

Data - Sense

ID 413: Information Graphics and Data Visualization
Spring 2016

Venkatesh Rajamanickam (@venkatrajam)
venkatra@iitb.ac.in
<http://info-design-lab.github.io/ID413-DataViz/>

Infographic Vs. Data Visualization

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In their book *Designing Data Visualizations*, authors Noah Iliinsky and Julie Steele use the following three criteria to determine whether to call a graphic a data visualization or an infographic:

1. **Method of generation:** This criterion refers to what goes into creating the graphic itself. If lots of original illustrations are created to explain the data, for example, it's likely to be an infographic. You often see infographics with beautiful, elaborate images created to explain the information.

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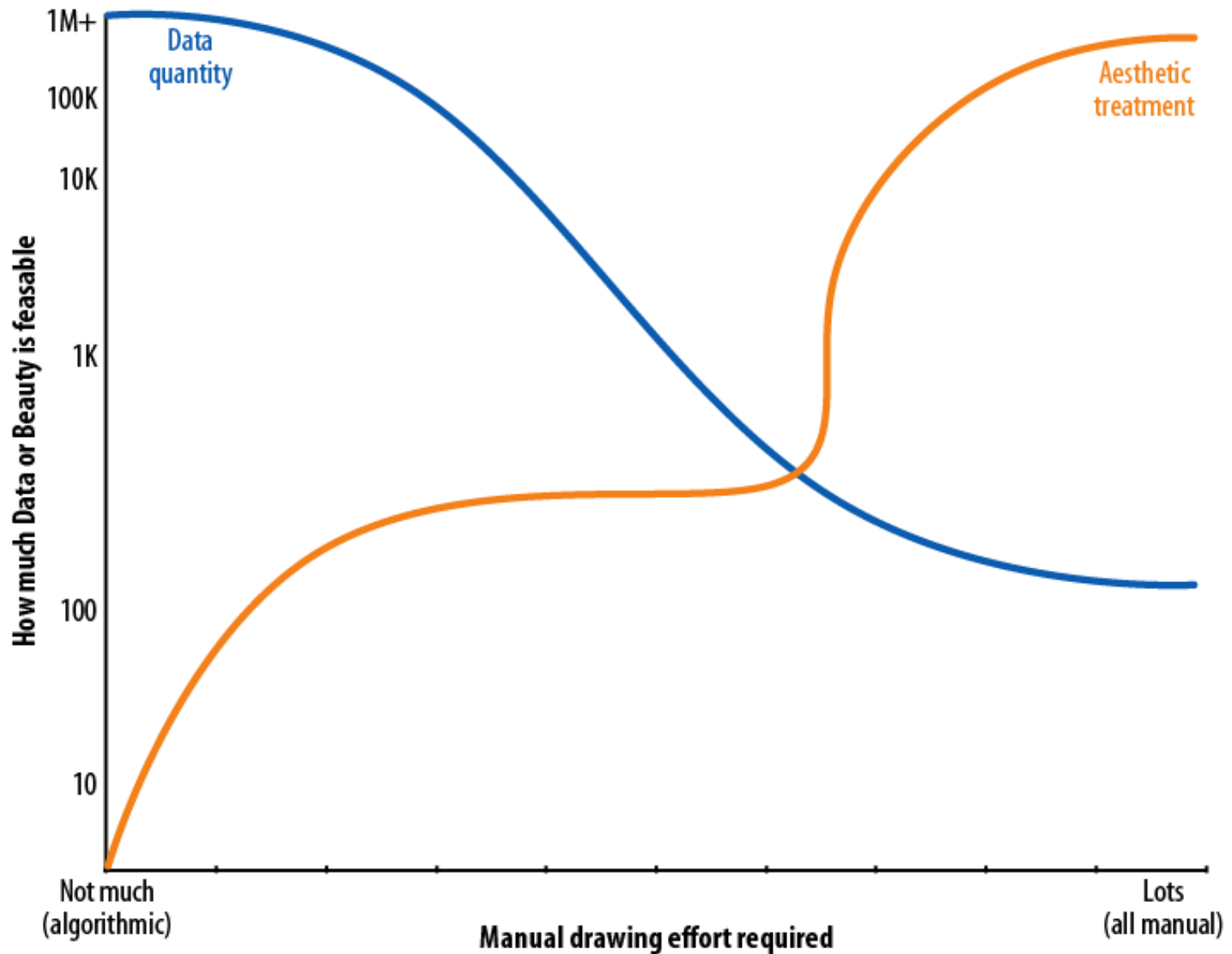
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2. **Quantity of data represented:** Typically, data visualizations have more and different kinds of data from infographics. Also, the data in data visualizations changes frequently to indicate changes in status. In addition, an infographic is less likely to include interactive numbers.

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3. **Degree of aesthetic treatment applied:** This criterion refers to the artfulness of the graphic. If a lot of design work has gone into displaying information, the graphic is likely to be an infographic.

Infographic Vs. Data Visualization



HEIGHT of MAN and BASE



PARTICIPANTS



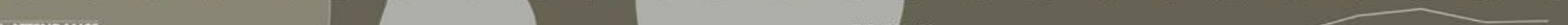
TICKET PRICE



THEME



MOON PHASE (burn night)



EVENT/FESTIVAL ATTENDANCE



HUALAPAI FLAT
1997

BLACK ROCK DESERT
1990-1996
1998-PRESENT

BLACK ROCK CITY
5 sq. mi.

PLAYA
200 sq. mi.

BLACK ROCK DESERT
1000 sq. mi.

THEMECAMPS (placed)

FIRE CONCLAVE GROUPS

ART PROJECTS (registered)

BLM CITATIONS

RECYCLED ALUMINUM CANS

COSTS

COST - PORTOPHONES IN MAN

the TEMPLES of BURNING MAN

TEMPLE of the MIND 2000 | TEMPLE of TEARS 2001 | TEMPLE of JOY 2002 | TEMPLE of HONOR 2003 | TEMPLE of STARS 2004 | TEMPLE of DREAMS 2005 | TEMPLE of HOPE 2006 | TEMPLE of FORGIVENESS 2007 | BASURA SAGRADA 2008 | FIRE of FIRES 2009 | TEMPLE of FLUX 2010

PARTICIPANT DEMOGRAPHICS



CITY POPULATIONS - NEVADA



AVERAGE WEEKLY WEATHER FORECAST



LOCAL POPULATION COMPARISON



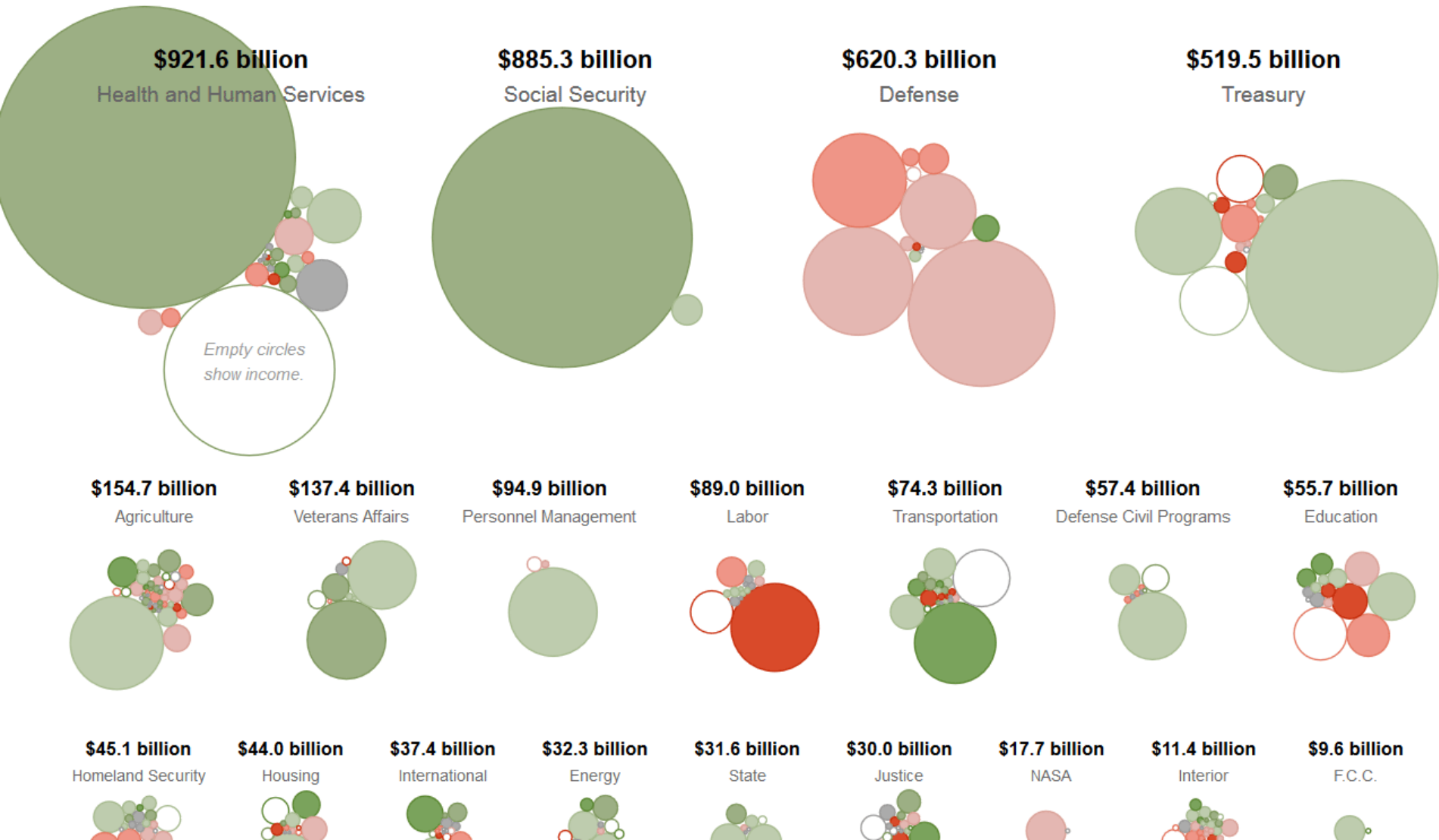
BURNING MAN

Black Rock Desert valley fills with water during Pleistocene ice age 70 MILLION YEARS AGO	Humboldt River flows to Black Rock Desert sub-basin 15,000 YEARS AGO	Lahontan lake covers 8,645 square miles; subsided under about 500 feet of water 12,700 YEARS AGO	Lake disappears significantly 9,000 YEARS AGO	Great Basin tribes inhabit area 7,000 YEARS AGO	Fremont Expedition 1843	Peter Lassen led California Trail emigrants through Applegate-Lassen Corral 1845	Western Pacific's Feather River Route starts (Oakland - Salt Lake City) 1910	Largest mammoth found in North America 1975	First Black Rock City built 1986	Land speed record (Thruxton) 1987	First successful launch of an amateur rocket to space (Stratolaunch) 2004
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Four Ways to Slice Obama's 2013 Budget Proposal

Explore every nook and cranny of President Obama's federal budget proposal.

- All Spending
- Types of Spending
- Changes
- Department Totals**



Mapping the 2010 U.S. Census

Browse population growth and decline, changes in racial and ethnic concentrations and patterns of housing development.

View More Maps



Change in population since 2000

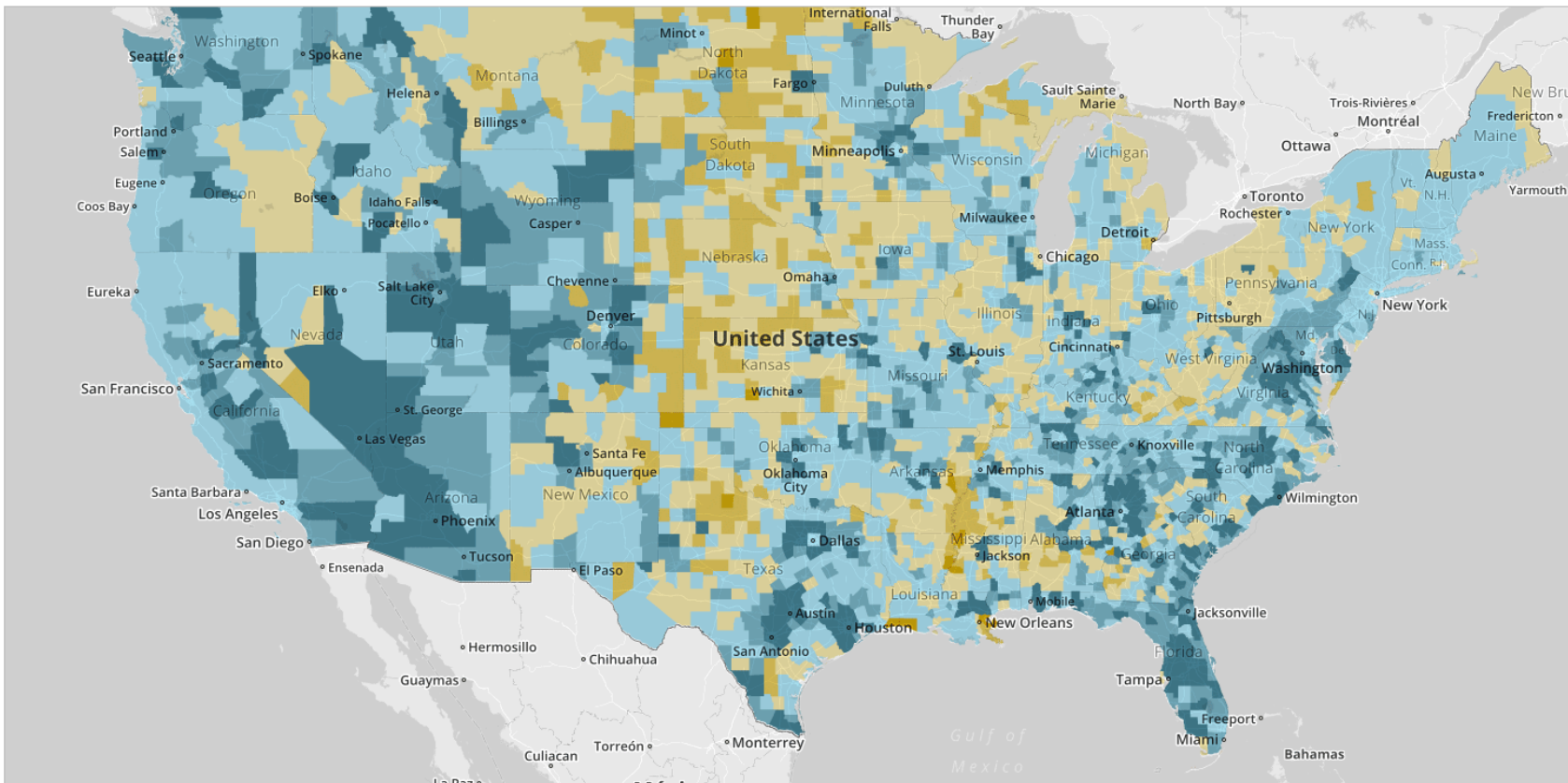
- Over 20% increase
- 10% to 20%
- 0% to 10%
- 0% to -10%
- 10% to -20%
- Over 20% decline

Zoom to a State

Missouri

2010 POPULATION	CHANGE FROM 2000
5,988,927	+7.0%

RACE/ETHNICITY	SHARE OF POP.	CHANGE FROM 2000
Whites:	81%	+4%
Blacks:	11%	+10%
Hispanics:	4%	+79%
Asians:	2%	+59%
Native Amer.:	0%	+3%
Multiracial:	2%	+48%
Other groups:	0%	+35%



Public Data

World Development Indicators

Economic Policy and Debt

Education

Environment

Agricultural irrigated land (% of tot...

Agricultural land (sq. km)

Agricultural machinery, tractors

Agricultural machinery, tractors pe...

Agricultural production index

Agriculture value added per worke...

Clear

Compare by Country

Region Color

Lending Type All

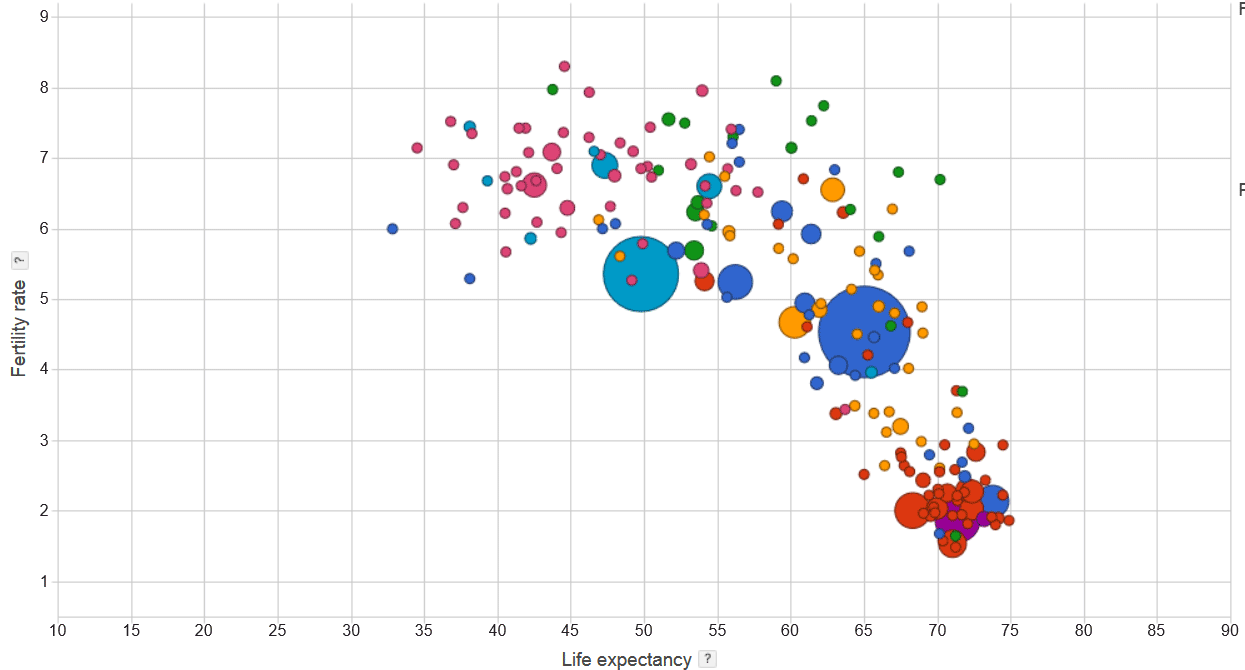
Income Level All

- Afghanistan
- Albania
- Algeria
- American Samoa
- Andorra
- Angola
- Antigua and Barbuda
- Argentina
- Armenia
- Aruba

Clear selections

- Gender
- Urbans/Rurals

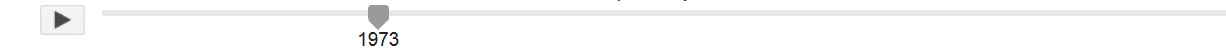
Countries ?



Region ?

- East Asia & Pacific
- Europe & Central Asia
- Latin America & Caribbean
- Middle East & North Africa
- North America
- South Asia
- Sub-Saharan Africa

Population ?



Data from World Bank Last updated: Jan 12, 2016

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Infographic Vs. Data Visualization

<http://www.nytimes.com/interactive/2012/02/13/us/politics/2013-budget-proposal-graphic.html>

<http://projects.nytimes.com/census/2010/map>

<https://www.google.co.in/publicdata/>

Infographics

Visual representation of data that is:

- manually drawn (and therefore a custom treatment of the information);
- specific to the data at hand (and therefore nontrivial to recreate with different data);
- aesthetically rich (strong visual content meant to draw the eye and hold interest);
- relatively data-poor (because each piece of information must be manually encoded).

Data Visualization

Visual representation of data that is:

- algorithmically drawn (may have custom touches but is largely rendered with the help of computerized methods);
- easy to regenerate with different data (the same form may be repurposed to represent different datasets with similar dimensions or characteristics);
- often aesthetically barren (data is not decorated);
- relatively data-rich (large volumes of data are welcome and viable, in contrast to infographics).

Data Sense

Approximately how many accidental deaths occur in the Mumbai suburban train network (Mumbai Local)?

- a. 1200
- b. 1800
- c. 2500
- d. 3500

Data Sense

What is Mumbai's approximate current population?

- a. 18 million
- b. 22 million
- c. 24 million
- d. 26 million

Data Sense

During peak hours, how many people pack into one compartment of a typical Mumbai local train?

- a. 300
- b. 400
- c. 500
- d. 600

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Do you know how much it is in terms of number of people per square meter?

Do you know the actual capacity of a compartment?

Data Sense

During peak hours, how many people pack into one compartment of a typical Mumbai local train?

- a. 300
- b. 400
- c. 500
- d. 600

Do you know how much it is in terms of number of people per square meter?
(14-16 per sq.mt)

Do you know the actual capacity of a compartment?
(188)

Data Sense

How many cases are pending in various judicial courts of Mumbai?

- a. 3 lakhs
- b. 6 lakhs
- c. 12 lakhs
- d. 24 lakhs

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Do you know how of them are criminal cases?

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(40,000)

Data Sense

What is the car ownership in India?

- a. 18 per 1000
- b. 34 per 1000
- c. 58 per 1000
- d. 72 per 1000

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Do you know that this is lower than Sudan & Afghanistan

China? Europe? U.S?

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(58, >500, >800)

Data Sense

What is number of tax payers in relation to voters?

- a. 4%
- b. 7%
- c. 12%
- d. 18%

Data Sense

How much did India's Mars programme cost?

- a. \$ 44 million
- b. \$ 54 million
- c. \$ 64 million
- d. \$ 74 million

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NASA's Maven mission – \$ 671 million

ESA Mars mission – \$ 386 million

Japan's failed Mars mission – \$ 186 million

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Rs. 7 per km

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Rs. 7 per km (Mumbai auto Rs. 12.19 per km)

Data Sense

Ratio of fake doctors to real doctors practicing in Delhi:

- a. 1:4
- b. 1:3
- c. 1:2
- d. 1:1

Visualize this! - class participation exercise 1

Which gender or income level group shows different effects of age on cholesterol levels?

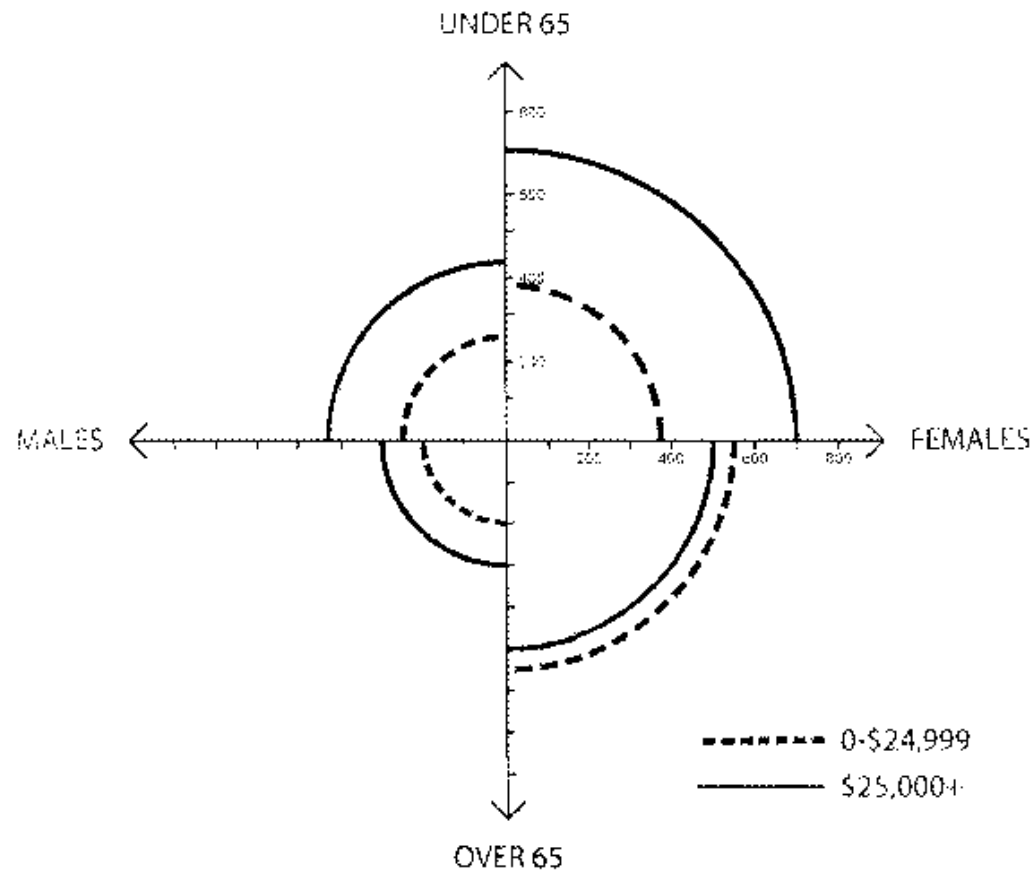
Income Group	Males		Females	
	Under 65	65 or Over	Under 65	65 or Over
0-\$24,999	250	200	375	550
\$25,000+	430	300	700	500

Visualize this! - class participation exercise 1

Rohan Jain
130040020

EXERCISE 1

CHOLESTROL LEVELS



Visualize this! - class participation exercise 1

