



# Introduction to plotly



# New Library?

- Client Requirement
- New Project/ Team
- Better Functioning



# Visualization Tool Comparison

- [Matplotlib](#) VS [Seaborn](#) VS [Plotly](#)



# How to approach it?

- [Documentation, Documentation, Documentation](#)
- Stack Overflow
- Online Notebooks([Netflix Plotly Notebook](#))



# What makes good data visualization?

- Provide Context
- Use the right charts
- Less is More



# Provide Context

## Audience Targeting

- Who's the audience and what do they need to know?
- With every graph, there should be a CTA for them

## Exploratory vs explanatory analysis

- Exploratory is finding information from data, infinite graphs possible
- Explanatory is choosing the relevant ones from them

# Choose the right visualisation

91%

Simple text

	A	B	C
Category 1	15%	22%	42%
Category 2	40%	36%	20%
Category 3	35%	17%	34%
Category 4	30%	29%	26%
Category 5	55%	30%	58%
Category 6	11%	25%	49%

Table

	A	B	C
Category 1	15%	22%	42%
Category 2	40%	36%	20%
Category 3	35%	17%	34%
Category 4	30%	29%	26%
Category 5	55%	30%	58%
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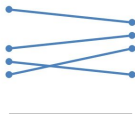
Heatmap



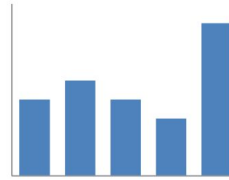
Scatterplot



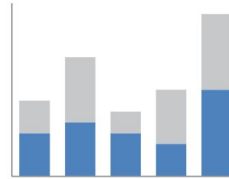
Line



Slopegraph



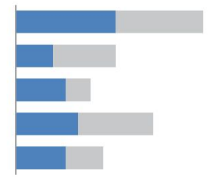
Vertical bar



Stacked vertical bar



Horizontal bar



Stacked horizontal bar

Source: Storytelling with Data



# Choose the right visualisation

Alternatively go through this amazing [graphic](#) as starting point of choosing graphs

Visualization Purpose	Description	Recommended Chart Type
Comparisons	You are trying to compare different values in your data set for e.g. which channel brought you the most traffic?	Bar Chart, Column Chart, Line Chart
Trends	You are trying to plot the trends in your data set for e.g. has our summer campaign increased sales in the last six months	Line Chart, Column Chart
Correlations	You are trying to map relationships between variables e.g. Ad spend and number of visits	Scatter Plot
Part-to-Whole	You need to show the device breakdown of your site visitors. Think Pie Chart	Pie Chart





# Less is more

- [Improve data to ink ratio](#)
- Keep it crisp and to the point
- Clutter is your enemy
- Reduce Cognitive Overload (Sorting, scaling and identifying relationships)
- Empower the user



# Notebooks used

- [Boilerplate notebook](#)
- [Notebook used in the session](#)
- [Final Solution Notebook](#)