

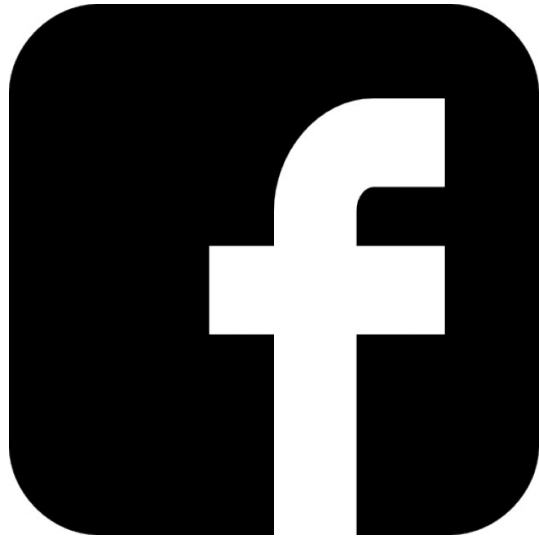
Voice of the customer

Using big data in UX, UI and documentation development

A case study in
16 easy lessons

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FTCS fall seminar
2.11.2018

0. Do not ignore social media



- Some of the stuff between ads, cat videos and more ads is important
- You can harvest the social media for mood and sentiment
- You can use it as a feedback channel (Lesson #16)

Case: Last generation Lumia smartphones



- Question: What did our customers **really** want us to do or fix next?
 - What new features did they want?
 - What bugs did they want us to fix?
 - In which order?

So that we could justify the use of finite resources.

We had data

Reports from consumer studies

**Net promoter Score statistics
and open feedback**

Call center data

**Data from
support
discussions**

Error reports from field testing

Operator feedback

Social media trends

FFR data

**Operators' device
return summaries**

Care point data

Error reports from system testing

Windows OS feedback

Consumer suggestions

**Error reports from
internal users
on trial builds**

Telemetry on app usage

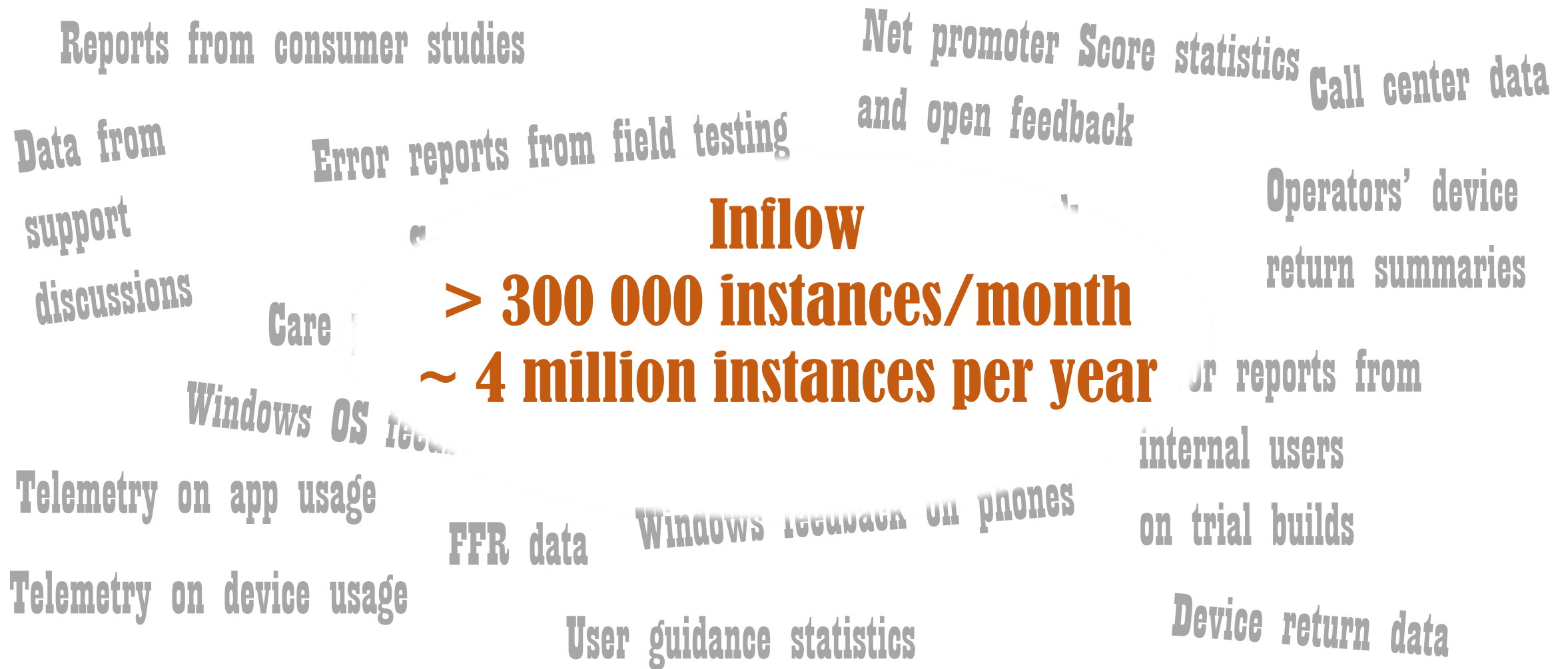
Windows feedback on phones

Telemetry on device usage

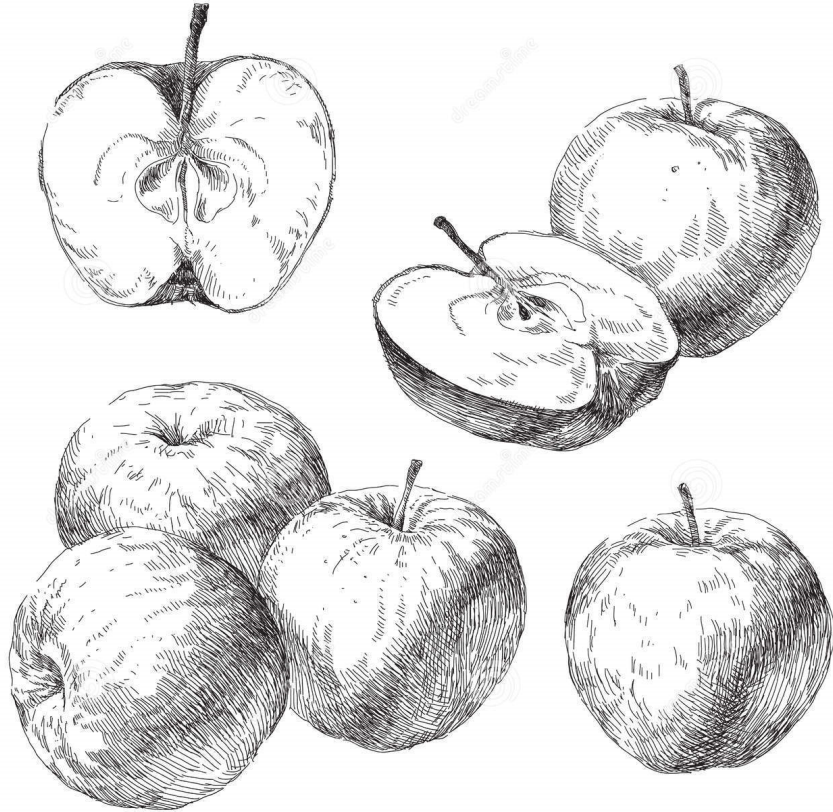
User guidance statistics

Device return data

...in fact more than we wanted

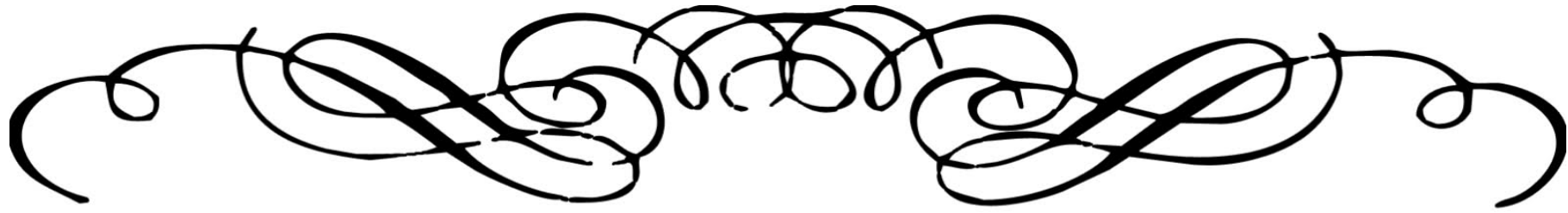


...and we had a problem



- How much is “much”
- How many apples is one boat
- 5 pears = 5 apples?

= The data was all but directly comparable



Lessons

OR

Here's how we did it



1. Define what you want to achieve



Our mission statement:

In Smart Devices' product management, we'll have an always up-to-date prioritized list of top 20 UI and UX improvements that is based on verifiable consumer feedback.

We'll use that list to prioritize and justify the work we carry out together with our stakeholders.

2. Understand what's available

Reports from consumer studies
Net promoter Score statistics and open feedback
Call center data
Data from support discussions
Error reports from field testing
Operator feedback
Operators' device return summaries
Social media trends
FFR data
Care point data
Error reports from system testing
Windows OS feedback
Consumer suggestions
Error reports from internal users on trial builds
Telemetry on app usage
Windows feedback on phones
Telemetry on device usage
User guidance statistics
Device return data

3. Understand what's achievable



- What data requires tools that you do not have now?
- What data needs more effort than your resources allow
- What data would be useful, but is not reliably quantifiable?

4. Define what data you'll use...

Net promoter Score statistics
and open feedback
Call center data

~~Reports from consumer studies~~
~~Error reports from field testing~~
~~Operator feedback~~
~~FFR data~~
~~Operators' device return summaries~~

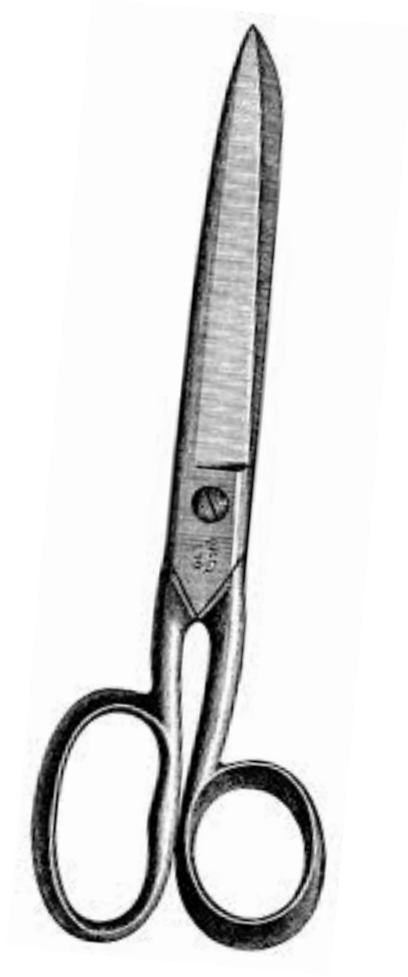
Social media trends

Care point data
Windows OS feedback
Consumer suggestions
Windows feedback on phones
User guidance statistics

Data from support discussions
Telemetry on app usage
Telemetry on device usage

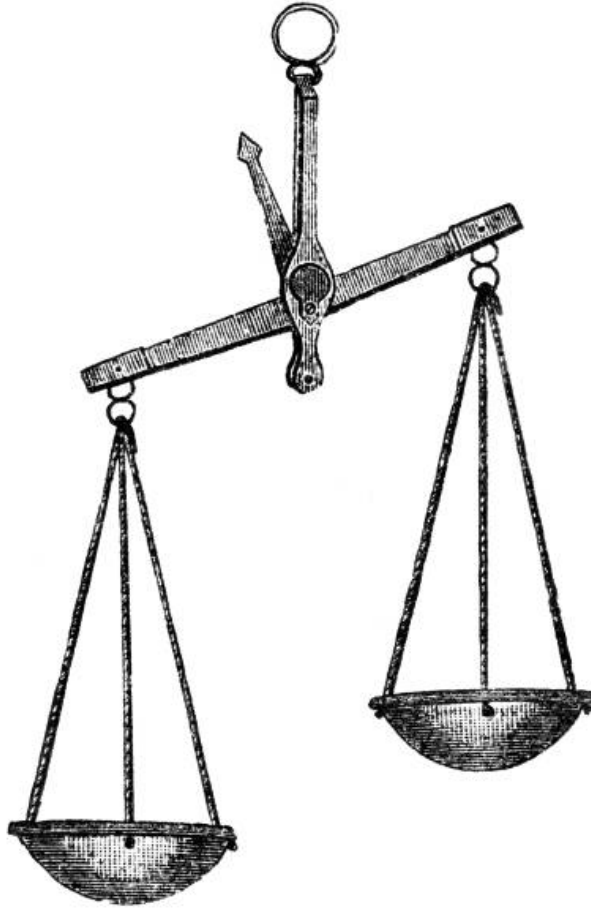
~~Error reports from system testing~~
~~Error reports from internal users on trial builds~~
Device return data

...and why



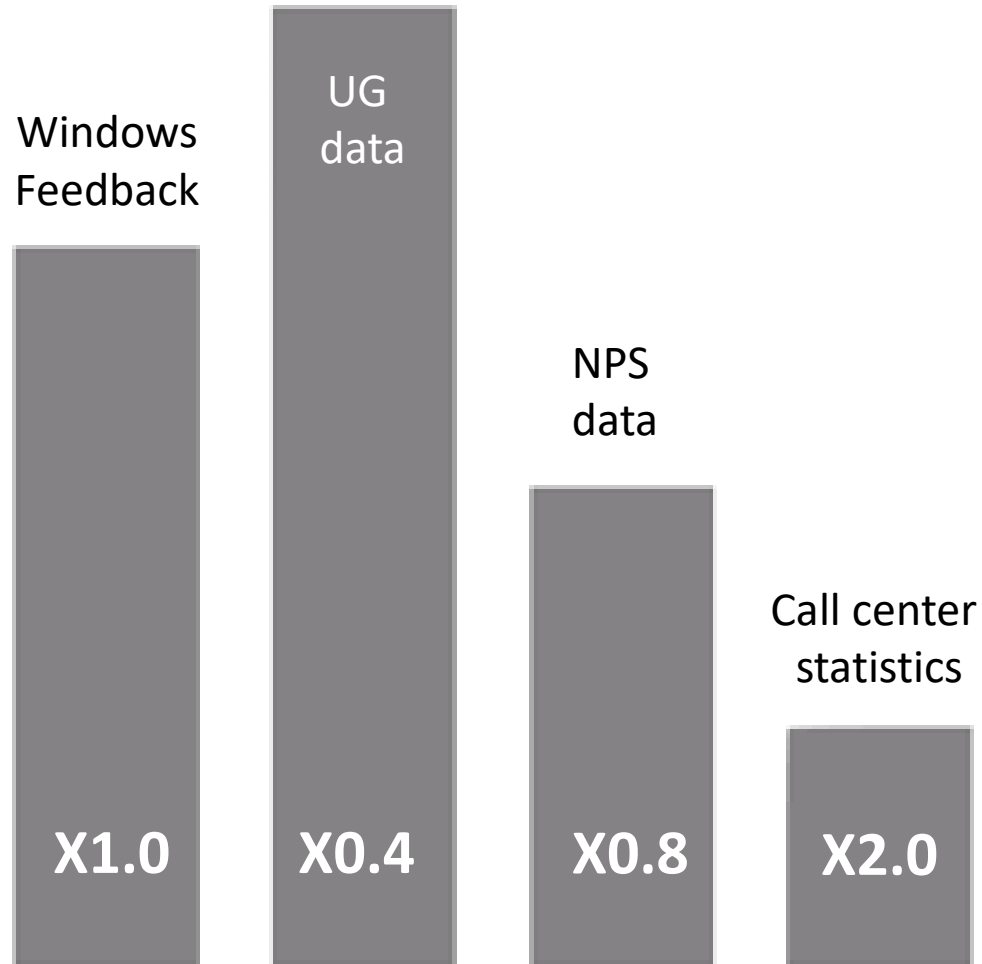
- Only data from our consumers
 - ✓ Direct feedback
 - ✓ Data that was generated based on relevant consumer actions with their consent
- No internal data
- No telemetry data
- Only data from key markets
- Only quantified data or data that could be made quantifiable
- We had no tools for harvesting social media

5. Decide what data is important



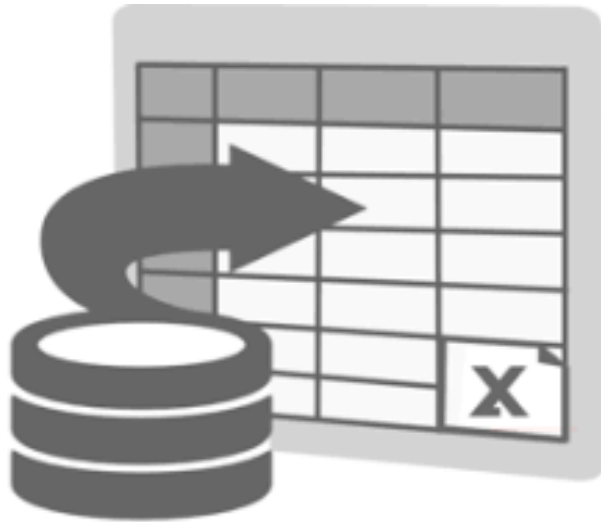
- Is all your data of equal value, or do you value some data sources more than others?
- If yes, why?
- The more personal effort and trouble consumers had to go through to provide their feedback, the more valuable the data was to us

6. Assign weights



- If needed, assign weights to prioritize the data
- Compare in a matrix

7. Decide how you analyze and report



Top 20 Voice of consumer issues January 201x

1. Office apps lack common functionalities on phone (details)
2. MS account sign-in is confusing during first use flow.
3. SD card and SIM card slots get mixed up in Lumia 950 (old)
4. EDGE bookmarks are difficult to discover (new)
5. Groove music does not play in all regions (new)
6. Phone calls to known contacts are difficult to make from phone app
7. All apps continues to be difficult to discover (old)

...

- Comparison and reporting in Excel, with accompanying details
- Executive summary on Power Point

Example

1. Populate the data

Number	Feedback item	NPS	Windows Feedback	UG	Call center	Care point	Total	Weighted total
1	I cannot install apps from the store	789	1105	3204	23	11			5132	3256
2	Signing into MS account fails	554	123	1809	11	7	56		2560	1762
3	Item 3	422	4	455	7	2		95	985	895
4	Item 4	121	605	522	4				1252	1204
5										
6										
7										
...										

2. Assign weights

3. Sort by weighted total

4. React

- **Top 20 – react**
- **Top 40 observe**
- **Top 60 be aware**
- **Top 60+ ignore for now**

8. Develop a reaction model



➤ Impact

- Bug
- feature request?
- Functional improvement?
- Major / minor UX flaw

➤ Urgency

- Needs an immediate permanent fix
- Needs a temporary fix
- Full fix/feature improvement in next release
- Fix in some future release
- Valid feedback in top 20 or top 40, but will not be addressed.

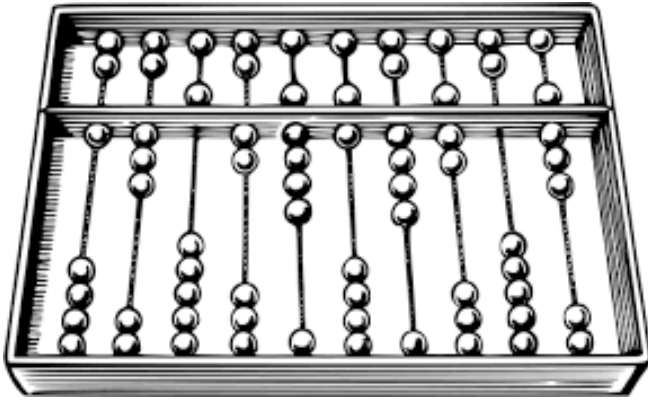
➤ Severity...

9. Develop systematic ways to address the issues



- **We had a cumulative approach based on cost and effort**
- Decided case-by-case with management and stakeholders
 - Inform in Facebook and Twitter only?
 - SoMe update + new FAQ?
 - Some update + new FAQ+ User guide change or clarification?
 - New Lumia UG content and/or video?
 - Temporary fix in the user guide, while waiting for permanent fix?
 - Temporary fix in Lumia user guide, Windows user guide and UI fix?
 - New content in Lumia user guide, Windows user guide, UI fix and a functional improvement?
 - Feature change in next release?
 - Full feature replacement with all new guidance content and deprecated old content?
- **Today, tomorrow or yesterday?**

10. Validate the data



- There's likely more data you can use
- Make sure the data you do use is correct and valid

...so that your actions can be trusted

For example:

NPS Data for Lumia 550 and 650, Item "SD card"

72% negative sentiment - 10% neutral sentiment - 18% positive sentiment"

- "Mahtavaa kun tähän saa edelleen oman muistikortin"
- "I like the possibility to extend the memory with a SD card"
- "SD card is a big plus"
- "Being able to use a SD card is a rare treat in a device at this price range."

11. Be transparent



- Clearly communicate
 - what data you are using
 - why and how
 - what you want to achieve
- Your stakeholders believe you better when they understand
 - What you do
 - Why do you do it

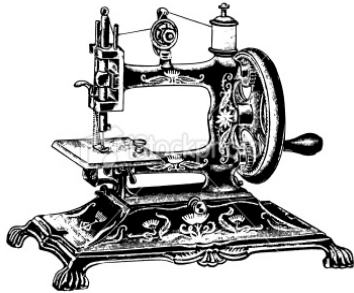
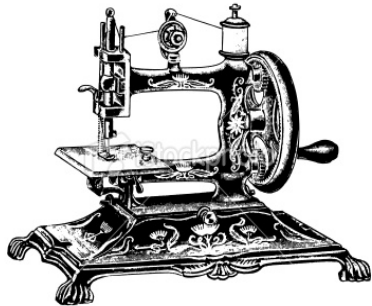
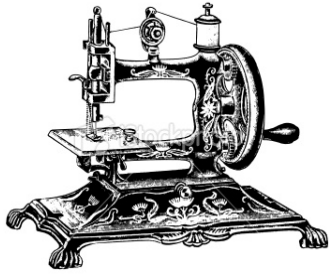
...and can commit to your results

12. Ensure management buy-in



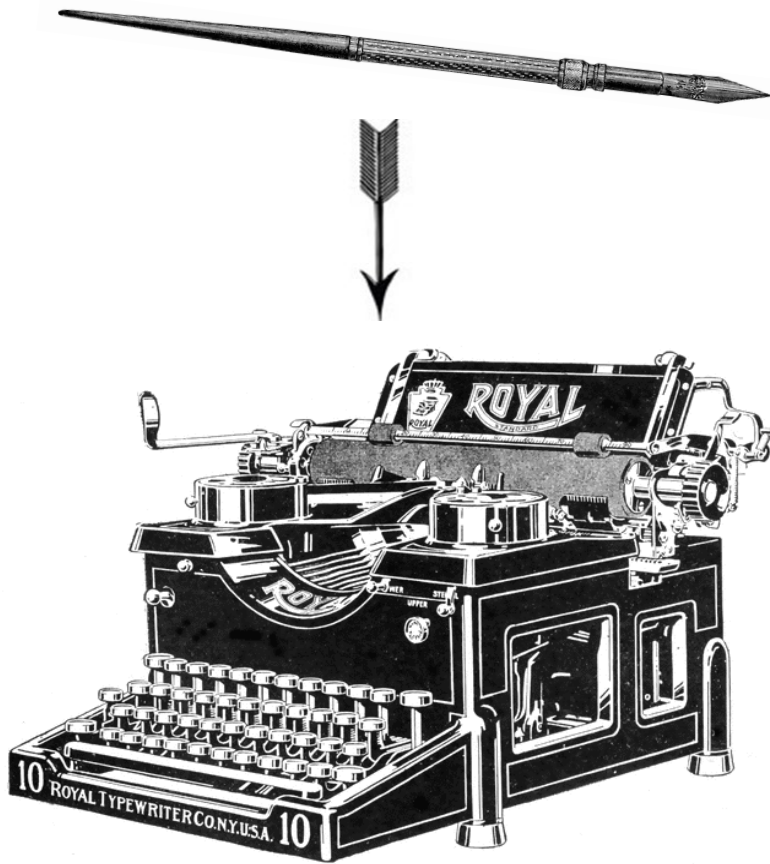
- Few of the issues you want to improve are entirely in your control
- Get a sponsor who
 - ✓ Understands the importance
 - ✓ Speaks in your favor and spreads the word
 - ✓ Allocates time, money and resources
 - ✓ Prioritizes your work over something else

13. Be consistent in your WoW



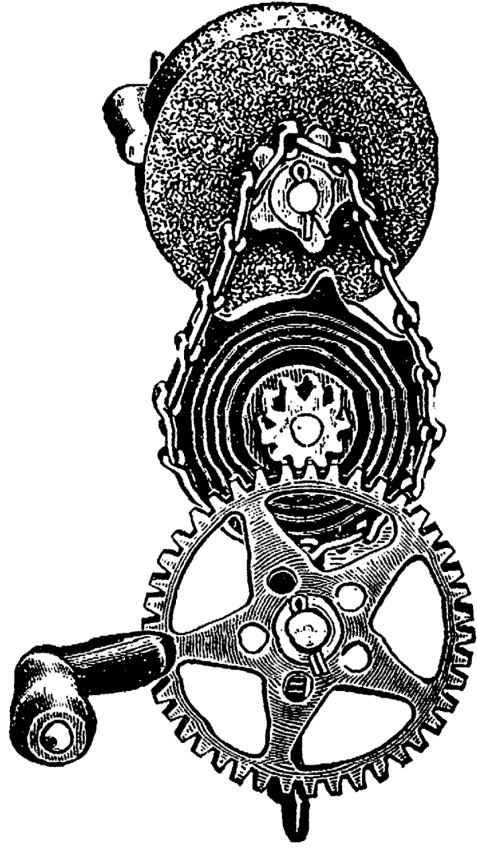
- Develop a systematic approach for data analysis and decision making and stick to it
- Deviate only when justified and communicate why
- **Your stakeholders will learn to rely on your data**

14. Start small and scale up



- Poc/Quick and dirty, whatever to try it out
 - Lean
 - Fail fast
- Iterate
 - Excel → Power BI dashboards for select data → IBM Bluemix for social media → Tailored solution

15. Follow up and improve



- Is your way of working repeatable?
- Is it lean?
- Did you do meaningful changes and improvements?
- **Do you see it in the new data?**

16. Remember to track back



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To the extent possible,
let your users know their
feedback matters and
makes a change.

You'll get more in the
future.



Thank you!
Question time