Tableau Software

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DATA ANALYSIS PROCESS

The role of a Data Analyst is quite crucial for any organization. The Data Analyst understands the data and gets valuable insights from it that help track the performance and scale the organization. The data analysis process includes:

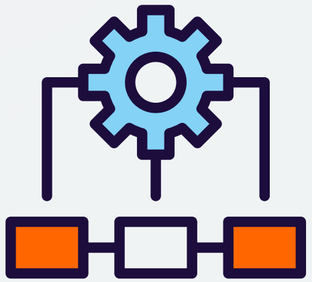
Data Preparation : The first step is to prepare the data. It includes profiling, cleaning, and transforming the data. This makes the data ready. Data preparation takes the raw data and converts it into useful, easy-to-understand information. This process fixes the inaccurate data, identifies missing data, corrects the wrong data, etc.

Model: The data gets ready to be modeled after the preparation step. This determines how the tables are related to each other by defining and creating relationships between them.

DATA ANALYSIS PROCESS

Visualize: Graphics are easier to understand than textual data, correct? The visualization step brings data to life by representing it in the form of reports. This makes it much easier to understand information and make better decisions. This step involves designing and creating reports for accessibility.

Analyze: Analyzing data helps in finding insights, identifying patterns, and predicting outcomes. The analysis step involves interpreting the information displayed in reports. With advanced analytics, business decisions become easier by providing meaningful results.



Manage: As a Data Analyst in an organization, you need to manage Power BI reports, dashboards, and semantic models. This includes overseeing the sharing and distribution of reports and dashboards.

WHAT IS BI

Business intelligence (BI) is the process of analyzing data and presenting it in an intuitive way—using dashboards, charts, reports, and other visual tools. This clear and accessible form of data helps organizations track performance, resolve issues, and adapt to market changes. The key components of BI include:

Data Collection: Gathering data from multiple sources such as databases, spreadsheets, and external systems.

Data Analysis: Applying statistical and analanalytical methods to uncover trends, patterns, and relationships in the data.

Data Visualization: Presenting analyzed data clearly and effectively through reports, dashboards, and other visual tools.

Insight Generation: Interpreting analytical results to identify opportunities, challenges, and areas for improvement.

WHAT IS TABLEAU

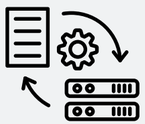
Tableau is a powerful and versatile data analysis, visualization, and business intelligence tool. It helps users transform raw data into understandable and actionable insights through interactive and shareable dashboards. Key benefits of using Tableau include:

- Improved data understanding and insights
- Enhanced decision-making capabilities
- Increased productivity and efficiency
- Better communication and collaboration
- Scalable and flexible data analysis

Tableau was founded in 2003 by Pat Hanrahan, Christian Chabot, and Chris Stolte, who were researchers at Stanford University. In 2019, Salesforce acquired Tableau.

FEATURES OF TABLEAU

Data Connectivity: Tableau can connect to numerous data sources, including databases, spreadsheets, cloud services, and big data platforms.



Data Blending: It enables users to combine data from multiple sources for a more comprehensive analysis.

Drag-and-Drop Interface: The intuitive interface allows users to create visualizations easily without needing advanced technical skills.

Real-Time Data: Users can build dashboards that update with real-time data, supporting timely decision-making.

Customization: Dashboards and reports can be highly customized to meet specific requirements.

Geospatial Support: The tool supports the creation of interactive maps and spatial analyses.

FEATURES OF TABLEAU

Tableau Cloud: This cloud-based analytics platform allows users to manage and share insights seamlessly.

TABLEAU - PRODUCTS

Tableau provides a range of products tailored for different use cases and user requirements. The primary Tableau products include:

Tableau Desktop: A robust data visualization tool for building interactive and shareable dashboards. It is offered as a free trial for 14 days, after which a license must be purchased.

Tableau Public: A free version for creating and publicly sharing visualizations. It has fewer features than Tableau Desktop, and all created visualizations are public and cannot be made private.

Tableau Server: An on-premises solution for sharing dashboards and managing users within an organization.

Tableau Online: A cloud-based platform for sharing dashboards and enabling collaboration.

TABLEAU - PRODUCTS

Tableau Reader: A free application for viewing and interacting with dashboards built in Tableau Desktop.

Tableau Mobile: A mobile application that allows users to access and view Tableau dashboards on their devices.

Tableau Prep: A dedicated tool for cleaning, combining, and organizing data prior to analysis.

Tableau Cloud: This is the new name for the product formerly known as Tableau Online.

POWER BI vs TABLEAU vs EXCEL

Feature	Power BI	Tableau	Excel
LAUNCH YEAR	2011	2004	1985
DATA VISUALIZATION	Strong capabilities, but generally considered less advanced than Tableau	Industry leader with advanced and sophisticated visualization features	Suitable for basic charts and simple data visualization
PROGRAMMING LANGUAGES	Data Analysis Expressions (DAX), M, Python	VizQL, Python, Java	C++, Objective-C
MACOS SUPPORT	Not available for macOS	Fully supported on macOS	Available for macOS
DEVELOPER	Microsoft	Tableau Software (acquired by Salesforce)	Microsoft
PRICE	More affordable than Tableau; cost varies by organization needs	Priced higher than Power BI; cost varies by organization needs	Most cost-effective option

POWER BI vs TABLEAU vs EXCEL

Feature	Power BI	Tableau	Excel
PROCESSING SPEED	Fast data processing	Fast data processing	Slower compared to Power BI and Tableau
DATA ANALYTICS	Strong analytical capabilities	Superior analytical features, exceeding Power BI's capabilities	Limited analytics options
REPORTS	Highly interactive and customizable reports	Highly interactive and personalized reports	Basic interactivity with limited customization
DATASET SIZE	Capable of analyzing large datasets	Capable of analyzing large datasets	Best for small to moderate-sized datasets
TARGET MARKET	Preferred by small and medium-sized enterprises	Preferred by large enterprises	Commonly used by small businesses

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