

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

- **Data Journalist**
- Background in web development and information visualization
- Ten years of experience in data journalism
- At Yle/Finland and lately at the EBU/Geneva

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

- Twitter: **@teelmo**
- Homepage: **teelmo.info**

I WORK WITH COMPUTERS



Successful data story: **examples**

- The examples are to give you ideas

Let's make this session as interactive as possible.

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

Ok, there is data?

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

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

(Data)**journalistic** approach

Politician: *"Immigration has doubled in five years"*

Data is **number**

Politician: *"Immigration has **doubled** in **five** years"*

Data is **words**

Politician: "**Immigration** *has doubled in five years*"

Data is **units**

Politician: *"Immigration has doubled in five **years**"*

Story When Can You Retire And For How Long

Motivation Pension system reform

Implementation Embedded calculator

Outcome One of the most read stories of the year

» data
» story

One of most read stories of the year, **Why?**

- Calculator **placed on top** of the article
- Had a **default result**
- Easy to use
- Simple and **“Suprising”** 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

Yle Plus Desk Team



2 Producers



3 Coders



3 Graphic Designers

Yle News



Plus Desk at Yle News

- Online stories in **co-operation** with other teams
- Focus on more **longer** and **investigative** projects, less daily news
- Usually in a project one has a coder, a graphic designer and a journalist



Story New City Council

Motivation Municipality elections

Implementation Election analysis

Outcome Unique view to the result

» data 1 / » data 2
» 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

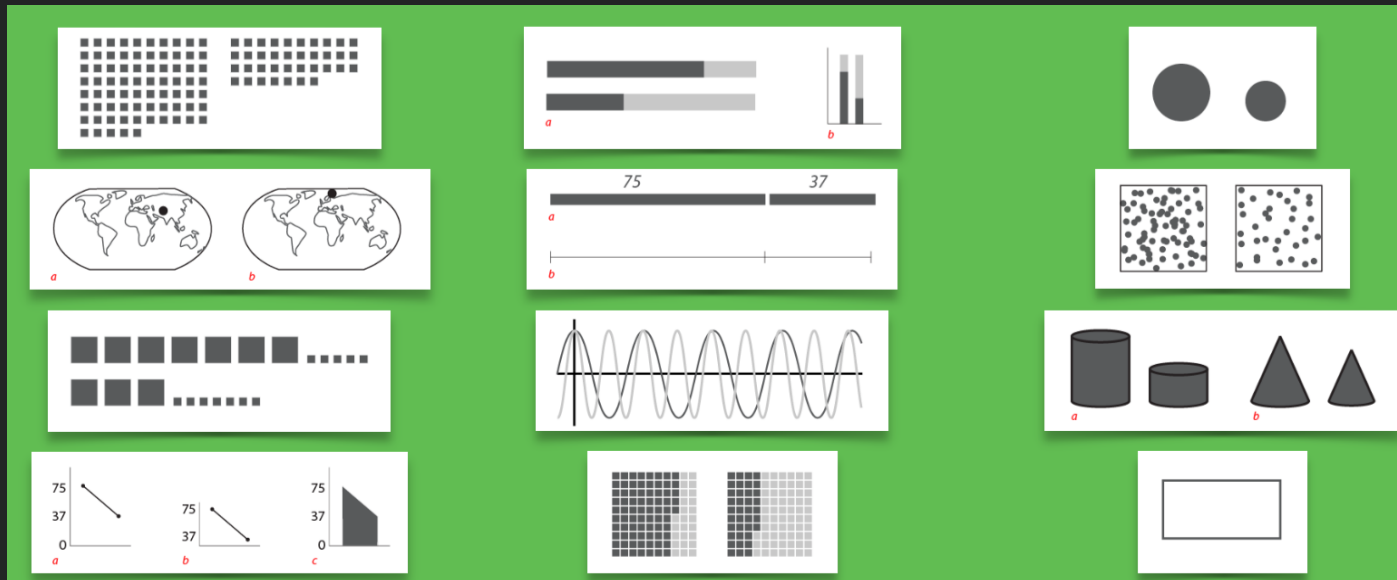
- **Combining** 17 000 election machine results with 9 000 electees
- Publication **on Monday morning**, 3 hours after final result
- Finding an interesting **representation**
- What and why would I share?

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
» data
» story

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?



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

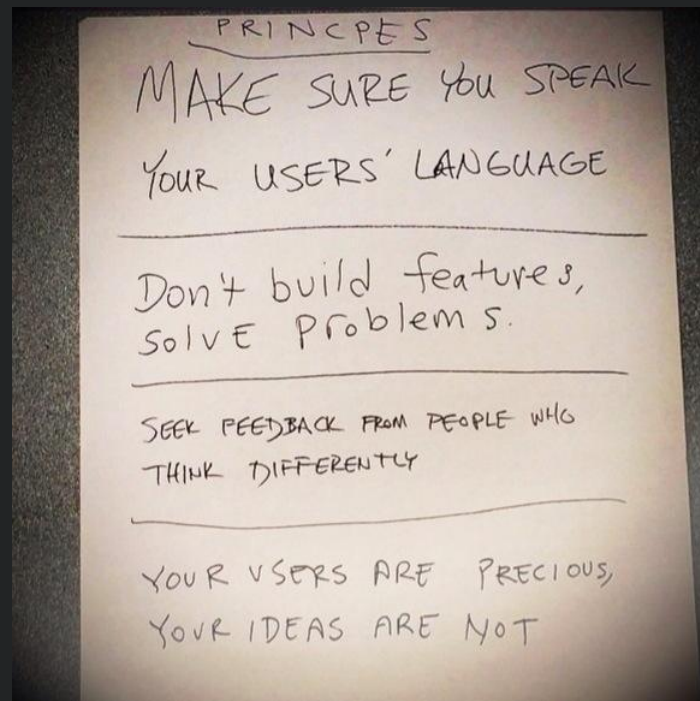
Challenges / Obstacles

- **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



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](#)

Feature stories

- Kulmala
- Messi

Thank you! **Questions?**



Teemo Tebest, [@teelmo](#)