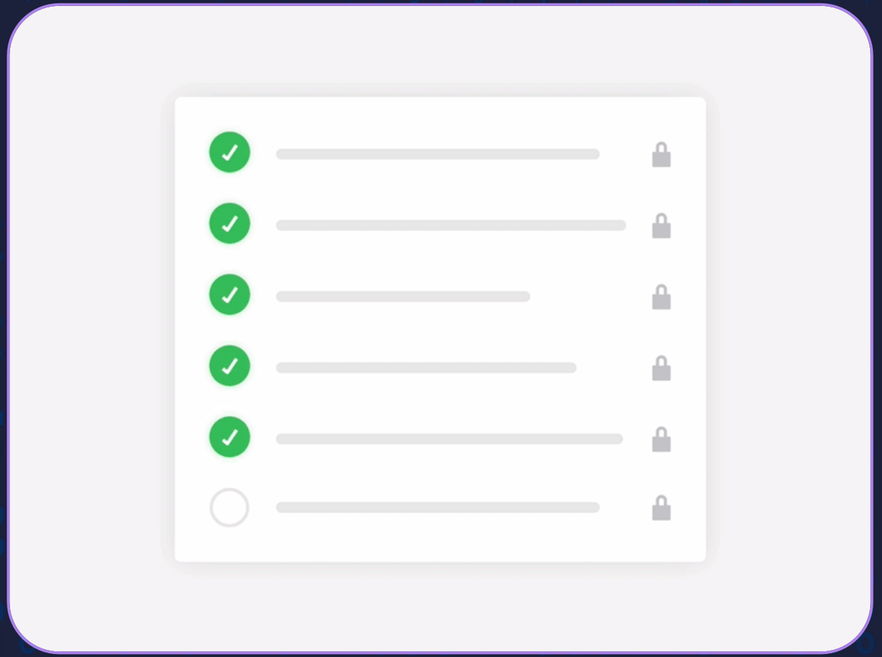
PW SKILLS

TABLEAU

Lecture CheckList

1. Business Intelligence
2. Tools and methodologies used in BI
3. Importance of Visualization
4. Future business impact of BI
5. Why Tableau?
6. Gartner’s Magic Quadrant
7. Tableau Product Suite
8. Tableau Architecture
9. Tableau installation in local system



What is Business Intelligence?

- BI is a technology-driven process that analyses data and provides actionable information, for better decisions.
- **Aim -** Drive a positive change to improve the company's performance and revenue.
- BI encompasses a variety of processes such as data mining, data analysis, KPIs, visualisations, etc.
- By using data to answer questions about the company's past and present, business intelligence significantly improves how a company arrives at its decision-making.

Methodologies used in BI

Basic Methods used :-

- Data collection – Surveys, Questionnaires, Forms, etc.
- Data visualization and Analysis
- Reporting
- Dashboards
- Decision-making

Who uses BI and why?

- People from departments like - sales, marketing, finance, operations, data science, data analysis, etc.

- Tasks include - Statistical analysis, performance measurement against business objectives, gaining customer insights, and communicating data to identify better future opportunities.

Some tools used in BI

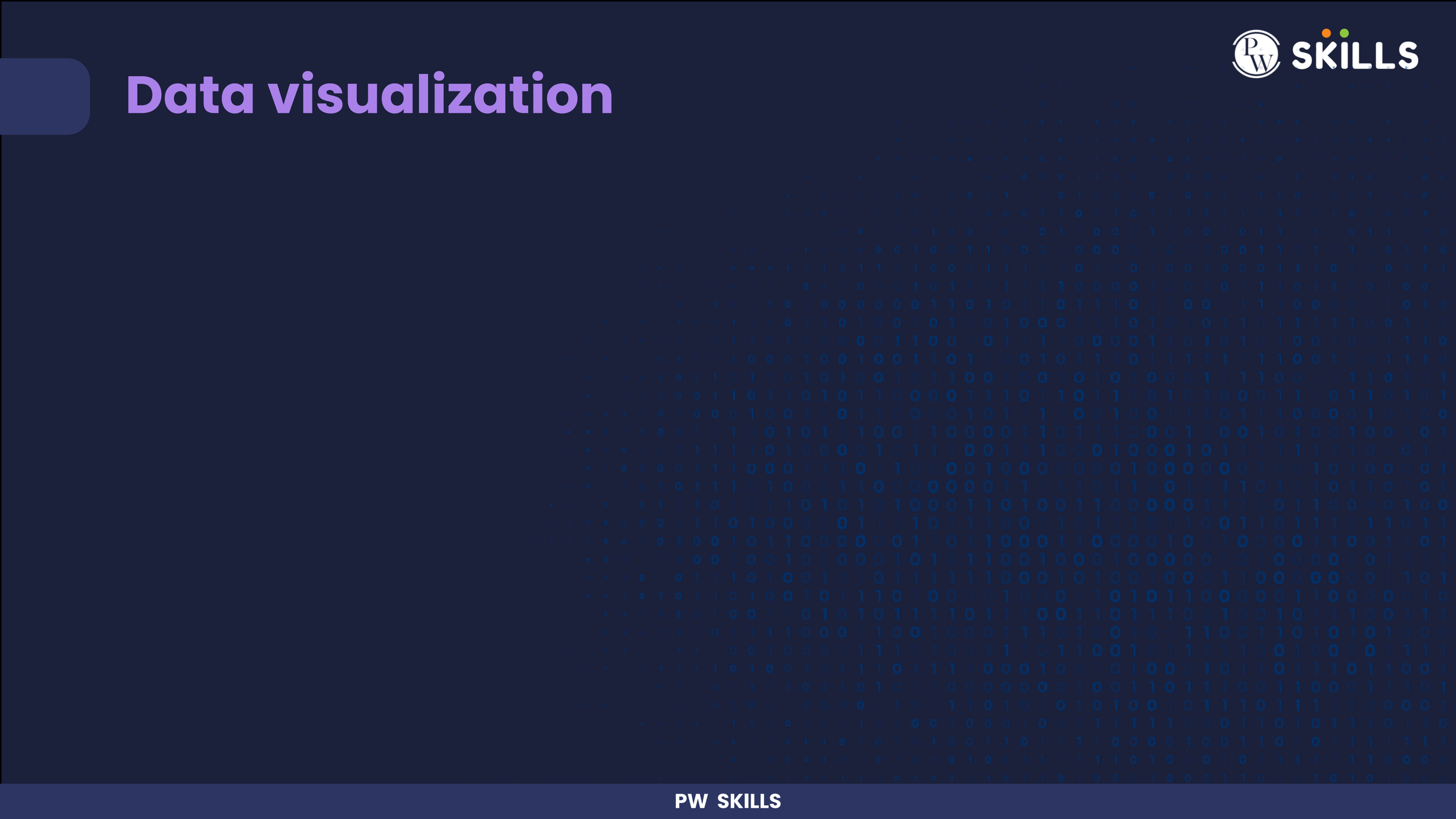
- Power BI
- Tableau
- Qlik
- Dundas BI
- Talend
- Sisense
- Oracle BI

Future impacts of BI

- Business intelligence (BI)'s future and the future of data are inseparably linked.
- As the amount of data created and consumed by businesses grows exponentially, the quickness and convenience with which you can obtain and rely upon that data will be of greater significance than ever before.

- Forecast market trends and consumer preferences
- Predict unforeseen challenges
- Data into Profits
- Predictive Analysis
- Better data-driven decision-making
- Time efficient

Data visualization

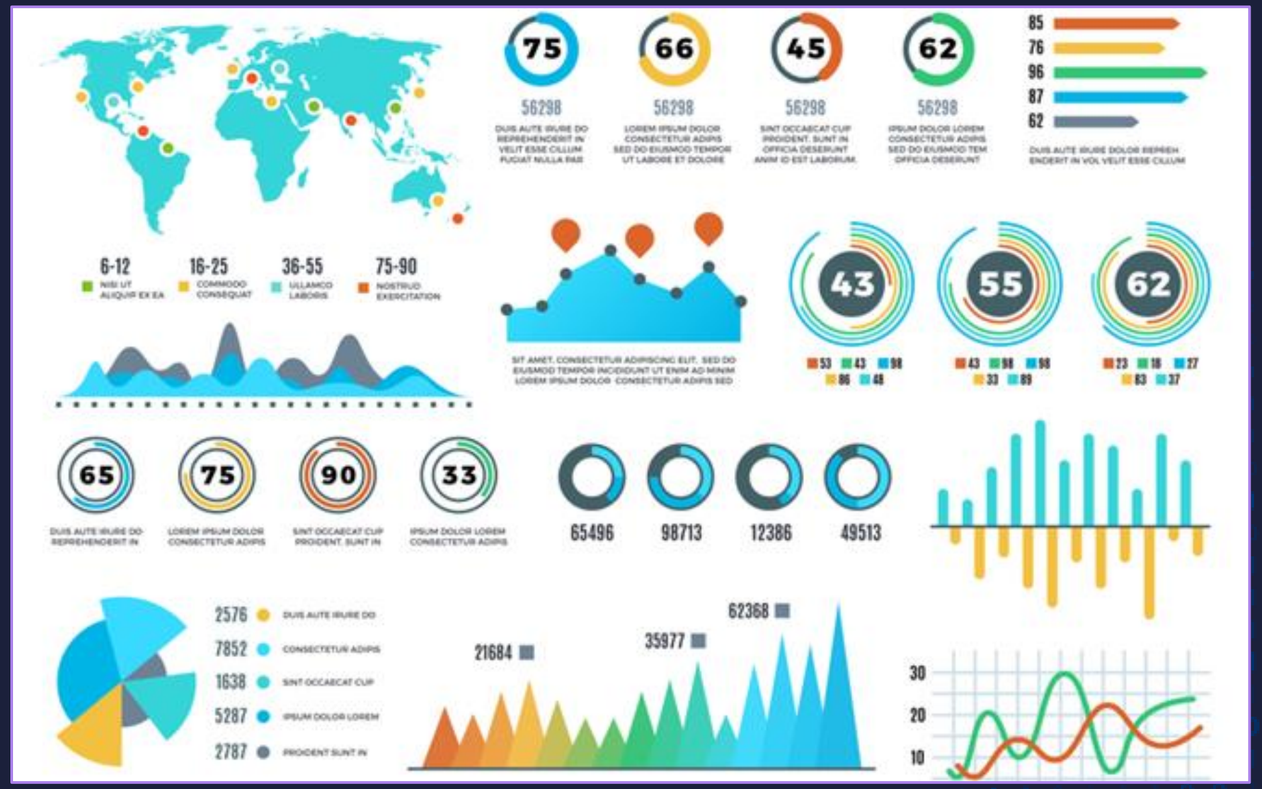


Data visualization

- Data visualisation is the graphical depiction of information and data.
- A form of visual art that captures our attention.
- The tools which include visual components like charts, graphs, maps, etc. come in handy to view and understand trends, outliers, and patterns in data.
- Furthermore, it allows employees or entrepreneurs to communicate facts to non-technical people without creating confusion.
- Data visualisation tools and techniques are critical in this Big Data age, for analysing huge volumes of data and making data-driven (strategic decisions based on data analysis and interpretations) decisions.

Benefits of data visualisation

- Colours and patterns catch our attention.
- Humans can quickly distinguish between red and blue, as well as squares and circles.
- When we look at a chart, we immediately spot trends and outliers.
- If you can't find a trend when you look at a huge spreadsheet of data, visualisation becomes important.
- Also, with visualization, information can be shared quickly and easily.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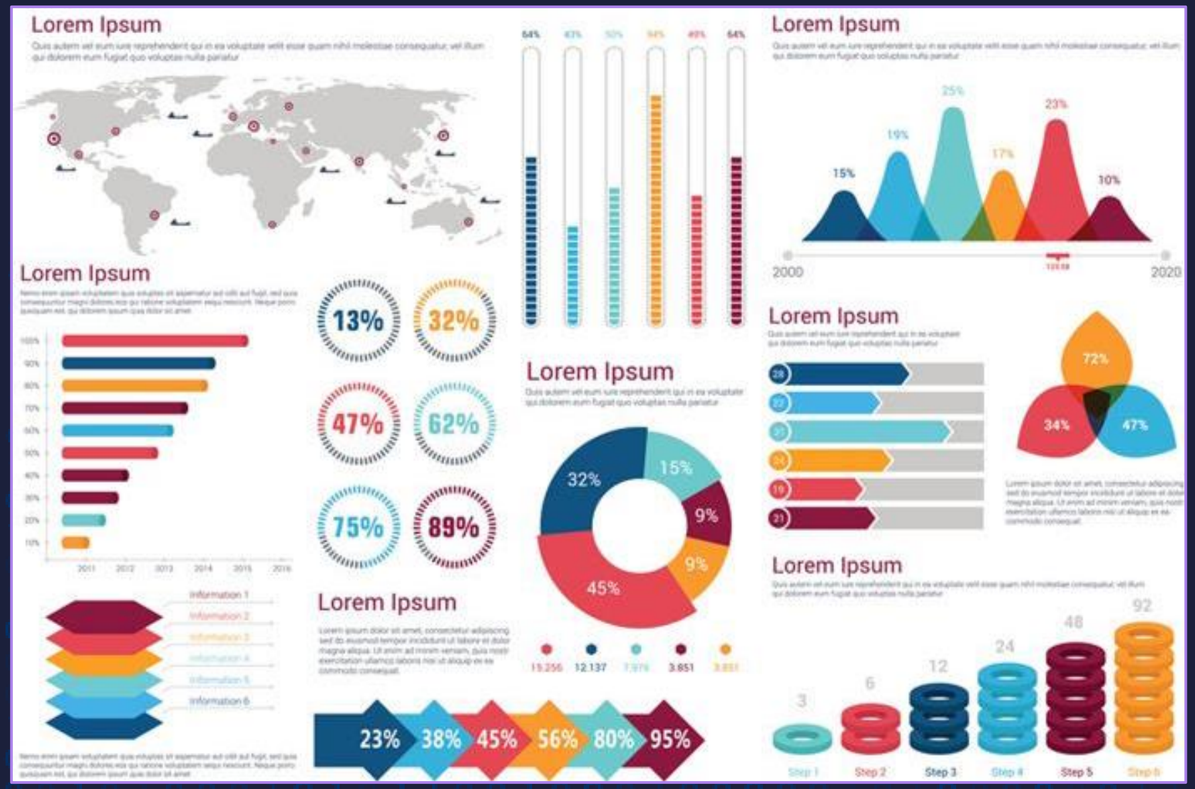
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Tableau

- Tableau is a highly effective and rapidly expanding data visualisation application used in the Business Intelligence Industry.
- It aids in the simplification of raw data very much clearly.
- Tableau assists in the creation of data that can be grasped by people at all stages of an organisation.
- It analyses data swiftly and delivers visualisations in the form of dashboards and workbooks.

System requirements

- Microsoft Windows 8/8.1, Windows 10 (x64)
- 4 GB memory
- 1.5 GB minimum free disk space
- CPUs must support SSE4.2 and POPCNT instruction sets
- MacOS Mojave 10.14, macOS Catalina 10.15, macOS Big Sur 11.4+, and macOS Monterey 12.6+ (for Tableau 2022.3+) Intel processors
- M1 processors under Rosetta 2 emulation mode
- 1.5 GB minimum free disk space
- CPUs must support SSE4.2 and POPCNT instruction sets

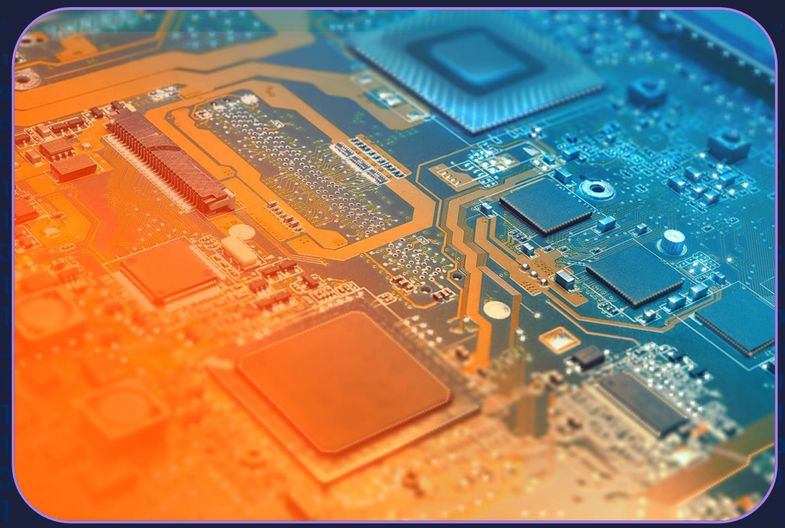


Tableau product suite

- Tableau desktop
- Tableau Cloud
- Tableau server
- Tableau public
- Tableau reader

(Tableau prep – ETL tool)

Tableau product suite

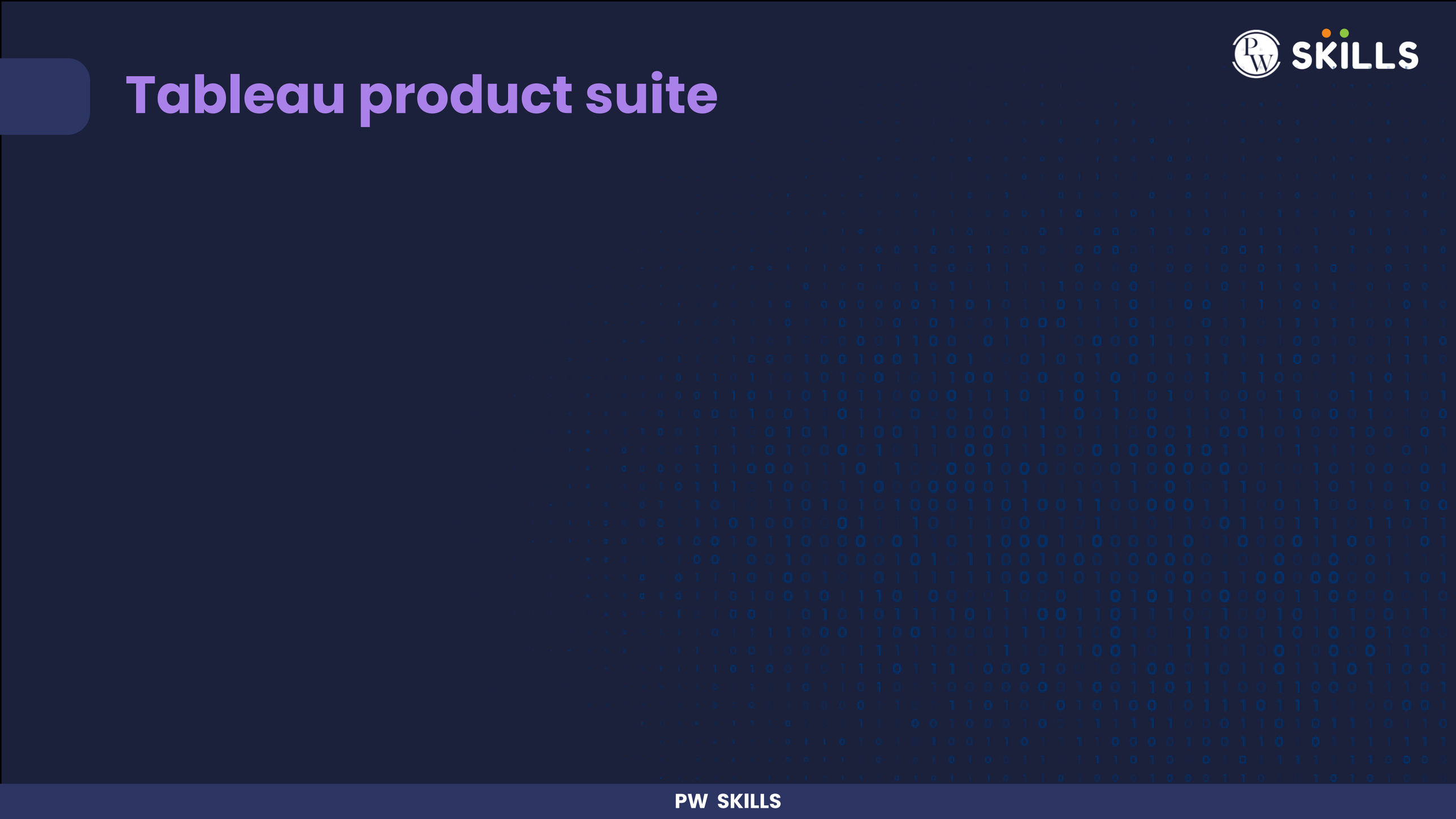


Tableau product suite

Tableau Creator

- Connect your data, build vizzes, and publish dashboards.
- Connect to any type of data
- Visual data preparation with Tableau Prep
- Powerful analytics with Tableau Desktop and Tableau Server
- Includes everything in Tableau Explorer

CONTACT FOR PRICING →

Tableau Explorer

- Edit existing dashboards.
- Connect to published data sources
- Author and share tailored content on Tableau Server
- Includes everything in Tableau Viewer

CONTACT FOR PRICING →

Tableau Viewer

- Access existing dashboards.
- View and interact with trusted content on Tableau Server
- Stay connected with subscriptions, notifications, and mobile

CONTACT FOR PRICING →

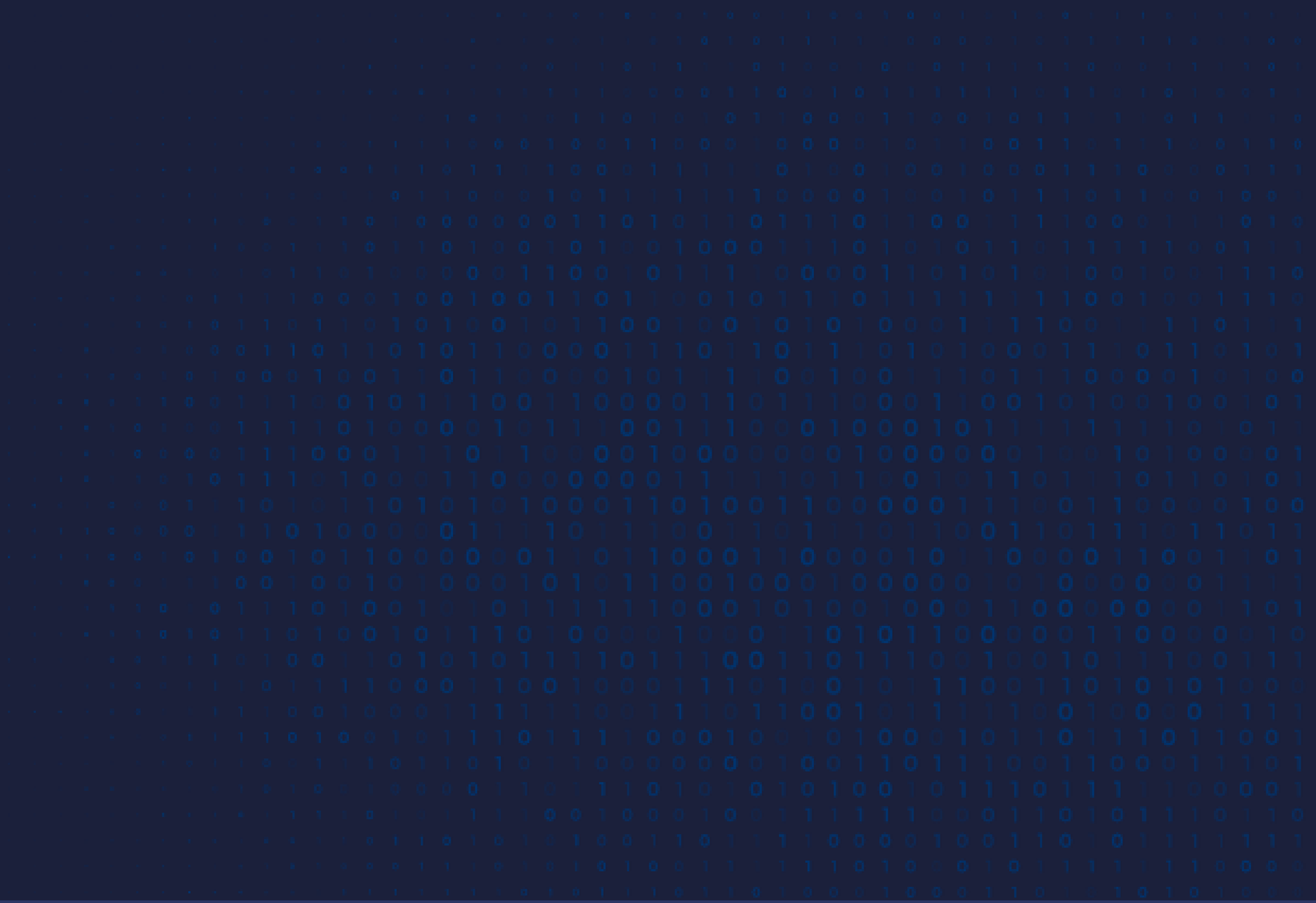
Tableau Architecture

Tableau architecture comprises :-

1. Data Server/Sources (75+)
2. Data connector
3. Tableau Server
4. Clients – web, mobile, desktop

Why use Tableau?

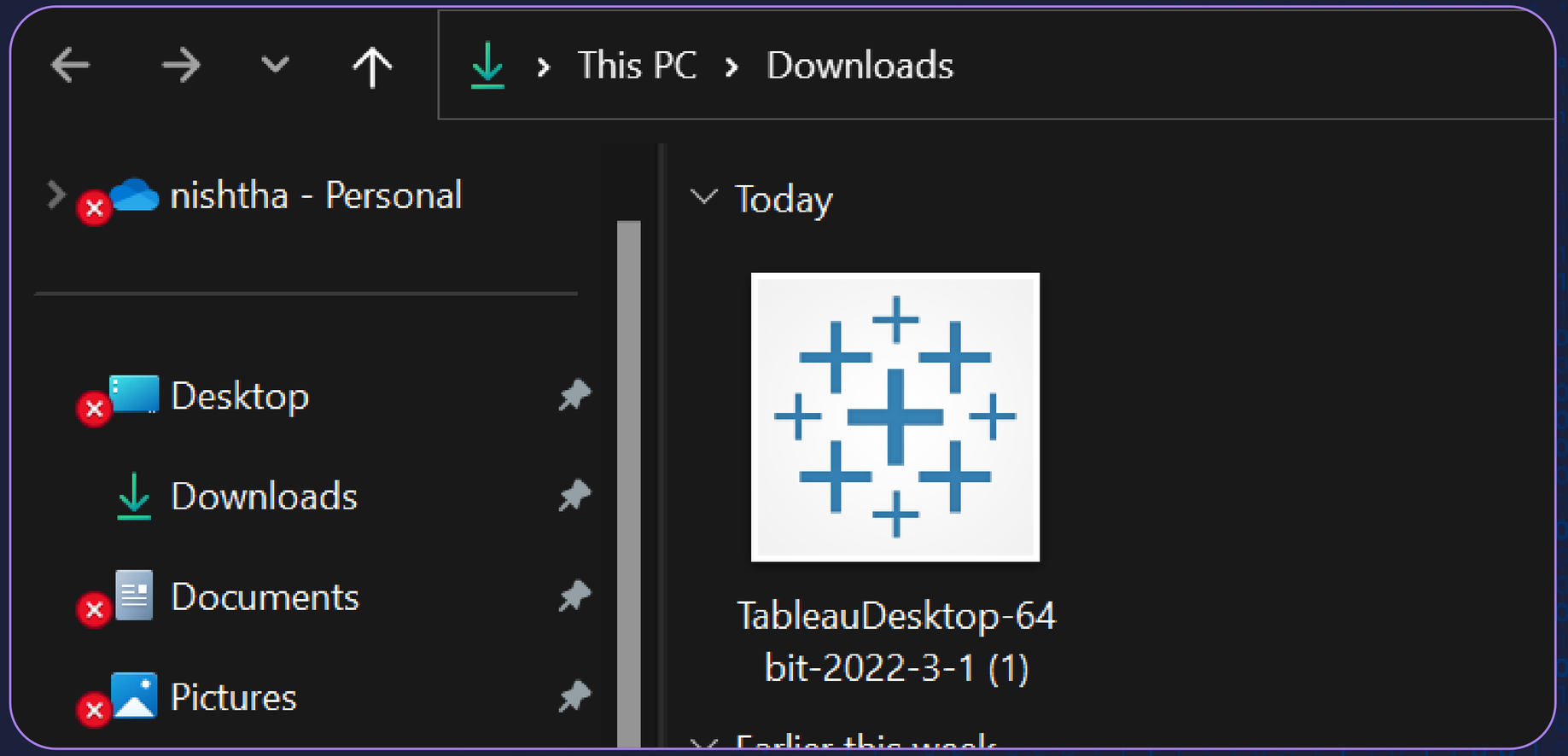
- User-friendly
- High performance
- Quite speedy
- Pretty convenient-to-use
- Interactive
- Easy publishing
- Rich visualizations



Why use Tableau?

- Huge Data handling
- Low cost
- Easy publishing
- Direct connection with multiple databases
- Simple drag-and-drop
- Gartner’s magic quadrant – one of the best

Install Tableau



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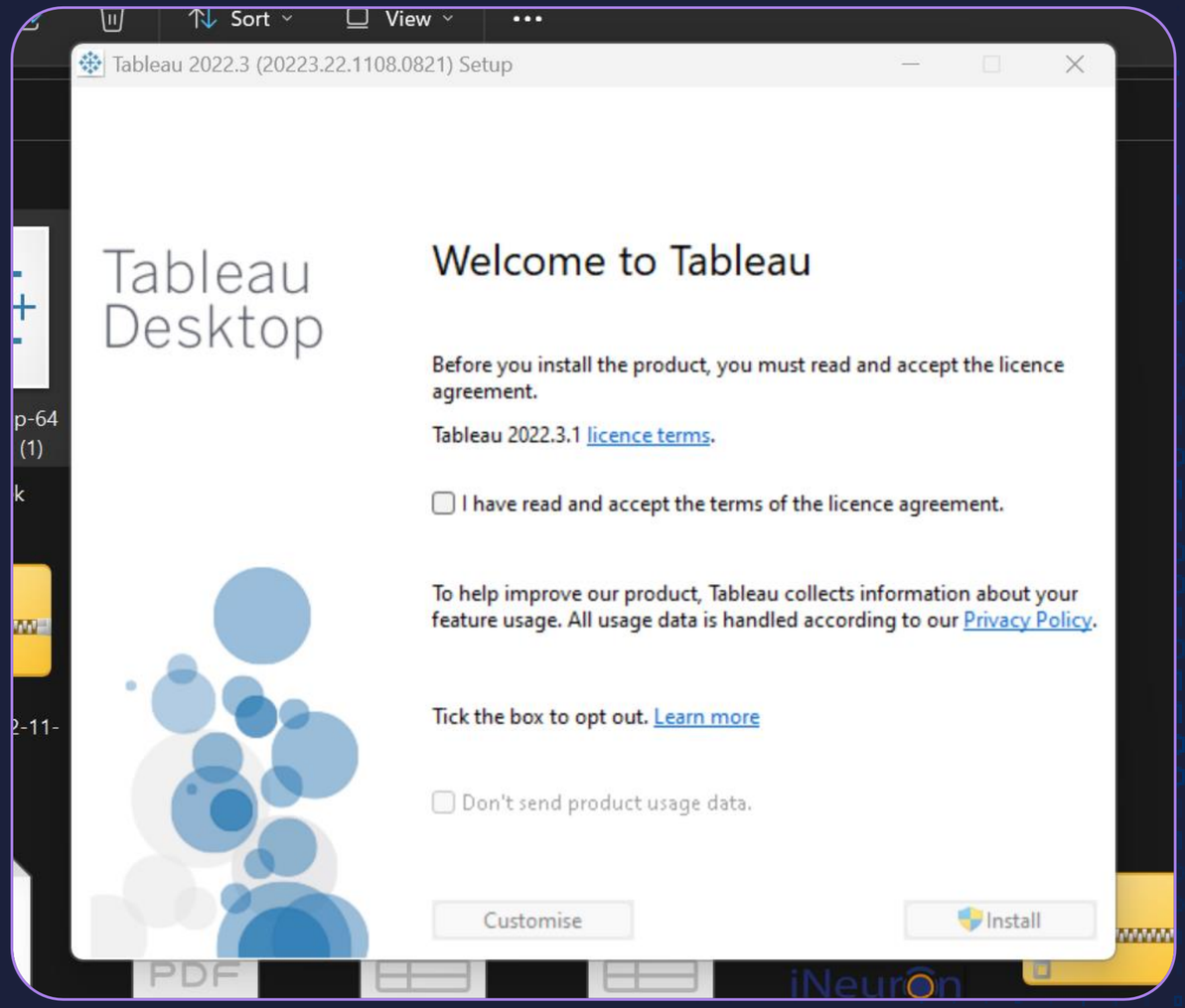

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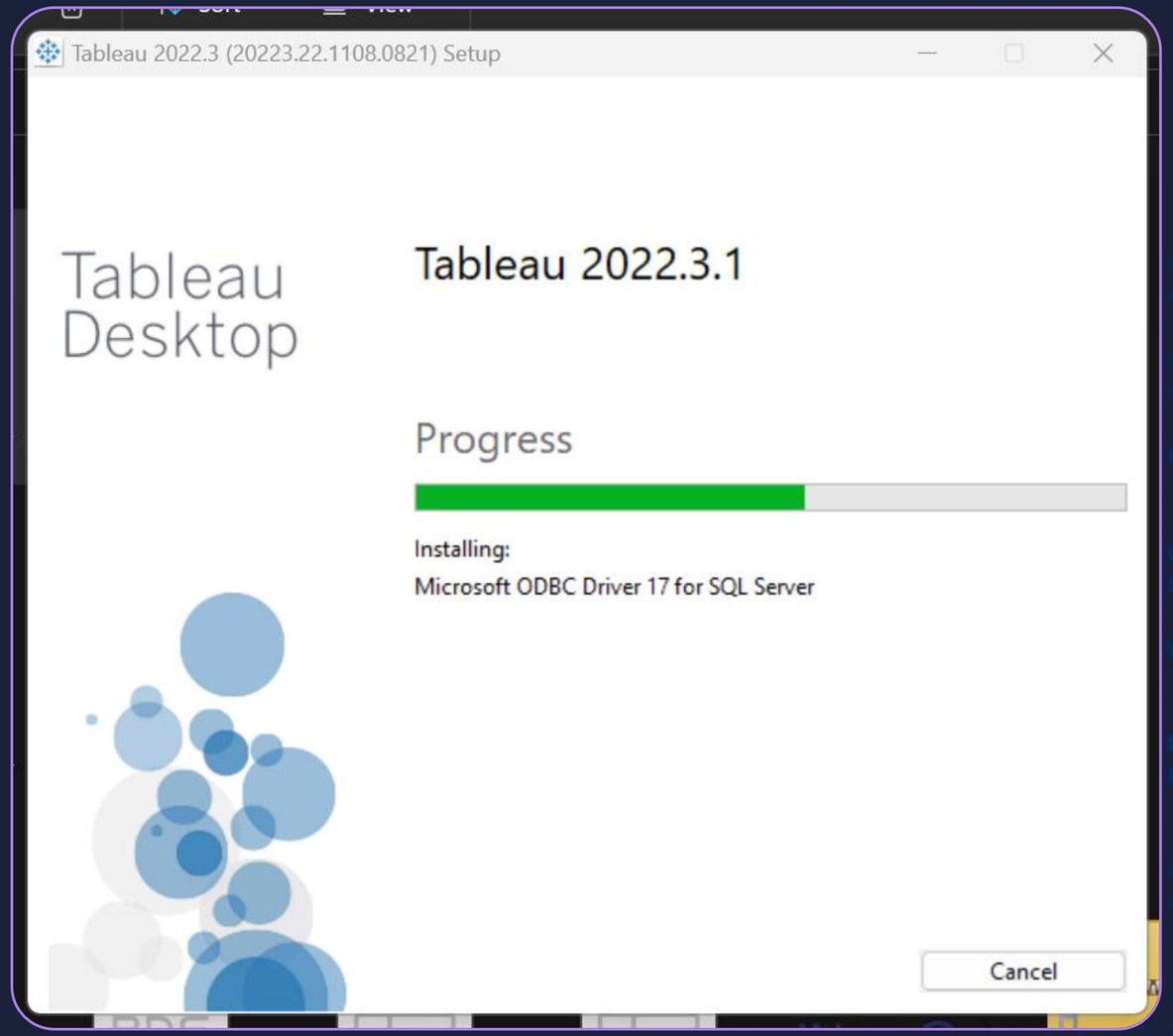

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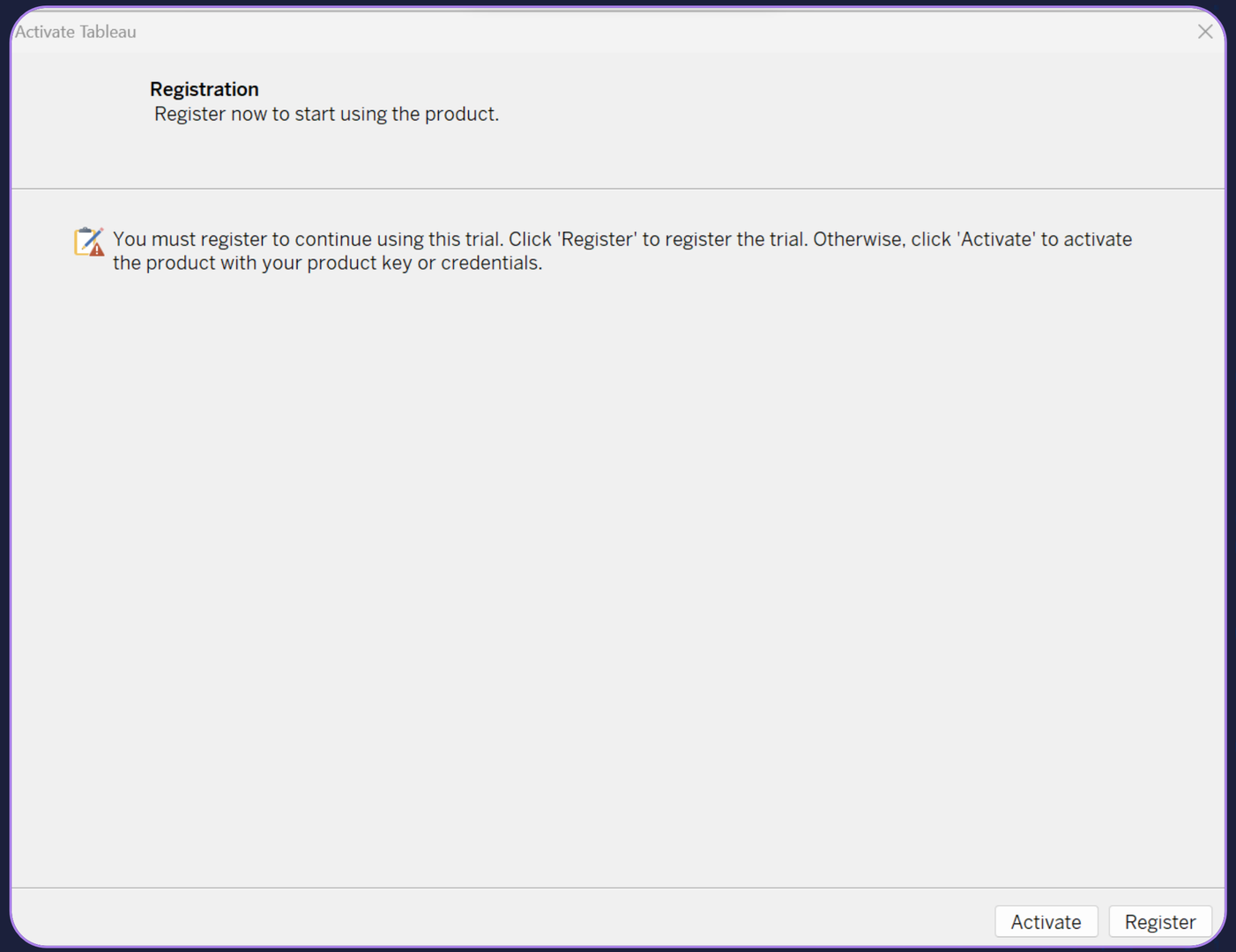

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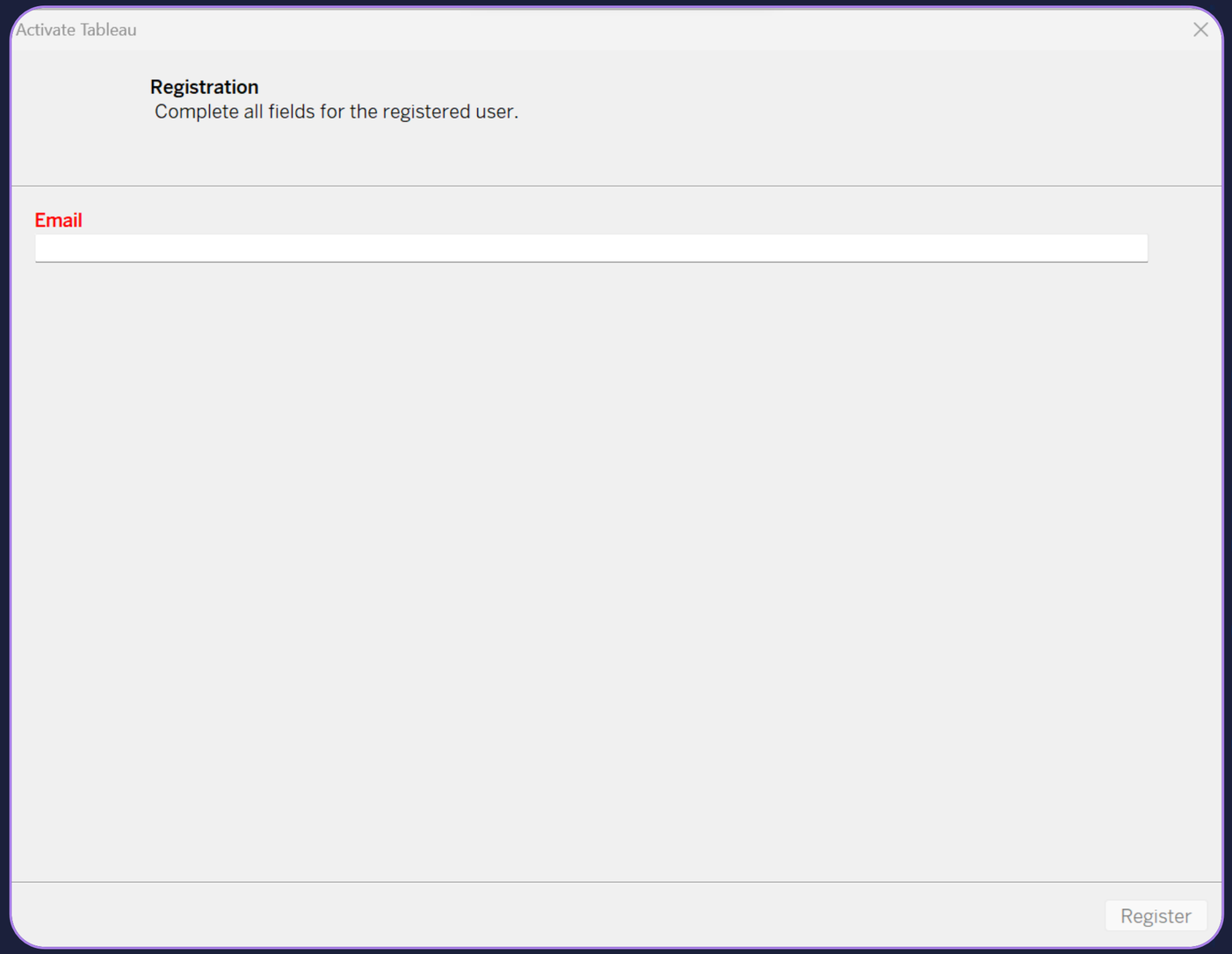
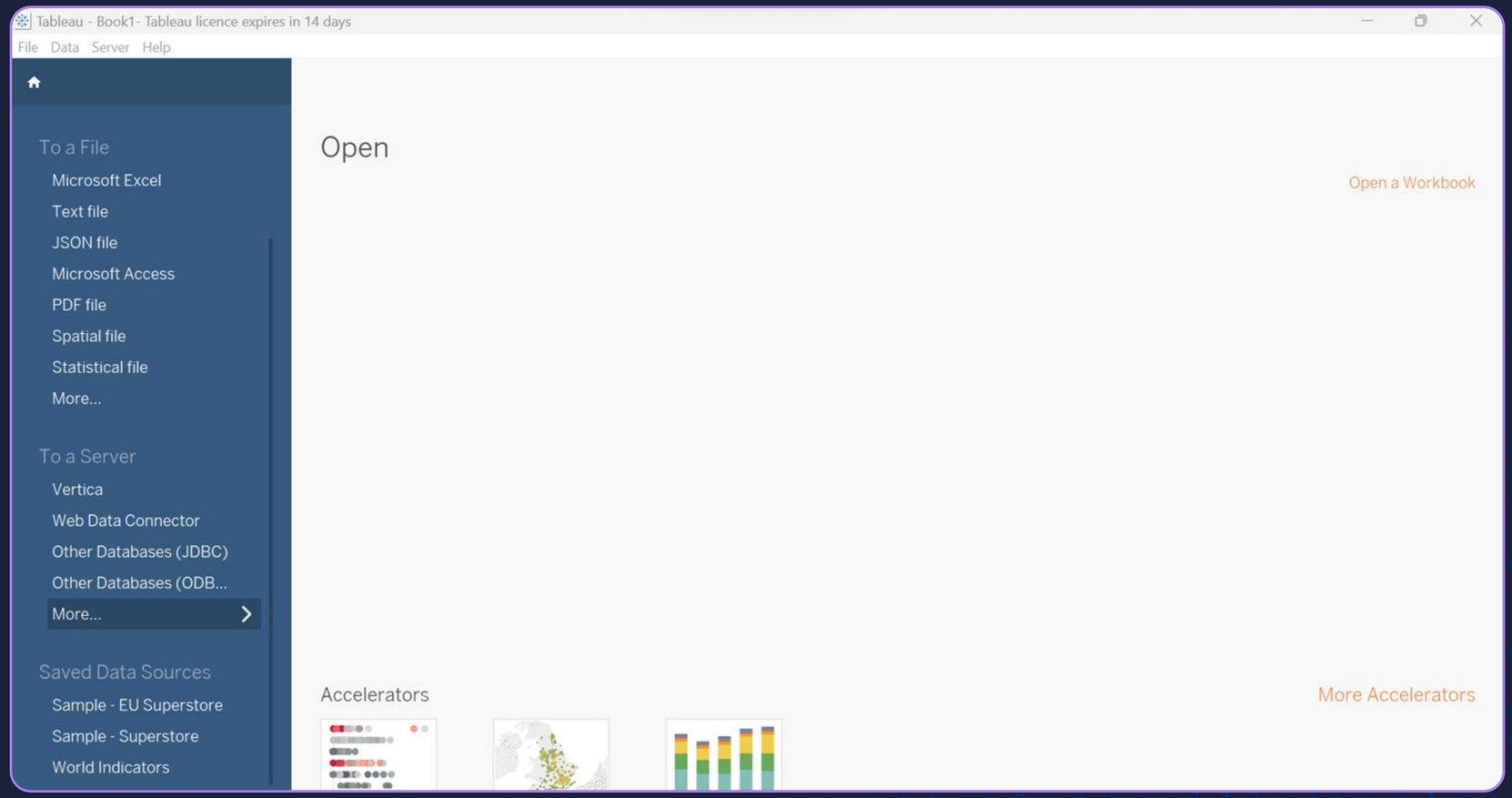
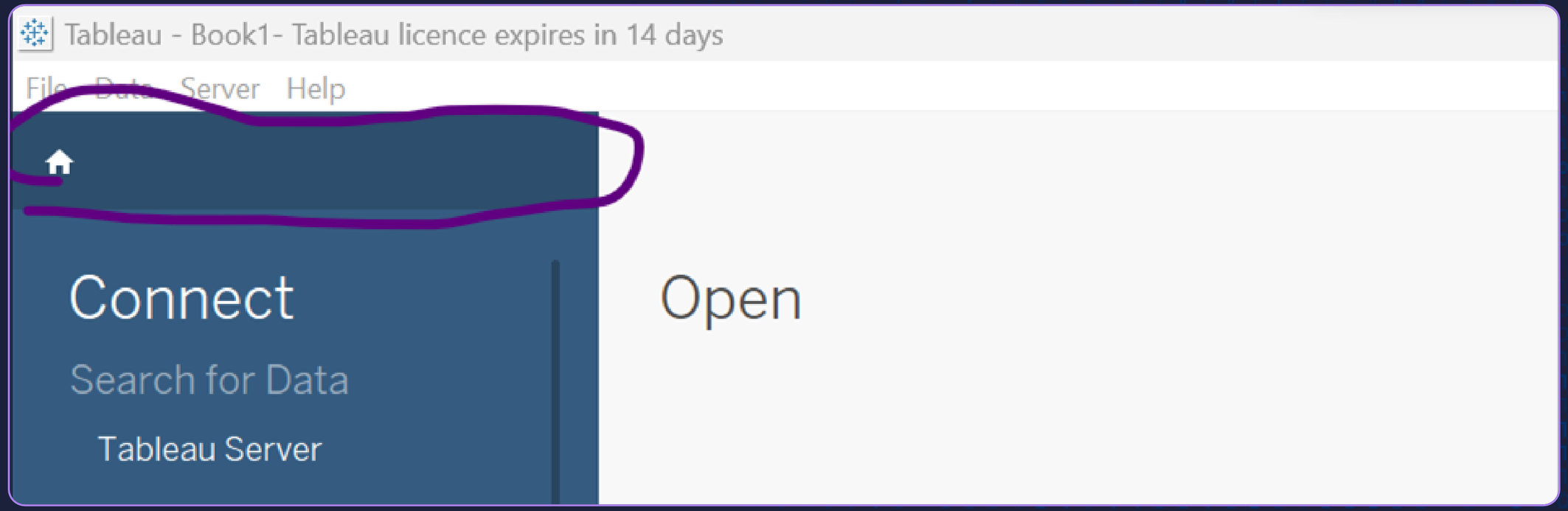


Tableau installed



Opening A New Workbook



THANK YOU