



**AIT**  
Asian Institute of Technology



# Business Intelligence Tools

Junar Landicho

**AT84.02: Business Intelligence and Analytics**  
January 2021



# Agenda for Today

## ■ Business Intelligence (BI)

- Introduction to BI
- Features of BI Tools
- Different BI Tools

## ■ Tableau

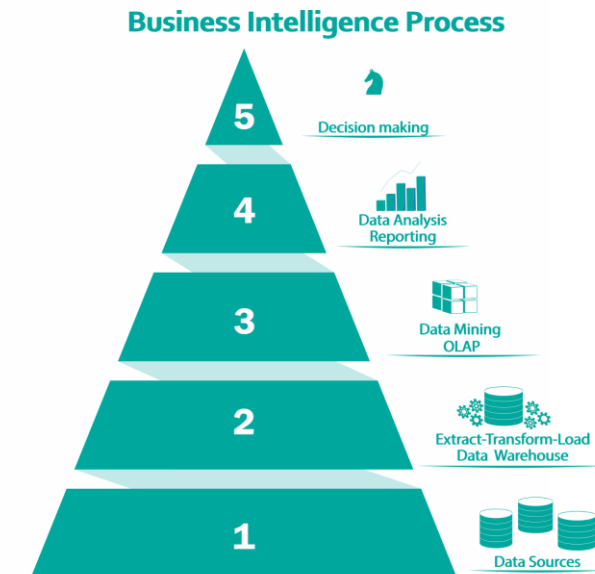
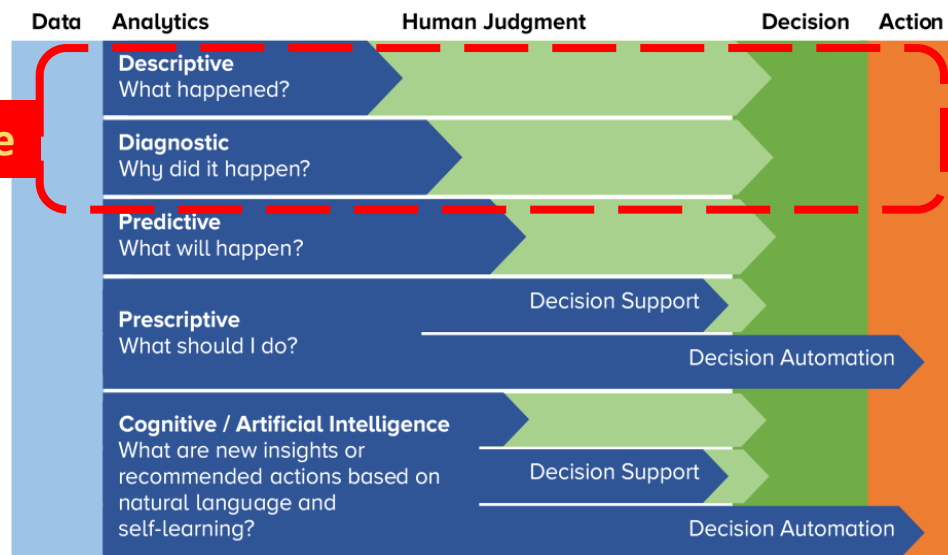
- Overview of Tableau
- Installation of Tableau Public
- Getting Started with Tableau Public



# Introduction to Business Intelligence

- Business Intelligence (BI) is a **technology-driven process** for analyzing. It combines **architectures, tools, databases, analytical tools, applications** and **methodologies**.
- The main objective is to enable **interactive access to data, manipulate data** and to **help corporate executives, business managers** and **other end users** to conduct appropriate analyses and make more informed business decisions.
- The process of BI is based on the **transformation of data** to information, then **decisions** and finally to **actions**.

## Business Intelligence



# Features of BI Tools

- Dashboards
- Metadata Management
- Data Analysis
- Reporting & Visualization
- Access Control & Security
- Open Integration
- Mobile Support



# BI Tools





# BI Tools



## About Microsoft Power BI

- An analytics tool that assists in reporting, data mining and data visualization to provide business insights.
- Business can connect to a variety of data sources and create own dashboards and reports.
- It has three version: **Desktop** - for free for individual use, **Pro plan** - monthly price-per-user SaaS subscription, **Premium plan** - provides enterprise-level insights with on-premise deployment and a dedicated cloud infrastructure.

## Why use Power BI?

- Live 360-Degree View of Data
- Collaborate Across Organization
- On-the-Go Access

*Source: selecthub.com*

# BI Tools

**ORACLE®**

**BUSINESS INTELLIGENCE**

## About Oracle BI

- An AI-powered solution that provides robust reporting and analytics features to businesses of all sizes.
- It offers a strong selection of reporting and analytics features from the convenience of the cloud.

## Why use Power BI?

- Customized Responses
- Conversation Analytics
- What-If Scenarios

*Source: selecthub.com*

# BI Tools



## About MicroStrategy

- A data analytics platform that delivers actionable intelligence to organizations of all sizes.
- It allows users to customize data visualizations and build personalized real-time dashboards.
- It leverages data connectivity, machine learning and mobile access to offer users comprehensive control over their insights.

## Why use MicroStrategy?

- Maximize Business Insights
- Seamless Integration
- Enterprise Mobility

*Source: [selecthub.com](https://selecthub.com)*



# BI Tools

The Domo logo is displayed in a light blue, sans-serif font.

## About Domo

- A cloud-based business management suite that accelerates digital transformation for businesses of all sizes.
- It performs both micro and macro-level analysis to provide teams with in-depth insight into their business metrics as well as solve problems smarter and faster.

## Why use Domo?

- Unified view of Business Data
- Collaboration
- Answer Business Questions

*Source: selecthub.com*

# BI Tools



## About SAS Visual Analytics

- It provides guided exploration, interactive dashboards, smart visualizations and self-service analytics to users of all technical skill levels, promoting data literacy and visibility.
- Its versatile, scalable design helps users make better business decisions based on data transparency.
- Built on a cohesive in-memory architecture, it promotes intelligent action driven by insight.

## Why use SAS Visual Analytics?

- Discover Data Relationships and Patterns
- Glean Data-Based Insights
- Perform Guided and Augmented Analysis

*Source: [selecthub.com](https://selecthub.com)*

# Overview of Tableau

## What is Tableau?

- A data visualization and analytics solution that assists enterprises in making data-driven business decisions.
- It blends information from a wide range of sources to deliver actionable, real-time insights.
- It allows exploration of data via intuitive means such as drag-and-drop filtering and natural language queries, irrespective of skill levels.



## Why use Tableau?

- Powerful Visualization
- Explore any type of data sources
- Multi-Layered Security

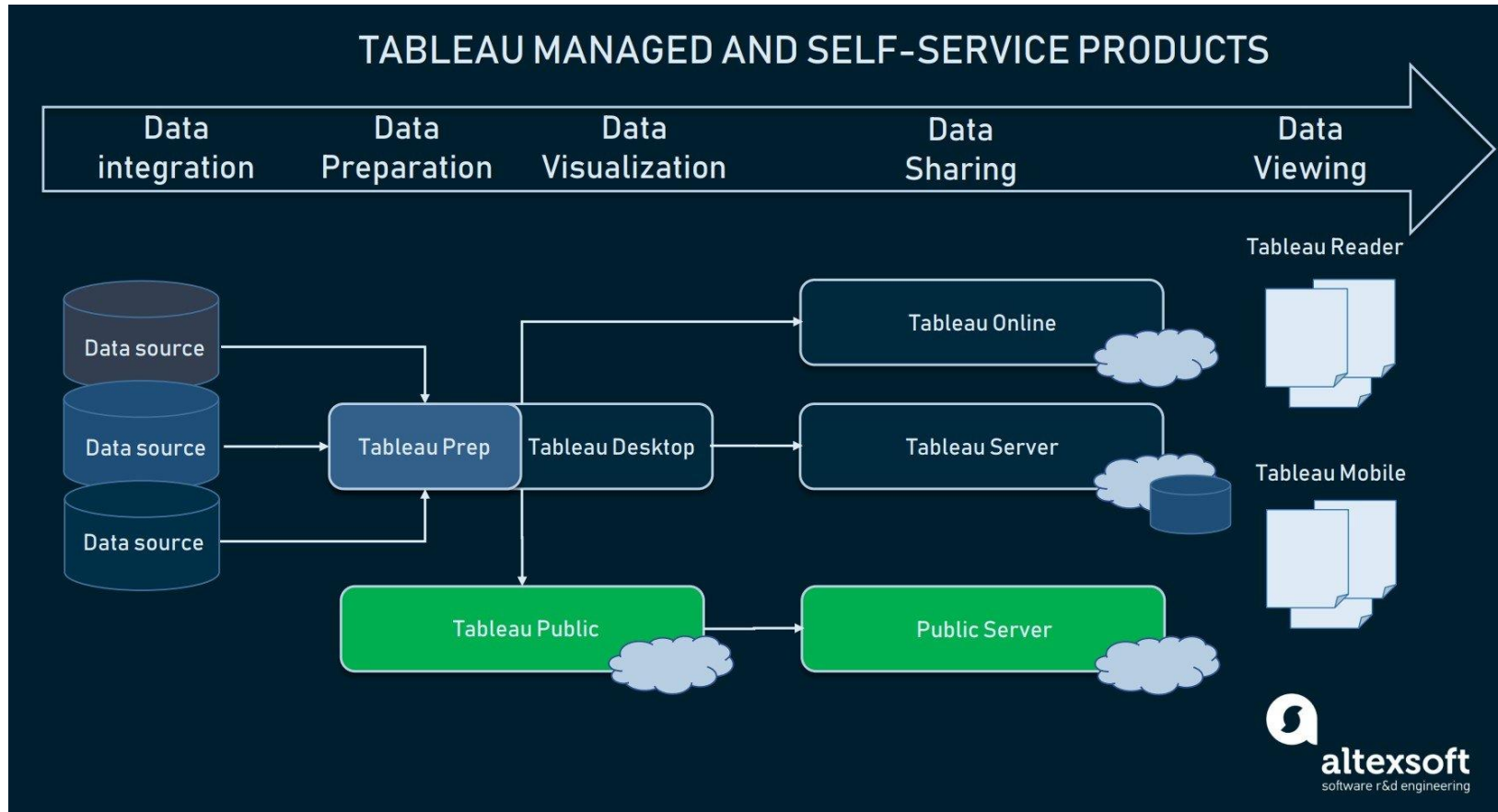
## Some key features

- Drag and Drop Visualizations
- Augmented Data Preparation
- Geographic Data Analysis
- Real-time Access & Role-Based Permissions

*Source: selecthub.com*

# Overview of Tableau

## Tableau Product Suite



Source: [altexsoft.com](https://altexsoft.com)

# Installation of Tableau Public

## System Requirements

### Windows

- Microsoft Windows 7 or newer (x64)
- 2 GB memory
- 1.5 GB minimum free disk space
- CPUs must support SSE4.2 and POPCNT instruction sets

### Mac

- macOS High Sierra 10.13, macOS Mojave 10.14 and macOS Catalina 10.15
- Intel processors
- 1.5 GB minimum free disk space
- CPUs must support SSE4.2 and POPCNT instruction sets

*Source: tableau.com*

# Installation of Tableau Public

## System Requirements

### Virtual Environments

- Citrix environments, Microsoft Hyper-V, Parallels, VMware, Microsoft Azure and Amazon EC2.
- All of Tableau's products operate in virtualized environments when they are configured with the proper underlying Windows operating system and minimum hardware requirements.

### Internationalization

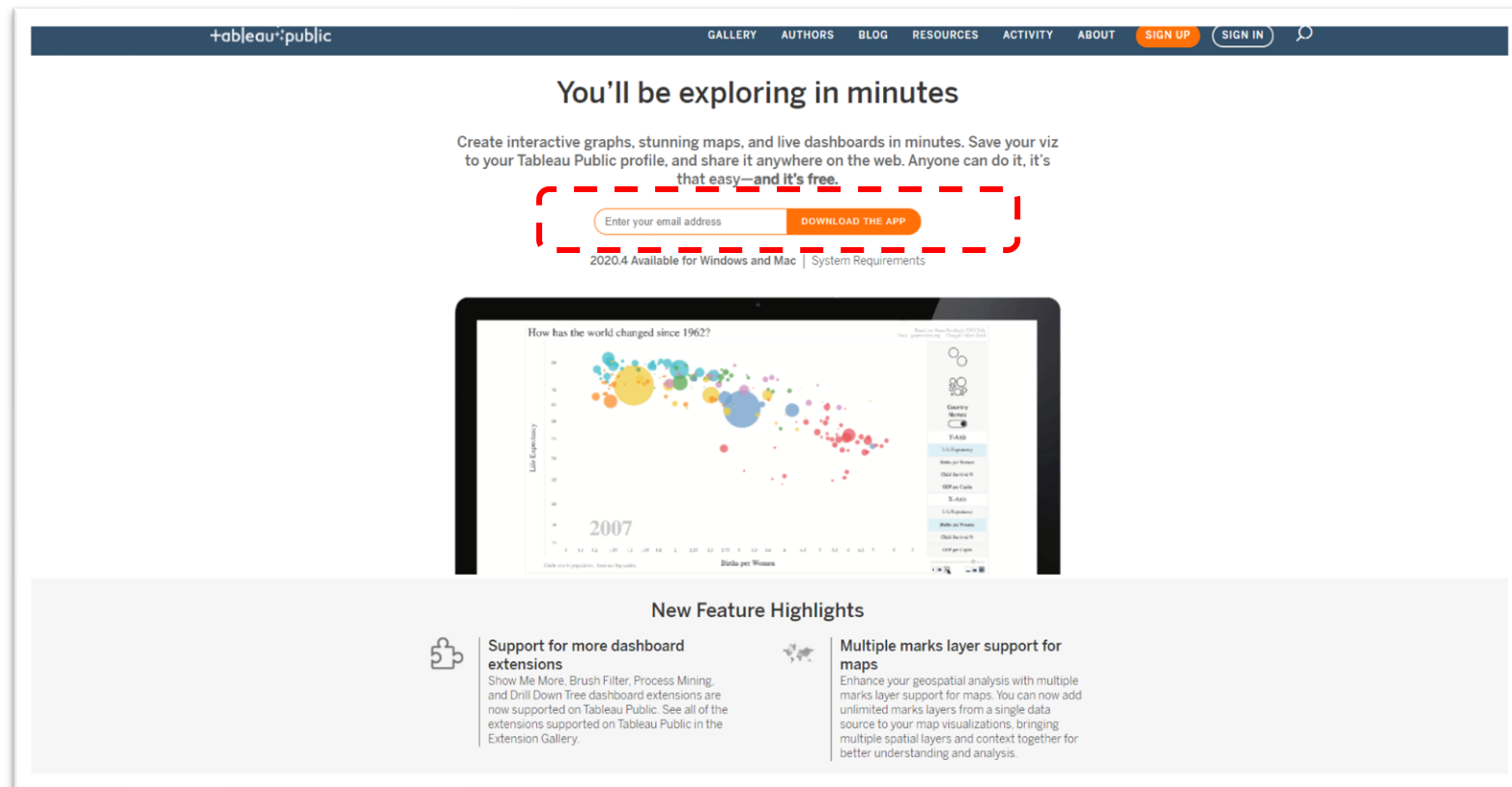
- These products are Unicode-enabled and compatible with data stored in any language.
- The user interface and supporting documentation are in English, French, German, Italian, Spanish, Brazilian Portuguese, Japanese, Korean, Traditional Chinese, and Simplified Chinese.

*Source: tableau.com*



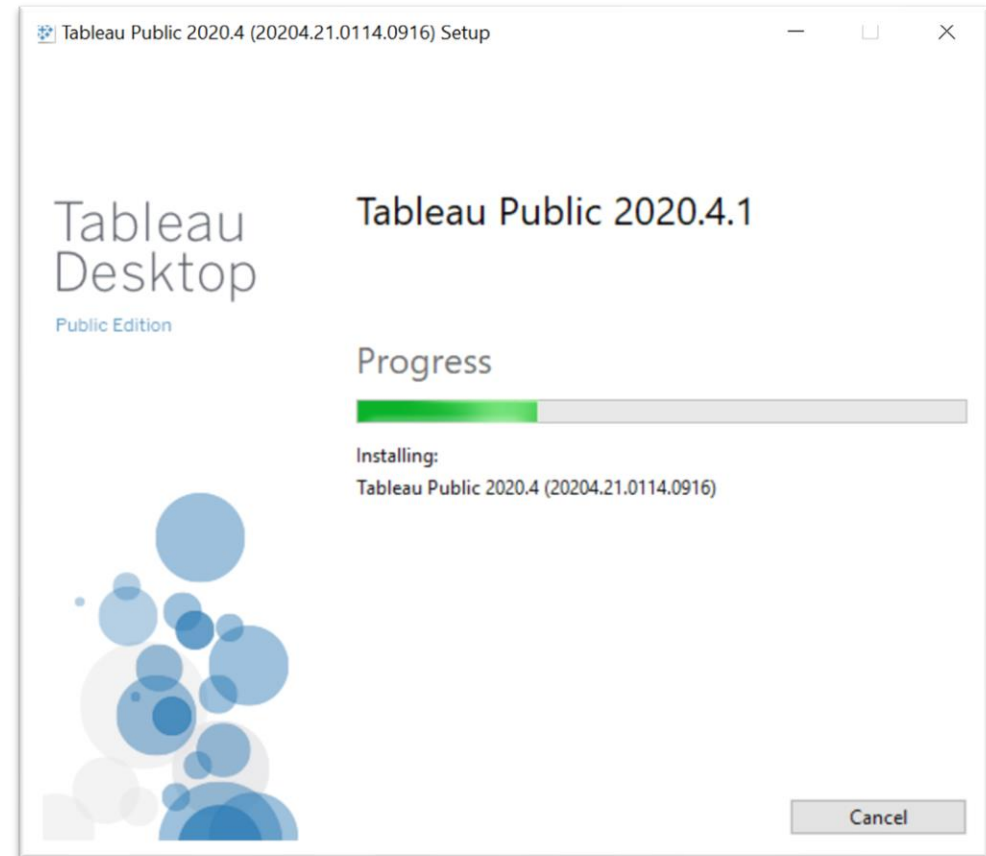
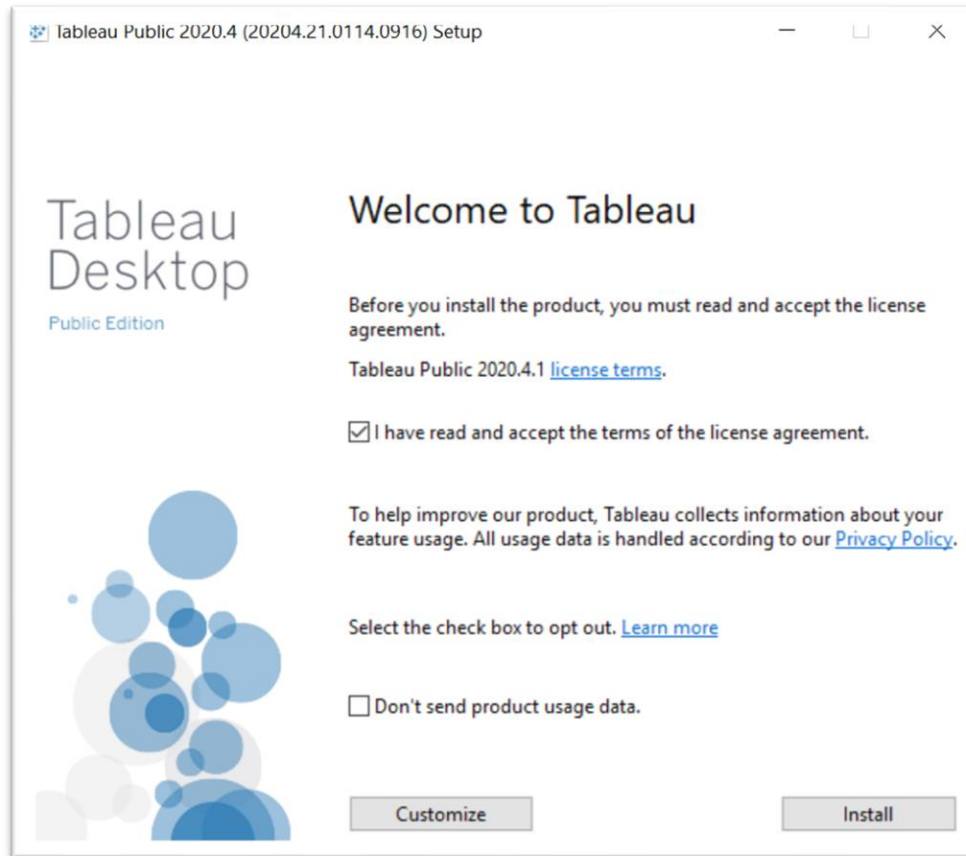
# Installation of Tableau Public

Visit <https://public.tableau.com/en-us/s/download>.  
Email add is needed to download the app.



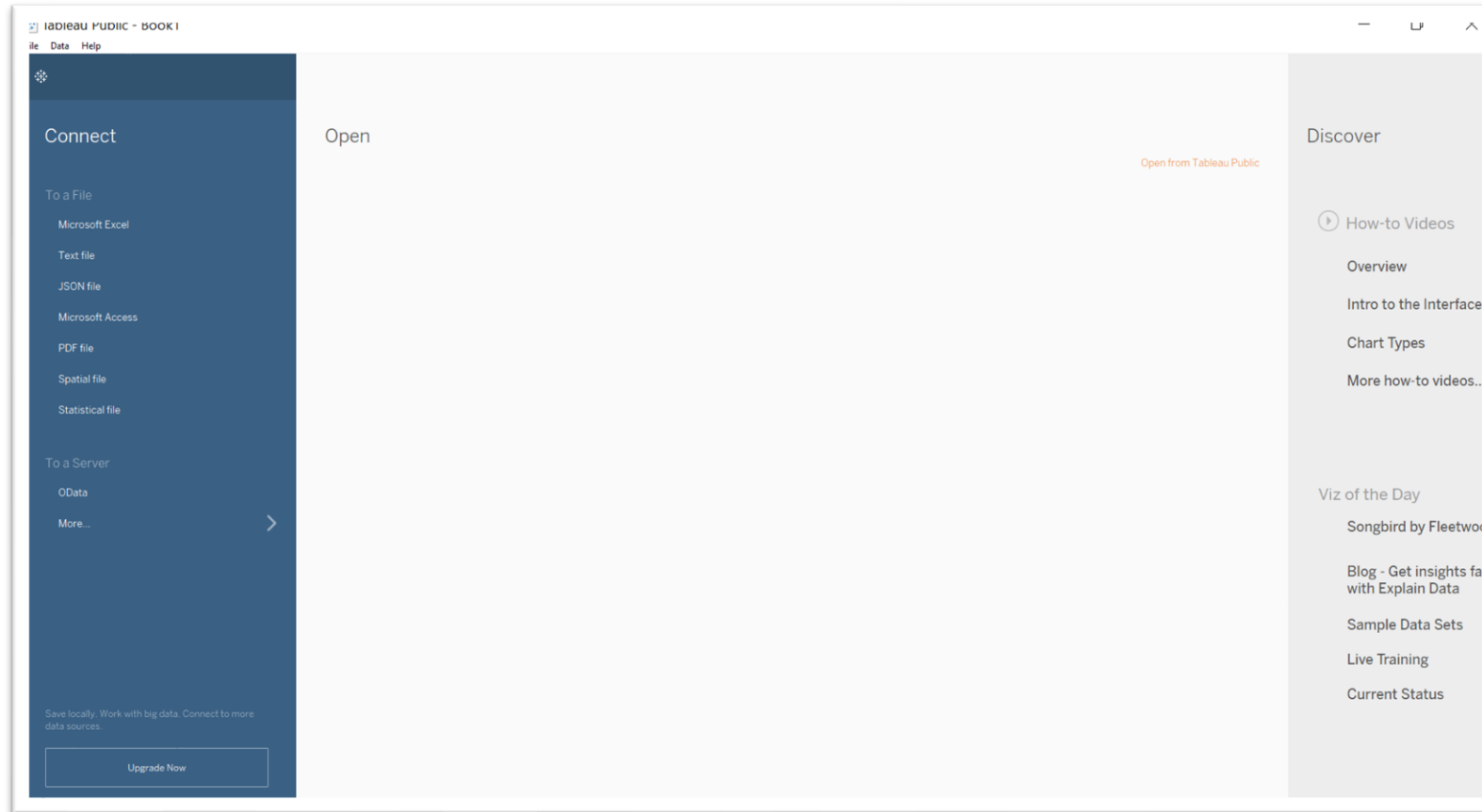
# Installation of Tableau Public

Open the downloaded file. Accept the terms and conditions and click on "Install" button.



# Getting Started with Tableau Public

The Start Screen of Tableau after installation.



# Getting Started with Tableau Public

Tableau can connect to various types of data sources.

Tableau Public - WORKBOOK

File Data Window Help

Connections [Add](#)

train  
Microsoft Excel

Sheets [p](#)

☐ Use Data Interpreter  
Data Interpreter might be able to clean your Microsoft Excel workbook.

train

New Union

train (train)

Filters  
0 | [Add](#)

train

Need more data?  
Drag tables here to relate them. [Learn more](#)

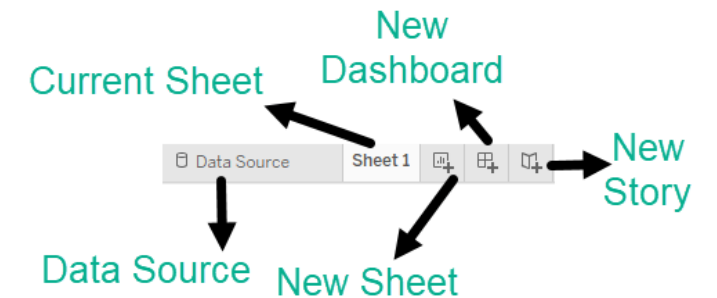
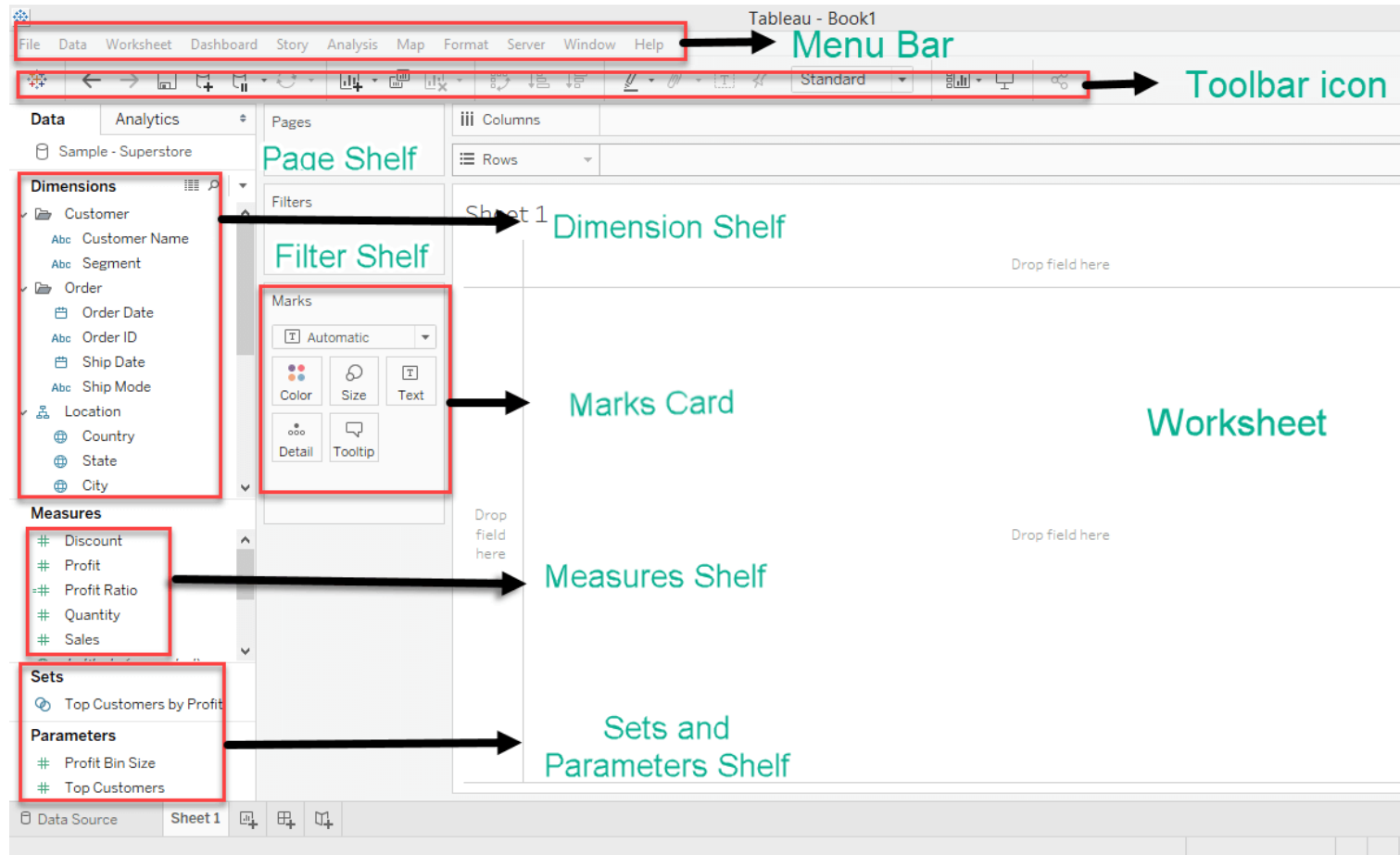
Sort fields Data source order ☐ Show aliases ☐ Show hidden fields 891 rc

Passenger Id	Survived	Pclass	Name	Sex	Age	Sib Sp	Parch	Ticket	Fare	Cabin	Embarked
1	0	3	Braund, Mr. Owen Harris	male	22.0000	1	0	A/5 21171	7.250	null	S
2	1	1	Cumings, Mrs. John Bradley (Florence Bri...	female	38.0000	1	0	PC 17599	71.283	C85	C
3	1	3	Heikkinen, Miss. Laina	female	26.0000	0	0	STON/O2 3101282	7.925	null	S
4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0000	1	0	113803	53.100	C123	S
5	0	3	Allen, Mr. William Henry	male	35.0000	0	0	373450	8.050	null	S
6	0	3	Moran, Mr. James	male	null	0	0	330877	8.458	null	Q
7	0	1	McCarthy, Mr. Timothy J	male	54.0000	0	0	17463	51.863	E46	S
8	0	3	Palsson, Master. Gosta Leonard	male	2.0000	3	1	349909	21.075	null	S
9	1	3	Johnson, Mrs. Oscar W	female	27.0000	0	2	347742	11.133	null	S

Data Source Sheet 1

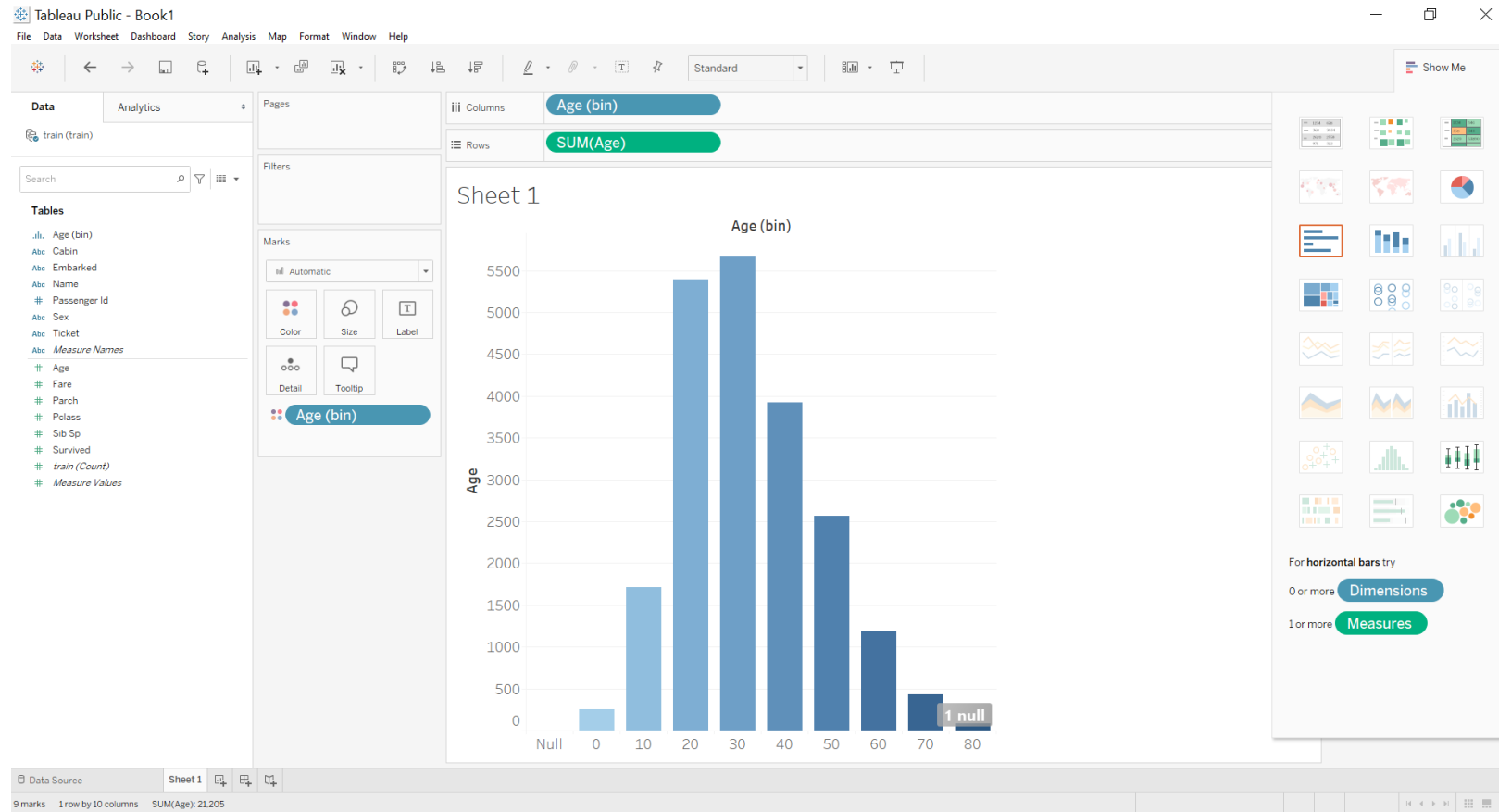
# Getting Started with Tableau Public

## Tableau Public Workspace



# Getting Started with Tableau Public

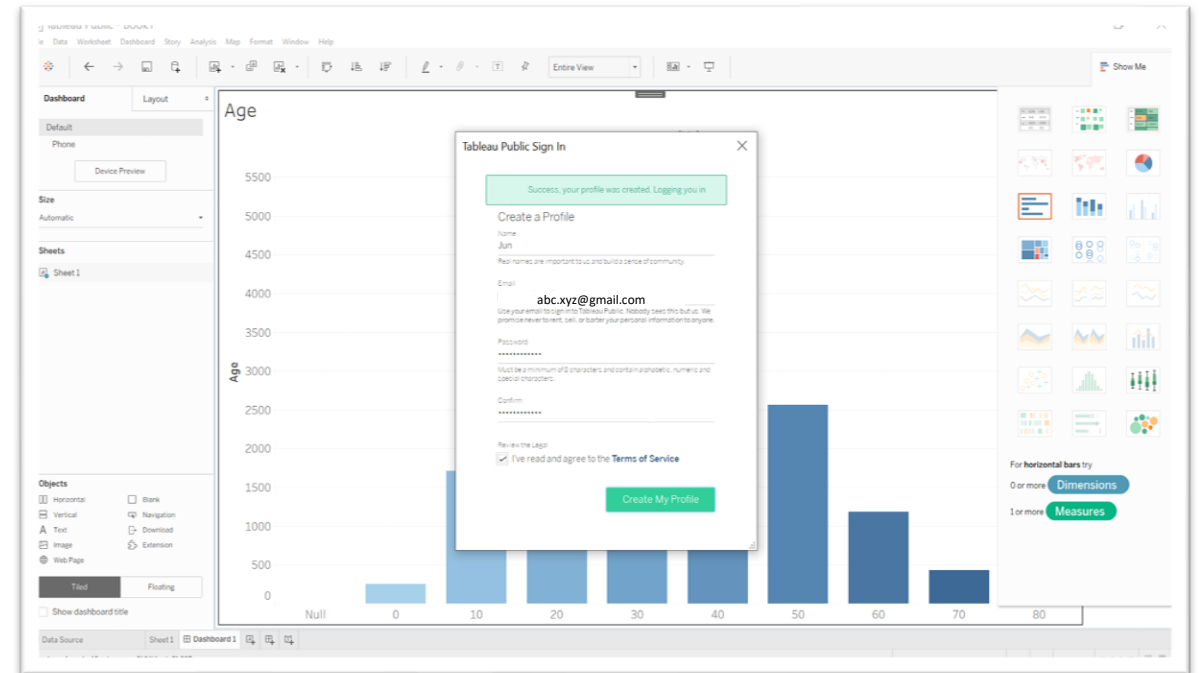
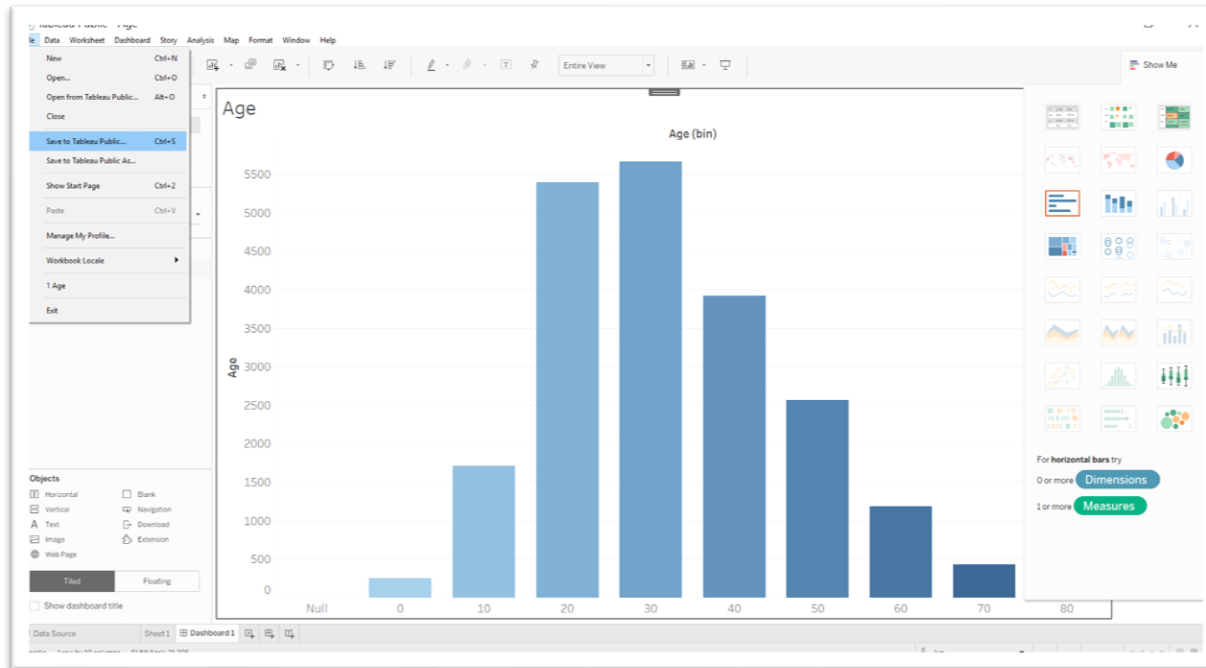
## Your first visualization





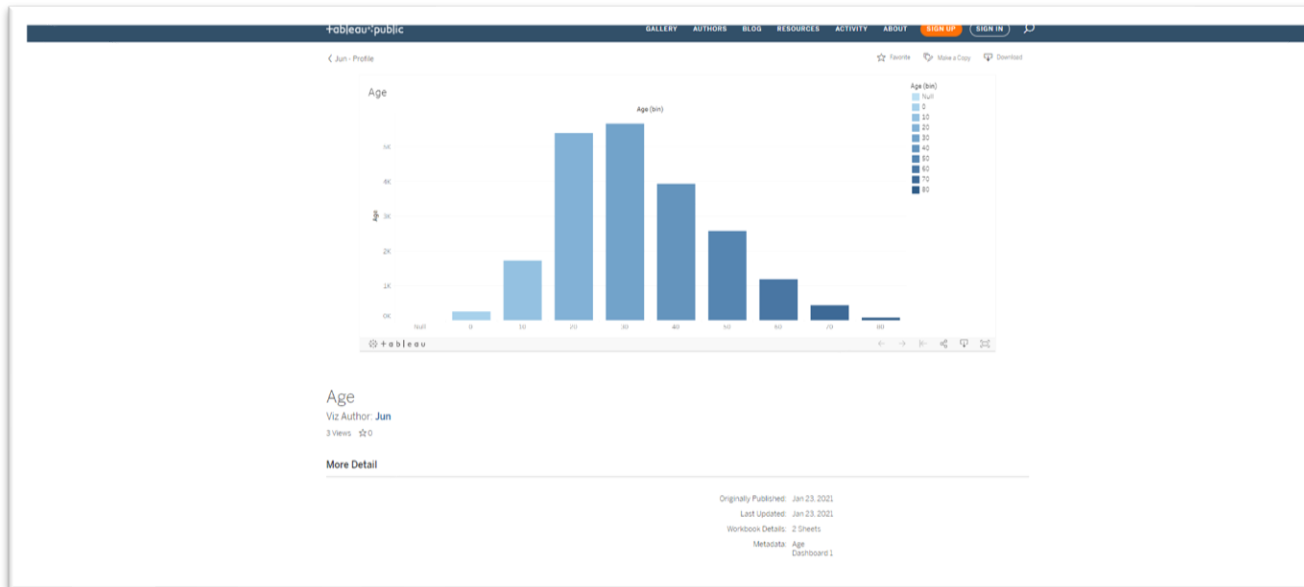
# Getting Started with Tableau Public

## Dashboard and Exportation



# Getting Started with Tableau Public

## Share Visualizations on a Website



# ■ Thank You

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