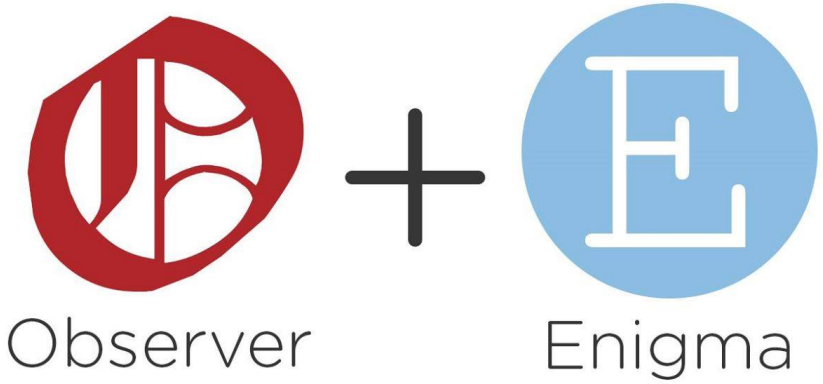
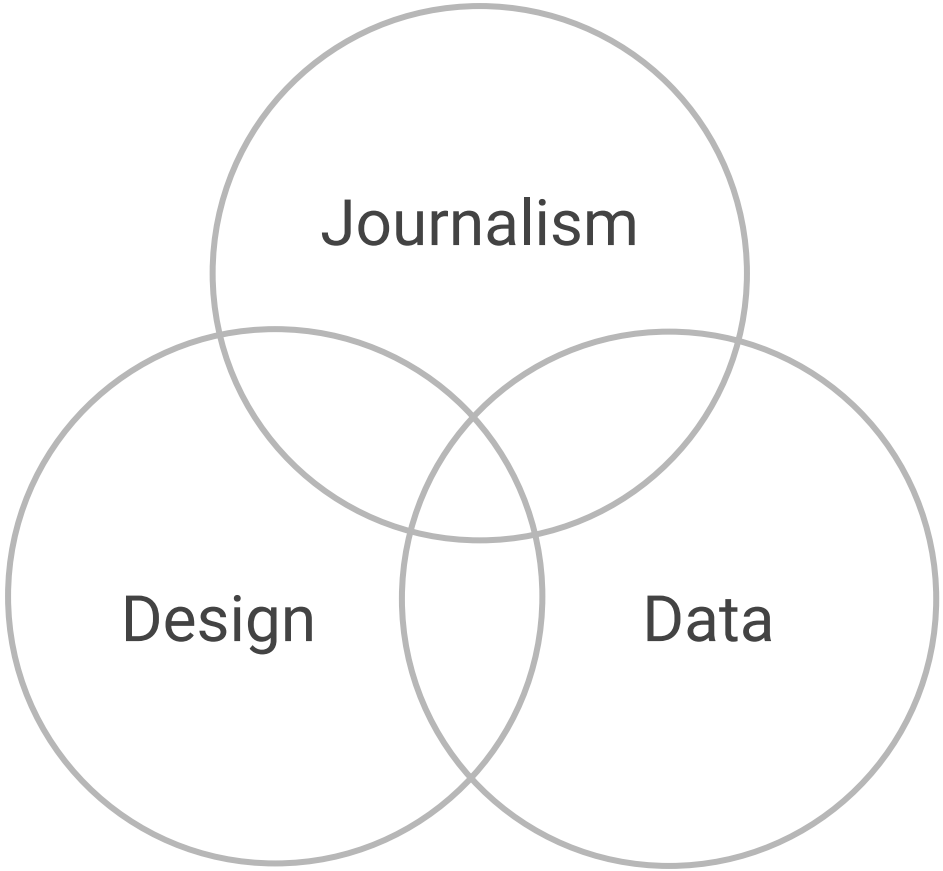
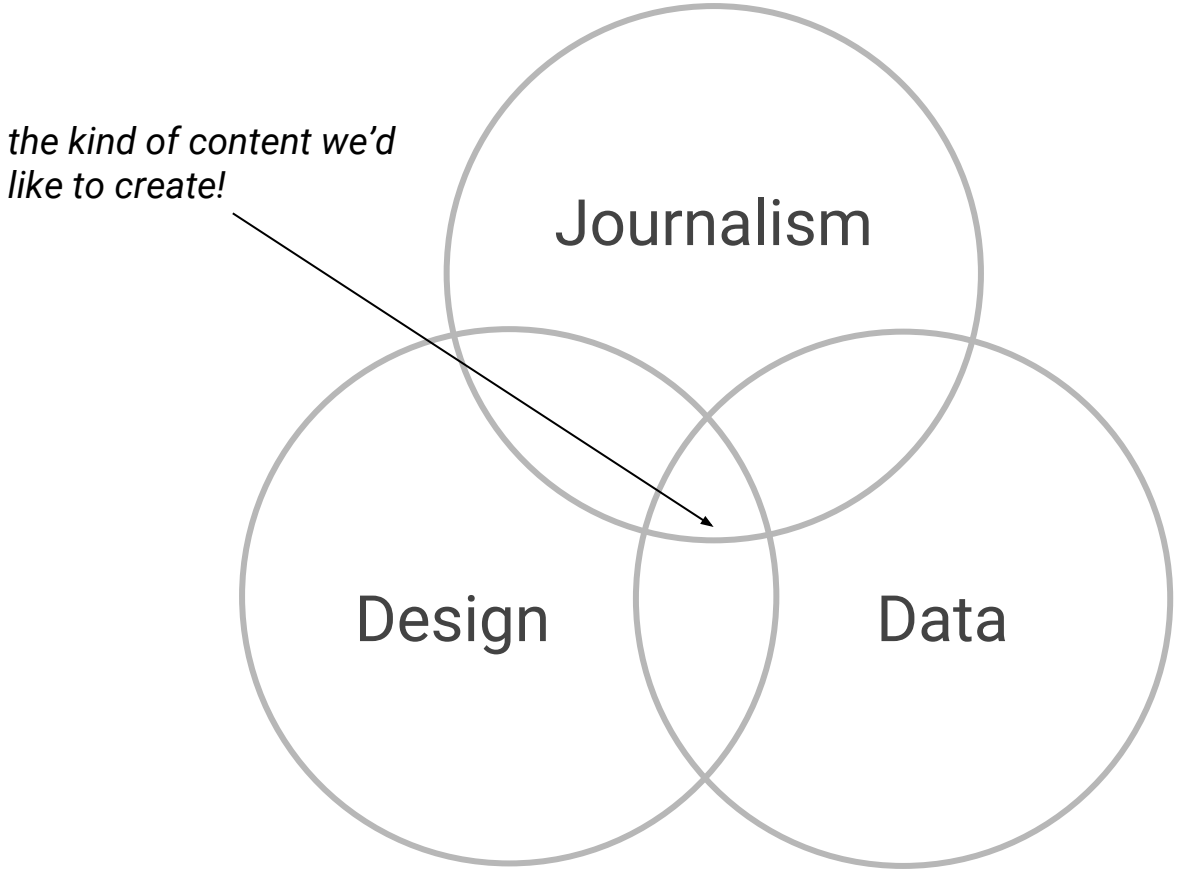
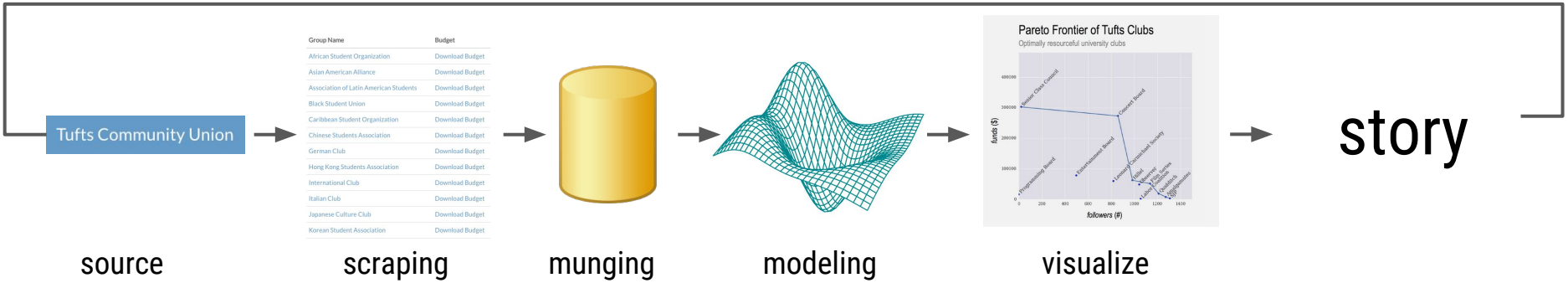


Design + Data Journalism

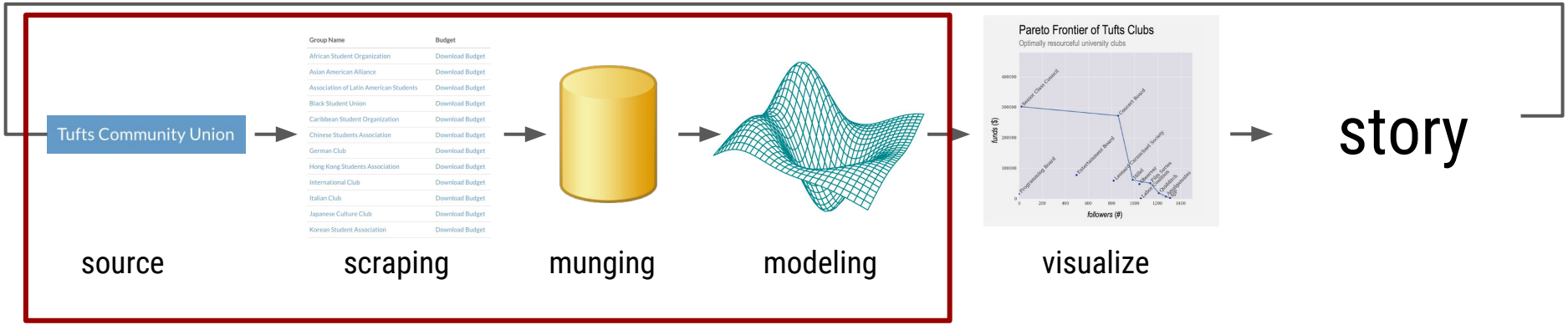

Journalism
Design
Data

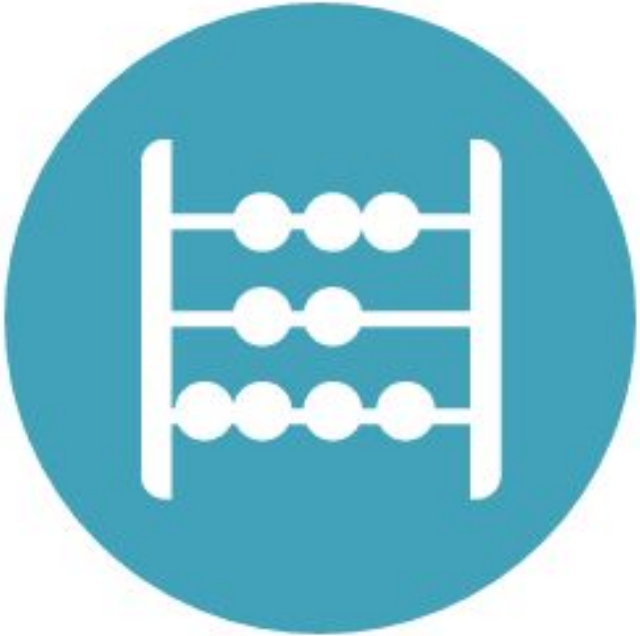

the kind of content we'd like to create!
Journalism
Design
Data

Journalism as a storytelling pipeline.



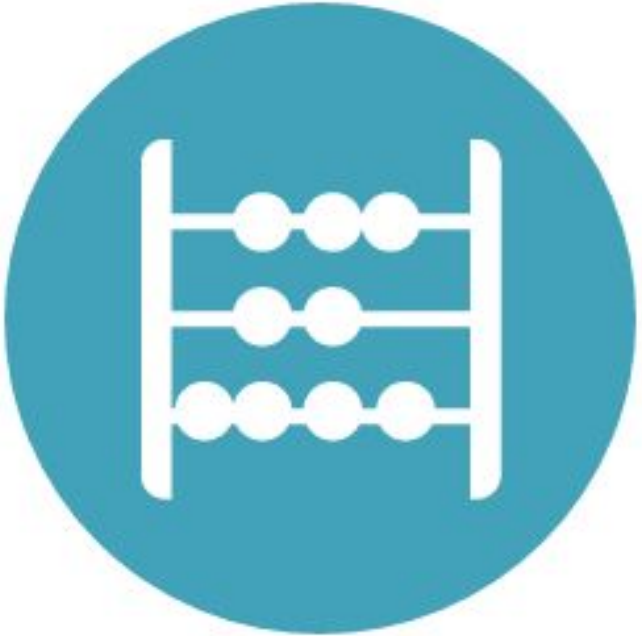
Journalism as a storytelling pipeline.
Data as the 'raw material'.





Data Types

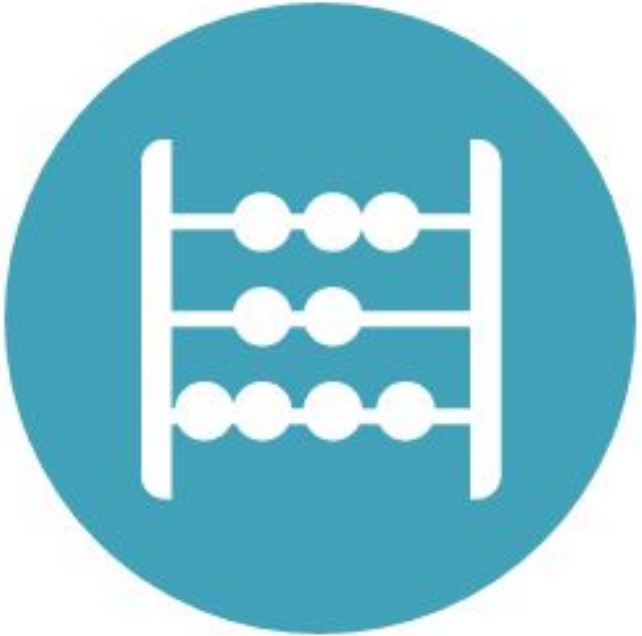
(i.e. ways to measure stuff)



Ordinal (i.e. ‘rank’)

Data Types

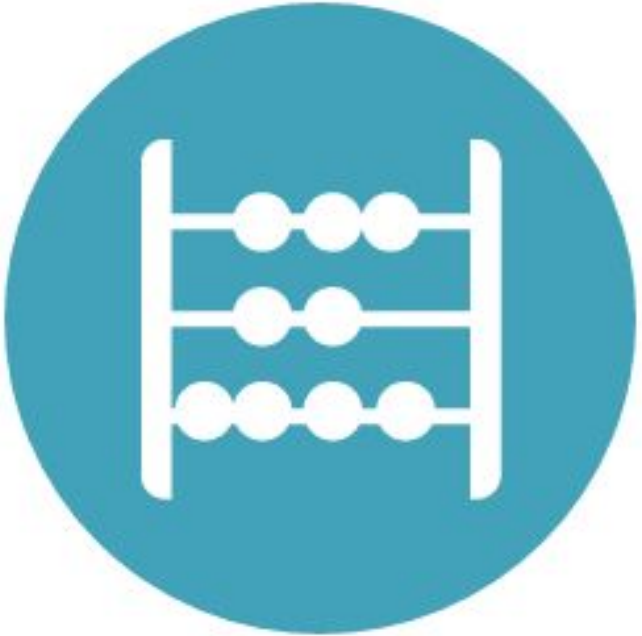
(i.e. ways to measure stuff)



Ordinal (i.e. ‘rank’)
Interval (i.e. ‘difference’)

Data Types

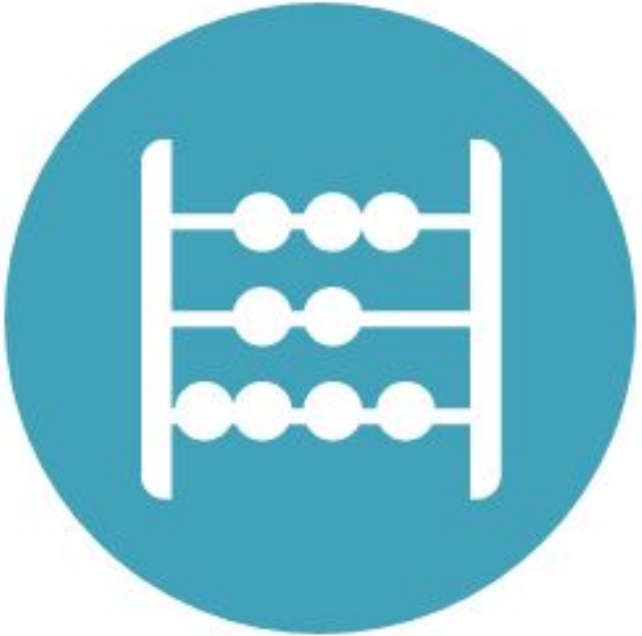
(i.e. ways to measure stuff)



Ordinal (i.e. ‘rank’)
Interval (i.e. ‘difference’)
Ratio (i.e. ‘relative size’)

Data Types

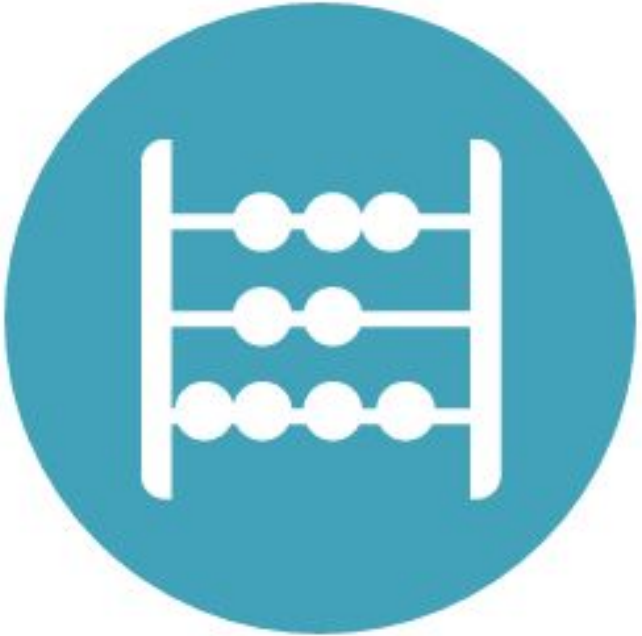
(i.e. ways to measure stuff)



Ordinal (i.e. ‘rank’)
Interval (i.e. ‘difference’)
Ratio (i.e. ‘relative size’)
Categorical (i.e. ‘groups’)

Data Types

(i.e. ways to measure stuff)

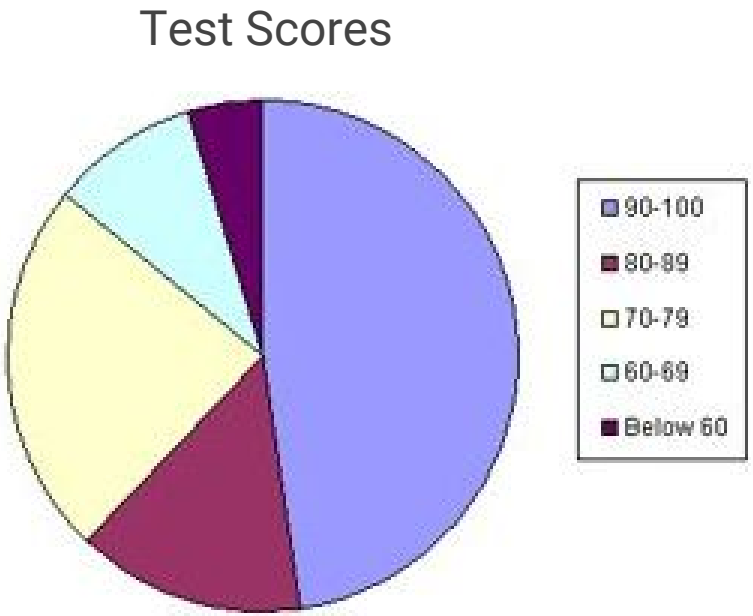


Ordinal (i.e. ‘rank’)
Interval (i.e. ‘difference’)
Ratio (i.e. ‘relative size’)
Categorical (i.e. ‘groups’)
Qualitative (i.e. ‘non-numeric’)

Data Types

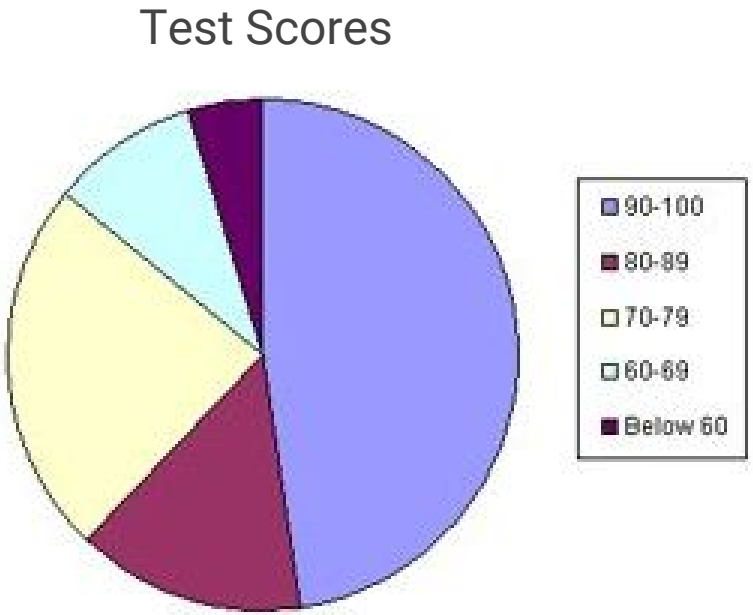
(i.e. ways to measure stuff)

What Kind of Data?



Source: k12handhelds

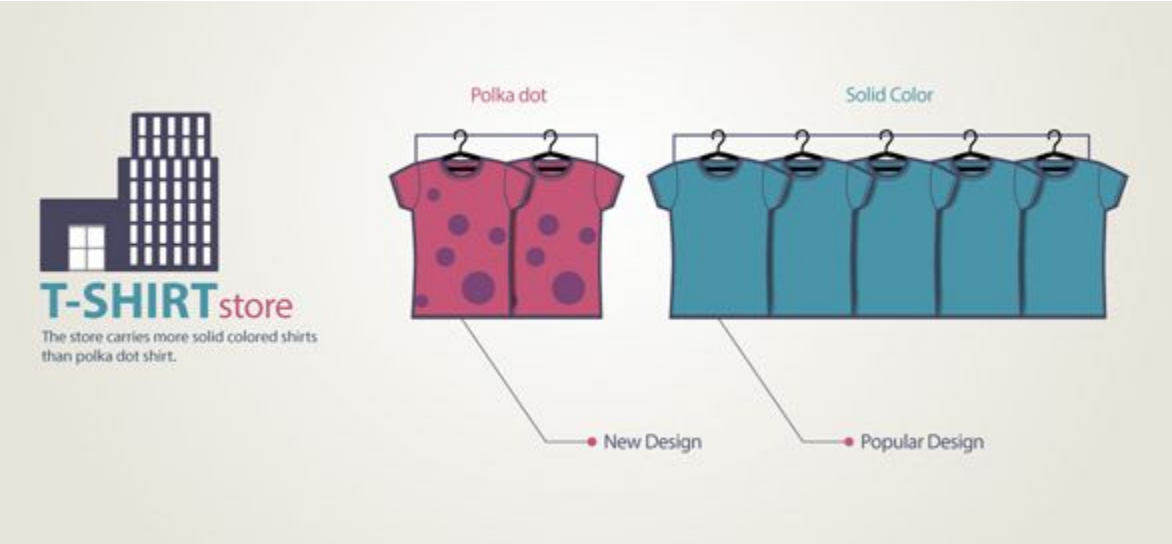
What Kind of Data?



clearly proportions... so ***ratio***

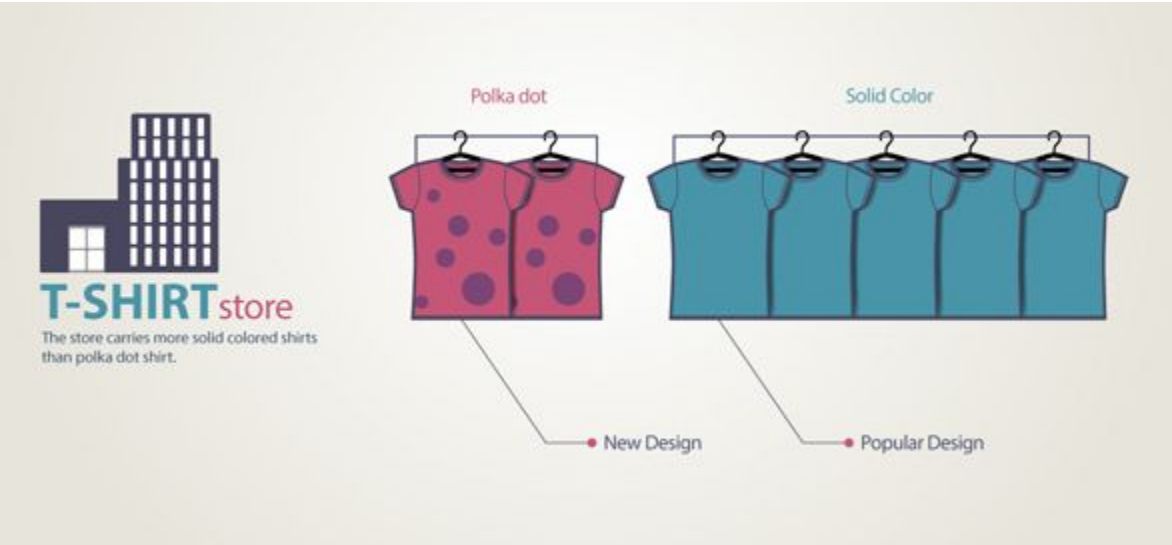
Source: k12handhelds

What Kind of Data?



Source: [The Visual Learner]

What Kind of Data?



representation of groups… so ***categorical***

Source: [The Visual Learner]

What Kind of Data?

"Opinion Survey"

Source: Data + Design

What Kind of Data?

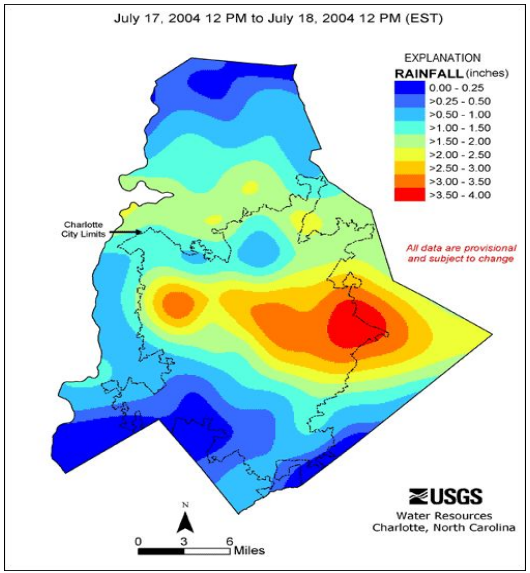
"Opinion Survey"

rank matters… so it's ***ordinal***

Source: Data + Design

What Kind of Data?

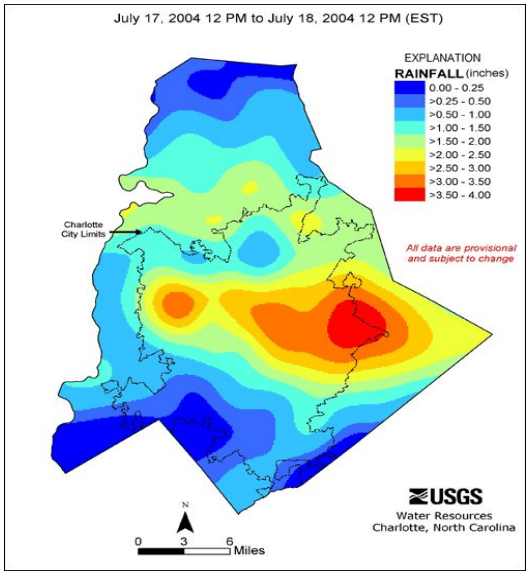
Heatmap of Water Resources



Source: [USGS]

What Kind of Data?

Heatmap of Water Resources



depiction of ranges… so ***interval***

Source: USGS

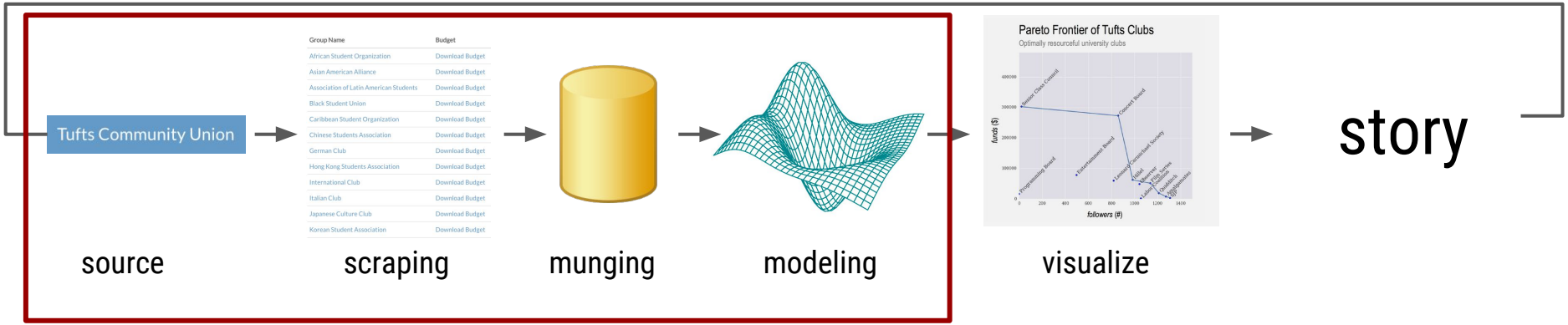
What Kind of Data?

Grocery Store Inventory

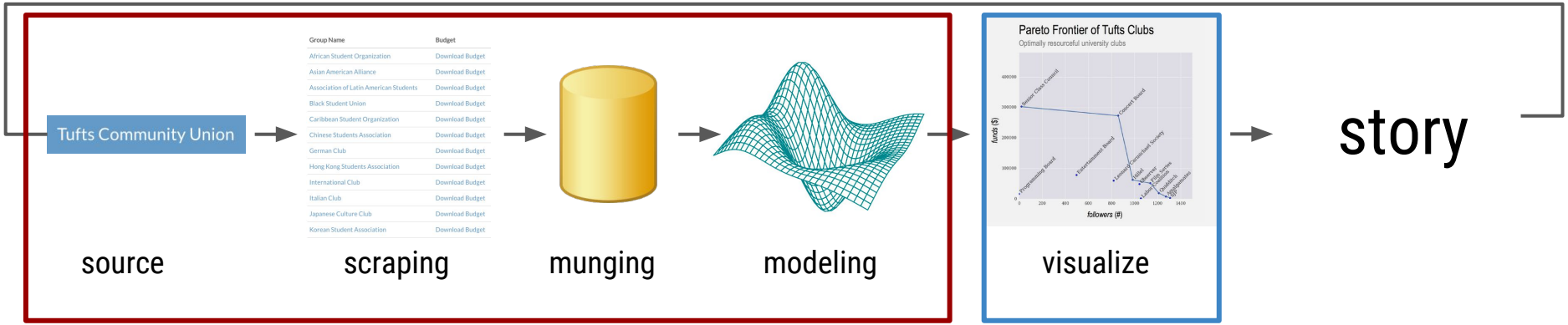
Date: 06/01/2014 Time: 11:32am				
Item	**Section**	**Aisle**	**Quantity**	**Cost (US$)**
Oranges—Lbs	Produce	4	2	2.58
Apples—Lbs	Produce	4	1	1.29
Mozzarella—Lbs	Dairy	7	1	3.49
Milk—Skim—Gallon	Dairy	8	1	4.29
Peas—Bag	Frozen	15	1	0.99
Green Beans—Bag	Frozen	15	3	1.77
Tomatoes	Canned	2	4	3.92
Potatoes	Canned	3	2	2.38
Mushrooms	Canned	2	5	2.95

Source: Data + Design

Journalism as a storytelling pipeline.
Data as the 'raw material'.



Journalism as a storytelling pipeline.
Data as the 'raw material'.
Design as the 'finished good'.



Design Process

Sketch

Design Process

Sketch
Collaborate

Design Process

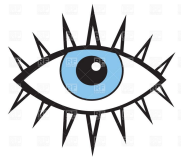
Sketch
Collaborate
Cohesion

Design Process

Sketch
Collaborate
Cohesion
Composition

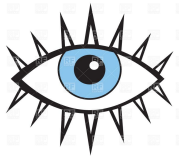
Design Process

Good Infographics vs. Bad Infographics



Good Infographics vs. Bad Infographics

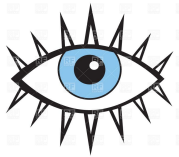
What makes an infographic visually appealing?



Good Infographics vs. Bad Infographics

What makes an infographic visually appealing?

Where is the reader’s eye directed?



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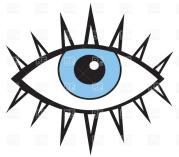

Good Infographics vs. Bad Infographics

What makes an infographic visually appealing?

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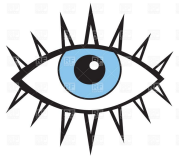
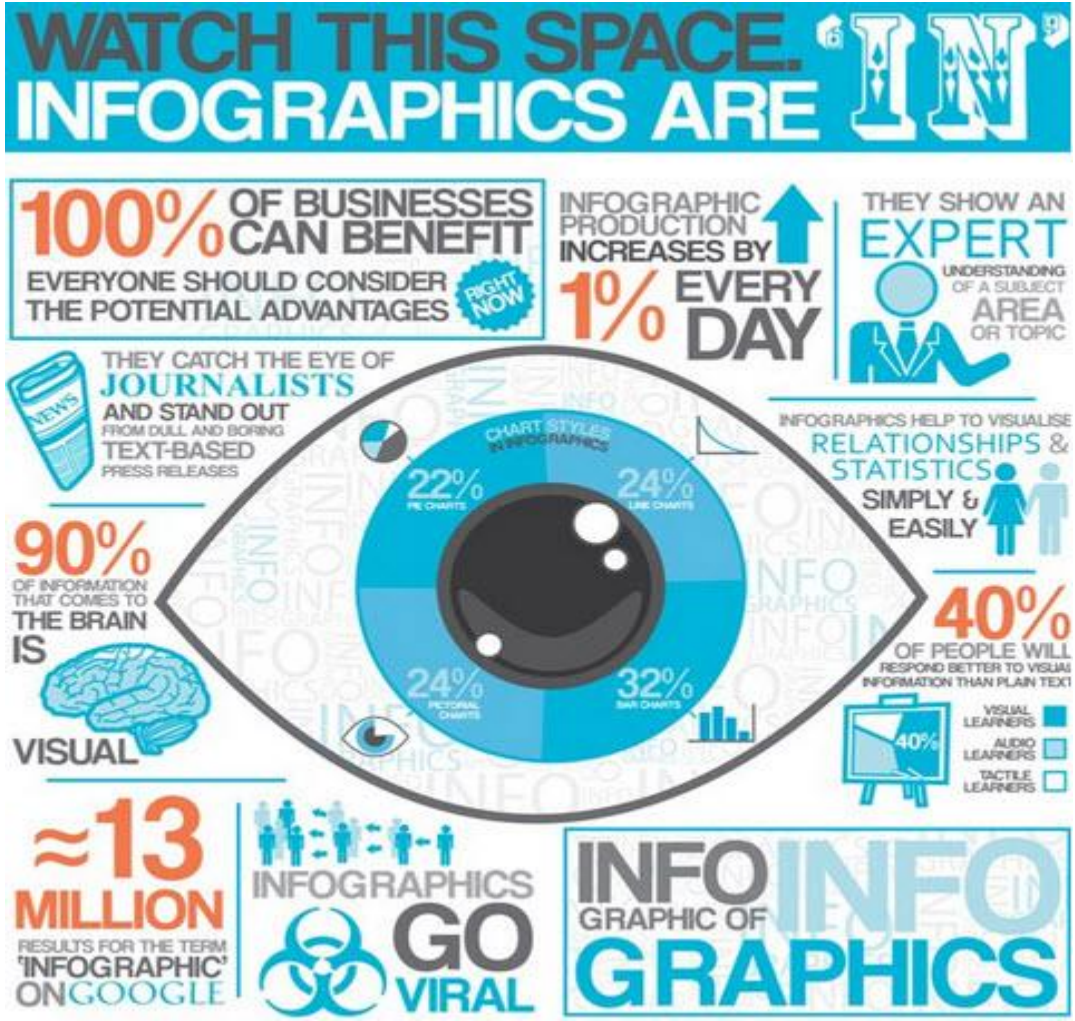
What is the message that the designer is trying to communicate?

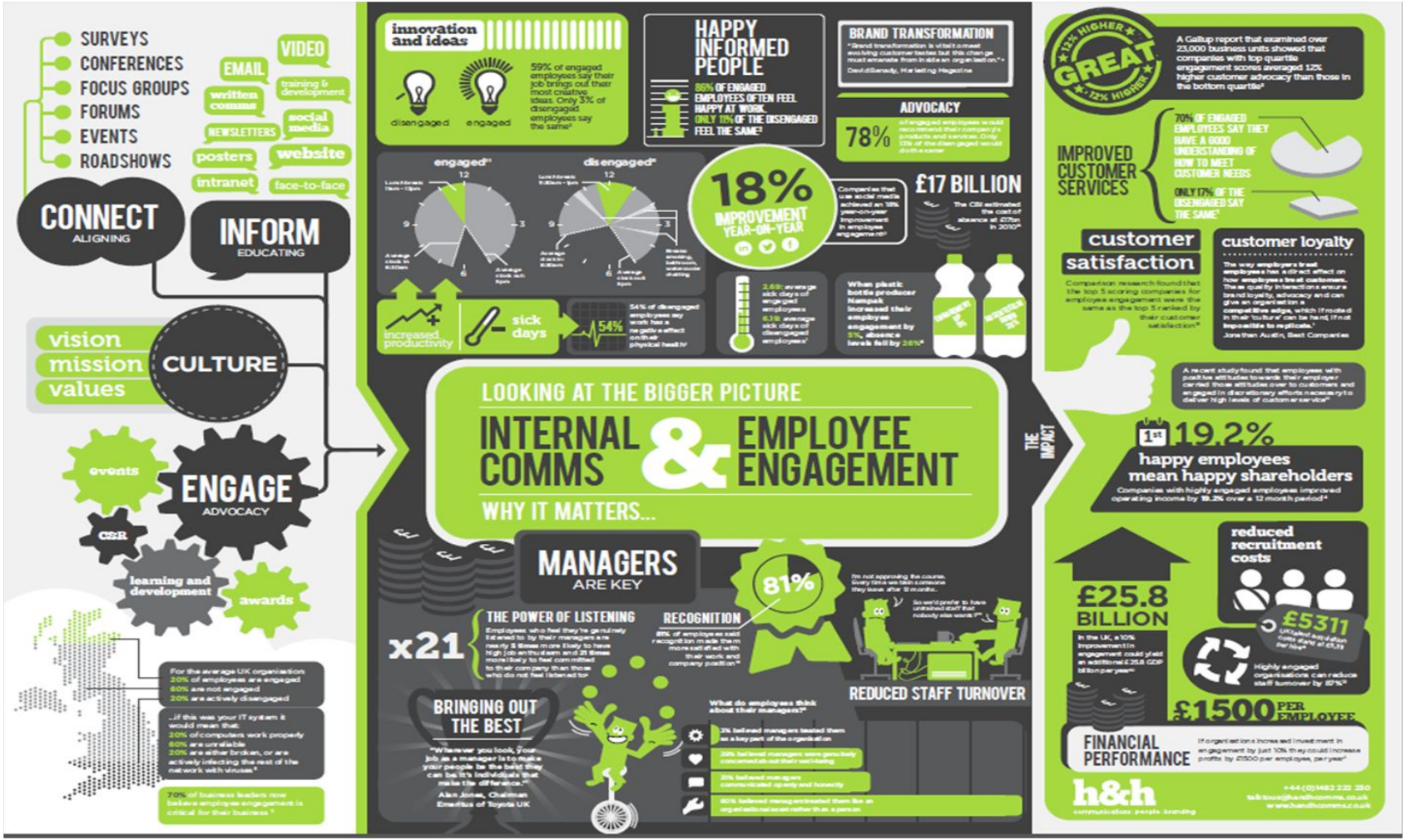
What is the importance of white space?



Case Studies



Source: Watch This Space



Source: Engage For Success

How the Recession Changed Us

WHAT A DIFFERENCE TWO YEARS MAKES.

By Timothy Lavin
Graphics by Amanda Back

OFFICIALLY, THE GREAT Recession lasted from December 2007 to June 2009. A mere 18 months—about average, as recessions go. Yet if the trauma this time feels deep and lasting, that may be because, as the figures on these pages show, so many disruptions have upended national life at once.

Millions of Americans have lost their jobs, nearly every state faces a budget shortfall, and hundreds of banks have shut their doors. The young are unemployed, living at home, and playing video games. The ranks of third-party candidates have swollen, militias have proliferated, and national leaders of both parties have seen their support decline. Of course, times of flux are often times of anxiety and unrest. But as the economy begins its slow and stuttering recovery, the vast changes wrought by this recession will continue to reverberate for many years—in ways predictable and otherwise.

Timothy Lavin is an Atlantic senior editor.

DAILY CONSUMER SPENDING

U.S. BOOK SALES

PERCENTAGE INCREASE in NYT ARTICLES mentioning the WORD "uncertainty," 2007 vs. 2010*

44%

*through Dec. 1

TAX COLLECTED by the TREASURY on sales of FIREARMS and AMMUNITION

PERCENTAGE who believe it's more important to preserve GUN OWNERS' RIGHTS than to control GUNS

FEATURE-LENGTH MOVIES released in 3-D

AVERAGE MINUTES SPENT READING per WEEKEND DAY, 15-to-19-year-olds

AVERAGE MINUTES SPENT PLAYING A GAME or USING A COMPUTER for leisure per WEEKEND DAY, 15-to-19-year-olds

DOMESTIC AUTO-INDUSTRY PROFITS (in billions of dollars)

PROFITS

YEAR BY QUARTER

UNEMPLOYMENT RATE

November 2007	November 2010
4.7%	9.8%

PERCENTAGE of UNEMPLOYED WHO HAVE BEEN UNEMPLOYED for 27 WEEKS or more

GOVERNMENT UNEMPLOYMENT BENEFITS PAID

PERCENTAGE of 18-to-29-year-olds WHO MOVED BACK IN WITH THEIR PARENTS during recession

24%

PERCENTAGE of 18-to-29-year-olds WHO THINK AMERICA is still a LAND of PROSPERITY

70%

NUMBER of PEOPLE in POVERTY

FOOD-STAMP RECIPIENTS by state

	2007	2009	% increase
FLORIDA			50%
NEVADA			63%
NEW YORK			29%

RESIDENTIAL PROPERTIES in FORECLOSURE

MORTGAGE DEBT HELD by FEDERAL AGENCIES

AVERAGE RATE on 30-YEAR FIXED MORTGAGE

November 2007	November 2010
6.21%	4.30%

MEDIAN SALE PRICE of EXISTING HOMES

STATES facing BUDGET SHORTFALLS

FY 2007: 1
FY 2010: 48

FEDERAL BUDGET DEFICIT

DEFICIT as PERCENTAGE of GDP

NUMBER of FEDERAL EMPLOYEES*

Percent increase: +12.6%

*Includes certain agencies and offices not provided for by the U.S. Office of Personnel Management

BANK FAILURES

MARKET CAP of EBAY

MARKET CAP of 99¢ ONLY STORES

INTEREST RATE on a 2-year TREASURY NOTE

November 2007	November 2010
3.125%	0.500%

TOTAL ASSETS of the FEDERAL RESERVE

CURRENCY in CIRCULATION

ACTIVE MILITIAS

SECRET-SERVICE AGENTS

SAVINGS RATE, as percentage of disposable income

AVERAGE INTEREST PAID on DOMESTIC DEPOSITS

November 2008	November 2010
2.22%	0.80%

PERSONAL BANKRUPTCIES

VIOLENT CRIMES per 100,000 PEOPLE

PERCENTAGE of AMERICANS who think PRESIDENT OBAMA is a MUSLIM

FAVORABLE VIEW of SARAH PALIN

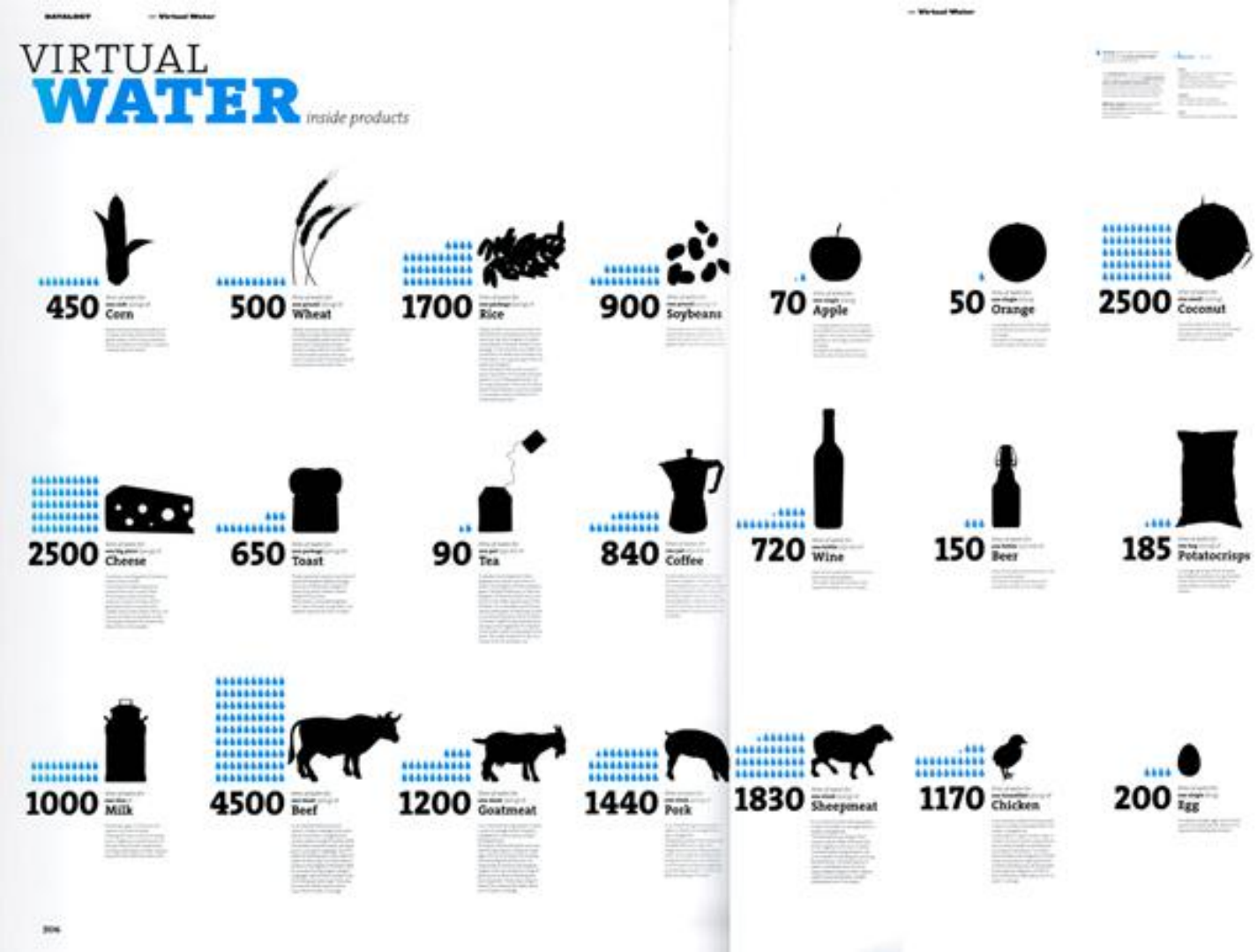
APPROVAL RATING for PRESIDENT OBAMA

THIRD-PARTY HOUSE candidates

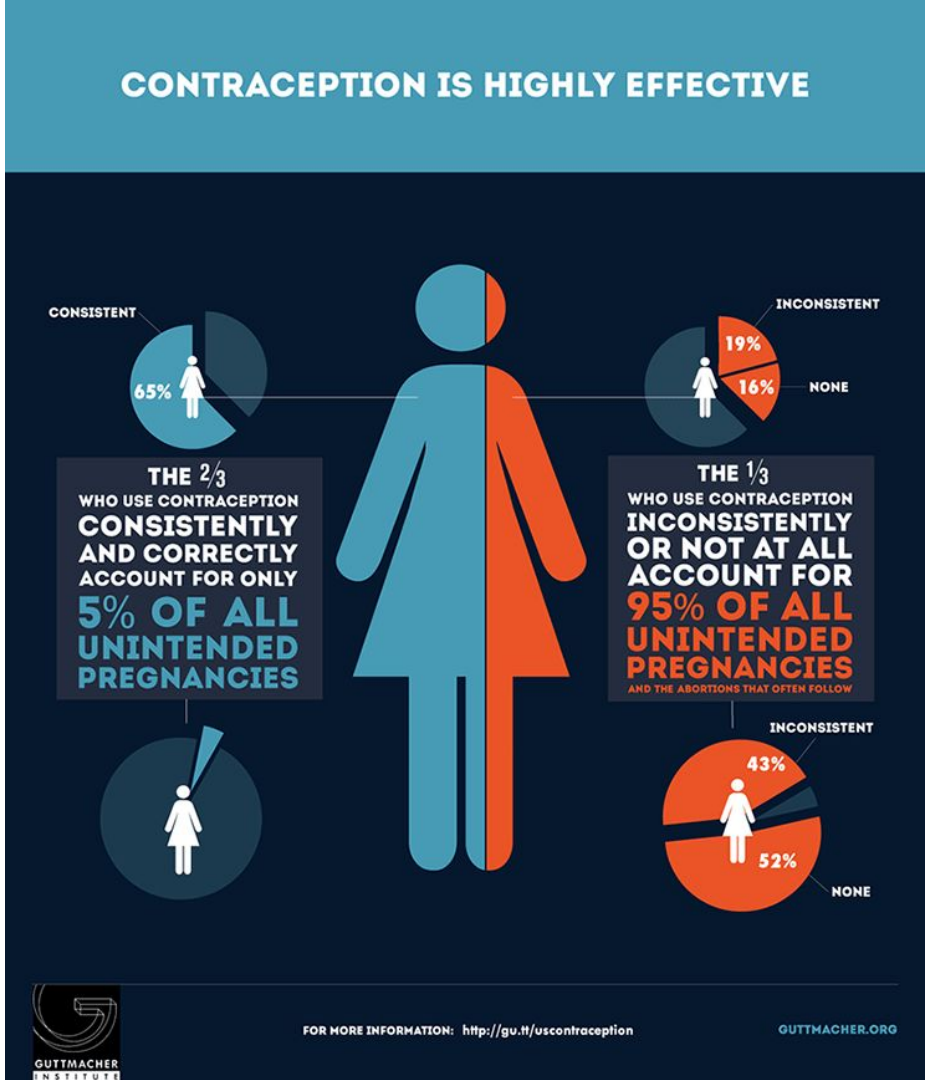
2008: 311
2010: 443

Source: The Atlantic

VIRTUAL WATER *inside products*



Source: Virtual Water

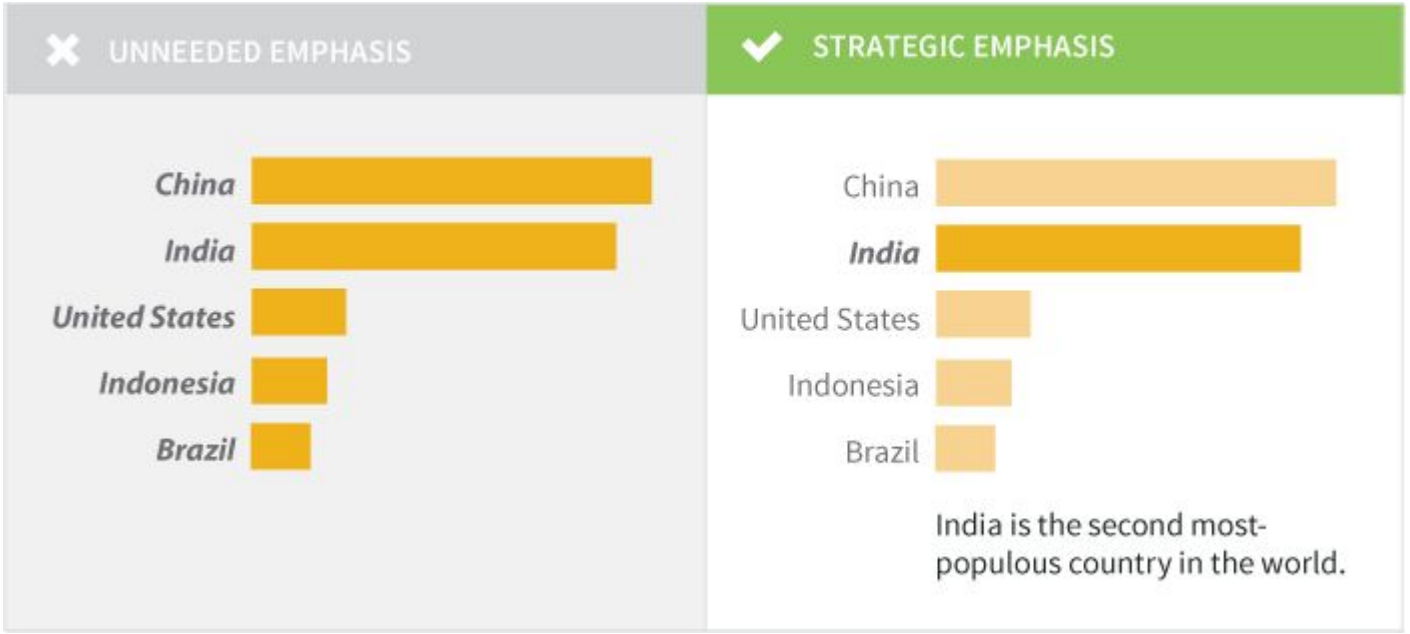


Source: Guttmacher Institute

Tufts Labor Coalition Infographic

click me

Source: Data + Design

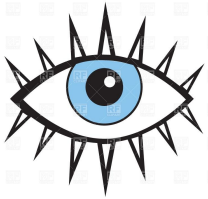


Source: Data + Design

Source: Data + Design

Source: [Data + Design]

Tips & Hints



Guide your reader visually

Have a specific purpose

Tell a story

Choose representations that make sense

Don’t be afraid of white space

Design Tools

The Noun Project

“Free vector icons for small illustrations.”

Canva

“Easy to use infographic templates.”

Microsoft Powerpoint

“...Surprisingly good + easy tool.”

Adobe Creative Suite

“Steep learning curve, but making anything in the world.”

Visualization Tools

(more in a future workshop!)

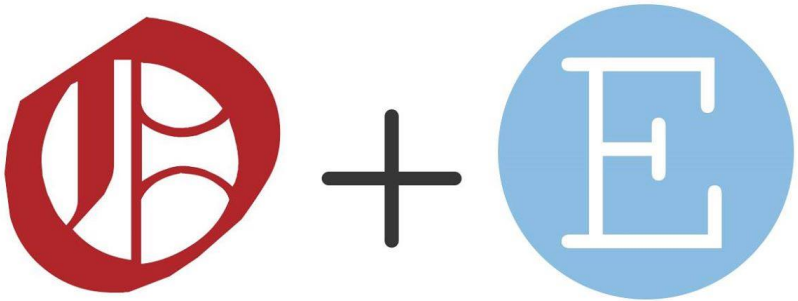
Plot.ly

“Easily create charts and graphs online.”

Tableau

“Explore data and quickly visualize in many different ways.”

D3

“Create interactive graphics in Javascript.”

Thanks!