



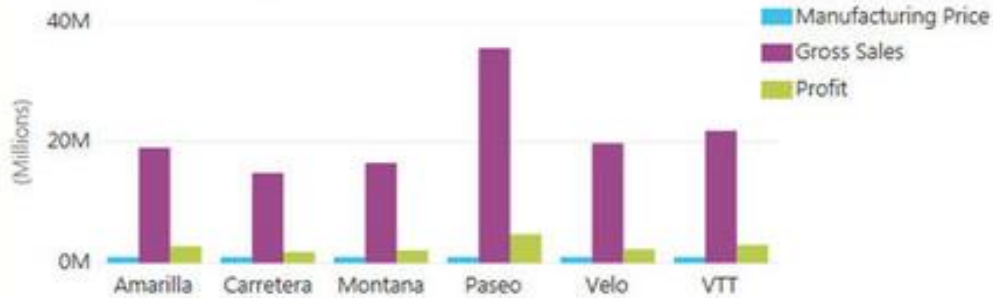
Power Business Intelligence (BI) systems in decision making and transparency.

By David Maina, ERP Expert

Would you mind this?



Manufacturing Price, Gross Sales, and Profit by Product



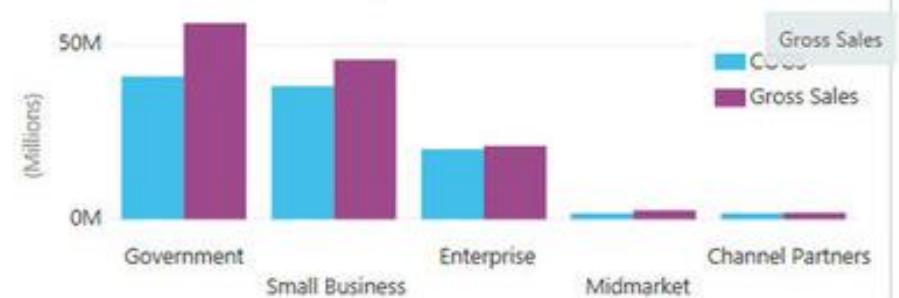
Gross Sales by Country, and Product



Units Sold, and Profit by Date



COGS, and Gross Sales by Segment



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What is BI (BI)?



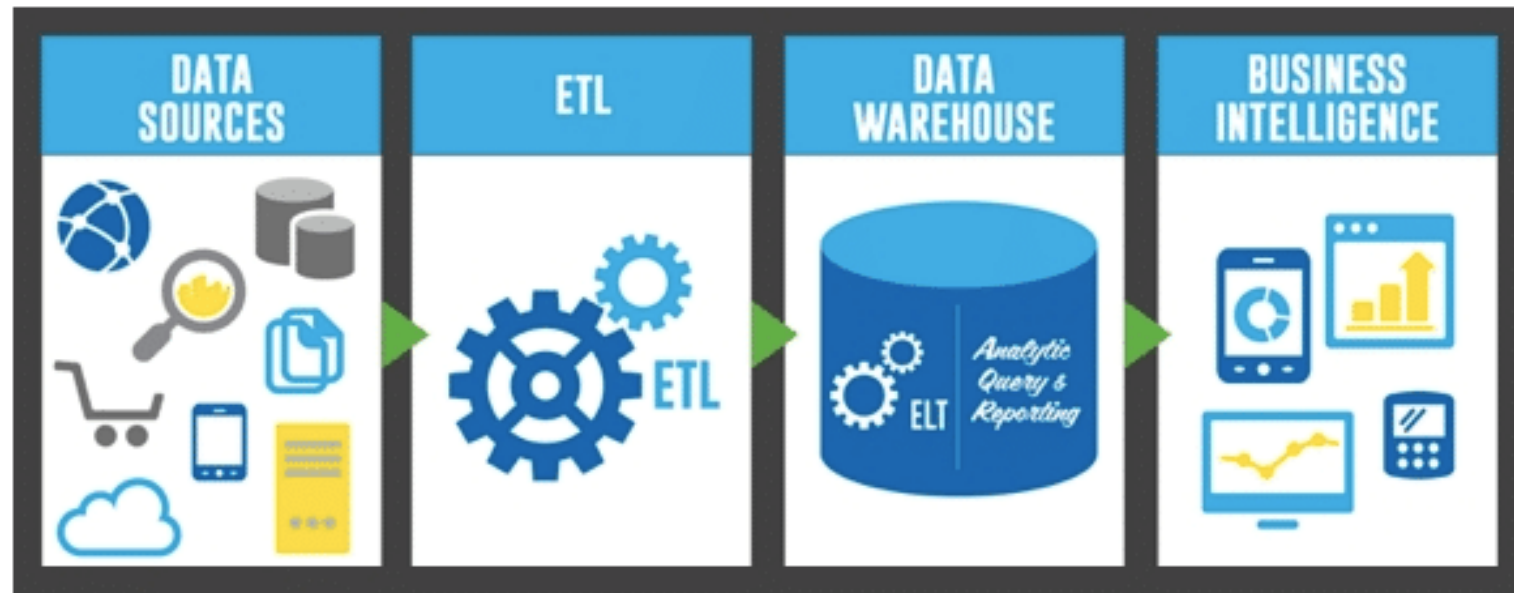
What is Business Intelligence (BI)?

This is the process by which organizations use strategies and technologies for analyzing current and historical data, with the objective of **improving strategic decision-making** and providing a competitive advantage.

For you to do this, you need understand the BI Process...

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BI Process



Extraction,
Transformation,
Load

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BI Tools



Business Intelligence tools include:-

- Data warehouses – Data from different sources for analysis and reporting,
- *Dashboards – Visualized data via charts, tables with **performance indicators**,*
- *Reports – Detailed and organized re-formatted data,*
- Data discovery tools - collect and combine data from multiple sources, and
- Cloud data services - cloud computing model that stores data on the Internet.

Dashboards and Reports



Accountants are uniquely **qualified to mine data** for business insights, but they usually spend much more time preparing the data than undertaking the value-added analysis. A business intelligence tool such as Microsoft Power BI may help reverse that trend.

What is this Power BI....

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What is Power BI?



It is a collection of business intelligence and data visualization tools such as software services, apps and data connectors.

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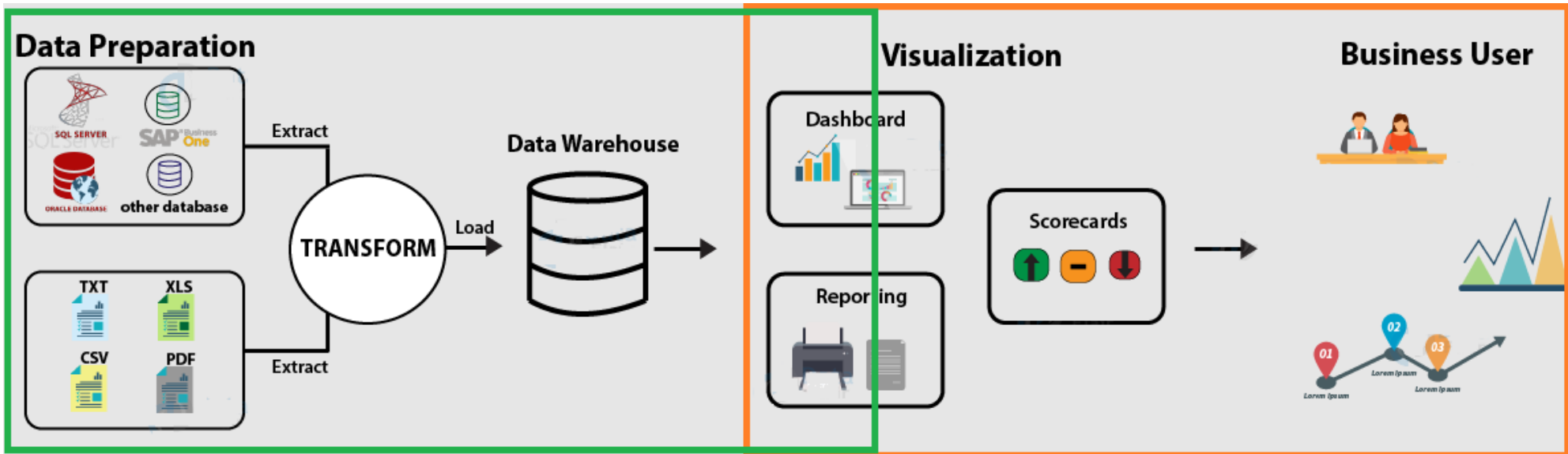
Why Power BI?



- Let's be honest, the **first analytical tool** most accountants reach for on a daily basis is good old Excel. **True/False?**
- Many accountants still use Excel to produce **financial insights** for management. **True/False?**
- Power BI can take advantage of the hard work performed in Excel spreadsheets by extracting data to **create reports**. **True/False?**



Power BI – Work Flow



Technical

Non Technical

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Power BI – Work Flow



1. Data Integration

Power BI can import data from different kinds of data sources in different formats. After data is integrated into Power BI, it is stored in a common storage area known as the **staging area**.

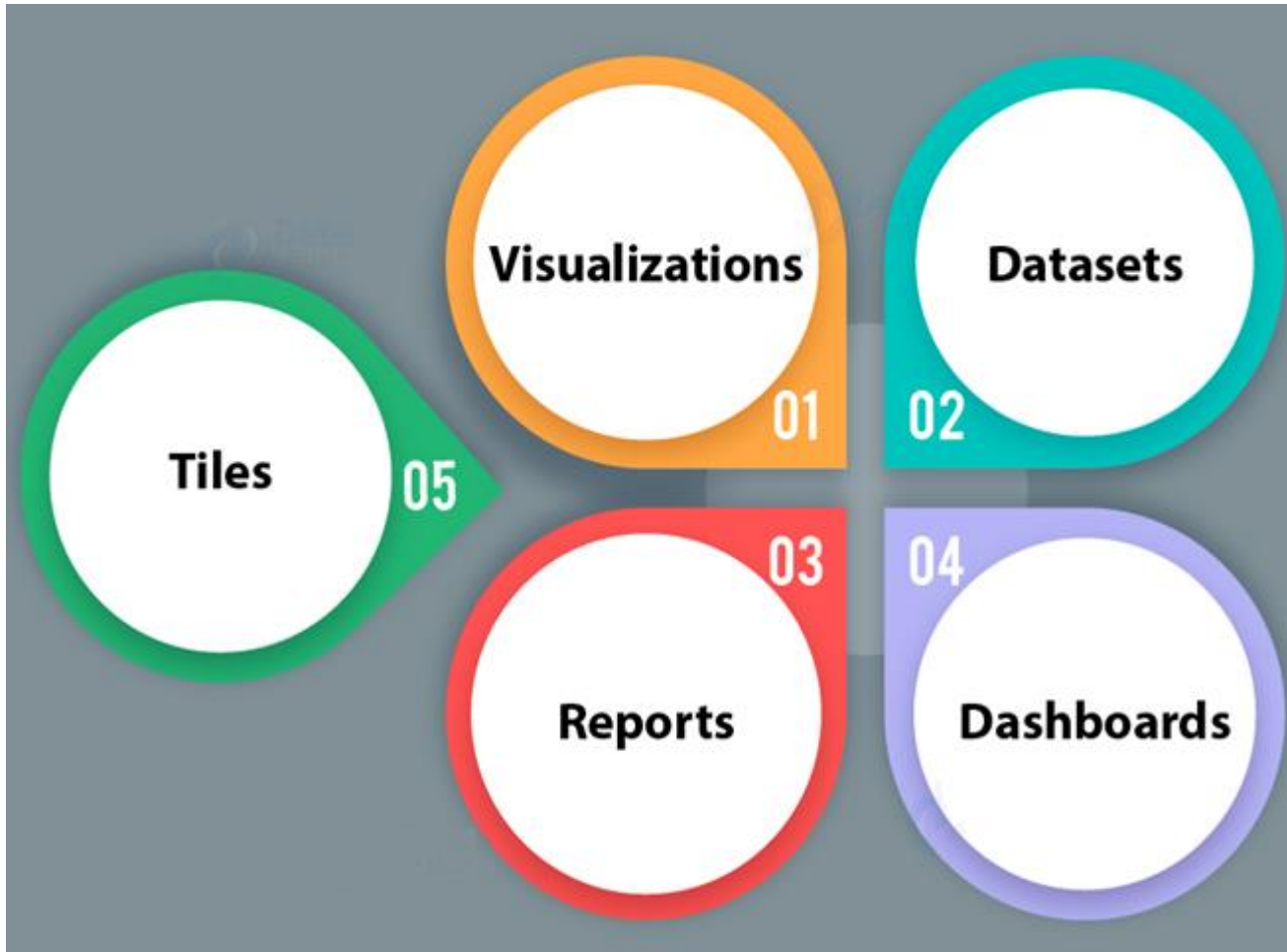
2. Data Processing

Once Power BI integrates and stores data at a secure place, the raw data requires some processing. Several processing or cleansing operations transform the raw data such as removing redundant values, etc.

3. Data Presentation

In this final phase, the processed data moves from the warehouse and goes into the Power BI platforms like Power BI Desktop to *create reports, dashboards, and scorecards*. Power BI offers a wide range of visualizations.

Power BI – Building Blocks



- Visualizations
- Datasets
- Reports
- Dashboards
- Tiles

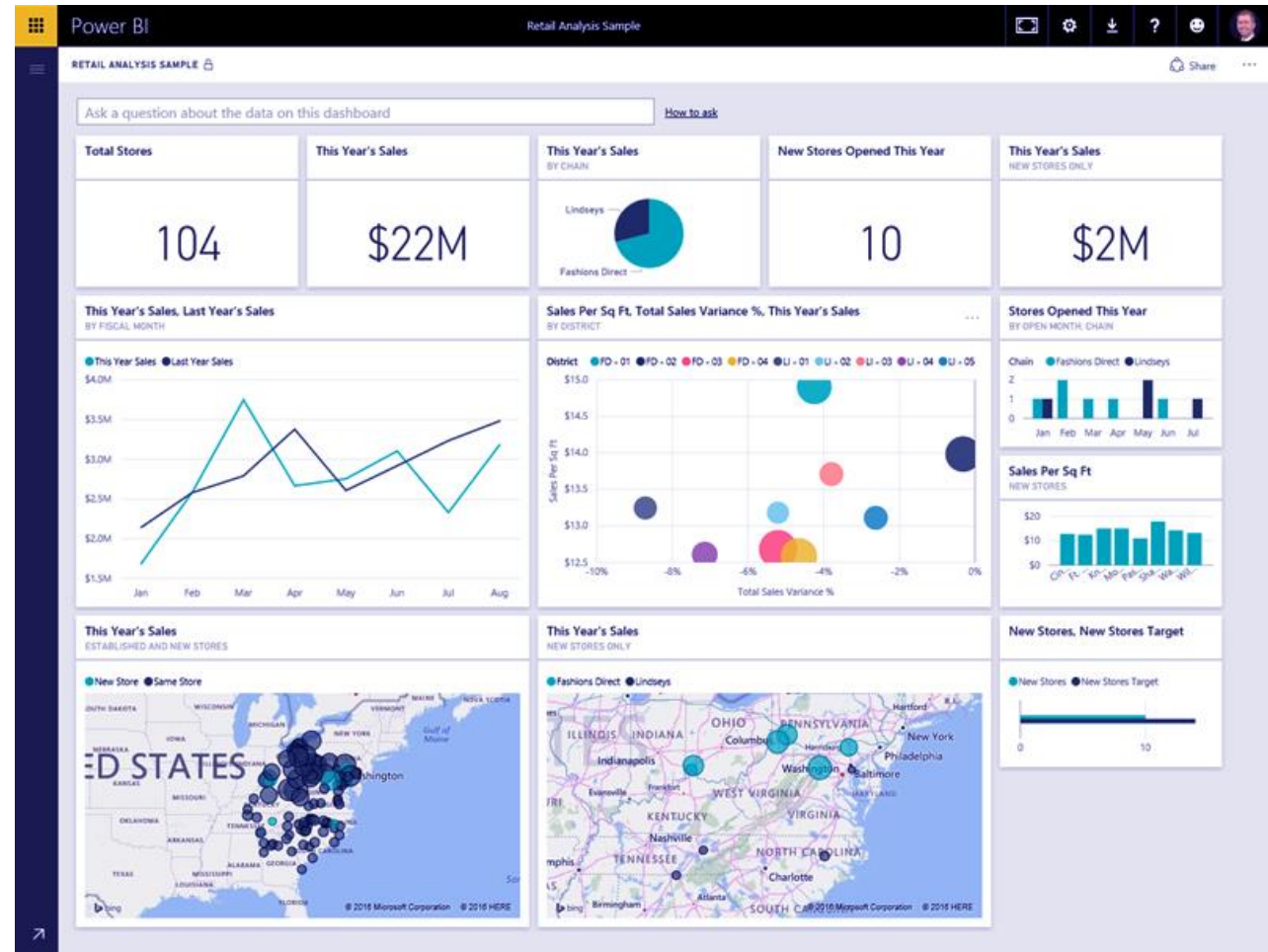
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Power BI – Building Blocks



1. Visualizations

A visual portrayal of information.



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Power BI – Building Blocks



	B	C	D	E	F	G	H
1	Year	Month	Month Name	Calendar Month	Births	Births Per Day	Births (Normalized)
2119	2004	1	January	1/1/2004	2,937	94.7	2842
2120	2004	2	February	2/1/2004	2,824	97.4	2921
2121	2004	3	March	3/1/2004	3,128	100.9	3027
2122	2004	4	April	4/1/2004	2,896	96.5	2896
2123	2004	5	May	5/1/2004	3,008	97.0	2911
2124	2004	6	June	6/1/2004	3,047	101.6	3047
2125	2004	7	July	7/1/2004	2,981	96.2	2885
2126	2004	8	August	8/1/2004	3,079	99.3	2980
2127	2004	9	September	9/1/2004	3,219	107.3	3219
2128	2004	10	October	10/1/2004	3,547	114.4	3433
2129	2004	11	November	11/1/2004	3,365	112.2	3365
2130	2004	12	December	12/1/2004	3,143	101.4	3042
2131	2005	1	January	1/1/2005	2,921	94.2	2827
2132	2005	2	February	2/1/2005	2,699	96.4	2892
2133	2005	3	March	3/1/2005	3,024	97.5	2926
2134	2005	4	April	4/1/2005	3,037	101.2	3037
2135	2005	5	May	5/1/2005	3,231	104.2	3127
2136	2005	6	June	6/1/2005	3,163	105.4	3163
2137	2005	7	July	7/1/2005	3,119	100.6	3018
2138	2005	8	August	8/1/2005	3,156	101.8	3054
2139	2005	9	September	9/1/2005	3,439	114.6	3439

2. Datasets

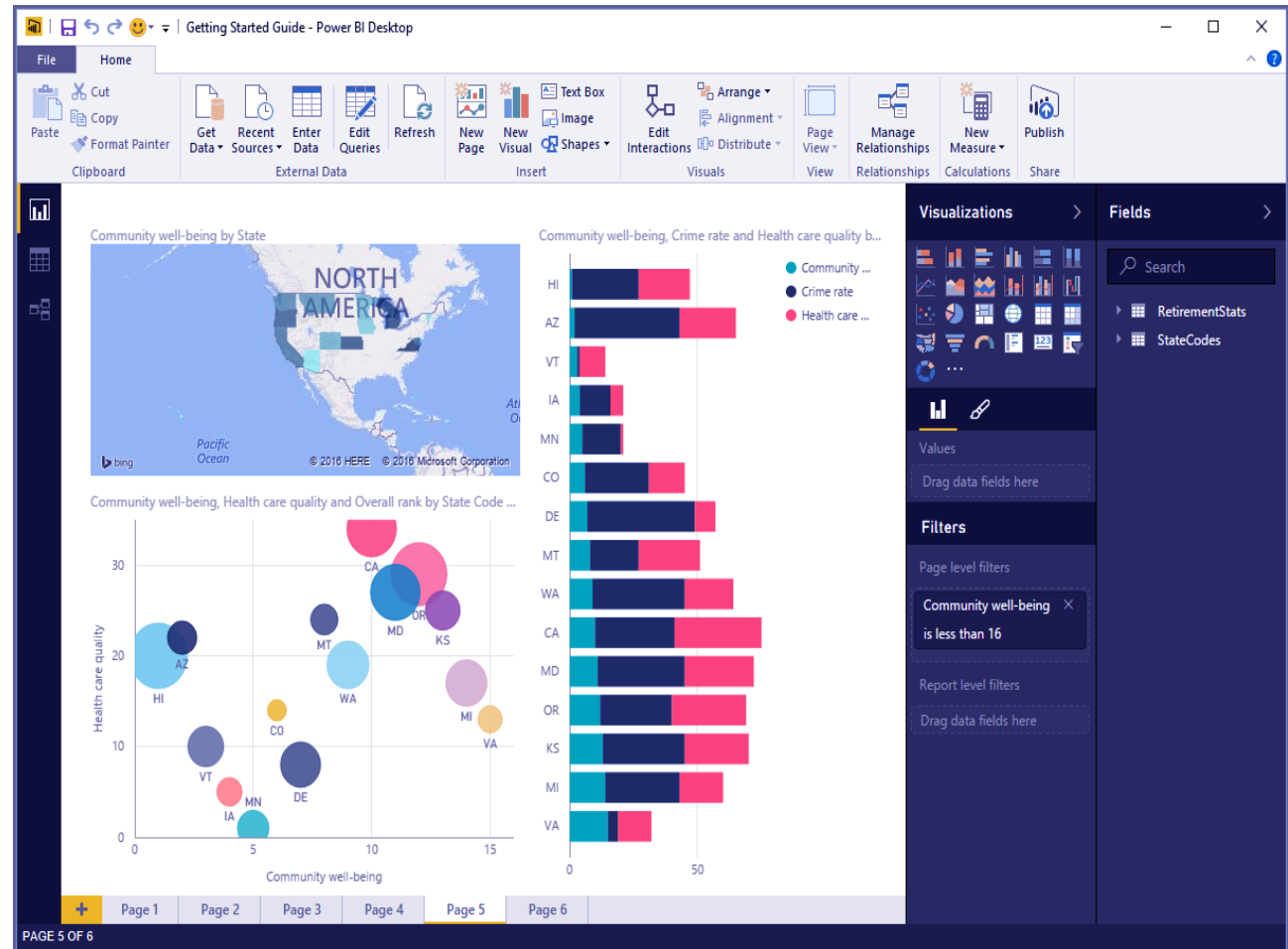
An accumulation of information that Power BI uses to make its representations. You can have a basic dataset from Excel table, like what appeared in the accompanying picture (Visualization)

Power BI – Building Blocks



3. Report

A report is a gathering of perceptions that seem together on at least one pages.



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Power BI – Building Blocks



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4. Dashboards

When offer an accumulation of perceptions in on one page, you make a dashboard.

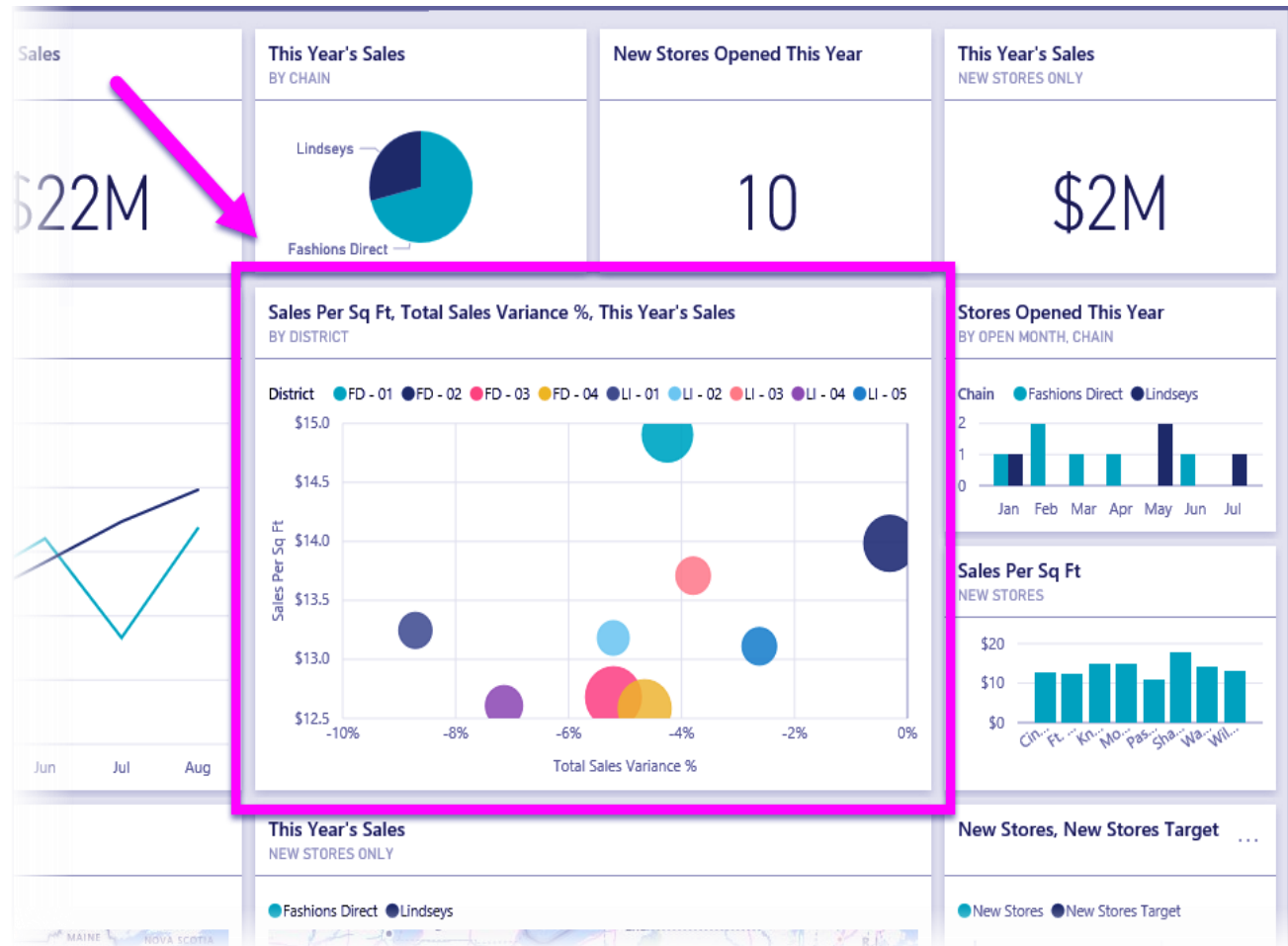
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Power BI – Building Blocks



3. Tiles

A solitary representation found in a report or on a dashboard



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Power BI – Features



1. Range of Attractive Visualizations
2. Customizable Dashboards
3. Datasets Filtration
4. Flexible Tiles
5. Get Data (Data Source)
6. Navigation Pane
7. Informative Reports
8. Natural Language Q & A Question Box
9. DAX Data Analysis Function
10. Help & Feedback Buttons
11. Office 365 App Launcher
12. Great Collection in Content Packs

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Power BI – Pros



1. Affordability

A major advantage of using Power BI for data analysis and visualization is that it is affordable and relatively inexpensive.

2. Custom Visualizations

Power BI offers a wide range of custom visualizations i.e. custom visualizations includes KPIs, maps, charts, graphs, R script visuals, etc.

3. Excel Integration

Ability of Excel integration helps users to view and work with the raw data behind a Power BI visualization.

4. Data Connectivity

Import data from a wide range of data sources.

5. Availability

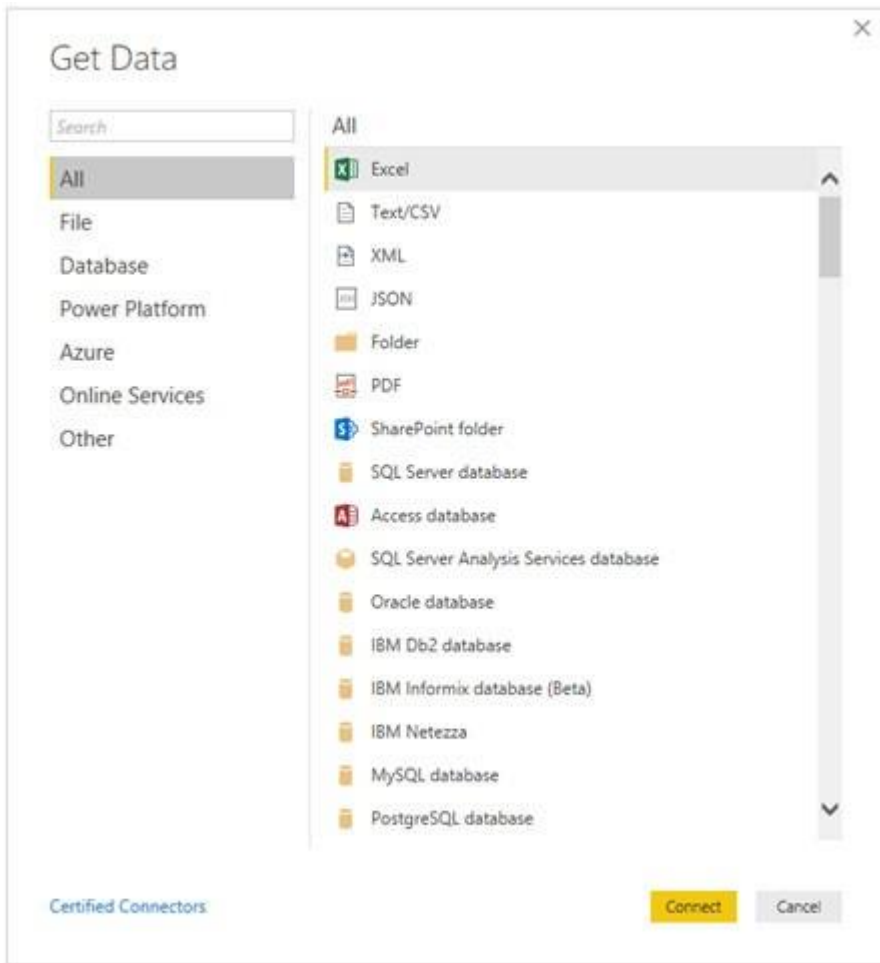
Power BI is available on Desktop, Mobile and as a Cloud service (powerbi.com)

Power BI – Cons



1. **Table Relationships** - Power BI is good with handling simple relationships between tables in a data model. But, if there are complex relationships between tables, that is, if they have more than one links between tables, Power BI might not handle them well.
2. **Configuration of Visuals** - You need to configure and optimize visualizations in Power BI. But even if you do, *Power BI does not provide many options to configure your visualizations as per your requirements*
3. **Crowded User Interface** - The user interface might be crowded and bulky by the users. Most users wish that the user interface or the report canvas was clearer with fewer icons and options.
4. **Rigid Formulas** - the expression language used to deal with data in Power BI is DAX,
5. **Handling Large Data Volumes** – 2GB max,
6. **Complex to Understand and Master** - learn and master several other tools like Gateways, Power BI Report Server, Power BI Services, etc

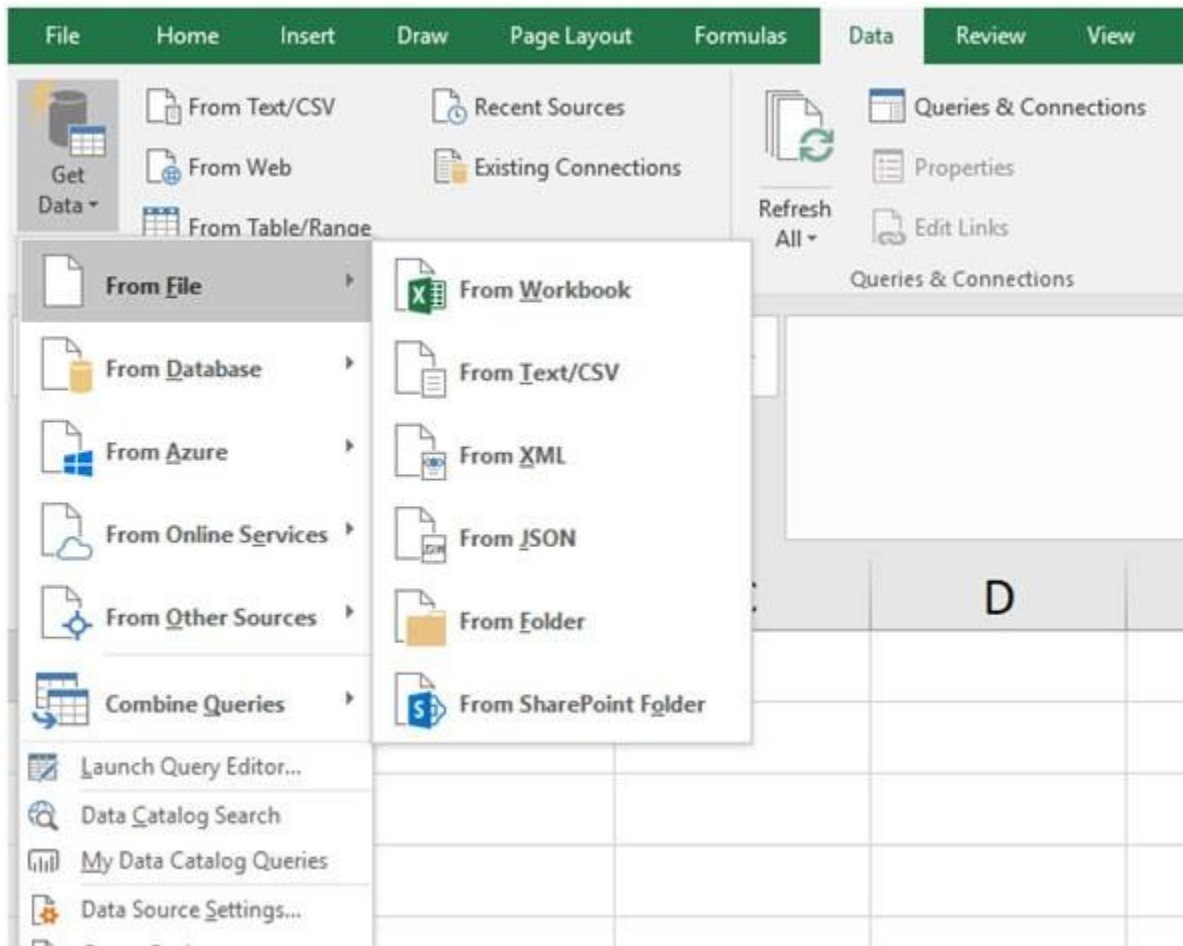
How to use Power BI



Get Data button on the Ribbon

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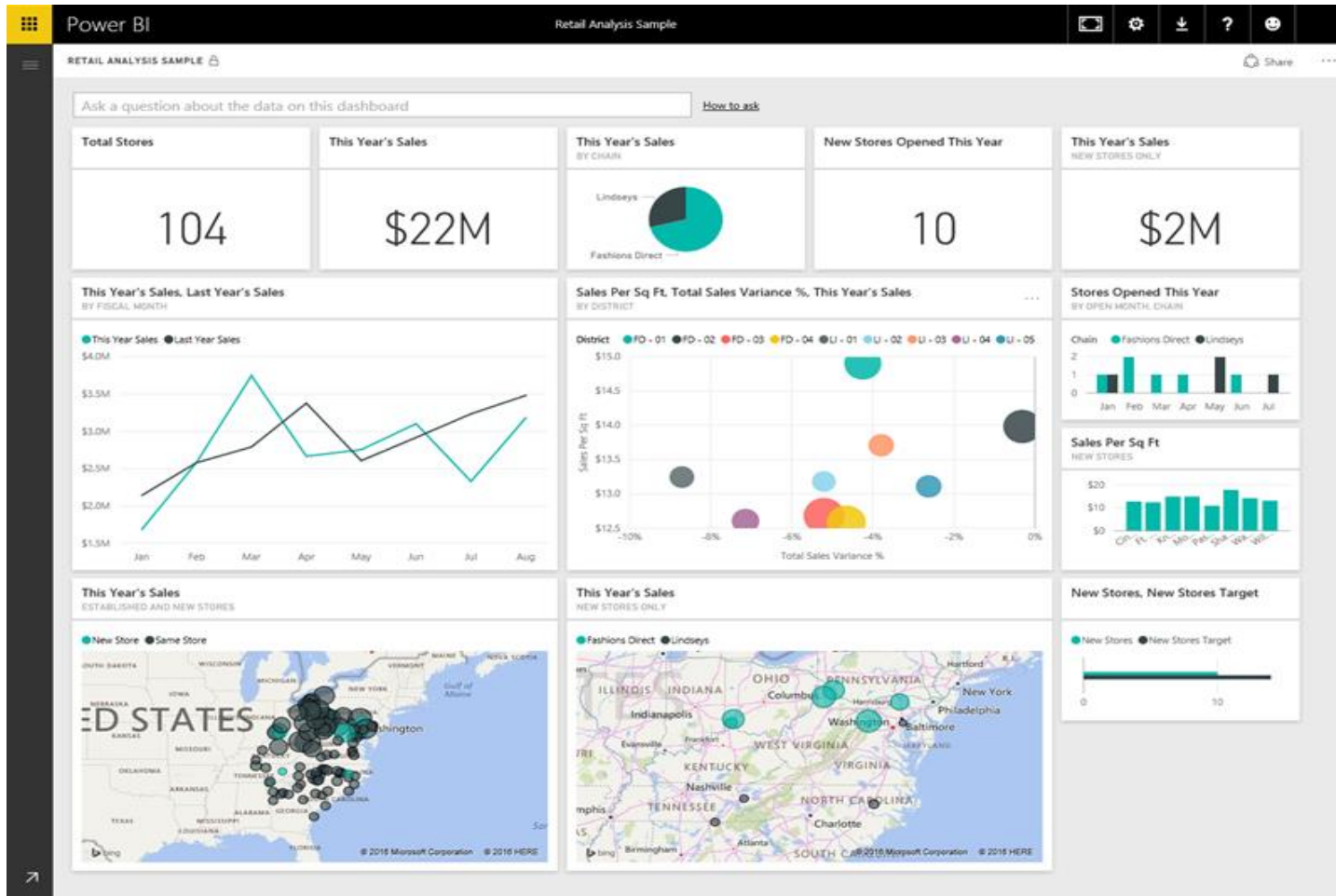
How to Use Power BI



Get & Transform feature is built into the **Data** tab

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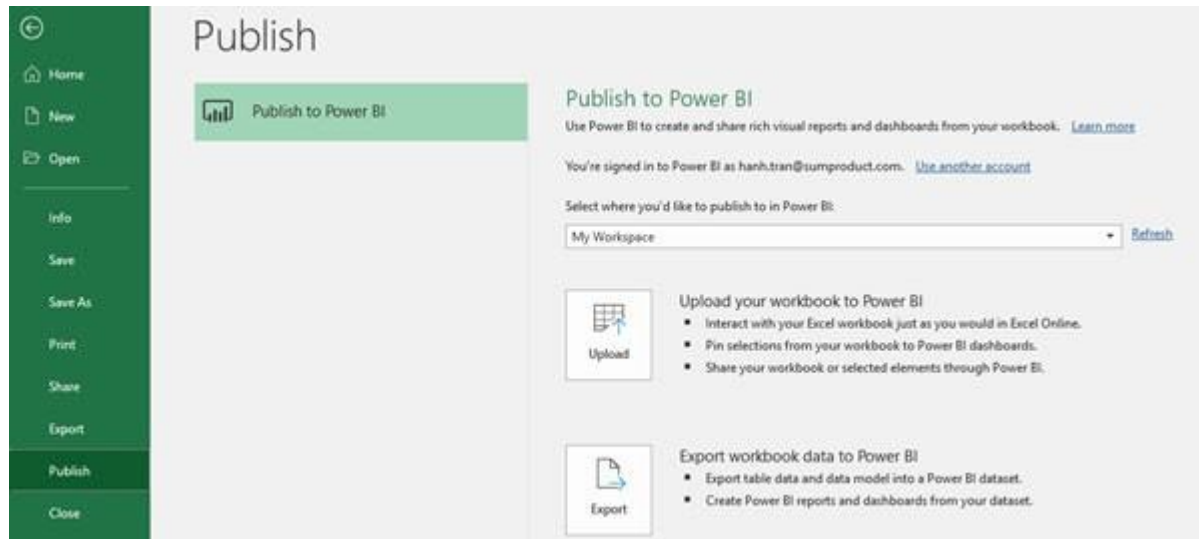
How to Use Power BI



Dashboards

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How to Use Power BI



Publish

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Power BI - Practical



1. Use Excel Data for Power BI

2. Online Example – www.BalancedKPI.com (Employee Performance Dashboards)

Employee or staff performance monitoring can be tedious and time consuming, additionally appraisal process can seem an up-hill task if you do not have the right tools. However, we have built a tool that will help you monitor your staff performance that is accessible anywhere.

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Exit();



Thank You

David Maina

ERP Expert & BI Analyst

daxmaish@gmail.com

david@balancedkpi.com

+254 775 632 576

<https://linkedin.com/in/dauti/>

www.BalancedKPI.com

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