Tableau Cheat Sheet

Core Concepts

What is Tableau? - A data visualization and business intelligence platform. - Converts raw data into interactive dashboards and visual insights. - Used across industries for reporting, analysis, and decision-making.

Primary Tableau Tools: - Tableau Public – Free version, dashboards are public - Tableau Desktop – Paid version, full feature set

Common File Types: - .twb – Tableau Workbook (structure only) -.twbx – Tableau Packaged Workbook (with data) - .csv – Comma-separated file (flat file format) - .xlsx – Excel file (tabular data)

Data Pane Overview

Type	Example Fields	Usage
Dimensions	Region, Product, Category	Categorical fields (blue pills)
Measures	Sales, Profit, Quantity	Numeric fields (green pills)

Core Tableau Components

Shelves

- Rows / Columns – Define chart layout
- Filters – Limit or highlight specific data
- Pages – Show one value at a time for animation or steps

Marks Card

- Color – Differentiate or highlight data
- Size – Represent magnitude
- Label – Show numbers or names directly
- Detail – Add context without visual change
- Tooltip – Customize hover details

Show Me Panel

- Suggests chart types based on selected data
- Includes: Bar, Line, Pie, Map, Treemap, Scatter, etc.

Common Chart Types and Use Cases

- **Bar Chart** – Used to compare values across categories
- **Line Chart** – Best for showing trends over time

- **Pie Chart** – Represents proportions of a whole (best with few values)
- **Scatter Plot** – Analyzes relationships between two measures
- **Treemap** – Displays part-to-whole relationships in a compact layout
- **Map** – Visualizes geographic data like sales by region or country
- **Box Plot** – Shows statistical distribution, including medians and outliers

Calculated Fields

How to Create: - Right-click in Data Pane → Create Calculated Field

Examples: - Profit Margin: [Profit] / [Sales]

 - Avg Sale per Unit: [Sales] / [Quantity]

- High Discount Flag: IF [Discount] > 0.2 THEN "High" ELSE "Low" END

- Profit Banding: IF [Profit] < 0 THEN "Loss" ELSEIF [Profit] < 500 THEN "Low"   ELSE "High" END

Filters and Parameters

Filters: - Dimension filter: filter categories like Region or Segment - Measure filter: filter values like Profit > 0 - Relative date filter: filter by time periods (e.g., last 30 days)

Parameters: - Custom input controls like dropdowns and sliders - Used in calculated fields for dynamic filtering and analysis

Creating Maps in Tableau

Steps: 1. Drag geographic field (e.g., State) to view

2. Tableau auto-generates the map

3. Drag a measure (e.g., Sales) to Color or Size

4. Choose Filled Map or Symbol Map

Dashboards

To Create a Dashboard: 1. Click New Dashboard 2. Drag worksheets into the dashboard area 3. Use Tiled or Floating layout 4. Add Filters, Titles, Legends 5. Enable interactions with 'Use as Filter'

Publish to Tableau Public: - File → Save to Tableau Public