

Microsoft Power BI Certification Training (DA-100)

*Module 1 – Introduction to Power
BI*



Agenda

01

What is Business
Intelligence?

02

Stages of Business
Intelligence

03

BI Use Cases

04

Various BI Tools

05

Why Power BI?

06

Introduction to
Power BI

Agenda

07 Power BI Components

08 Power BI Pricing

09 Building Blocks of Power BI

10 Architecture of Power BI

11 Power BI Desktop

12 Power BI Desktop Installation

13 Creating Reports in Power BI

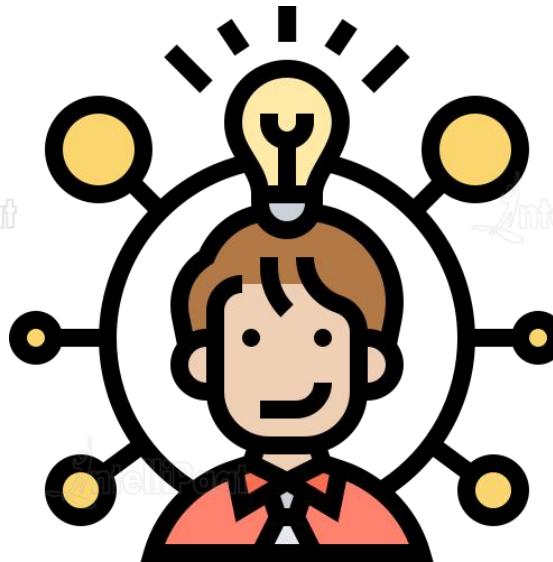


What is Business Intelligence?



What is Business Intelligence?

Business Intelligence (BI) is a set of processes, architectures, and technologies that help in the collection, integration, analysis, and presentation of business information. The purpose of Business Intelligence is to enable stakeholders make better business decisions



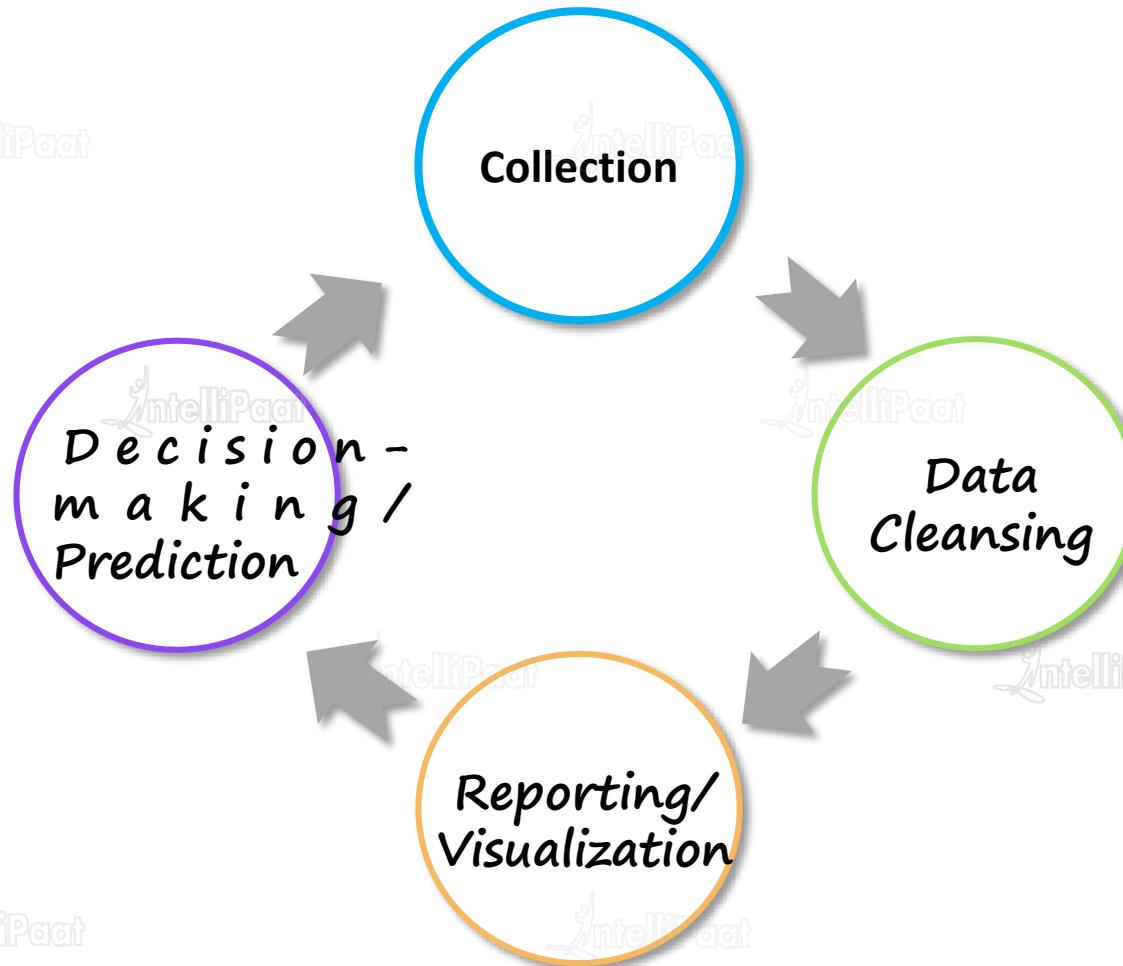


Stages of Business Intelligence

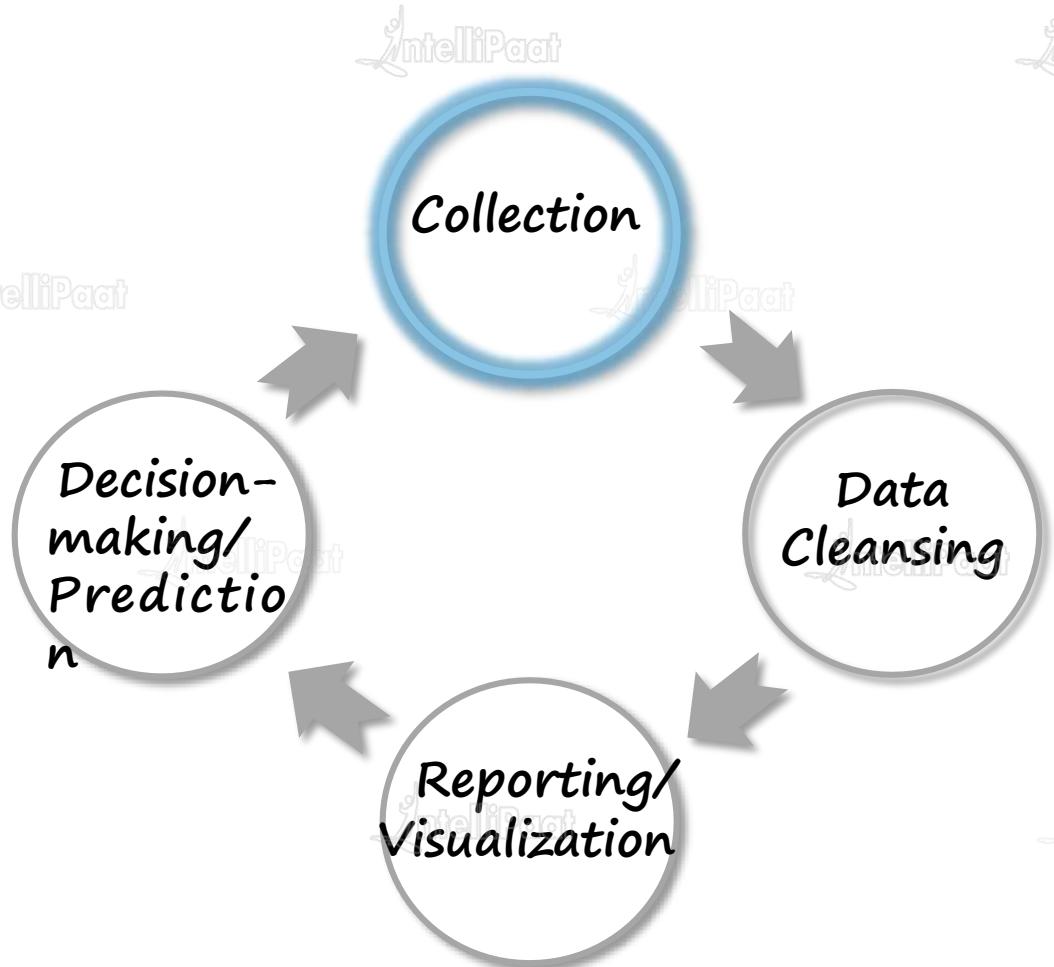


Stages of Business Intelligence

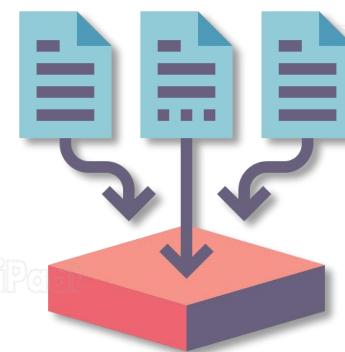
Business Intelligence is generally divided into four stages:



Stages of Business Intelligence

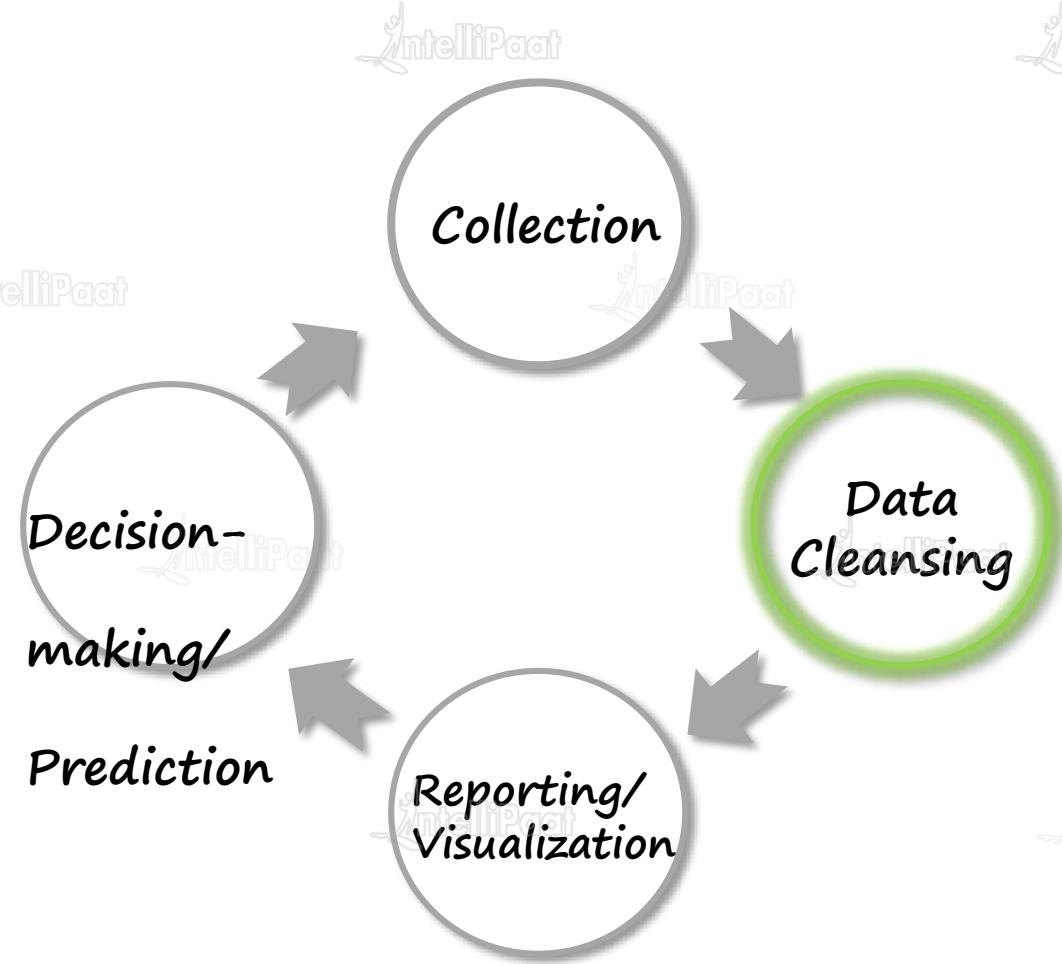


Collection



Data is collected either from the existing sources, such as ERP data, company database, etc., or externally through polls, forms, and others

Stages of Business Intelligence



Data Cleansing



Identifying irrelevant parts of the data and modifying, deleting, or replacing the coarse data

Stages of Business Intelligence

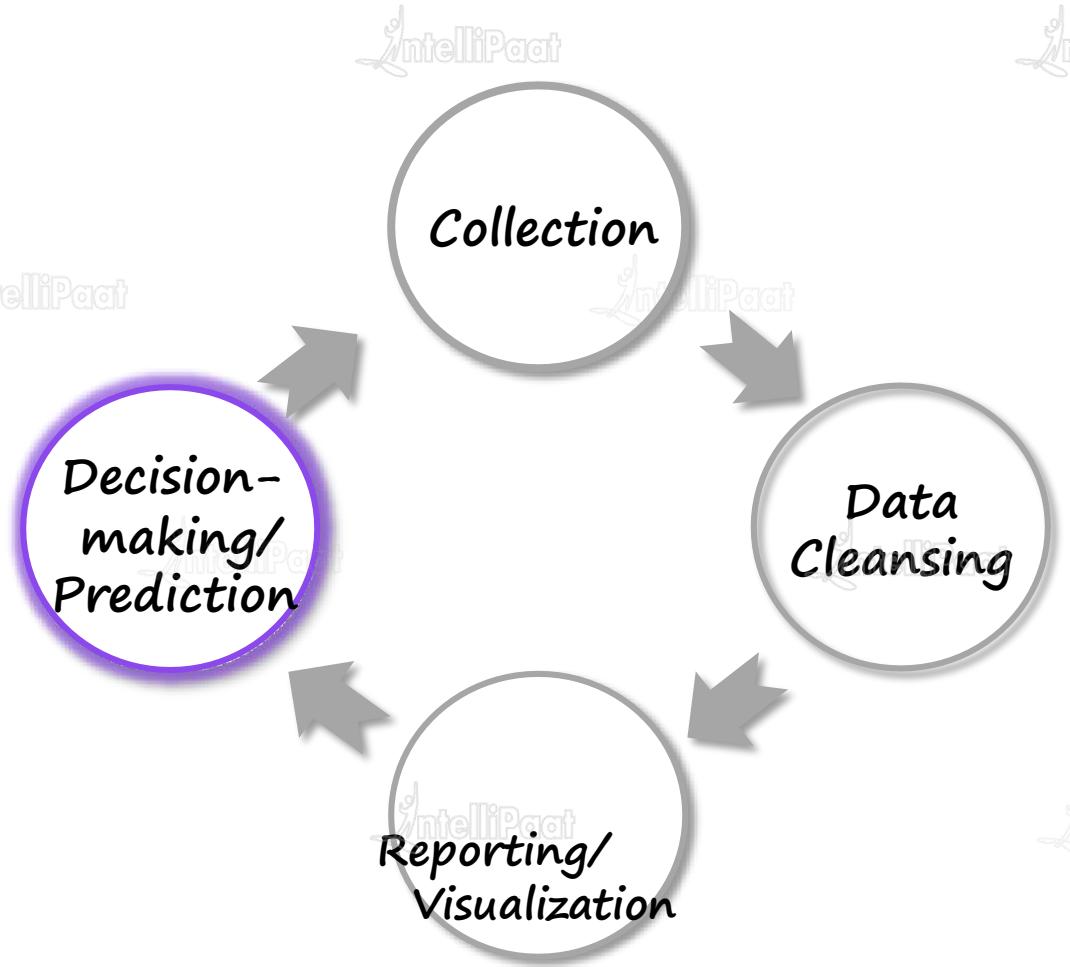


Reporting/Visualization



Graphical representation of data using visual elements such as charts, graphs, tables, etc.

Stages of Business Intelligence



Decision-making/Prediction



The last stage is making business decisions and monitoring and predicting business trends based on the report developed



elliPaat



liPact



Copyright Intellipaat. All rights

BI Use Cases

BI is everywhere!



Performance
Management



Financial Analysis



Education

Data Semantics





Data Semantics makes use of BI for sales reporting and sales prediction dashboards

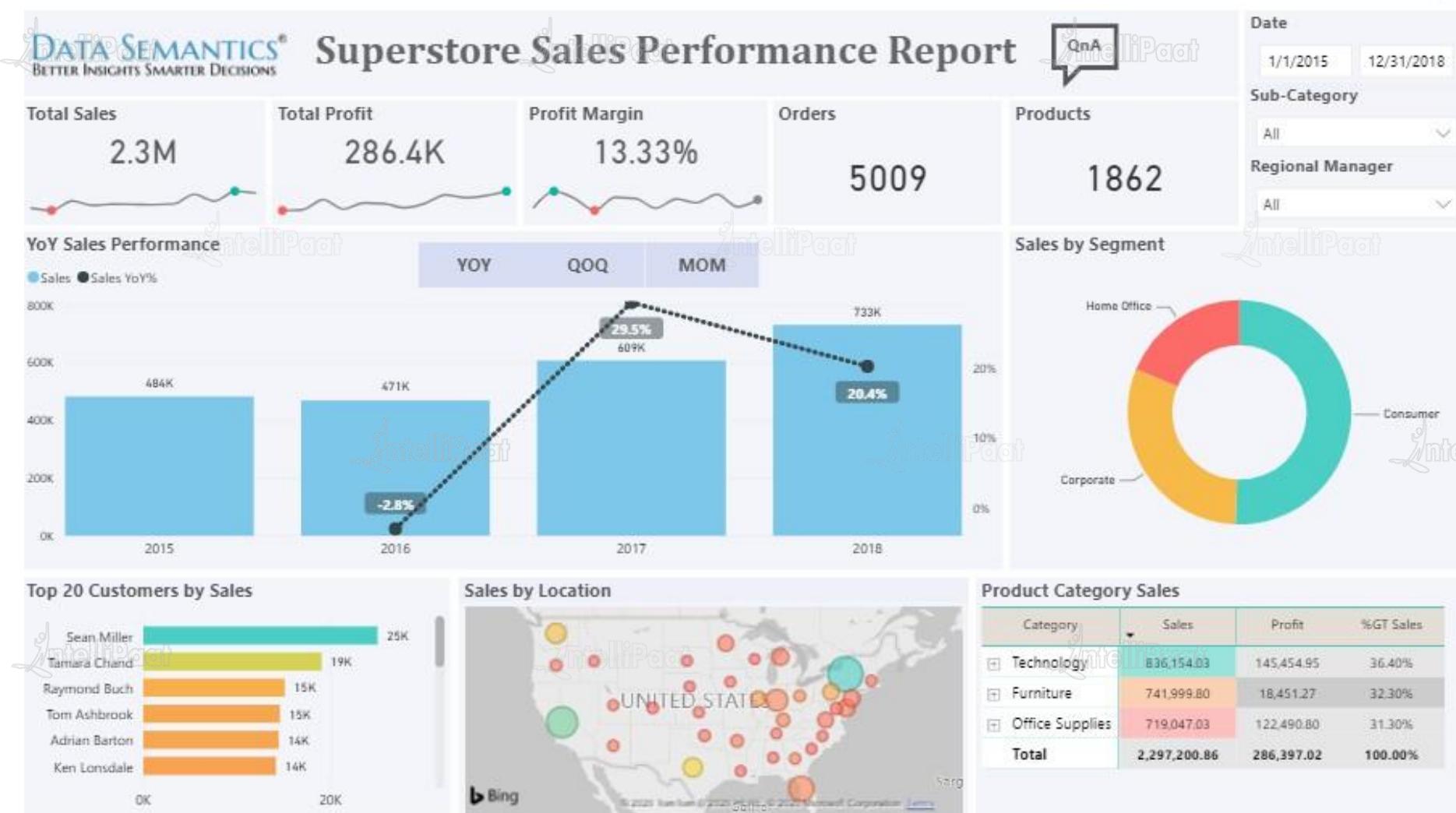


Business Intelligence allows the company to make decisions at the right time

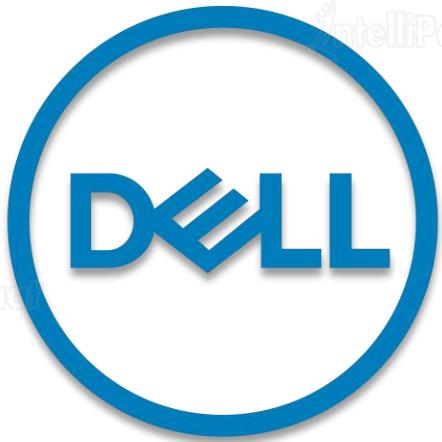


BI also allows the company to discover why its sales are dropping in a particular domain and helps it understand where it needs to perform better

BI Use Cases



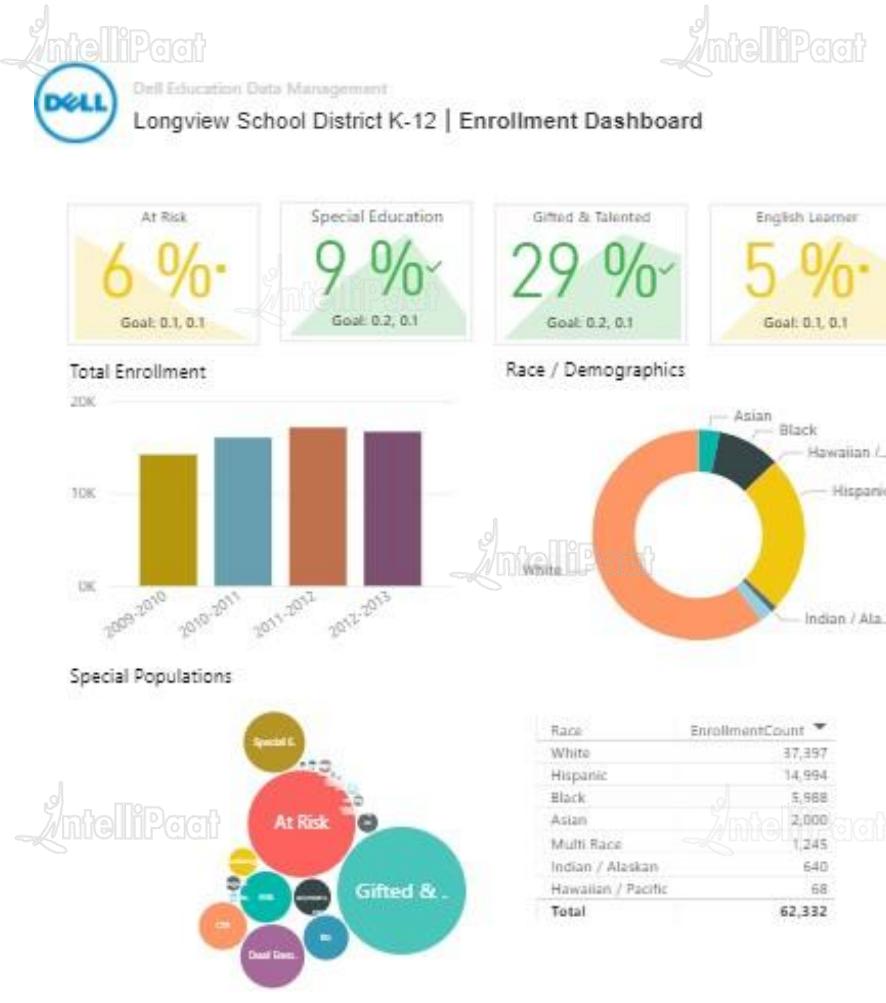
BI Use Cases



Dell uses Business Intelligence in its education data management

It uses various dashboards and KPIs to improve student performance, monitor the efficiency of programs, and help identify the students who need assistance

BI Use Cases



The EDM District Enrollment Dashboard displays registration totals by a variety of categories. Most can be used as interactive filters for insight. Key Performance Indicators (KPIs) like "At Risk" direct attention based upon predefined goals.

For more information: bigdata@dell.com





elliPaat



liPaat



Copyright Intellipaat. All rights

BI Tools



These are the most commonly used BI tools



zoho Analytics



+ a b | e a u





elliPaat



liPaat



Copyright Intellipaat. All rights

Why Power BI?



01

Affordability

02

Natural Language
Query

03

Real-time
Streaming

04

Custom Visualization

Why Power BI?

01

Affordability

02 Natural Language Query

03 Real-time Streaming

04 Custom Visualization

Affordability

The Power BI Desktop version is available for free, which can be used for report building on a computer. If we want to use more Power BI services, then we can buy Power BI Service at an affordable cost



Why Power BI?



01

Affordability

02

Natural Language

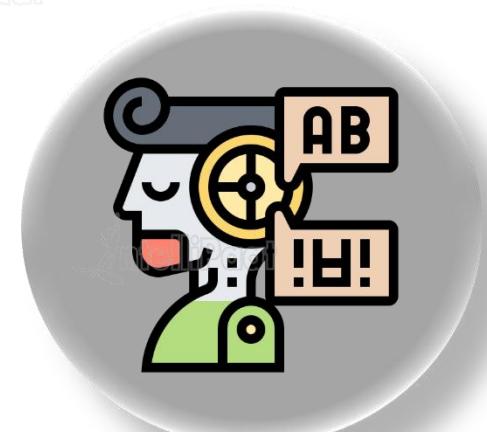
03

Real-time Streaming

04 Custom Visualization

Natural Language Query

This feature allows users to type questions and get answers in a user-specific format. This is mainly useful in getting quick insights from data.



Why Power BI?



01

Affordability

02 Natural Language

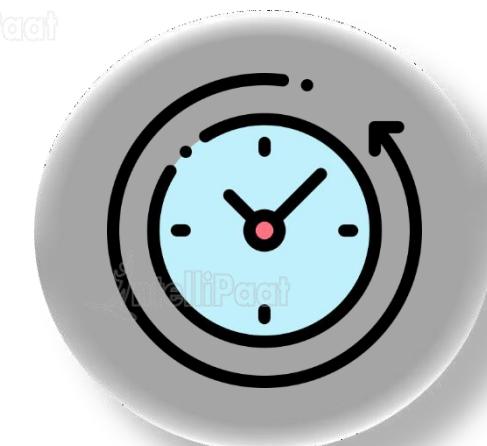
03 Real-time

04 Custom Visualization



Real-time Streaming

This feature allows users to stream real-time data and update dashboards in real time, which helps them make timely business decisions



Why Power BI?



01

Affordability

02 Natural Language Query

03 Real-time Streaming

04 Custom Visualization

Custom Visualization

Power BI has visualizations that are made by developers for specific use cases. These custom visualizations are available in Power BI Marketplace





elliPaat



Introduction to Power BI

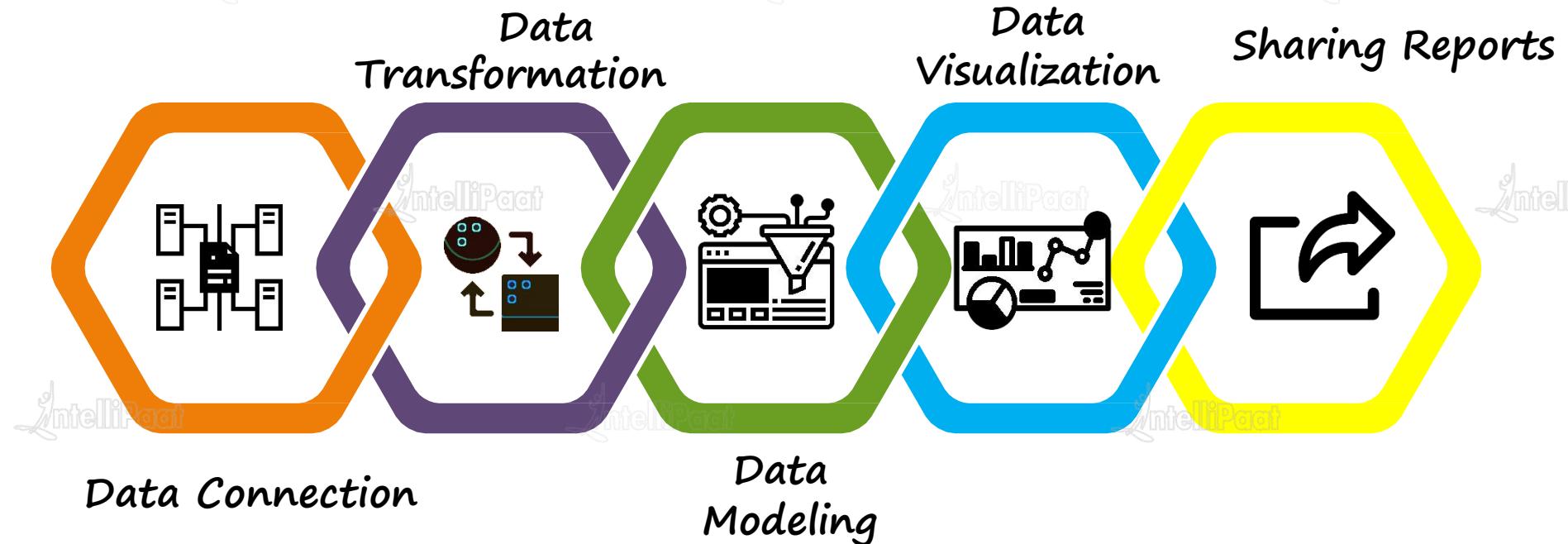


liPact



Introduction to Power BI

Power BI is a Business Intelligence platform, which provides tools for aggregating, analyzing, visualizing and sharing data





elliPaat



Power BI Components

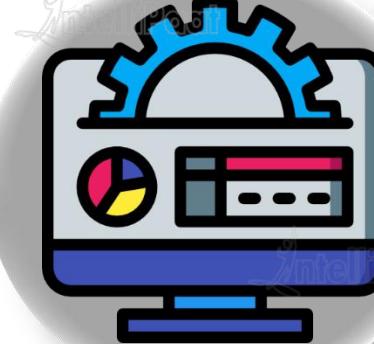
Power BI Components



Power BI Components

Power BI Desktop

It is a free application that helps us connect to multiple data sources and transform and visualize our data



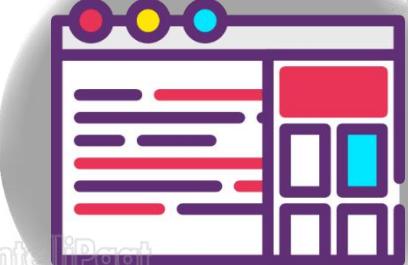
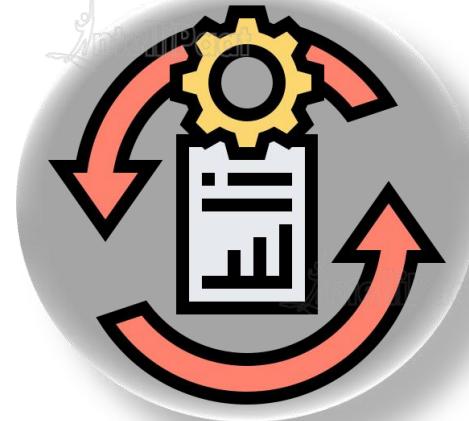
Power BI Service

It is a cloud-based service where users view and share their reports and dashboards

Power BI Components

Power BI Gateway

It is mainly used for scheduled data refresh



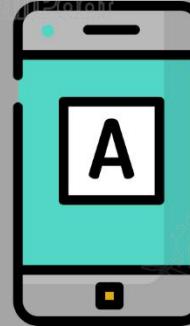
Power BI Report Server

It is an on-premises web interface and an alternate for Power BI Service

Power BI Components

Power BI Mobile App

Power BI offers a set of mobile apps for Android, iOS, and Windows mobile devices through which users can securely access and view their live dashboards and reports



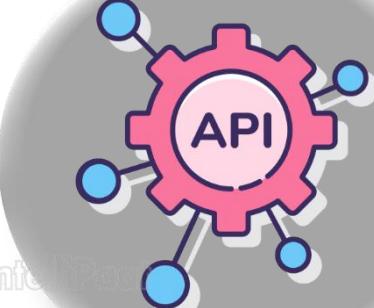
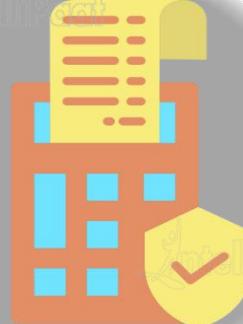
Power Query

Power BI accepts data from a variety of other data sources such as excel. Power Query allows you to search data from various sources such as social media websites, big data, and so on.

Power BI Components

Power BI Report Builder

It helps in developing paginated reports such as invoices, receipts, delivery notes, etc.



Power BI Embedded

It helps in the integration of BI reports with other applications



elliPaat



liPact



Copyright Intellipaat. All rights

Power BI Pricing

Features	Power BI Free	Power BI Pro	Power BI Premium	Power BI Premium
License	Per user	Per user	Capacity based	Per User
70+ data sources				
Ability to publish reports to share and collaborate				
Cost	Free	US\$9.99/mo nth	US\$4,995/mo nth	US\$20/month
Storage limit	10 GB	10 GB	100 TB	100 TB
Data refresh rate	8/1 day	8/1 day	48/1 day	48/1 day
Ability to export content to Excel and CSV files				



ellipaat

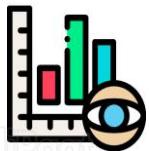


Building Blocks of Power BI

Building Blocks of Power BI

Visualization

Visualization is the graphical representation of information and data using charts, graphs, maps, etc.



Reports

A report is a multi-perspective view with visuals that represent different

Datasets

A datasets is the container of the data. It can be Excel sheets or a company - owned database of c



Dashboards

A dashboard collects the most important metrics on one screen to answer users' questions or to tell them a story



Tiles

A Power BI tile is a snapshot of the data dashboard





Architecture of Power BI

Data Sources



Connect



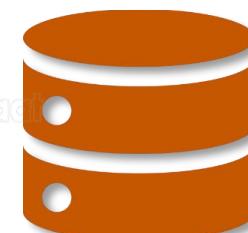
Power BI Desktop



Publish



Power BI Gateway



Access



Multiple
Devices



ellipaat



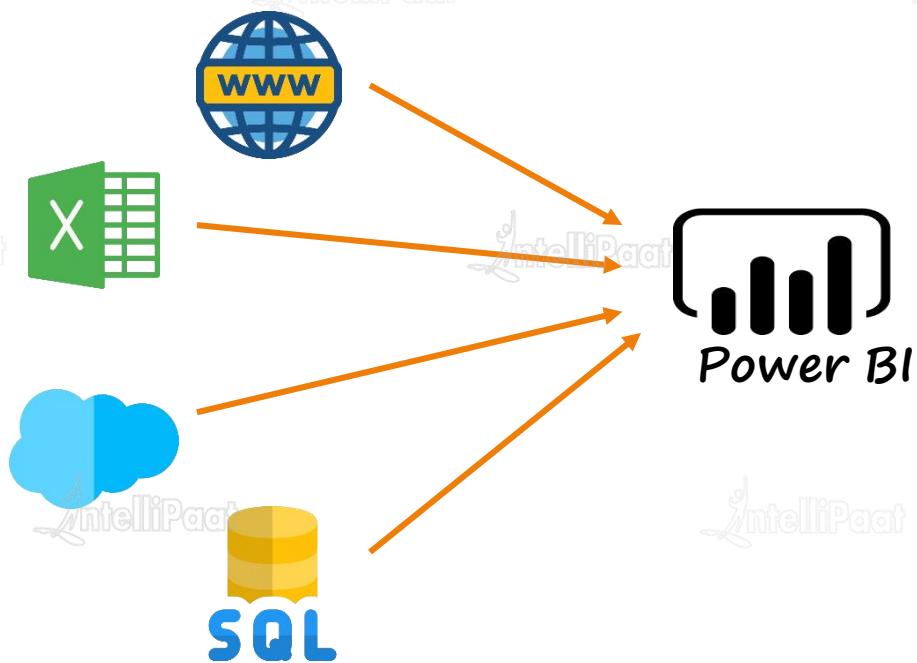
llipaat



Copyright Intellipaat. All rights

Power BI Desktop

Power BI Desktop combines Microsoft Query Engine (M) with visualization and data modeling for creating interactive reports





Power BI Desktop Installation



Power BI Desktop Installation

- Go to Microsoft's official website, and select Power BI Desktop
- Select the language of your choice to download Power BI
- Choose the file based on your operating system
- Then, download and install it on your local machine



Power BI



Demo: Installing Power BI Desktop





Creating Reports in Power BI



Creating Reports in Power

BI

The three-step process in creating reports in Power BI are:

Connect to Data Sources

Transform Data into a Model

Add Visualization

Creating Reports in Power BI

BI

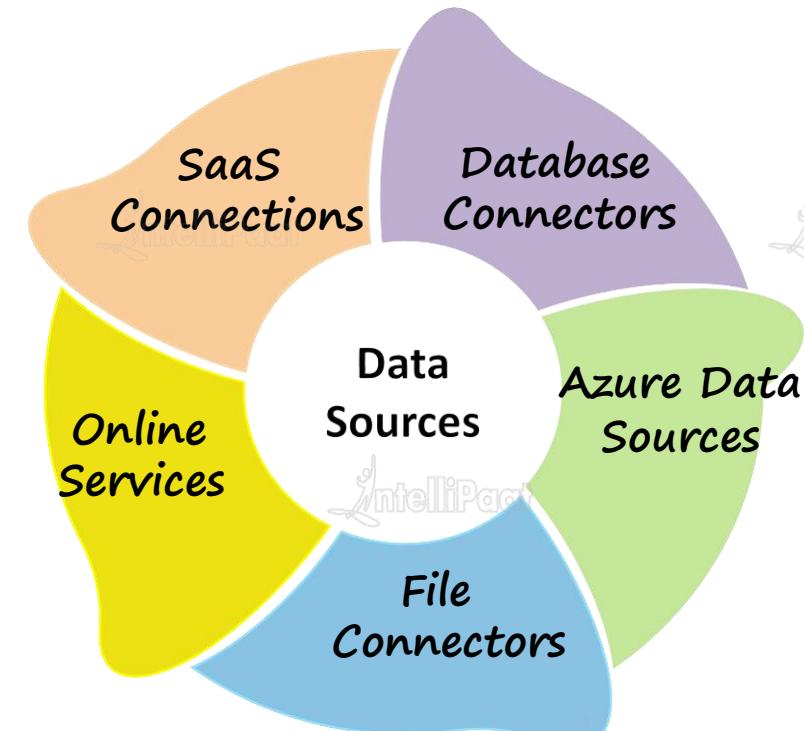
Connect to
Data
Sources

Transform Data
into a Model

Add
Visualization

Connect to Data
Sources

With Power BI Desktop, we can connect to many
different data sources to collect data



Creating Reports in Power BI

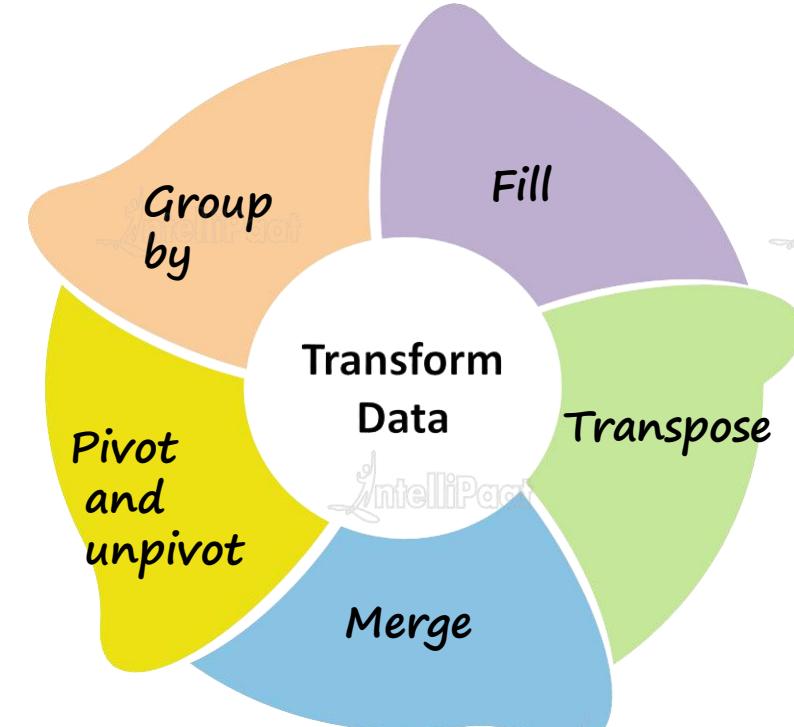
Connect to Data Sources

Transform Data into a Model

Add Visualization

Transform Data into a Model

Power Query Editor in Power BI Desktop helps us transform the data into a model



Creating Reports in Power BI

BI

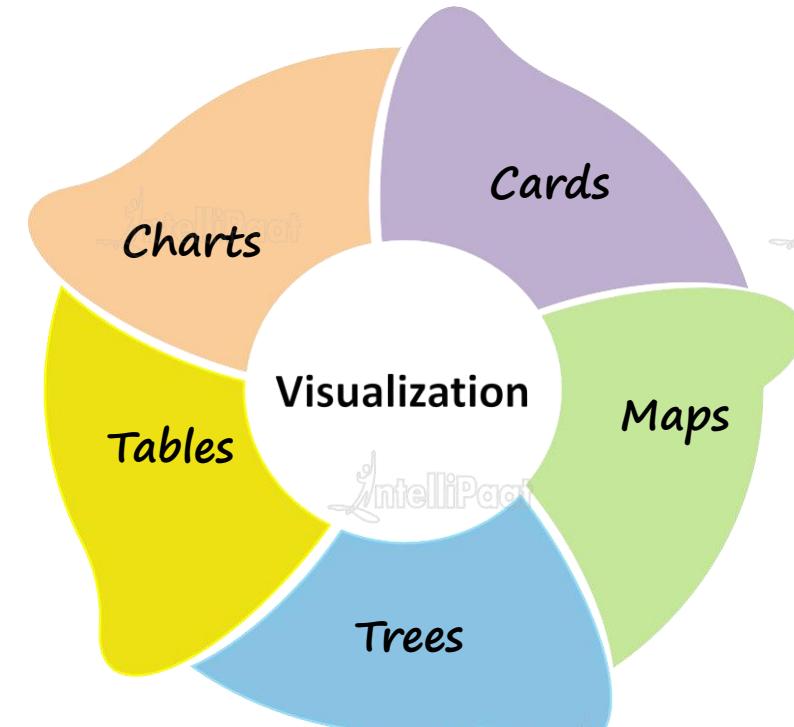
Connect to Data Sources

Transform Data into a Model

Add Visualization

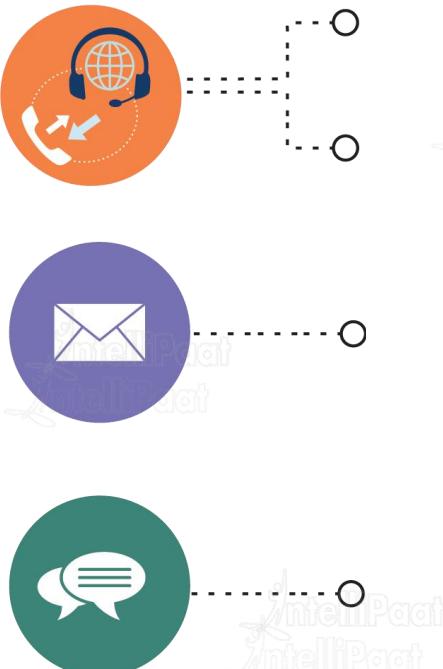
Add Visualization

Data visualizations bring data to life, using colors and shapes





Demo: Creating a Report in Power BI



India: +91-7847955955

US: 1-800-216-8930 (TOLL FREE)

sales@intellipaat.com

24/7 Chat with Our Course Advisor