

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

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

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

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Teemo Tebest, **@teelmo**

# Teemo Tebest, Yle

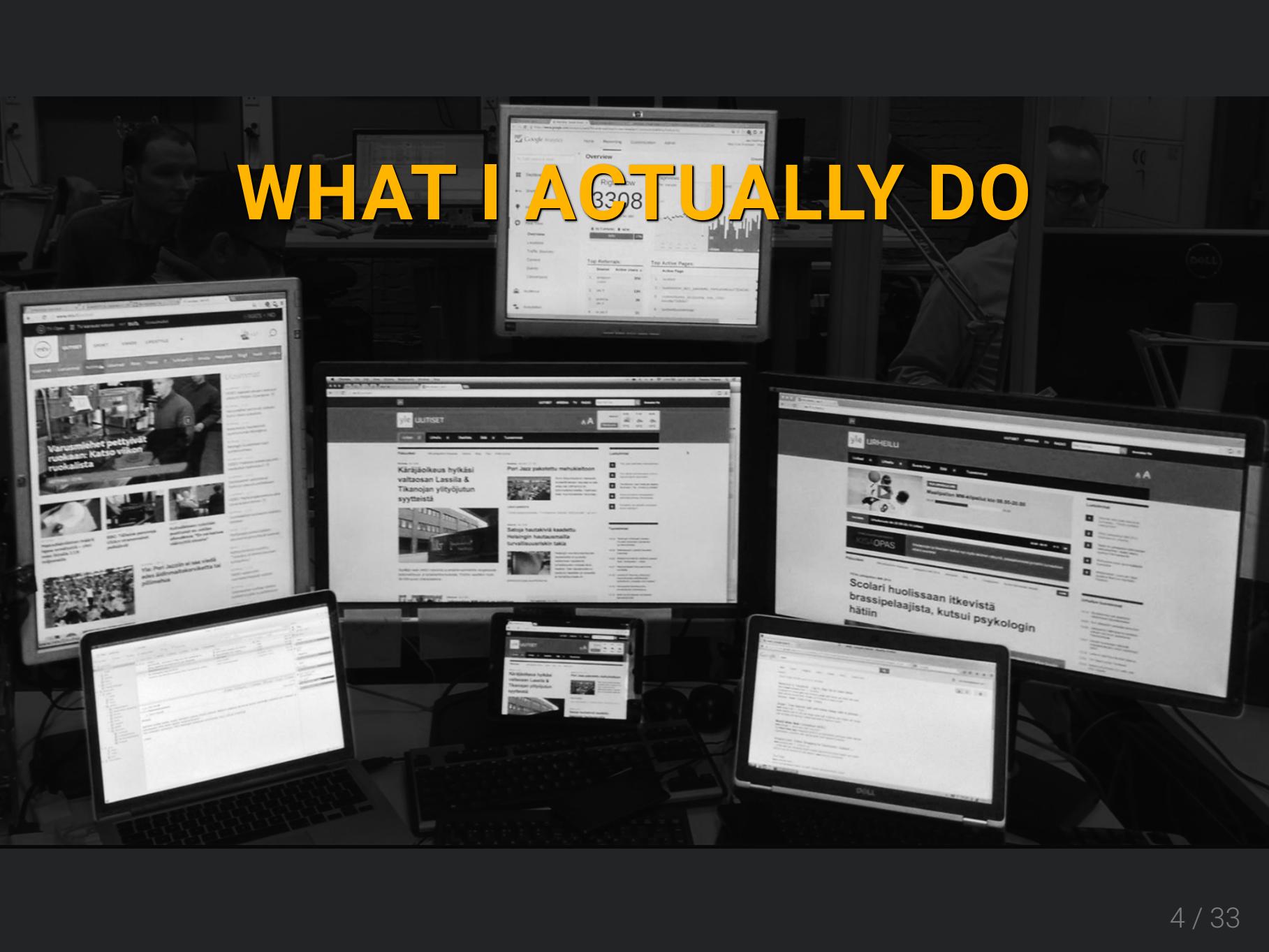
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- **Data Journalist**
- Background in web development and information visualization
- Founding member of Yle's datadesk since 2013

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

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

# WHAT I ACTUALLY DO



# Yle Plus Desk Team



2 Producers



3 Coders



3 Graphic Designers

# Yle News



# Plus Desk at Yle News

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- 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**

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

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

Ok! I lied, there  
**even more examples!**

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And you will have to participate :)

# How many **threes**?

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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

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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

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**Motivation** Pension system reform

**Implementation** Embedded calculator

**Outcome** One of the most read stories in 2016

» data  
» story  
» numbers

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

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- 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

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

# Another calculator

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- Tax calculator

# **Story** New City Council

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**Motivation** Municipality elections

**Implementation** Election analysis

**Outcome** Unique view to the result

» data 1 / » data 2  
» story  
» numbers

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

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

» another election story

# Challenges / Obstacles

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- **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

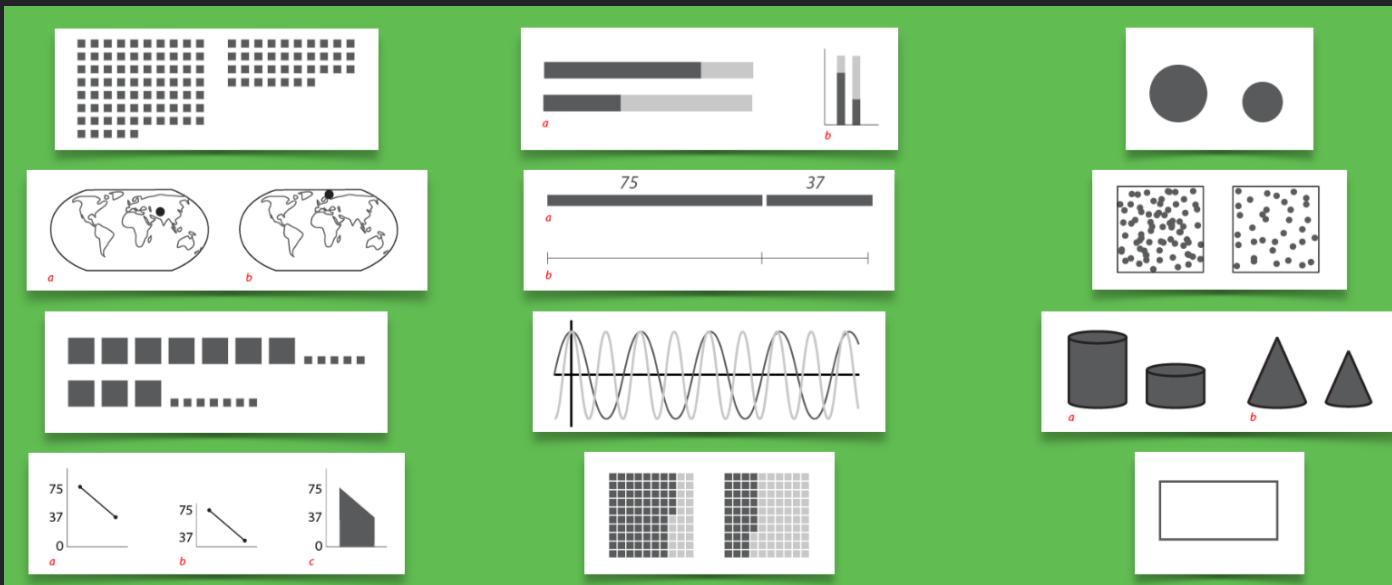
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Make up as many ways to visualize numbers **75** and **37**. Sketch on paper.

**Take 5 minutes**

# Examples

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# **Story** Can you afford an apartment

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**Motivation** First-time home buyers

**Implementation** Map-based application

**Outcome** Unique view to the housing markets

- » inspiration
- » data
- » story
- » numbers

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

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

# Challenges / Obstacles

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- 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!**

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There's no place like

**127.0.0.1**

Programming in movies vs. programming in real life

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# **Story** What is the status of your municipality

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**Motivation** Upcoming elections

**Implementation** Municipality Radar

**Outcome** Noda Awards '17 nominee

» [data](#)  
» [story](#)

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

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- 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

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- **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

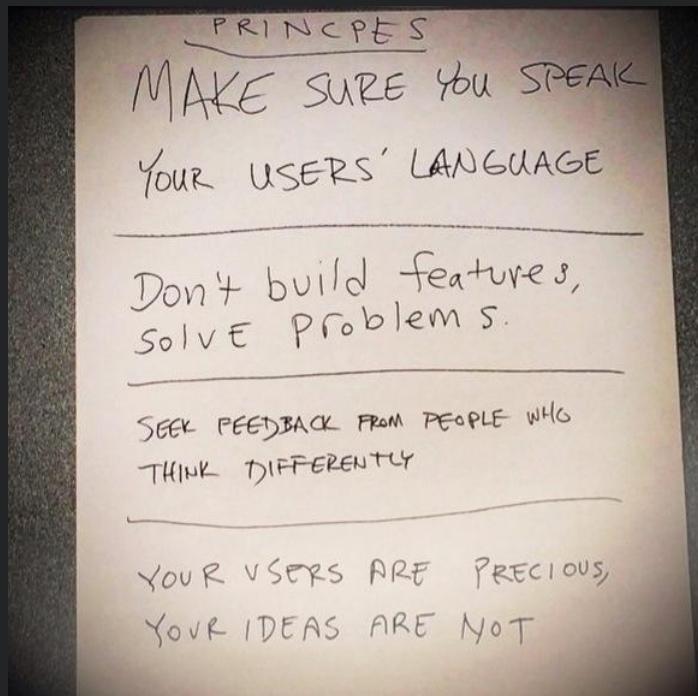
# 5 star rating rampage

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- Postal code radar
- Primary school radar

# 4 things I like to keep in mind

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# Data visualizations gone **wrong**

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

# Data visualization **success**

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- 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

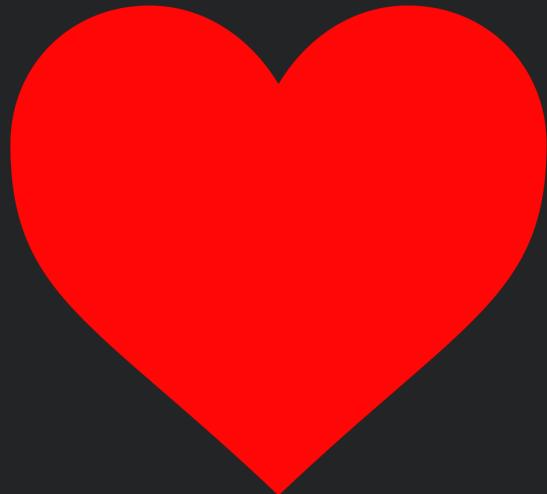
# Feature stories

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- Kulmala
- Messi

Thank you! **Questions?**

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Teemo Tebest, [@teelmo](#)

# Plus Desk

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<https://plus.yle.fi>