Topic

DA5 – Tableau

CSC14118 – Introduction to Big Data

OUR TEAM

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SUMMARY OF CONTENTS

MAIN POINTS COVERED

1. Introduction
2. Major Components
3. Main Functionalities
4. Applications
5. Demonstration
6. Review

1

Introduction

WHAT IS BUSINESS INTELLIGENCE?

Nowadays, thousands of new businesses have mushroomed. In order to make the difference, they need to learn from the old business, and develop it. With that in mind, data is one powerful thing that they can depend on. But they would not manually read millions of lines of data just to make decisions. That's how Business Intelligence is vital in business.

GATHERING DATA

INTEGRATING DATA

MANAGING DATA

ANALYZING DATA

VISUALIZING DATA

MAKING DECISIONS

TABLEAU

INTRODUCTION

Tableau was founded in 2003 as a result of a computer science project at Stanford that aimed to **improve the flow of analysis and make data more accessible to people through visualization.**

TABLEAU

REWARDS AND REGCONITIONS

2008

CODiE Award for "Best Business Intelligence Solution"

2013 - 2022

Recognized as a leader in the Gartner Magic Quadrant for ten consecutive years

2023

Readers' & Editors' Choice Awards for the "Best Big Data Product: Business Intelligence and Data Visualization"

TABLEAU

WHAT IS TABLEAU?

TABLEAU is a powerful data visualization tool focused on business intelligence, used for analyzing and presenting large datasets in an interactive and intuitive manner.

TABLEAU provides a comprehensive solution for data analysis, visualization, and decision-making, empowering organizations to be more data-driven.

2

Major Components

TABLEAU

COMPONENTS

TABLEAU DESKTOP

Visualize and analyze structured data

TABLEAU SERVER

Central repository for enterprise dashboards

TABLEAU PUBLIC

Free tool for creating and sharing visualizations

TABLEAU READER

View Tableau Desktop workbooks locally

TABLEAU ONLINE

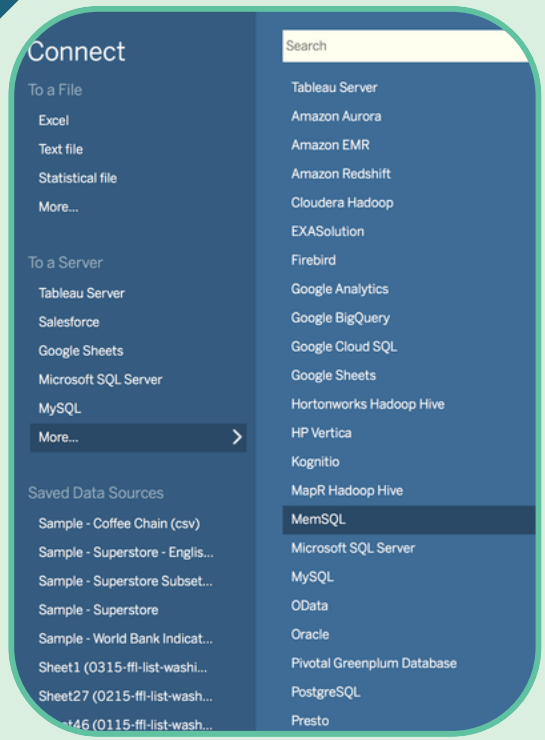
Cloud-based dashboard hosting

TABLEAU PREP BUILDER

Data cleansing and transformation tool

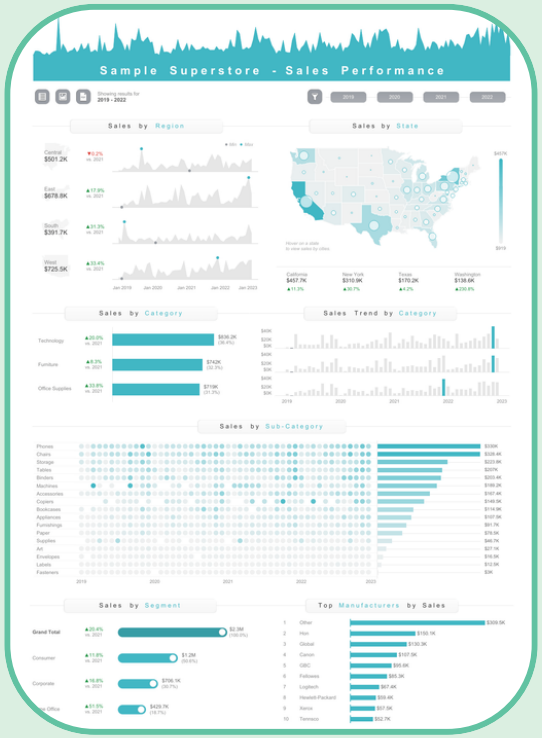
3

Main Functionalities



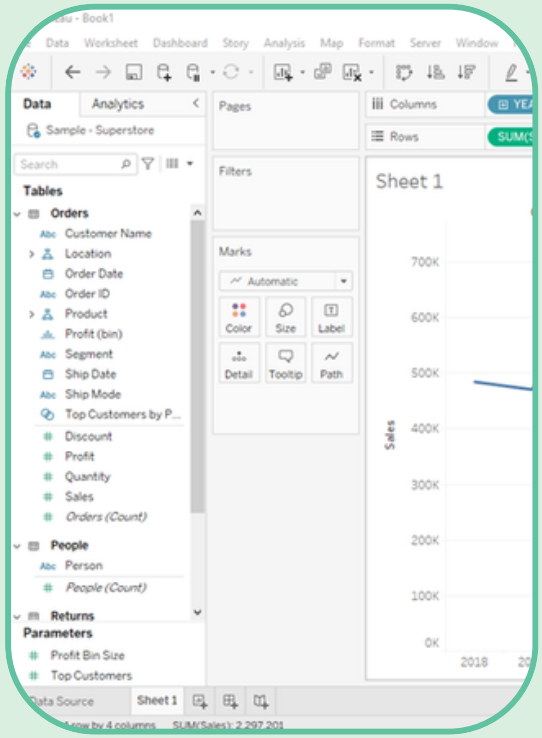
DATA CONNECTION

Connect to databases, spreadsheets, and cloud services



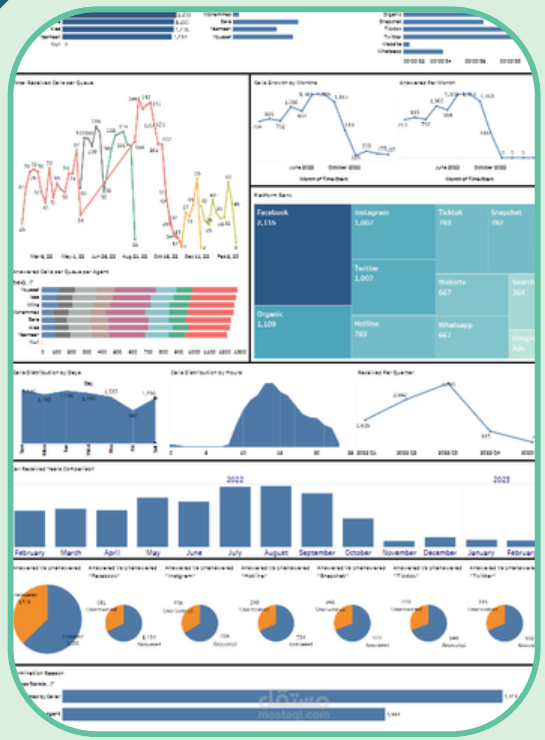
VISUALIZATION TOOLS

Create charts, graphs, maps, and dashboards



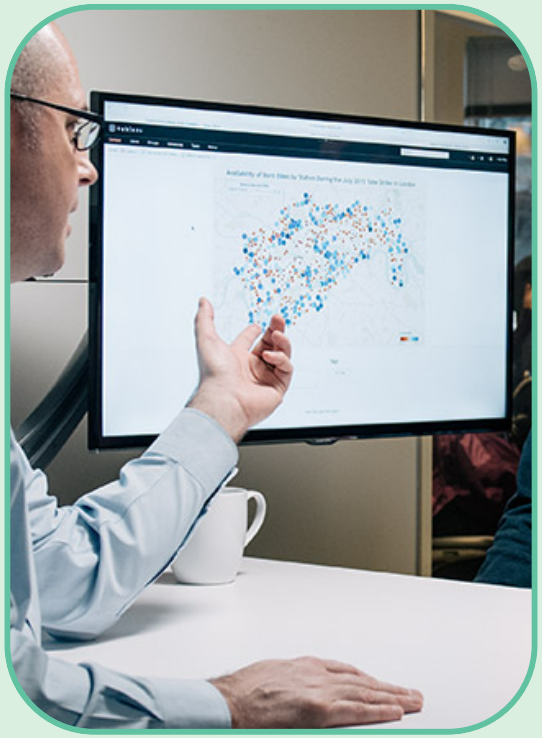
DRAG-AND-DROP INTERFACE

Intuitive interface for easy exploration and analysis



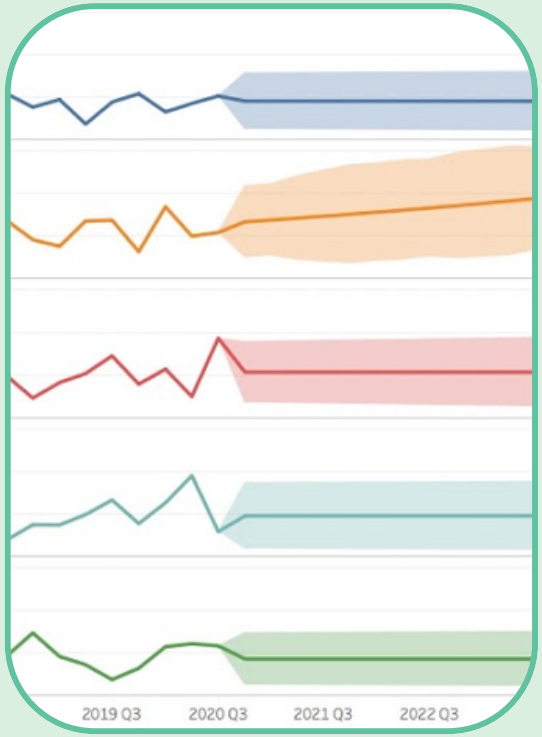
INTERACTIVE DASHBOARDS

Drill down, filter, and gain real-time insights



COLLABORATION TOOLS

Share and collaborate on visualizations for data-driven decisions

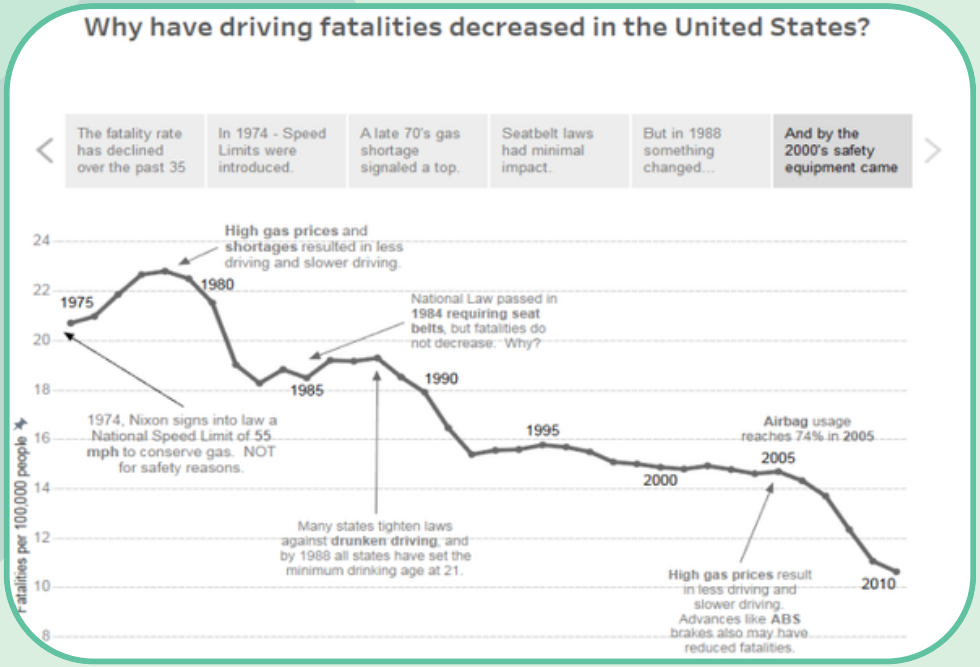


ADVANCED ANALYTICS

Predictive modeling and statistical analysis uncover hidden patterns

4

Applications



DATA ANALYSIS & VISUALIZATION

Researchers can create interactive dashboards and visualizations to present their findings effectively

EDUCATION & TRAINING

Teach data analysis, visualization, and BI concepts; Students can get 1 free year with school mail.

BUSINESS INTELLIGENCE IN INDUSTRY

Analyzes sales data, customer trends, financial metrics and operational performance.

Gains insights and make data-driven decisions.

INDUSTRY USERS

Amazon, Walmart, Accenture, Lenovo, and so on widely use Tableau.

HEALTHCARE ANALYTICS

Analyzes patient data, tracks medical outcomes, monitors hospital performance, and identifies public health trends. Real-time updates enhance effectiveness.

FINANCIAL ANALYSIS AND REPORTING

Analyzes financial data, monitors market trends, and generates reports. Facilitates financial planning, budgeting, forecasting, and risk management.

SUPPLY CHAIN OPTIMIZATION

Visualizes supply chain data, tracks inventory levels, and optimizes operations. Identifies inefficiencies, reduces costs, and improves performance.

TABLEAU

POPULARITY

TABLEAU

COMMUNITY

Most of the Fortune Global 500 companies are using this tool.

Tableau has a market spread of about 16.23% with 46,812 companies using Tableau

3 million students and instructors

195,714 questions and ideas shared on forums

510 in-person and virtual user groups

RED HAT

deepens data culture with 4,500+ staff in less than a year

NISSAN

builds an enterprise data culture with Tableau

HENKEL

saves millions of euros per year across its award-winning digital supply chain with Tableau

LENOVO

created a flexible sales dashboard that departments can adapt for ad-hoc analyses, leading to a 95% improvement in efficiency across 28 countries

	Power BI	QlikView/Qlik Sense	Google Data Studio
Functionality	Robust data visualization, dashboard creation, and business intelligence capabilities similar to Tableau	Powerful data discovery and visualization platforms that offer similar functionalities to Tableau	Offers basic visualization capabilities suitable for simpler use cases
Data Intergration	- Integrates seamlessly with other Microsoft products such as Excel, Azure, and SQL Server - Some users find Power BI's interface and learning curve to be slightly more intuitive	- Navigate data intuitively, easy to uncover insights and explore data from multiple perspectives. - Suitable for handling large datasets and supporting enterprise-level deployments	- Integrates seamlessly with other Google products - Accessible to users with varying levels of technical expertise - Have limitations compare to TABLEAU
Cost	More flexible compared to Tableau	Vary based on deployment size and specific requirements	Free

5

Demonstration

6

Review

How many main functionalities of TABLEAU that we have covered previously?

A. 4

B. 5

C. 6

D. 7

How many main functionalities of TABLEAU that we have covered previously?

A. 4

B. 5

C. 6

D. 7

With educational email, how long can students use TABLEAU for free?

A. 1 month

B. 3 months

c. 6 months

d. 1 year

With educational email, how long can students use TABLEAU for free?

A. 1 month

B. 3 months

c. 6 months

d. 1 year

As a business analyst, you need to visualize your company sales data including orders with registered customers assuming they're all legit to know who your potential loyal customer is. Why are they potential and what kind of discount could you provide for their loyalty. Which charts would you use to answer all the questions?

THANK YOU FOR LISTENING!