

Data Visualization for Developers

Introduction

Dan Appleman
danappleman.com
@danappleman

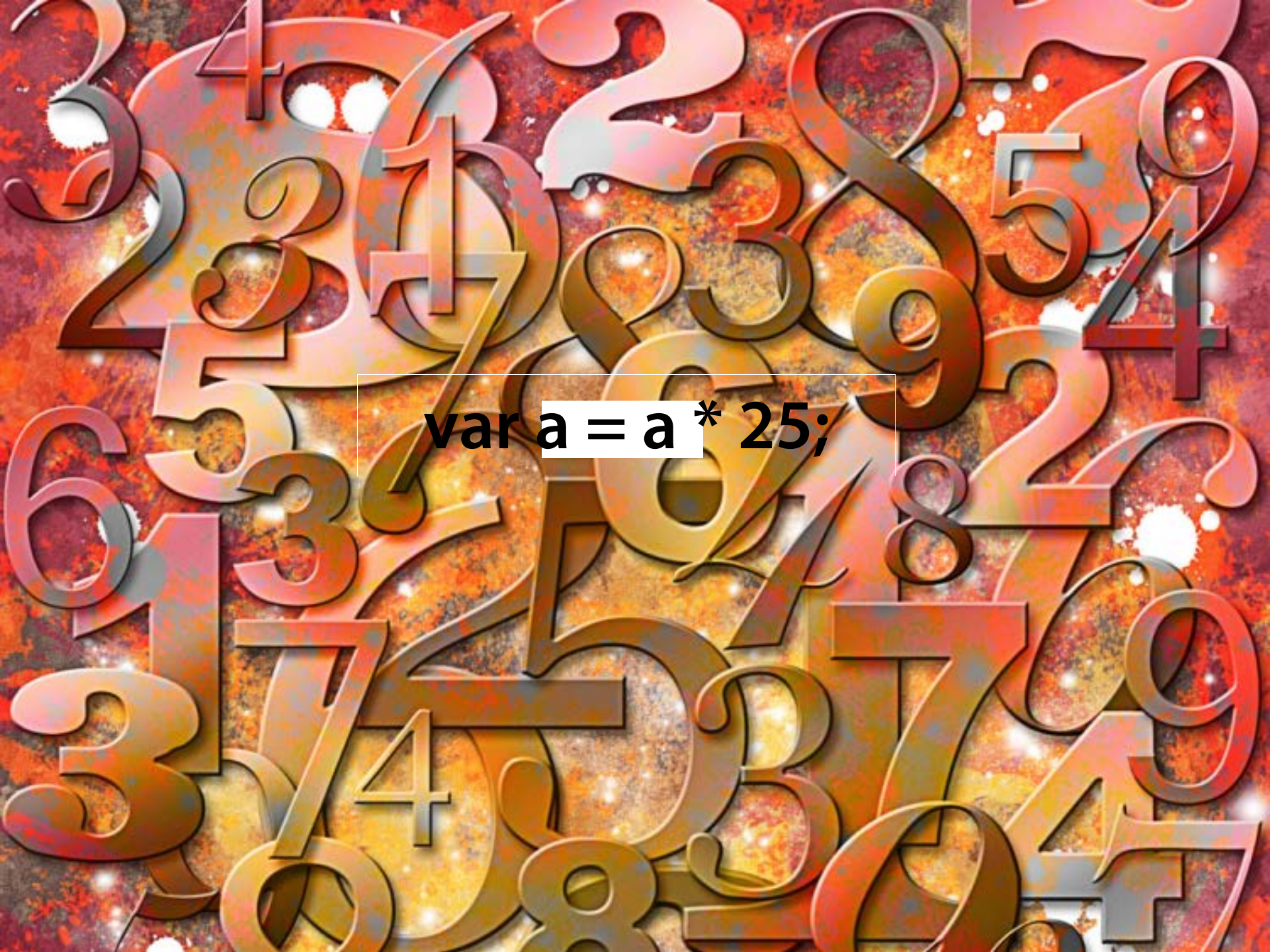


pluralsight 
hardcore dev and IT training

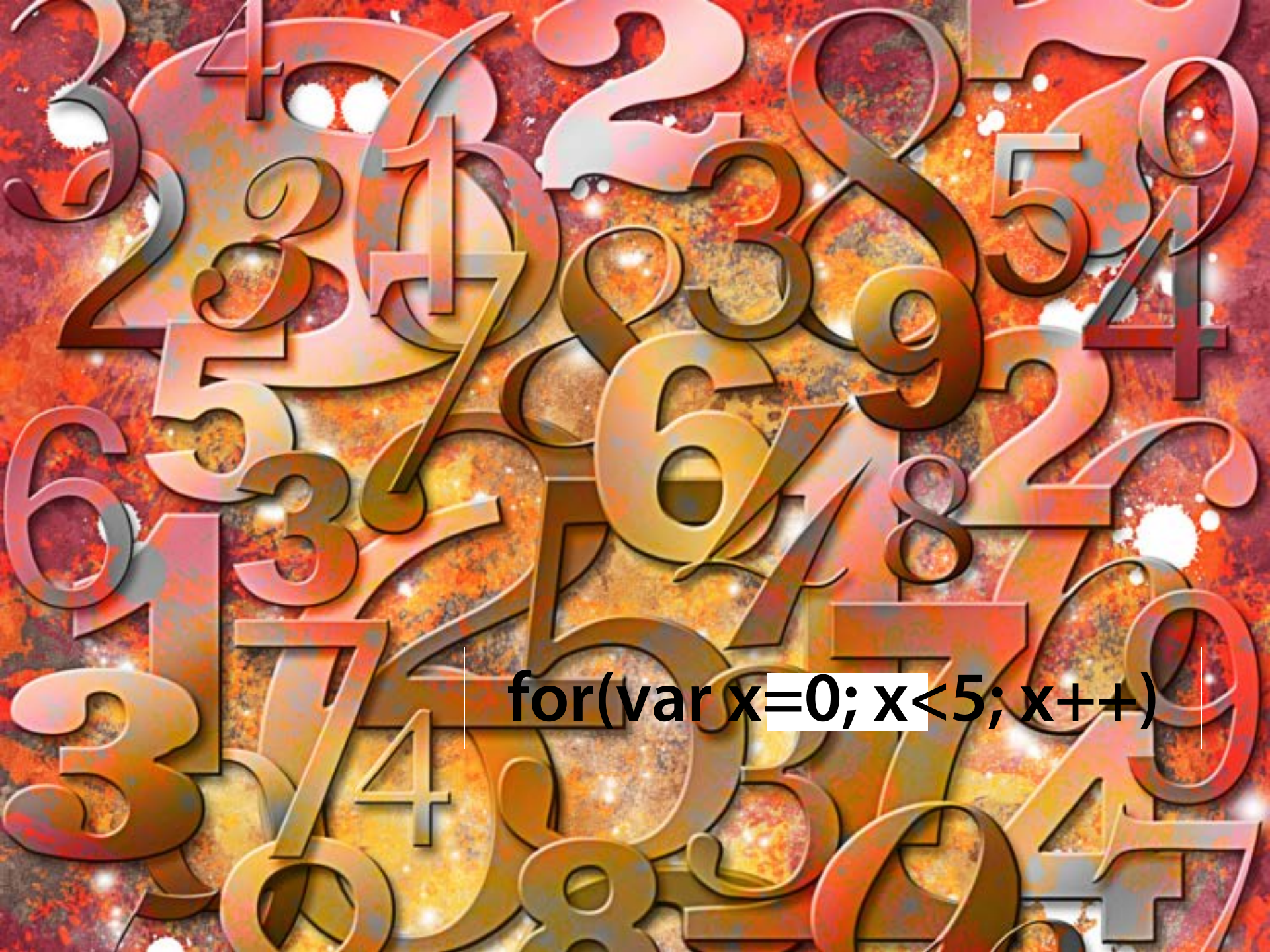




`var a = parseInt("10");`



```
var a = a * 25;
```

```
for(var x=0; x<5; x++)
```




```
$('#output').html= a.toString();
```

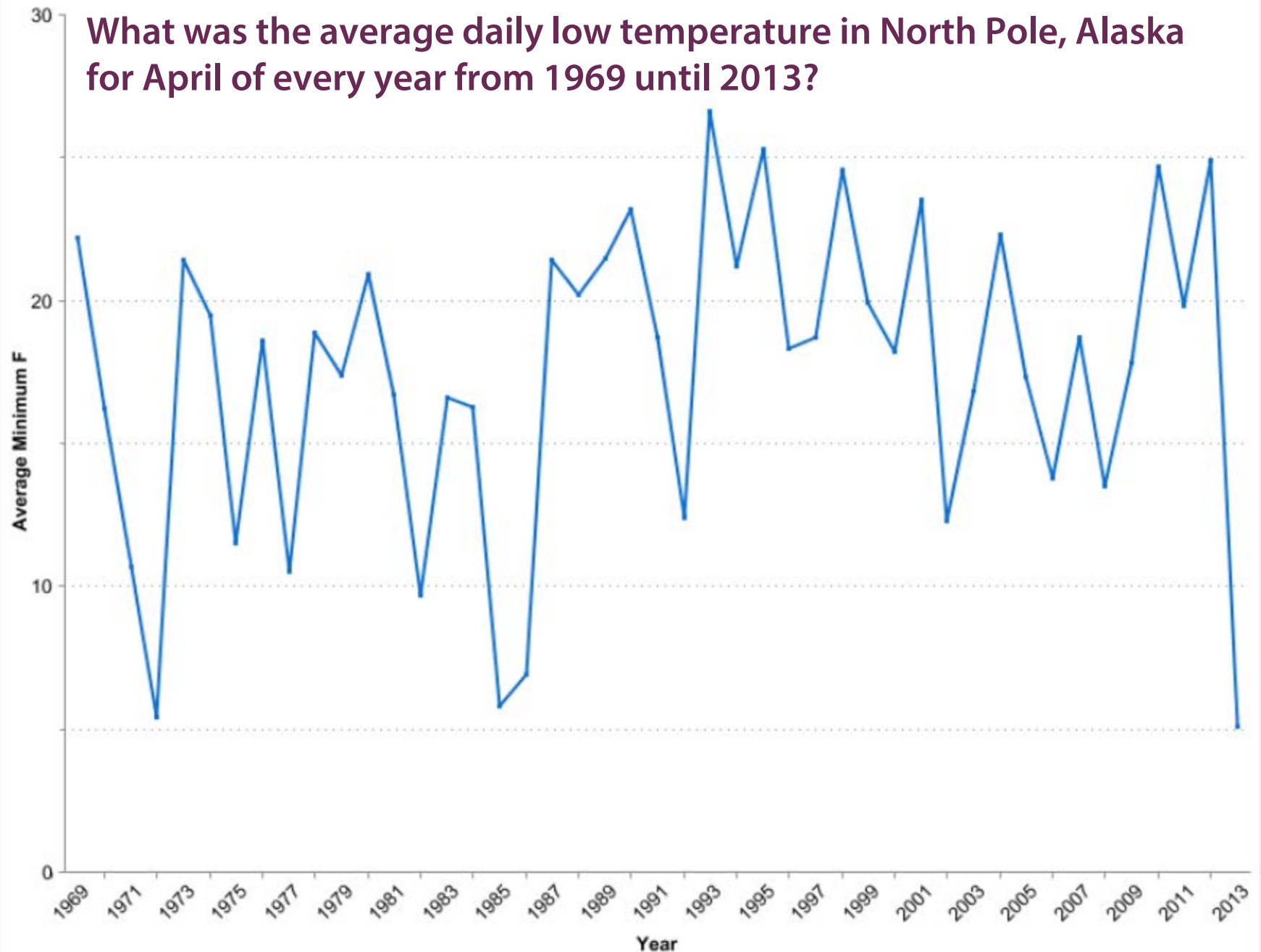
Month Starting ↑	Minimum F	Maximum F	Average F
1/1/1969	-37.80	-23.40	-29.40
2/1/1969	-22.40	5.60	-8.40
3/1/1969	-4.50	26.20	10.80
4/1/1969	22.20	48.80	35.50
5/1/1969	32.70	60.60	46.70
6/1/1969	43.40	78.50	61.00
7/1/1969	46.00	68.30	57.20
8/1/1969	34.50	60.20	47.40
9/1/1969	30.60	46.90	38.80
10/1/1969	18.40	43.80	31.10
11/1/1969	-14.70	6.80	-4.20
12/1/1969	-9.80	13.50	1.90
1/1/1970	-28.10	-7.50	-17.80
2/1/1970	-5.80	19.10	6.70
3/1/1970	6.00	33.80	19.90
4/1/1970	16.20	41.20	28.70
5/1/1970	33.20	62.70	48.00
6/1/1970	41.80	67.50	54.70
7/1/1970	46.50	72.30	59.40
8/1/1970	42.00	64.70	53.40
9/1/1970	30.60	46.90	38.80
10/1/1970	8.70	24.60	16.60
11/1/1970	-4.20	16.90	6.40
12/1/1970	-24.90	-4.10	-14.50
1/1/1971	-45.30	-24.30	-34.80
2/1/1971	-19.20	5.40	-6.90
3/1/1971	-17.80	9.50	-4.20
4/1/1971	10.70	37.10	23.80
5/1/1971	31.10	57.10	44.10
6/1/1971	43.70	75.40	59.70
7/1/1971	45.40	72.50	59.20
8/1/1971	42.90	65.40	54.40
9/1/1971	33.40	52.90	43.30

What was the
average daily low
temperature in
North Pole, Alaska
for October, 1970?

8.7 F (-12.9 C)

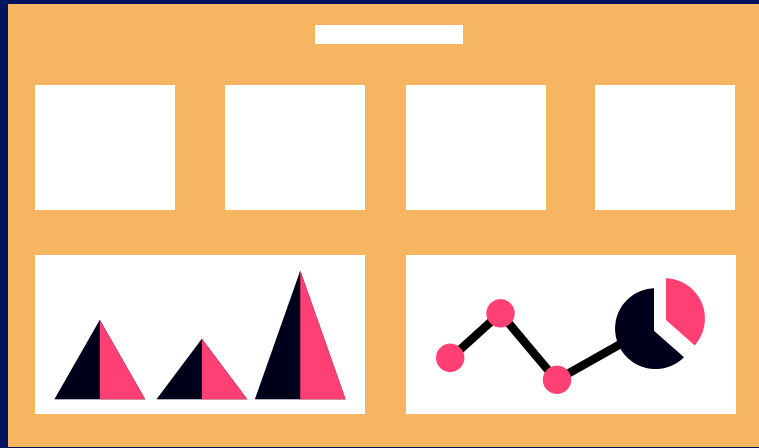
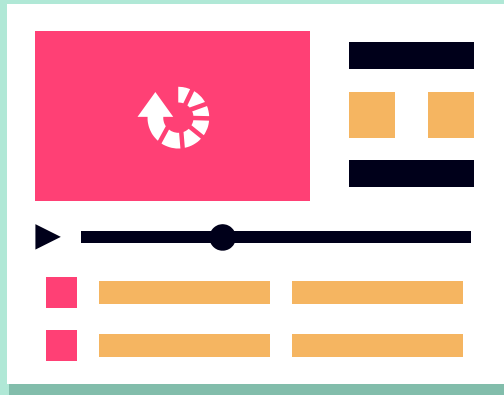
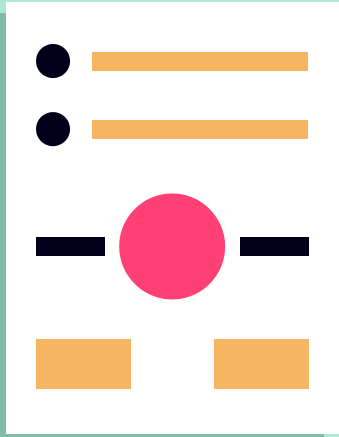
Average Minimum Temperature in April

What was the average daily low temperature in North Pole, Alaska for April of every year from 1969 until 2013?



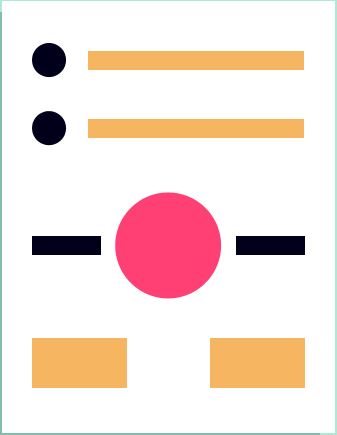
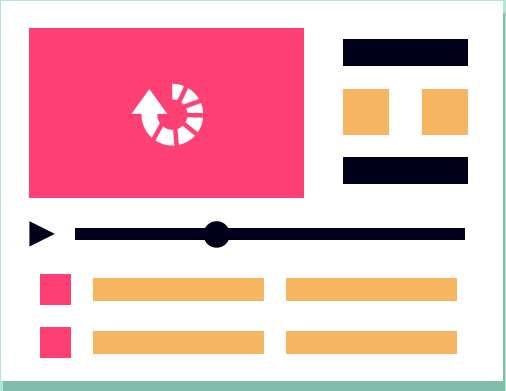


How much
Data?



How much
Data?

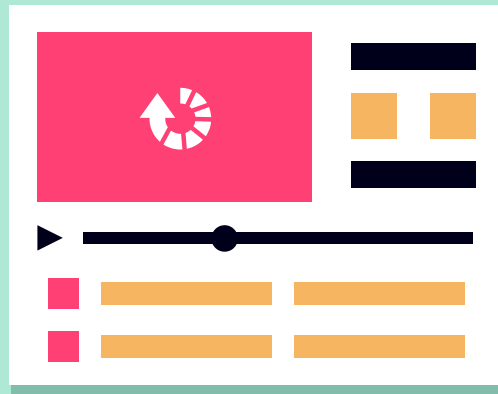
Where is the
Data?
Server?
Client?



● How is it
Rendered?

HTML5?
SVG?
JPG?

How much
Data?



Where is the
Data?

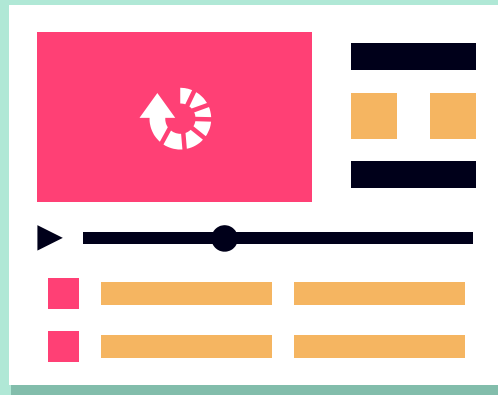
Server?
Client?



● How is it
Rendered?

HTML5?
SVG?
JPG?

How much
Data?



Where is the
Data?

Server?
Client?

Which clients?
Browsers?
Mobile?



Learning Paths

From the course “Learning Technology in the Information Age”



Fundamentals

Information

Skills

Innovation

Learning Paths

From the course “Learning Technology in the Information Age”

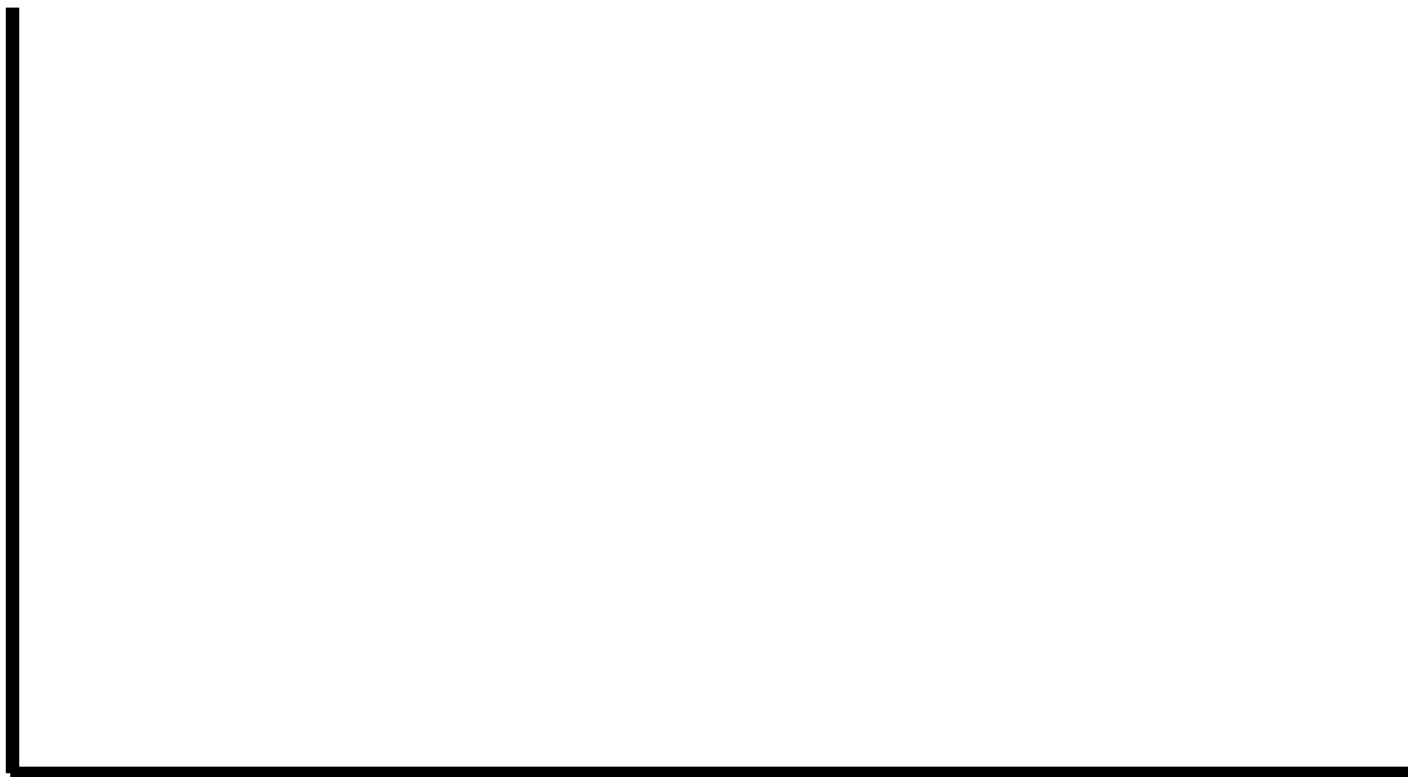


Fundamentals

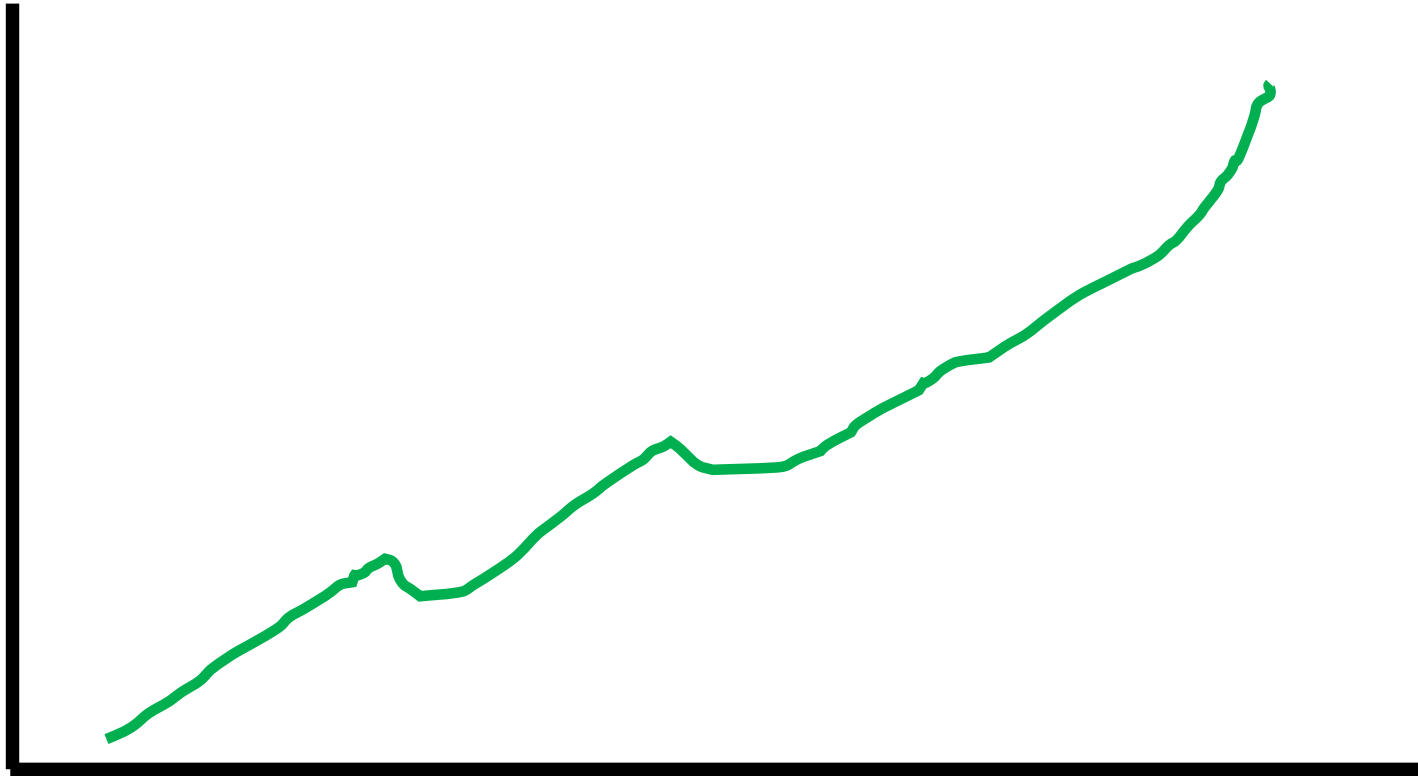
Information

Skills

Innovation



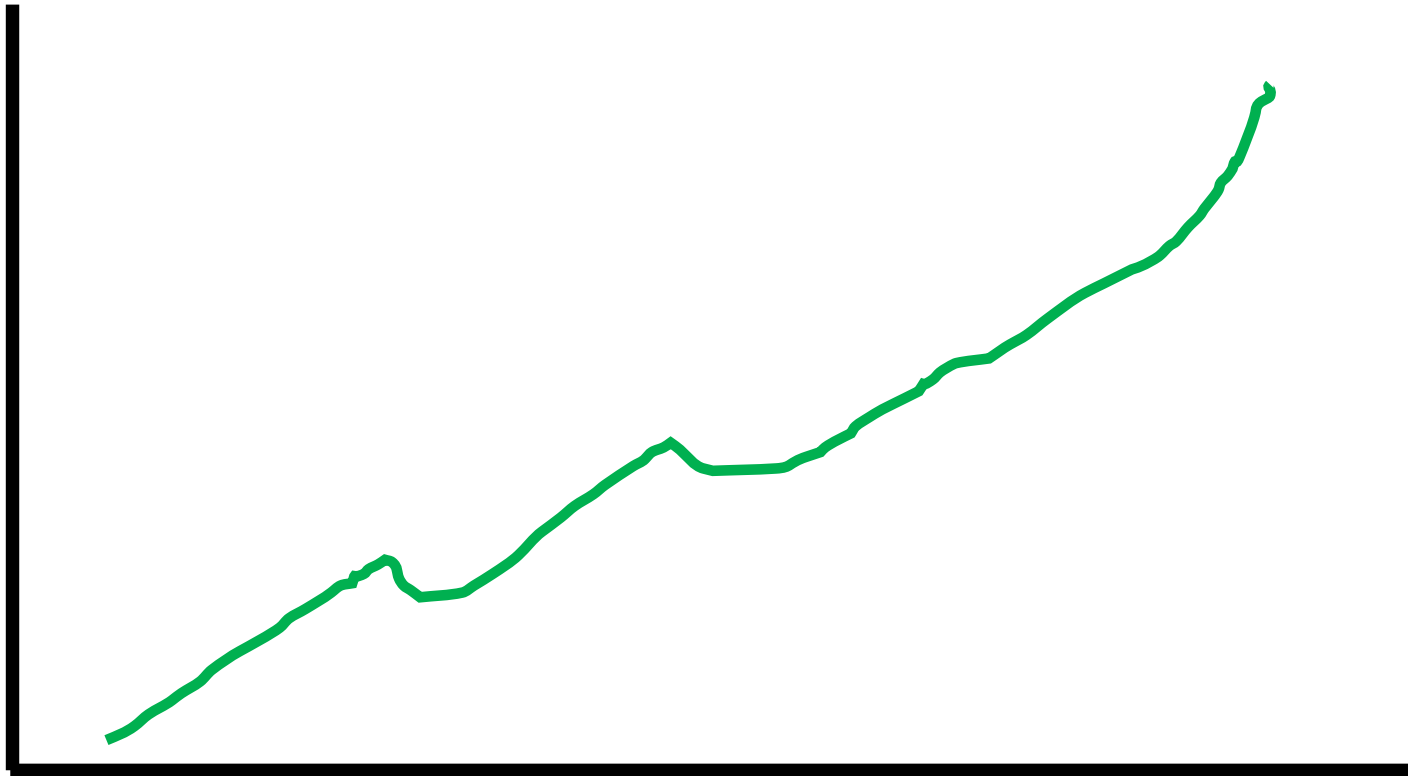
Profits are Growing!!!



Profits are Growing!!!

Net income

50 cents



Years

5

Uh.. Spoke too soon...

Server

Analytics
Software

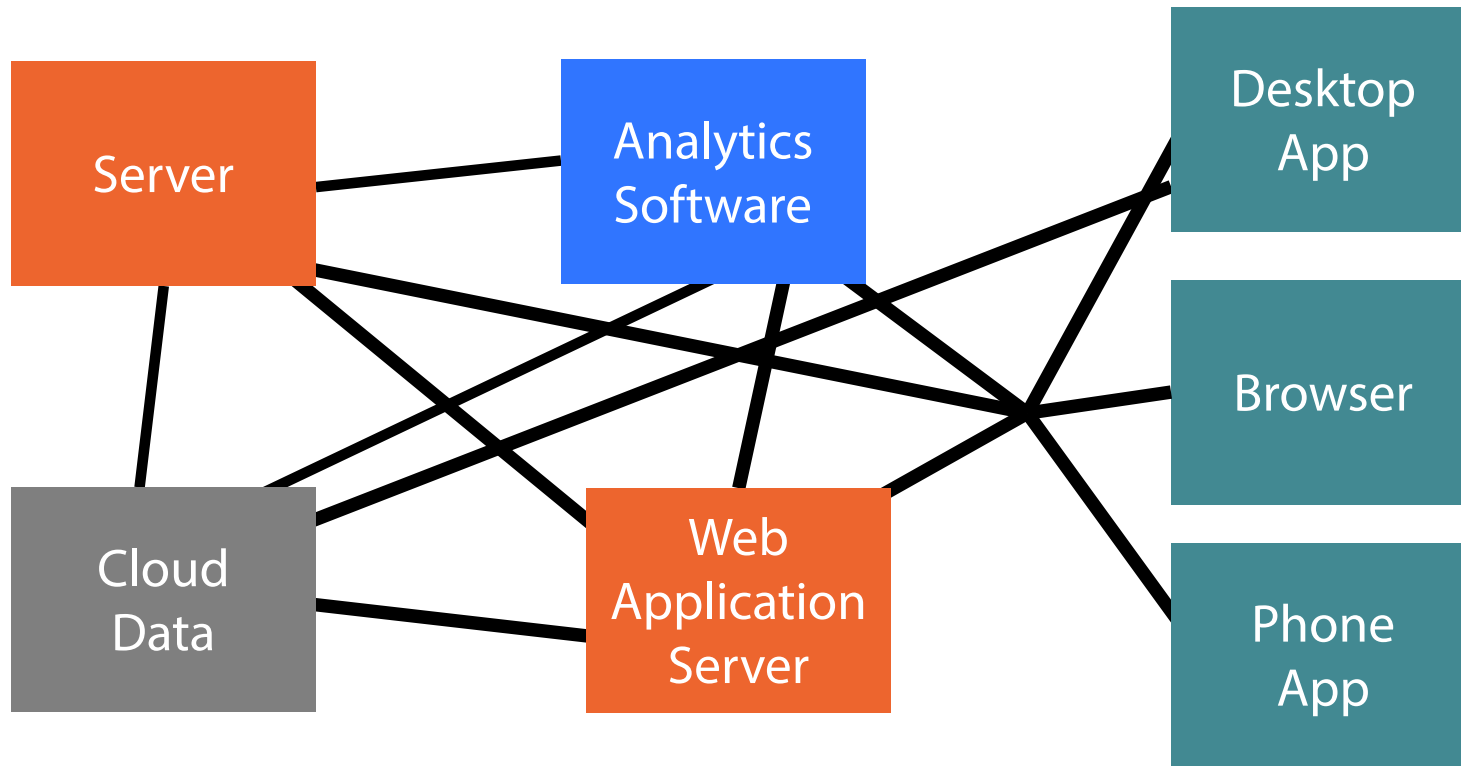
Desktop
App

Cloud
Data

Web
Application
Server

Browser

Phone
App

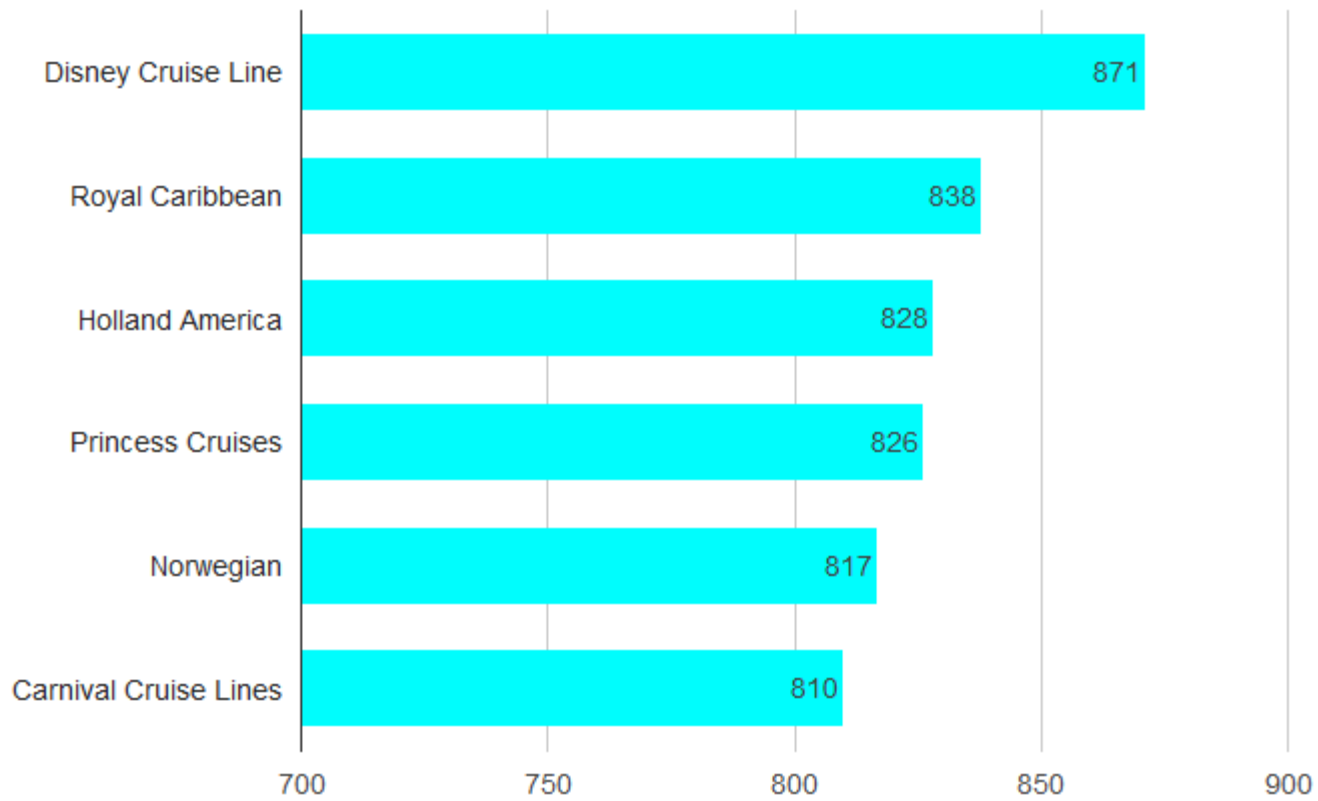


Visualization is not just Excel anymore...

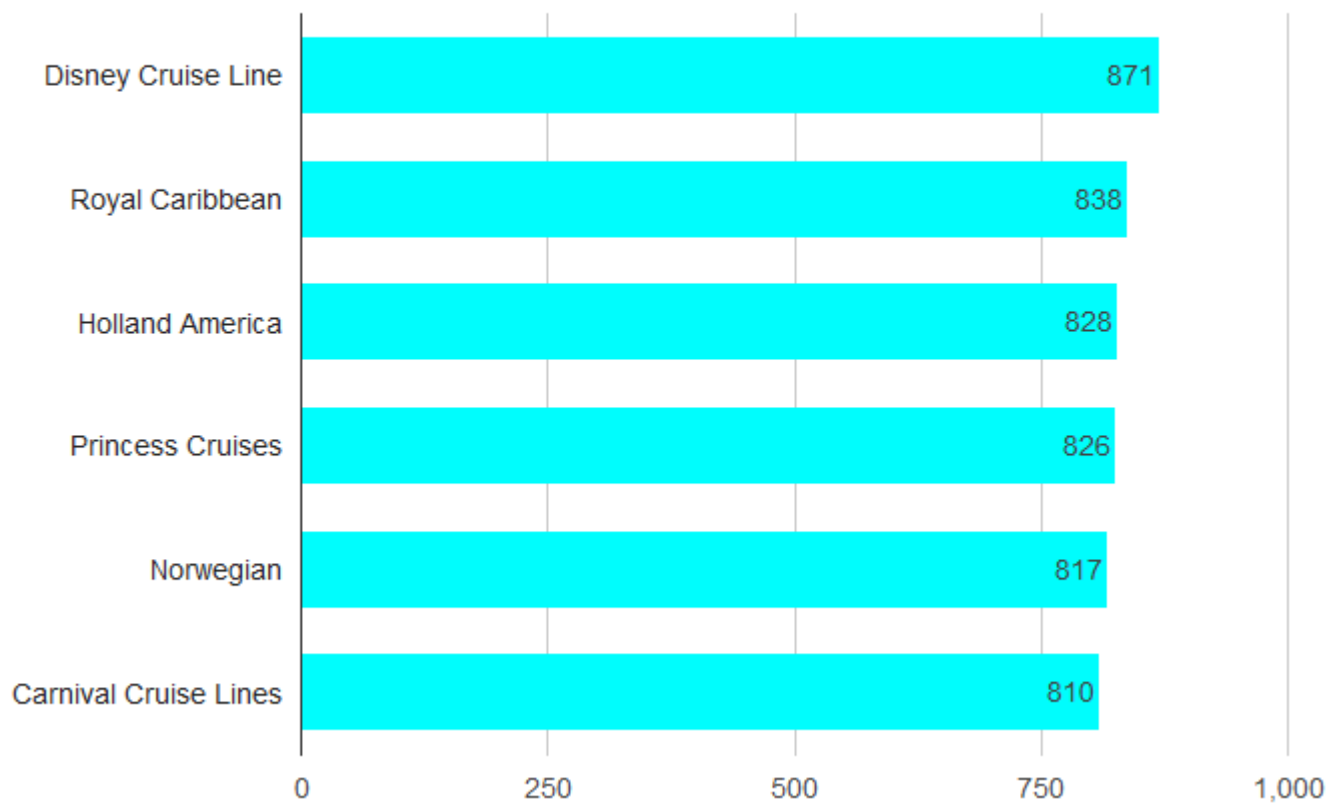




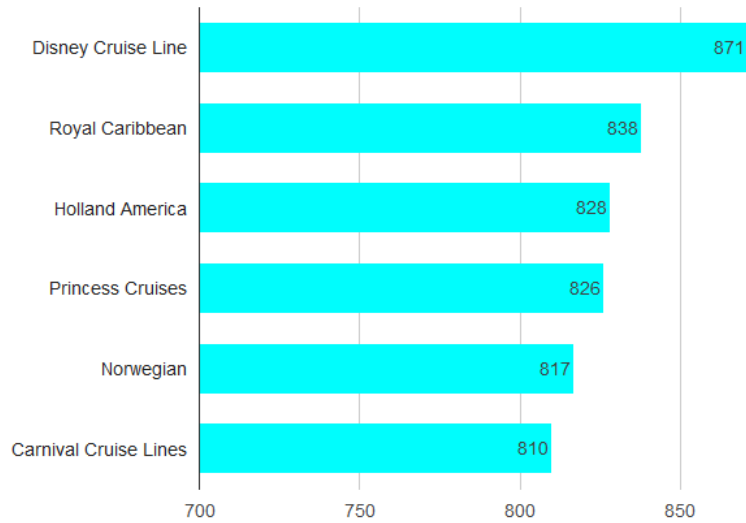
Customer Satisfaction Index Ranking



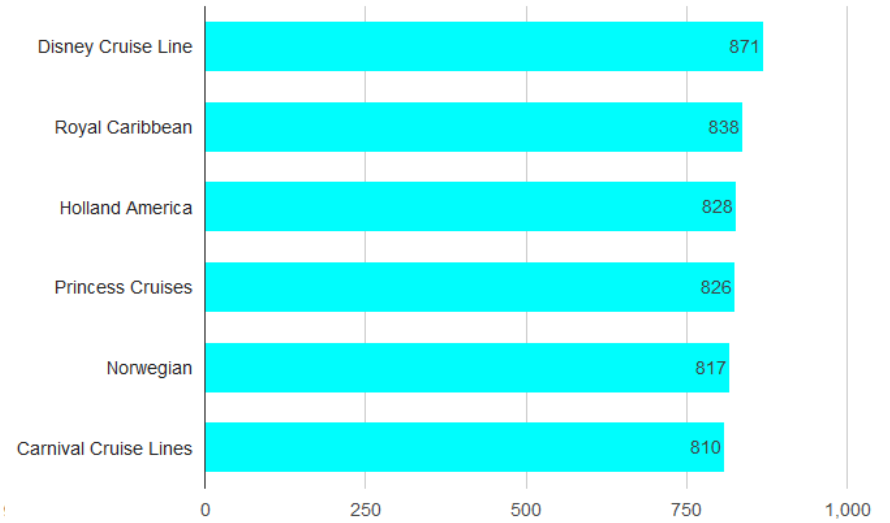
Customer Satisfaction Index Ranking



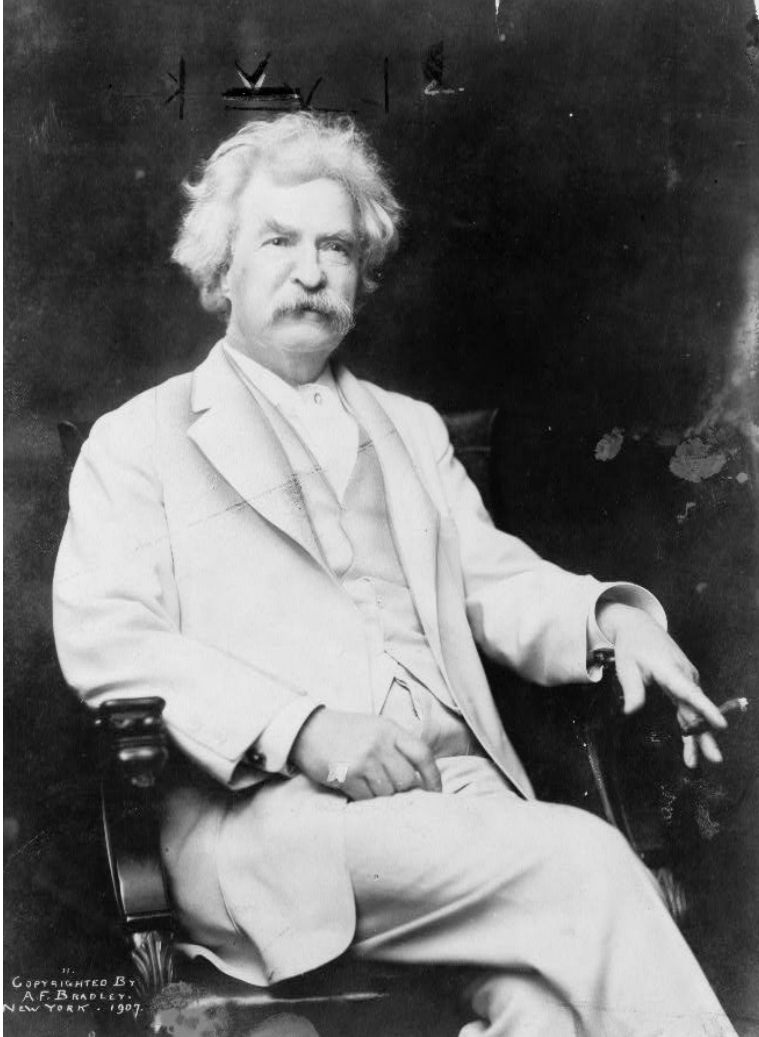
Customer Satisfaction Index Ranking



Customer Satisfaction Index Ranking



Which is true?



“There are three kinds of lies: lies, damned lies, and statistics”

Popularized by Mark Twain, in “Chapters from My Autobiography” who attributed it to Benjamin Disraeli. Actual origin is unclear.



2013 Cruise Line Satisfaction Report

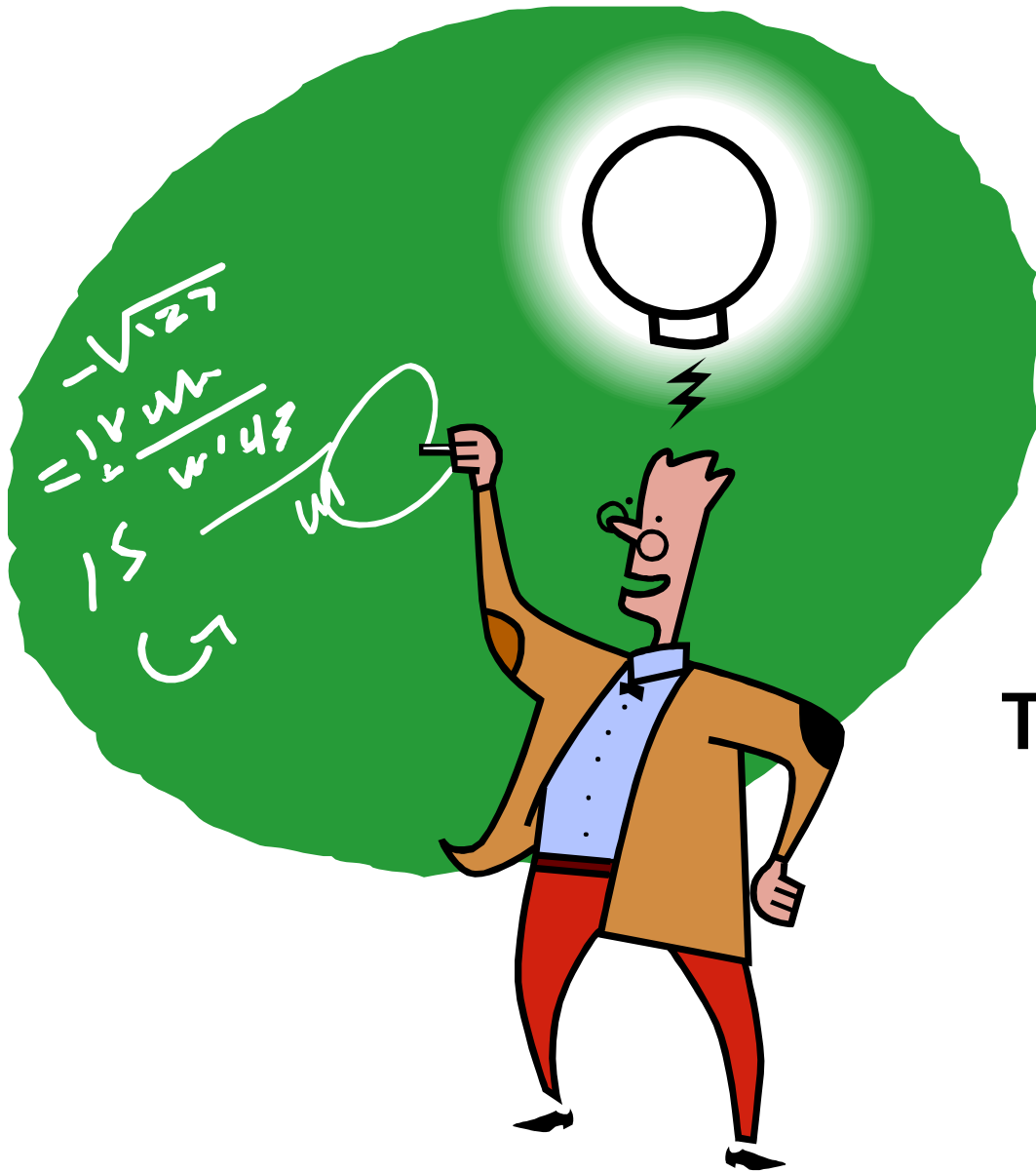
J.D. Power Reports:

Although Overall Satisfaction with Cruise Lines Is High, Nearly 20 Percent of Passengers Experience A Problem on Their Cruise

To read the original press release:

<http://www.jdpower.com/content/press-release/BNsKy1W/2013-cruise-line-satisfaction-report.htm>

The Three Roles of Data Visualization



The Data Scientist

The Graphic Designer



