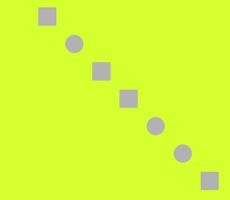
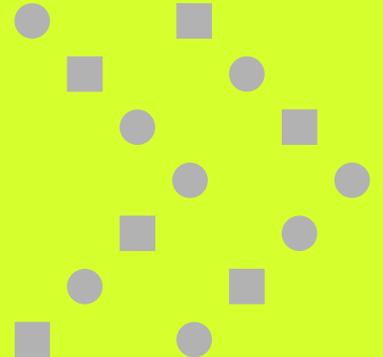


‘Excel’ in Power BI or rather don’t

Michael Schwaenen



memor



Meet Oddie



**Data
Modeling**

DAX



**Data
Visualisation
and Report
Design**

**PBI
Governance**

Understanding the question



Welcome and nice to meet you!



Michael Schwaenen

BI Lead at Nemeon

Michael.Schwaenen@nemeon.io



Today's agenda

1. Understanding the question.
2. Why?
 1. Further calculations and analyses
 2. Unfamiliar with Power BI
 3. Print all the things
3. What about Excel?
4. Wrap-up

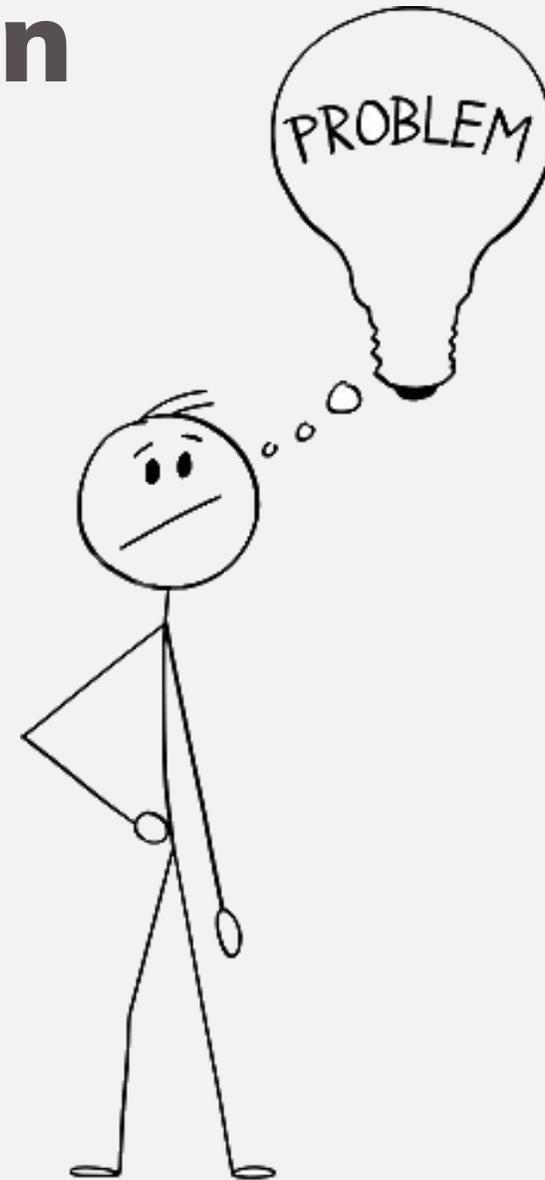
Understanding the question

Understanding the question



Understanding the question

- So, what is the issue with exporting to Excel?
 - Manual Work
 - No One Version of Truth
 - Data is Not Updated
 - A lot of unnecessary work for report development
 - ...
- How do we solve this?



Understanding the question



Understanding the question

- The **why** is the basis for our next steps
- Understanding **why** people take certain actions gives us insight in how we can tackle this.
- In general, we'll see 3 types of behaviour on this question.

Why?

Why?

Performance Statistics

Note: Wait Time and Talk Duration are reported in seconds.

Agent	% Resolved	% Unresolved	% Unanswered	Wait Time	Talk Duration	Customer Sat.
Becky	89,4%	10,6%	18,1%	↓ 65	↓ 220	↓ 3,37
Dan	90,1%	9,9%	17,4%	▬ 67	↑ 231	↑ 3,45
Diane	90,2%	9,8%	20,9%	↓ 66	↓ 219	▬ 3,41
Greg	90,6%	9,4%	19,6%	▬ 68	▬ 227	▬ 3,40
Jim	90,5%	9,5%	19,5%	↓ 66	↑ 228	▬ 3,39
Joe	90,1%	9,9%	18,4%	↑ 71	▬ 224	↓ 3,33
Martha	89,7%	10,3%	19,4%	↑ 69	▬ 224	↑ 3,47
Stewart	88,9%	11,1%	18,0%	↓ 66	▬ 226	▬ 3,40

Why?

Performance Statistics

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- Can we division our talk duration by closing type?
- Can we get the total of Wait Time + Talk Duration?
- Can we do some combination of % Resolved and Customer Satisfaction?

Why?

Further calculations and analyses

Why?

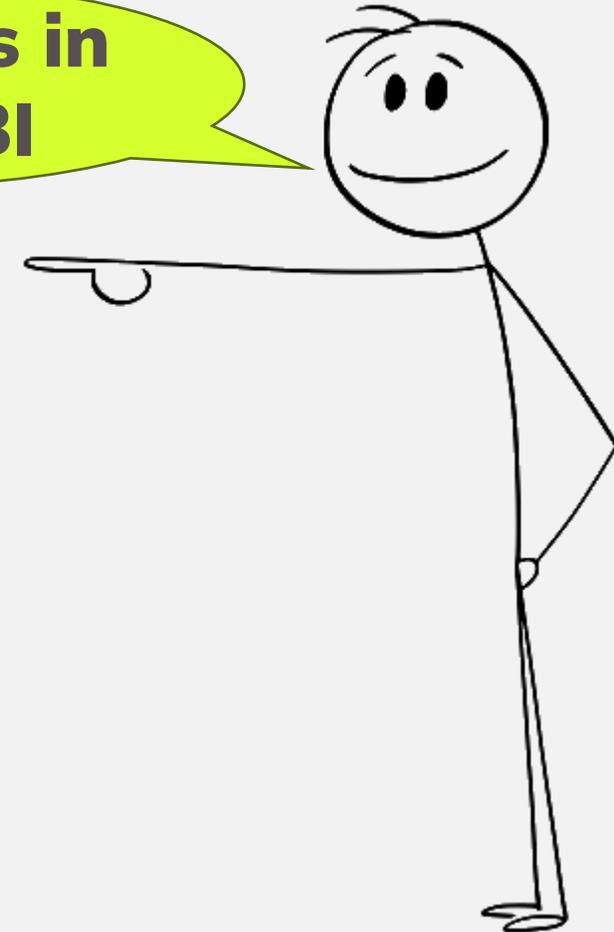
Further calculations and analyses

- What manual steps does he want to undertake?
- Why isn't this available in the report already?
- Take a step back and look at the **requirements gathering**.



Requirement Gathering Lift and Shift

I want this in
Power BI



AutoSave Off Cons. Budget

Search (Alt+Q)

File Home Insert Page Layout Formulas Data Review View Help DataRails

Submit Versions Cell Audit Drill Down Analysis Dashboard Refresh Functions Tables Filters Dynamic Ranges Data Mapper Integration Sync Publish Rollforward Info Filters User

Workflow Analysis Data Tools

K11 =SUM(Cons.IY23:Y24)

Budget Year	2022				Budget	Budget	Budget	Bud
Baseline Forecast V	9+3				Jan-22	Feb-22	Mar-22	Apr
Functional Area	Group	Full Year	Monthly Avg.					
Revenue - Product	Revenue - Sets	52,177,531	4,348,128		3,247,838	3,229,104	3,404,599	3,40
Revenue - Product	Revenue - Infusions	30,066,129	2,505,511		2,253,495	2,205,548	2,325,415	2,32
Revenue - Product	Revenue - Inhalers	100,591,275	8,382,606		6,939,244	7,024,459	7,160,709	7,15
Revenue - Services	Revenue - Services	257,578	21,465		5,292	5,292	5,292	5,29
Total Rev.		183,092,512	15,257,709		12,445,869	12,464,404	12,896,015	12,
COGS Equipment	Salaries & Benefits	3,320,426	276,702		276,702	276,702	276,702	276
COGS Equipment		73,865,466	6,155,456		6,155,101	6,155,268	6,155,268	6,15
COGS Service		837,916	69,826		69,826	69,826	69,826	69,8
Total Cost Of Sales		78,023,808	6,501,984		6,501,630	6,501,797	6,501,797	6,5
GP		105,068,704	8,755,725		5,944,239	5,962,607	6,394,219	6,3
GM %		57%	57%		48%	48%	50%	50%

Cons. Cons. (2) publish

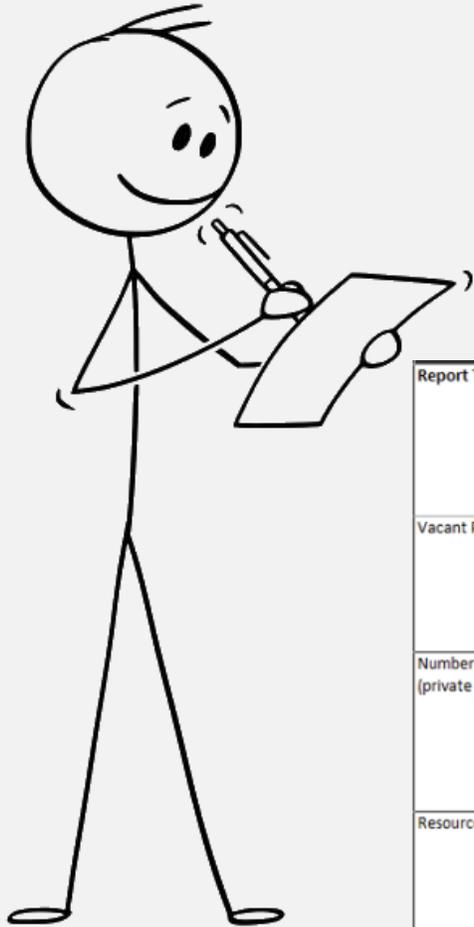
Ready Accessibility: Investigate

136%

Requirement Gathering Lift and Shift

- No attention to **strength** and **weaknesses** of the tool
 - Forcing unnatural behaviour to work like old platform
- **No improvements** were made to the solution
 - Same problems than the original are still present
- Often this leads to even more request for export to Excel down the line.

Requirement Gathering Requirement Docs



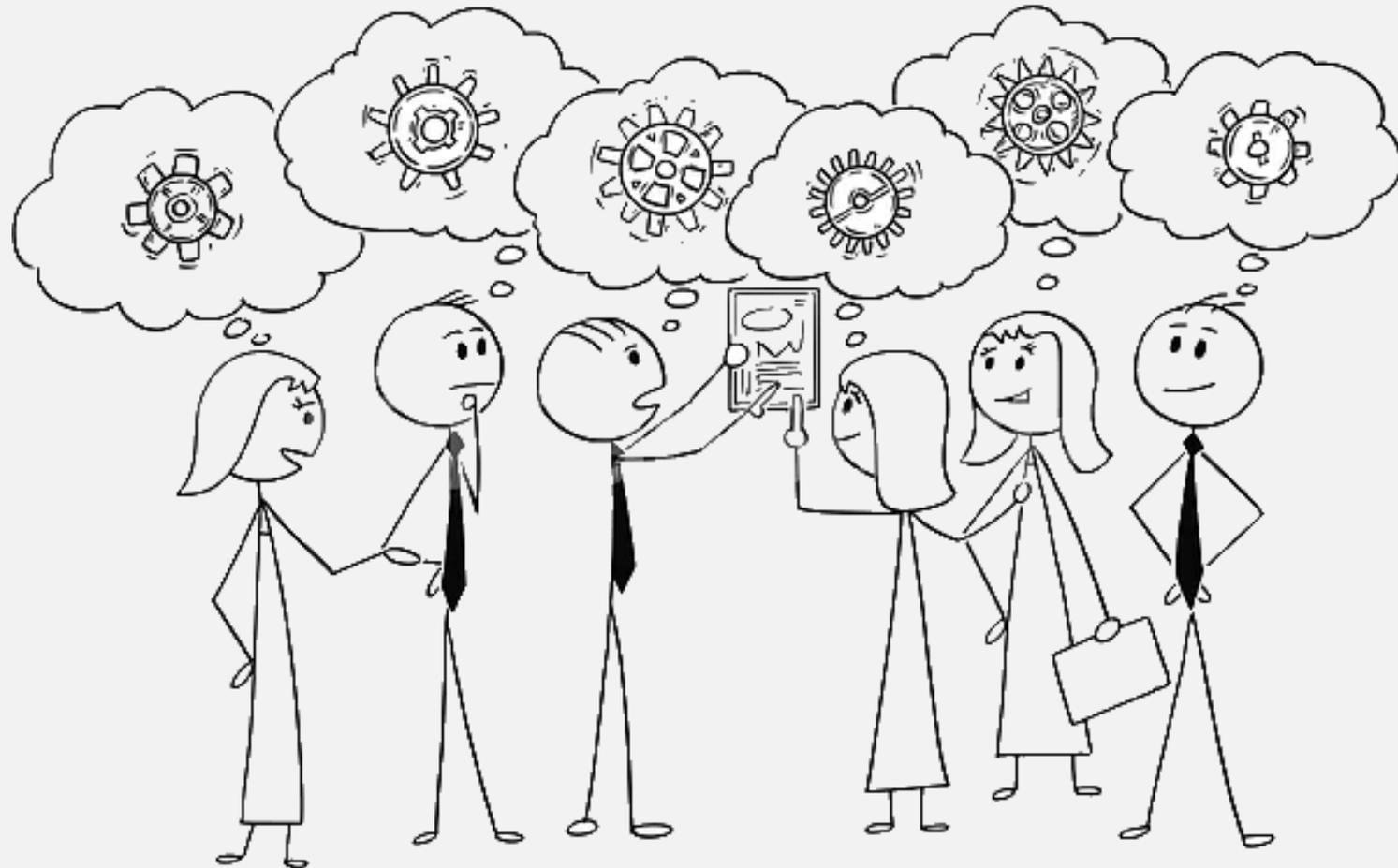
**Can you return
this document
filled in?**

Report Title	What business objective is supported by the report	What is the business activity that triggers the need for the report	HR and Policy Management Question	Required Data	Search criteria	Report Owner	How often is the report usually run; Expected Frequency	When is the report usually run	How is the report generated / distributed	Comments/Notes
Vacant Positions	To efficiently manage staff resources and understand hiring needs	Quarterly and annual planning and budgeting	Assure that groups of procurement are being managed by correct staff	1) Number of positions by cadre 2) Forecasted salary impact 3) Length of time position is open	1) Date Range 2) Type of Position 3) Province/state/district	HR Recruiting	Monthly	Month-end	Manually from system	
Number and type of staff by sector (private versus public)	To understand staff deployment and as input to the annual planning process	Quarterly and annual planning and budgeting		1) Number of positions by cadre, and by Public or Private sector		HR Planning	Monthly	Month-end	Automatically from system overnight and made available on portal	
Resource forecasting	For input to the annual budgeting process	Quarterly and annual planning and budgeting				HR Planning	Quarterly	quarter-end	Manually from system	

Requirement Gathering Requirement Docs

- We don't **talk directly** to the people using the reports.
 - But business users don't always know what's best practice to represent data in Power BI
 - Overcomplicated reports
- People don't really know **what** they need
- You don't know **how** they are going to use the report

Requirement Gathering Co-Creation Workshops



Requirement Gathering Co-Creation Workshops

- Identify your end-user **persona's**
- Hold **interactive** and **collaborative** workshops
- **Iterate** on the reports after a workshop

- What problem/situation are you trying to analyse?
 - Help guide them in the process.

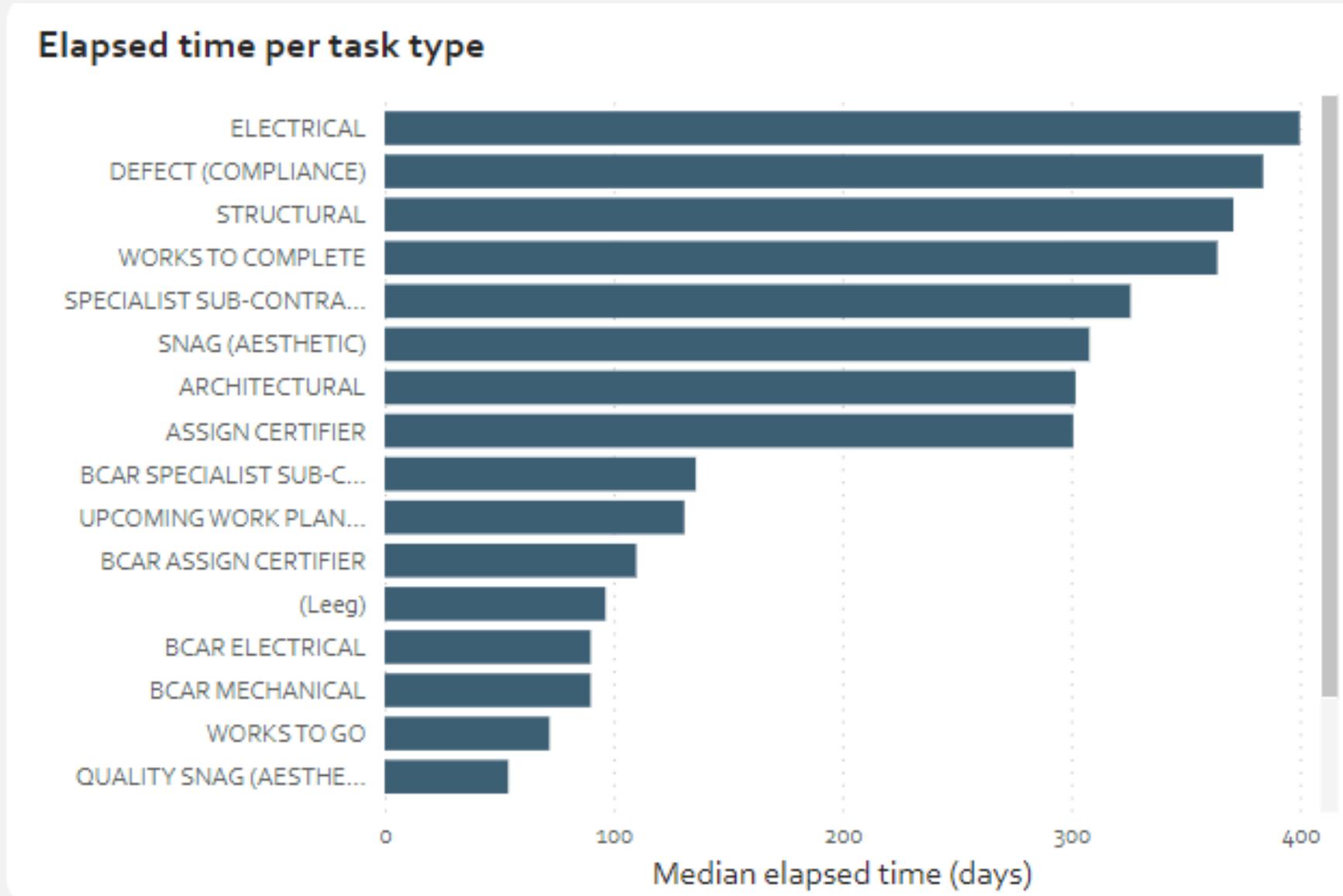
Requirement Gathering

- 3 Main Ways
 - Lift and Shift
 - Requirements Documents
 - Co-Creation Workshop
- Again, try to understand **why, not what**
- And always keep **iterating** and **communicating** with your end users



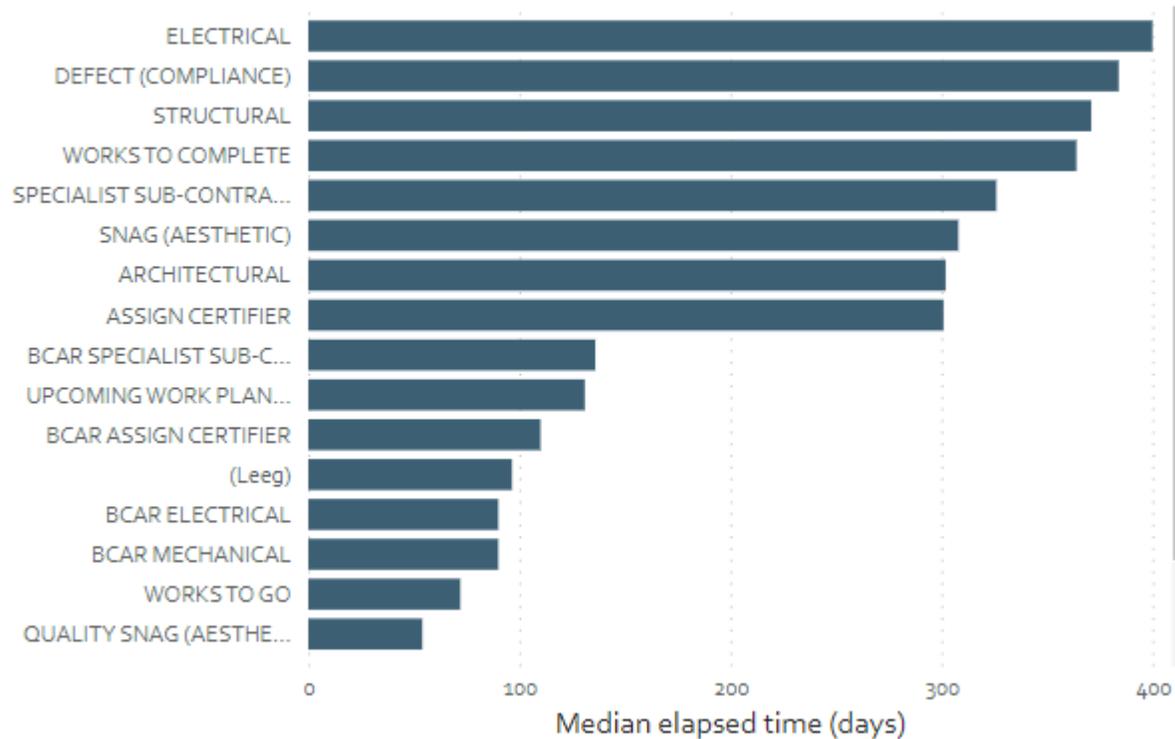
Why?

Why?



Why?

Elapsed time per task type



- Can we use average time instead of median time?
- Can we filter this by project?
- Can we get this in table format?

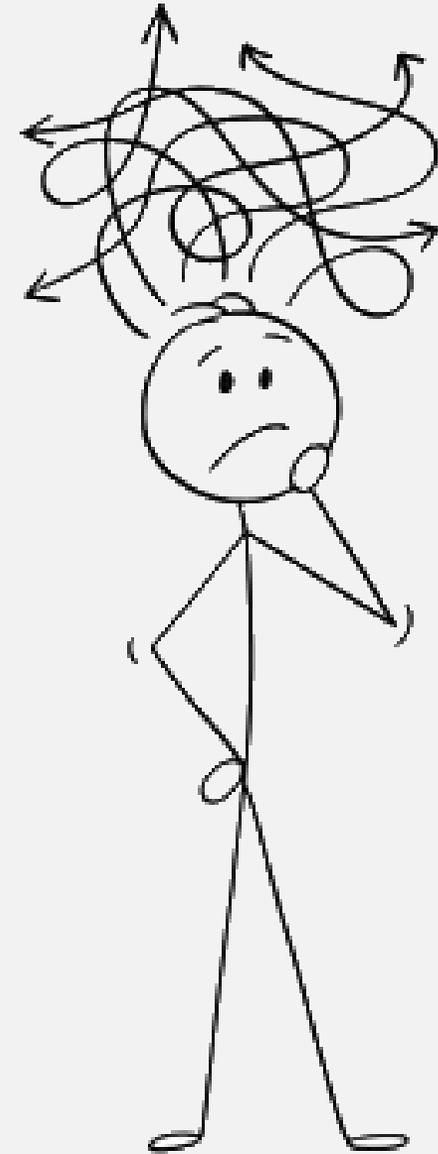
Why?

Unfamiliar with Power BI

Why?

Unfamiliar with Power BI

- How do I apply a filter?
- Why do my charts sometimes interact with each other?
- Take a step back and look at how you **onboard** new users.



Onboarding Documentation

- Documentation is essential



Onboarding Documentation

Warehouse Floor Plan:

- Unit A:** Bailey (1 5), Fuji (1 5), Golden (2 6), Granny Smith (2 6), Lady Apple (3 7), Organic (3 7), Royal Gala (4 8), Starking (4 8)
- Unit B:** Fingerling (1 4), New potatoes (1 4), Purple (2 5), White (2 5), Yellow (3)
- Unit C:** Organic (1 3), Honeyglow (1 3), Rosigold (2), Transit

Apple Capacity Gauge: 63%

Product	Storage	Capacity
Bailey	A - 01	
Golden	A - 02	48%
Lady Apple	A - 03	79%
Royal Gala	A - 04	95%
Fuji	A - 05	59%
Granny Smith	A - 06	38%
Organic apple	A - 07	
Starking	A - 08	48%

Potato Capacity Gauge: 95%

Product	Storage	Capacity
Fingerling	B - 01	55%
Purple	B - 02	92%
Yellow	B - 03	50%
New potatoes	B - 04	95%
White	B - 05	

Mango Capacity Gauge: 56%

Product	Storage	Capacity
Organic mango	C - 01	59%
		24%

Pineapple Capacity Gauge: 26%

Product	Storage	Capacity
Honeyglow	C - 03	26%

Informational Text Boxes:

- Here, you see the floor plan of our warehouse. We have three main units: A, B, and C. A solely stores apples, B only potatoes. Storage unit C houses Mangos and Pineapples.
- Welcome to the help page of BelStora, a company dedicated to storing and distributing fruits and vegetables.
- This area displays the current capacity of our facility, grouped by fruit / vegetable type.
- You can navigate to a more detailed page on the warehouse contents by clicking on "Warehouse - Details"
- The current date is shown as standard. If you want, you can go back in time for the last 14 days.

Page Footer:

BelStora
Storing and distributing Fruits and vegetables

Info Warehouse - Capacity Warehouse - Details Today



Onboarding Documentation

- Documentation is essential

The dashboard displays a warehouse floor plan with three main units: A, B, and C. Unit A stores apples, Unit B stores potatoes, and Unit C stores mangos and pineapples. Capacity charts show the following data:

Product	Storage	Capacity
Apple		63%
Potato		95%
Mango		56%
Pineapple		26%

Additional capacity data for specific products:

Product	Storage	Capacity
Bailey	A-01	48%
Golden	A-02	48%
Lady Apple	A-03	79%
Royal Gala	A-04	79%
Fuji	A-05	59%
Granny Smith	A-06	38%
Organic apple	A-07	48%
Starking	A-08	48%
Fingerling	B-01	55%
Purple	B-02	92%
Yellow	B-03	50%
New potatoes	B-04	95%
White	B-05	95%
Organic mango	C-01	59%
Honeyglow	C-03	26%

Text boxes on the dashboard provide additional information:

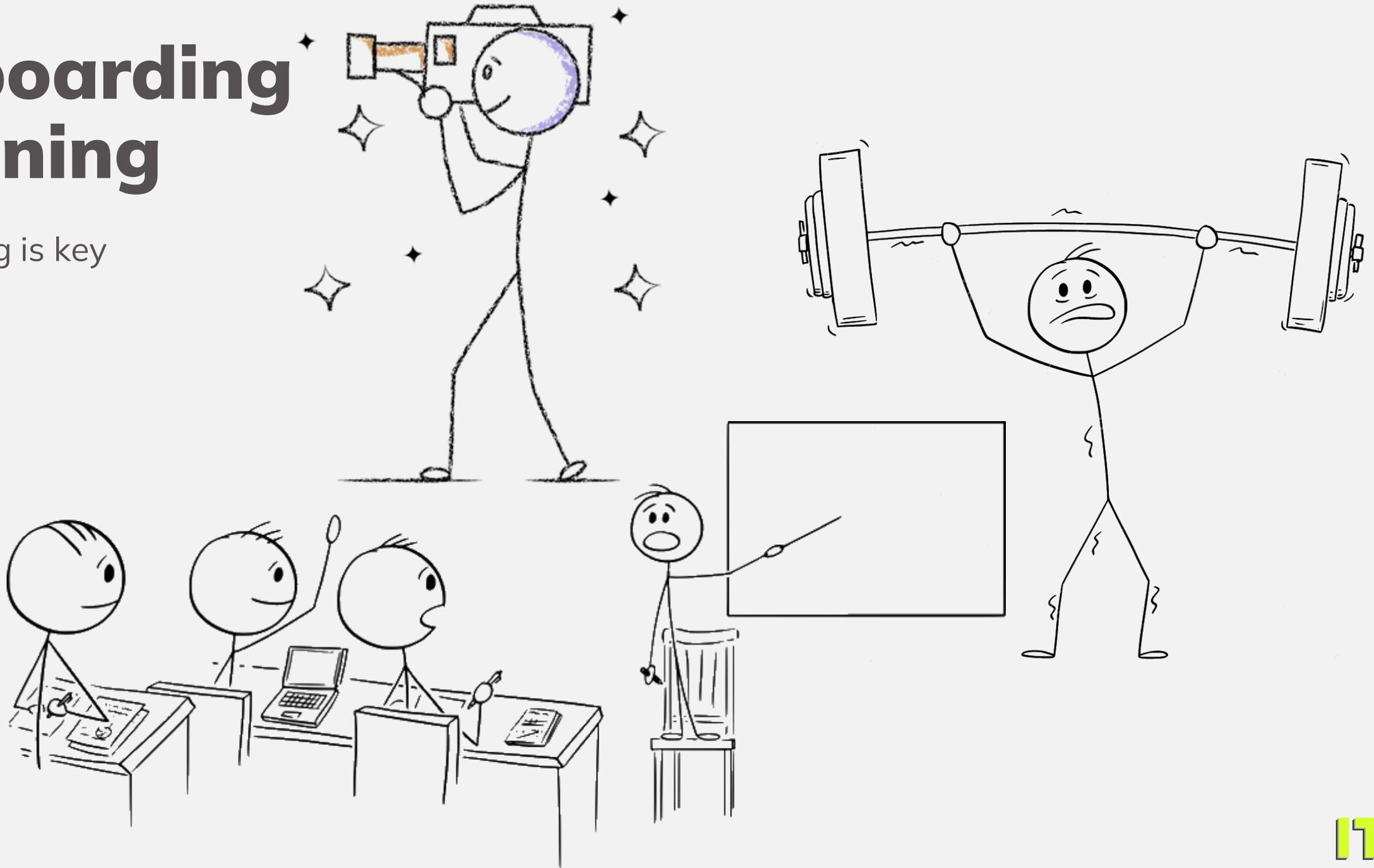
- "Here, you see the floor plan of our warehouse. We have three main units: A, B, and C. A solely stores apples, B only potatoes. Storage unit C houses Mangos and Pineapples."
- "Welcome to the help page of BelStora, a company dedicated to storing and distributing fruits and vegetables."
- "This area displays the current capacity of our facility, grouped by fruit / vegetable type."
- "You can navigate to a more detailed page on the warehouse contents by clicking on 'Warehouse - Details'."
- "The current date is shown as standard. If you want, you can go back in time for the last 14 days."

Navigation buttons at the bottom include: Info, Warehouse - Capacity, Warehouse - Details, Today.



Onboarding Training

- Training is key



Onboarding Centre of Excellence

- Create a Power BI community in your organisation
 - **Share knowledge** and **foster ownership**
 - Identify and promote **super-users**



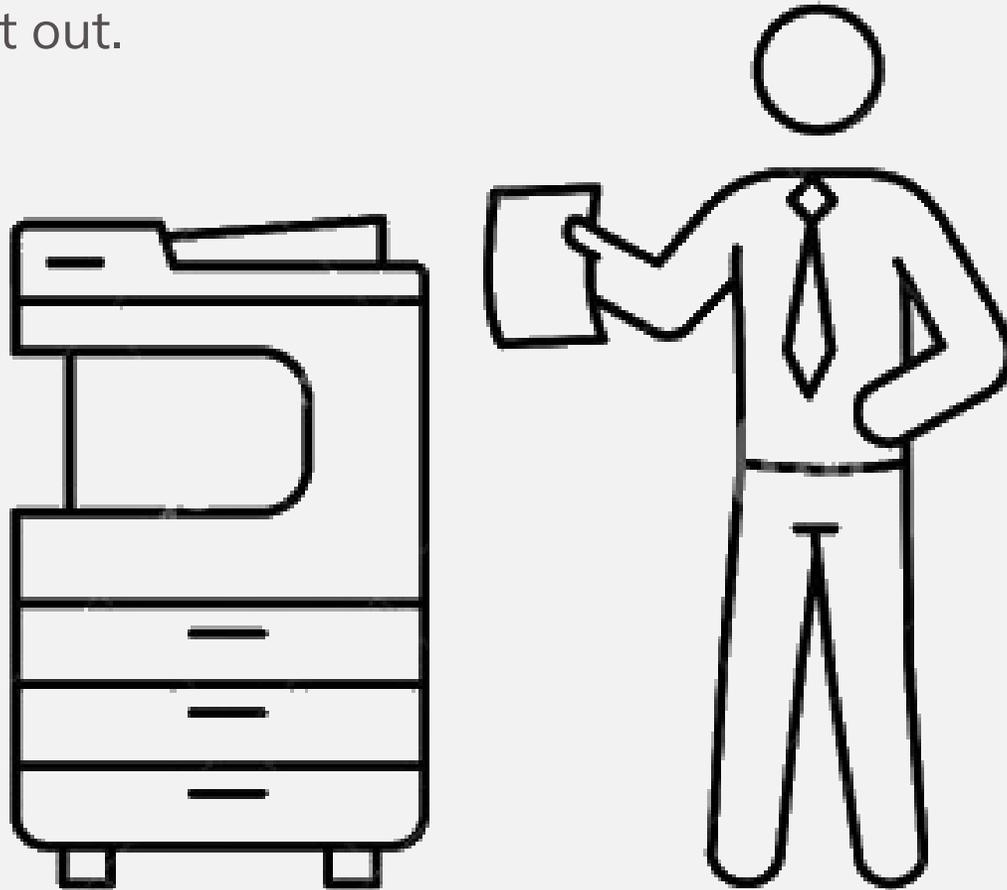
Onboarding

- Create **documentation**
 - Both external and in your reports
- Offer **training** to new users
 - General trainings
 - Short videos
 - Exercises
- Create a **centre of excellence**
 - Foster an internal community
 - Promote super-users

Why?

Why?

- I want an Excel I can print out.



Why?

Print all the things.

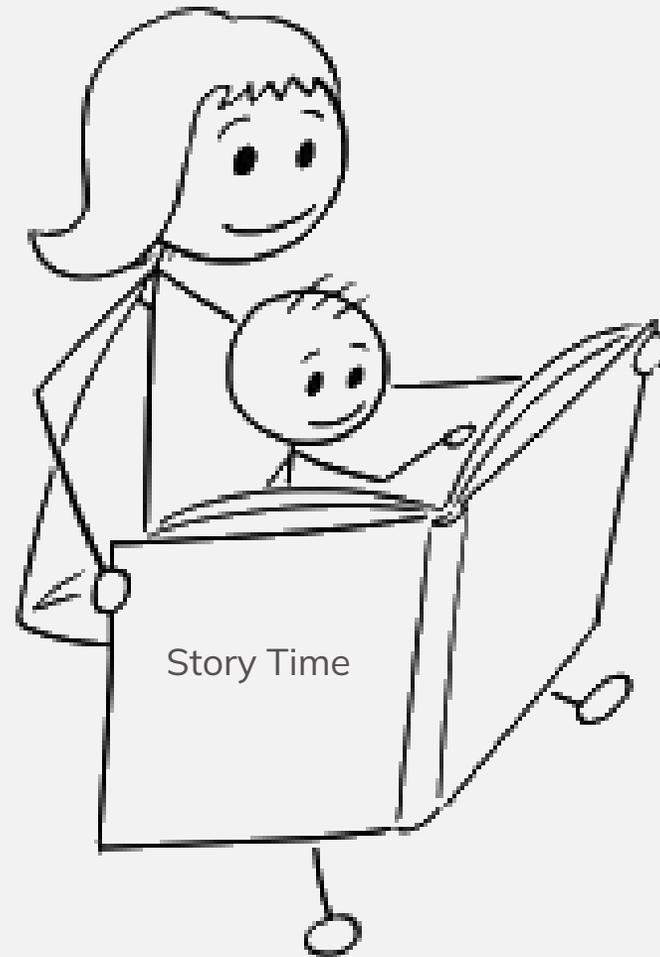
Why?

Print all the things

- Can be a combination of both previous
 - They want to add notes, highlight, ... to printed papers.
 - They don't see the **added value** of Power BI (yet)
- Again, it comes back to their motive.
 - Why do they want to export to excel to print it out? And what are they doing with it?

Why?

Print all the things



Added value of Power BI

- Visuals interact by default.
- Field Parameters, Calculation Groups, Personalizing Visuals, ... all assist in adaptability for your end users.
- Integration with Teams and PowerPoint

- You still want big lists in your mailbox or to print?
 - Paginated Reports to the rescue

What about Excel?

What about Excel?



What about Excel?

- Of course, Excel still has its place.
- But connected to a Power BI Dataset
 - Updated data
 - One version of the truth
 - Calculations are already there
 - Perspectives can help to limit number of tables
- Exports from Paginated Reports
 - Can be useful to supply data to Externals.
 - As a starting point

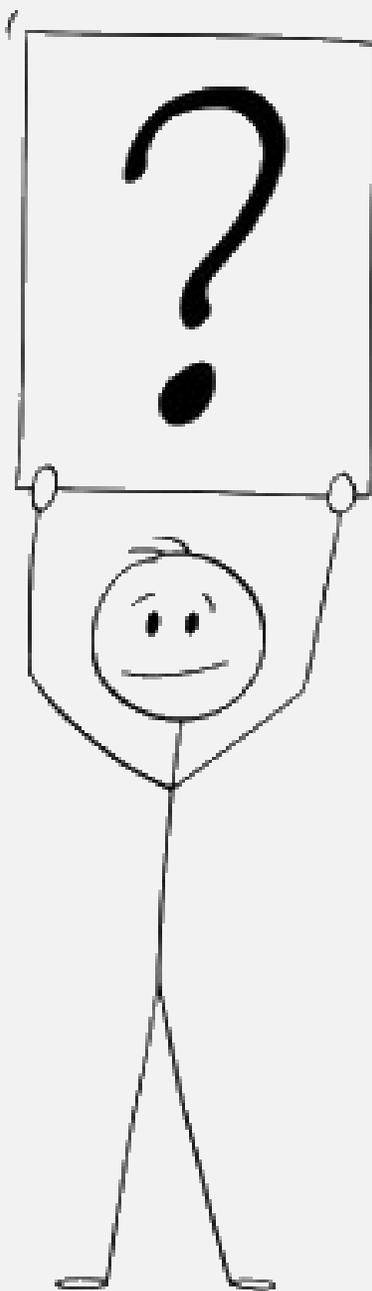
Wrap-up

General Approach

- Identify existing **structures** and **people**
- Organize exhaustive **co-creation workshops**
 - Not only to gather requirements
 - But give some ownership to key persons in the organization
- **Iterate** on these workshops
- **Show** don't tell
 - “Modern” report design 3-30-300
 - Flexibility by using Field Parameters, Calculation Groups, Audiences, RLS, ...
 - Step by Step approach
- Keep **involving the end-users**
- **Excel** on top of the dataset for **on-the-fly analysis**.
 - But include in the app where necessary
- **Paginated** to solve the real export to Excel scenario's

Understanding the question





Questions? Reach out!

Michael Schwaenen – michael.schwaenen@nemeon.io