

WELCOME TO INTRO TO DATA VIZ AND TABLEAU





GENERAL ASSEMBLY





Matthew Morris

**Advanced Analytics Data Analyst, Costco
Data Analytics Course Instructor, General
Assembly**

Since 2001 I have worked from Data warehousing to Data science always finding ways to enable the business to have a competitive edge. Today I work at building advanced analytic teams within the business.

REVIEW DATA VIZ BASICS

BRIEF LOOK AT STATS AND VIZ

SKETCH AND WIREFRAME

WORKSHOPS

TABLEAU WALKTHROUGH



Intro to charts

1	8	3	2	4	3	1	1	8	7	5	0	3
6	4	7	5	7	8	1	6	6	0	4	7	8
8	0	4	1	5	3	2	8	4	3	3	9	1
5	3	6	4	9	6	2	5	2	5	2	1	4
6	5	3	2	1	1	2	6	2	7	1	3	2
4	9	6	5	5	7	4	4	6	2	8	4	3
1	2	1	2	6	8	4	1	9	4	0	3	5
6	5	9	1	5	4	5	6	3	6	2	5	7
7	8	6	8	3	6	5	7	1	0	3	3	1
2	6	3	4	8	7	5	2	2	1	6	6	2
1	3	6	5	7	8	6	1	4	3	8	7	0
3	0	1	6	9	5	6	3	0	2	6	4	4
7	8	2	7	0	8	7	7	8	6	4	0	6
4	2	5	6	7	0	7	4	1	4	6	1	8
9	0	3	7	6	2	8	9	3	3	0	8	3

Presenting Data

Intro to charts

1	8	3	2	4	3	1	1	8	7	5	0	3
6	4	7	5	7	8	1	6	6	0	4	7	8
8	0	4	1	5	3	2	8	4	3	3	9	1
5	3	6	4	9	6	2	5	2	5	2	1	4
6	5	3	2	1	1	2	6	2	7	1	3	2
4	9	6	5	5	7	4	4	6	2	8	4	3
1	2	1	2	6	8	4	1	9	4	0	3	5
6	5	9	1	5	4	5	6	3	6	2	5	7
7	8	6	8	3	6	5	7	1	0	3	3	1
2	6	3	4	8	7	5	2	2	1	6	6	2
1	3	6	5	7	8	6	1	4	3	8	7	0
3	0	1	6	9	5	6	3	0	2	6	4	4
7	8	2	7	0	8	7	7	8	6	4	0	6
4	2	5	6	7	0	7	4	1	4	6	1	8
9	0	3	7	6	2	8	9	3	3	0	8	3

Presenting Data

Intro to charts

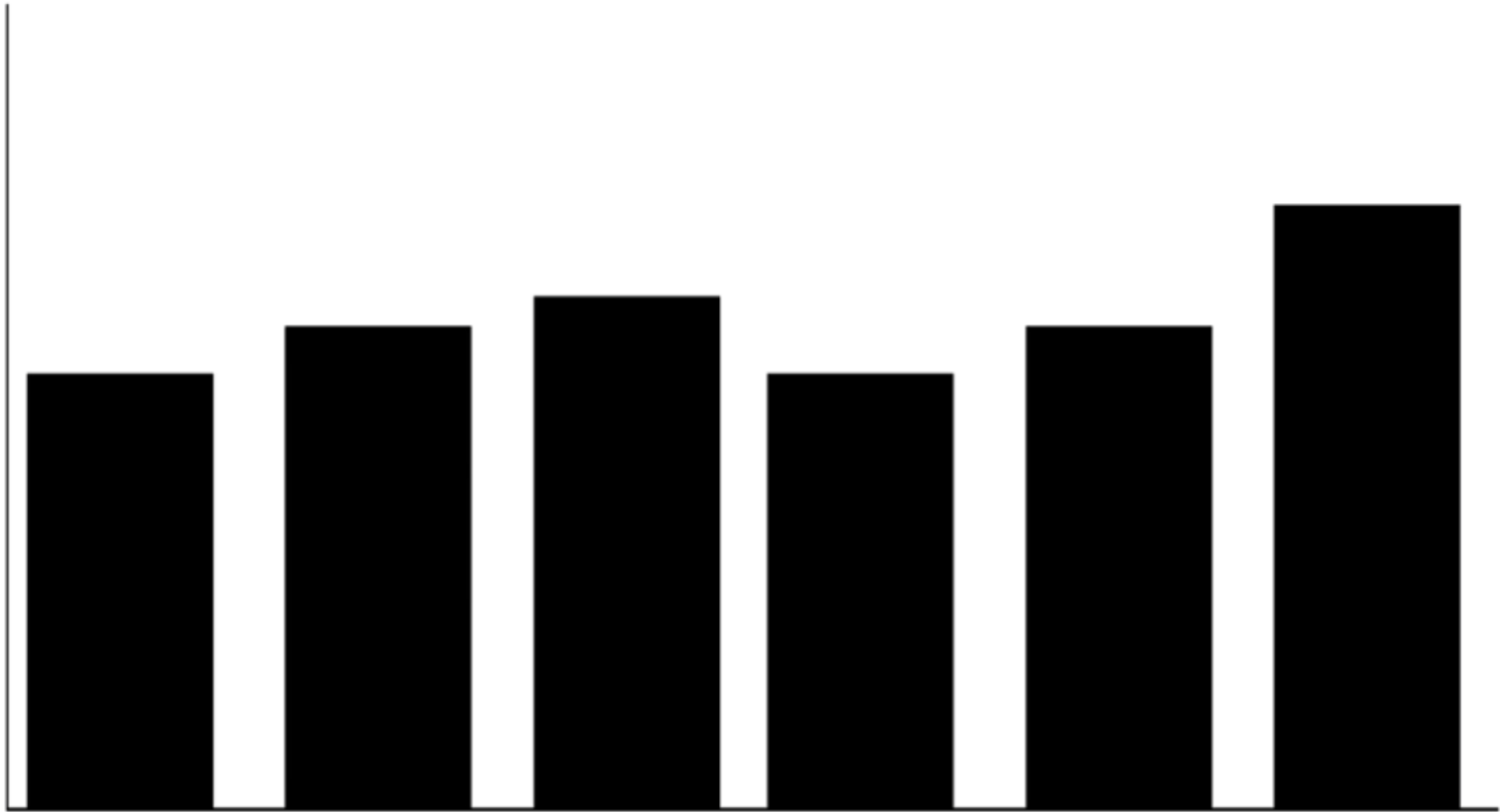
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7	8	2	7	0	8	7	7	8	6	4	0	6
4	2	5	6	7	0	7	4	1	4	6	1	8
9	0	3	7	6	2	8	9	3	3	0	8	3

Projects

Basic Charts

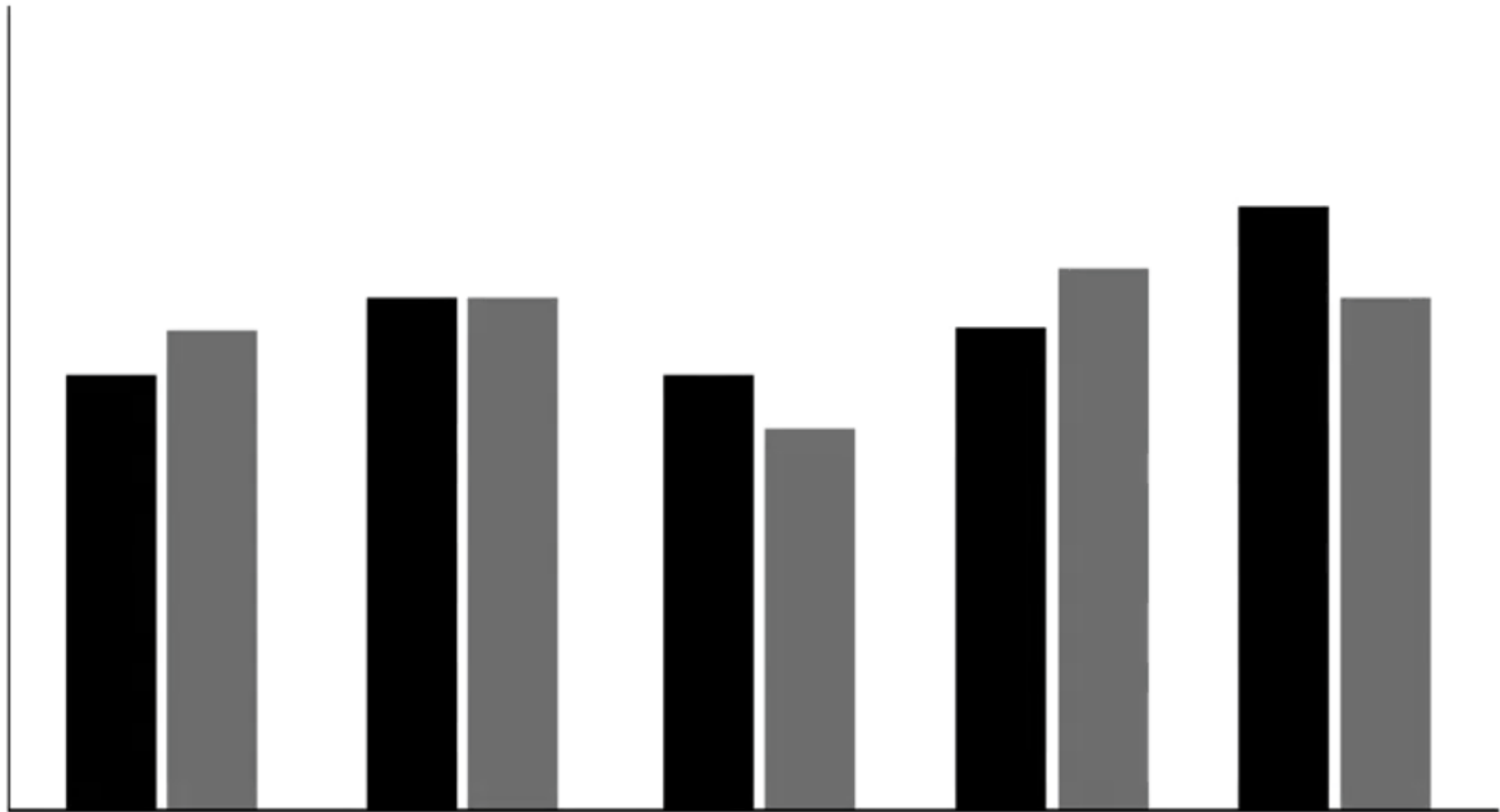
- Bar charts
- Line charts
- Area charts
- Timelines
- Scatter plots
- Bubble charts
- Pie charts

Intro to charts



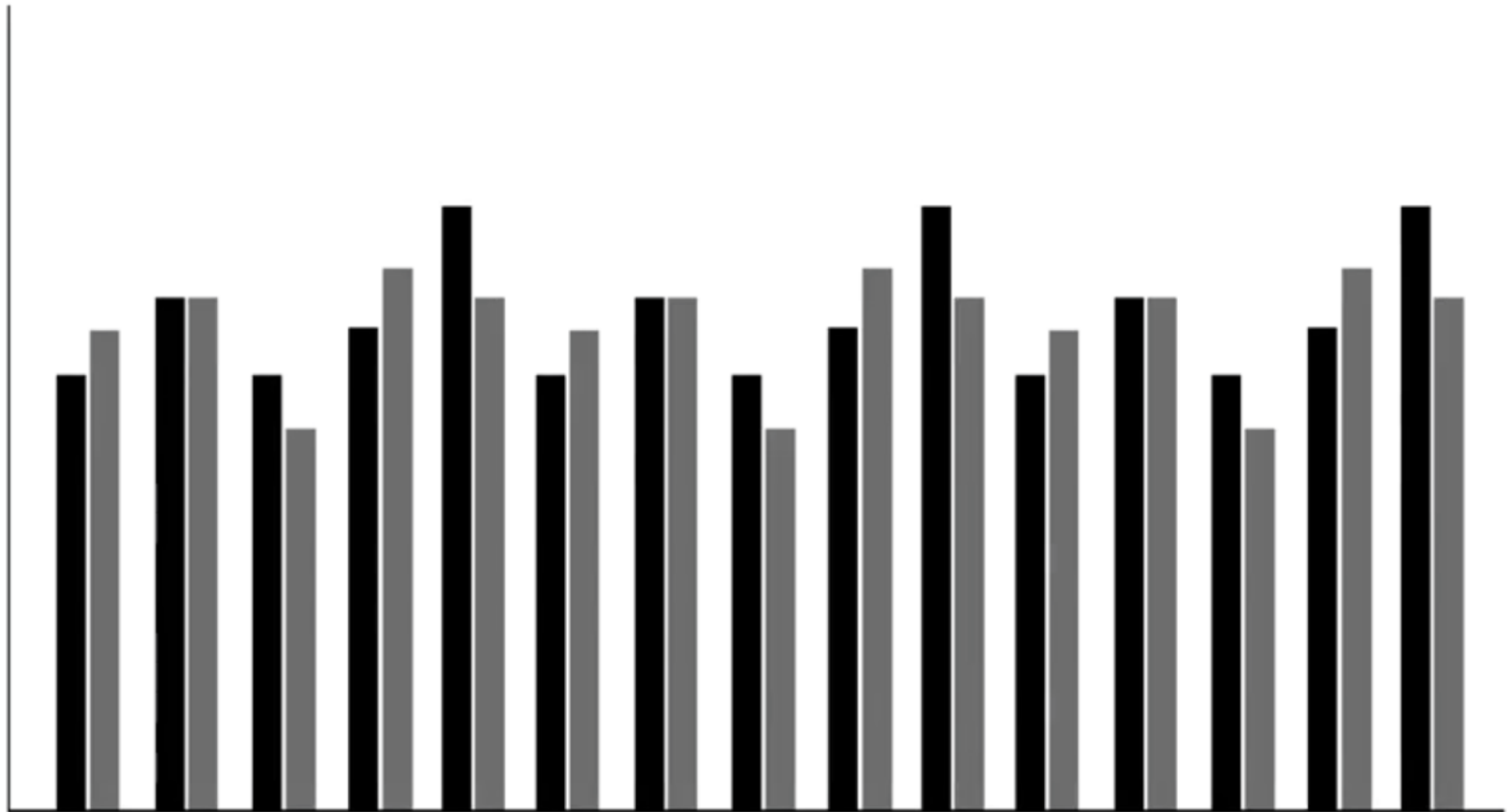
Presenting Data

Intro to charts



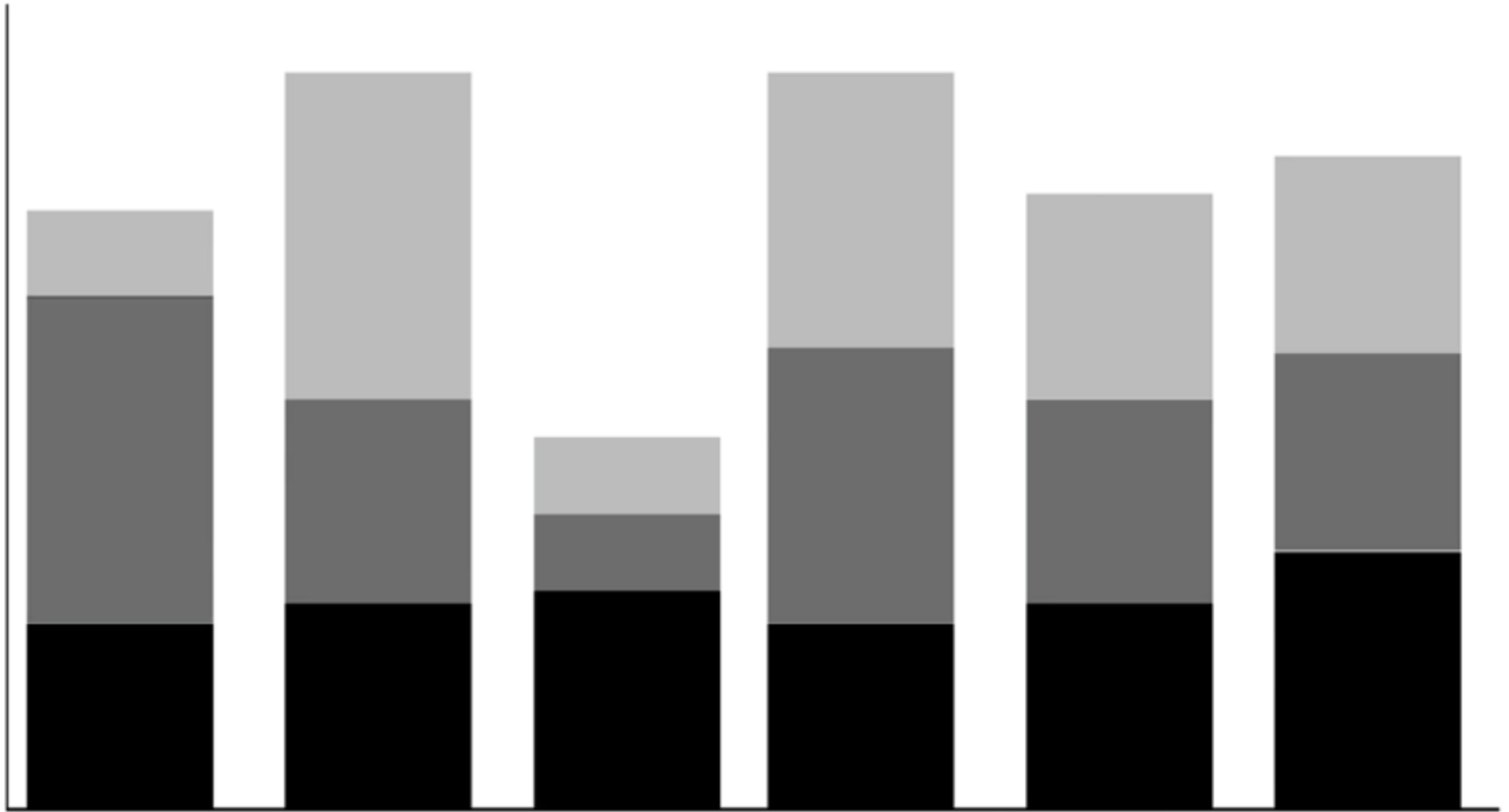
Presenting Data

Intro to charts



Presenting Data

Intro to charts



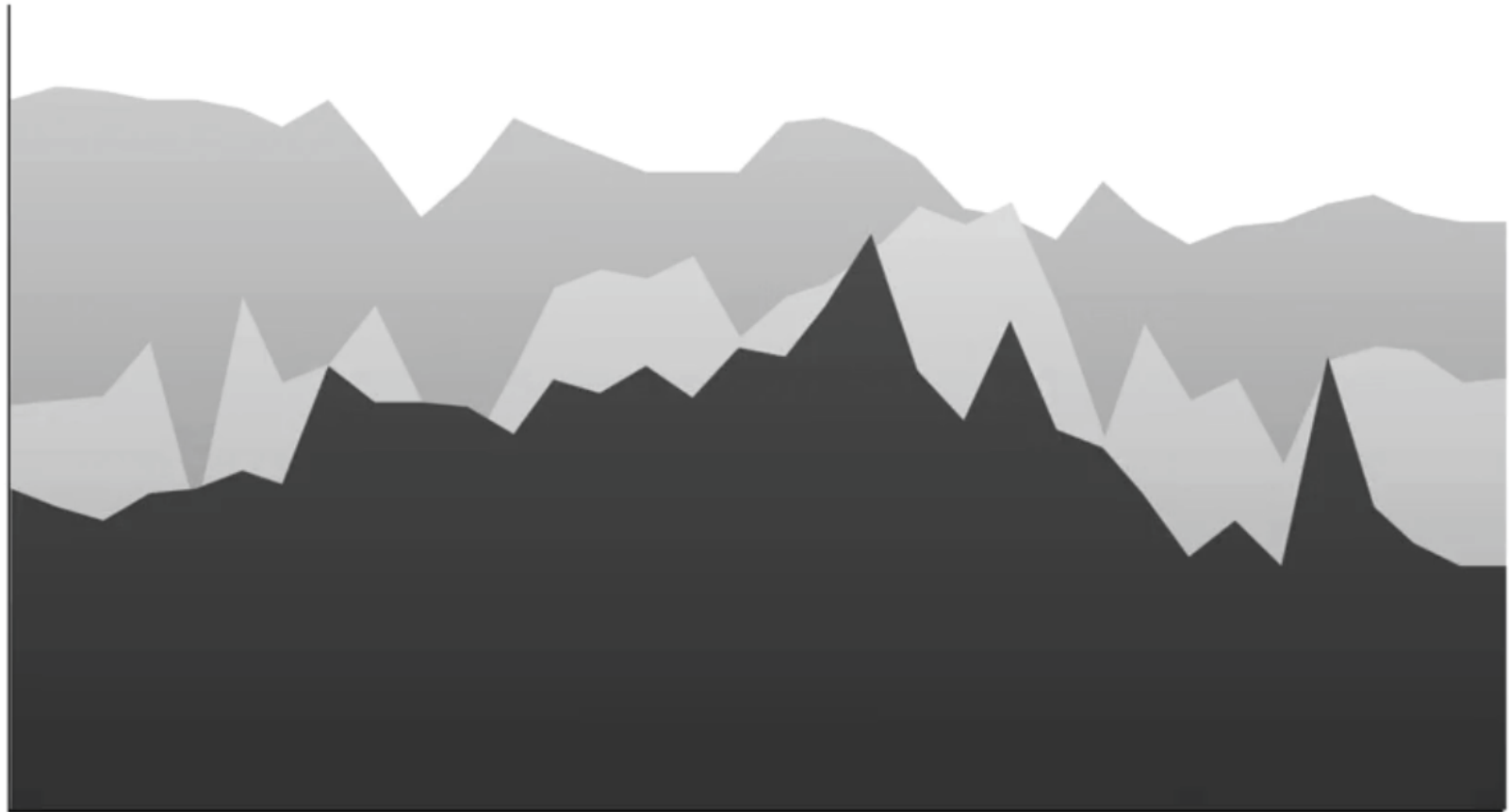
Presenting Data

Intro to charts



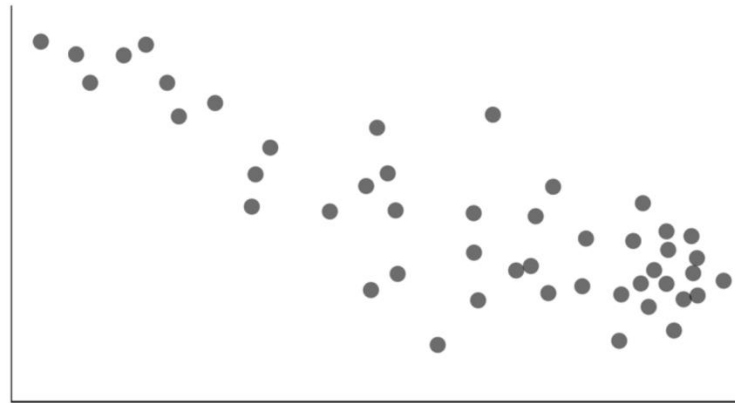
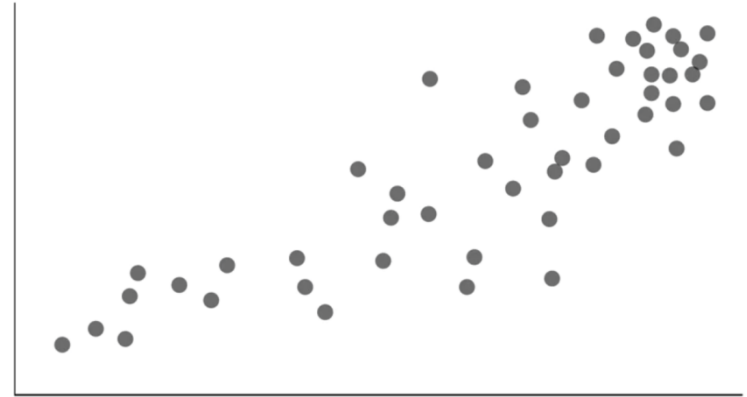
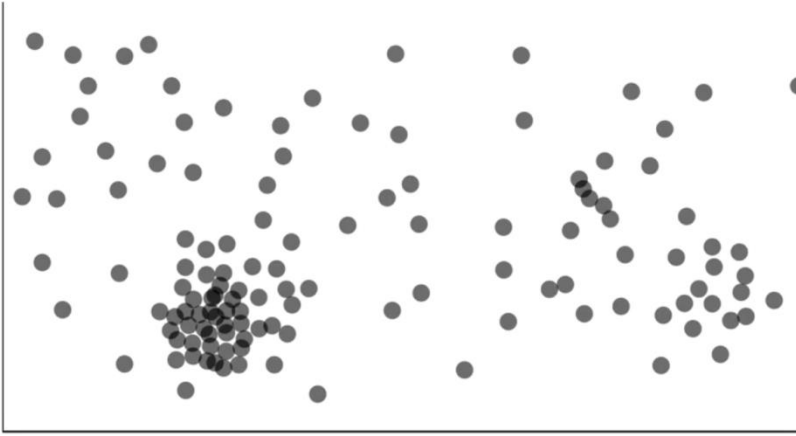
Presenting Data

Intro to charts



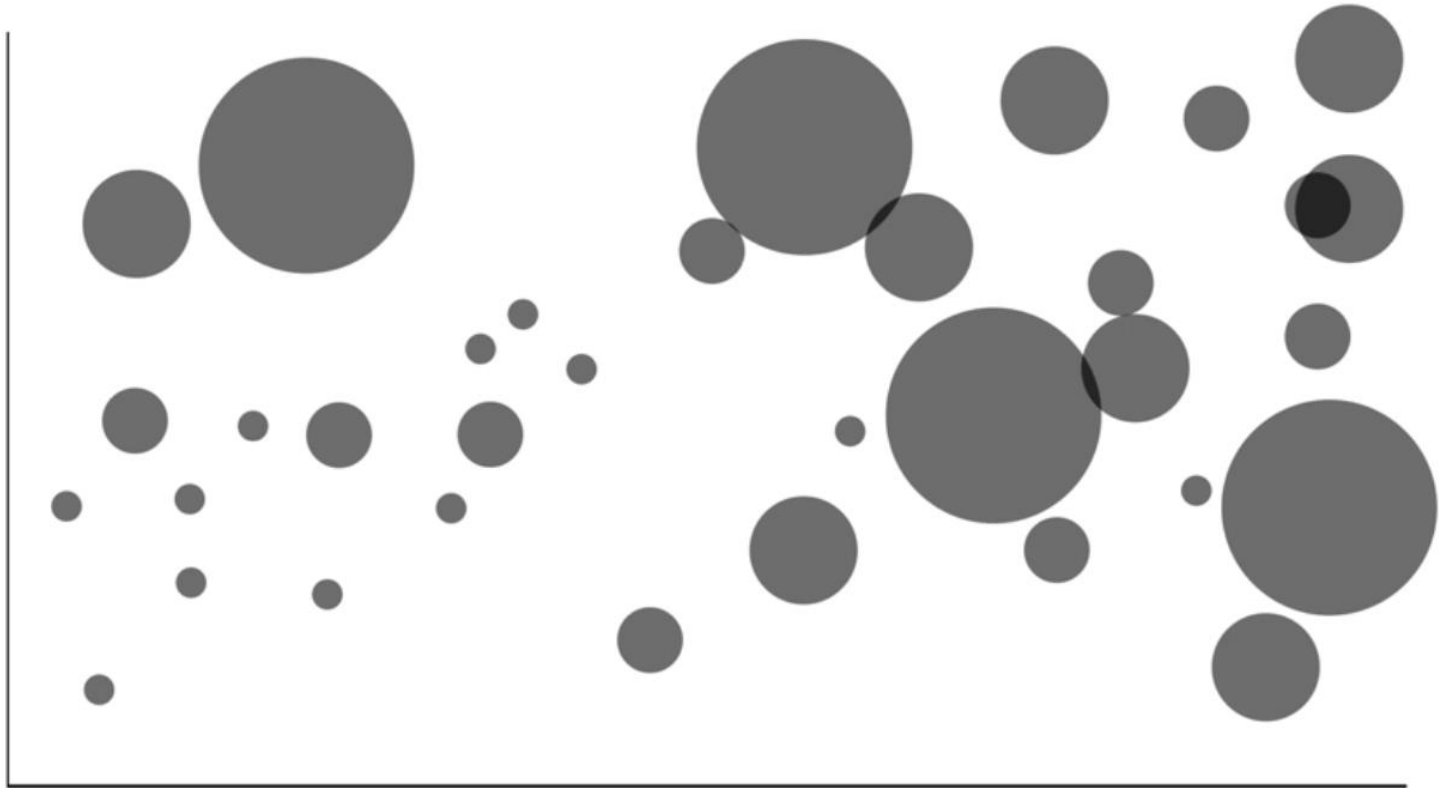
Presenting Data

Intro to charts



Presenting Data

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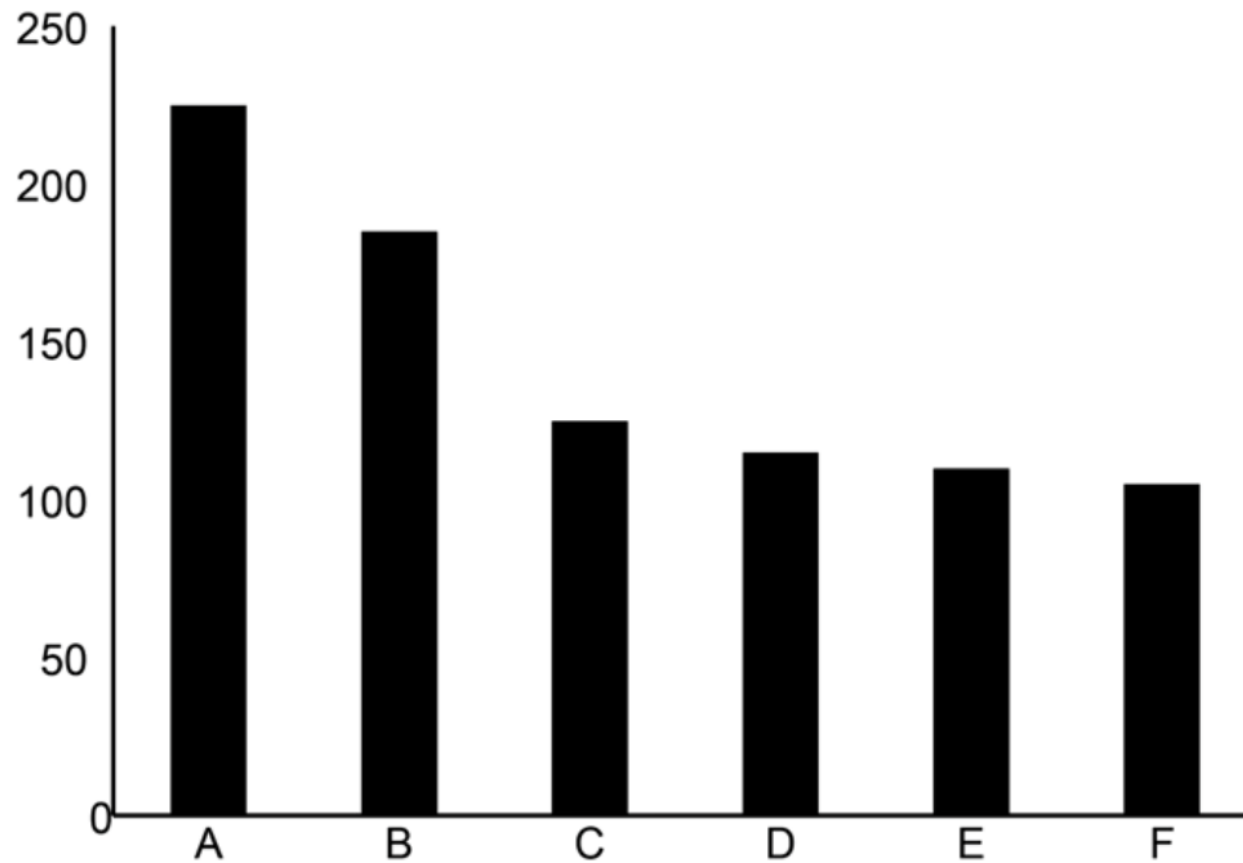
Projects

Intro to charts



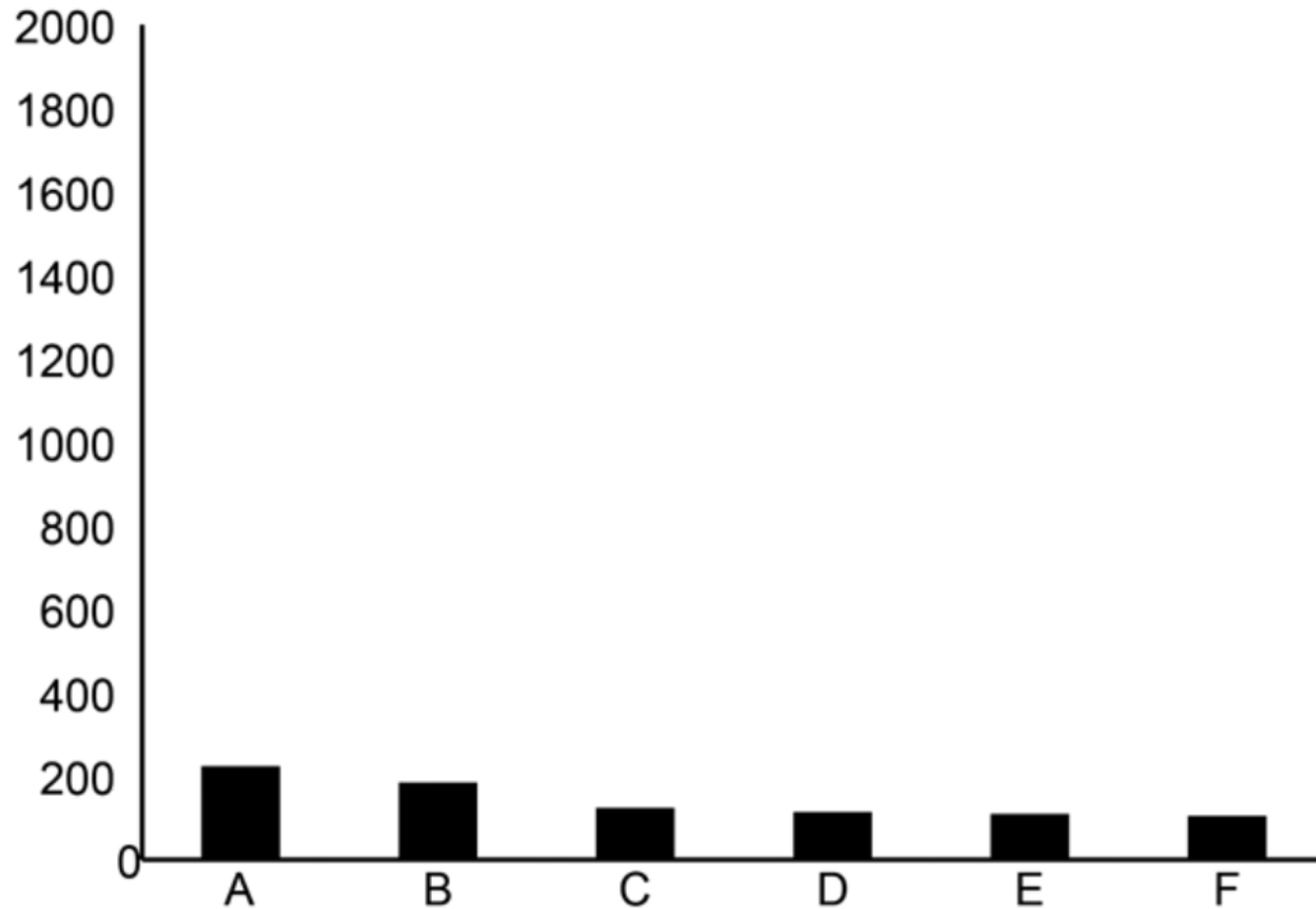
Presenting Data

Intro to charts



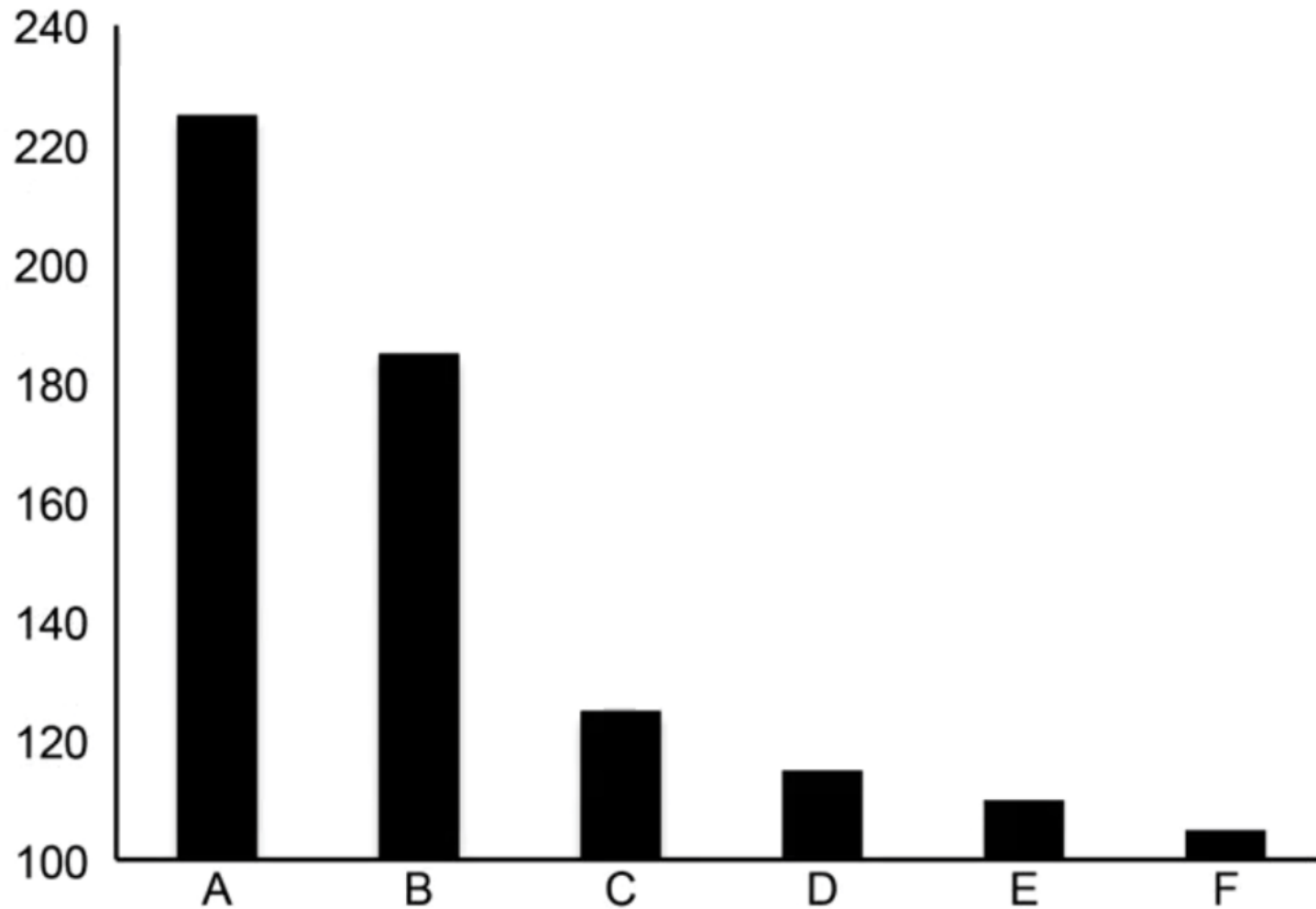
Presenting Data

Lesson Material



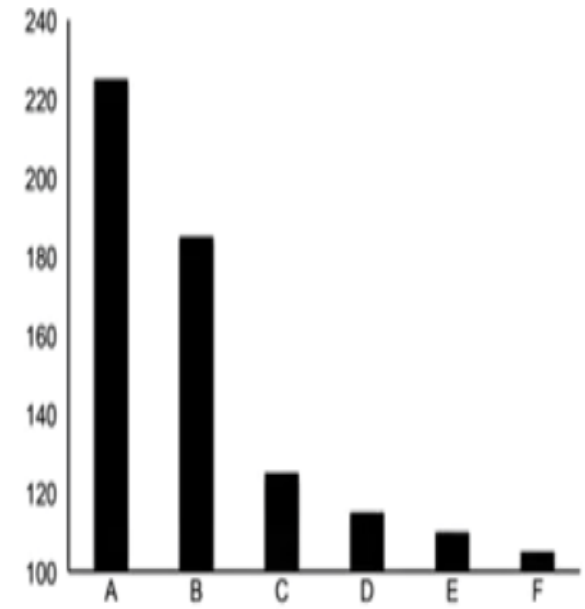
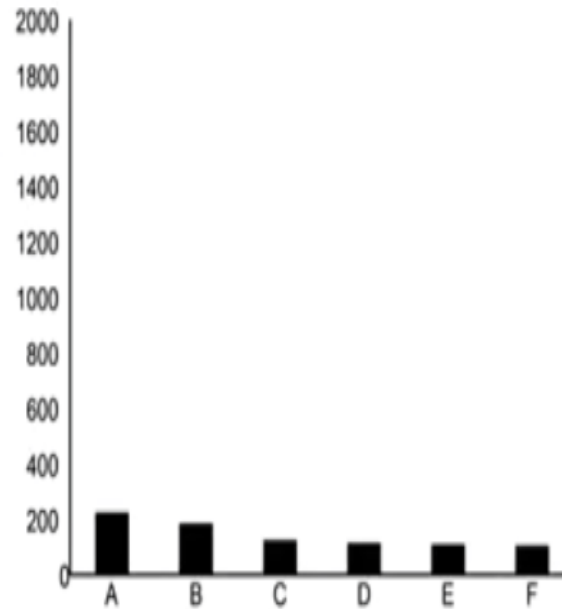
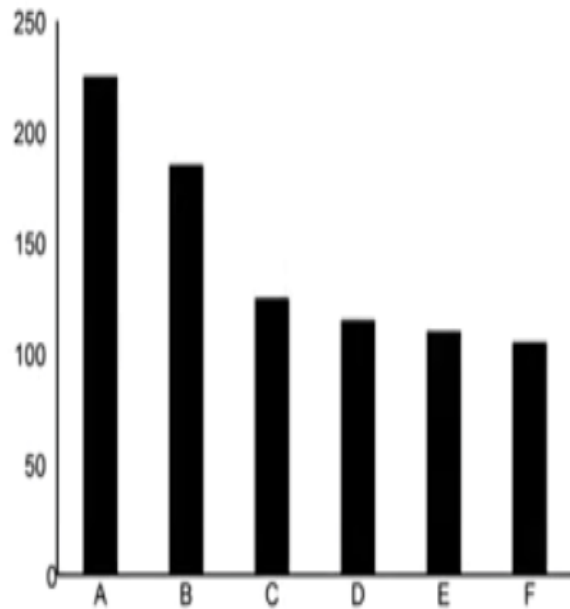
Presenting Data

Lesson Material



Presenting Data

Intro to charts



Presenting Data

Overview of Course



Above Average

Below Average

Adding Value to Data

Intro to Statistics

Install a Roof Costs

LOCATION: NATIONAL [Change Location](#)

[Embed this graph >](#)

AVERAGE REPORTED COSTS

\$6,838

based on 21,552 cost profiles

LOW COST

\$2,000

MOST HOMEOWNERS
SPENT BETWEEN
\$4,687 - \$9,014

HIGH COST

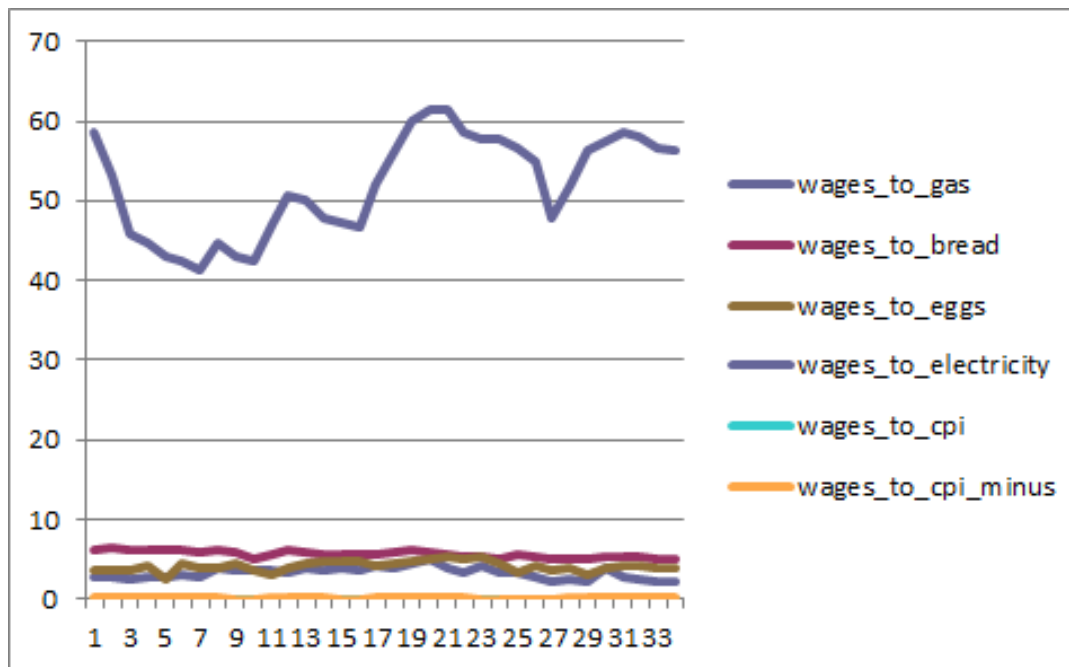
\$25,000

Cost data is based on actual project costs as reported by HomeAdvisor members.

[How do we get this data?](#)

Value of Data

Adding Value to Data



Preparing Data

Charts



Carte Figurative des pertes successives en hommes de l'Armée Française dans la campagne de Russie 1812-1813.

Russie par M. Minard, Inspecteur Général des Ponts et Chaussées en retraite. Paris, le 20 Novembre 1869.

Les nombres d'hommes présents sont représentés par les largeurs des zones colorées à raison d'un millimètre pour dix mille hommes; ils sont de plus écrits en travers des zones. Le rouge désigne les hommes qui entrent en Russie, le noir ceux qui en sortent. — Les renseignements qui ont servi à dresser la carte ont été puisés dans les ouvrages de M. M. Chiers, de Ségur, de Fezensac, de Chambray et le journal inédit de Jacob, pharmacien de l'Armée depuis le 28 Octobre.

Pour mieux faire juger à l'œil la diminution de l'armée, j'ai supposé que les corps du Prince Jérôme et du Maréchal Davout qui avaient été détachés sur Minsk et Mohilow et qui rejoignent vers Orscha et Witebsk, avaient toujours marché avec l'armée.

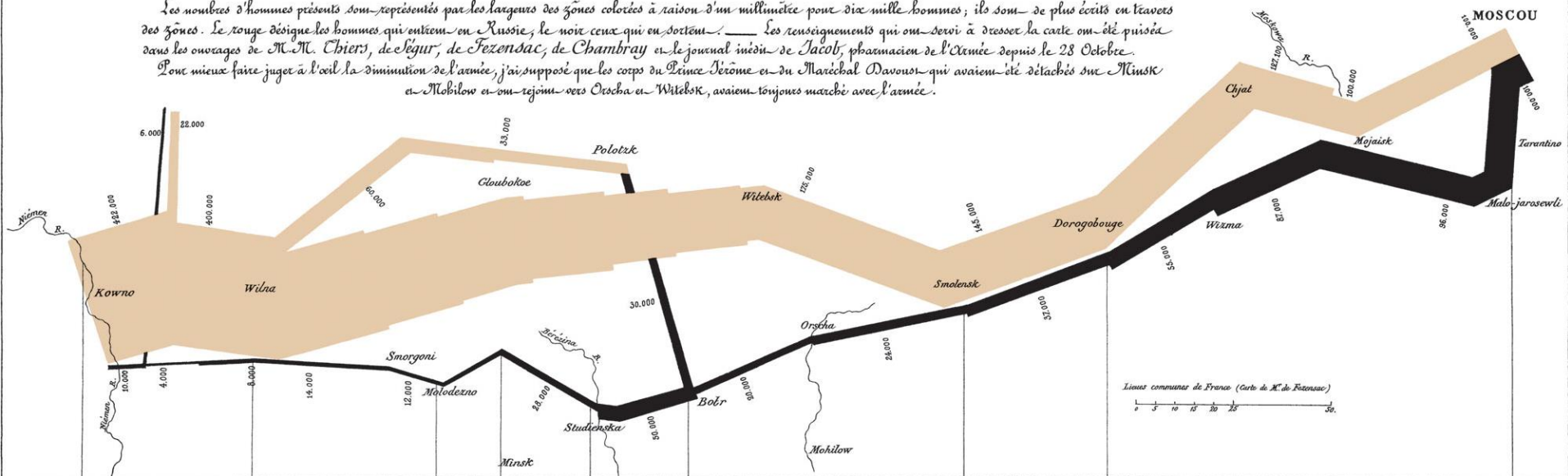
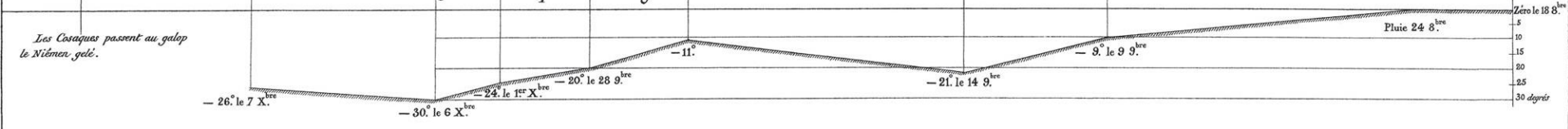


TABLEAU GRAPHIQUE de la température en degrés du thermomètre de Réaumur au dessous de zéro.



4x4 Model

4x4

A MODEL FOR
KNOWLEDGE
CONTENT



THE
WATER COOLER



THE
CAFE



THE
RESEARCH LIBRARY



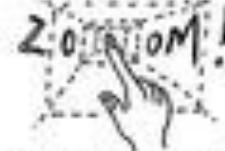
THE LAB



VISUALIZATION



STORYTELLING



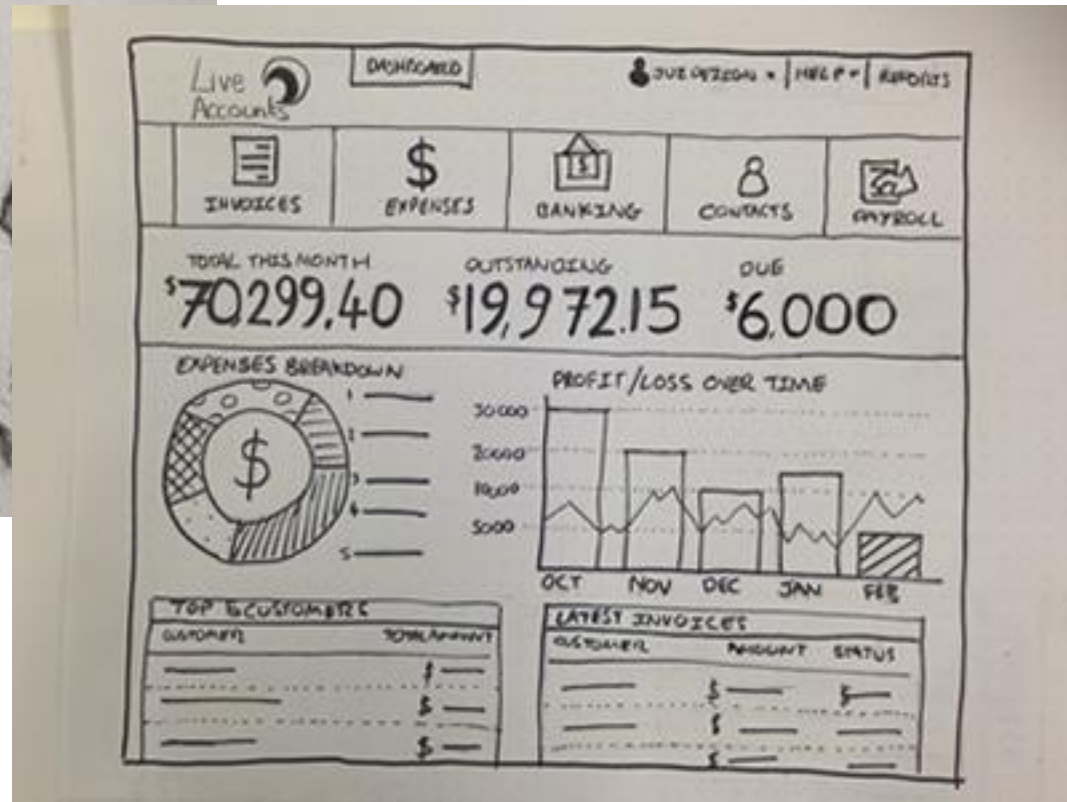
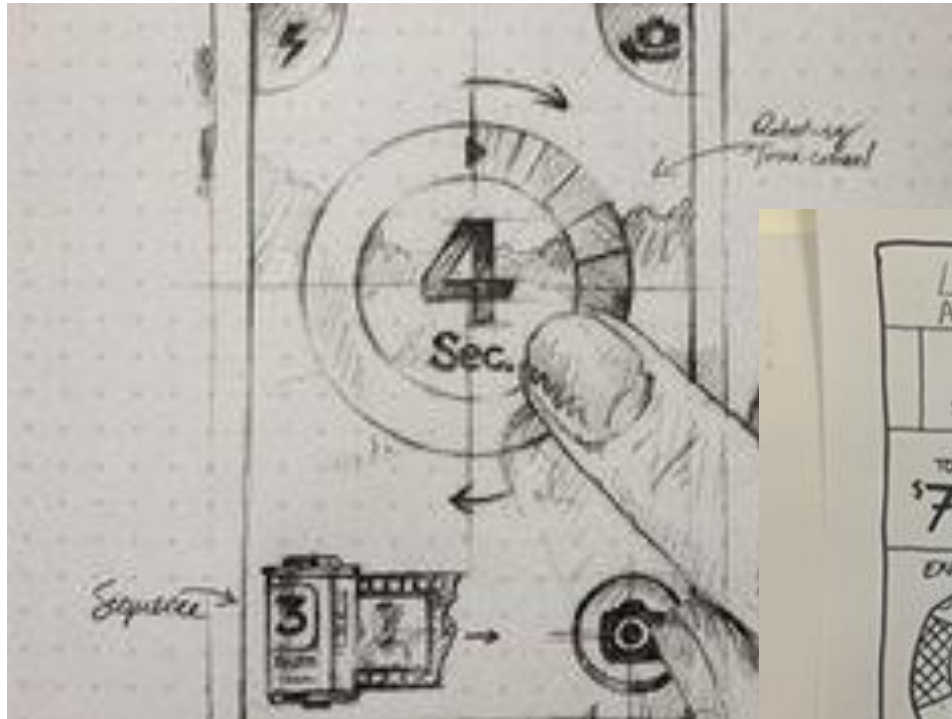
Interactivity



SHAREABILITY

KEY COMPONENTS

Sketch and Wireframing



Sketch and Wireframing





Tableau Project Flow

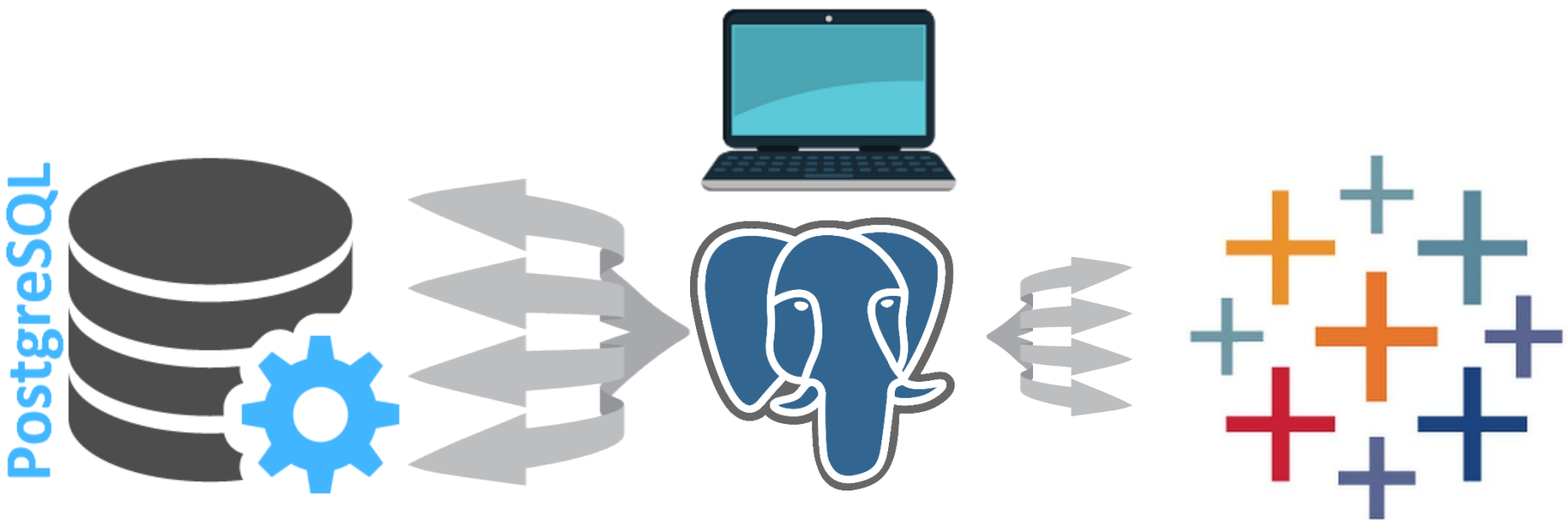


Tableau Project Flow

ETL process – Data prep tools



Data Viz or Consumption tools



The Market



Sense



FusionCharts

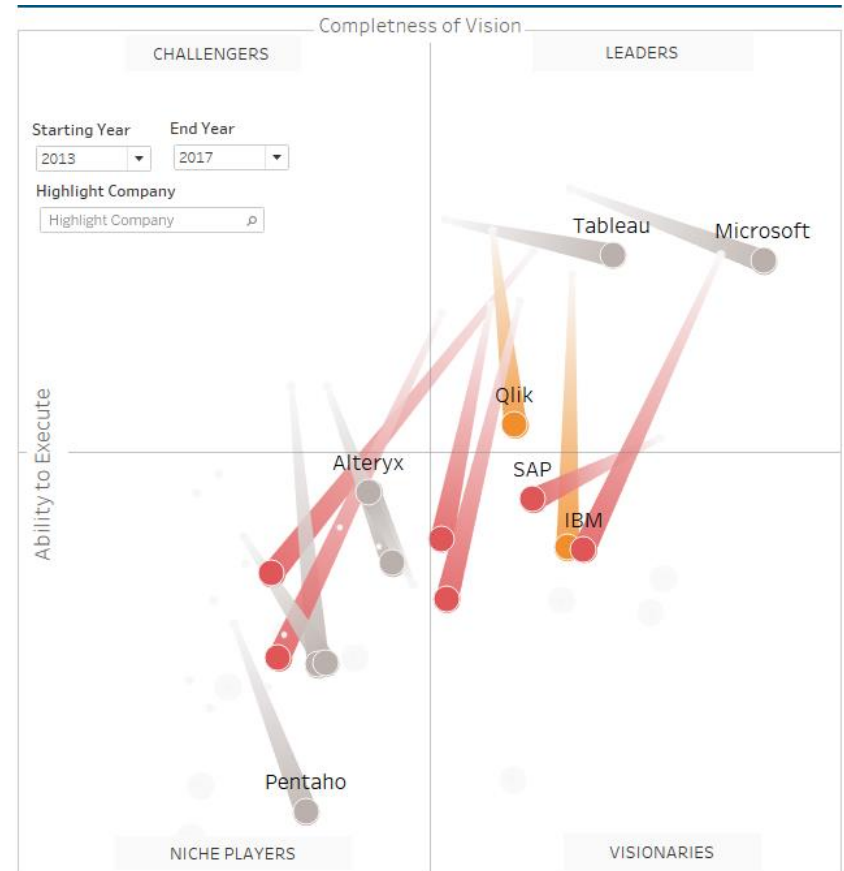
The Market



The Market

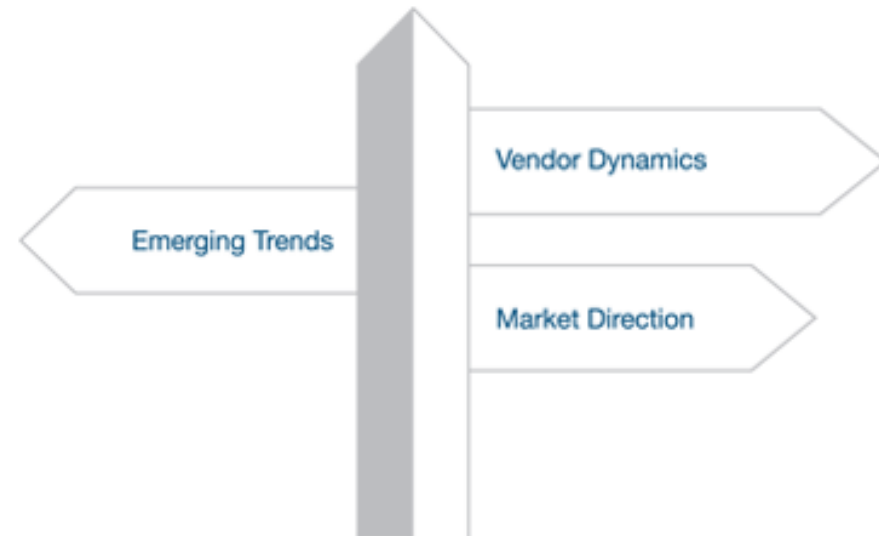
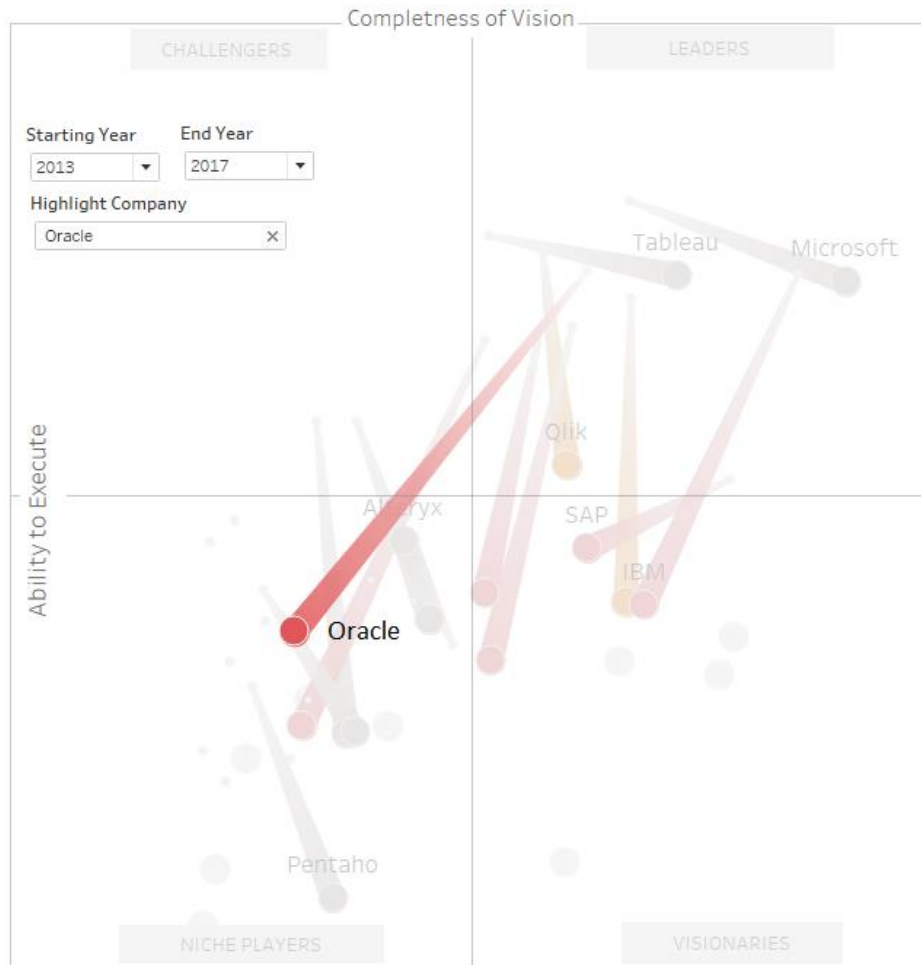


Source: Gartner (February 2017)



The Market

The Oracle decent into Hades



<https://www.gartner.com/technology/home.jsp>



+ableau®

TWB & TWBX

Conclusion

Tableau is one of many Data visualization tools.

Being familiar with story telling via visualizations is key.

Tableau is a visualization tool and not an ETL tool.

When dealing with massive amounts of data, look for ways to segment.

Data visualization has technical and creative elements.



Q & A

Visualizations act as a campfire around which we gather to tell stories.

—Al Shalloway