

There are **10 kinds** of people
in this world.

Those that understand
binary and **those that don't**.

How To Make A Successful **Story from data**



Teemo Tebest, **@teelmo**

Teemo Tebest, Yle

- **Data Journalist**
- Background in web development and information visualization
- Founding member of Yle's datadesk since 2013

```
require('JS, HTML5, PHP, Python, full-stack, MongoDB, GIS, network analysis');
```

- Twitter: [@teelmo](https://twitter.com/teelmo)
- Homepage: teelmo.info

WHAT I ACTUALLY DO



Yle Plus Desk Team



2 Producers



3 Coders



3 Graphic Designers

Yle News



Plus Desk at Yle News

- We make online stories in **co-operation** with other teams
- More **bigger** and **investigative** projects, less fast-ones
- From 350 stories in 2013 to 150 in 2017
- **The most read stories** at Yle come from Plus Desk



Succesful data story: **4 examples**

1. **Pension** Calculator
2. **Election** Result
3. **Housing** Machine
4. **Municipality** Radar

```
if (Motivation === true) {  
  if (Implementation === true) {  
    return Outcome  
  }  
}
```

Ok! I lied, there
even more examples!

And you will have to participate :)

How many **threes**?

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

20

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

Story When Can You Retire And For How Long

Motivation Pension system reform

Implementation Embedded calculator

Outcome One of the most read stories in 2016

» story

One of most read stories in 2016, **Why?**

- Calculator **placed on top** of the article
- Had a **default result**
- Easy to use
- Simple and **“Surprising”** message
- **Shareable** result, over 100,000 FB actions
- Funny → **Memorable**

Challenges / Obstacles

- From **Excel** to story
- **Two datasets** → pick more relevant
- Use of **understandable language** and terms

Another calculator

- Tax calculator

Story New City Council

Motivation Municipality elections

Implementation Election analysis

Outcome Unique view to the result

» story

Unique view to the election result, **Why?**

- Combined election result to electees opinions
- Comments gave context
- Compare local status with country level

» another election story

Challenges / Obstacles

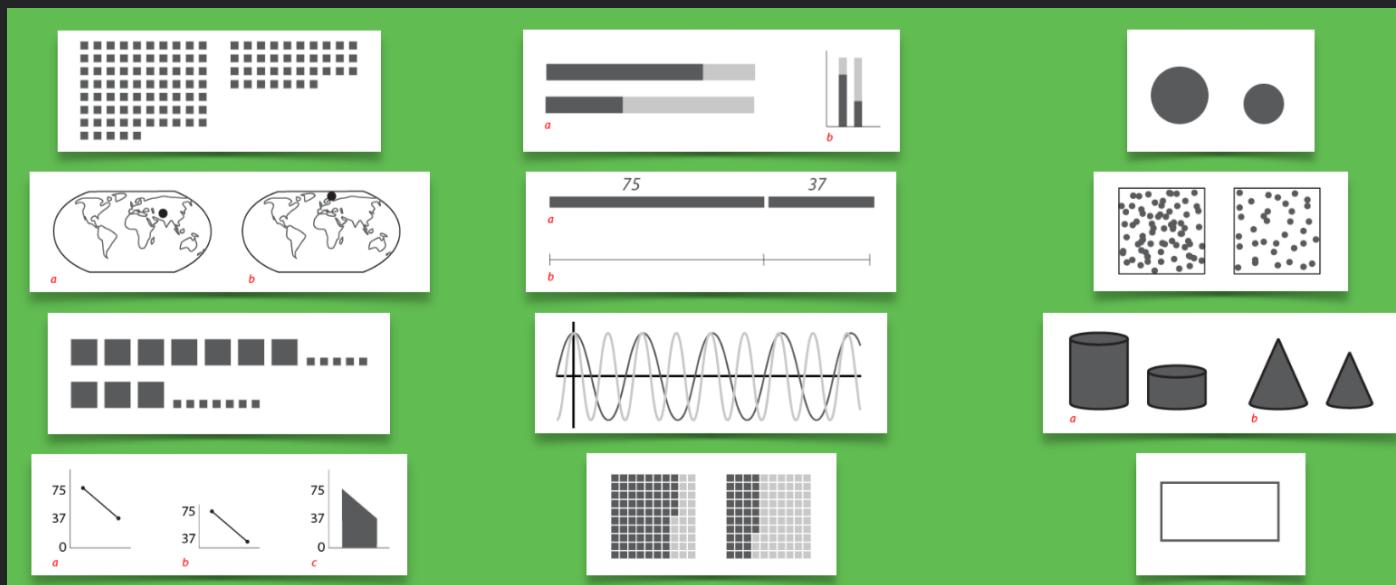
- **Combining** 17 000 election machine results with 9 000 electees
- Publication **on Monday morning**, 3 hours after final result
- Finding an interesting **representation**
- What and why would I share?

Exercise

Make up as many ways to visualize numbers **75** and **37**. Sketch on paper.

Take 5 minutes

Examples



Story Can you afford an apartment

Motivation First-time home buyers

Implementation Map-based application

Outcome Unique view to the housing markets

- » inspiration
- » story
- » numbers

Unique view to housing markets, **Why?**

- Combined housing prices with income
- Size instead of price
- Showed the segregation between cities and rural areas

Challenges / Obstacles

- Maps with data on **mobile devices** 😠
- Lack of sales data in most areas
- No data from houses, only apartments
- Application ↔ Story
- Why and what would I share?



Time to look **under the hood!**

There's no place like

127.0.0.1

Programming in movies vs. programming in real life

Story What is the status of your municipality

Motivation Upcoming elections

Implementation Municipality Radar

Outcome Noda Awards '17 nominee

» data
» story

Noda Awards '17 nominee, **Why?**

- Quick **Overview** → **Details** on Demand
- **Personalized** and **Familiar** feel
 - Municipality arms, Subtitle, Background map, Street view, Municipality text
- We **crowdsourced** candidate test questions
- Was adopted by municipalities and by public
- Data and process was opened

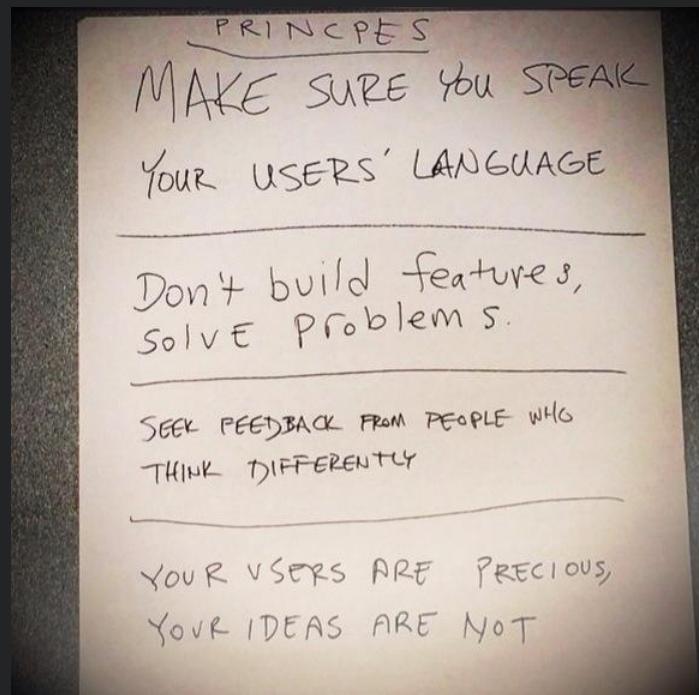
Challenges / Obstacles

- **Getting data** for current municipalities
- Merging various data sources and formats into one sheet
- Learning **statistical analysis** and standard deviation
- Getting unified municipality texts and handling updates
- **Finishing and polishing**
- Technical issues

5 star rating rampage

- Postal code radar
- Primary school radar

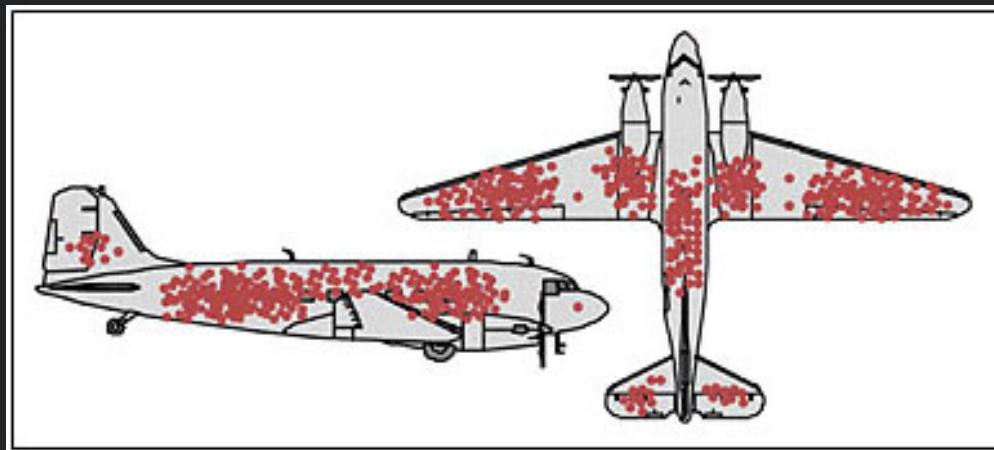
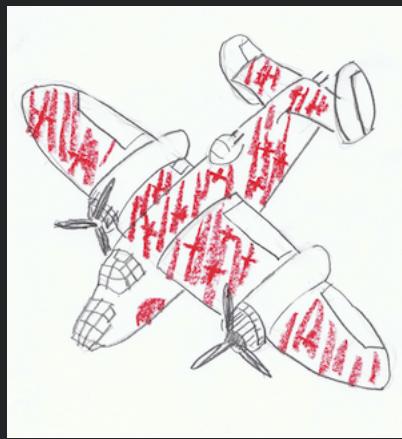
4 things I like to keep in mind



Abraham Wald

- Hungarian mathematician.
- Worked for British air force in **World War II**.
- How to **make aircrafts more resistant** to antiaircraft weapons.

Abraham Wald



Credit: Cameron Moll

Data visualizations gone **wrong**

- [The 9 Worst Data Visualizations Ever Created](#)
- [The Worst Graphs of 2017](#)

Data visualization **success**

- A global map of wind
- Here's every total solar eclipse happening in your lifetime
- A Tornado Hits The Weather Channel
- How temperature has changed in each country since 1900
- Finnish Summer

Feature stories

- Kulmala
- Messi

Tools

- Infogram
- Flourish
- Google Sheets
- Fusion Tables

Thank you! **Questions?**



Teemo Tebest, [@teelmo](#)

Make up **5 data stories** or topics

Or stories that would specially interest you.

- Write the ideas down on a paper.

Use 10 minutes

Choose the best and make **5 questions**

Write down questions like:

- What...?
- Who...?
- When...?
- How...?

Use 10 minutes

Make groups of three,
sell your idea!

Why your idea is important, relevant, interesting?

- 2 minutes per person

Use 10 minutes

Choose the best topic and **sketch a prototype**

- What you would do with infinite resources
- After we will go thought what you have accomplished
- Who is the audience?
- Why this is important!

You have until 20–30 minutes

Plus Desk

<https://plus.yle.fi>

