



Valsts kanceleja

NACIONĀLAIS
ATTĪSTĪBAS
PLĀNS 2020



EIROPAS SAVIENĪBA

Eiropas Sociālais
fonds

I E G U L D Ī J U M S T A V Ā N Ā K O T N Ē

DATU VIZUALIZĀCIJA

KĀ DATUS PĀRVĒRST SPĒCĪGĀ VĒSTĪJUMĀ?

STĀSTA

NIKA ALEKSEJEVA



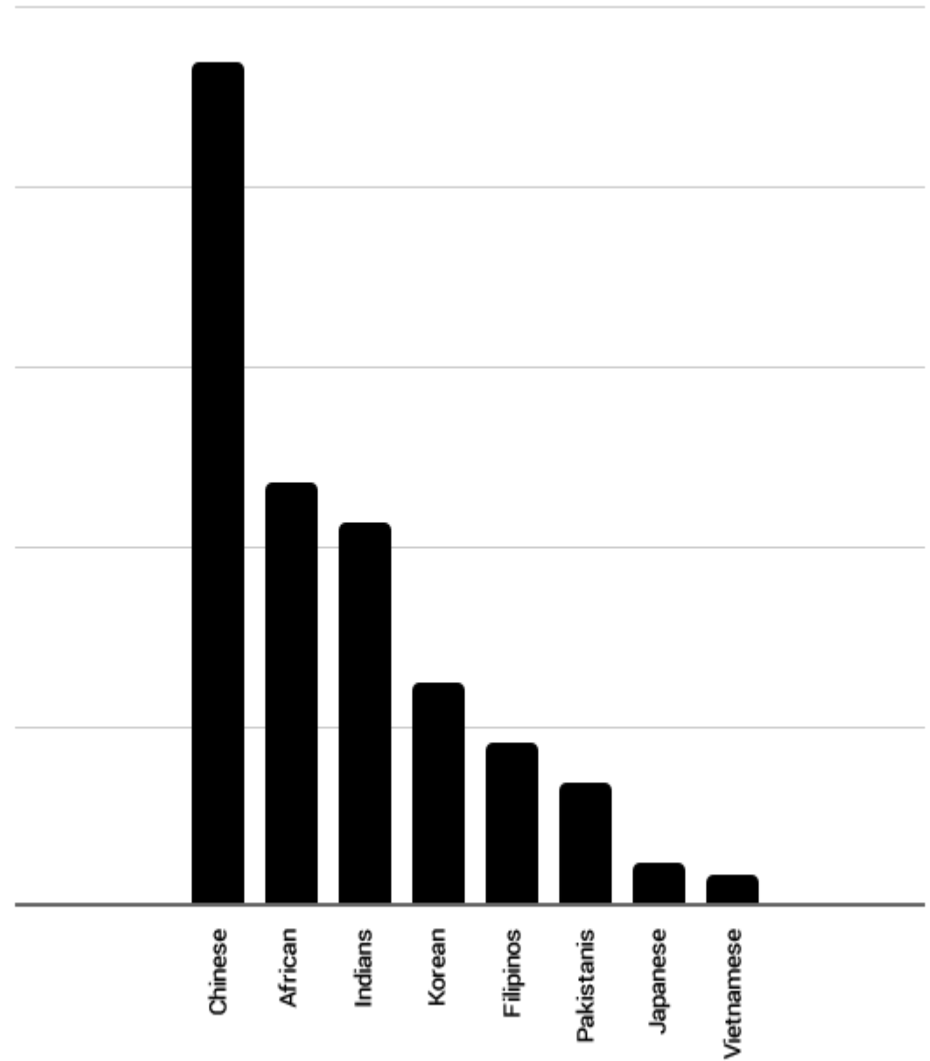
Vebinārs tiek īstenots ESF projekta Nr. [3.4.2.0/15/I/003](#)
"Augstākā līmeņa vadītāju attīstības programma"
ietvaros



**CILVĒKA PRĀTS
VIZUĀLO
INFORMĀCIJU
UZTVER 60 000
REIŽU ĀTRĀK NEKĀ
TEKSTUĀLU**

Billion Dollar Graphics

The New York City metropolitan area is home to the largest Jewish community outside Israel. It is also home to nearly a quarter of the nation's Indian Americans and 15% of all Korean Americans and the largest Asian Indian population in the Western Hemisphere; the largest African American community of any city in the country; and including 6 Chinatowns in the city proper, comprised as of 2008 a population of 659,596 overseas Chinese, the largest outside of Asia. New York City alone, according to the 2010 Census, has now become home to more than one million Asian Americans, greater than the combined totals of San Francisco and Los Angeles. New York contains the highest total Asian population of any U.S. city proper. 6.0% of New York City is of Chinese ethnicity, with about forty percent of them living in the borough of Queens alone. Koreans make up 1.2% of the city's population, and Japanese at 0.3%. Filipinos are the largest southeast Asian ethnic group at 0.8%, followed by Vietnamese who make up only 0.2% of New York City's population. Indians are the largest South Asian group, comprising 2.4% of the city's population, and Bangladeshis and Pakistanis at 0.7% and 0.5%, respectively. / Demographics of New York, Wikipedia



DATU VIZUALIZĀCIJA

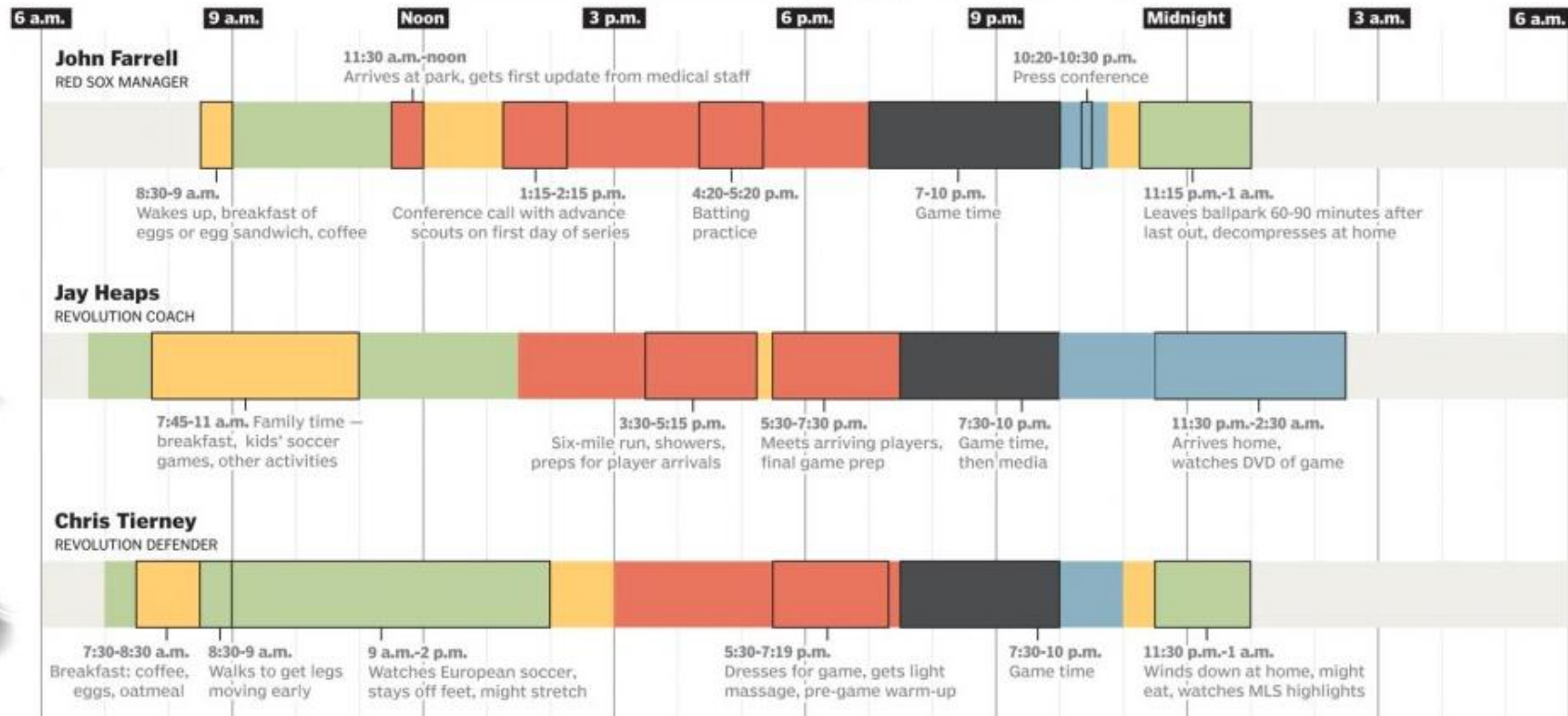
INFORMĀCIJAS DIZAINS

A dozen daily routines

To compete at the highest level, sports figures develop daily routines. They figure out what works best for bedtimes and meal times, for pregame preparation and postgame recovery. Some follow rigid schedules. Some take a more flexible approach. Here's a look at 12 Boston sports figures and how their days tend to unfold. **For the complete interactive version, go to bostonglobe.com/sports**

■ GAME PREP
 ■ MEALS
 ■ DOWNTIME
 ■ POSTGAME DUTIES
 ■ GAME TIME
 ■ SLEEP

*Meal times also include other activities like stretching, driving, organizing, e-mailing, and winding down.



A question of taste

International wine fair Vinexpo lands at the Hong Kong Convention and Exhibition Centre next Tuesday and is expected to draw 15,000 visitors, many of whom will be hoping to take part in the nation's burgeoning wine market. The *Post* offers a crash course in wine appreciation for those planning a trip to Wan Chai for a taste of the action.

FULL SIZE

</>

EMBED

Wine servings

Serving temperature
18°C to 15°C



Large red wine

Glass shape with a wider mouth offers more exposure to air, allowing wine to breathe

Wines/grape varieties

Older red wines with complex aromas such as pinot noir, burgundy, Médoc, Roja

14°C to 13°C



Small red wine

Narrower glass directs the bouquet to the nose

Light red wines such as Beaujolais, shiraz

14°C



Fortified wine

Smaller than a wine glass, but with a rounded bowl. Allows concentration of aromas on nose

Port, Madeira, mistelle, Marsala

14°C to 11°C

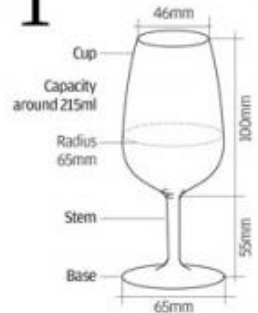


Sherry

Even smaller than a port glass, perfect to accentuate fruity aromas

Tasting, step by step

1 Serving



Wine tasting glass standard dimensions (vary within 2-3mm)

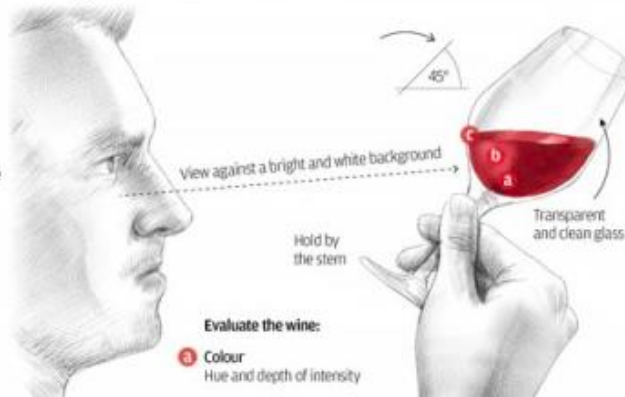
Fill the glass to 1/4 or 1/3 of its volume



The wine bottle Most common volume is 75cl (750ml), but sizes vary

2 Visual appreciation

Looking at the wine often gives a sense of anticipation of the sensations to follow



3 Aroma appreciation

First smell the wine before swirling



Faulty wine

Uncharacteristic, unpleasant or vinegary smell means wine could be oxidised, has acetic acid or has cork contamination

Swirl the wine glass

This movement releases the less volatile aromas

Inside a grape



Where wine comes from



SCHOOL OF DATA

A PERIODIC TABLE OF VISUALIZATION METHODS

C continuum											G graphic facilitation										
Tb table	Ca cartesian coordinates	Data Visualization <i>Visual representations of quantitative data in schematic form (either with or without axes)</i>										Strategy Visualization <i>The systematic use of complementary visual representations in the analysis, development, formulation, communication, and implementation of strategies in organizations.</i>									
Pi pie chart	L line chart	Information Visualization <i>The use of interactive visual representations of data to amplify cognition. This means that the data is transformed into an image, it is mapped to screen space. The image can be changed by users as they proceed working with it</i>										Metaphor Visualization <i>Visual Metaphors position information graphically to organize and structure information. They also convey an insight about the represented information through the key characteristics of the metaphor that is employed</i>									
B bar chart	Ac area chart	R radar chart cobweb	Pa parallel coordinates	Hy hyperbolic tree	Cy cycle diagram	T timeline	Ve venn diagram	Mi mindmap	Sq square of oppositions	Cc concentric circles	Ar argument slide	Sw swim lane diagram	Gc gaatt chart	Pm perspectives diagram	D dilemma diagram	Pr parameter ruler	Kn knowledge map				
Hi histogram	Sc scatterplot	Sa sankey diagram	In information lense	E entity relationship diagram	Pt petri net	Fl flow chart	Cl clustering	Lc layer chart	Py minto pyramid technique	Ce cause-effect chains	Tl toulmin map	Dt decision tree	Cp cpm critical path method	Cf concept fan	Co concept map	Ic iceberg	Lm learning map				
Tk tukey box plot	Sp spectrogram	Da data map	Tp treemap	Cn cone tree	Sy system dyn./ simulation	Df data flow diagram	Se semantic network	So soft system modeling	Sn synergy map	Fo force field diagram	Ib ibis argumentation map	Pr process event chains	Pe pert chart	Ev evocative knowledge map	V Vee diagram	Hh heaven 'n' hell chart	I infomural				
										Compound Visualization <i>The complementary use of different graphic representation formats in one single schema or frame</i>											

Cy **Process Visualization**

Hy **Structure Visualization**

- Overview**
- Detail**
- Detail AND Overview**
- Divergent thinking**
- Convergent thinking**

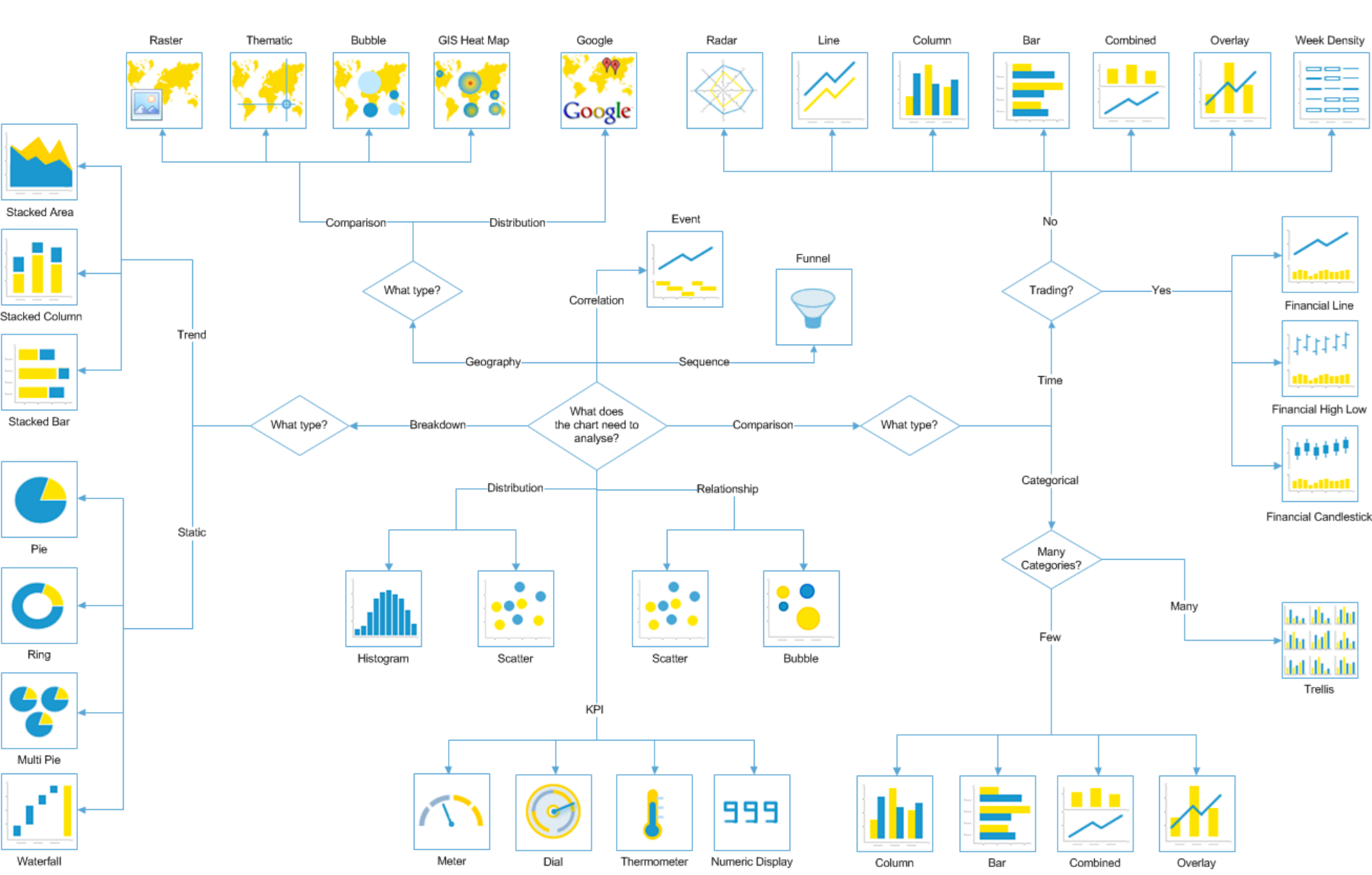
Note: Depending on your location and connection speed it can take some time to load a pop-up picture.

version 1.5

© Ralph Lengler & Martin J. Eppler, www.visual-literacy.org

Su supply demand curve	Pc performance charting	St strategy map	Oc organisation chart	Ho house of quality	Fd feedback diagram	Ft failure tree	Mq magic quadrant	Ld life-cycle diagram	Po porter's five forces	S s-cycle	Sm stakeholder map	Is ishikawa diagram	Tc technology roadmap
Ed edgeworth box	Pf portfolio diagram	Sg strategic game board	Mz mintzberg's organigraph	Z zwickly's morphological box	Ad affinity diagram	De decision discovery diagram	Bm bcg matrix	Stc strategy canvas	Vc value chain	Hy hype-cycle	Sr stakeholder rating map	Ta taps	Sd spray diagram

KĀ NEPAZUST DATU VIZUALIZĀCIJAS MEŽĀ?



Viena dimensija



Bar



Pie



Picto

Salīdzinājums

Divas dimensijas



Scatterplot



Area



Line

Tendence/attiecības

Trīs + dimensijas

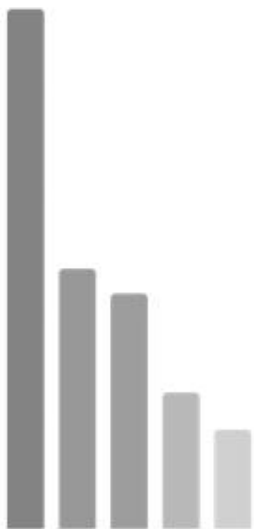


Bubble

Salīdzinājums/
attiecības



GRAFIKI UN VIZUALIZĀCIJAS IR METAFORAS

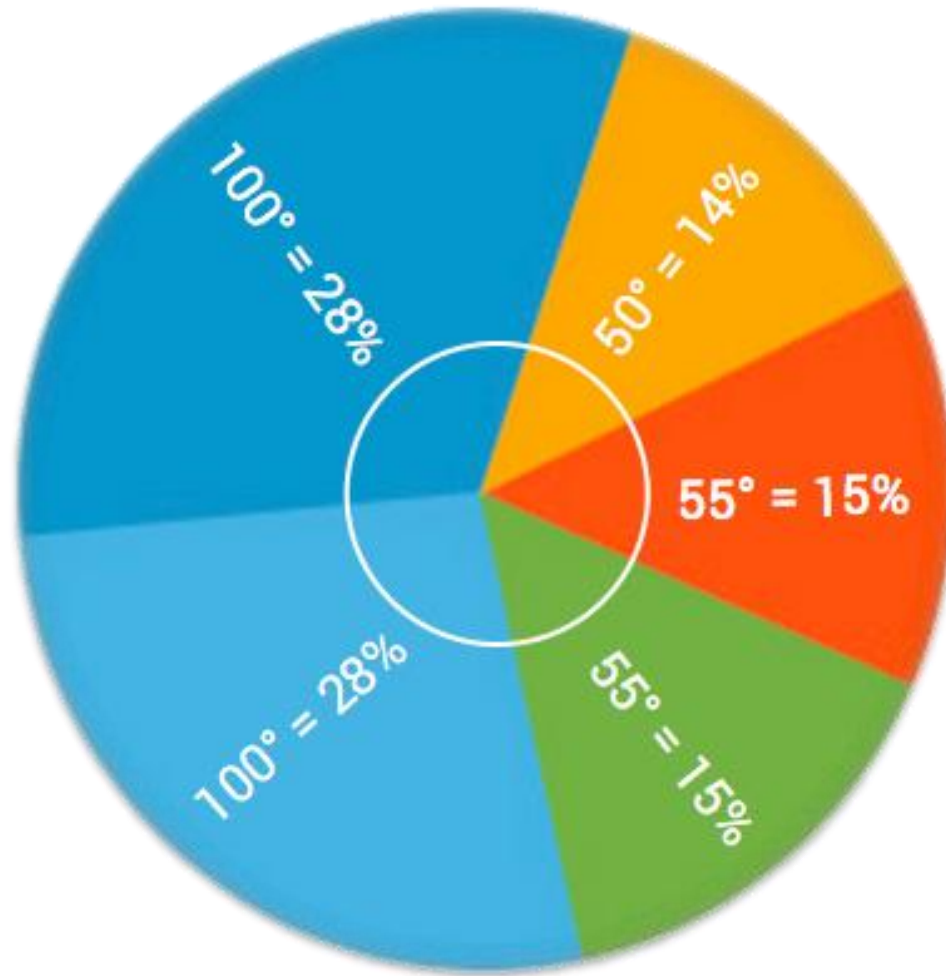


value = length



Categories

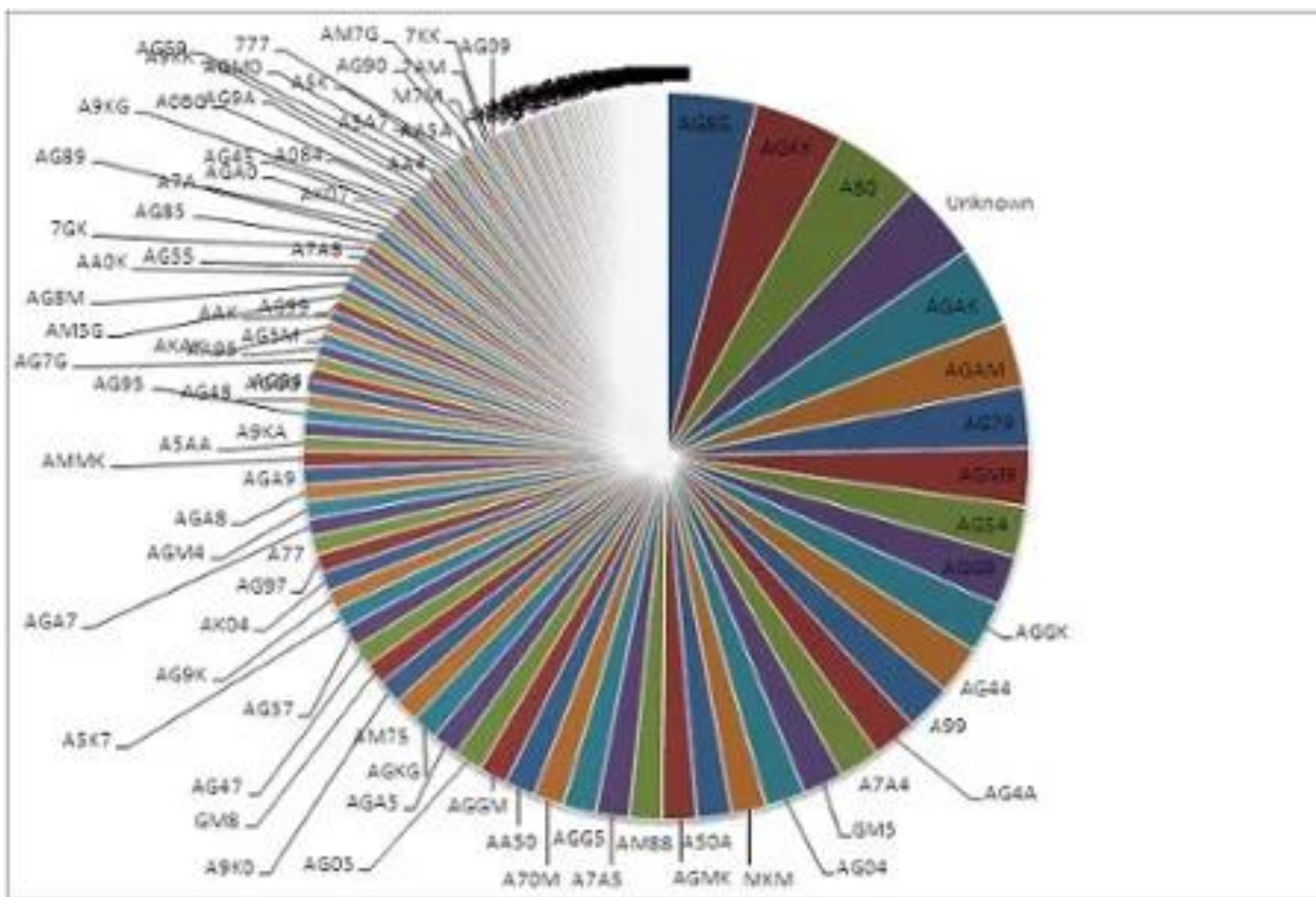






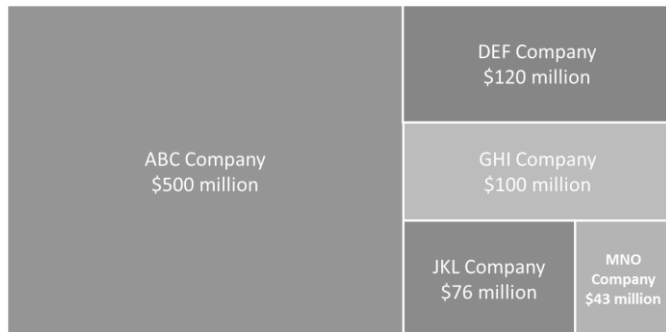
GRAFIKI UN VIZUALIZĀCIJAS IR METAFORAS

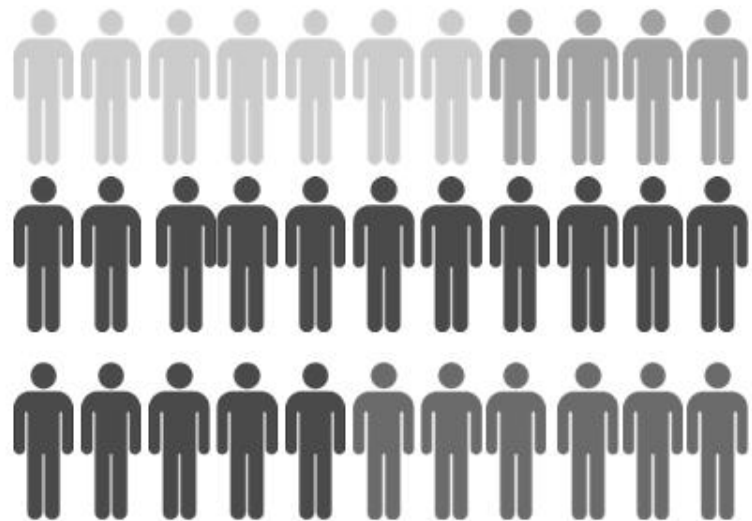






GRAFIKI UN VIZUALIZĀCIJAS IR METAFORAS

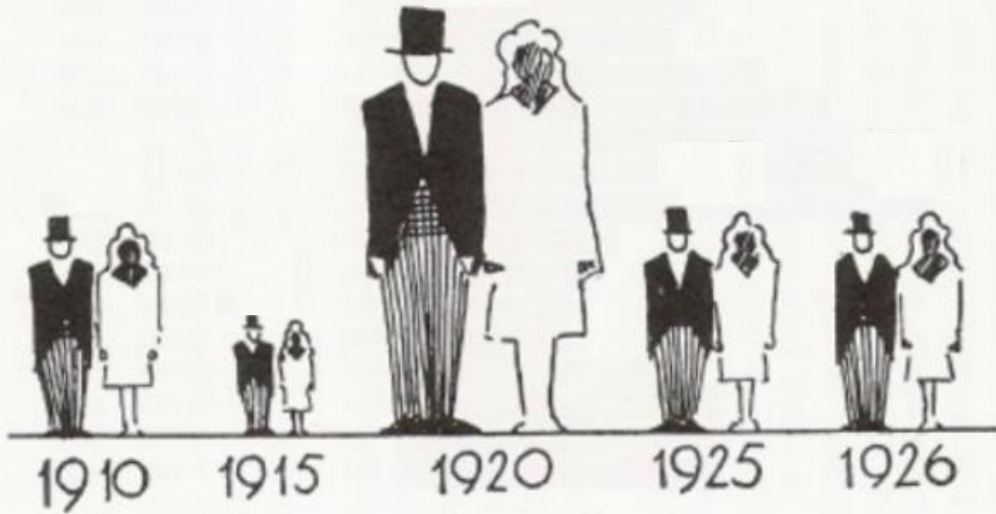




GRAFIKI UN VIZUALIZĀCIJAS IR METAFORAS

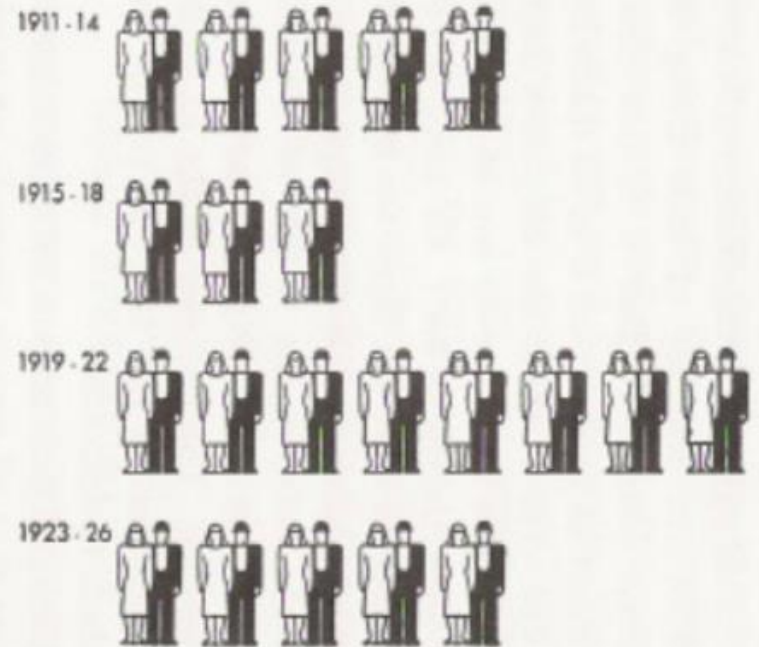
Example of bad system : signs of different sizes

Number of men getting married in Germany out of every 10,000 persons

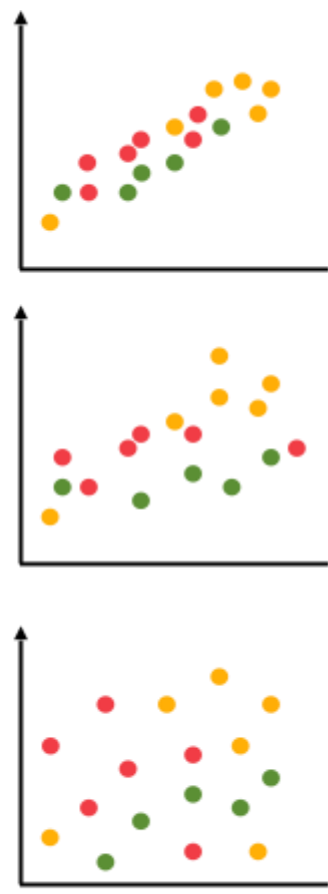
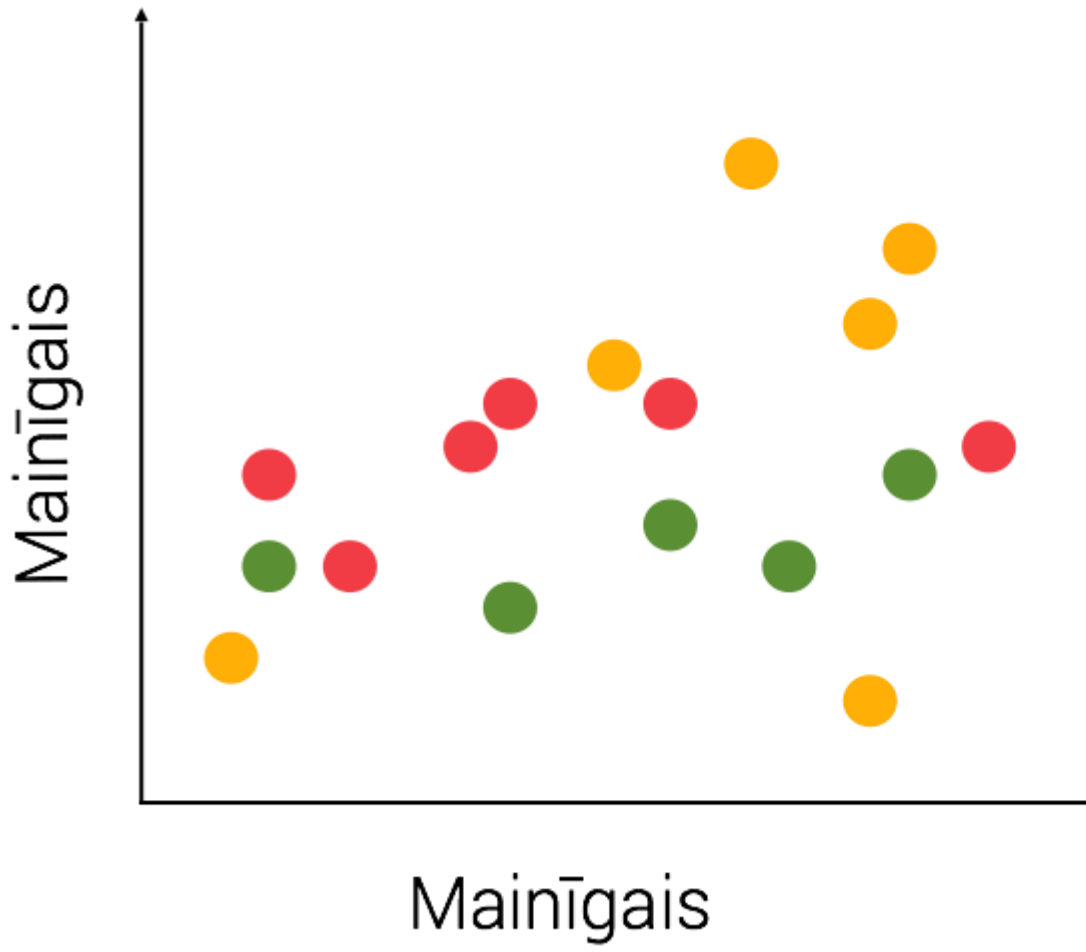


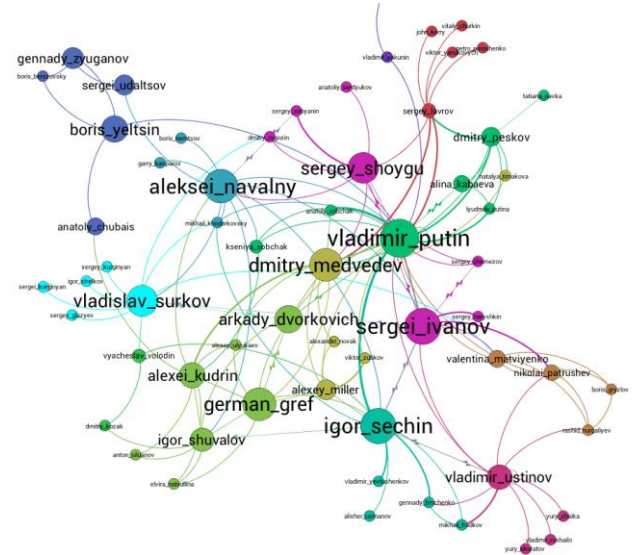
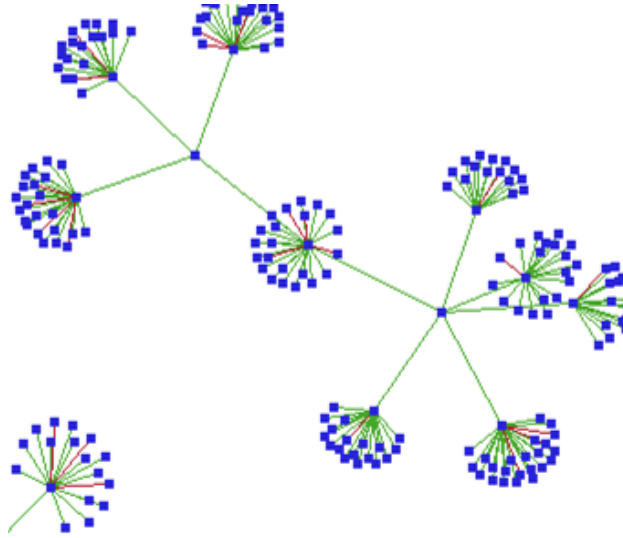
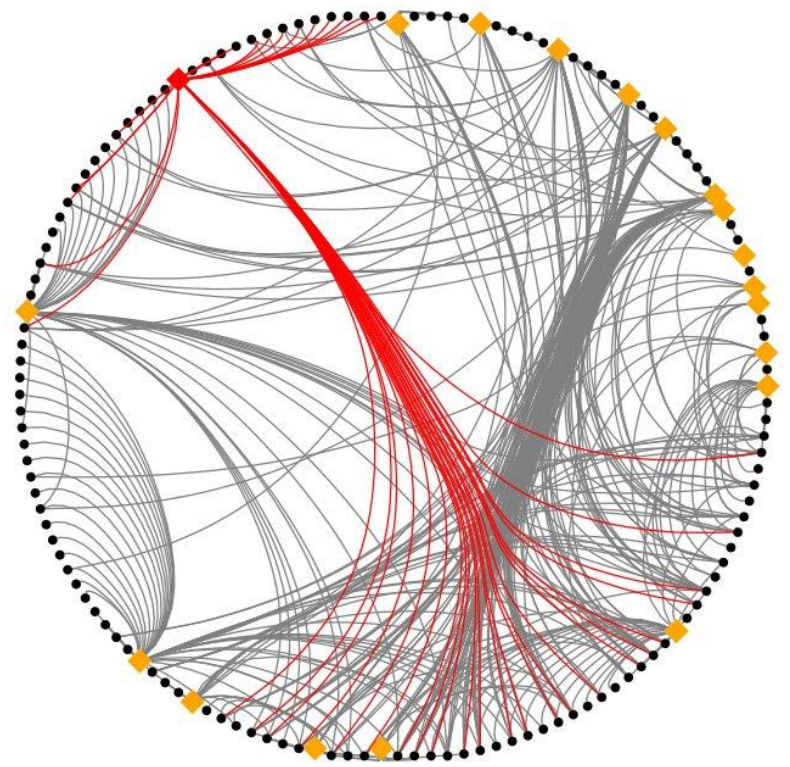
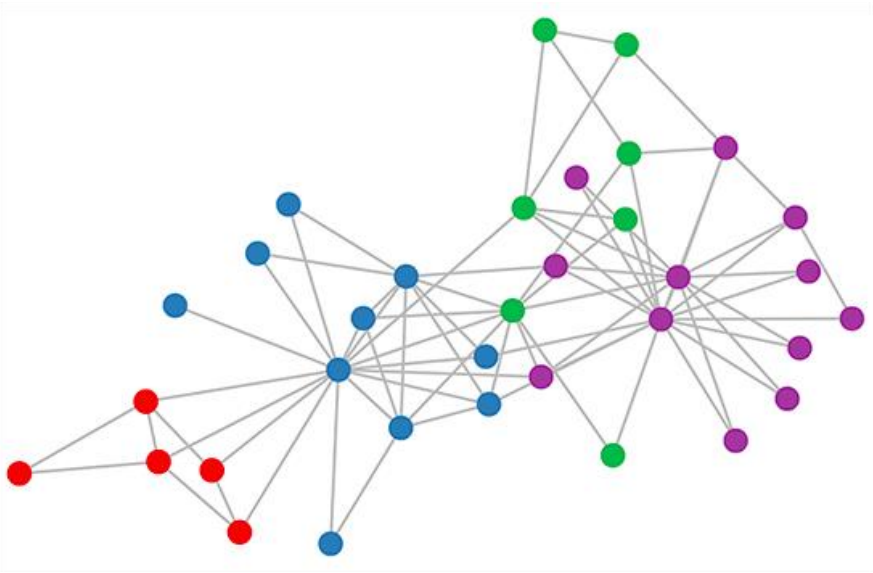
PICTURE 25

Men Getting Married in Germany in a Year



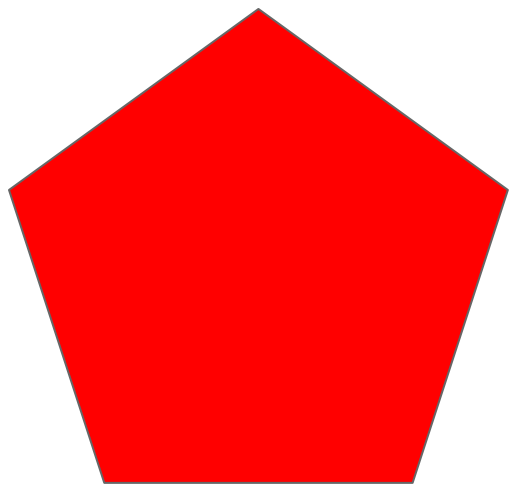
1 sign for 100,000 a year



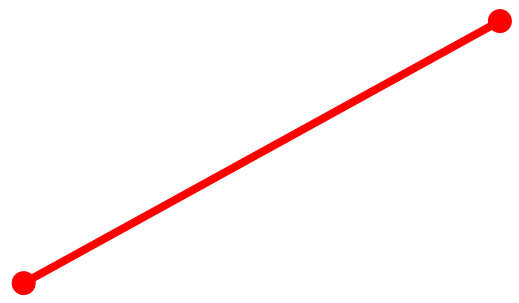


Kartes

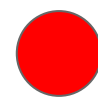




Poligons

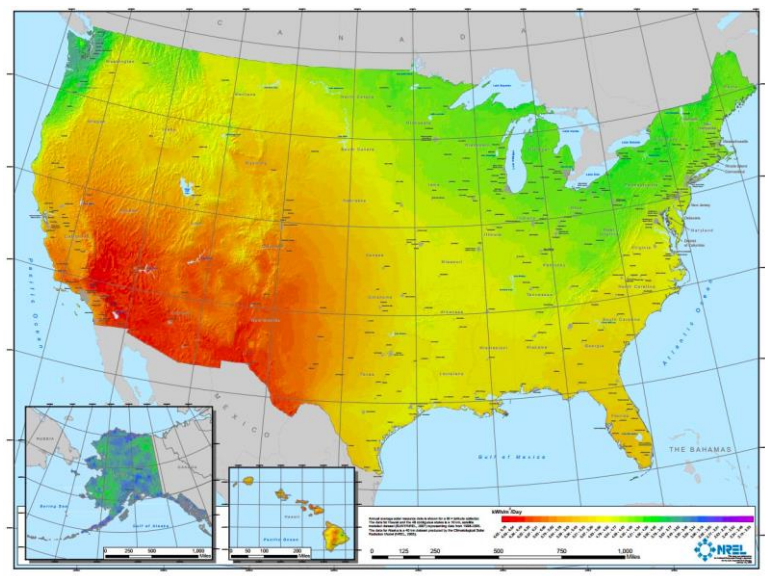


Līnija

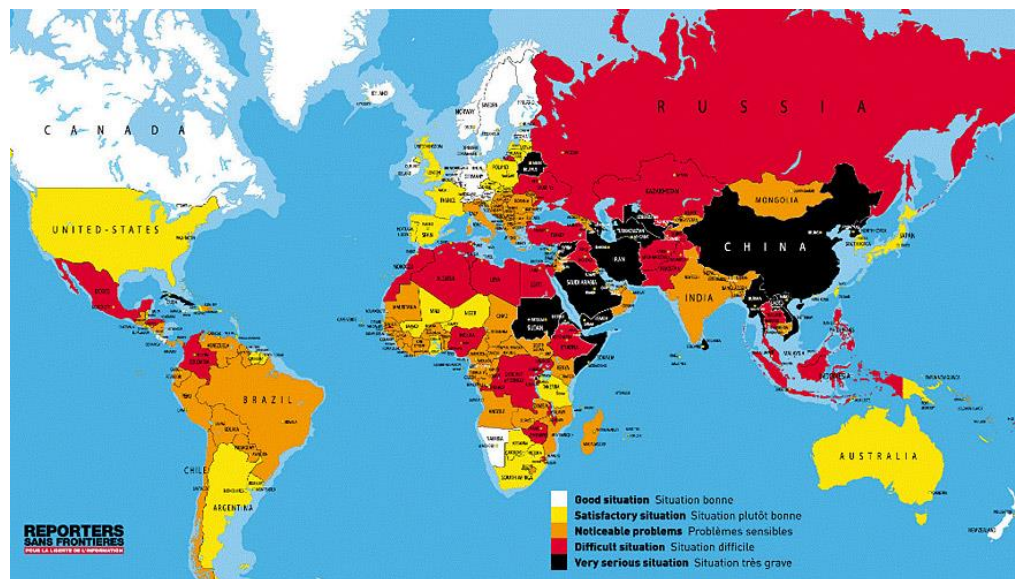


Punkts

Poligoni

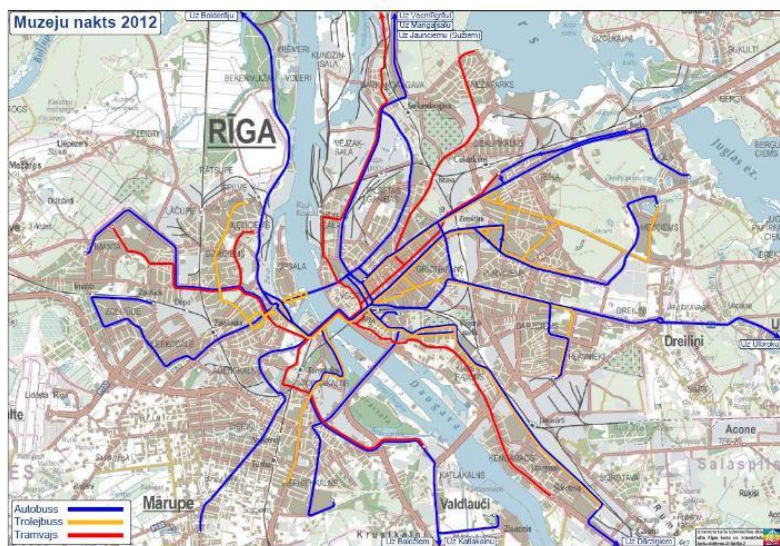


Karsutma karte



Chloropleth

Līnijas

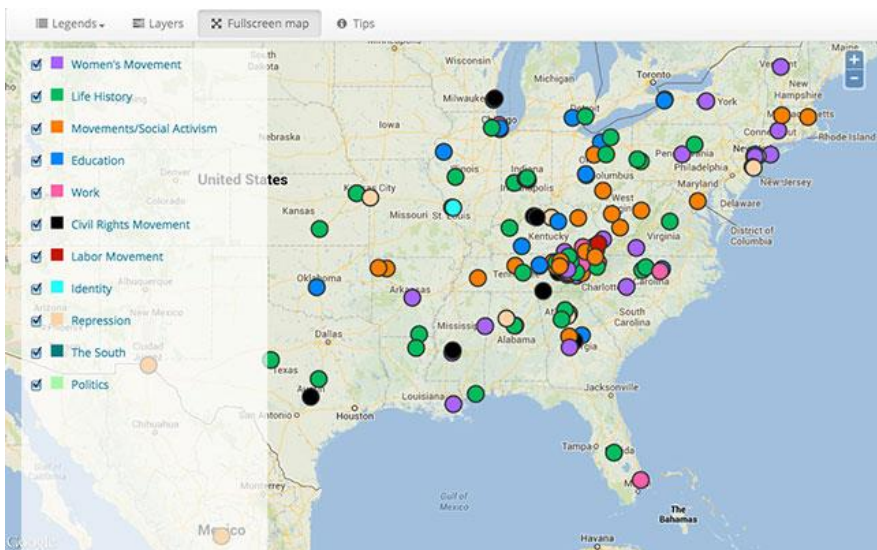


Kategorizētas līnijas

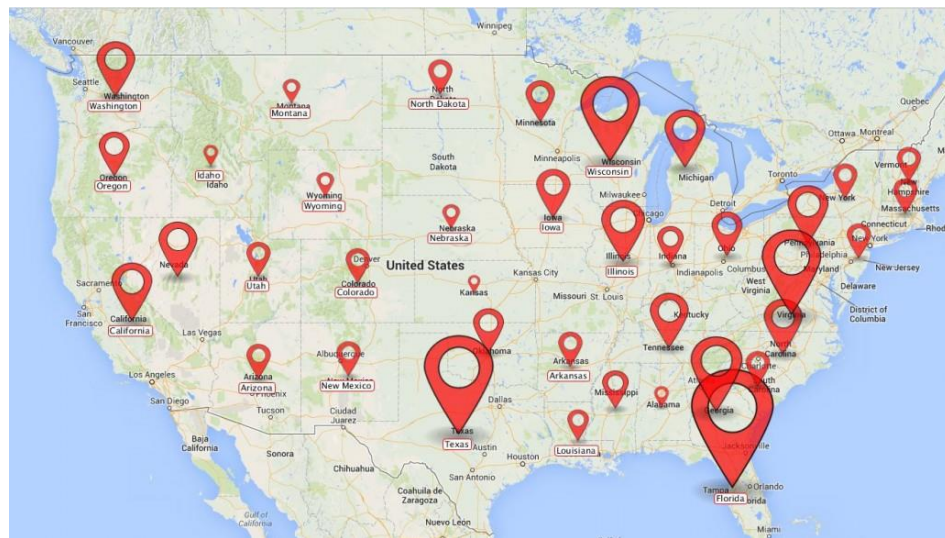


Intensitātes līnijas

Punkti



Kategorizēti punkti



Punkti, kas izsaka lielumu

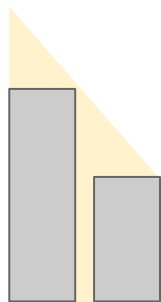
KĀ MŪSU PRĀTS TIEK GALĀ AR DATU VIZUALIZĀCIJU?

THINKING WITH DATA VISUALIZA TIONS, FAST AND SLOW

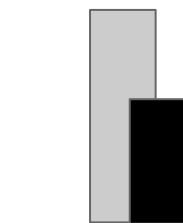
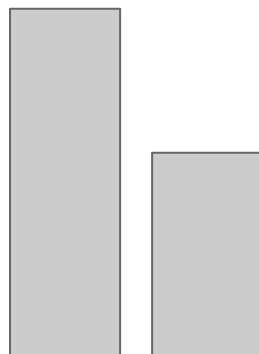
STEVEN
FRANCONERI



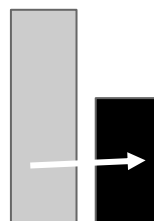
Prāta vizuālie rīki



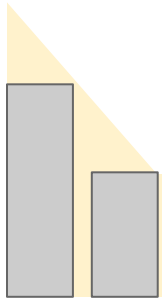
Objektu
atpazīšana



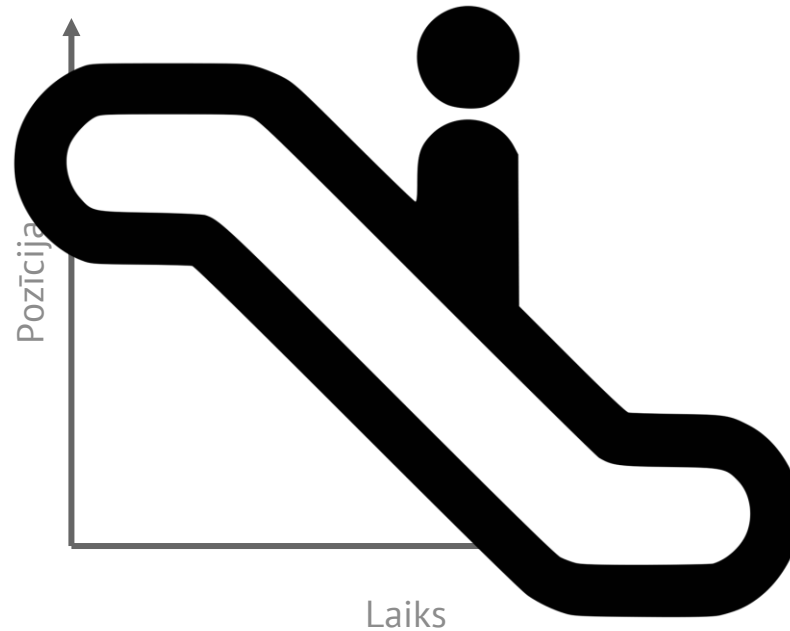
Dažādu pazīmju
atpazīšana (krāsa,
lielums)

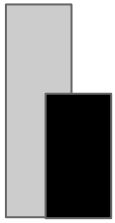


Salīdzināšana (lielais pa
kreisi, mazais pa labi,
pelēkais pa kreisi...)

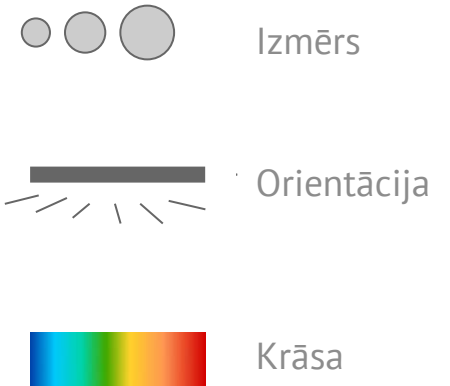
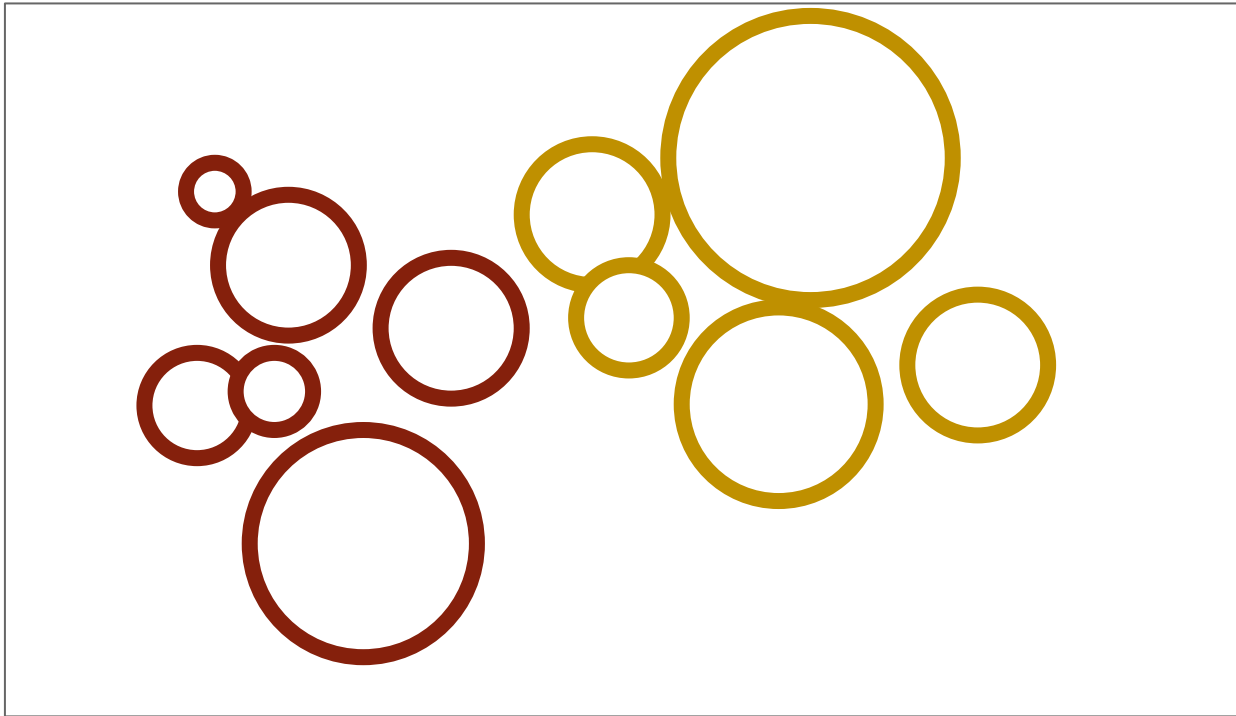


Objektu atpazīšana

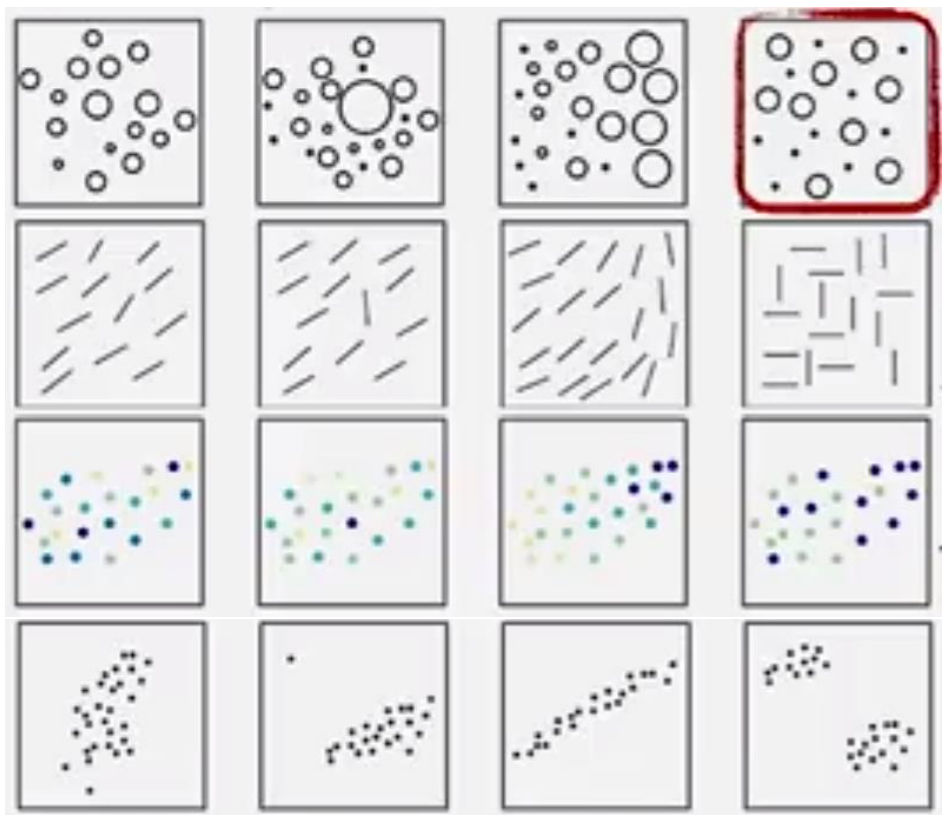




Pazīmju atpazīšana



Pazīmju atpazīšana



Izmērs



Orientācija



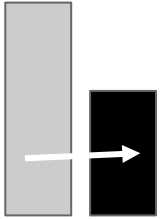
Krāsa

Kopskats

Izņēmums

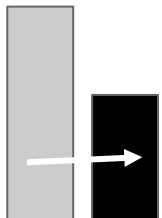
Tendences

Segmentācija



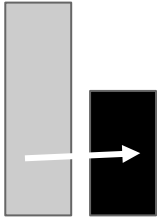
Salīdzināšana



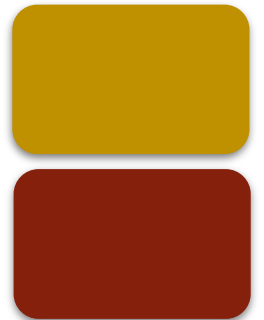
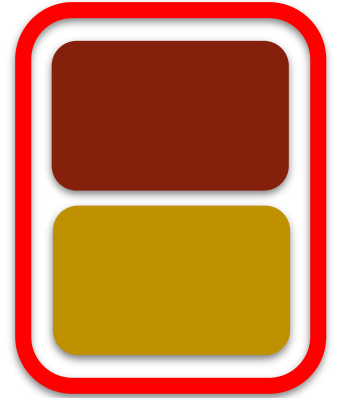
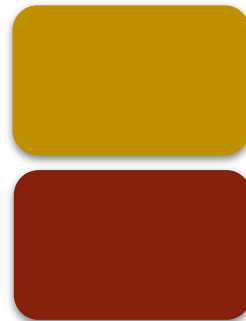
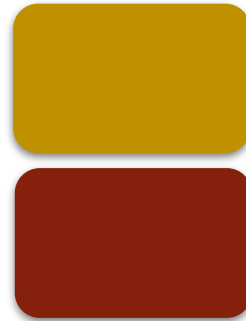
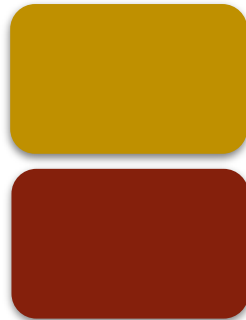
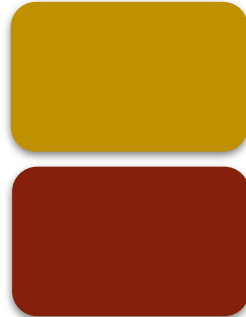
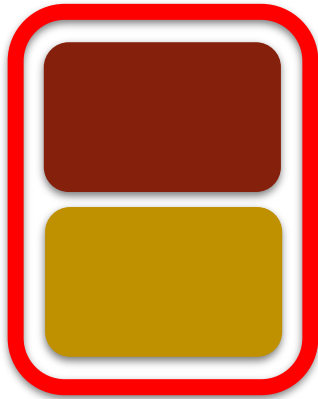
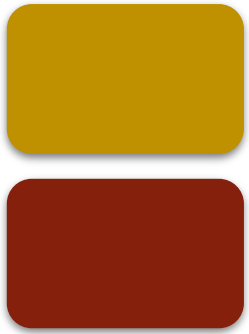


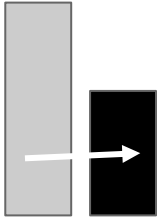
Salīdzināšana





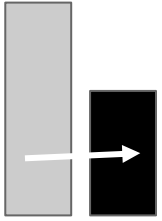
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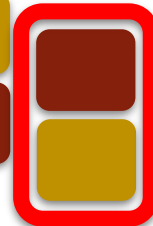
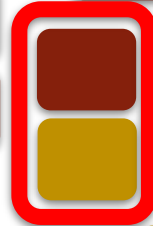
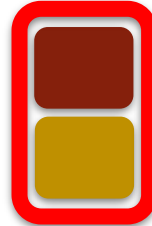
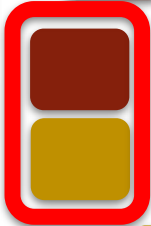
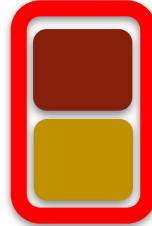
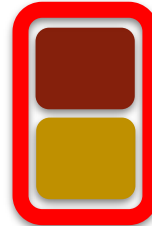
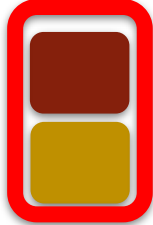
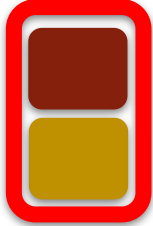
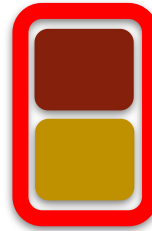


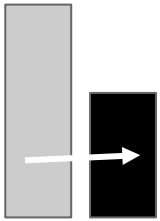
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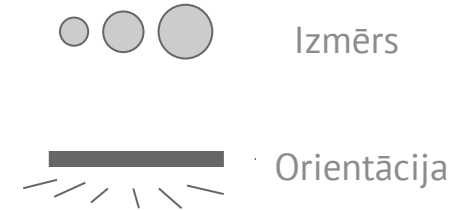
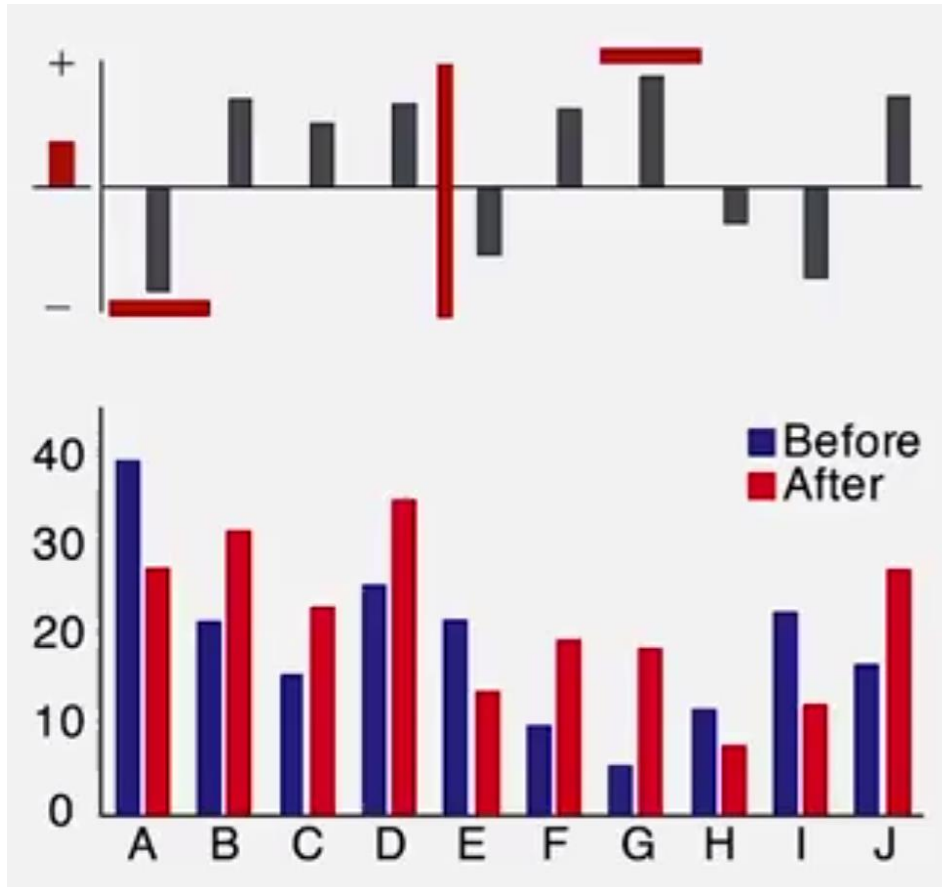
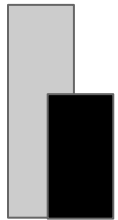


Salīdzināšana

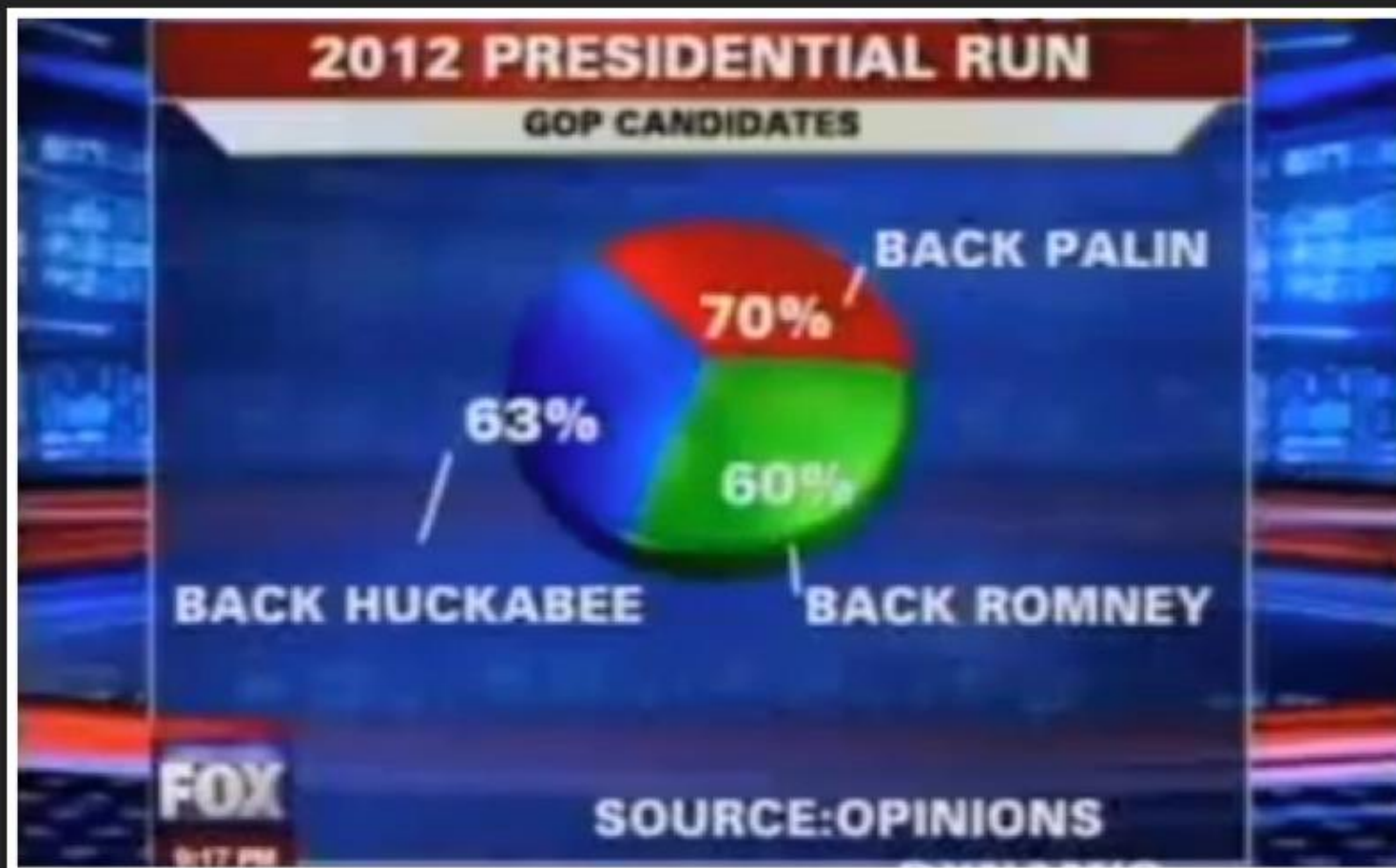




Salīdzināšana



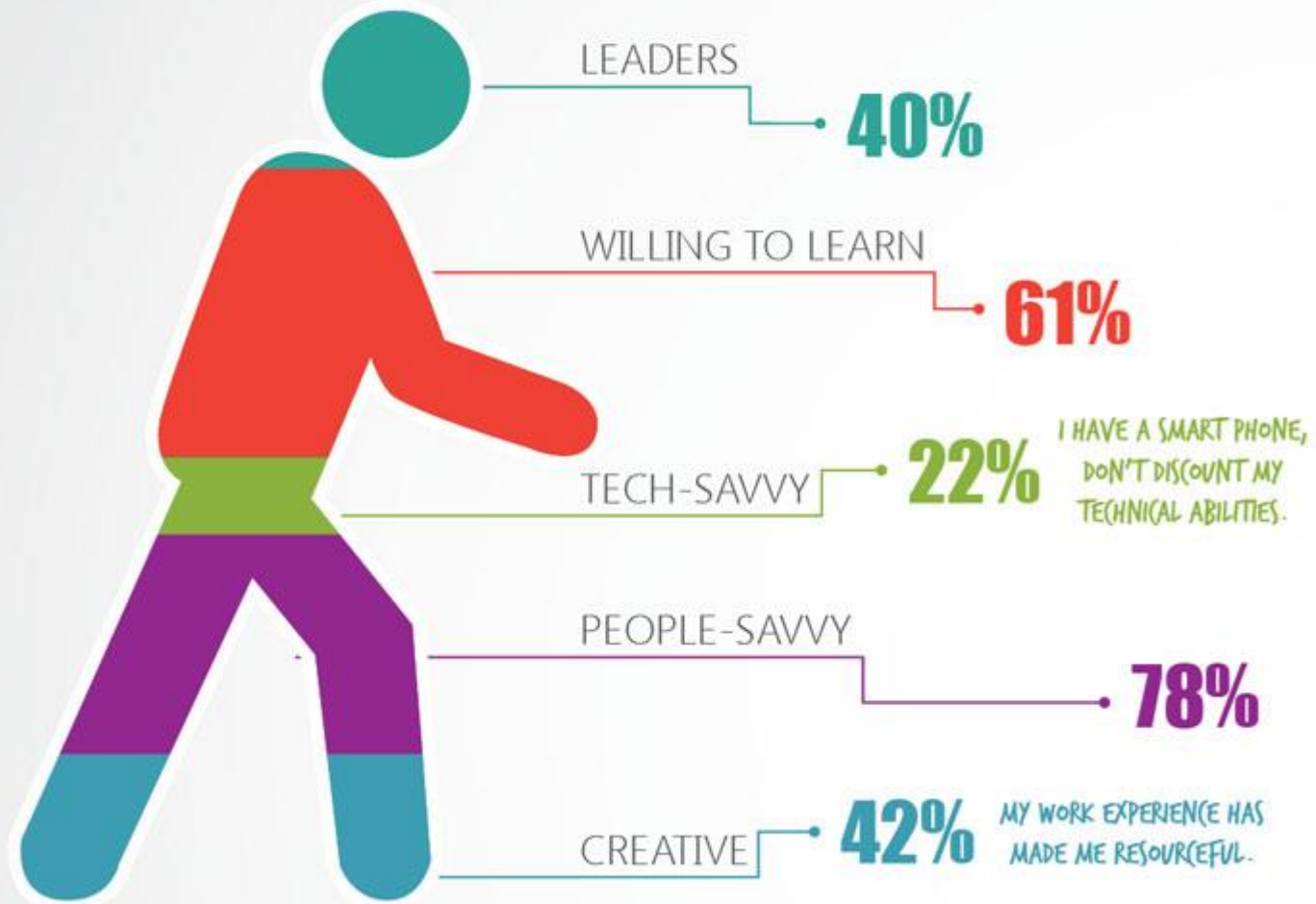
KĀ DATU VIZUALIZĀCIJA VAR NOIET GREIZI?

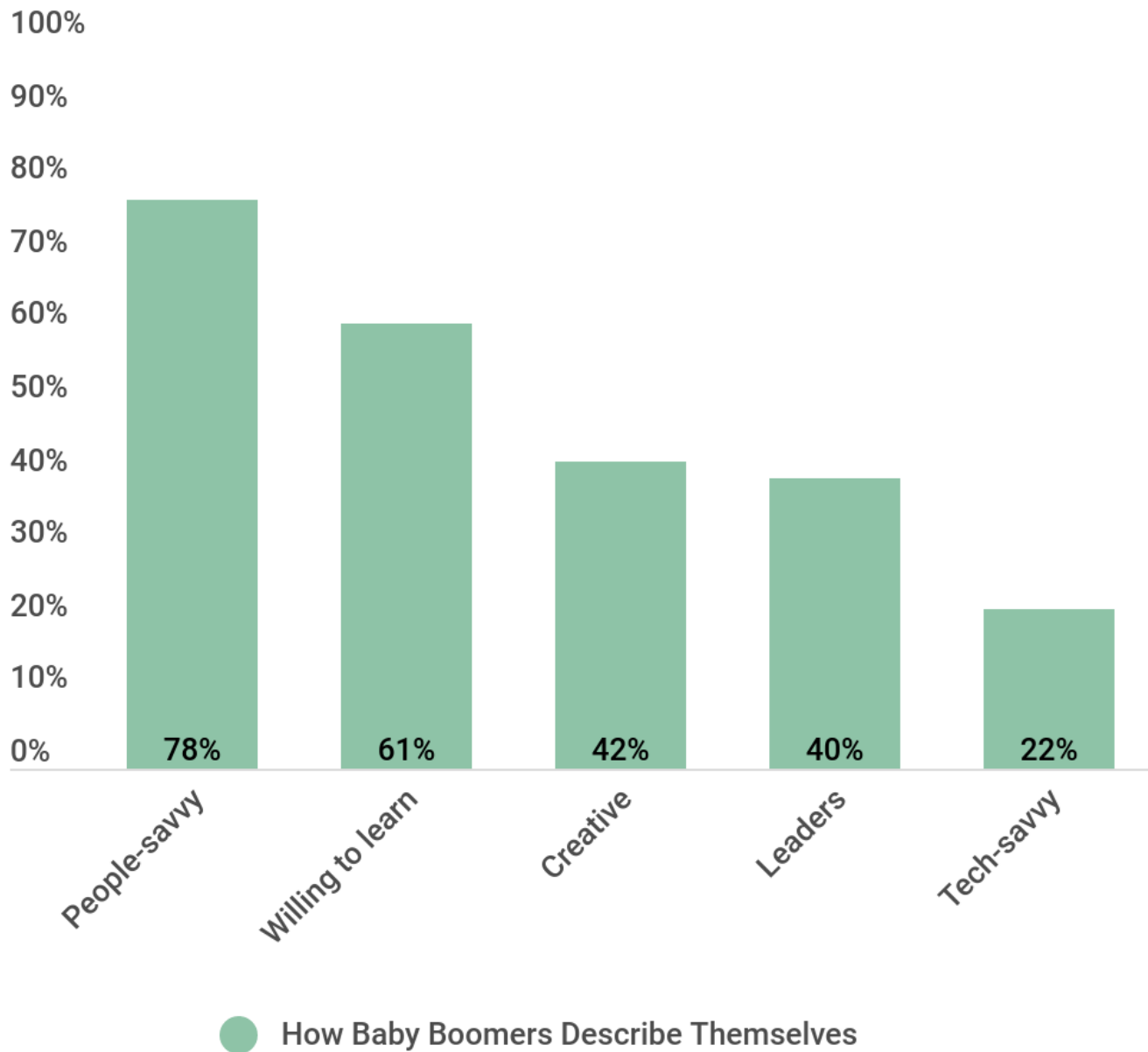


TAS BRĪDIS KAD

$$63\% + 70\% + 60\% = 100\%$$

HOW BABY BOOMERS DESCRIBE THEMSELVES





Anatomy of a Winning TED Talk

● 1%

Sophisticated Visual Aids

We're not sure who puts the D in TED—most of the best presentations favor tepid PowerPoint slide shows (sorry, Brené Brown), Pictionary-quality drawings (really, Simon Sinek?), or no props at all.

● 5%

Opening Joke

Remember the one about the shoe salesman who went to Africa in the 1900s? That's how Benjamin Zander opened his talk—which turned out to be about classical music.

● 5%

Spontaneous Moment

Don't overprepare. Tease the guy in the front row ("You could light up a village with this guy's eyes"). Commend the stagehand who handles the human brain you brought.

● 5%

Statement of Utter Certainty

People come for answers—give 'em what they want, as Shawn Achor did: "By training your brain ... we can reverse the formula for happiness and success."

● 12%

Snappy Refrain

The TED equivalent of "I have a dream." Example: "People don't buy what you do; they buy why you do it." Repeat 7x.

● 23%

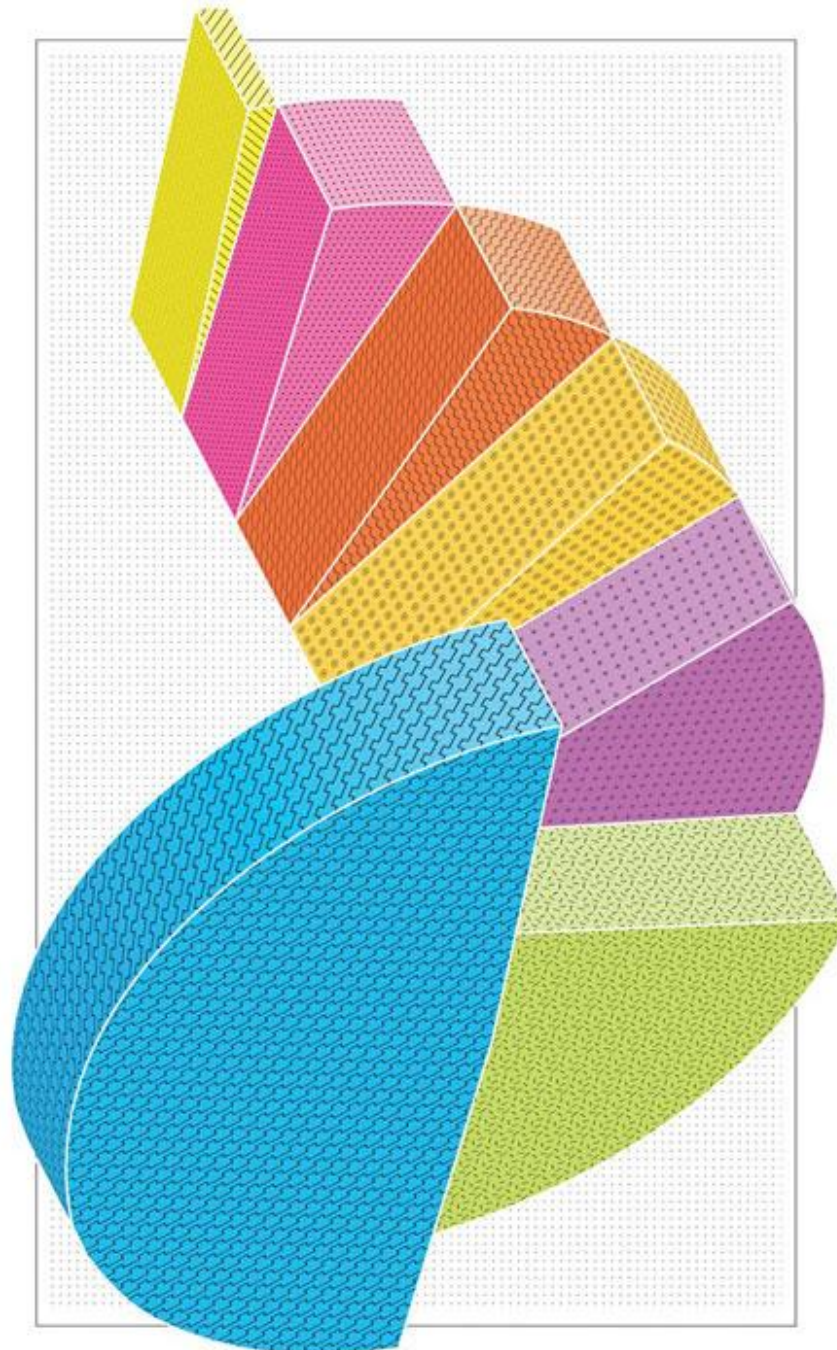
Personal Failure

Be relatable. We want to know about that nervous breakdown. Or at least the time you didn't fit in at summer camp.

● 49%

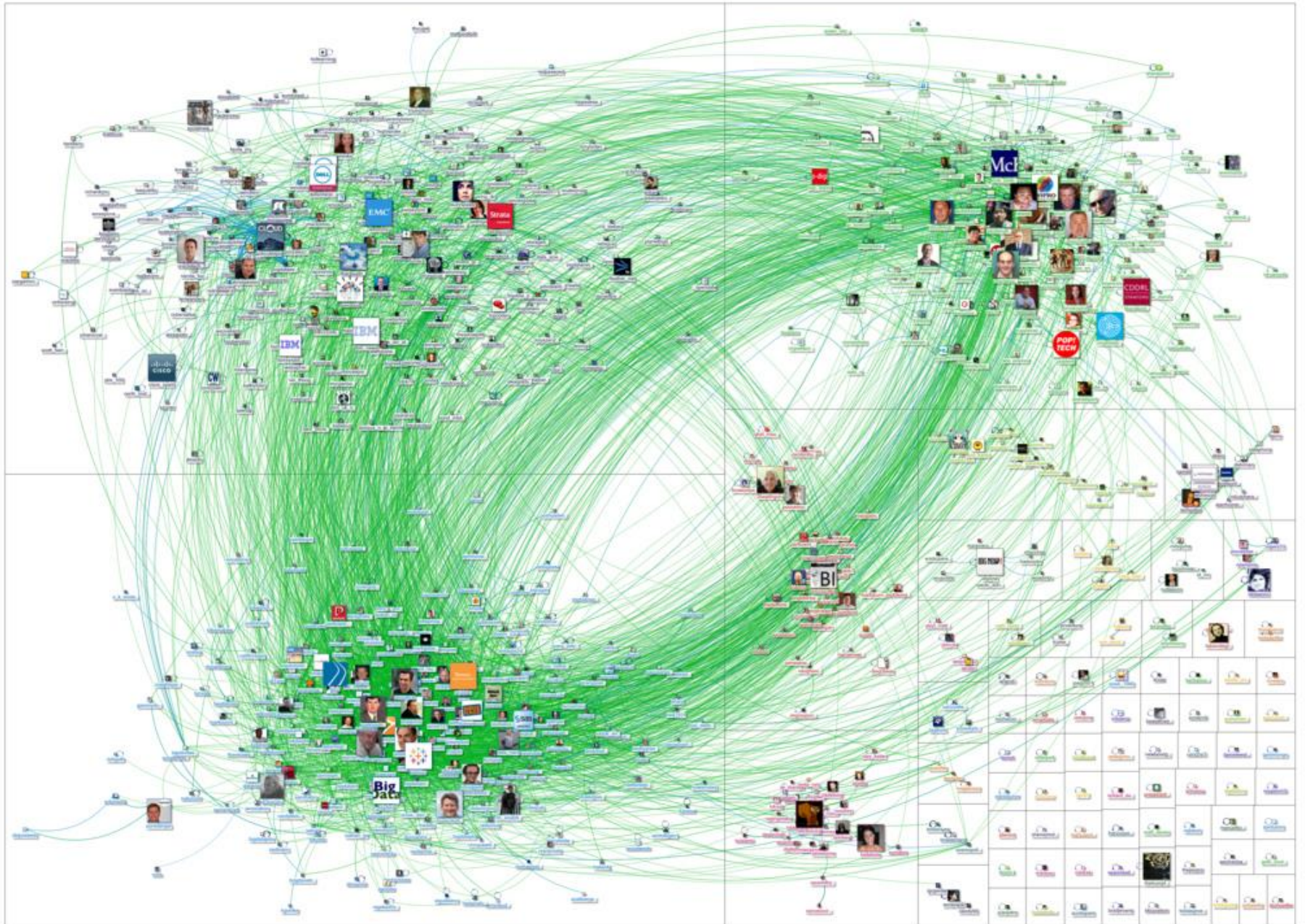
Contrarian Thesis

Wait a sec—we should be playing *move* videogames? The more choices we have, the worse off we are? TED is where conventional wisdom goes to die.

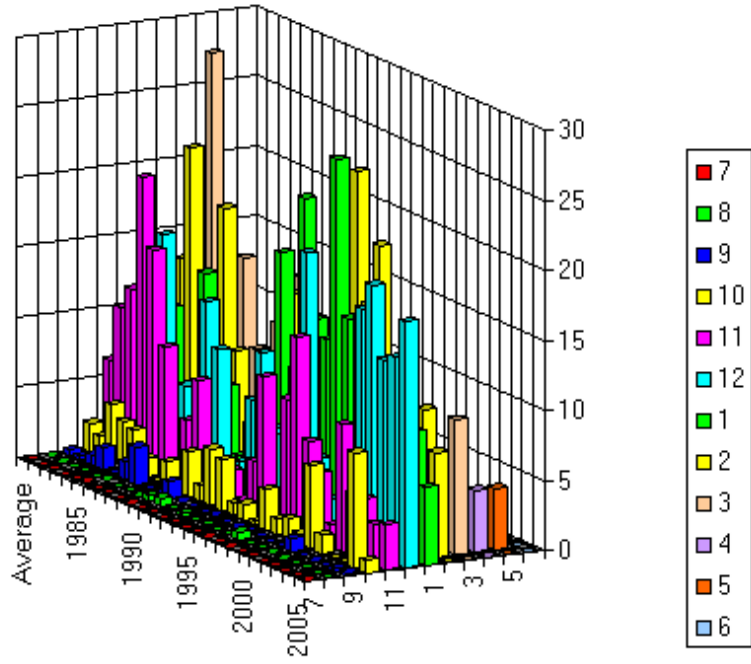


WIRED

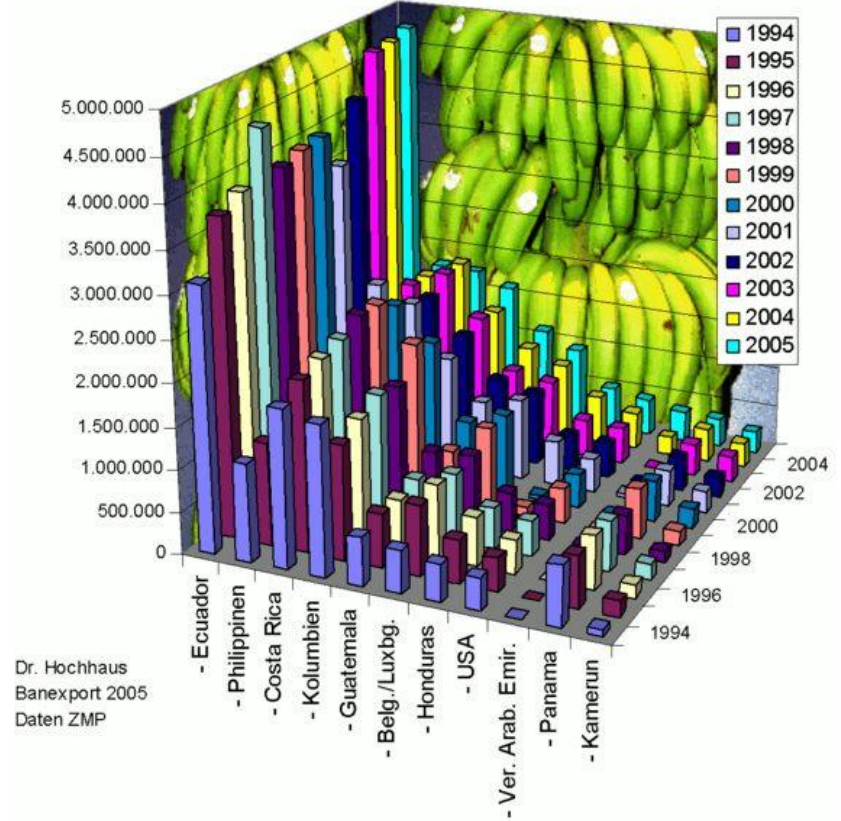
[Avots](#)



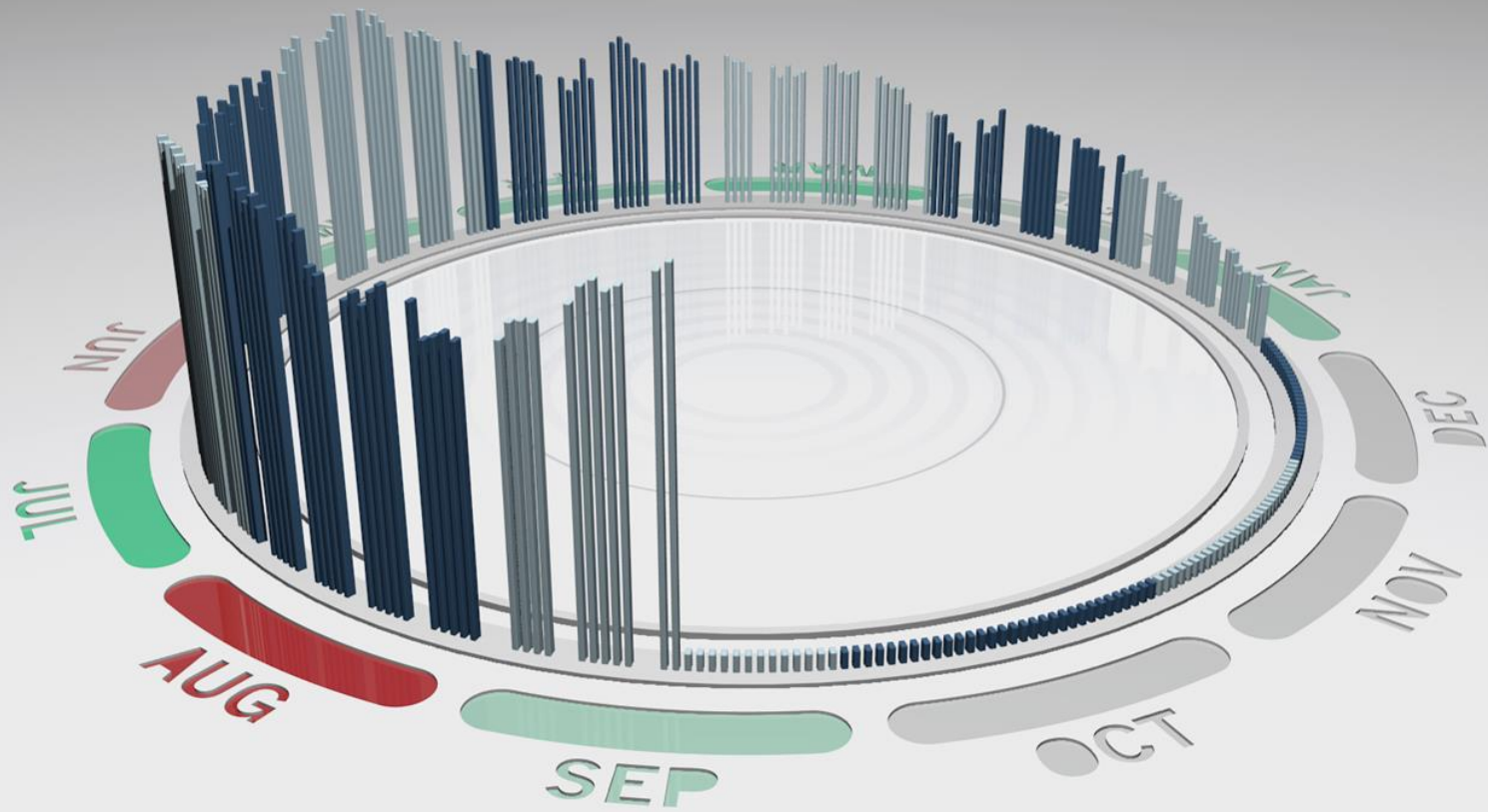
Month vs Year



Export von Bananen in Tonnen von 1994-2005

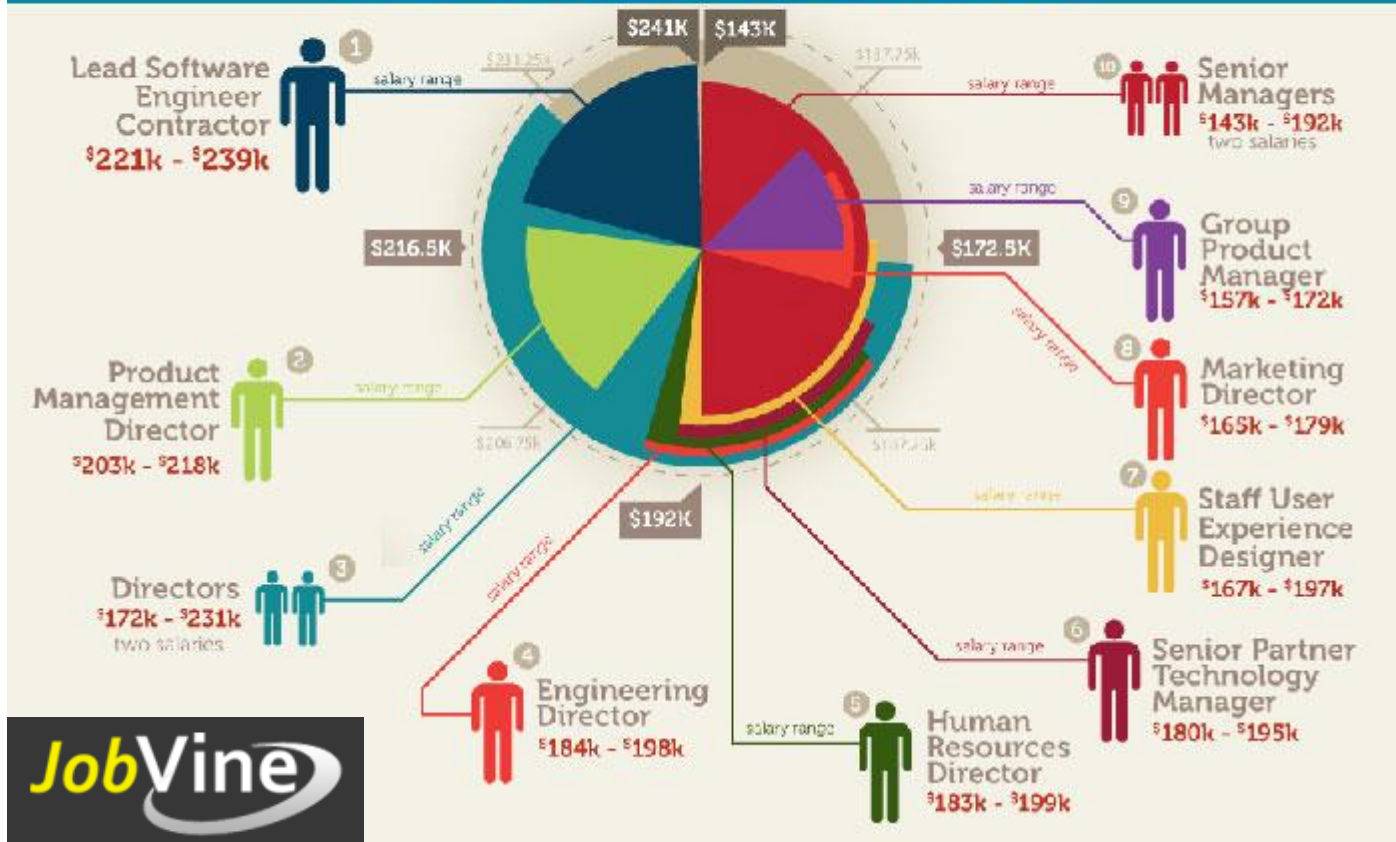


Dr. Hochhaus
Banexport 2005
Daten ZMP

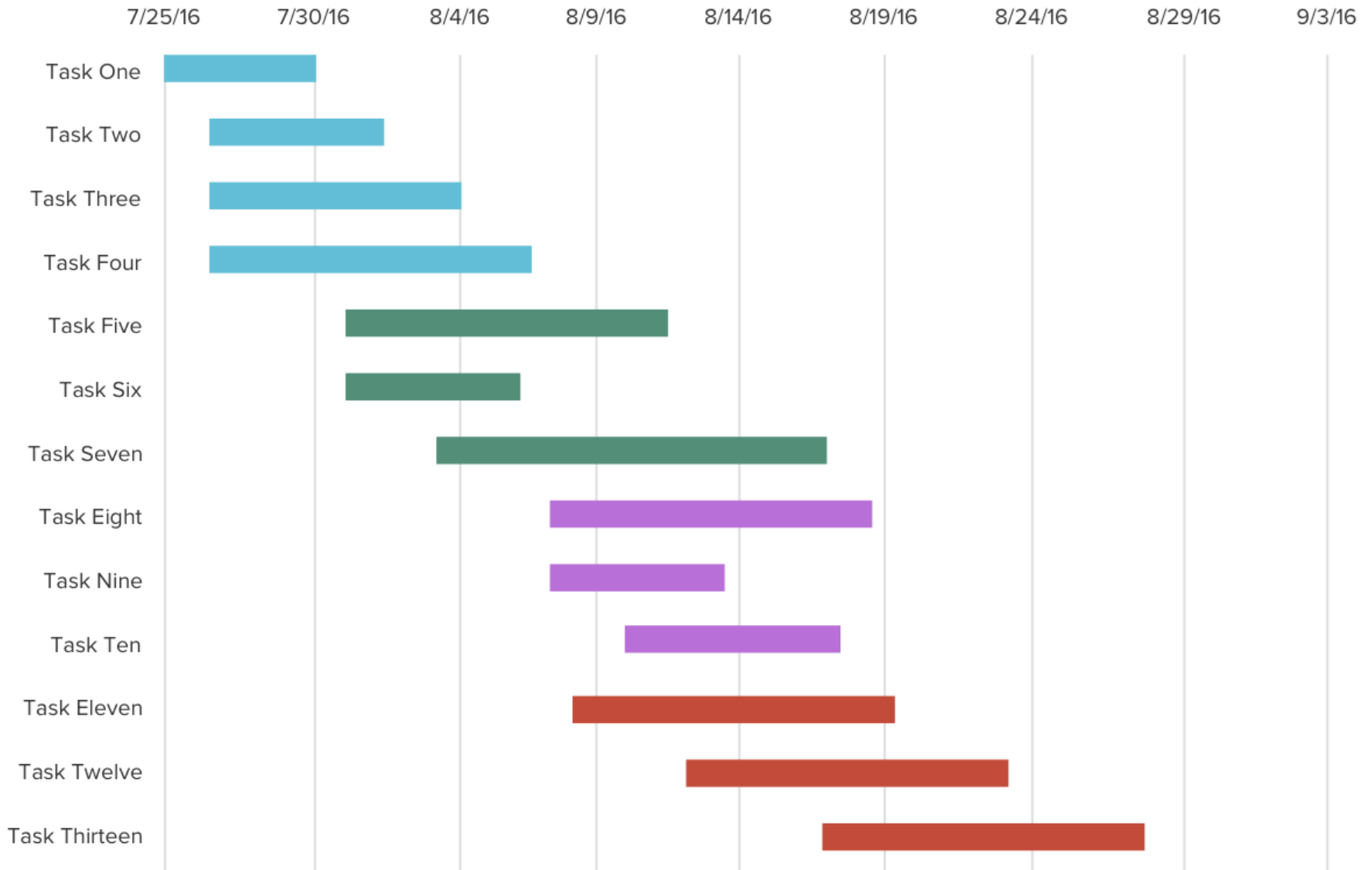


top 10 salaries at Google™

RANGE FROM \$143,000 TO \$241,000 PER YEAR.



Excel Gantt Chart Template



Peak time for sports and leisure

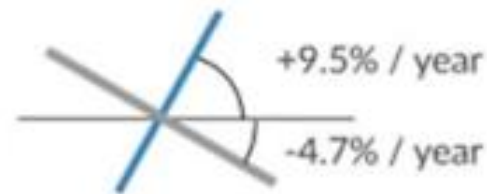
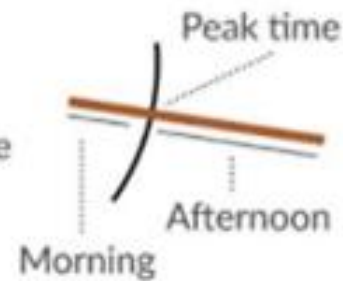
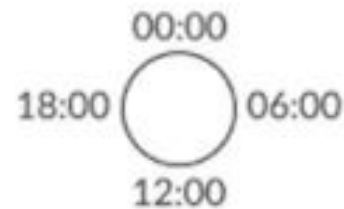
@hnrkIndbrg | Source: A

- Playing bi
- Di
- B
- S
- Playing vol
- Participating in marti
- Playing racquet
- Playing s
- Weightlifting/strength tr
- Playing basi
- Vehicle touring/
- H
- Playing ba
- Doing
- Rollerb
- F
- Participating in water

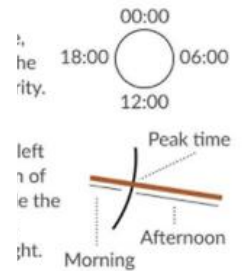
Each activity is a line, hitting the circle at the peak time of popularity.

The length of the line to the left of this point is the proportion of time spent before noon, while the line to the right is proportion spent from noon until midnight.

The angle of the line is the linear regression slope of each activity's popularity (population minutes spent per day) between 2003 - 2015



pecified
ar equipment



regression slope of each activity's popularity (population minutes spent per day) between 2003 - 2015



IR Offices: Types of Staff

18%

have at least one undergraduate student working in the office

Administrative Staff

28%

have at least one full-time staff member

10%

have at least one part-time staff member

95%

have a full-time Director

11%



have at least one graduate student working in the office

84%

have at least one full-time professional staff

13%

have at least one part-time professional staff

5%

have a part-time Director

2019. gada valsts budžeta izlietojums

#budžets2019



Finanšu ministrija

6,7%
632,6 miljoni €
Aizsardzība

8,5%
799,2 miljoni €
Izglītība

35,0%
3 285,0 miljoni €
Sociālā aizsardzība

6,7%
630,1 miljoni €
Sabiedriskā kārtība un drošība

12,2%
1 138,6 miljoni €^{***}
Veselība

1,7%
158,6 miljoni €
Atpūta, kultūra un reliģija

14,3%
1 342,0 miljoni €
Vispārējie valsts dienesti:

- **0,4%** 34,2 miljoni €
Valsts prezidenta kanceleja, Saeima, Ministru kabinets
- **8,6%** 807,6 miljoni €
ES fondu maksājumi, dotācijas pašvaldībām, valsts ierēmtumu un muitas politikas nodrošināšana, zinātnē u.c.

- **5,3%** 500,2 miljoni €
Valsts parāda vadība un ieraksts EK budžetā

0,1%
12,0 miljoni €
Teritoriju un mājokļu apsaimniekošana

0,5%
48,0 miljoni €
Vides aizsardzība

14,3%
1 345,4 miljoni €
Ekonomiskā darbība:

- **2,6%** 248,5 miljoni €
Tautsaimniecība
- **7,0%** 654,3 miljoni €
Lauksaimniecība
- **4,7%** 442,6 miljoni €
Transports



Kopā veido 100%
9 391,5 miljoni €*

Vairāk informācijas www.fm.gov.lv

[@FinMin](#) [FinanšuMinistrija](#) [FinanšuMinistrija](#) [FinanšuMinistrija](#)

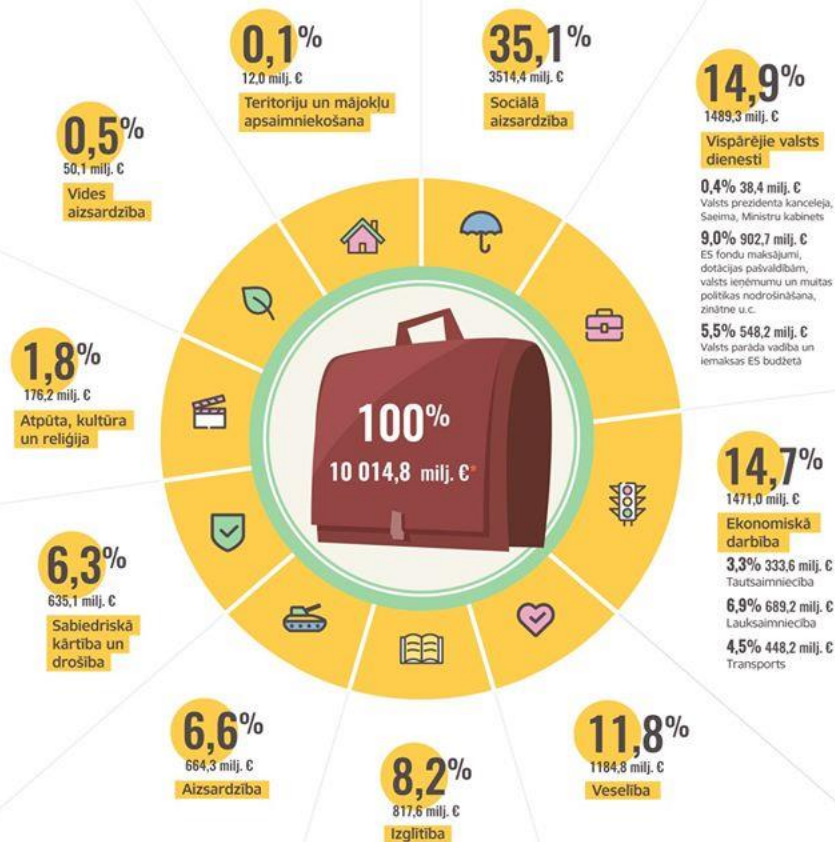
* Saeimas apstiprinātais 2019. gada budžets, pēc 2. lasījuma.
** Kopā ar veselības izdevumiem 1 138,6 miljoni €

2020. gada valsts budžets



Finanšu ministrija

#budžets2020



* Saeimā apstiprinātais 2020. gada budžets (pēc 2. lasījuma)

Vairāk informācijas www.fm.gov.lv

[@FinMin](#) [FinanšuMinistrija](#) [FinanšuMinistrija](#) [FinanšuMinistrija](#)

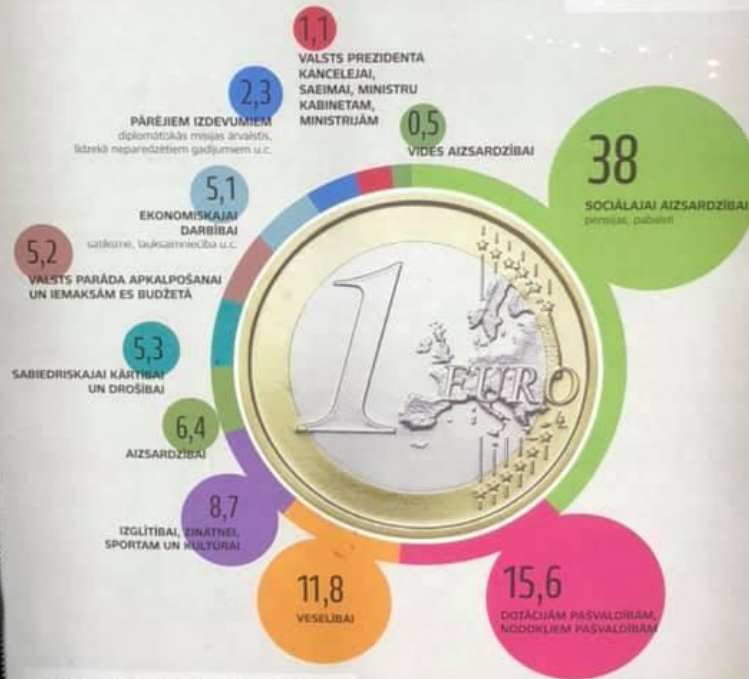
Cik

tiek novirzīts nozarēm
no **viena nodokļos**
iemaksātā eiro?



Finanšu ministrija

#budžets2021



Vairāk informācijas: www.fm.gov.lv



@FinMin



FinansuMinistrija



FinansuMinistrija



FinansuMinistrija

1 eiro sadalījums norādīts centos

PADOMI VEIKSMĪGAI DATU VIZUALIZĀCIJAI



Fakti



Rīcība

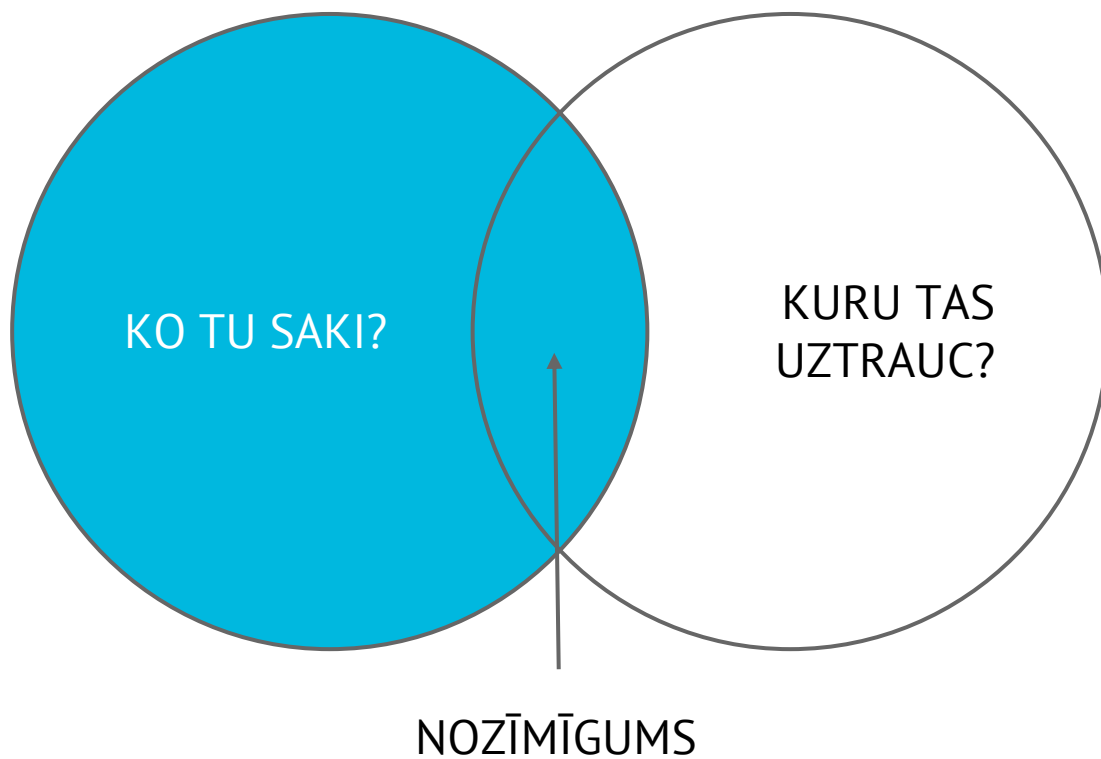


Vēstījums

IZPROTI SAVU VIZUALIZĀCIJAS
GALA PRODUKTU

Sāc ar jautājumu

Kas ir tavs mērķis?



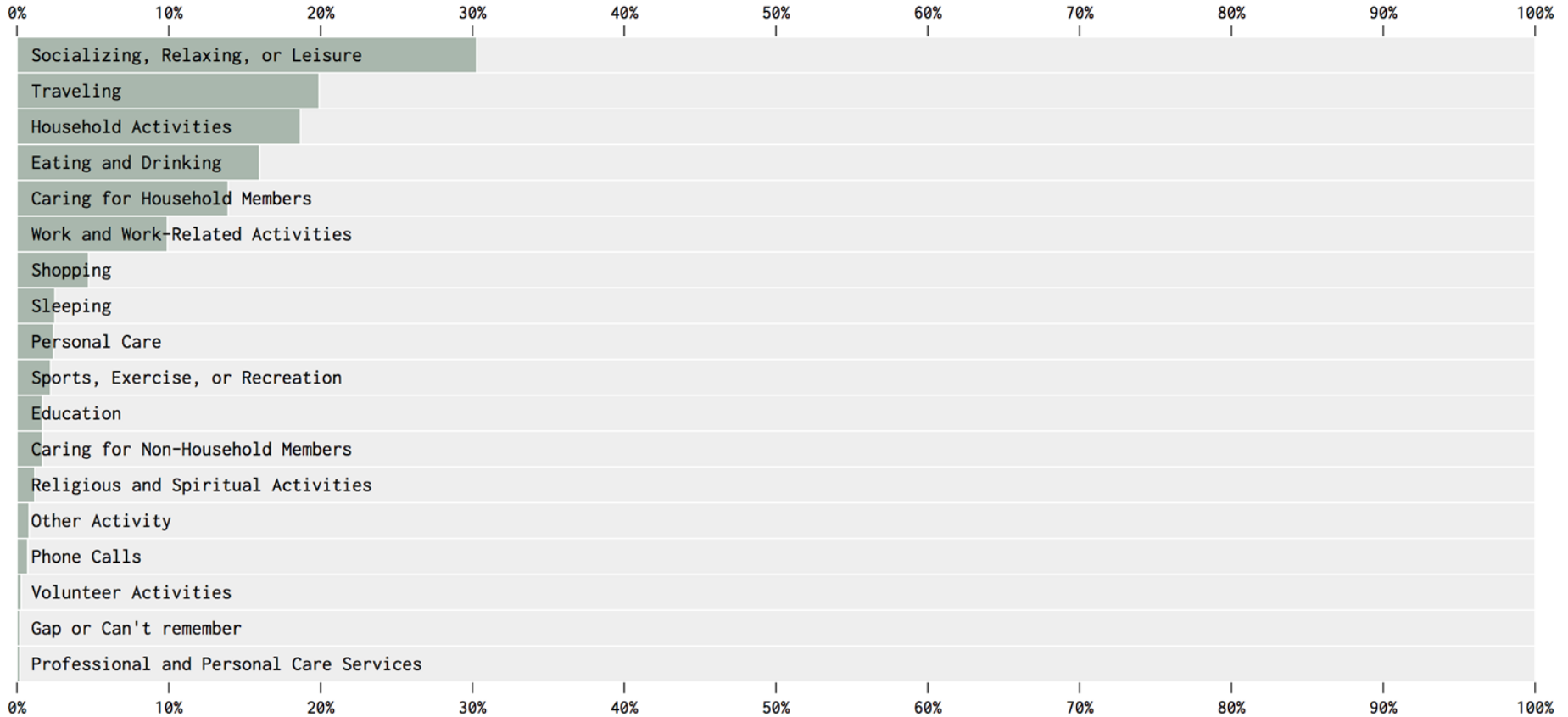


JA STĀSTS NAV PAR KLAUSĪTĀJU,
VIŅŠ TO NEDZIRDĒS

John Steinbeck, East of Eden

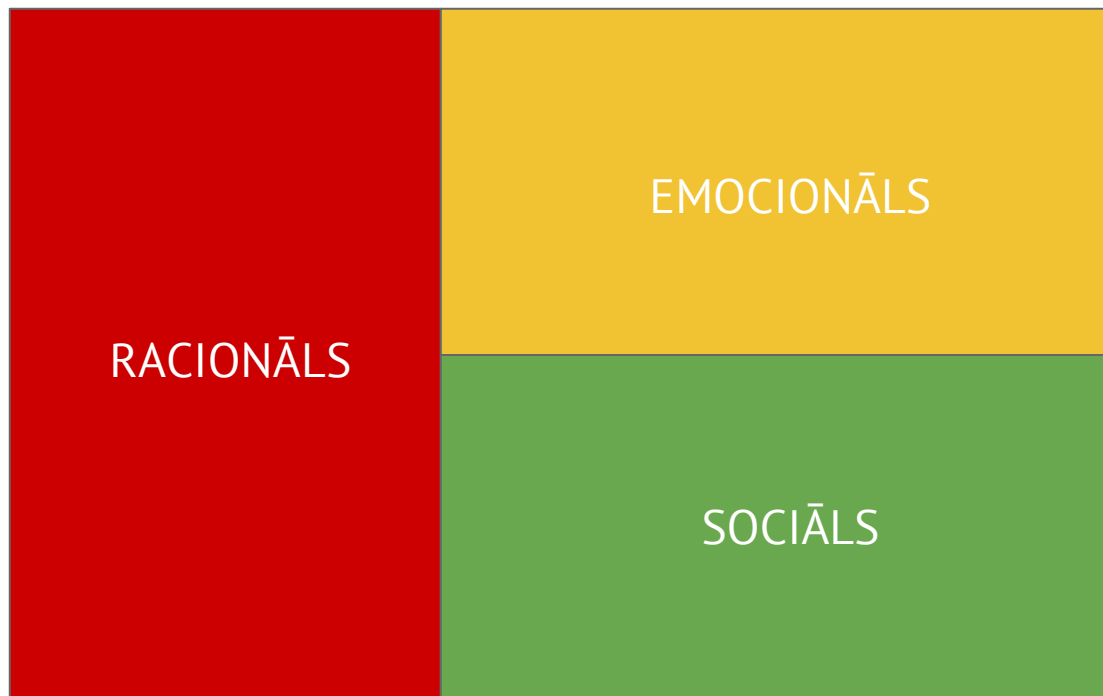
See how you compare to your cohort.

On an average day **6:00pm-6:29pm** this percentage of **females** age **25 to 34** did the activities below.



[Most Common Use of Time, By Age and Sex](#)

NOZĪMĪGUMS IR TRĪSDAĻĪGS



IEJŪTIES KLAUSĪTĀJA ĀDĀ



ATCERIES, KĀ BIJA TAD, KAD TU
NEKO NEZINĀJI

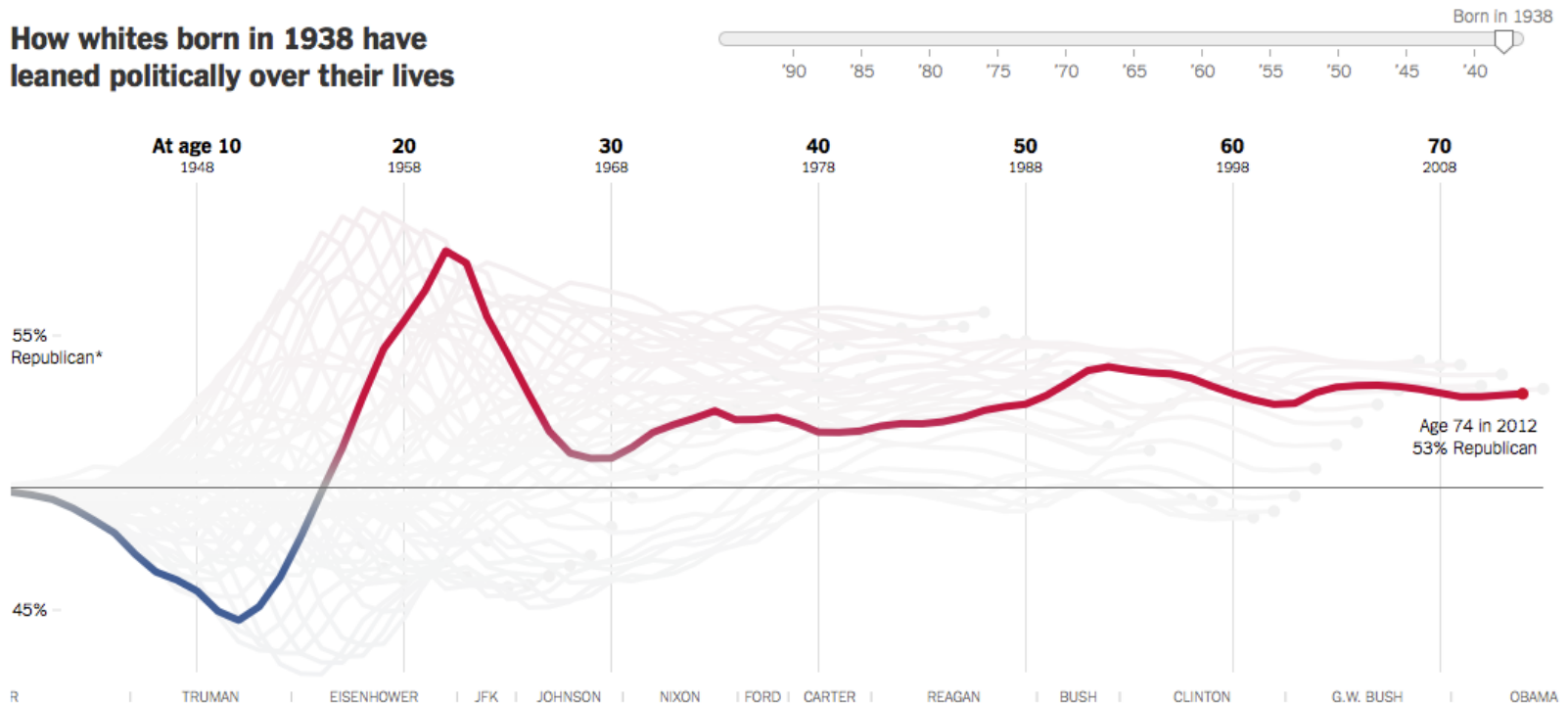


BET... ZINĀŠANU LĀSTS TIK
TIEŠĀM IR LĀSTS

How Birth Year Influences Political Views

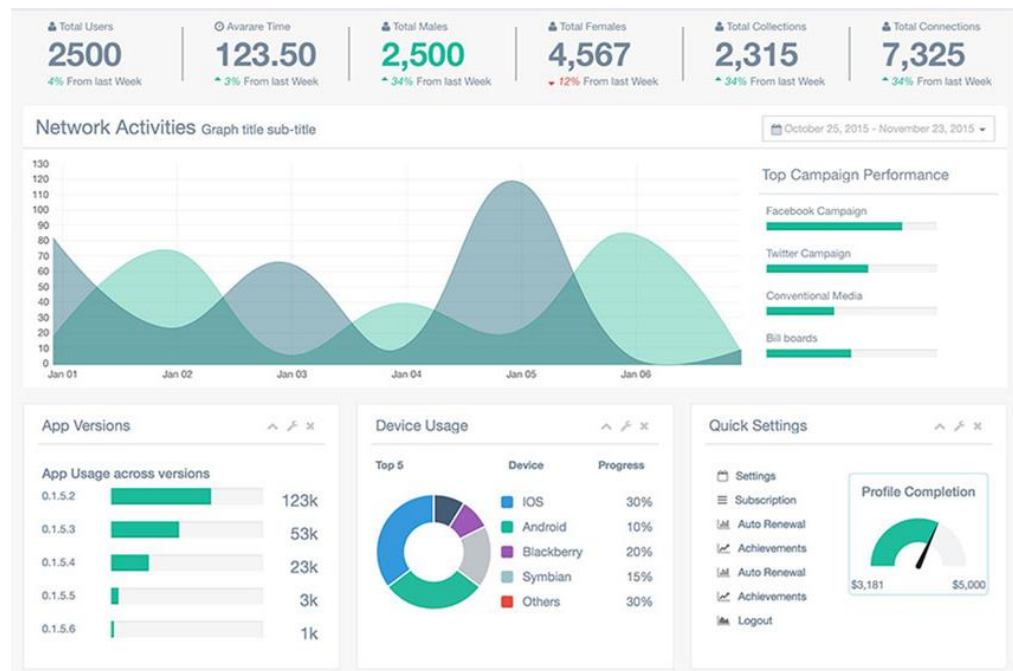
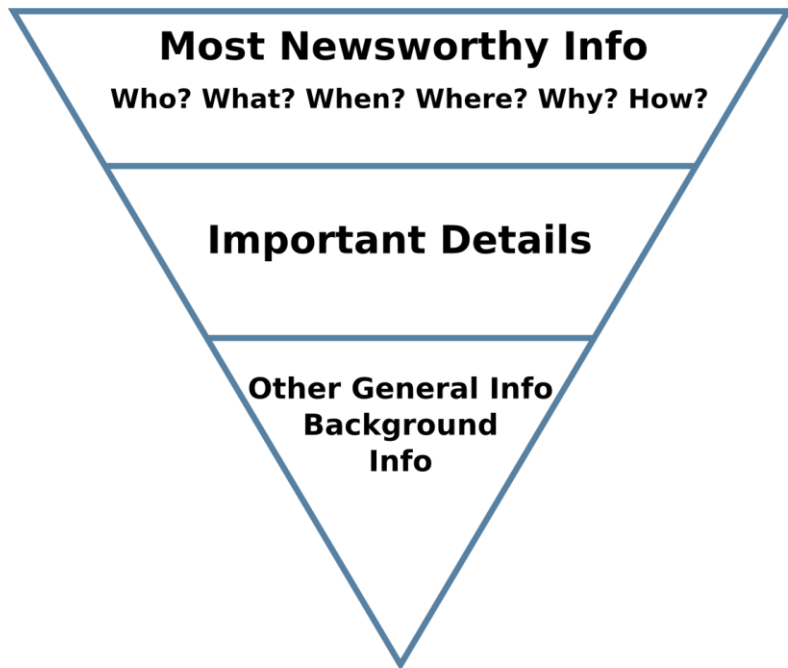
By AMANDA COX JULY 7, 2014

How whites born in 1938 have leaned politically over their lives



* Estimated vote in an average presidential election. Preferences for children are inferred.

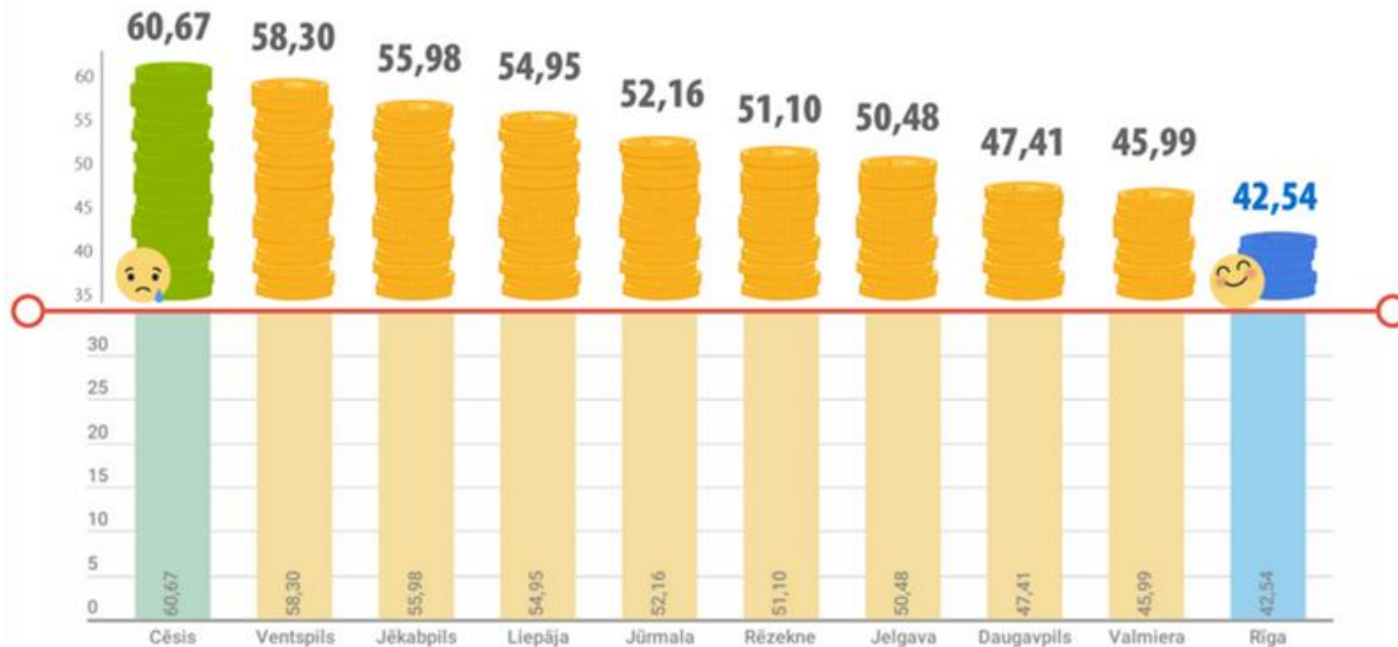
TĀPĒC... PALĪDZI CITIEM
SAREDZĒT, KO REDZI TU



ATVIEGLO DZĪVI, SĀC AR SVARĪGĀKO

🔑 CIK MAKSĀ SILTUMENERĢIJA LATVIJAS PILSĒTĀS?

Siltumenerģijas tarifi **EUR/MWh** (bez PVN) 2017. gada janvārī



Avots: <https://www.sprk.gov.lv/lapas/Siltumenerija-lietotajiem#Tarifi84>

SAGLABĀ UZTICĪBU, ESI
KONKRĒTS/-A



Fatal Road Accidents In Europe (And Russia)

Over 25,000 fatalities were recorded in road traffic accidents in the European Union in 2017.



Road Deaths In Russia And The Rest Of Europe

Over 25,000 fatalities were recorded in road traffic accidents in the European Union in 2017.



PARĀDI, KA DATI VAR BŪT
AIZRAUJOŠI, AIZKUSTINOŠI...

PALDIES!

NIKA ALEKSEJEVA

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Facebook: /datuskola

nika@datuskola.lv

