refinement, customization, integration, transformation, visualization and analytics to uncover insights hidden within data and enhance data exploration.

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## OBJECTIVES

This paper will compare Power BI Desktop with Power BI services. Power BI Report Server and the Power BI service have many similarities and some key differences. Some details of them will be discussed here along with some implementation.



## BACKGROUND

One of the most famous BI solution is Power BI which provide a large range of services. Which provides its own unique and some common functionalities. Power BI desktop is used to transform and modeling of data, Power BI online services is used for sharing and collaboration of data. Power BI gateway is used to refresh the data and corresponding report and Power BI mobile applications are used for mobile view of dashboards in app. All these services plays a vital role in BI but mainly Power BI desktop and Power BI services will be discussed here.



## POWER BI DESKTOP

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Power BI Desktop is a windows (on premises) version also known as Power BI Designer. It provides capability to create reports and also analysis of data. It enables data connection from a wide range of sources along with transformation of data in Query Editor without any need of internet connection, which only requires for report publishing or importing custom visuals.

### Benefits

Power BI Desktop provides a wide range of capabilities.



### Limitations

There are some of the limitations in Power BI Desktop.



## POWER BI SERVICE

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Power BI services enables report editing and creation along with collaboration, it is a cloud base service also known as Power BI Portal or Power BI Online. But there are a lot of limitations when comes to data modeling but provides a wide range of data connections. It allows to share reports and get notifications of report after every update in data.



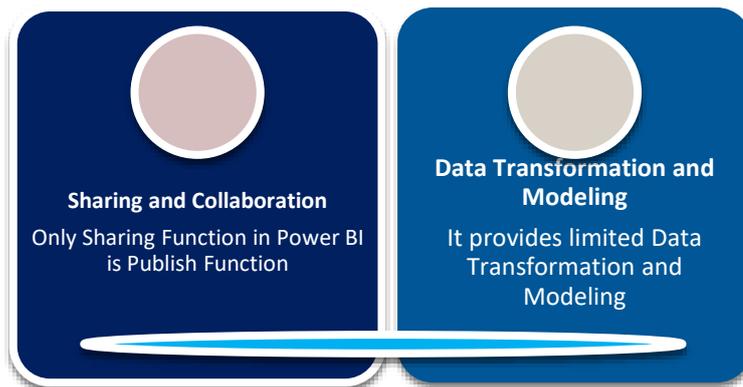
## Benefits

Power BI Services provides a wide range of capabilities



## Limitations

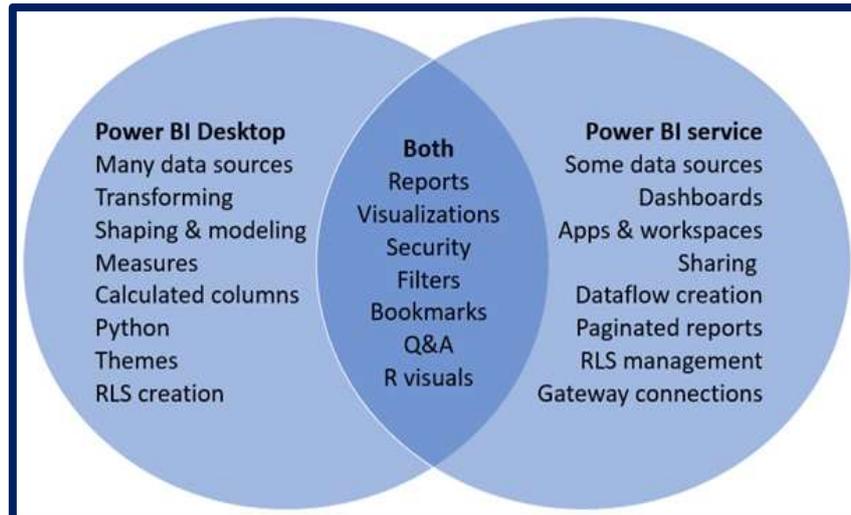
There are some of the limitations in Power BI Services.



## POWER BI DESKTOP VS POWER BI SERVICES

Power BI Desktop and Power BI Service have a lot of similarities and differences. Comparing both of them with help of Venn diagram gives a wider picture of what common functionalities they share with each other and what are the different ones.





## TECHNICAL BACKGROUND

For having better understanding of difference between Power BI desktop and Power BI services lets have a technical view of both these.

### Power BI Desktop

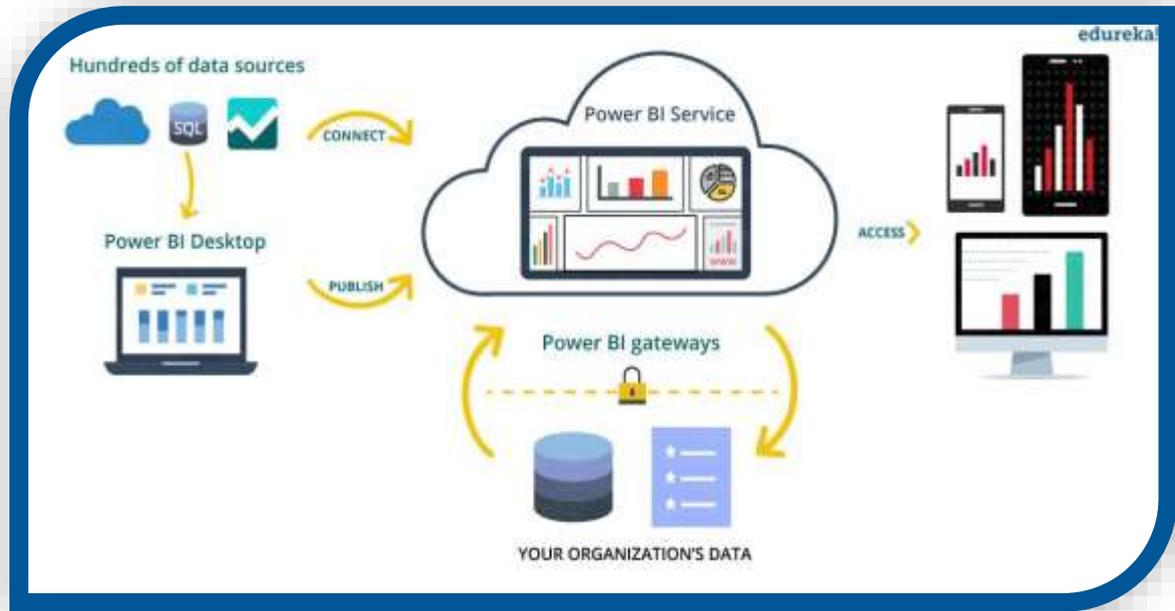
- Open Power BI desktop and click on Get Data to get dataset from a wide range of data.
- From the Home ribbon, select Get Data > More. The Get Data window appears, showing the many categories to which Power BI Desktop can connect.
- When you select a data type, you're prompted for information, such as the URL and credentials, necessary for Power BI Desktop to connect to the data source on your behalf.
- Open dataset in Power Query editor for basic transformation.
- Manage relationship of data or add new Measures or Columns.
- Add visuals to report by adding corresponding datasets to the visual.
- Publish the Report to Power BI Services.
- Power BI prompts you to select where in the Power BI service you'd like to share the report, such as your workspace, a team workspace, or some other location in the Power BI service.
- You must have a Power BI license to share reports to the Power BI service.

### Power BI Services

- Open Power BI Services and create a new workspace.
- Upload data in Power BI services by clicking on Get Data, it provides a wide range of data sources from excel/csv to data from cloud.
- After connection of data, visualizations can be design in report by adding corresponding data points.
- These visuals can be save as report in the workspace.
- By clicking on the pin icon on a visual, visual could be added to a dashboard. A dashboard could have visuals from more than one report.
- Clicking on Share from a dashboard allows sharing of dashboard.



- Clicking on insights gives insight of all the datasets in visual form, any visual could be pinned into already existing dashboard or a new dashboard.
- From Dashboard tabs under workspace you can select which app you want to include in you App. Click on Publish App.
- Select your App name, logo, and permissions and click on publish App.
- For Alerts, select either KPI, card or gauge and click on manage alerts.



## CONCLUSION

Power BI is an umbrella product, everything cannot be perform with merely one application. Data modeling and transformation cannot be done with Power BI Services, Similarly, Dashboard creation and report sharing cannot be done by Power BI Desktop. For complete functionality, from data transformation to sharing of report both are required.

Cognitive Convergence will provide consulting services that help in designing, deploying, managing, enhancing or troubleshooting on-premises, cloud-based or hybrid Power BI environment. Cognitive Convergence will provide help to start fresh with Power BI to modernize current business analytics solution or revamp existing Power BI deployment by incorporating new data sources or adding new services.

