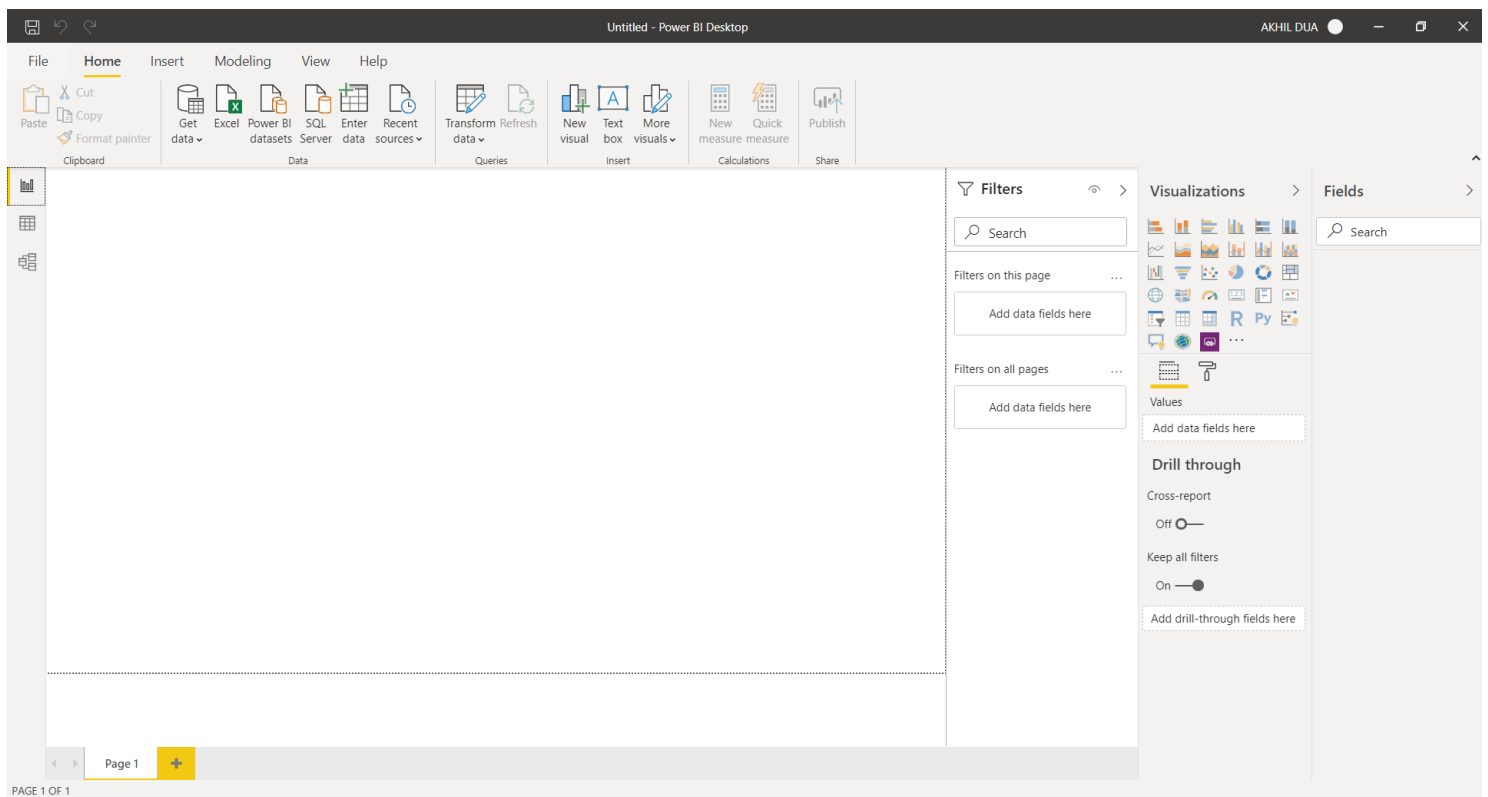


## Assignment – 1 Solutions

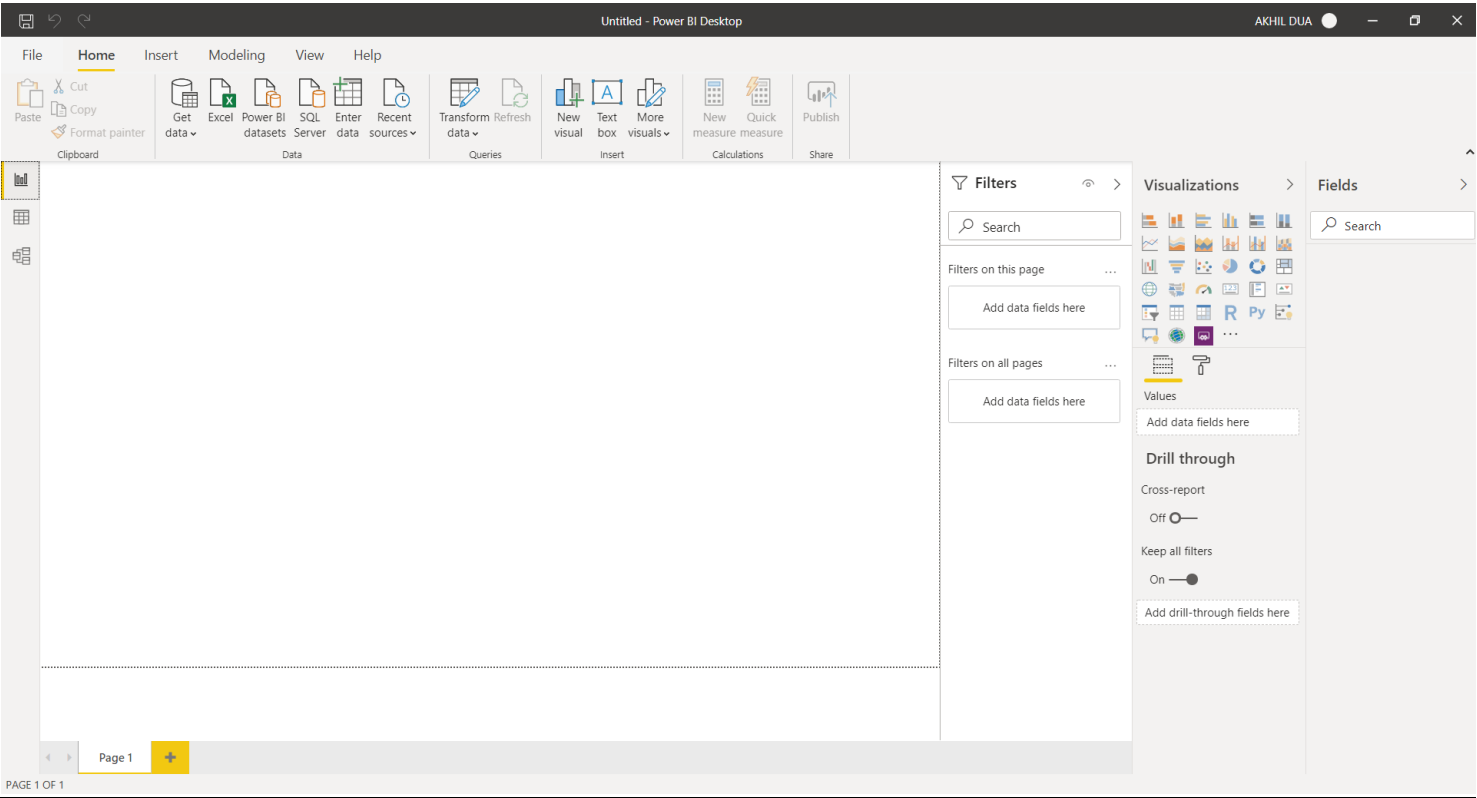
- **Install Power BI Desktop and share the final screenshot of the report view page which appears when power desktop starts.**

### ➤ Report View Page:

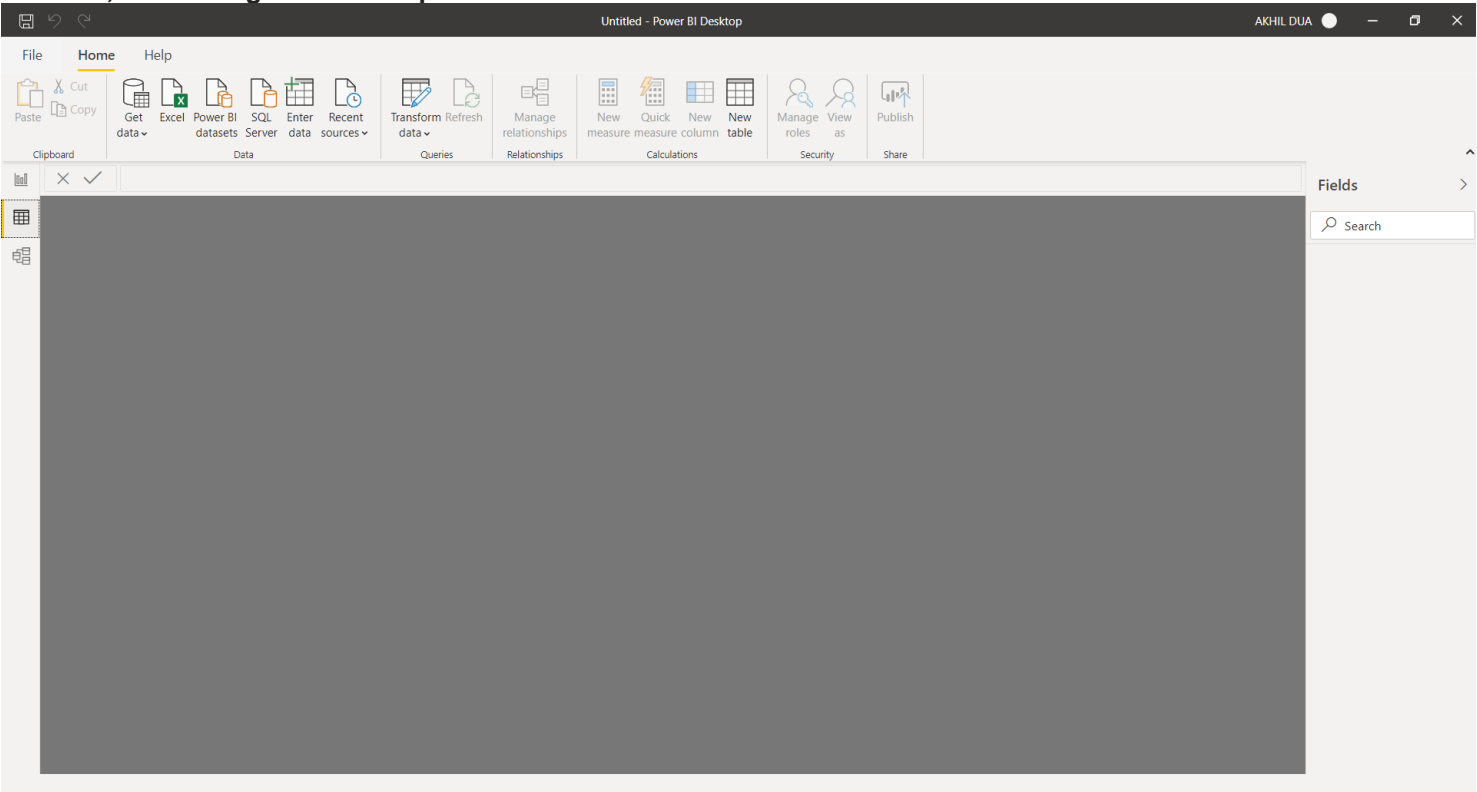


- **Prepare a document and with the following screenshot**
- **– Report View**
- **– Data View**
- **– Model View**
- **– Power Query Editor**
- **– Advance Editor**

- **Report View:**
- This is where visualizations are created to build reports.
  - Reports can have multiple pages.
  - Where you use queries you create to build compelling visualizations, arranged as you want them to appear, and with multiple pages, that you can share with others.

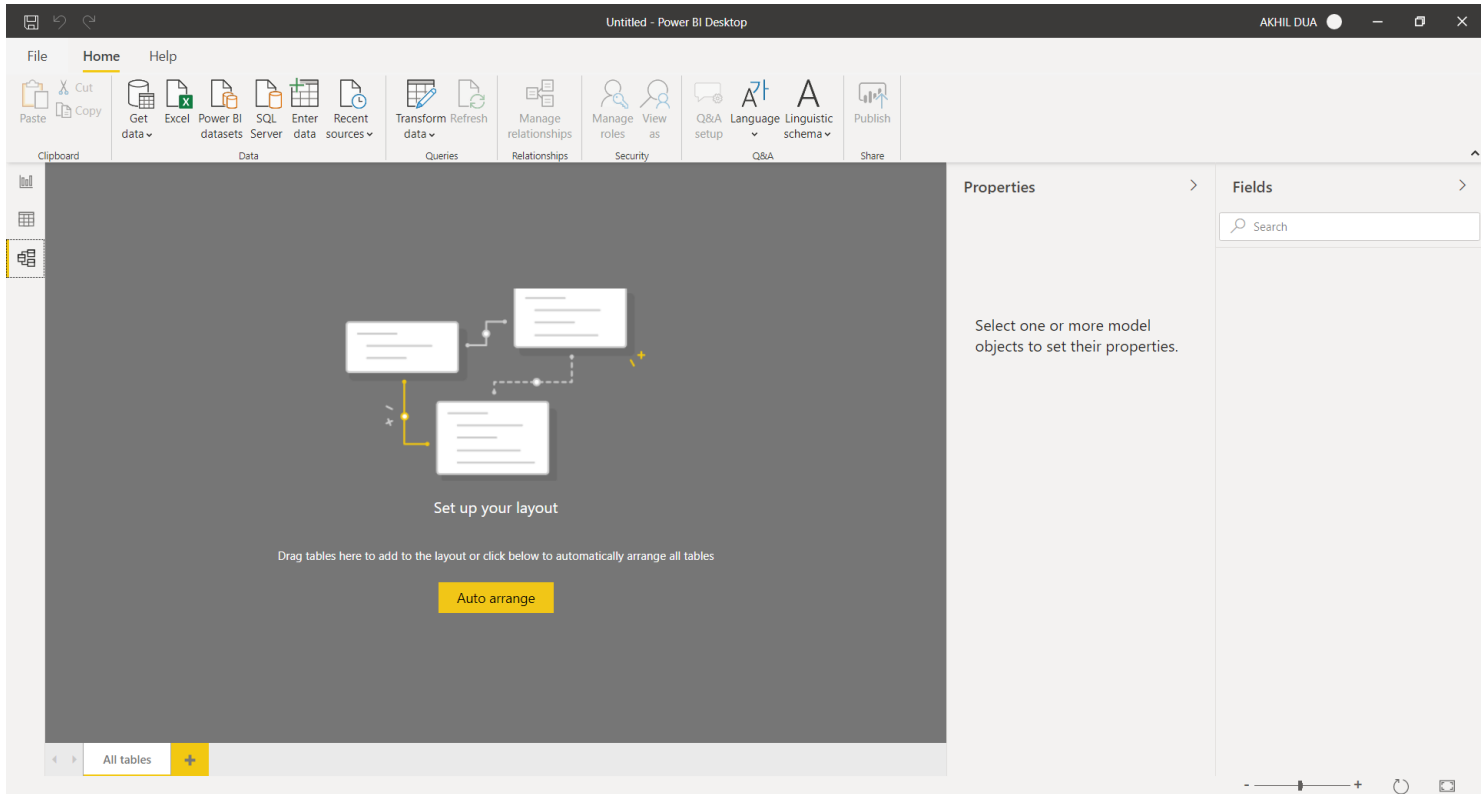


- Data View**
- This shows the data tables that make up the Power BI data model
  - We can add data to the data model in the form of new tables, columns and measures
  - Each column in each table has a type and format, which we can modify in data view
  - Data types determine how data is stored in the data model, while formats determine how the data is displayed in charts and reports
  - Summary of Data View: See the data in your report in data model format, where you can add measures, create new columns, and manage relationships.



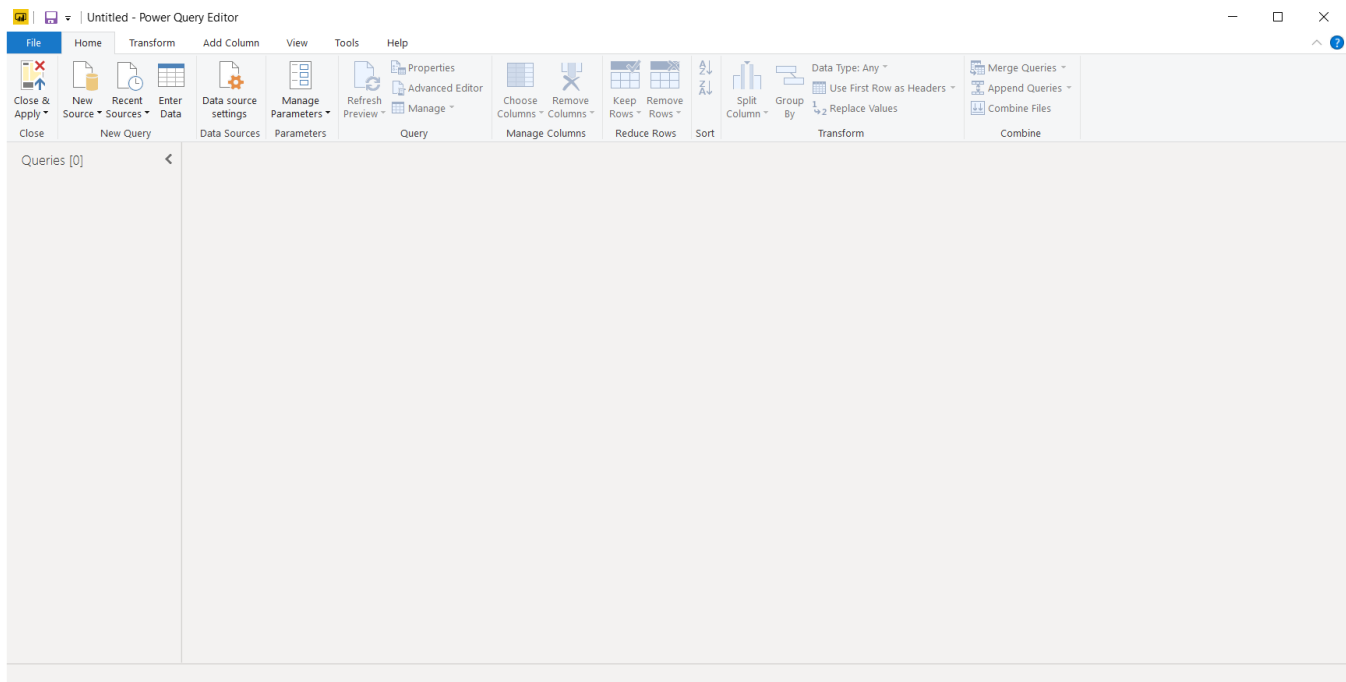
**-Model View :**

- This view shows the tables in the data model, and the relationships between them
- Relationships can be created when the same data appears in two tables
- Relationships allow us to create charts using data from more than one table
- Where you can see a graphical representation of the relationships that have been established in your data model, and manage or modify them as needed.



**-Power Query Editor:**

- The Power Query Editor is the primary data preparation experience, allowing users to apply over 300 different data transformations by previewing data and selecting transformations in the user experience. These data transformation capabilities are common across all data sources, regardless of the underlying data source limitations.
- With Power Query in Power BI you can connect to many different data sources, transform the data into the shape you want, and quickly be ready to create reports and insights.



### -Advance Editor :

- The Advanced Editor lets you see the code that Power Query Editor is creating with each step. It also lets you create your own shaping code. To launch the advanced editor, select View from the ribbon in power query editor window, then select Advanced Editor or simply in the Home tab, select Advanced Editor option. A window appears, showing the existing query code.
- You can directly edit the code in the Advanced Editor window. To close the window, select the done or Cancel button.



- **Prepare a document with details of the following along with their price**

– **Power BI Desktop**

– **Power BI Pro**

– **Power BI Premium**

- **There are three types of Power BI currently available for business users, in addition to mobile-responsive apps :-**

1. **Power BI Desktop :-**

Power BI Desktop is the free version of Power BI that you can install on your local computer as a program, and acts as a companion desktop application to the full version of Power BI. If you need to consolidate your data sources, create your own reports and conduct your own analysis or test it's capabilities, it's the perfect version to start with for all skill levels - whether you're non-IT and want to make your reports more interactive, or analysts seeking richer detail, it's one of the best business analytics tools to use.

Despite its free nature, Microsoft has included the below features with Power BI Desktop:-

- You can connect and import data from over 70 cloud-based and on-premises sources
- The same rich visualizations and filters from Power BI Pro
- Auto-detect that finds and creates data relationships between tables and formats
- Export your reports to CSV, Microsoft Excel, Microsoft PowerPoint and PDF
- Python support

- Save, upload and publish your reports to the Web and the full Power BI service
- Storage limit of 10 GB per user

Naturally, there are some feature limitations with the free Power BI Desktop that give further incentive to upgrade.

- Can't share created reports with non-Power BI Pro users
- No App Workspaces
- No API embedding
- No email subscriptions
- No peer-to-peer-sharing
- No support to analyze in Excel within Power BI Desktop

All of the Power BI's basic features - cleaning and preparing data, connectors to data sources, custom reports, visualizations and exports to Microsoft apps are included in Power BI Desktop.

Thus, whatever core functionality or features are available in Power BI Desktop are also standard in the higher-tier, paid versions.

## **How do I get Power BI Desktop?**

You don't need a Microsoft Office 365 subscription of any sort to use Power BI Desktop.

As of the time of writing, Power BI Desktop is a free download available directly from Microsoft as a MSI package, with Windows 10, Windows 7, Windows 8, Windows Server 2008 R2, Windows Server 2012 and Windows Server 2012 R2 operating systems currently supported.

You can also download and install the Power BI Desktop app from the Microsoft Store, which offers additional benefits such as automatic updates whenever feature upgrades or patches are released by the development team. You can't, however, have both versions installed at this time.

### **2. Power BI Pro :-**

Power BI Pro is the full version of Power BI, complete with the ability to use Power BI for both building dashboards and reports and unlimited viewing, sharing and consumption of your created reports (and reports shared by others) - the latter not possible with Power BI Desktop.

A breakdown of Power BI Pro's differences against Power BI Desktop:

- Ability to embed Power BI visuals into apps (PowerApps, SharePoint, Teams, etc)
- Native integration with other Microsoft solutions (Azure Data Services)
- Share datasets, dashboards and reports with other Power BI Pro users
- Can create App Workspaces and peer-to-peer sharing

Power BI Pro is licensed by individual user. For example, if your organization has 20 people that need to full capabilities of self-service BI to create dashboards and reports, you need 20 licenses of Power BI Pro, which gives these users full access to creation of reports and unlimited consumption (viewing) of any created content.

If you have a lot of users, Power BI Pro can obviously become quite expensive - but there's a better option if you have more users that need to consume reports than use Power BI for creating reports that is in Power BI Premium.

### **3. Power BI Premium :-**

Power BI Premium is the most expensive tier of Power BI currently available and very distinct from the other two versions available on the market.

On top of the features and functionality standard to all versions of the service, users of Power BI Premium get:

- Increased data capacity limits and maximum performance
- Access to one API surface
- Ability to embed Power BI visuals into apps (PowerApps, SharePoint, Teams, etc)
- Larger storage sizes for extended deployments
- Geo distribution, higher refresh rates, isolation, pin to memory, read-only replicas
- Power BI Report Server

Power BI Premium differs from the free version and Power BI pro in its licensing model, which only suits a specific size and type of organization and business scenario. You can purchase Premium in a range of capacity sizes that offer different numbers of memory and virtual cores that can scale as your data analysis requirements change.

With Power BI Premium, you are licensing capacity for your datasets, dashboards and reports, not just licensing all users of that content. In other words, you're not buying individual licenses; you're buying them in bulk to allow a large number of your users to use Power BI to view reports. All of your content is stored in Premium and can then be viewed by as many users in your organization as you want, without additional per-user costs.

**Power BI Report Server** is an on-premises server that lets your business build your BI initiatives on local hardware, and publish and share both Power BI reports and traditional paginated reports created with SQL Server Reporting Services from within your organization's firewall.

This option is included with Power BI Premium and suits businesses who want to build their reporting infrastructure on-premises, apply their own governance and policies, and have an investment in a cloud-ready data analytics solution that will seamlessly scale with a future move to the cloud. Power BI Report Server also lets you use the same number of virtual cores provisioned in the cloud on-premises, without the need to split capacity.

If you want Power BI Report Server but don't want to purchase Power BI Premium, it's also available part of SQL Server Enterprise Edition - but only if you have active Software Assurance

## **Which version of Power BI should I get?**

### **You're still in the early stages of self-service BI:-**

**Power BI Desktop** is suitable for the average end-user who mostly consumes reports or does their own analysis without the need to share it with other end-users on a larger scale.

The free version's feature-set is enough to easily create customized reports that suit every type of expertise level and analysis need, and it has the same visualizations as the Pro version.

### **You need Power BI's full business intelligence & data analysis capabilities:-**

**Power BI Pro** is for heavy business analytics users who use Power BI regularly for both creation and consumption and wish to share data, dashboards and reports with other Pro users.

For small and large deployments, Power BI Pro is optimal to deliver full business intelligence capabilities to all users. Staff across multiple departments and roles can use Pro for ad-hoc analysis, dashboard sharing and report publishing, and analysis collaboration much more freely.

They can then export, share and publish their reports for non self-service BI users (i.e. staff who only need to view report, not edit or create any) who can access it via Power BI Desktop.

Microsoft currently offers a 60 day trial, making it easy to try Pro for yourself and determine whether or not you need the additional functionality over the free version and see for yourself if the ad

### **You have more users viewing reports than using self-service BI :-**

**Power BI Premium** is best as it suits large enterprise organizations that need a large number of people across the business to be able use Power BI to view dashboards and reports.

Premium grants all users in the workplace a license (unlike Power BI Pro, which is an individual license), supports larger data volumes (you can publish datasets up to 10GB) and sports greater performance (refresh up to 48x per day) but most critically lets your self-service Power BI Pro users share dashboards and reports without needing per-user licenses for the people viewing your content.

It's easiest to think of Premium as a super upgrade rather than a user licensing model; it enables maximum performance and other features, as well as lets the widest number of users view reports, but it's also very expensive.

For enterprises with more than 200 people, Power BI Premium currently can range anywhere from AU \$5,000 - \$20,000 per month, so it's only worth it if Power BI is core to your company's business intelligence initiatives.

### **Power BI Pro vs. Power BI Premium key differences:-**

Power BI Premium and Power BI Pro's differences mostly come down to aforementioned performance - if you're using Premium, you will actually need to have a large number of Pro licenses to compliment it.

The reason is simple: Power BI Premium only lets your users consume Power BI content rather than actually create reports. Consume refers to viewing Power BI custom-built dashboards and reports published on the Web, Power BI mobile apps, or reports embedded in internally-developed applications (such as PowerApps) and portals.

It’s important to understand that even with a Power BI Premium license, your organization’s self-service BI users (i.e. the guys actually building reports and not just consuming them using Power BI) still require their own Power BI Pro licenses to create reports for consumption for the rest of your users (those just viewing) covered by Premium.

By having a Premium license, your smaller number of Pro users unlock more capacity (larger storage sizes) and higher limits (refresh rates, isolation, etc) - so it's not totally a case of only having one or the other - unless...

**Power BI Pro vs. Power BI Premium - Which one?**

The choice between only having *either* Power BI Pro and Power BI Premium comes down to a comprehensive assessment of your total organization size, identifying the amount of staff that need access to the full capabilities of Power BI Pro, and determining those users that only need to have access to view your dashboards and reports.

If you’re a large company with more users that need to consume your reports than create them, Power BI Premium is the optimal choice, and you can purchase a lesser amount of Pro licenses for your self-service team.

However, if you have more self-service BI users that need to be able to create reports than those who actually need to view them, Power BI Pro’s individual licensing model on its own may be more cost-effective BI option.

**Pricing:-**

Note: - Power BI Desktop is Free of Cost while the cost of Power BI Pro & Power BI Premium as of now is given below:-

Do you need self-service BI?

Choose Power BI Pro

- Self-service and modern BI in the cloud
- Collaboration, publishing, sharing, and ad-hoc analysis
- Fully managed by Microsoft

Power BI Pro

\$9.99

Monthly price per user

Buy now>

Try free >

Do you need advanced analytics, big data support, and on-premises and cloud reporting?

Add Power BI Premium

- Enterprise BI, big data analytics, cloud and on-premises reporting
- Advanced administration and deployment controls
- Dedicated cloud compute and storage resources
- Allows any user to consume Power BI content

Power BI Premium

\$4,995

Monthly price per dedicated cloud compute and storage resource with annual subscription

Request a consultation >

Compare features