

Welcome!

Before we begin...

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|----|------------------------------------|--|
| 01 | Register for Tableau Public | Go to id.tableau.com/register |
| 02 | Activate Your Account | Login at public.tableau.com/app/discover |
| 03 | Verify Web Authoring | Go to “Create” and choose “Web Authoring” |
| 04 | Download Data | Check the registration email for the csv file |
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Introduction to Data Visualization with Tableau

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Why Data Visualization?

Data becomes valuable when people understand it

Data visualization is one avenue we can use to distill data into understanding

Data viz is a portable skill that applies regardless of tool, today we are using Tableau. These same concepts apply in Power BI, Excel, Looker, Python, Claude...

What We Will Learn Today

Data Visualization Concepts

Which chart types to use, relating data viz to decisions

Tableau Basics

Connect to data, build 4 fundamental visualizations, combine them into a dashboard, publish to Tableau Public



What Makes Good Data Visualization?

A good visual should help someone answer a question

How has something changed?

What is happening right now?

Where do I need to focus?

Every chart should contribute to a decision being made



Four Questions, Four Charts

These four chart types are the backbone of business oriented data visualization

01	Line	How has something changed over time?
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02	Bar/Column	How do categories compare?
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03	KPI	What is the current value?
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04	Table	What are the exact details?
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Today's Dataset

 Minnesota Weather Data

Data from Minnesota Department of Natural Resources

- Multiple weather stations
- Daily observations
- Temperature
- Snow
- Rain

Date	Location	Zip Code	High Temperature	Low Temperature	Precipitation	Snowfall	Snow Depth
7/17/2016	MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT	55111	84	66	0.1	0	0
7/18/2016	MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT	55111	88	67	0	0	0
7/19/2016	MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT	55111	87	68	0	0	0
7/17/2016	DULUTH NWS	55802	76	49	0	0	0
7/18/2016	DULUTH NWS	55802	75	60	0.17	0	0
7/19/2016	DULUTH NWS	55802	75	58	0	0	0
7/17/2016	MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT	55111	84	66	0.1	0	0
7/18/2016	MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT	55111	88	67	0	0	0
7/19/2016	MINNEAPOLIS-ST. PAUL INTERNATIONAL AIRPORT	55111	87	68	0	0	0
7/17/2016	ROCHESTER INTERNATIONAL AIRPORT	55904	82	61	1.68	0	0
7/18/2016	ROCHESTER INTERNATIONAL AIRPORT	55904	84	61	0	0	0
7/19/2016	ROCHESTER INTERNATIONAL AIRPORT	55904	81	64	0	0	0
7/17/2016	DULUTH NWS	55802	76	49	0	0	0
7/18/2016	DULUTH NWS	55802	75	60	0.17	0	0
7/19/2016	DULUTH NWS	55802	75	58	0	0	0
7/17/2016	ROCHESTER INTERNATIONAL AIRPORT	55904	82	61	1.68	0	0
7/18/2016	ROCHESTER INTERNATIONAL AIRPORT	55904	84	61	0	0	0
7/19/2016	ROCHESTER INTERNATIONAL AIRPORT	55904	81	64	0	0	0

[Link to data](#)

Dimensions and Measures

Dimensions

Fields that **describe** things

In our data:

- Date
- Location
- Zip Code

Can be used to group, filter, and label data points

Measures

Fields that **quantify** things

In our data:

- Temperature
- Precipitation
- Snowfall
- Snow Depth

Numeric fields that can be aggregated (Sum, average, median, etc)

Let's Build a Dashboard Together!

Before we jump into Tableau, any questions about the concepts we have covered?

Thank You!

Connect with me!

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