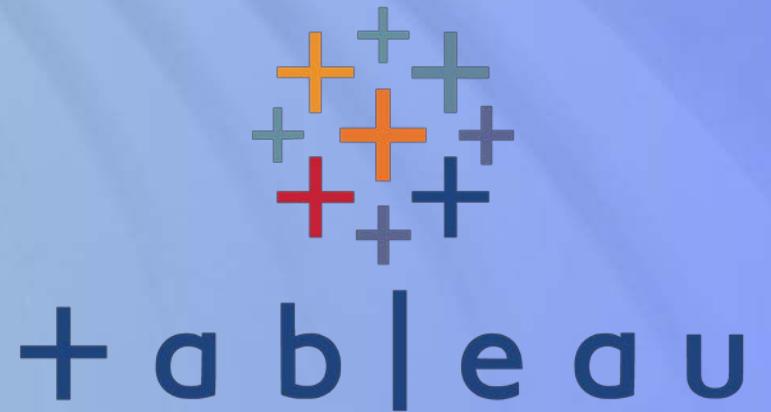




BATCH : B106 Data Science
LESSON : Tableau
DATE : 15.12.2022
SUBJECT : Introduction

-  techproeducation
-  techproeducation
-  techproeducation
-  techproeducation
-  techproedu



Data Visualization with Tableau



Data Science Program



**Tableau Desktop indirdim ve
Desktop'ta kullanıma hazır !!**



Content

- Program Overall Content
- Introduction to Tableau Desktop
- Visual analytics
- Calculations
- Combining Table and Data
- Dashboard design

Project

Materials

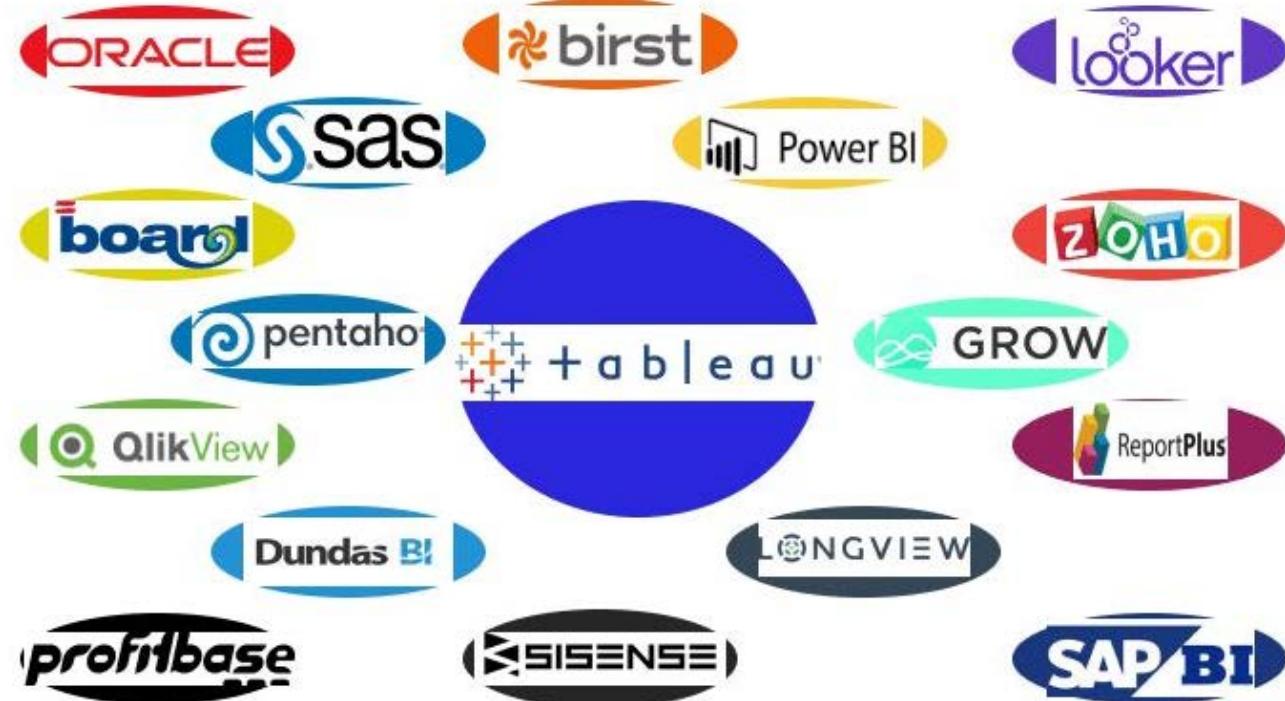
- PDF document and books
- Tableau Free Training Videos (Official Web Sites)
- LMS PreClass materials

Education Tools

- LMS - Zoom - Slack – Peardeck
- Tableau Public & Desktop
- Kahoot



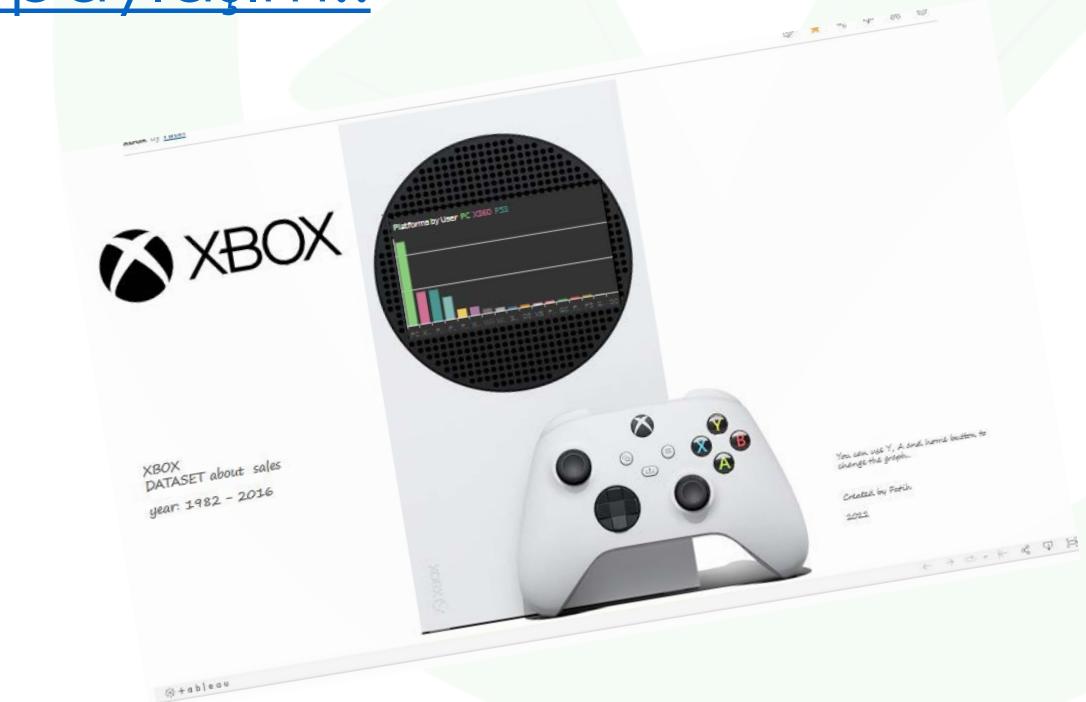
LMS Pre-Class'ta bu dersle
ilgili kısma çalıştım



**Görselleştirme Tools'larından
bildiğiniz herhangi biri var mı?**



- Bitmiş bir projeye gidelim..
- Tableau Public üzerinden bir paylaşım..

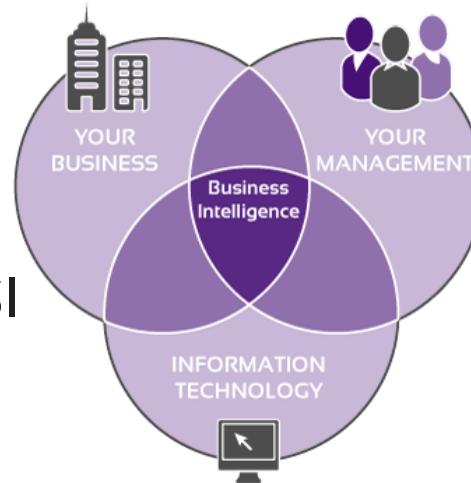




What is Business Intelligence (BI) ?

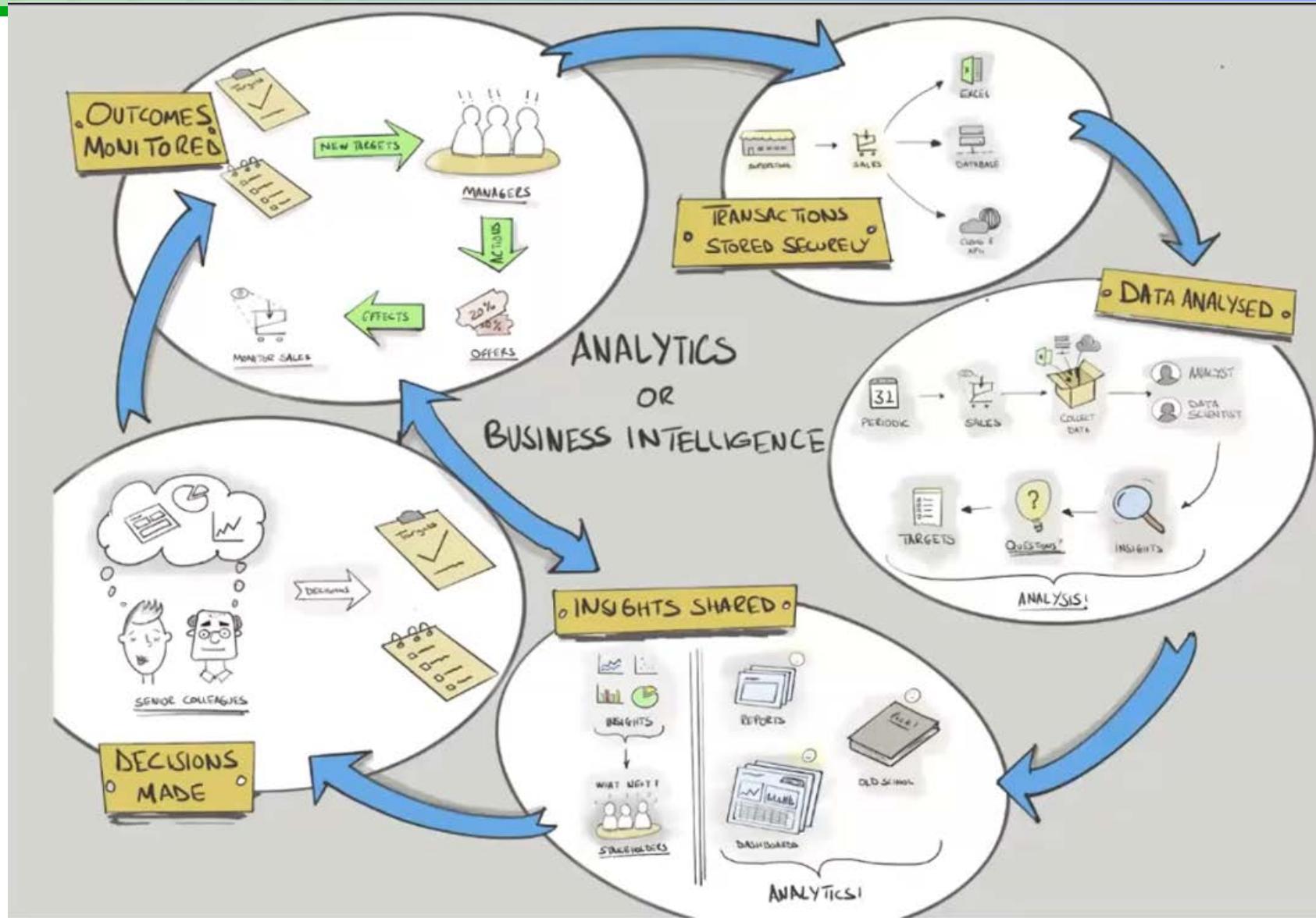
BI Faydaları

- Verilere dayalı iş kararlarının verilmesi
- Hızlı planlama, raporlama ve analiz yapılmasını sağlama
- Gelir artışına katkıda bulunması
- Veri kalitesini artırması
- Çalışanlarının memnuniyetini artırma potansiyeli
- Rekabette avantaj sağlama





What is Business Intelligence (BI) ?



video

Power Query

CSV

DB

CLOUD

XLS

CSV Files
Database
Excel File
Text File

video

Power Query

CSV

DB

CLOUD

XLS

video

Power Query



BI Process

BI Süreçleri

- Bu süreçler şunları içerir:
- Veri madenciliği
- Raporlama
- Performans ölçümleri ve kıyaslama
- Açıklayıcı analistik
- sorgulama
- İstatistiksel analiz
- Veri goruntuleme
- Görsel analiz
- Veri Hazırlama



- BI (Business Intelligence) tools typically consists of
 - Databases:** Store/query data
 - ETL(Extract Transform and Load) tools:** Migrate, manipulate and transform data
 - Data visualization:** Understanding and reporting on data
- Companies spend millions of dollars in BI tools every year
- Ideally, these tools must be suitable for non-technical users to master, connect to a wide variety of datasources and provide guidance for rendering the data into useful insights



KPI nedir ?

KPI – Key Performance Indicator

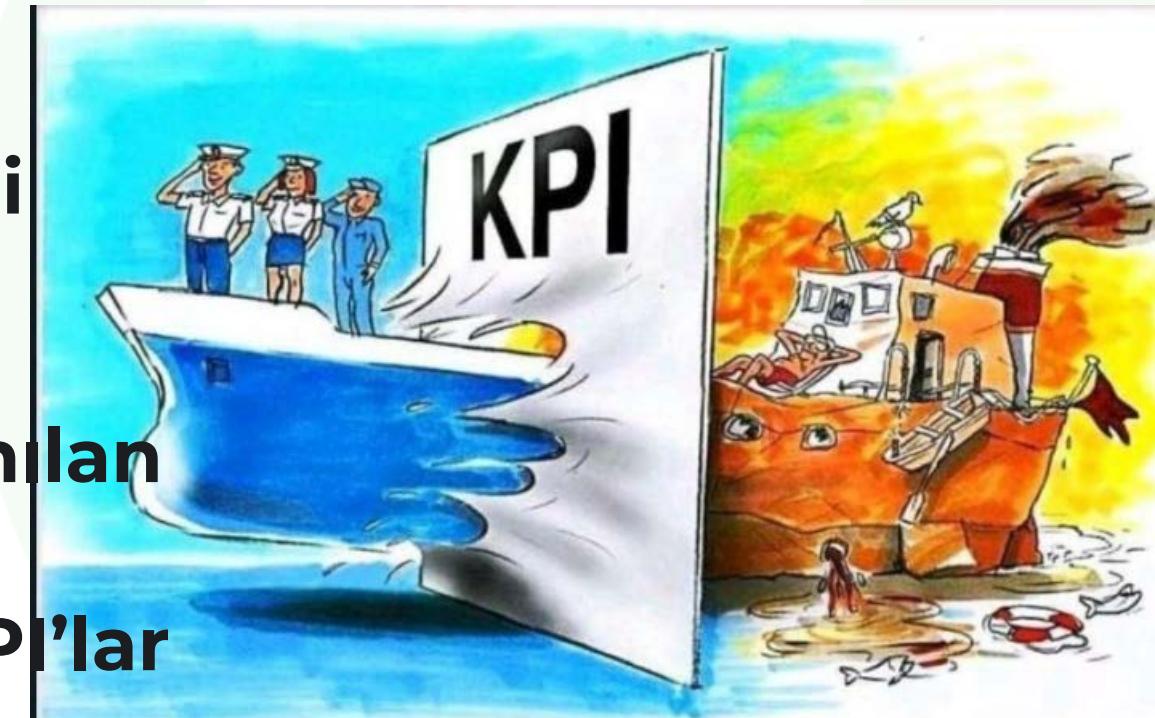
- Bu ay geliriniz ne kadar arttı ?
- Web sitemiz nasıl performans gösteriyor?
- Yeni stok siparişi ne zaman?
- Yeni kampanyanın etkileri nasıl ?
- En çok etkileşim hangi sosyal medya mecrasında ?
- Dönemsel karşılaştırmalar nasıl?





KPI's..

- Finansal Performansla İlgili KPI'lar
- Müşteri ile İlgili KPI'lar
- Pazarlama Performansı ile İlgili KPI'lar
- Operasyonel Performans Ölçümünde Kullanılan KPI'lar
- Çalışan Performansı ile İlgili KPI'lar
- Çevresel ve Sosyal Sürdürülebilirlik KPI'ları

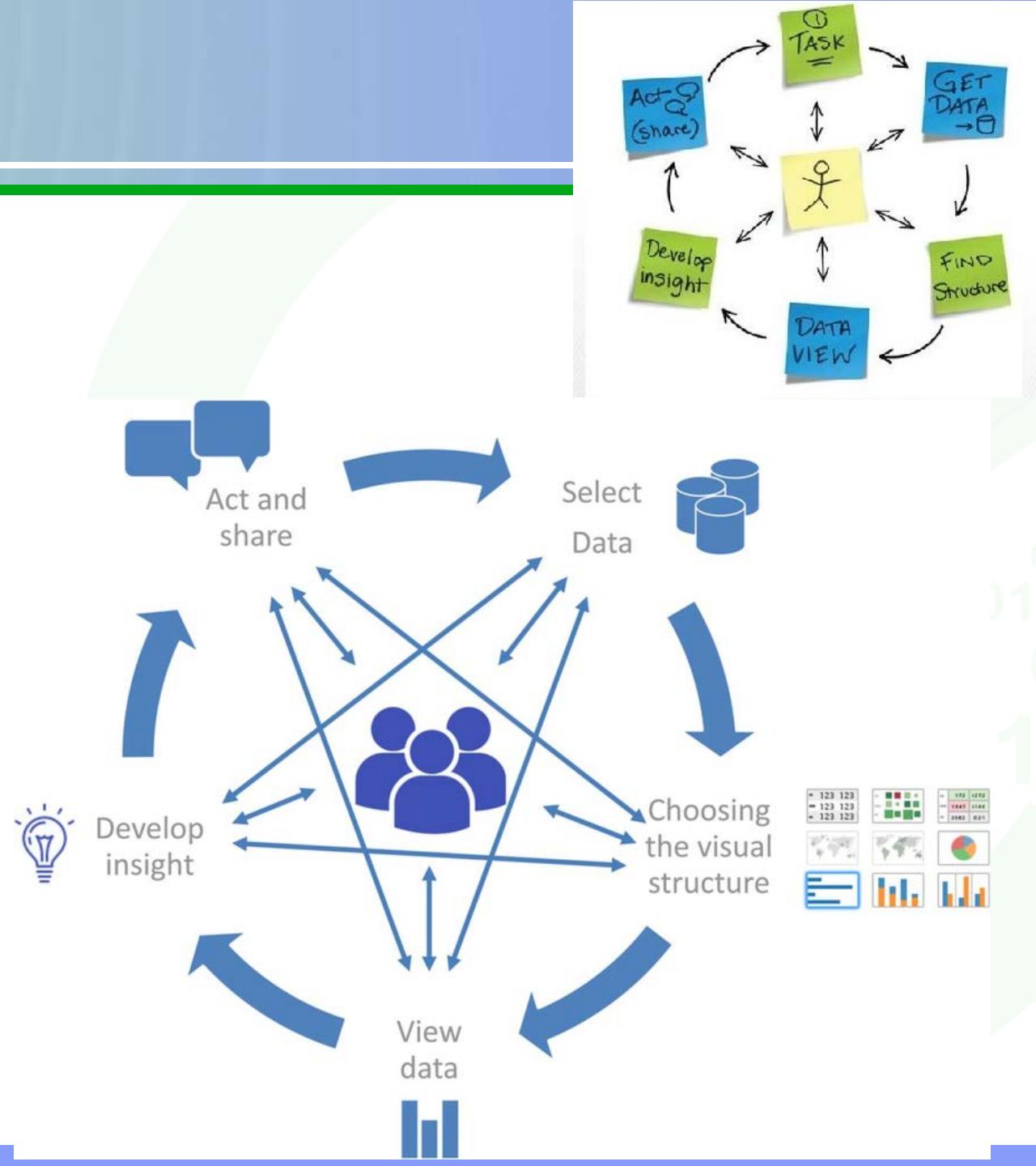




Visual Analysis

Starting to Tableau

- Görsel analiz çevrimi
 - Task generate
 - Get Data
 - Find Structure
 - View Data
 - Develop Insight
 - Act and Share
 - Task

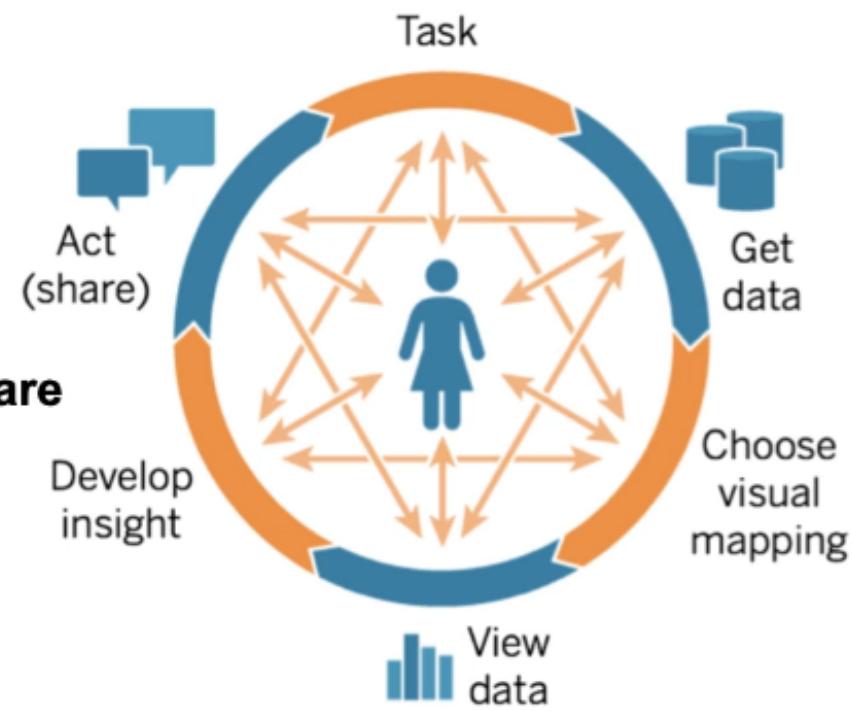




Visual Analysis

Visual Analytics

- **What is Visual Analytics?**
- **Visual analytics is a means of exploring and understanding data**
- **A story unfolds from one visual summary to another**
- **Visual analysis is a non-linear process**
- **Later, you can retrace the story to rethink, explore further, and share**
- **Tableau supports and accelerates this analysis process**





Data Visualization Tools



- Full-featured Free Version
- Development Environment
- R and Python Supported
- Dynamic Cross-filtering
- AI-enabled Analytics
- Search Analytics with NLP
- Data Prep Tools
- Data Modeling Tools
- Preferred Data Model
- Database Independent
- Built in Row Level Security
- Mixed Model Types
- Third-party Data Model Access
- Commenting & Collaboration
- Embedded Analytics
- Open-source Custom Visualizations
- Native Mobile App

	Power BI	Tableau	Qlik Sense	ThoughtSpot	Looker
Yes	Yes	Separate tool	Separate tool	No	No
Desktop	Desktop	Desktop	Web Browser	Implementation	Cloud
Yes	Yes	Yes	Yes	R Only	Yes
Yes	Yes	Yes	Yes	No	No
Yes	Yes	Yes	Yes	Yes	No
Yes	Yes	Yes	Yes	Yes	No
Yes	Separate tool	Separate tool	Separate tool	Yes	No
Yes	Separate tool	Separate tool	Yes	Yes	Yes
Star-schema	Flat	Snowflake	Star-schema	Flat	
Yes	Yes	Yes	Yes	Yes	No
Yes	Yes	Yes	Yes	No	No
Yes	No	No	Yes	Yes	No
Yes	No	No	No	No	No
Yes	Yes	Yes	Yes	Yes	No
Yes	Yes	Yes	Yes	Yes	Yes
Yes	No	Yes	No	No	Yes
Yes	Yes	Yes	Yes	Yes	No



+ a b l e a u ®
CERTIFIED



Looker



Qlik Sense



ThoughtSpot



**Görselleştirme Tools'larından
kullandığınız oldu mu? Yazınız..**



Tableau vs. Power BI



Feature	Power BI	Tableau
Date Established	2013	2003
Best Use Case	Dashboards	Ad-hoc Analysis
Best Users	Average Joe/Jane	Analysts
Licensing	Rigid	Flexible
Investment Required	Low	High
Overall Functionality	Very Good	Very Very Good
Performance With Large Datasets	Good	Very Good
Support Level	Low (Or through partner)	High
Infrastructure	SaaS only	Any
Get Started	Buy Now	Free Trial

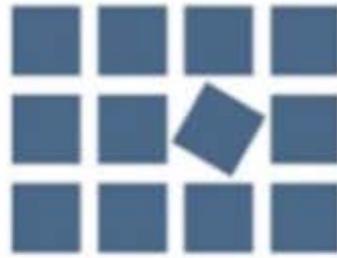
Parameters	Power BI	Tableau
Parent Company	Microsoft	Salesforce
Establishment Year	2013	2003
Learning Curve	Very easy	Little steep
Pricing	Cost-effective	Costly
Usability	Small, medium, and large enterprises	Especially large enterprises
UI	Familiar to Microsoft products	Intuitive and easy-to-use
Security	Raw-level security and roles restriction	Offers raw-level security and set up filters
Underlying language	DAX (Data Analysis Expression)	MDX (Multidimensional Expressions)
Performance	Rich in data visualization, integration, and manipulation	Hypothetical visualization, ad-hoc analysis, capable to handle a huge volume of datasets
Installation	Easy to set up and start	Easy and quick



Visualization Realities



COLOR HUE



ORIENTATION



TEXTURE



POSITION & ALIGNMENT



COLOR BRIGHTNESS



COLOR SATURATION

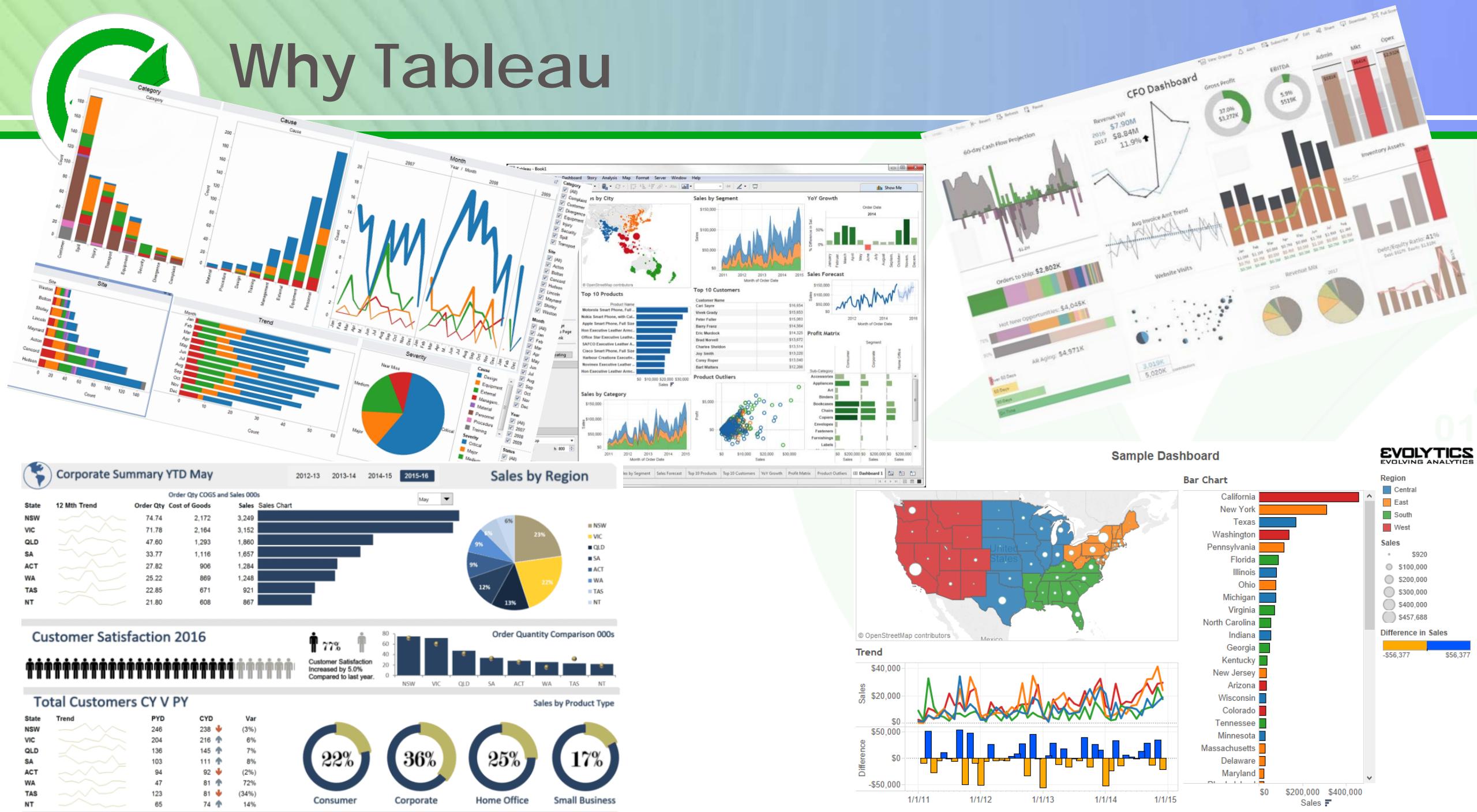


SIZE



SHAPE

Why Tableau



EVOLYTICS
EVOLVING ANALYTICS

Region	Central	East	South	West		
Sales	\$920	\$100,000	\$200,000	\$300,000	\$400,000	\$457,688

Difference in Sales
-\$56,377 \$56,377



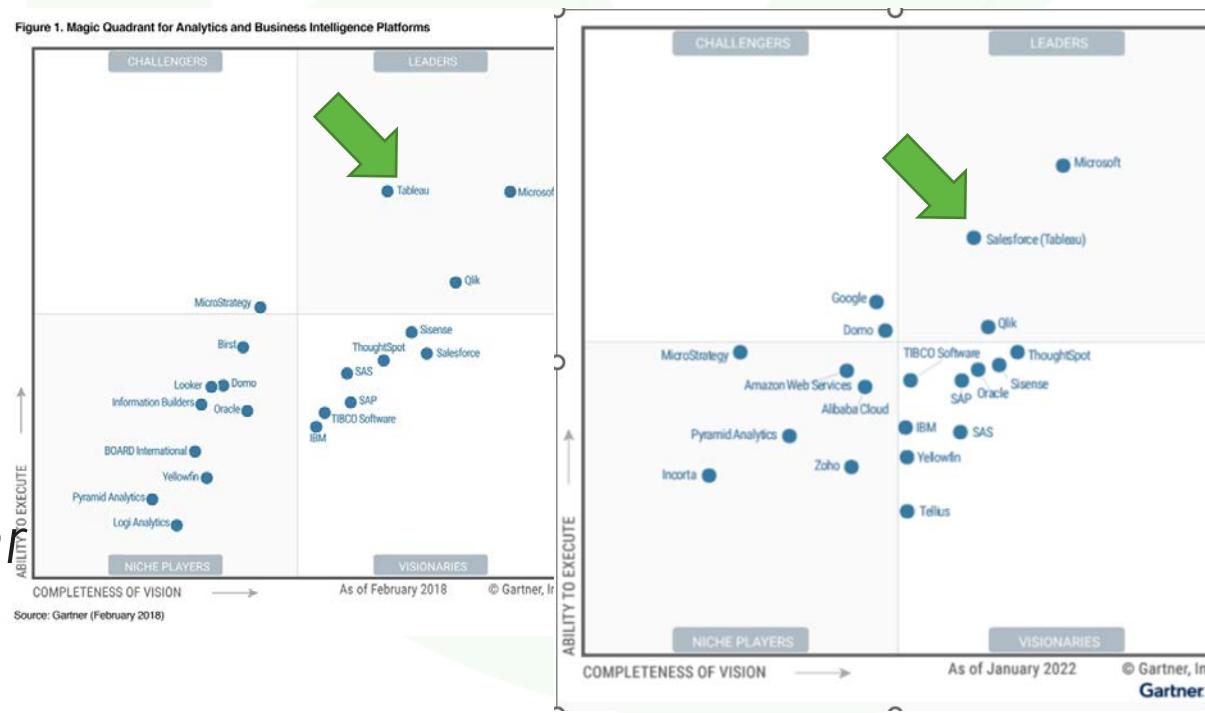
Why Tableau

Tableau ile

- verilerinizi keşfeder,
- analiz eder,
- ardından bulgularınızı sunar ve
- iş arkadaşlarınızla, ortaklarınız veya müşterilerinizle paylaşırınsız.
- Herkes sürükle ve bırak yöntemiyle verileri analiz edebilir.
- Verilerinizi dakikalar içinde bağlayabilir ve görselleştirebilirsiniz.
- Yüksek düzeyde etkileşimli Dashboardlar (birkaç grafikten oluşur) oluşturabilir ve bunlarla etkileşimi sağlayabilirsınız



Figure 1. Magic Quadrant for Analytics and Business Intelligence Platforms

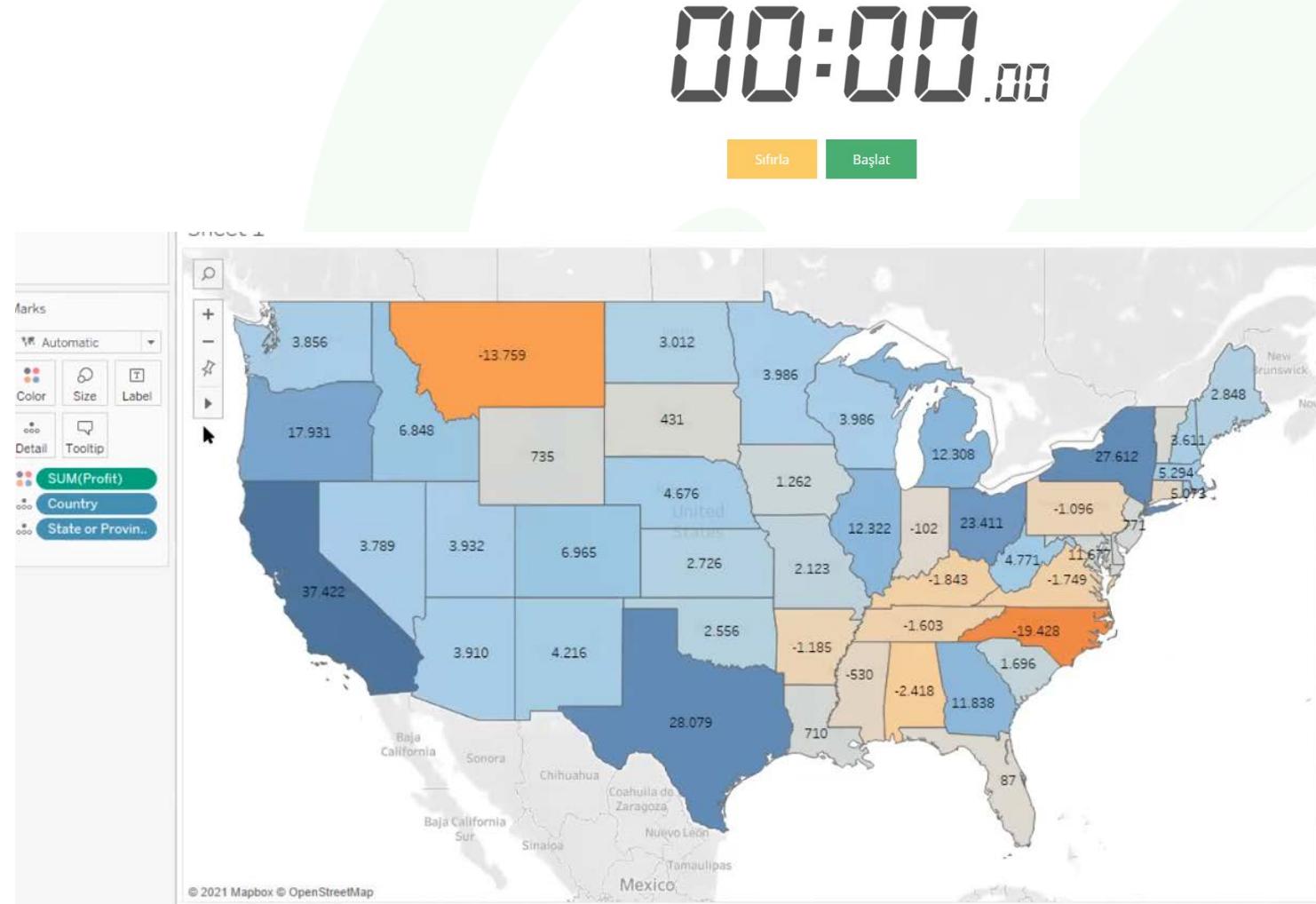




Challenge Time



- Online kronometre
icin tiklayiniz.





Loading Tableau

- Yükleme İçin Kullanılacak Web Sayfaları:
- **TABLEAU DESKTOP** (14 gün deneme süreli) -
<https://www.tableau.com/products/trial>
- **TABLEAU PUBLIC KURULUMU** (Ücretsiz sürüm)
- <https://public.tableau.com/s/>
- **TABLEAU FOR STUDENTS** (ÖĞRENCİ İÇİN) -
<https://www.tableau.com/academic/students>
- **TABLEAU FOR TEACHING** (EĞİTMEN İÇİN) -
<https://www.tableau.com/academic/teaching>

!! Kurulum için
gerekli
doküman
ayrıca
paylaşılmıştır.



About Tableau..

Tableau

- **Tableau is a BI data visualization software**
- **Uses drag-and-drop interface to transform data into visually appealing dashboards**
- **Founded at Stanford University in 2003 and recently sold to Salesforce for \$15B**
- **Tableau products query relational databases, online analytical processing cubes, cloud databases, and spreadsheets to generate graph type data visualizations**
- **These interactive visualizations are presented on a dashboard**



Traditional vs. Tableau

Traditional vs. Tableau

Traditional Method	Tableau
Requires specific programming skills	No programming skills required
Focused on only one type of database	Combines different types of database spreadsheets, databases, cloud data, and even big data such as Hadoop
Time consuming	Time saving
Decision makers have to ask the IT people to retrieve any information from the database	Decision makers can directly use the dashboard to retrieve any information from the database
Largely depends on Query languages	Query is done behind the scene
Combining different types of database is difficult	Different types of databases can be combined easily
Not every business intelligence tool offers interactive dashboard	Interactive dashboard is easy to build and it makes data visualization quick and efficient
Comparatively expensive	Comparatively affordable
Mostly designed for large businesses	Perfect BI solution for small, medium, and large businesses, and even for non-profits



Business Process vs. Tableau Process

	BUSINESS PROCESS	TABLEAU PLATFORM
1 TRANSACTIONS STORED		 DATABASE FILE TYPES
2 DATA ANALYSED DATA PREP		 TABLEAU PREP BUILDER
ANALYSIS + EXPLORE		 TABLEAU DESKTOP TABLEAU PUBLIC
3 INSIGHTS SHARED		 SERVER/ONLINE TABLEAU MOBILE TABLEAU READER APIs
4 DECISIONS MADE		
5 OUTCOMES MONITORED		



Tableau Products

Tableau ürünler

- Tableau Desktop
- Tableau Prep
- Tableau Server
- Tableau Online

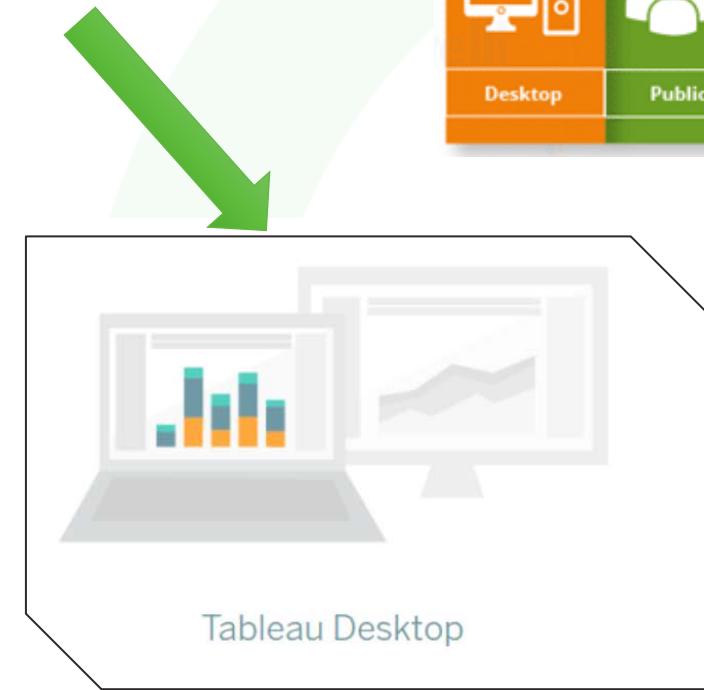
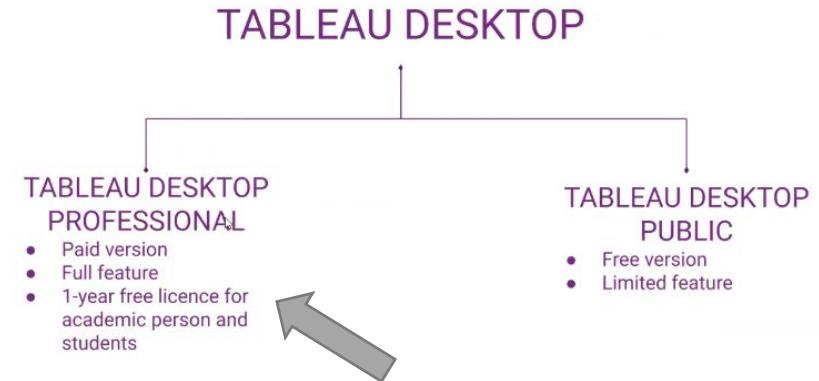


Tableau Online

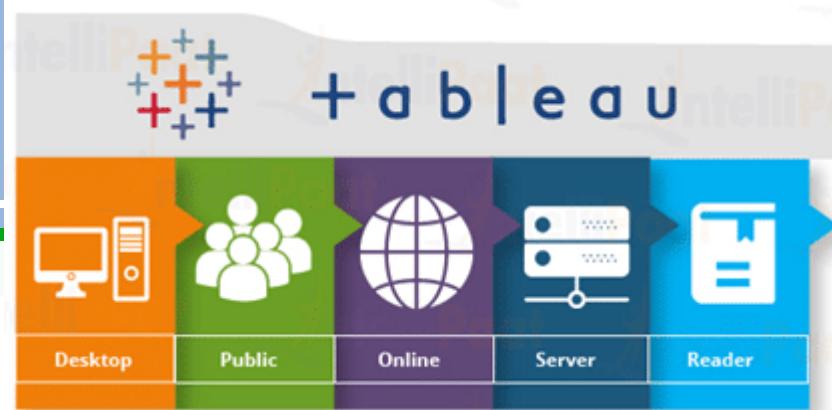


Tableau Prep



Tableau Server



Tools Learning Information Step

Tableau Learning Flow Infograph

Tableau Basic
as Introduction

Calculations

Combining
Table and
Data

Visual
Analytics

Dashboard
forms

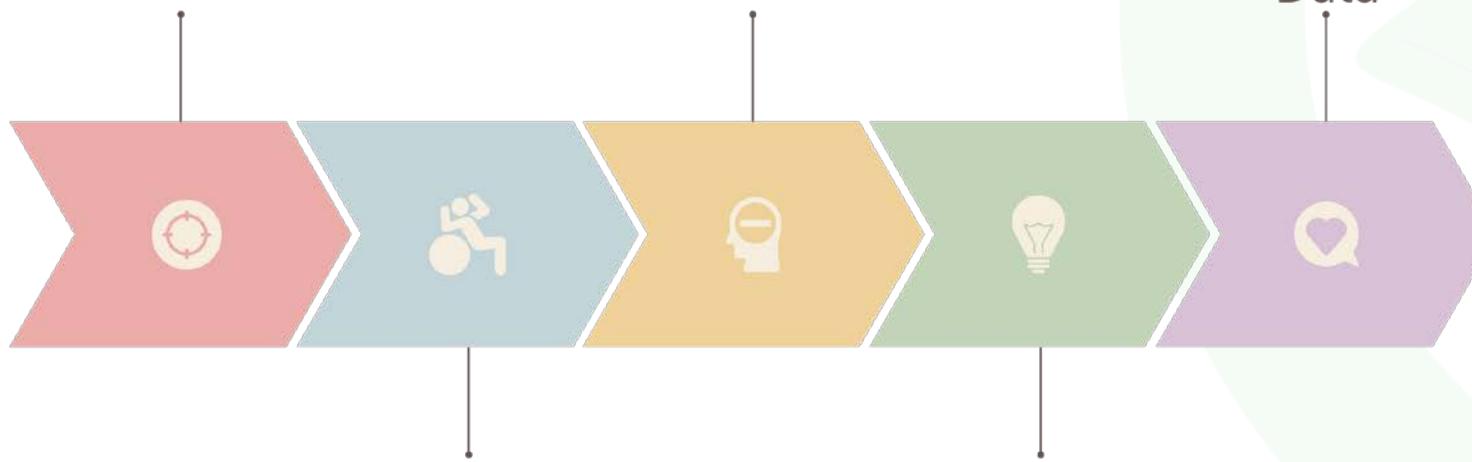


Tableau Engineer

OREDATA · Istanbul, Istanbul, Turkey (Hybrid) · 6 days ago · 5 applicants

Full-time · Mid-Senior level

51-200 employees · Information Technology & Services

3 connections

See recent hiring trends for OREDATA. [Try Premium for free](#)



Differences with Tool and Theoric Learning

Hatırlatma

- Yeni bir Tool öğrenirken şu noktalar önemli
 - Instructor ile aynı anda yapınca bazı noktalar kaçırılabilir
 - Detaylar dikkatle dinlenilmeli ve hatırlatıcı notlar düşülmeli
 - Uygulama için size yeterli zaman olacaktır





Tableau Timeline

TABLEAU CRM TIMELINE

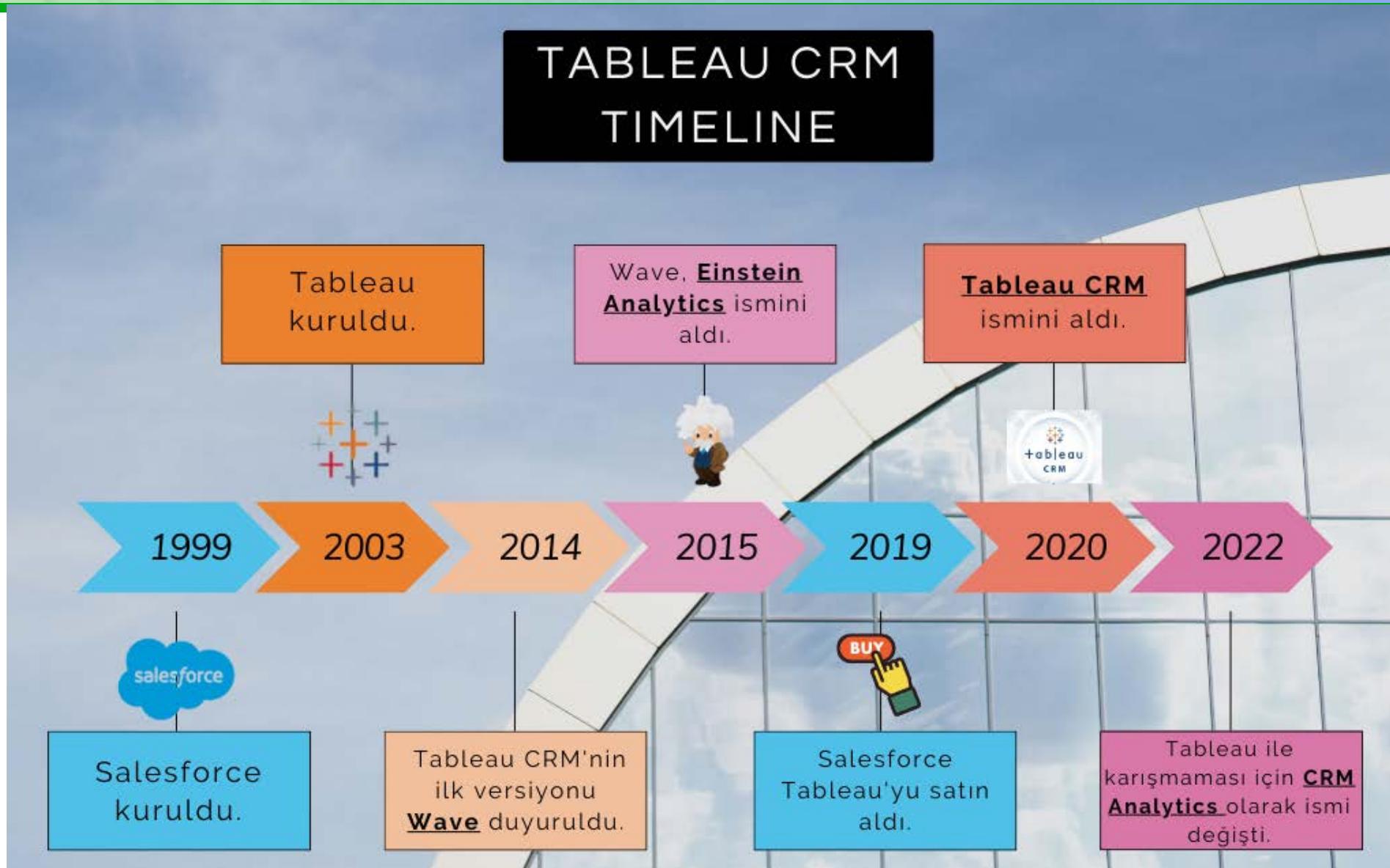




Tableau vs Tableau CRM



TABLEAU & TABLEAU CRM



TABLEAU

Bireysel/Kurumsal tüm kullanıcılarla açıktır.

Genel analize göre tasarlanmıştır.

Hem cloudda hem de lokalde çalışır.

Heryerden data çekebilir.

AI ve ML yetenekleri daha sınırlıdır.

Analiz ve görselleştirme daha ön plandadır.

VS



TABLEAU CRM

Salesforce müşterilerine özeldir.



Satış ve hizmet odaklıdır.



Salesforce ekosisteminde çalışır.



Salesforce datasını kullanır.



AI ve ML yetenekleri çok gelişmiştir.



Predictive (tahmin) yetenekleri daha güçlündür.



Tableau Fundamentals

Tableau Basics



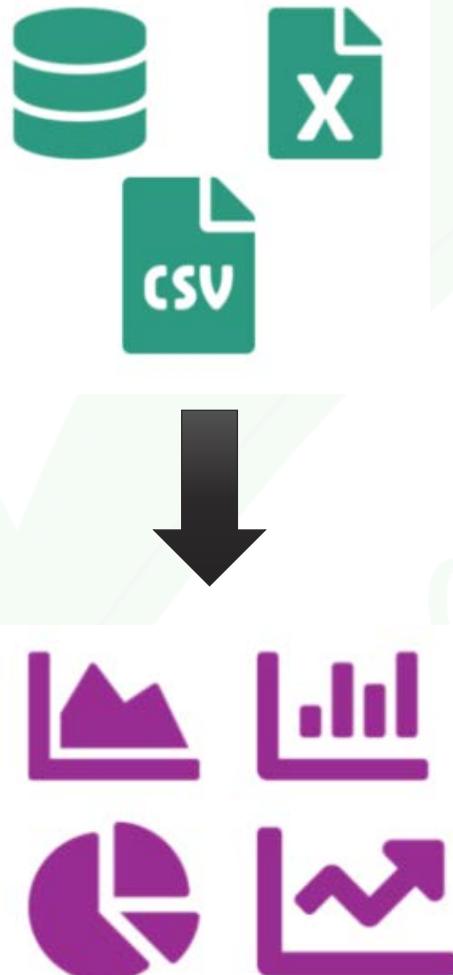
Dataset Definition

Dataseti nedir (Tableau için)

- Görselleştirme için kullanılacak database'dır.
- Data tipleri
 - E-tablolalar
 - Relational veritabanları
 - Cloud verileri
 - Diğerleri

01	Spreadsheets, Flat Files	<ul style="list-style-type: none">• Microsoft Excel• Google Sheets• csv, text file
02	Relational Databases	<ul style="list-style-type: none">• MySQL, MSSQL Server, PostgreSQL
03	Cloud Data	<ul style="list-style-type: none">• AWS• Microsoft Azure• Google Cloud
04	Other	<ul style="list-style-type: none">• Spatial Files• Statistical Files• PDF files

[Tableau'da kullanılan tüm data tipleri için tıklayınız..](#)



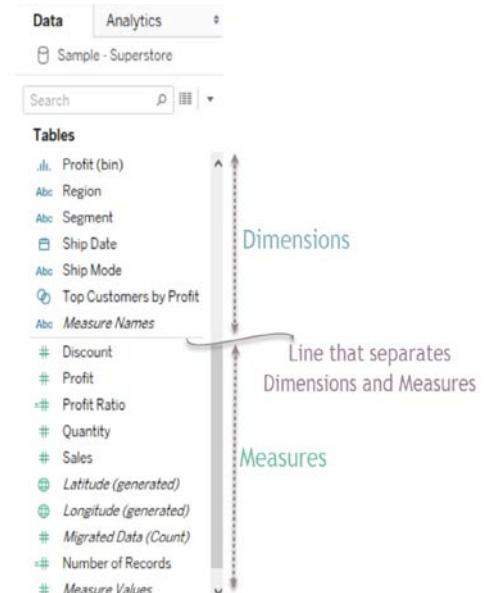


Fields

Fields - Alanlar

- Tableau'da kolon veya sütun terimini kullanmıyoruz, bunun yerine field – alan tabirini kullanıyoruz
- Dimensions
- Measures

Dimensions	Measures
Qualitative data	Quantitative data
Names, dates, or geographical data	Numeric & quantitative values



employees table						
emp_id	first_name	last_name	salary	job_title	gender	hire_date
17679	Robert	Gilmore	110000	Operations Director	Male	2018-09-04
26650	Elvis	Ritter	86000	Sales Manager	Male	2017-11-14
30840	David	Barrow	85000	Data Scientist	Male	2019-12-12

DIMENSION	MEASURE
DISCRETE	strings data parts boolean (t/f)
CONTINUOUS	dates numbers



Row-Level Record

Row-level Record kavramı

- Satır düzeyinde kayıt
Tableau'da çok önemli bir kavramdır
- Veri setimizin en küçük parçası gibi düşünülebilir
- Granularity kavramı
- Aggregation kavramı

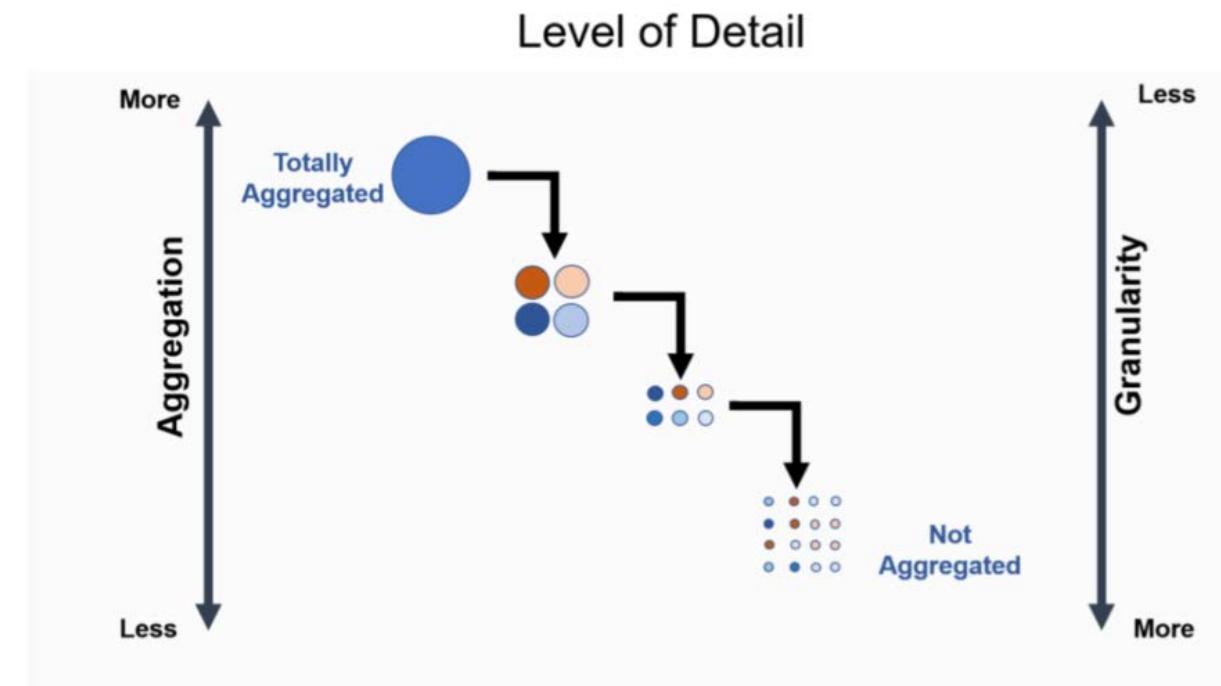
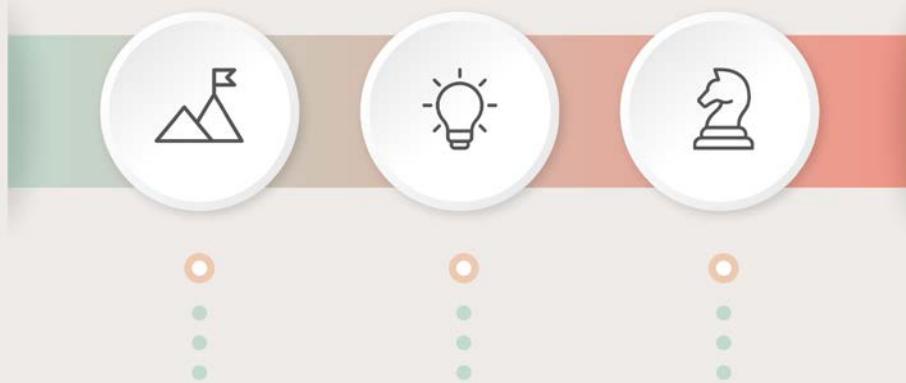




Tableau Overall Workflow

3 STEPS TO

Tableau Overall Workflow



CONNECT

ANALYSIS

SHARE

The screenshot shows the Tableau desktop application interface:

- Left Panel (Connect Tab):** Lists options for connecting to data, including "Search for Data" (Tableau Server), "To a File" (Microsoft Excel, Text file, JSON file, Microsoft Access, PDF file, Spatial file, Statistical file, More...), and "To a Server" (Microsoft SQL Server, MySQL, Oracle, Amazon Redshift, More...).
- Middle Panel (Open Tab):** Shows "Sample Workbooks" like "Superstore", "Regional", and "World Indicators".
- Right Panel (Discover Tab):** Includes sections for "Training" (Getting Started, Connecting to Data, Visual Analytics, Understanding Tableau, More training videos...), "Resources" (Get Tableau Prep, Tableau Blueprint Assessment, Tableau Community Forums, Blog - Read latest post, Sample data for Relationships), and a "Tableau 2021.4 available now" announcement.



Tableau Desktop Start Page

Tableau - filter

File Data Server Help

Connect

Search for Data

Tableau Server

To a File

Microsoft Excel

Text file

JSON file

Microsoft Access

PDF file

Spatial file

Statistical file

More...

To a Server

Microsoft SQL Server

MySQL

Oracle

Amazon Redshift

More...

Sample Workbooks

Superstore

Regional

World Indicators

Open

filter

Bookt

Book100

EFI1

EFI2019

EFI Tableau Work B...

World Indicators

test3

test2

test1

Book5

Book4

Book3

Book2

More Samples

Discover

Training

Getting Started

Connecting to Data

Visual Analytics

Understanding Tableau

Resources

Get Tableau Prep

Blog - Read latest post

The NEW Community Forums

Sample data for Relationships

Tableau Conference is Over. Ish.

Watch again or enjoy it for the first time here. →

LEARN MORE

Update to 2020.3.1 Now

The screenshot shows the Tableau Desktop interface. On the left, there's a red sidebar with 'Connect' and 'Open' sections. The 'Connect' section lists various data sources like Microsoft Excel, MySQL, and Amazon Redshift. The 'Open' section displays thumbnails of several workbooks, including 'filter', 'Bookt', 'Book100', 'EFI1', 'EFI2019', 'EFI Tableau Work B...', 'World Indicators', 'test3', 'test2', 'test1', 'Book5', 'Book4', 'Book3', and 'Book2'. To the right of the main workspace is a green 'Discover' sidebar containing links for training, getting started, connecting to data, visual analytics, understanding Tableau, resources, and sample data for relationships. At the bottom right, there's a yellow banner for the Tableau Conference, with a link to watch again if you missed it. A large green checkmark icon is positioned at the top left of the slide.



Connect Pane

Bağlantı paneli

- **Search for Data:**
- **To a File,**
- **To a Server,**
- **Saved Data Sources.**

Connect

Search for Data

Tableau Server

To a File

- Microsoft Excel
- Text file
- JSON file
- Microsoft Access
- PDF file
- Spatial file
- Statistical file
- More...

To a Server

- Microsoft SQL Server
- MySQL
- Oracle
- Amazon Redshift
- More... >

Saved Data Sources

- My Oders data
- Sample - Superstore
- World Indicators



Open Pane + Discover Pane

Open

filter Book1 Book100 EFI1 EFI2019 EFI Tableau Work B...
EFI1 Data show_data_across_ create_a_weighted_ World Indicators test3
test2 test1 Book5 Book4 Book3 Book2

Sample Workbooks

Superstore Regional World Indicators

More Samples.

Discover

Training

Getting Started

Connecting to Data

Visual Analytics

Understanding Tableau

Resources

Get Tableau Prep

Blog - Read latest post

The NEW Community Forums

Sample data for Relationships

Tableau Conference is Over. Ish.

Watch again or enjoy it for the first time here. →



Update to 2020.3.1 Now



Data Connection

Tableau - Book1

File Data Server Help

Connect

Search for Data

Tableau Server

To a File

- Microsoft Excel
- Text file
- JSON file
- Microsoft Access
- PDF file
- Spatial file
- Statistical file
- More...

To a Server

- Microsoft SQL Server
- MySQL
- Oracle
- Amazon Redshift
- More... >

Saved Data Sources

- Sample - EU Superstore
- Sample - Superstore
- World Indicators

Open

Open a Workbook

Discover

Training

- Getting Started
- Connecting to Data
- Visual Analytics
- Understanding Tableau
- More training videos...

Resources

- Get Tableau Prep
- Tableau Blueprint Assessment
- Tableau Community Forums
- Blog - Read latest post
- Sample data for Relationships

Sample Workbooks

- Superstore
- Regional
- World Indicators

More Samples

Tableau 2021.4 available NOW

Secure, connected analytics in the flow of business → Explore now

Microsoft Excel seçeneği ile data dosyası yüklenir



Data Setine bağlandım



Tableau Data Source Page

The screenshot illustrates the Tableau Data Source Page interface with four numbered callouts:

- 1 Left Pane**: The left sidebar contains the "Connections" section with "Sample - Superstore" selected, and the "Sheets" section listing "Orders", "Returns", and "People".
- 2 Canvas**: The main workspace where tables can be dragged.
- 3 Data grid**: A large gray arrow points from the Data Source page towards the Data grid.
- 4 Metadata grid**: The data grid itself, showing a preview of the data with columns "Order ID", "Customer Name", "Order Date", and "Ship Date".

Sample data from the Orders sheet:

Order ID	Customer Name	Order Date	Ship Date
6962 CA-2017-162096	10.11		
6963 CA-2016-157161	16.07		
6964 CA-2016-157161	16.07		

The screenshot displays the Tableau interface with several key components highlighted:

- Menu Bar**: Located at the top, containing options: File, Data, Worksheet, Dashboard, Story, Analysis, Map, Format, Server, Window, Help.
- Toolbar icon**: A horizontal bar with various icons for navigation and data manipulation.
- Page Shelf**: A sidebar on the left containing the **Sample - Superstore** data source.
- Dimensions**: A list of dimensions:
 - Customer: Customer Name, Segment
 - Order: Order Date, Order ID, Ship Date, Ship Mode
 - Location: Country, State, City
- Measures**: A list of measures:
 - # Discount, # Profit, =# Profit Ratio, # Quantity, # Sales
- Sets**: A list of sets:
 - Top Customers by Profit
- Parameters**: A list of parameters:
 - # Profit Bin Size, # Top Customers
- Filter Shelf**: A shelf where filters can be applied.
- Dimension Shelf**: A shelf where dimensions can be placed.
- Marks Card**: A card showing mark types: Automatic, Color, Size, Text, Detail, Tooltip.
- Measures Shelf**: A shelf where measures can be placed.
- Sets and Parameters Shelf**: A shelf where sets and parameters can be placed.
- Worksheet**: The main area where visualizations are built, currently titled "Sheet 1".



Tableau - Book1

File Data Server Window Help

Connections Add

Sample - Superstore Microsoft Excel

Sheets

Use Data Interpreter
Data Interpreter might not be able to clean your Microsoft Excel workbook.

Orders People Returns Orders People Returns New Union

Sample - Superstore (2)

Drag tables here

Window Help Add

Show alias

Sample - Superstore (3)

Orders

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

Connection Live Extract

Filter 0 |

Orders 21 fields 9994 rows 100 → rows

Name Orders

Fields

Type	Field Name	Physical Table	Remote File...
#	Row ID	Orders	Row ID
Abc	Order ID	Orders	Order ID
Def	Order Date	Orders	Order Date

Data Source Sheet 1

#	Abc	Def	Def	Abc	Abc	Abc
Row ID	Orders	Orders	Orders	Orders	Orders	Orders
1	CA-2016-152156	8.11.2016	11.11.2016	Second Class	CG-12520	Claire Gute
2	CA-2016-152156	8.11.2016	11.11.2016	Second Class	CG-12520	Claire Gute
3	CA-2016-138688	12.06.2016	16.06.2016	Second Class	DV-13045	Darrin Van Huff
4	US-2015-108966	11.10.2015	18.10.2015	Standard Class	SO-20335	Sean O'Donnell
5	US-2015-108966	11.10.2015	18.10.2015	Standard Class	SO-20335	Sean O'Donnell
6	CA-2014-115812	9.06.2014	14.06.2014	Standard Class	BH-11710	Brosina Hoffmar



Drag and Drop

Animasyonlu anlatım sayfası





Tableau - Book1

File Data Server Window Help

Connections Add

Sample - Superstore Microsoft Excel

Sheets

Orders Returns

Orders People Returns Orders People Returns

New Union

Orders+ (Sample - Superstore)

Connection Live Extract Filters 0 | Add

Orders Returns

Sort fields Data source order

Show aliases Show hidden fields 1000 rows

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Country/Region	City	State	Postal Code	Region	Product ID
1	CA-2018-152156	8.11.2018	11.11.2018	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-BI-1000
2	CA-2018-152156	8.11.2018	11.11.2018	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-CI-1000
3	CA-2019-138688	12.06.2018	16.06.2018	Second Class	DV-13045	Darrin Van Huff	Corporate	United States	Los Angeles	California	90036	West	OFF-LA-1000
4	US-2017-108966	11.10.2017	18.10.2017	Standard Class	SD-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	FUR-TA-1000
5	US-2017-108966	11.10.2017	18.10.2017	Standard Class	SD-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	OFF-ST-1000
6	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-FU-1000
7	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-AR-1000
8	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1000
9	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-BI-1000
10	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-AP-1000
11	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-TA-1000
12	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1000
13	CA-2019-114412	15.04.2019	20.04.2019	Standard Class	AA-10480	Andrew Allen	Consumer	United States	Concord	North Carolina	28027	South	OFF-PA-1000
14	CA-2018-161389	5.12.2018	10.12.2018	Standard Class	IM-15070	Irene Maddox	Consumer	United States	Seattle	Washington	98103	West	OFF-BI-1000
15	US-2017-118983	22.11.2017	26.11.2017	Standard Class	HP-14815	Harold Pawlan	Home Office	United States	Fort Worth	Texas	76106	Central	OFF-AP-1000

Go to Worksheet X

Data Source Sheet 1



Tableau - Book1

Menu Bar

Toolbar icon

Page Shelf

Dimension Shelf

Marks Card

Worksheet

Filter Shelf

Measures Shelf

Sets and Parameters Shelf

Dimensions

- Customer
 - Customer Name
 - Segment
- Order
 - Order Date
 - Order ID
 - Ship Date
 - Ship Mode
- Location
 - Country
 - State
 - City

Measures

- Discount
- Profit
- Profit Ratio
- Quantity
- Sales

Sets

- Top Customers by Profit

Parameters

- Profit Bin Size
- Top Customers

Drop field here

Drop field here

Drop field here

Data Source Sheet 1



Undo process

Tableau - Book1

File Data Server Window Help

Connections Add

Sample - Superstore

Sheets

Orders

People

Returns

Orders

People

Returns

New Union

Orders (Sample - Superstore)

Connection Live Extract

Filters 0 Add

Undo

Sort fields Data source order ▾

Show aliases Show hidden fields 1000 ↗ rows

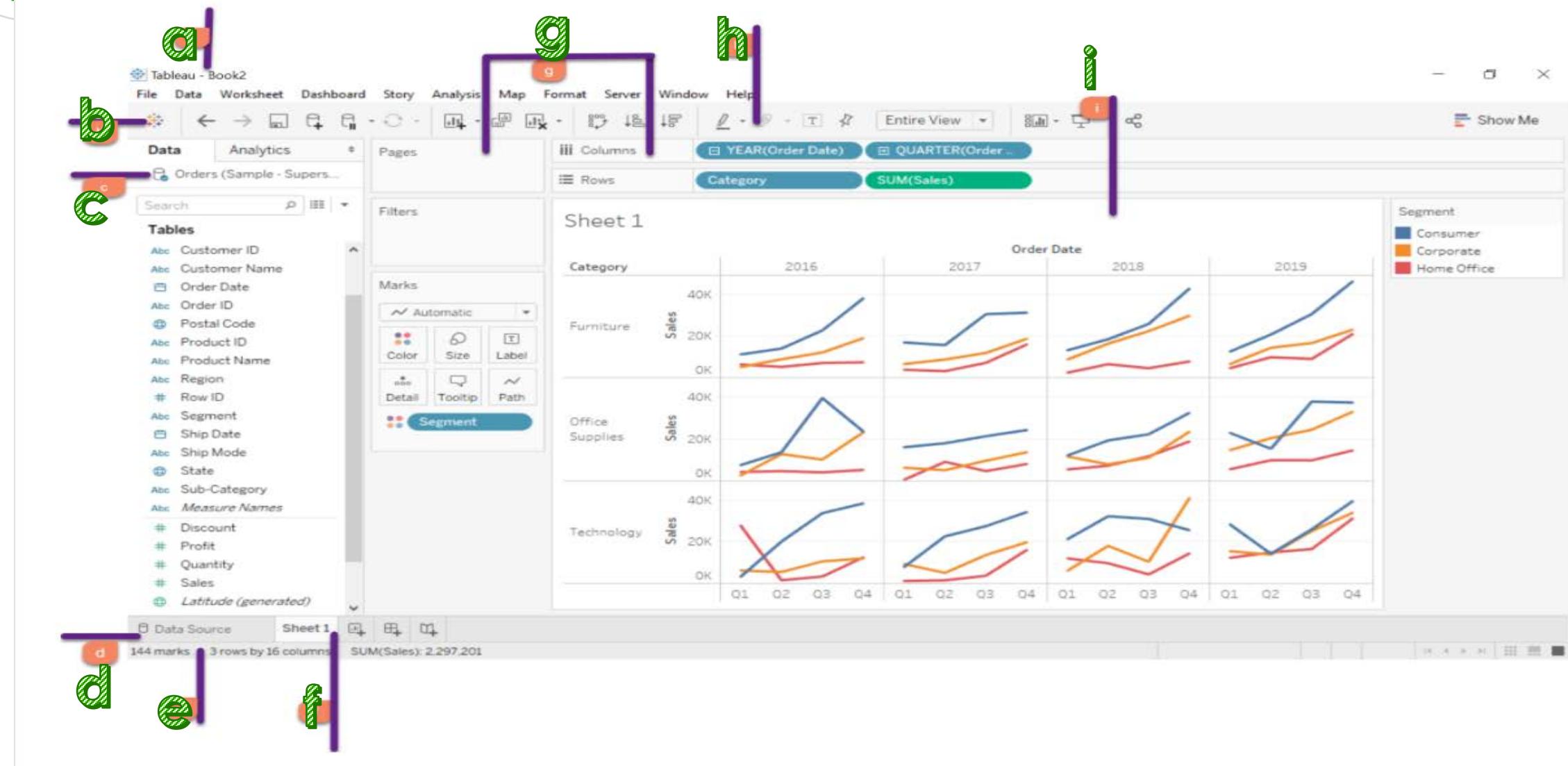
Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Country/Region	City	State	Postal Code	Region	Product ID
1	CA-2018-152156	8.11.2018	11.11.2018	Second Class	CB-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-BD-1001
2	CA-2018-152156	8.11.2018	11.11.2018	Second Class	CB-12520	Claire Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-CH-100C
3	CA-2018-1386688	12.06.2018	16.06.2018	Second Class	DV-13046	Darrin Van Huff	Corporate	United States	Los Angeles	California	90036	West	OFF-LA-1000
4	US-2017-108966	11.10.2017	18.10.2017	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	FUR-TA-1000
5	US-2017-108966	11.10.2017	18.10.2017	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	OFF-ST-1000
6	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-PU-1000
7	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-AR-1000
8	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1000
9	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-BI-1000
10	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-AR-1000
11	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-TA-1000
12	CA-2016-115812	9.06.2016	14.06.2016	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1000
13	CA-2015-114412	15.04.2019	20.04.2019	Standard Class	AA-10480	Andrew Allen	Consumer	United States	Concord	North Carolina	28027	South	OFF-PA-1000
14	CA-2018-161389	5.12.2018	10.12.2018	Standard Class	IM-15070	Irene Maddox	Consumer	United States	Seattle	Washington	98103	West	OFF-BI-1000
15	US-2017-118983	22.11.2017	26.11.2017	Standard Class	HP-14815	Harold Pawlan	Home Office	United States	Fort Worth	Texas	76106	Central	OFF-AP-1000

Go to Worksheet X

Data Source Shift F1



Tableau Workspaces



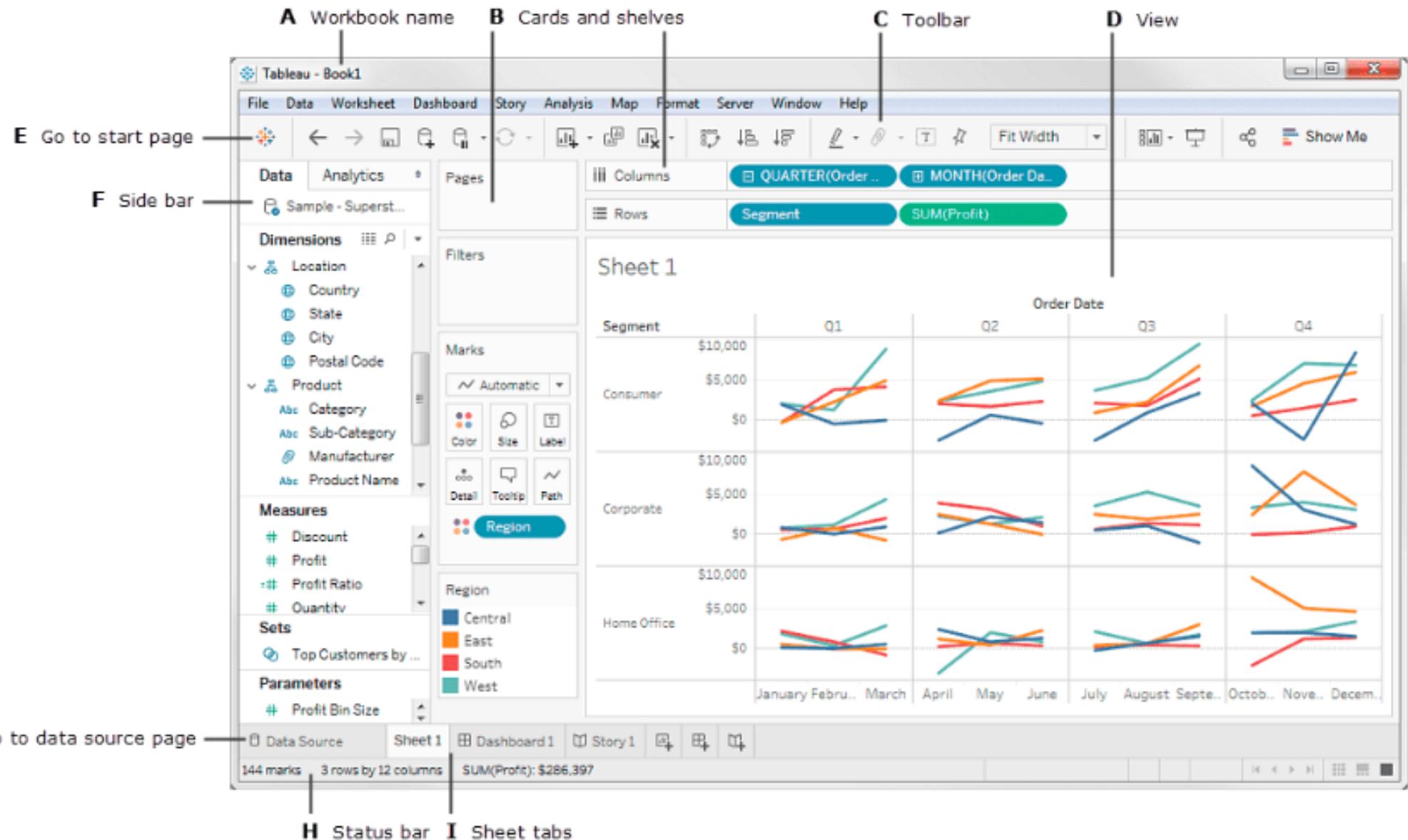




Tableau - Go to Start

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Data Analytics

Orders (My Superstore)

Dimensions

- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category

Measures

- Discount
- Profit
- Quantity
- Sales
- Latitude (generated)
- Longitude (generated)
- Number of Records

Sets

- City Set

Parameters

- Shipping Cost Parameter

Data Pane

Pills

Standard Fit Show Me

Pages Columns MONTH(Order Da..)

Rows Category SUM(Sales) AVG(Discount)

Sample Worksheet

Category

Sales

Discount

View

Furniture

Office Supplies

Technolo...

Sales

Discount

Sales

Discount

Sales

Discount

2012 2013 2014 2015 2016

Month of Order Date

Shelves

Color Size Label

Detail Tooltip

Category

Legend

Category

- Furniture
- Office Supplies
- Technology

Measure Names

- Discount

Caption

The trends of sum of Sales and Discount for Order Date Month broken down by Category. For pane Sum of Sales: Color shows details about Category. For pane Average of Discount: Color shows details about Discount. The data is filtered on

Data Source Tab

Status Bar

288 marks 3 rows by 1 column SUM of AVG(Discount): 2221%

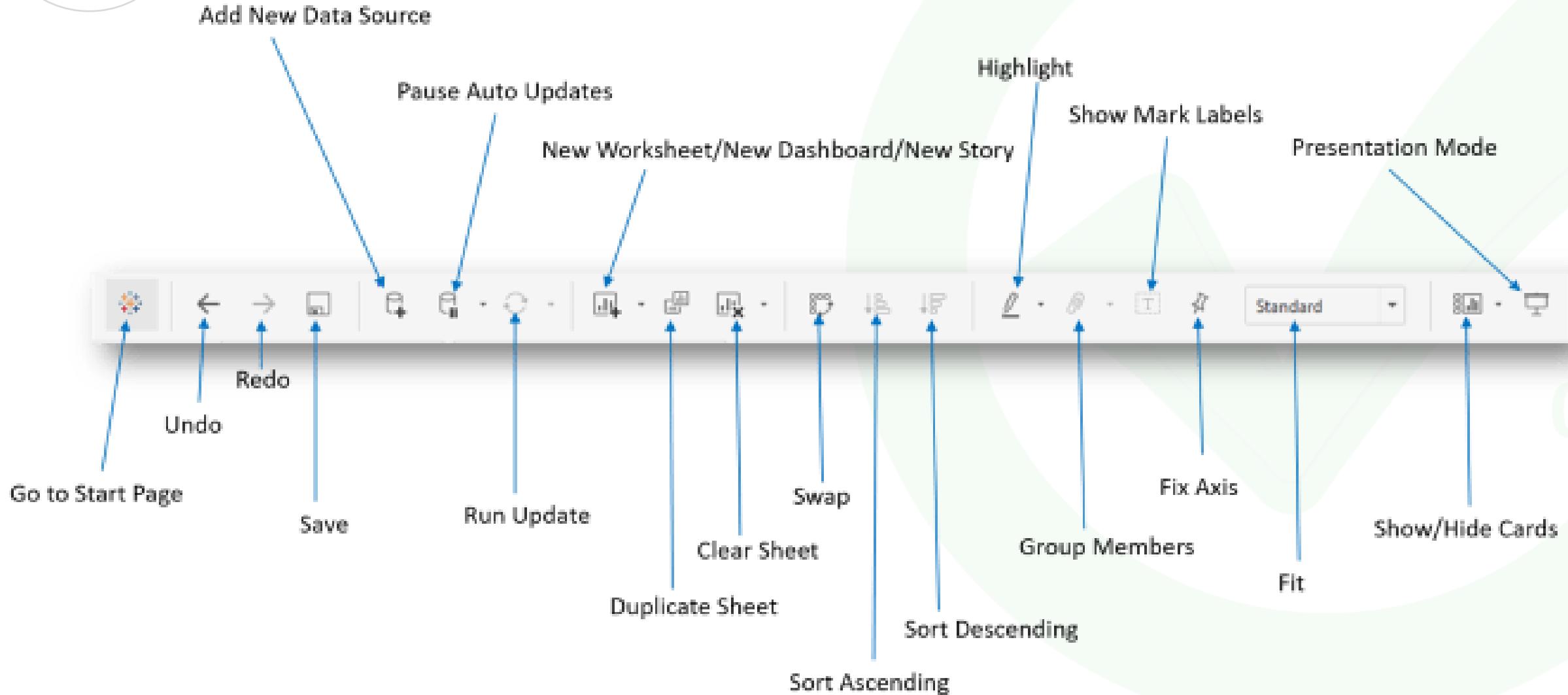
Region

- (All)
- Central
- East
- South
- West

Displayed Filter



Navigation Toolbar





Toolbars Tryings

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Data Analytics Pages Columns Category

Orders (Sample - Superstore) Rows SUM(Sales)

Search

Tables

- Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- Profit
- Quantity
- Sales
- Latitude (generated)
- Longitude (generated)
- Orders (Count)
- Measure Values

Marks

Automatic

Color Size Label

Detail Tooltip

Sales

Category

836,154

742,000

719,047

Sales

Techn... Furnit... Office...

0K 100K 200K 300K 400K 500K 600K 700K 800K 900K

Data Source Sales Sheet 2 Dashboard Sales

1 row by 3 columns SUM(Sales): 2,297,201



Tableau - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Data Analytics < Pages

Orders+ (Sample - Superstore (3))

Search

Tables

- Abc Category
- Abc City
- Abc Country
- Abc Customer ID
- Abc Customer Name
- Abc Order Date
- Abc Order ID
- Abc Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- # Row ID
- Abc Segment
- Abc Ship Date
- Abc Ship Mode
- Abc State
- Abc Sub-Category
- # Discount
- # Profit
- # Quantity
- # Sales
- # Orders (Count)

People

- Abc Person
- Abc Region (People)
- # People (Count)

Measure Names

Data Source Sheet 1 Sheet 2

Columns

Rows

Marks

- Automatic
- Color
- Size
- Text
- Detail
- Tooltip

Sheet 1

Drop field here

Drop field here

Drop field here

Show Me

Select or drag data
Use the Shift or Ctrl key to select multiple fields

The screenshot shows the Tableau desktop application. The top menu bar includes File, Data, Worksheet, Dashboard, Story, Analysis, Map, Format, Server, Window, and Help. A toolbar below the menu contains various icons for data preparation, navigation, and visualization. On the left, the 'Data' pane lists tables and measures from the 'Orders+' data source, including categories like City, Country, and Product, along with measures like Sales and Profit. The 'Analytics' pane is collapsed. The main workspace is titled 'Sheet 1' and features three empty drop zones labeled 'Drop field here'. To the right of the workspace is a 'Show Me' panel displaying a grid of preview icons for different chart types, such as maps, bar charts, line graphs, and bubble charts. A note at the bottom of the workspace instructs users to 'Select or drag data' and 'Use the Shift or Ctrl key to select multiple fields'.



Data Pane

Data Bölmesi

- **Dimensions** qualitative yani nitel değerler içerir (isimler, tarihler veya coğrafi veriler vb.).
- **Measures** sayısal, quantitative nicel değerler içerir .. Satış, kar, sıcaklık, miktar vb

The screenshot shows the Tableau Data pane interface. At the top, there are tabs for 'Data' and 'Analytics', with 'Data' being the active tab. Below the tabs, it says 'Sample - Superstore'. There is a search bar and a filter icon. The main area is titled 'Tables' and lists various data items: Profit (bin), Region, Segment, Ship Date, Ship Mode, Top Customers by Profit, Measure Names, Discount, Profit, Profit Ratio, Quantity, Sales, Latitude (generated), Longitude (generated), Migrated Data (Count), Number of Records, and Measure Values. A vertical dashed line runs down the middle of the list, separating the 'Dimensions' on the left from the 'Measures' on the right. A callout points to this line with the text 'Line that separates Dimensions and Measures'. Another callout points to the 'Measures' section with the text 'Measures'.

Table
Profit (bin)
Region
Segment
Ship Date
Ship Mode
Top Customers by Profit
Measure Names
Discount
Profit
Profit Ratio
Quantity
Sales
Latitude (generated)
Longitude (generated)
Migrated Data (Count)
Number of Records
Measure Values



Data Pane

Orders+ (Sample - Superstore (3))

Search

Tables

- Abc Category
- 🌐 City
- 🌐 Country
- Abc Customer ID
- Abc Customer Name
- 📅 Order Date
- Abc Order ID
- 🌐 Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- # Row ID
- Abc Segment
- 📅 Ship Date
- Abc Ship Mode
- 🌐 State
- Abc Sub-Category
- # Discount
- # Profit
- # Quantity
- # Sales
- # Orders (Count)

▼ People

Dimension'i verilerimizdeki ayrıntıları kategorilere ayırmak, bölgelere ayırmak, parçalara ayırmak ve ortaya çıkarmak için kullanıyoruz



Measure, buradaki field'lar üzerinden birleştirme ve diğer hesaplamaları yapmak için kullanıyoruz

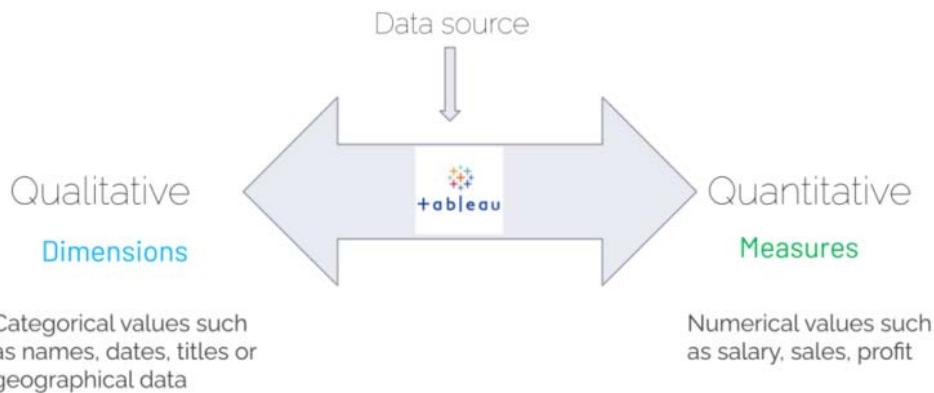




Data Pane

Data Bölmesi

- Measure Values field
- Measure Names field
- NameofTable(Count) field ,



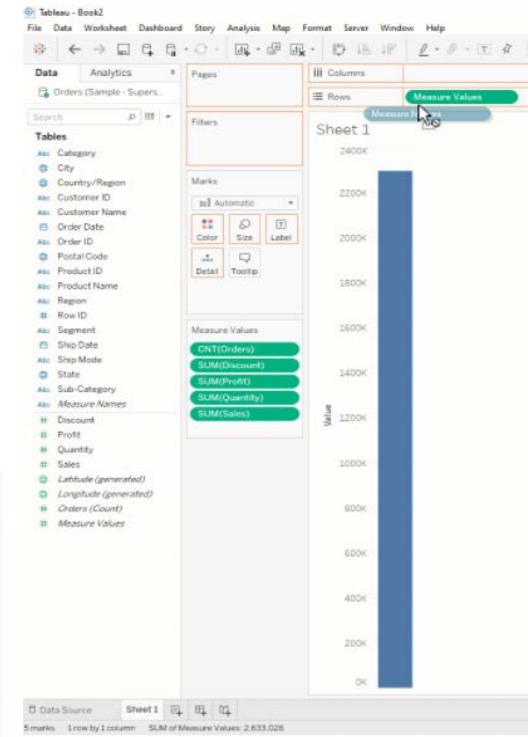
Data Analytics

Orders (Sample - Supers...)

Search

Tables

- Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- Profit
- Quantity
- Sales
- Latitude (generated)
- Longitude (generated)
- Orders (Count)
- Measure Values



Automatically created Fields



Data Pane

Veri bölmesi

- Mavi simge, field'in discrete olduğunu gösterir.
- Yeşil simge, field'in continuous olduğunu gösterir.

Data Type	Icon
String values (Text)	Abc
Integer values (Numbers)	#
Date values (DD/MM/YYYY or MM/DD/YYYY)	Calendar
Date & Time values	Calendar Clock
Boolean values (True or False; relational)	T/F
Geographic values (Region, Postal code etc.)	Globe
Cluster group or mixed values	Group

Icon	Data type
Abc	Text (string) values
Calendar	Date values
Calendar Clock	Date & Time values
#	Numerical values
T/F	Boolean values (relational only)
Globe	Geographic values (used with maps)

Data Analytics

Orders (Sample - Supers...)

Search

Tables

The field contains text values.

- Abc Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region

The field contains geographical data and has been assigned a geographic role.

The field contains date values.

- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region

The field contains numeric values.

- # Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names

The field contains numeric values.

- # Discount
- # Profit
- # Quantity
- # Sales
- Latitude (generated)
- Longitude (generated)
- # Orders (Count)
- # Measure Values



Discrete vs. Continuous



Blue pill

DISCRETE

individually separate and distinct

treated as finite

generally add headers to the view

Furniture Office Supplies Technology

Green pill

CONTINUOUS

forming an unbroken whole,
without interruption

treated as an infinite

generally add axes to the view

Blue pill

DISCRETE

Product Category

Segment

Country

Age

Green pill

CONTINUOUS

Revenue

Population

Profit

Age

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



PearDeck time..

Order ID deki veri tipi hangisidir ?



Discrete vs. Continuous

The 4 Roles of Fields

Tables

- ⊕ Country/Region
- Abc Customer ID
- Abc Customer Name
- ⊕ Order Date
- Abc Order ID
- ⊕ Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- # Row ID
- Abc Segment
- ⊕ Ship Date
- Abc Ship Mode
- ⊕ State
- Abc Sub-Category
- Abc Measure Names
- # Discount
- # Profit
- # Quantity
- # Sales

Dimensions with a data type of String or Boolean cannot be continuous

Dimension

DISCRETE

Dimension

CONTINUOUS

Measure

DISCRETE

Measure

CONTINUOUS



Tables - Book2

File Data Server Window Help

Connections Add

Sample - Superstore

Sheets

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

Orders Returns Orders People Returns New Rows

Orders (Sample - Superstore)

Orders

Need more data?
Drag tables here to relate them: Learn more

Sort fields Data source order

#	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Country/Region	City	State	Postal Code	Region	Product ID
1	CA-2018-152156	11/9/2018	11/11/2018	Second Class	CG-12520	Craig Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-BG-1000
2	CA-2018-152156	11/9/2018	11/11/2018	Second Class	CG-12520	Craig Gute	Consumer	United States	Henderson	Kentucky	42420	South	FUR-CH-1000
3	CA-2018-138068	6/12/2018	6/16/2018	Second Class	DV-13045	Darren Van Huff	Corporate	United States	Los Angeles	California	90036	West	OFF-LA-1000
4	US-2017-108946	10/1/2017	10/18/2017	Standard Class	SD-20395	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	FUR-TA-1000
5	US-2017-108946	10/1/2017	10/18/2017	Standard Class	SD-20395	Sean O'Donnell	Consumer	United States	Fort Lauderdale	Florida	33311	South	OFF-ST-1000
6	CA-2016-115812	6/9/2016	6/14/2016	Standard Class	BH-1710	Erosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-FU-1000
7	CA-2016-115812	6/9/2016	6/14/2016	Standard Class	BH-1710	Erosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-AB-1000
8	CA-2016-115812	6/9/2016	6/14/2016	Standard Class	BH-1710	Erosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1000
9	CA-2016-115812	6/9/2016	6/14/2016	Standard Class	BH-1710	Erosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-BI-1000
10	CA-2016-115812	6/9/2016	6/14/2016	Standard Class	BH-1710	Erosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	OFF-AP-1000
11	CA-2016-115812	6/9/2016	6/14/2016	Standard Class	BH-1710	Erosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	FUR-TA-1000
12	CA-2016-115812	6/9/2016	6/14/2016	Standard Class	BH-1710	Erosina Hoffman	Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1000
13	CA-2019-114412	4/20/2019	4/20/2019	Standard Class	AA-10480	Andrew Allen	Consumer	United States	Concord	North Carolina	28027	South	OFF-PA-1000
14	CA-2018-161389	12/5/2018	12/10/2018	Standard Class	IM-5070	Irene Medots	Consumer	United States	Seattle	Washington	98103	West	OFF-BI-1000

Data Source Sheet1

Data type change in the data source page

#	Orders Row ID	Orders Date	Orders Ship Date	Orders Ship Mode
1	18	11/11/2018	Second Class	
2	18	11/11/2018	Second Class	
3	18	6/16/2018	Second Class	
4	017	10/18/2017	Standard Class	
5	017	10/18/2017	Standard Class	
6	04-2018-1158012	6/14/2016	Standard Class	
7	CA-2016-115812	6/9/2016	Standard Class	
8	CA-2016-115812	6/9/2016	Standard Class	
9	CA-2016-115812	6/9/2016	Standard Class	
10	CA-2016-115812	6/9/2016	Standard Class	
11	CA-2016-115812	6/9/2016	Standard Class	
12	CA-2016-115812	6/9/2016	Standard Class	
13	CA-2019-114412	4/20/2019	Standard Class	

Data type change in the data pane

Orders (Sample - supers...)

Search

Tables

Category

Number (decimal)

Number (whole)

Date & Time

Date

String

Boolean

Default

Geographic Role

Row ID

Segment

Ship Date

Ship Mode

State

Sub-Category

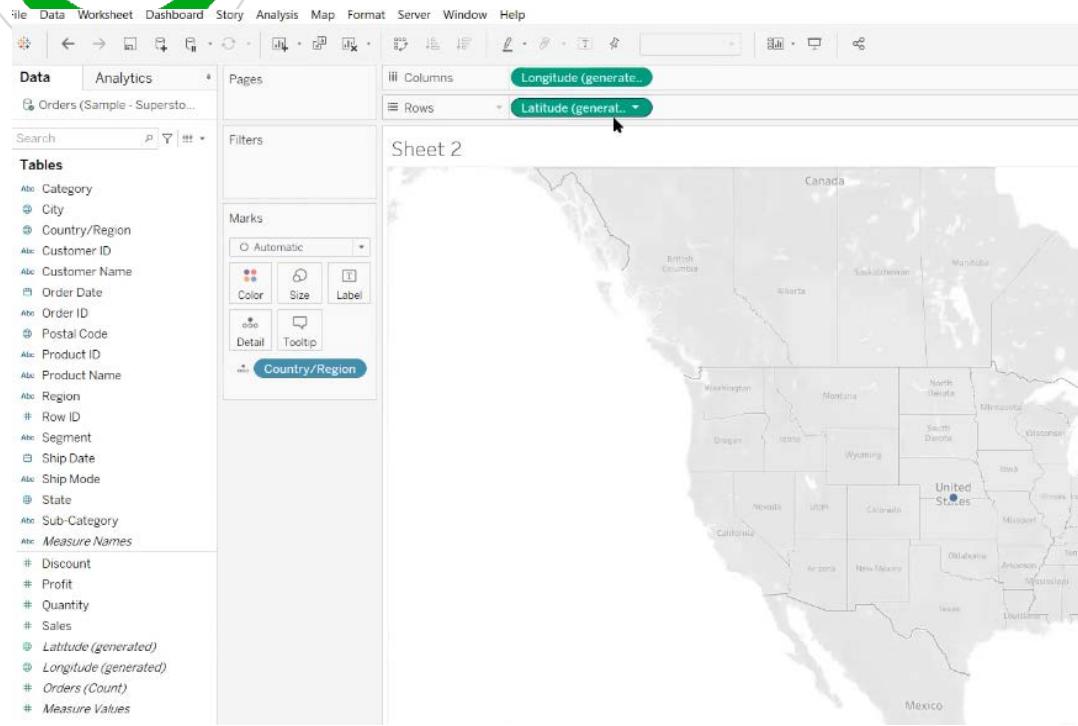
Measure Names

Discount

Profit

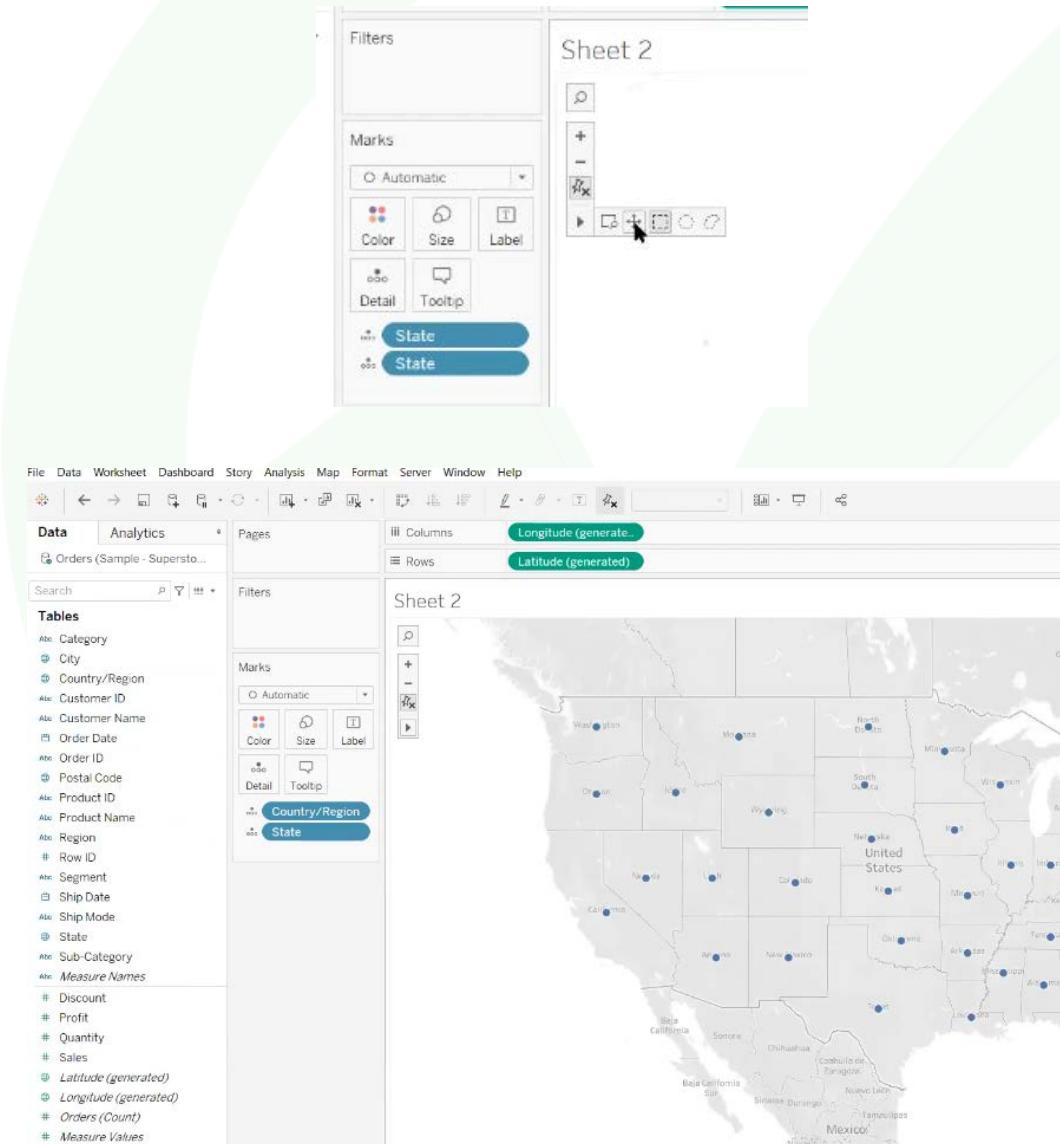


Sample - Hands On..



Tables

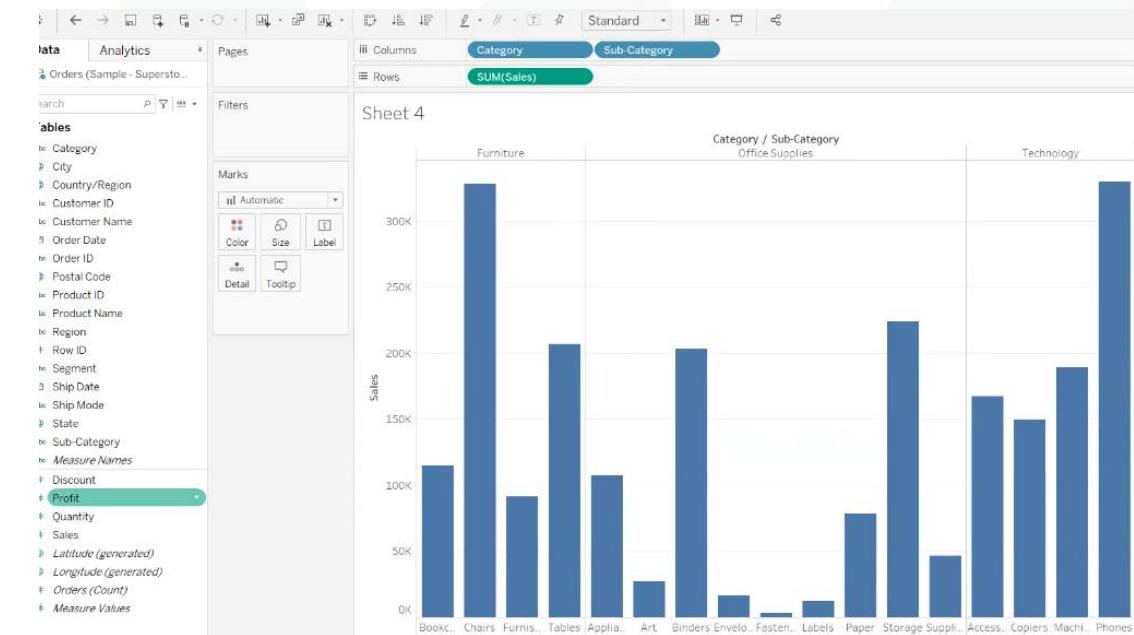
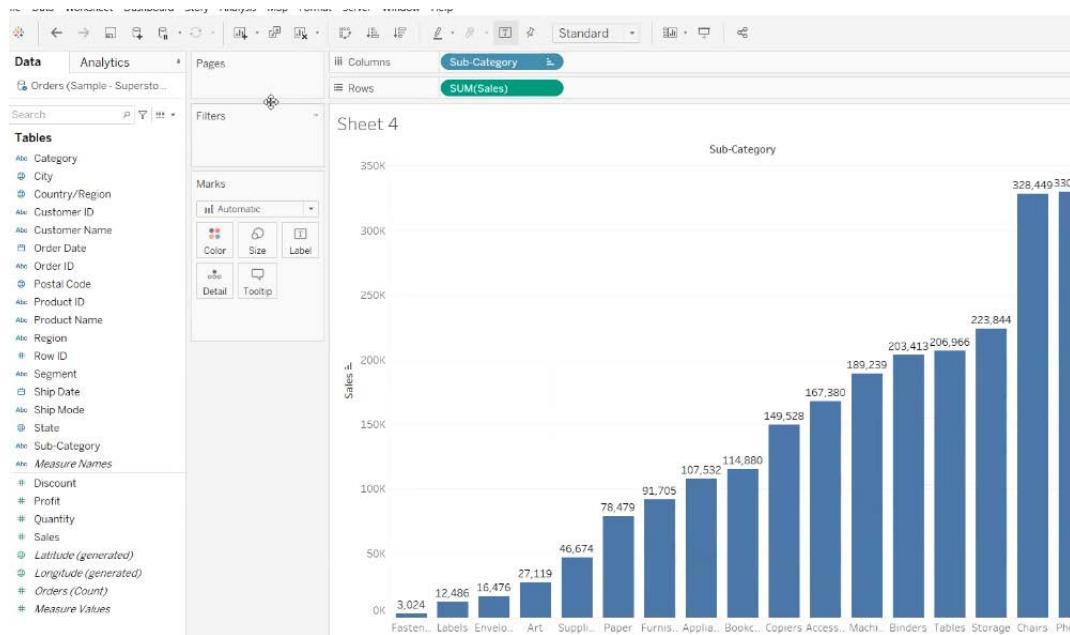
- Category
- City
- Number (decimal)
- Number (whole)
- Date & Time
- Date
- String
- Boolean
- Default
- Geographic Role
 - None
 - Airport
 - Area Code (U.S.)
 - CBSA/MSA (U.S.)
 - City
 - Congressional District (U.S.)
 - Country/Region
 - County
 - NUTS Europe
 - State/Province
 - ZIP Code/Postcode
- Create from





Samples..

- Birlikte yapalım.. Önce sizler..





CSV dosyası ile çalışma

The screenshot illustrates the workflow for working with CSV files in Microsoft Power BI Data Studio.

Top Left: A context menu titled "To a File" is open, showing options like "Text file" (which is selected), "Microsoft Excel", "JSON file", "Microsoft Access", "PDF file", and "Spatial file".

Middle Left: A preview pane shows a small thumbnail of a CSV file named "Book2".

Middle Center: A list of files in a folder named "Ad" (Address). The files are:

Ad	Değiştirme tarihi
Airports and routes.csv	3.06.2021 19:57
cancer.csv	3.05.2021 12:57
Order_Details_data.csv	10.01.2022 05:15
weather.csv	29.05.2021 18:45

Bottom Left: A detailed view of the "Order_Details_data.csv" file properties. It shows the file name, field separator set to "Space", and a dropdown menu for "Text qualifier" containing options: Comma, Tab, Semicolon, Space, Vertical Bar, and Other. The "Space" option is currently selected.

Right Side: A context menu is open for the "Order_Details_data.csv" file, listing options: Open..., Rename, Remove, and "Field names are in first row" (which is checked). Below these, there are two buttons: "Text File Properties..." (highlighted in blue) and "Convert to Union...".

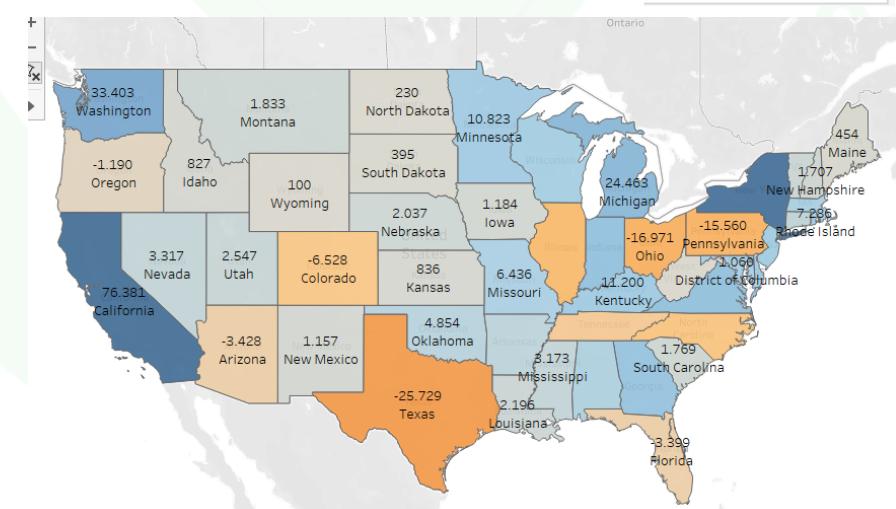
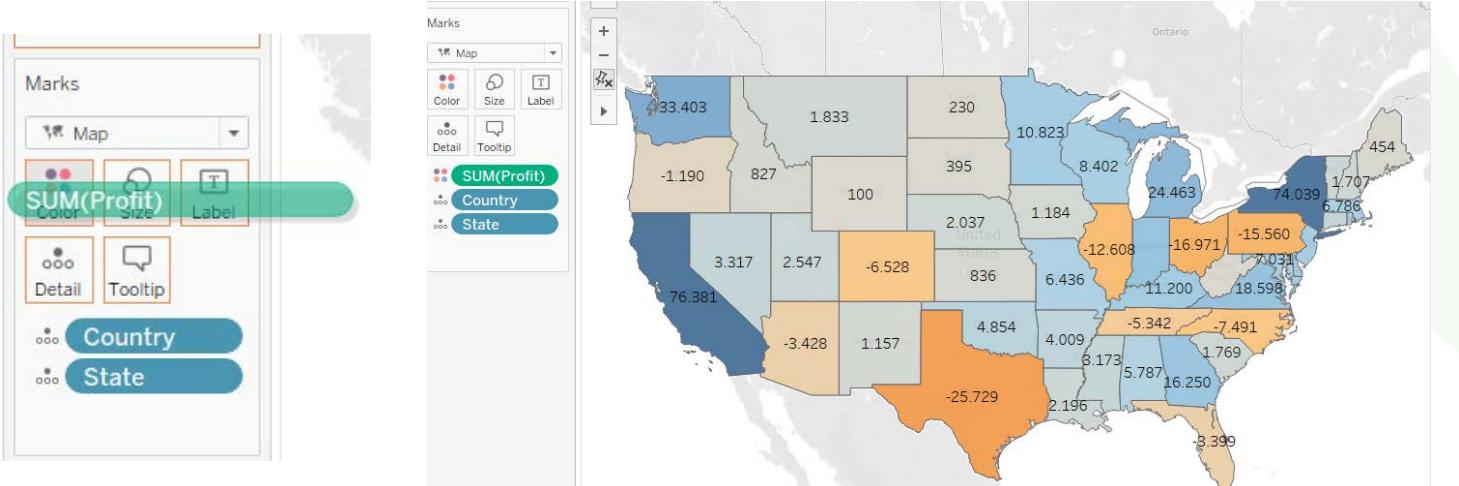
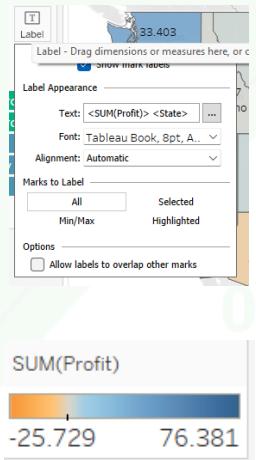
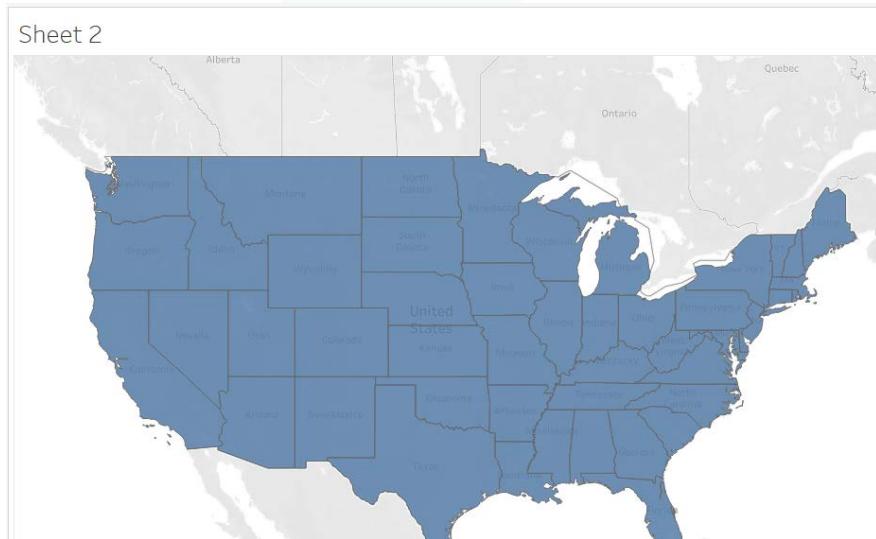
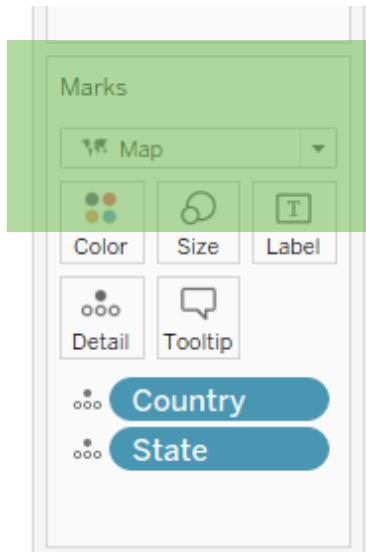


Challenge time

Dersin başındaki görseli şimdi siz hazırlayınız.



- Abc Category
- City
- Country
- Abc Customer ID
- Abc Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- # Row ID
- Abc Segment





Hands on

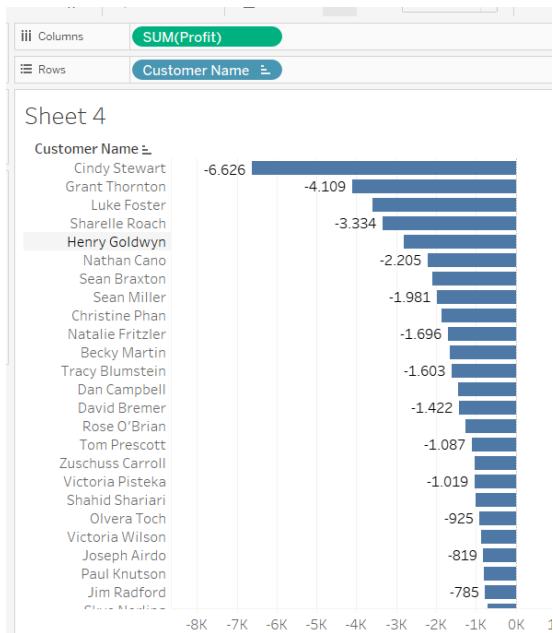
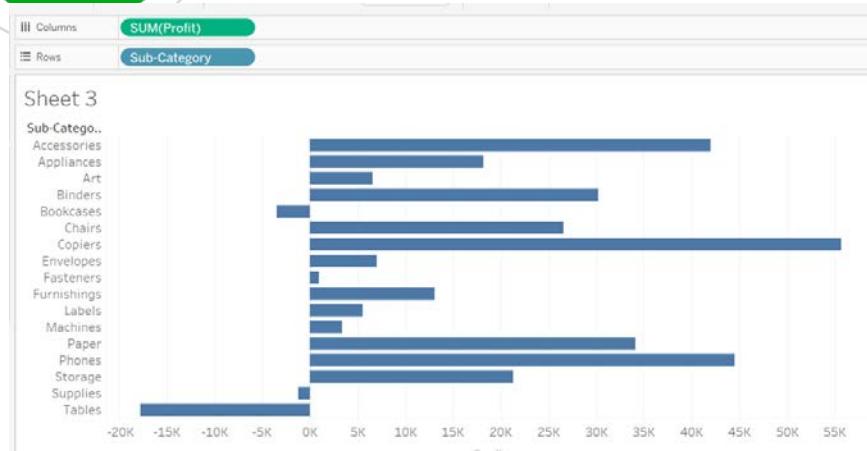




Tableau - 2

Visualization Build



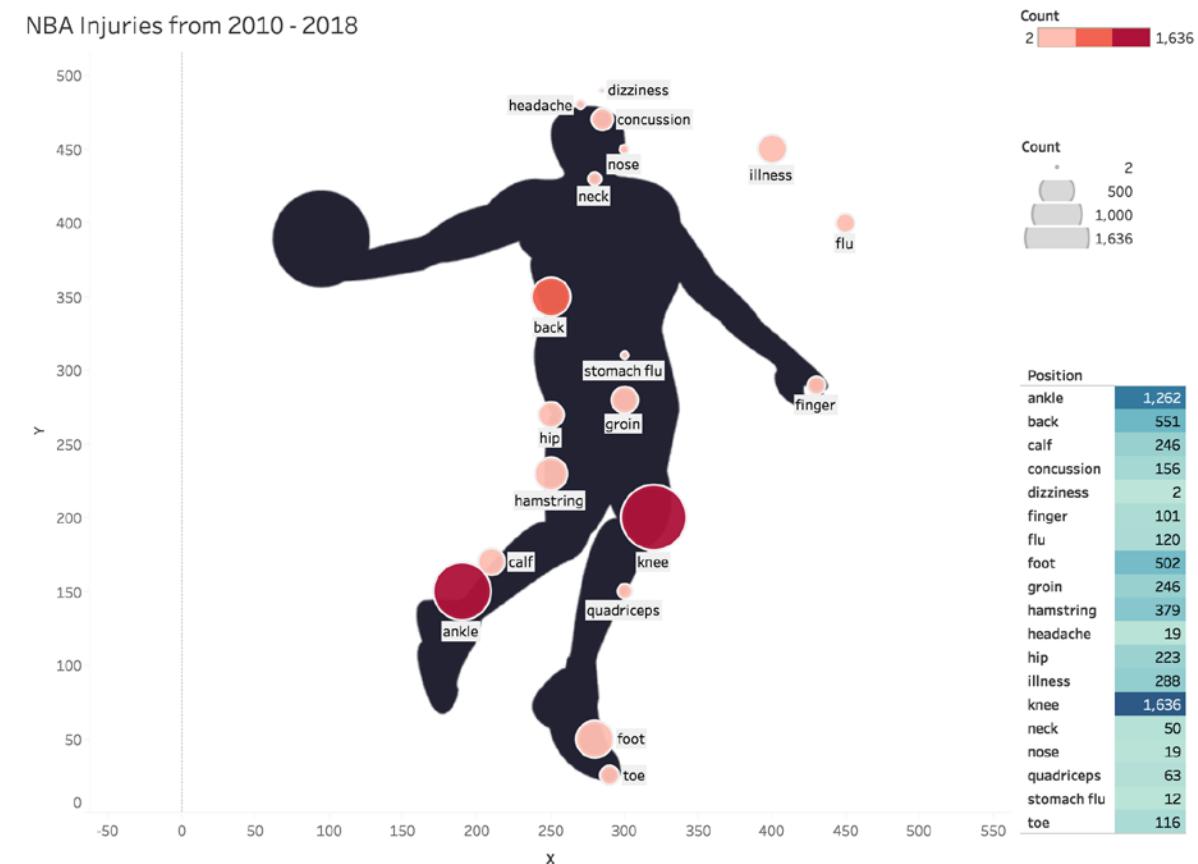


Tableau



Content

- Building Visualization
- Marks Field
- Color Palette

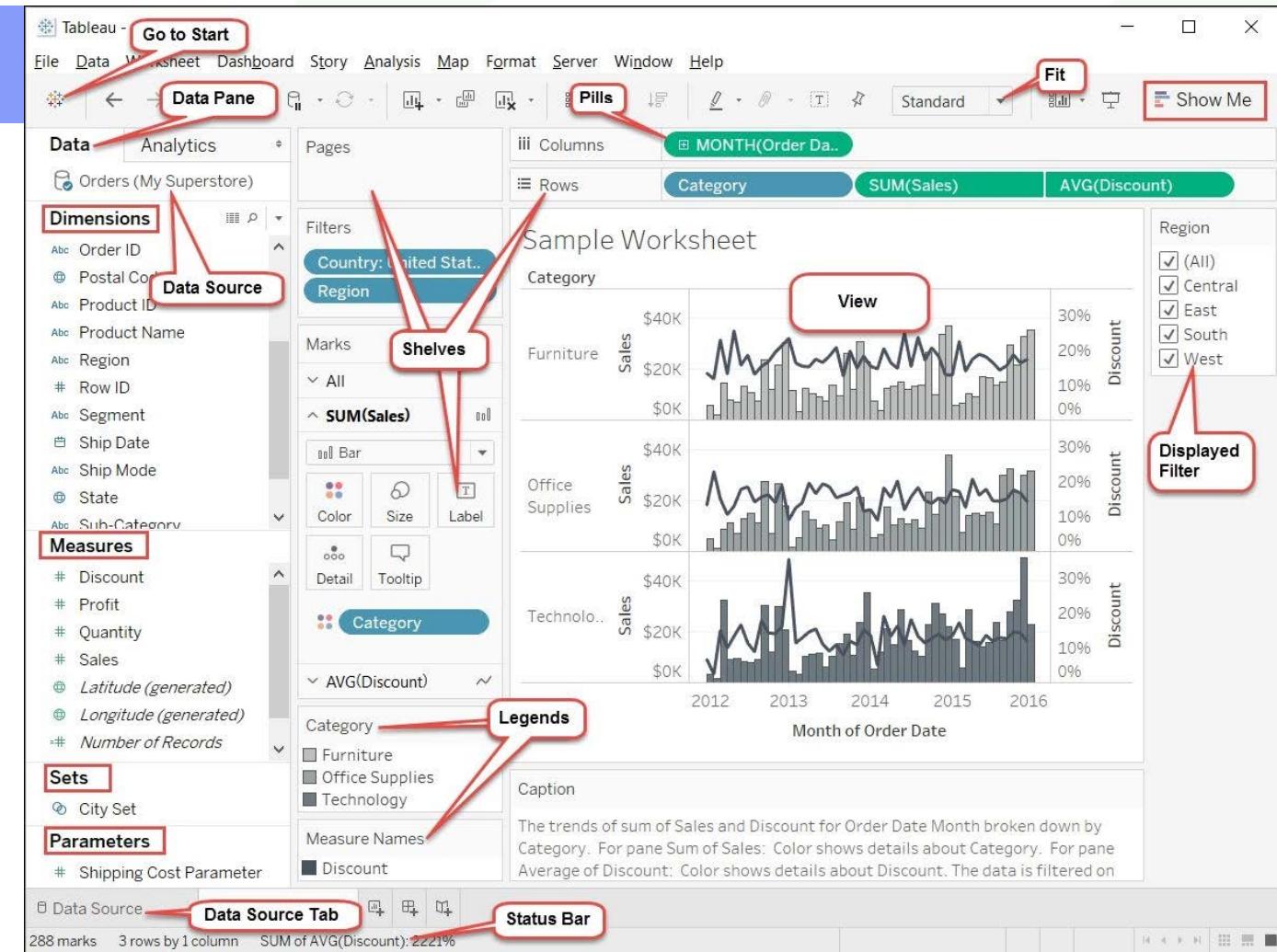




Building Visualization

Görselleştirme Alanları

- Columns shelf
- Row shelf
- Pages shelf
- Filters shelf
- Marks Card
- View





View Area

The screenshot shows the Tableau desktop interface with the following key elements:

- Top Bar:** File, Data, Worksheet, Dashboard, Story, Analysis, Map, Format, Server, Window, Help.
- Toolbars:** Standard, Search, Filters, and a toolbar with various icons.
- Left Panel:** Pages Shelf (highlighted with a red box), Sample - Superstore (3) data source, and a large list of fields under Categories, Measures, and Dimensions.
- Middle Panel:** Columns and Rows Shelf (highlighted with a red box). The Columns shelf contains "iii Columns" and the Rows shelf contains "Rows".
- Sheet 1:** A blank canvas with three placeholder labels: "Drop field here" (top left), "Drop field here" (bottom left), and "View" (center).
- Bottom Panel:** Data Source (Sample - Superstore), Sheet 1, and other sheet tabs. The status bar at the bottom right shows the date and time: 03:08 14.01.2022.



Clear - Undo



- Geri alma
- Silme

Data Worksheet Dashboard Story

← →

Data Analytics Pages

Orders (Sample - Super...)

Format Server Window Help

Clear Sheet (Alt+Shift+Backspace)

Rows SUM(Sales)

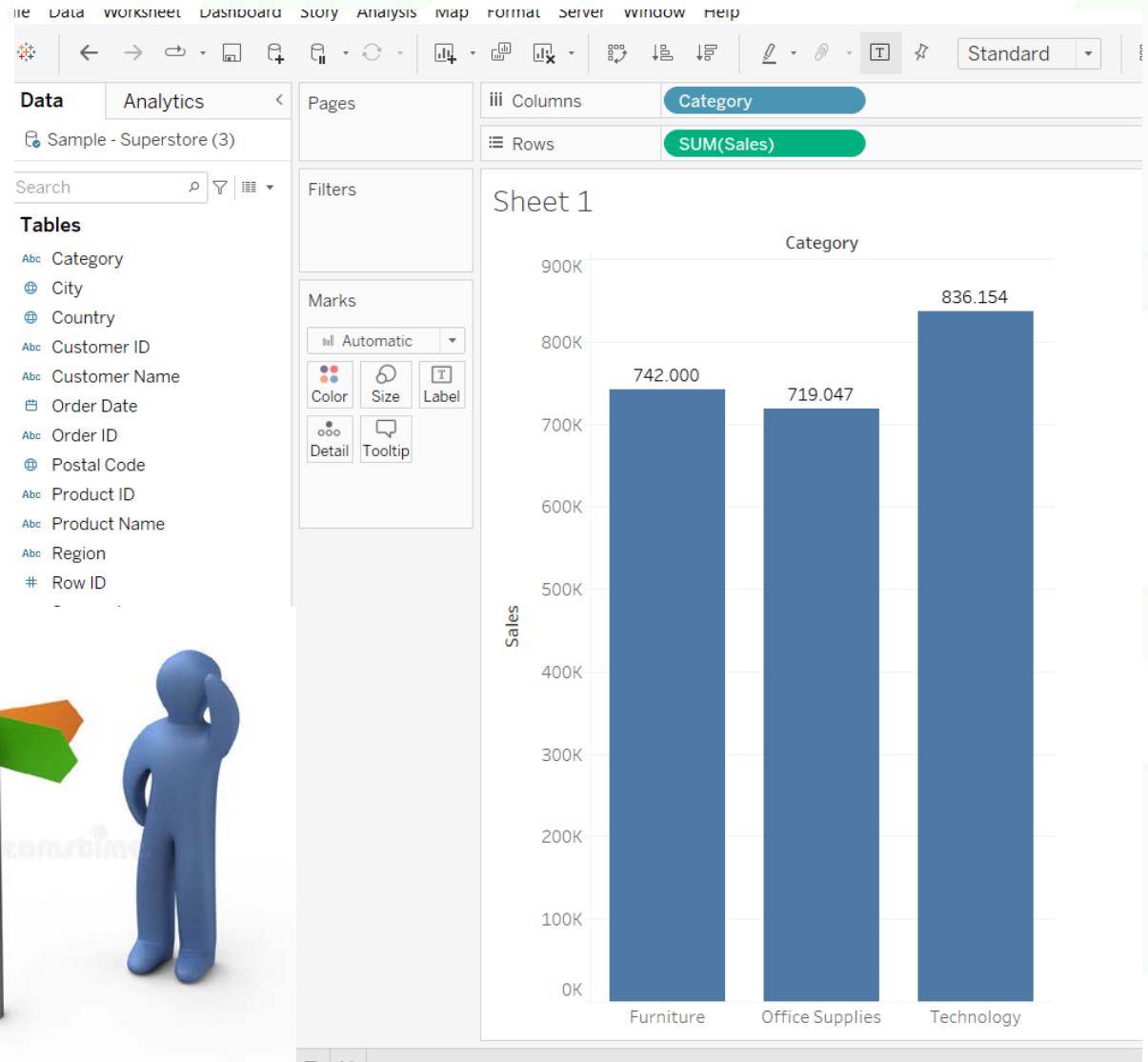


Görsel nasıl olmalı

- kolay anlaşılır olmalı
- Mesajı doğru vermeli

Yöntemler

- Drag-Drop ile Raflara
- Drag-Drop ile View alana
- Data Pane de çift klikleme
- Show me alanı
- Marks Card kullanımı





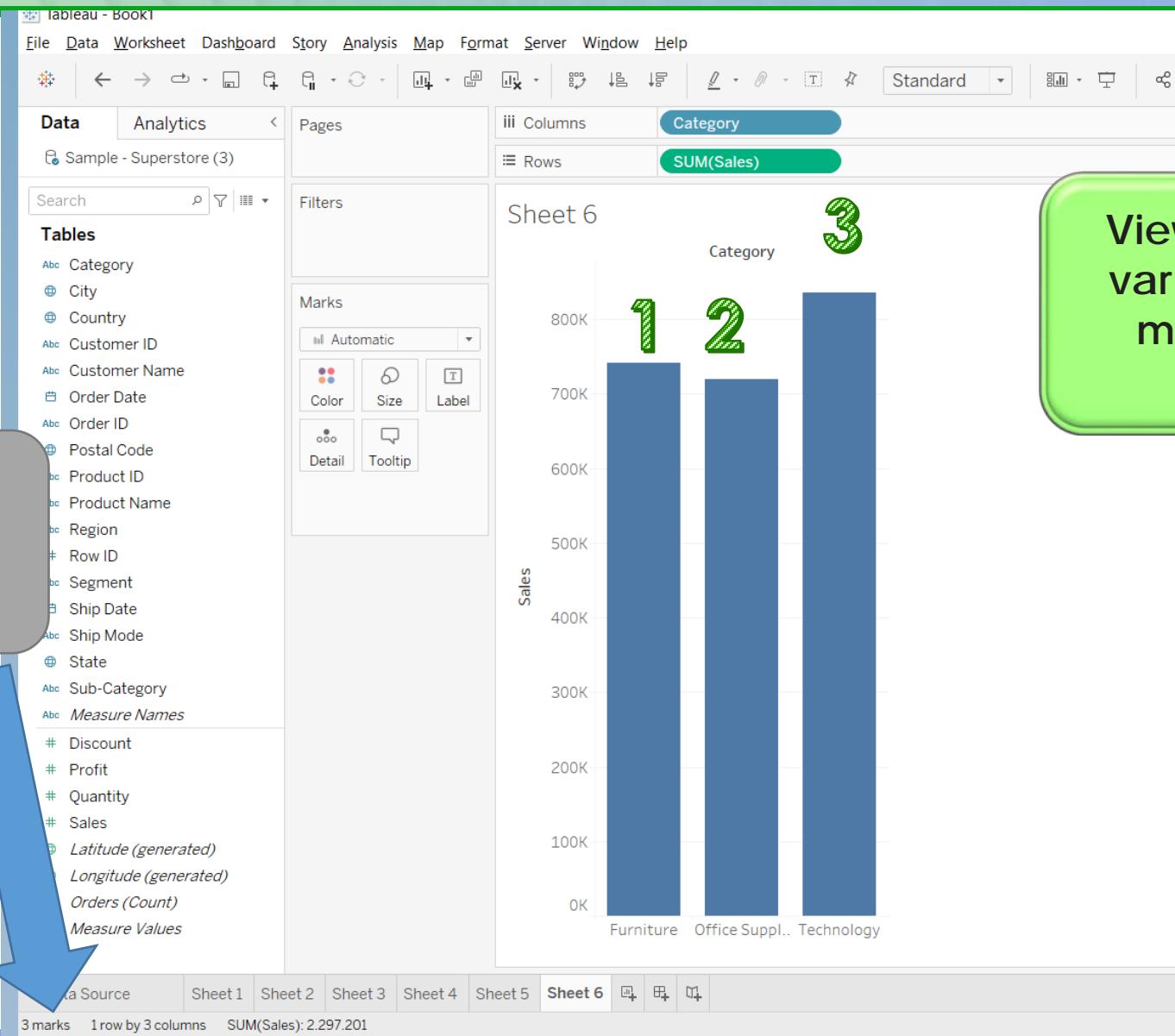
Show Me



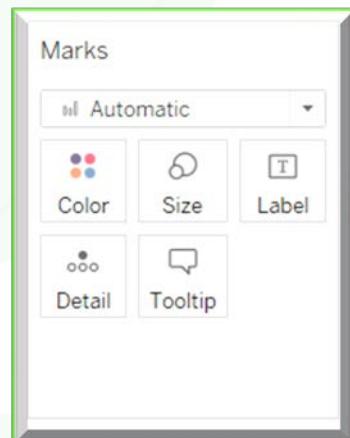


Marks Card

Status bar'da View kısmındaki Marks'ların sayısı görünür



View alanında 3 adet bar var. Yani, View'da 3 adet marks (data point) var demektir





Marks Card

This image shows a Tableau dashboard titled "Marks Card" with two main visualizations and their respective data source configurations.

Sheet 6 Data Configuration:

- Data:** Sample - Superstore (3)
- Analytics:** Category (Columns), SUM(Sales) (Rows)
- Tables:** Category, City, Country, Customer ID, Customer Name, Order Date, Order ID, Postal Code, Product ID, Product Name, Region, Row ID, Segment, Ship Date, Ship Mode, State, Sub-Category, Measure Names, Profit, Quantity, Sales, Latitude (generated), Longitude (generated), Orders (Count), Measure Values.
- Marks:** SUM(Profit) is assigned to Color, Size, and Label. Detail and Tooltip are also present.
- Marks Card:** SUM(Profit) is displayed as 18.451 and 145.455.

Sheet 6 Visualization:

A bar chart titled "Sheet 6" showing Sales by Category. The Y-axis ranges from 0K to 800K. The X-axis categories are Furniture, Office Suppl., and Technology. The sales values are approximately 750K for Furniture, 720K for Office Suppl., and 850K for Technology.

Category	Sales
Furniture	~750K
Office Suppl.	~720K
Technology	~850K

Sheet 6 Analytics Configuration:

- Data:** Sample - Superstore (3)
- Analytics:** Category (Columns), SUM(Sales) (Rows)
- Tables:** Category, City, Country, Customer ID, Customer Name, Order Date, Order ID, Postal Code, Product ID, Product Name, Region, Row ID, Segment, Ship Date, Ship Mode, State, Sub-Category, Measure Names, Profit, Quantity, Sales, Latitude (generated), Longitude (generated), Orders (Count), Measure Values.
- Marks:** SUM(Profit) is assigned to Color, Size, and Label. Detail and Tooltip are also present.

Sheet 6 Visualization:

A bar chart titled "Sheet 6" showing Sales by Category. The Y-axis ranges from 0K to 800K. The X-axis categories are Furniture, Office Suppl., and Technology. The sales values are approximately 750K for Furniture, 720K for Office Suppl., and 850K for Technology.

Category	Sales
Furniture	~750K
Office Suppl.	~720K
Technology	~850K



Marks Card

The image shows a Tableau dashboard interface with several components:

- Top Navigation:** Data, Analytics, Pages, Columns (Category), Rows (SUM(Sales)).
- Search Bar:** Sample - Superstore (3).
- Tables:** Category, City, Country, Customer ID, Customer Name, Order Date, Order ID, Postal Code, Product ID, Product Name, Region, Row ID, Segment, Ship Date, Ship Mode, State, Sub-Category, Measure Names, Discount, Profit, Quantity, Sales, Latitude (generated), Longitude (generated), Orders (Count), Measure Values.
- Marks Card:** A card showing a line chart with Sales on the Y-axis (0K to 800K) and Category on the X-axis (Furniture, Office Supplies, Technology). The chart shows Sales decreasing from Furniture (~750K) to Office Supplies (~720K) and then increasing to Technology (~800K). The Marks card also displays SUM(Profit) values: 18.451 for Furniture and 145.455 for Technology.
- Marks Legend:** Bar, Color, Size, Label, Detail, Tooltip, SUM(Profit).
- View Data Window:** A modal showing the data for Sheet 6: Category, Profit, Sales. One row is visible: Technology 145.454,95 836.154,03.
- Contextual Menu:** A green arrow points to a context menu for the Technology bar. The menu includes: Select All, View Data..., Explain Data..., Copy, Format..., Clear Manual Sizing, Mark Label, Annotate, Trend Lines, Forecast, Drop Lines, Show View Toolbar, Keep Only, Exclude, Group, Create Set... (with 'View Data...' highlighted).
- Bottom Navigation:** Data Source, Sheet 1, Sheet 2, Sheet 3, Sheet 4, Sheet 5, Sheet 6, and icons for Refresh, Undo, Redo.



Marks Card

Tableau - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages iii Columns Region Category

Sample - Superstore (3) Rows SUM(Sales)

Search

Tables

- Category
- City
- Country
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- Profit
- Quantity
- Sales
- Latitude (generated)
- Longitude (generated)
- Orders (Count)
- Measure Values

Marks

Automatic

Color Size Label Detail Tooltip

Sheet 6

Region / Category

Region	Category	Sales
Central	Furniture	163.797
Central	Office Supplies	167.026
Central	Technology	170.416
East	Furniture	208.291
East	Office Supplies	205.516
East	Technology	264.974
South	Furniture	117.299
South	Office Supplies	125.651
South	Technology	148.772
West	Furniture	252.613
West	Office Supplies	220.853
West	Technology	251.992

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4 Sheet 5 Sheet 6

12 marks 1 row by 12 columns SUM(Sales): 2.297.201

05:54 14.01.2022 22

Windows Taskbar icons: File Explorer, Edge, Camera, Mail, Google Chrome, WhatsApp, VLC, Spotify, Powerpoint, Word, Excel.



File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Data Analytics < Pages Columns Region

Sample - Superstore (3)

Search

Tables

- Category
- City
- Country
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- Profit
- Quantity
- Sales
- Latitude (generated)
- Longitude (generated)
- Orders (Count)
- Measure Values

Marks

- All
- SUM(Sales)
- Automatic
- Color
- Size
- Label
- Detail
- Tooltip

CNT(Orders)

Sheet 6

Region

Region	Sales	Count of Orders
Central	501.240	2.323
East	678.781	2.848
South	391.722	1.620
West	725.458	3.203

View Data Sheet 6

3.203 rows Show aliases Show all fields

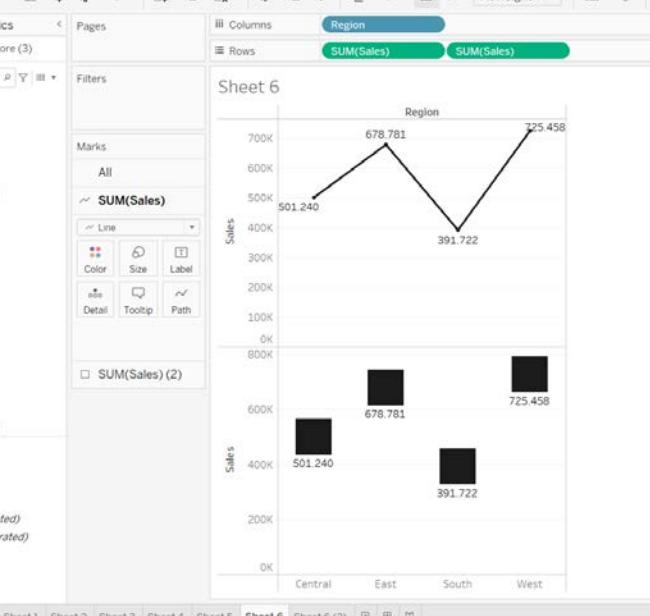
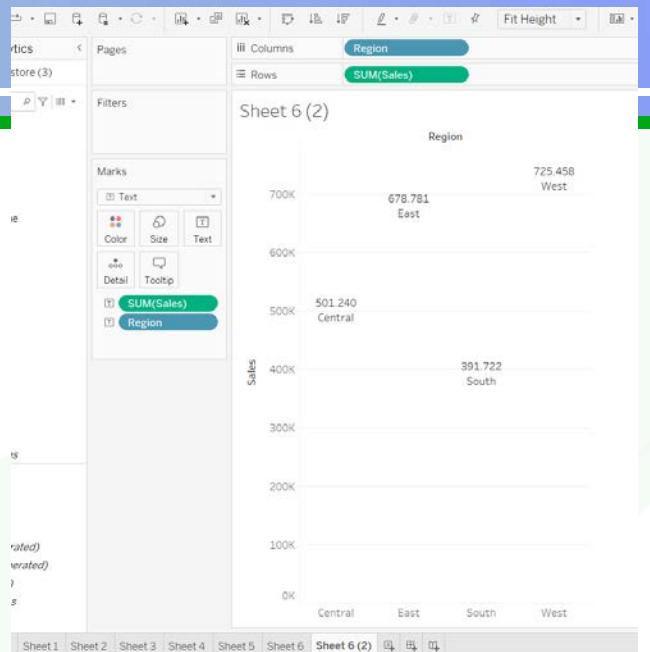
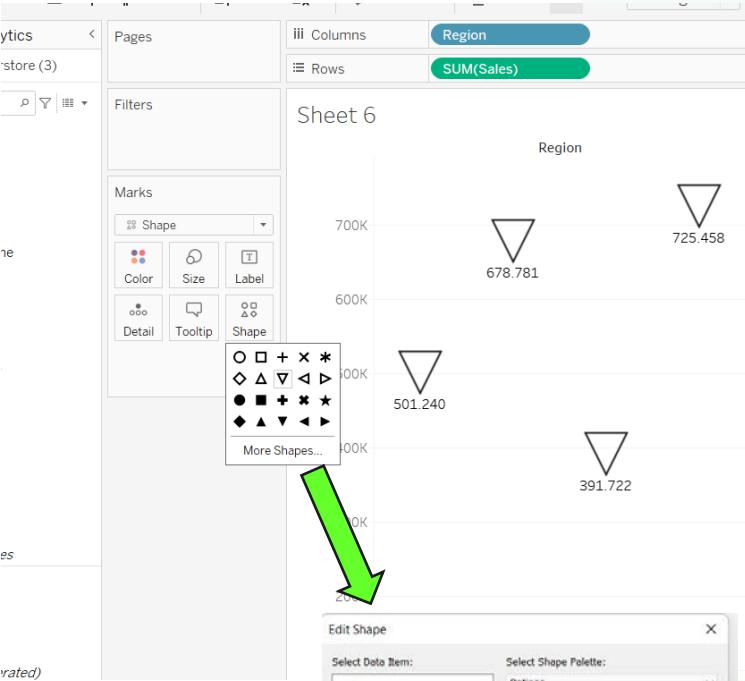
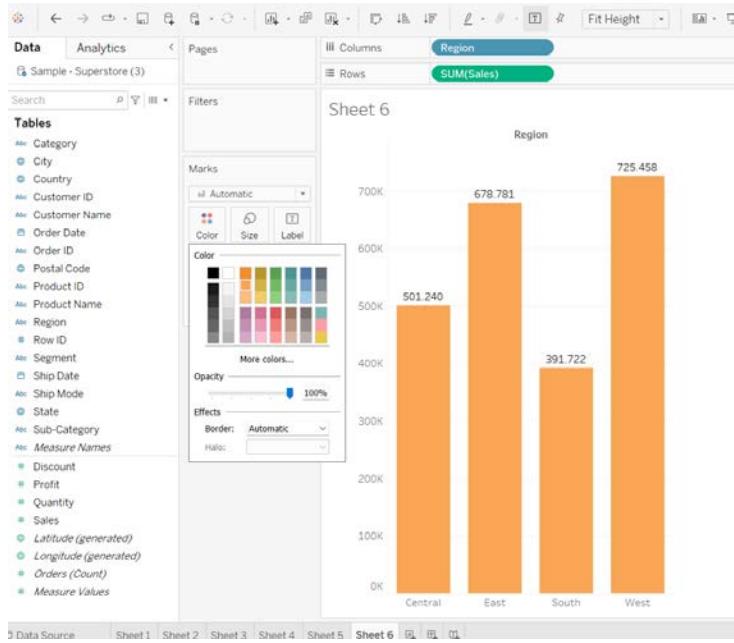
Region	Category	City	Country	Customer ID	Customer Name	Order Date	Order
West	Office Supplies	Los Angeles	United States	DV-13045	Darrin Van Huff	12.06.2016	CA-20
West	Furniture	Los Angeles	United States	BH-11710	Brosina Hoffman	9.06.2014	CA-20
West	Office Supplies	Los Angeles	United States	BH-11710	Brosina Hoffman	9.06.2014	CA-20
West	Technology	Los Angeles	United States	BH-11710	Brosina Hoffman	9.06.2014	CA-20
West	Office Supplies	Los Angeles	United States	BH-11710	Brosina Hoffman	9.06.2014	CA-20
West	Office Supplies	Los Angeles	United States	BH-11710	Brosina Hoffman	9.06.2014	CA-20
West	Furniture	Los Angeles	United States	BH-11710	Brosina Hoffman	9.06.2014	CA-20
West	Technology	Los Angeles	United States	BH-11710	Brosina Hoffman	9.06.2014	CA-20
West	Office Supplies	Seattle	United States	IM-15070	Irene Maddox	5.12.2016	CA-20
West	Office Supplies	West Jordan	United States	AG-10270	Alejandro Grove	13.05.2014	CA-20
West	Office Supplies	San Francisco	United States	ZD-21925	Zuschuss Donatelli	27.08.2014	CA-20
West	Technology	San Francisco	United States	ZD-21925	Zuschuss Donatelli	27.08.2014	CA-20
West	Office Supplies	San Francisco	United States	ZD-21925	Zuschuss Donatelli	27.08.2014	CA-20
West	Furniture	Orem	United States	EB-13870	Emily Burns	25.09.2015	CA-20
West	Office Supplies	Los Angeles	United States	EH-13945	Eric Hoffmann	16.01.2016	CA-20

Summary Full Data 3.203 rows

8 marks_ 2 rows by 4 columns_ SUM of CNT(Orders) 9.994.



Marks Cards





Marks

Automatic

Color

Size

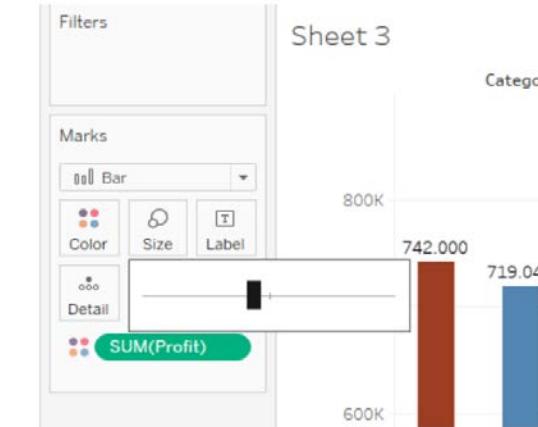
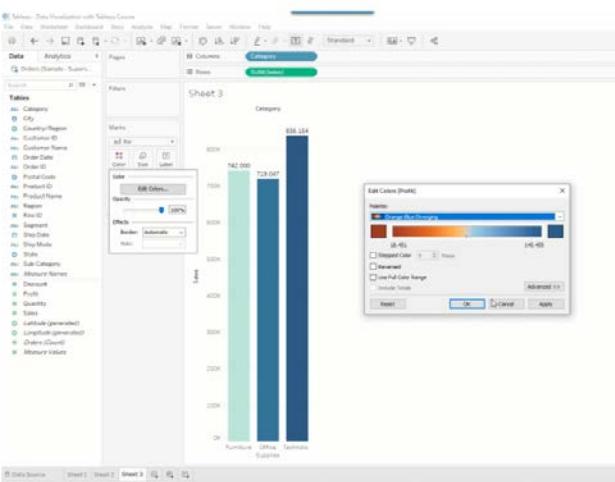
Label

Detail

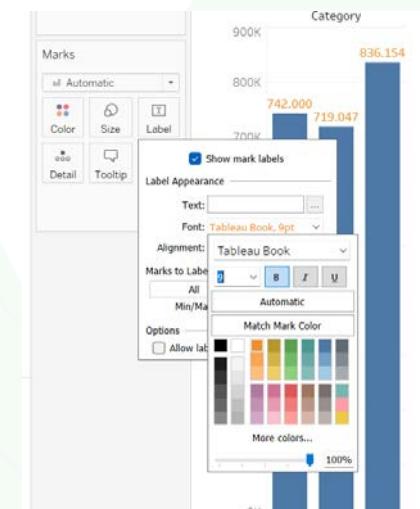
Tooltip

A screenshot of the Tableau software interface showing the 'Marks' card. The 'Automatic' dropdown is selected. Below it are six buttons: 'Color' (selected), 'Size', 'Label', 'Detail', and 'Tooltip'. The main workspace shows a bar chart with three bars labeled 'TAZ 000', '729.047', and '836.154'.

Color Card



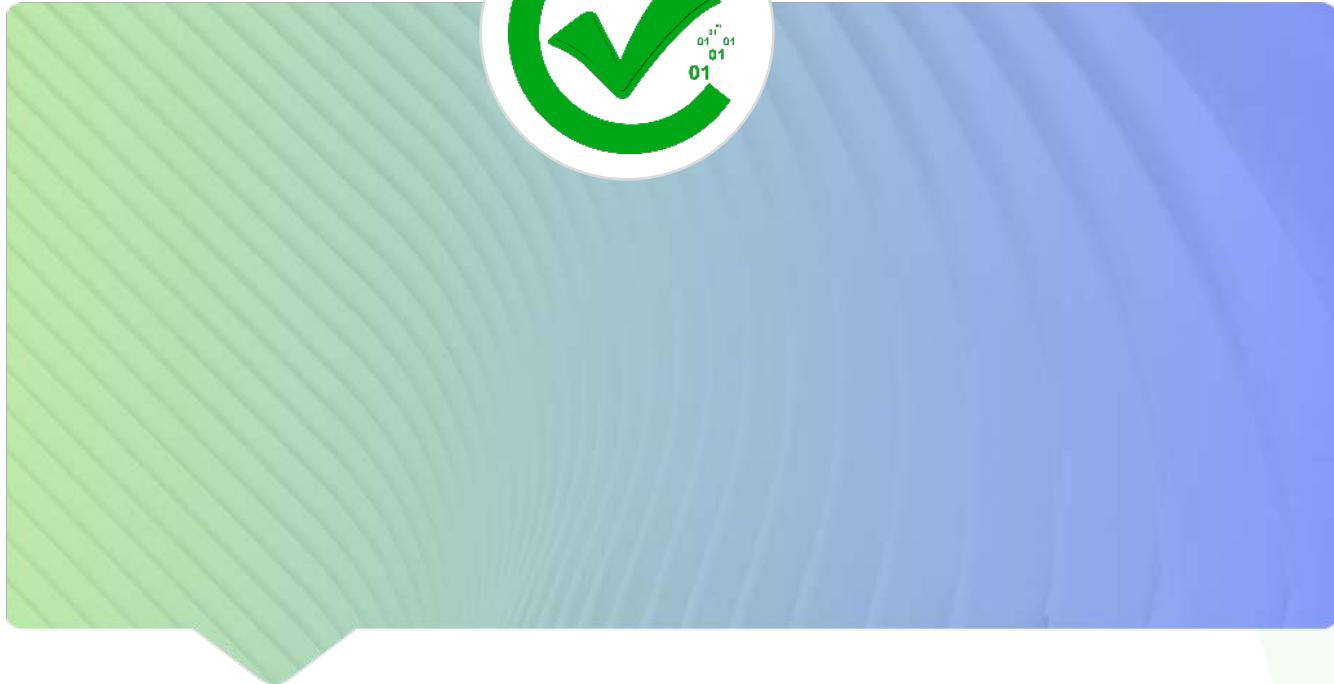
Size Card



Label Card



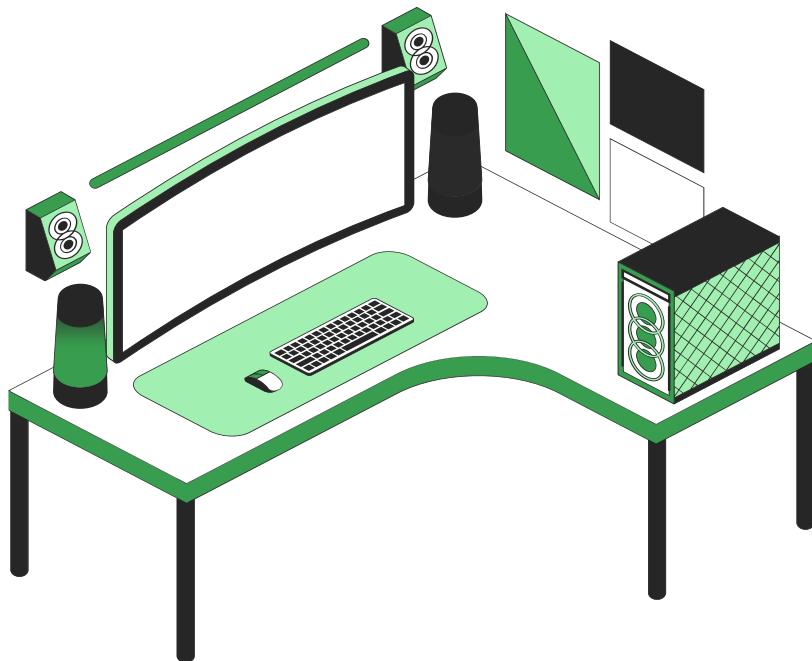
Bugün neler öğrendik...



Bugünkü dersi anladım ...



FINISH



Do you
have any
questions?

Send it to us! We hope you learned
something new.