

From Data to Action

Driving decision-making with Power BI

THANK YOU



Platinum



Gold



Lucient



Measure Killer



Silver



Bronze



From Data to Action

Driving decision-making with Power BI

**SPENT HOURS
BUILDING AN
AWESOME
REPORT**



**NO ONE
USES IT**





Valerie Junk

Data Analytics & Visualization

Data Storytelling

BI Standardization

Process Improvement



**People don't buy products – they
buy solutions to their problems**

Why care?

A real example



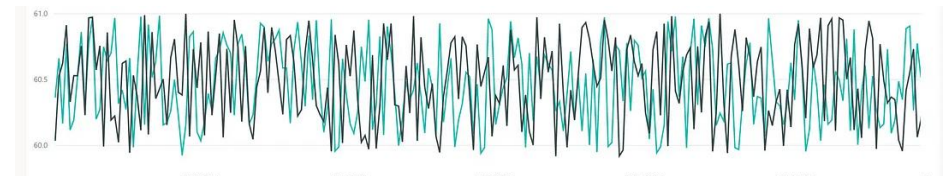
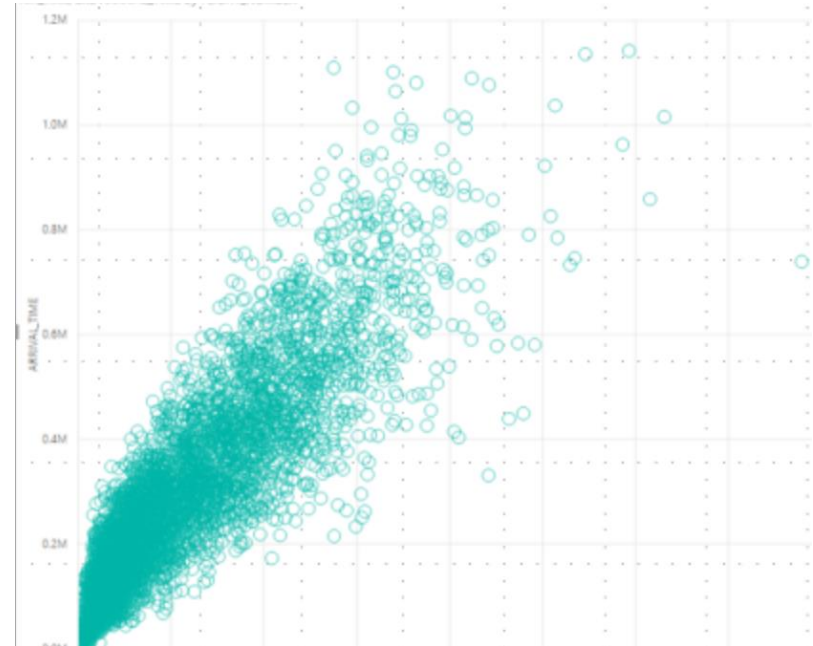
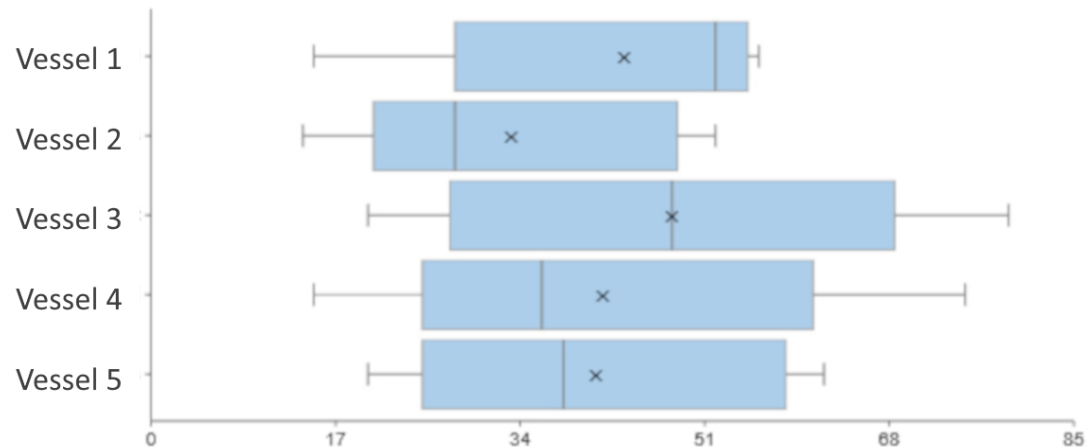
Vessel tracking

- Loading time
- Start time
- Time of arrival
- Unloading

Need: Efficiency report to evaluate and adjust vessel speed

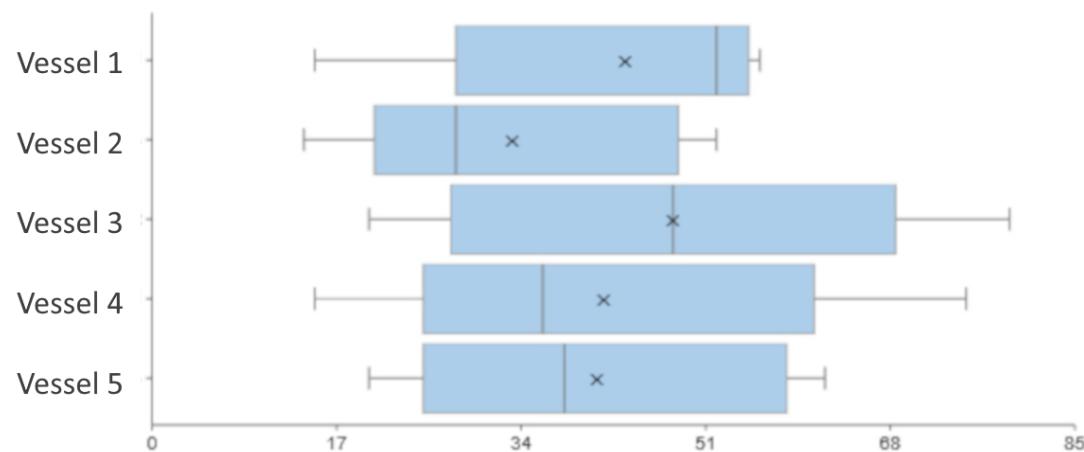
What they got

- 20 page “report”
- 53 visuals
- No KPIs
- Almost no text (description)

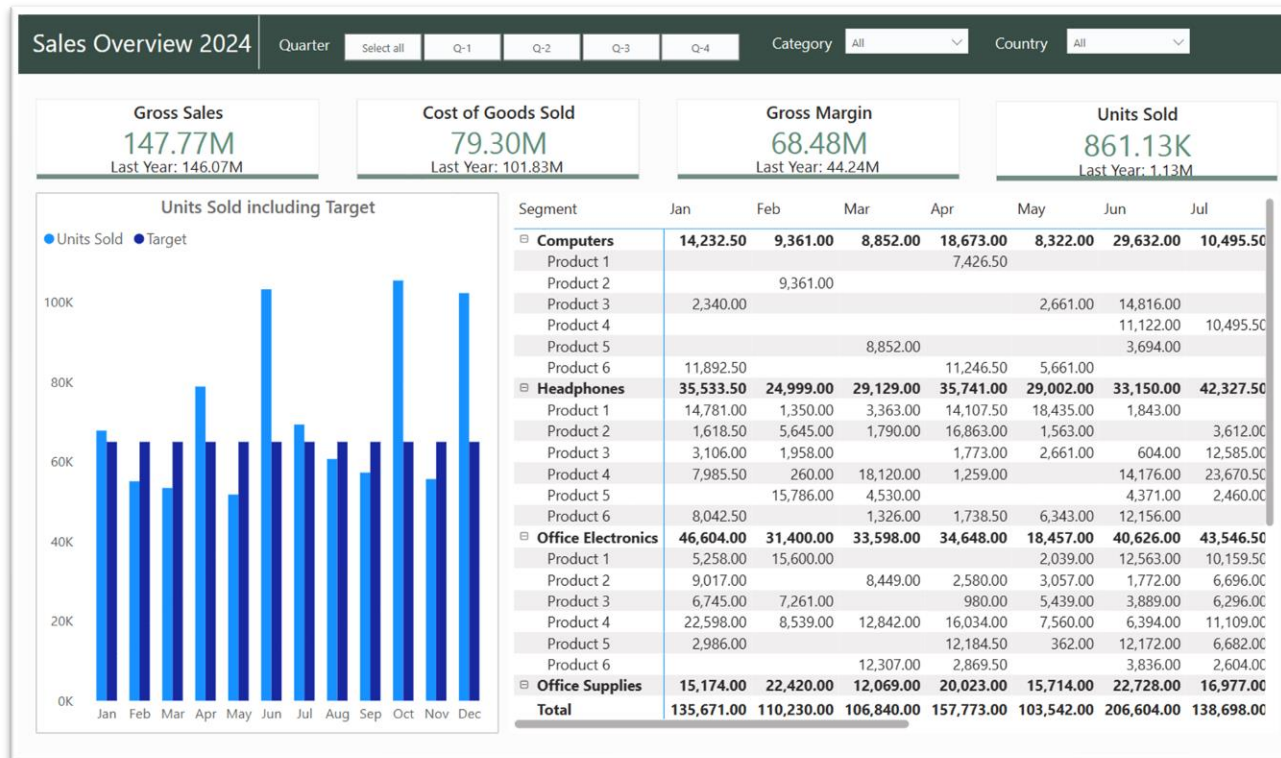


The Audience

Vessel 3 won!

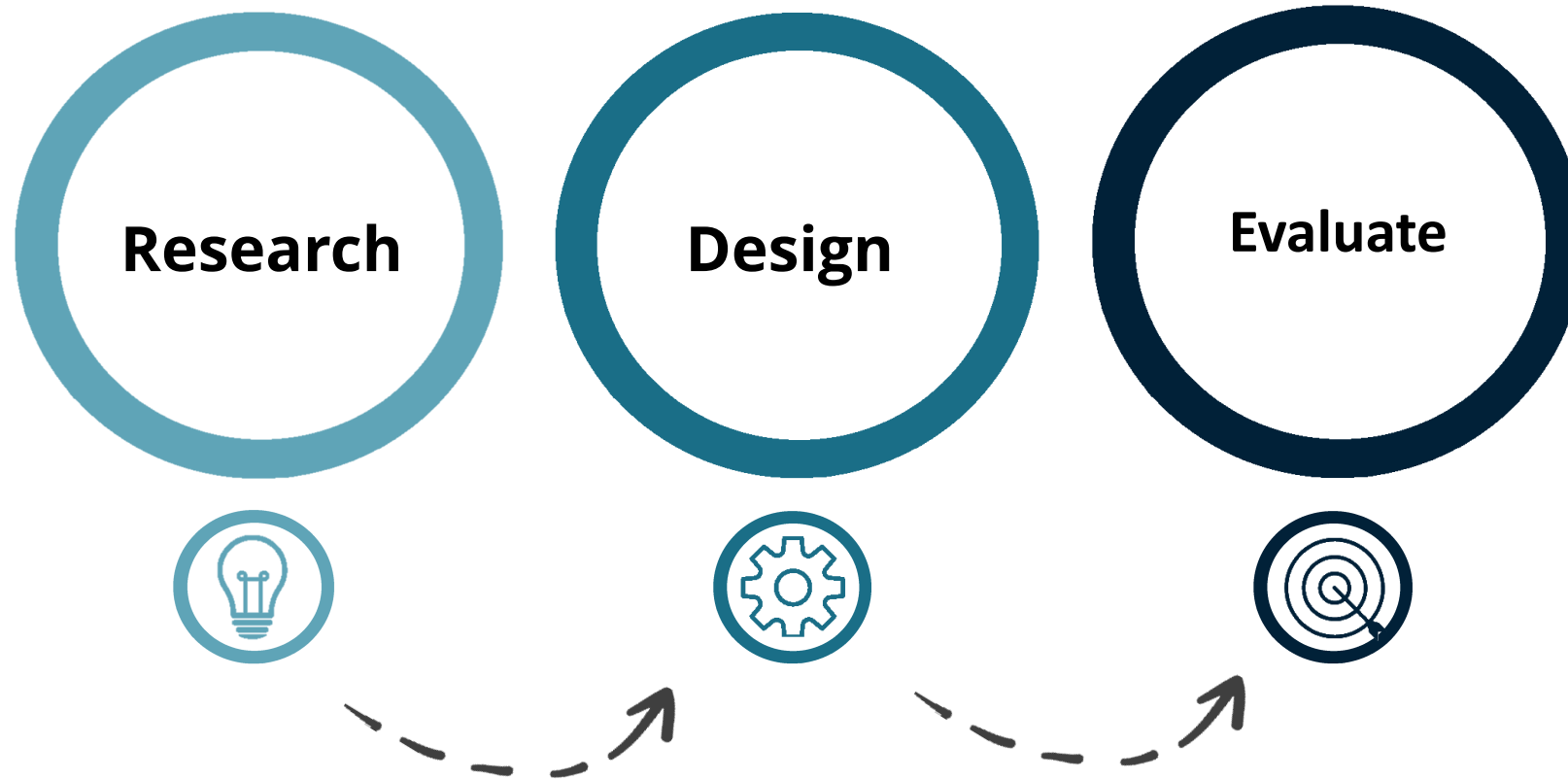


It shouldn't be a treasure hunt



- The answer is in there (somewhere...)
- “Everybody knows this, right?”
- “The user did not tell me what to do!”
- “I do not know how to ask what they want.”

From data to action





Research

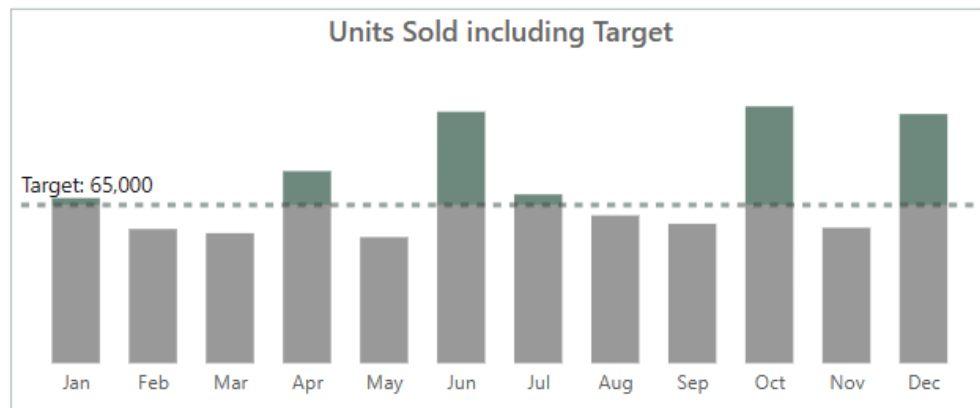
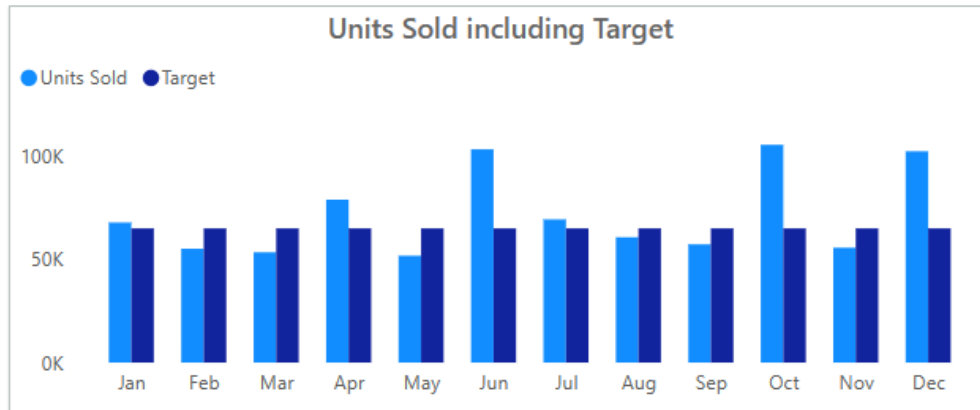
Who, What & Why?

Who is the audience?



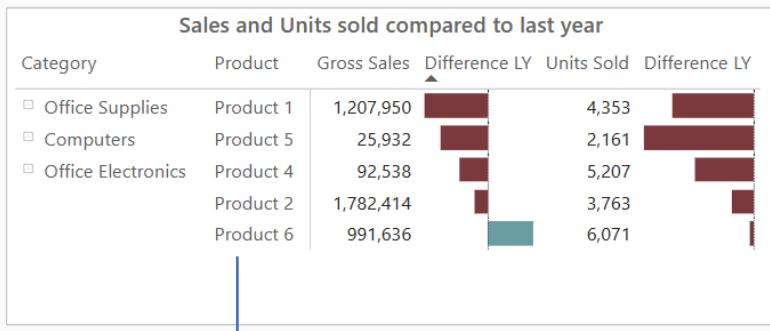
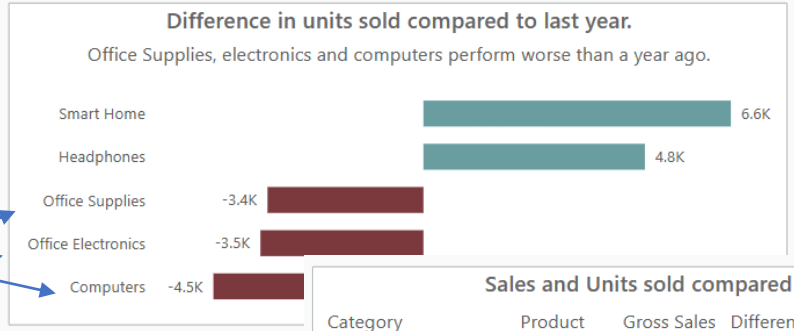
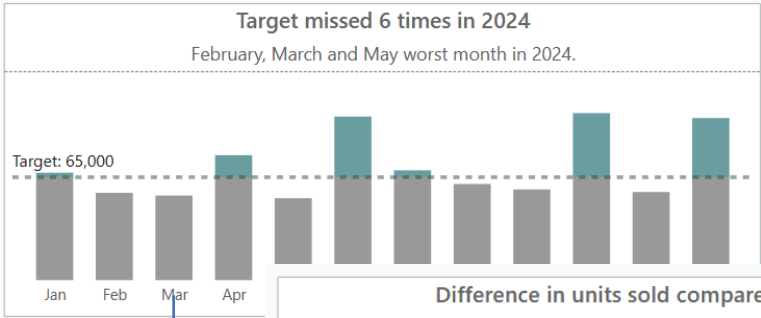
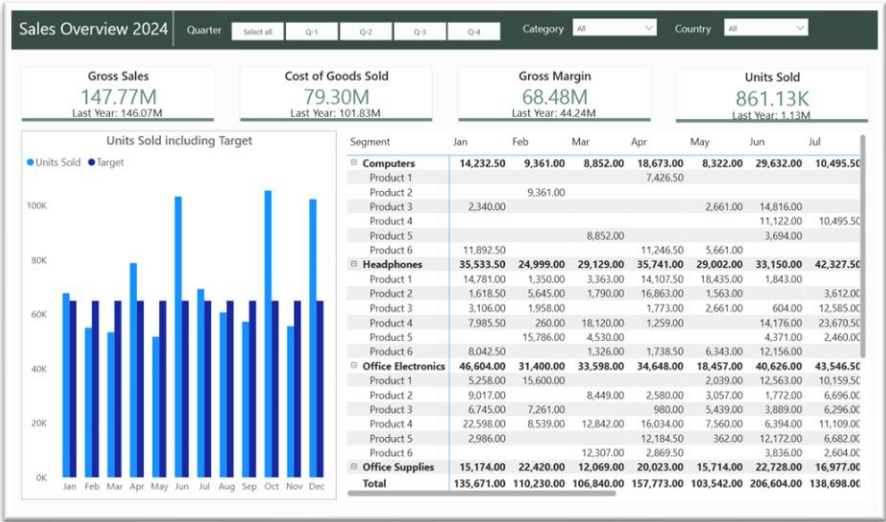
- Who is the audience?
- What is the experience level?
- What information do they need?
- What actions do they want to take?
- What's the process?

Why actions are important



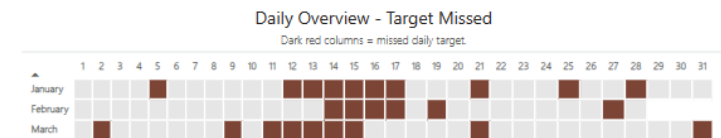
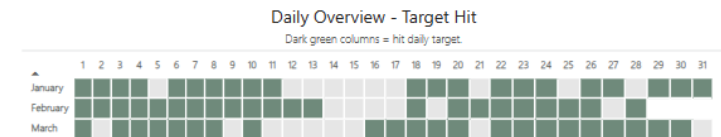
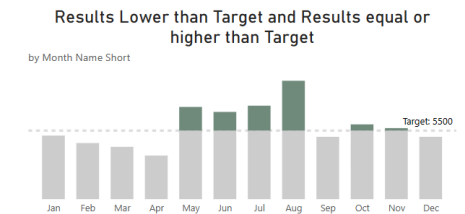
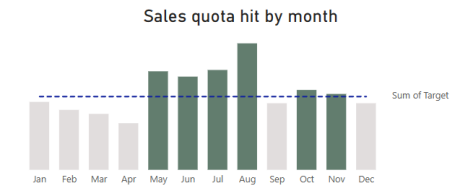
- A visual has no real meaning when the information has no purpose.
- When you know the actions and processes, you can provide context and supporting information.

Actions = add purpose



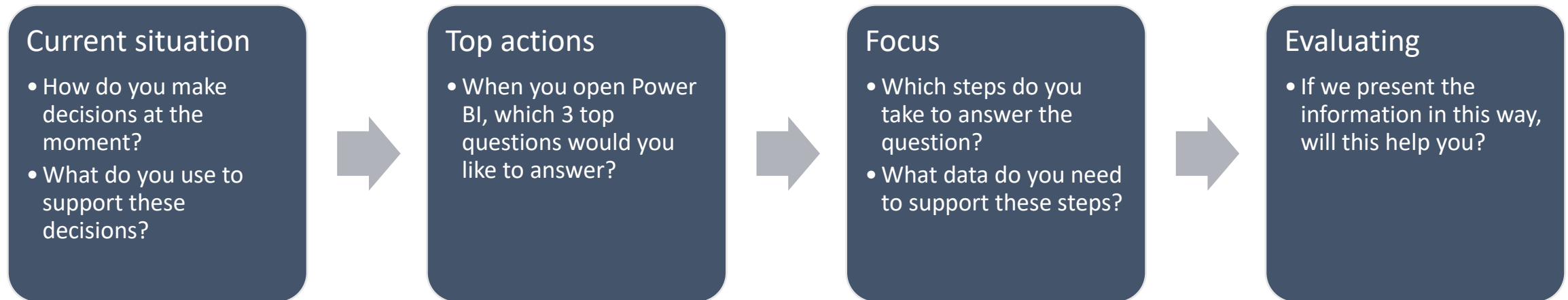
Manufacturer,
Accountmanager,
Logistics....

- Provide examples
- What is the most important information for you to be able to do your work?
- Actions taken currently
 - Based on data
 - Based on feeling
- Wishes



Guiding the audience

- Sometimes, the audience does not know where to start



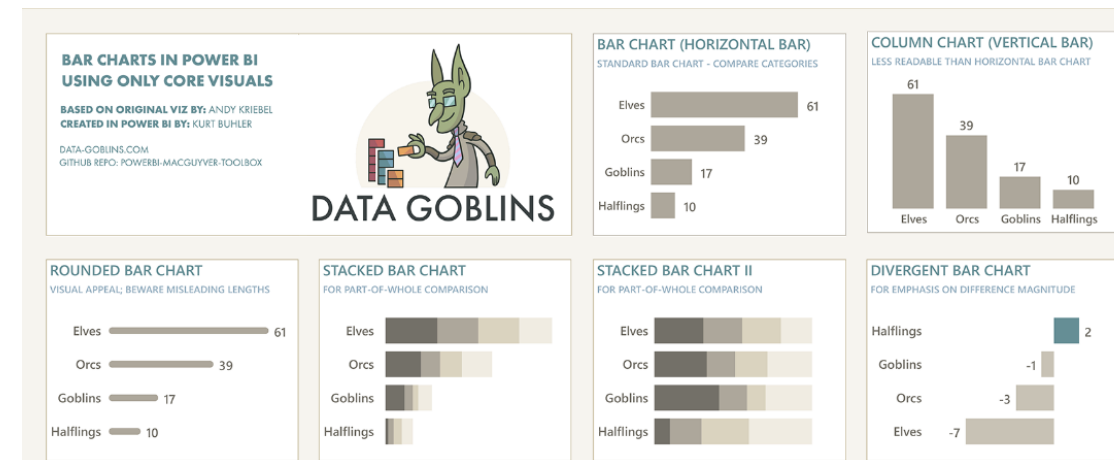
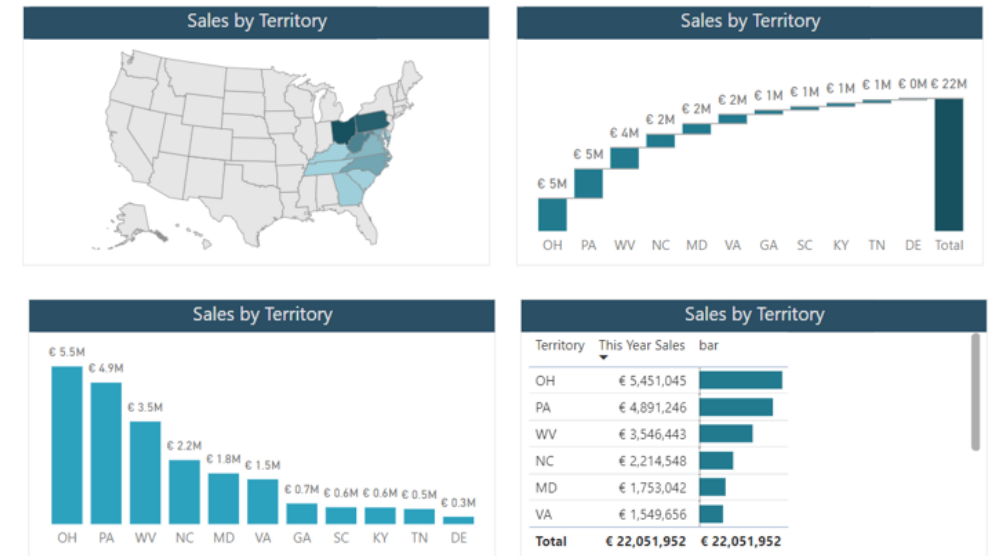


Design

Context, Simplicity & Relevance

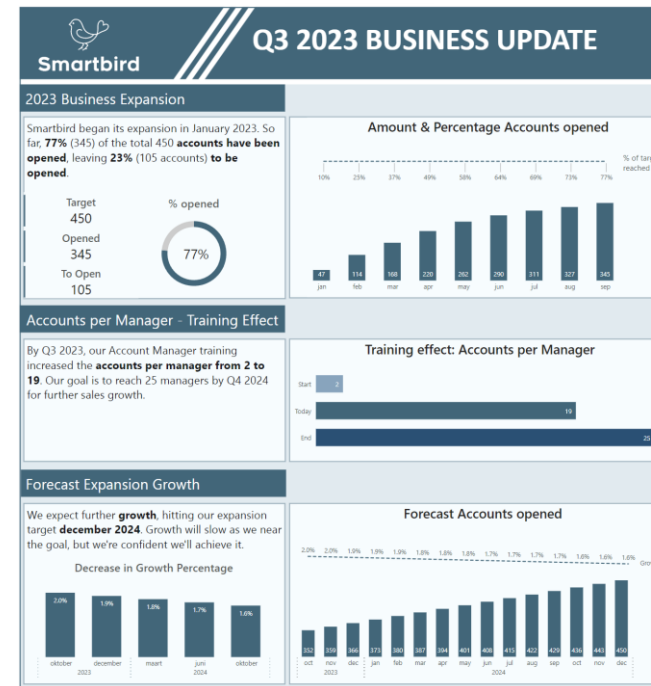
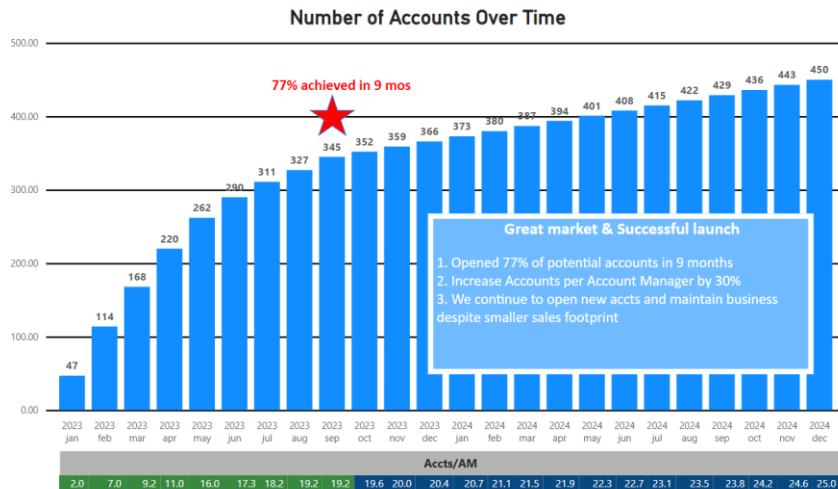
Goal = Visual

- Goal determines design
- Same data can be visualized in different ways
- Choices seem endless
 - Get inspired: <https://data-goblins.com/power-bi/bar-charts>



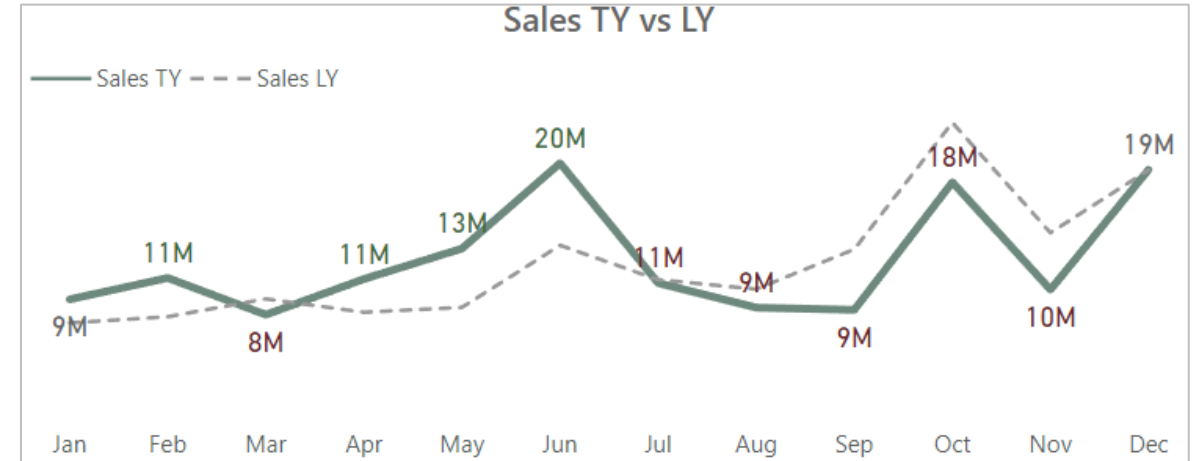
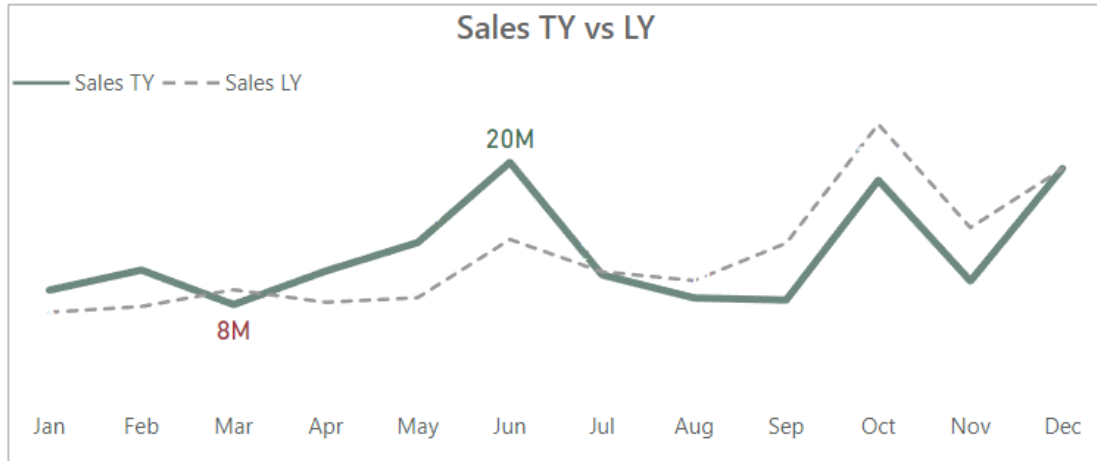
Simple, Relevant & easy to use

- Too complex = Frustration
- Don't overestimate the time the users is willing to spend to find information



Declutter & Enrich

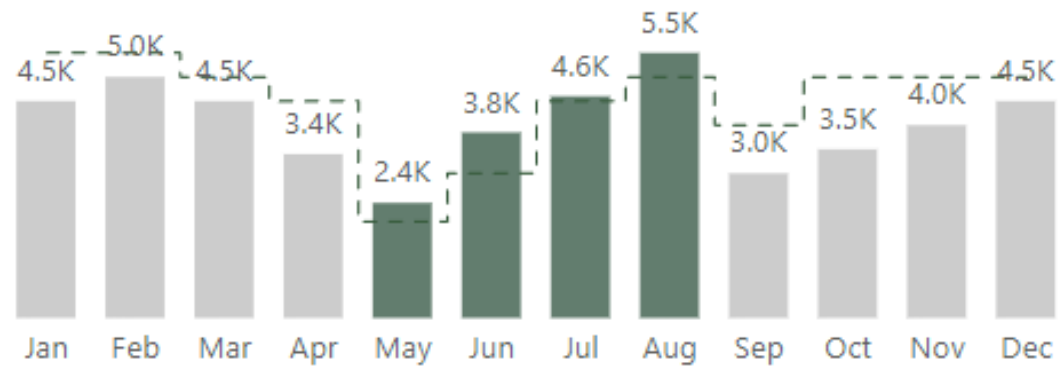
What information & how much guidance is needed?



Add Context

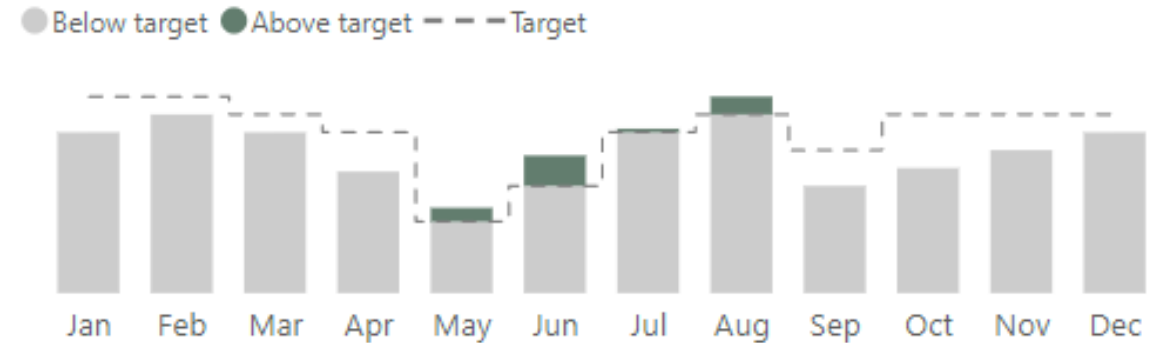
Dynamic title & color coding

Sales quota by month with target

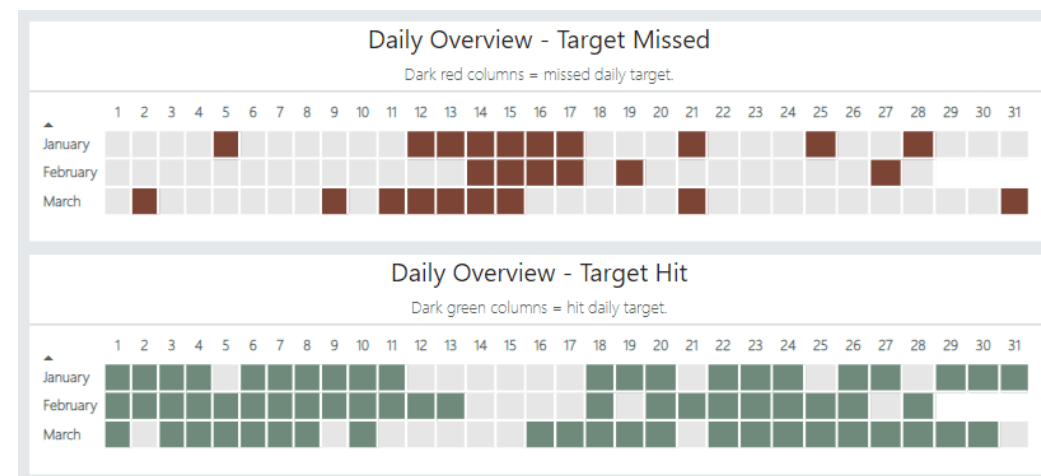


Sales target hit 4 times in 2023

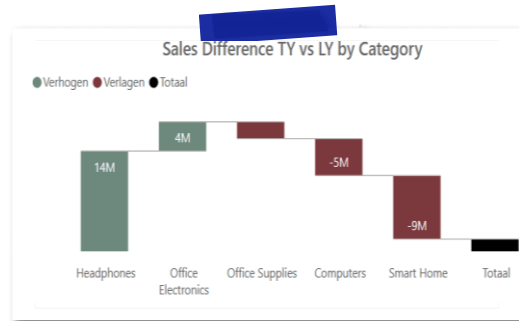
Achieving more than expected in may, june, july and august



If possible - Simplify

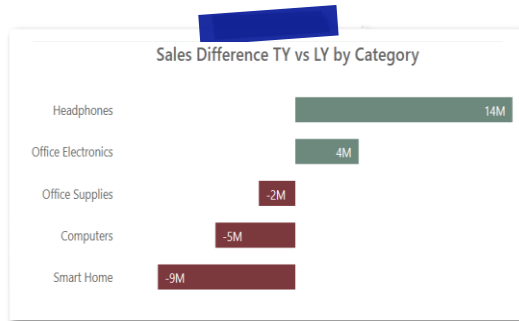
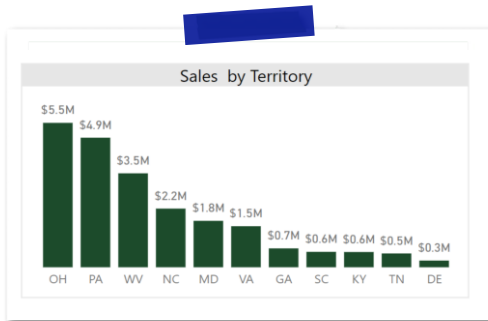
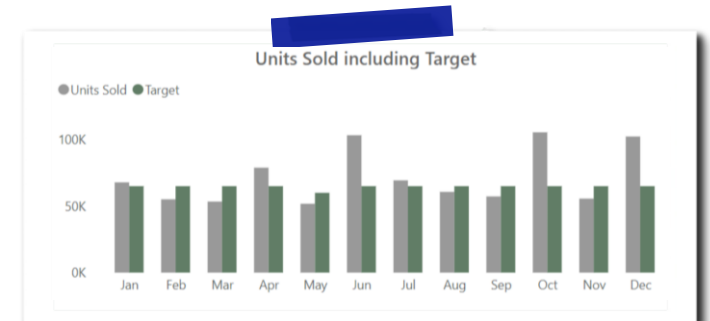


Check every visual



Sales Difference TY vs LY by Product

Category	Product	Gross Sales	Difference LY	Units Sold	Difference LY
Office Electronics	Product 4	15,468,394.40	-583,396.53	88,790.00	-31,303.00
Office Electronics	Product 6	12,043,158.08	1,804,151.16	40,982.50	-15,084.50
Office Electronics	Product 5	10,276,638.44	5,093,043.05	51,090.50	-2,640.50
Headphones	Product 4	9,216,325.30	1,011,620.77	66,659.50	14,232.00
Office Supplies	Product 4	8,592,488.50	2,584,096.88	27,705.00	-5,007.00
Headphones	Product 1	8,318,254.37	3,318,314.67	40,525.50	12,470.50
Headphones	Product 6	7,796,253.92	3,730,122.58	36,423.00	13,603.00
Office Electronics	Product 1	7,302,442.70	-502,078.43	47,291.00	-8,067.50
Total		147,771,511.24	1,702,062.57	861,132.00	-264,674.00



Sales Difference TY vs LY by Product

Category	Product	Gross Sales	Difference LY	Units Sold	Difference LY
Office Electronics	Product 4	15,468,394		88,790	
	Product 6	12,043,158		40,983	
	Product 5	10,276,638		51,091	
Headphones	Product 1	7,302,443		47,291	
	Product 2	7,082,499		30,822	
	Product 3	5,204,885		33,837	
	Product 4	9,216,325		66,660	
	Product 1	8,318,254		40,526	
	Product 6	7,796,254		36,423	



Small improvements – huge effect

Sales Difference TY vs LY by Product				
Category	Gross Sales	Difference LY	Units Sold	Difference LY
☐ Office Electronics				
Product 4	€ 15,468,394	-583,396.53	88,790	-31,303.00
Product 6	€ 12,043,158	1,804,151.16	40,983	-15,084.50
Product 5	€ 10,276,638	5,093,043.05	51,091	-2,640.50
Product 1	€ 7,302,443	-502,078.43	47,291	-8,067.50
Product 2	€ 7,082,499	-313,509.85	30,822	-10,722.00
Product 3	€ 5,204,885	-1,438,575.67	33,837	-16,389.00
☐ Headphones				

Sales Difference TY vs LY by Product				
Category	Gross Sales	Difference LY	Difference Units	
☐ Office Electronics				
Product 4	€ 15,468,394	-€ 583,396.53 ▼	-31,303.00 ▼	▼
Product 6	€ 12,043,158	€ 1,804,151.16 ▲	-15,084.50 ▼	▼
Product 5	€ 10,276,638	€ 5,093,043.05 ▲	-2,640.50 ▼	▼
Product 1	€ 7,302,443	-€ 502,078.43 ▼	-8,067.50 ▼	▼
Product 2	€ 7,082,499	-€ 313,509.85 ▼	-10,722.00 ▼	▼
Product 3	€ 5,204,885	-€ 1,438,575.67 ▼	-16,389.00 ▼	▼
☐ Headphones				

Sales Difference TY vs LY by Product				
Category	Gross Sales	Difference LY	Units Sold	Difference LY
☐ Office Electronics				
Product 4	€ 15,468,394	<div></div>	88,790	<div></div>
Product 6	€ 12,043,158	<div></div>	40,983	<div></div>
Product 5	€ 10,276,638	<div></div>	51,091	<div></div>
Product 1	€ 7,302,443	<div></div>	47,291	<div></div>
Product 2	€ 7,082,499	<div></div>	30,822	<div></div>
Product 3	€ 5,204,885	<div></div>	33,837	<div></div>
☐ Headphones				

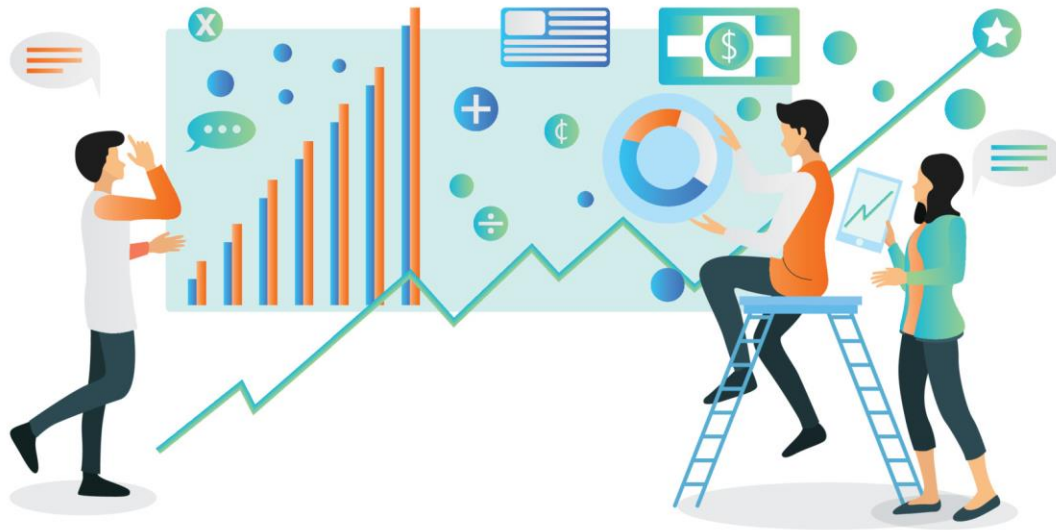
Sales Difference TY vs LY by Product				
Category	Gross Sales	Difference LY	Units Sold	Difference LY
☐ Office Electronics				
Product 4	€ 15,468,394	-583,396.53	88,790	-31,303.00 ☆
Product 6	€ 12,043,158	1,804,151.16	40,983	-15,084.50
Product 5	€ 10,276,638	5,093,043.05 ★	51,091	-2,640.50
Product 1	€ 7,302,443	-502,078.43	47,291	-8,067.50
Product 2	€ 7,082,499	-313,509.85 ☆	30,822	-10,722.00
Product 3	€ 5,204,885	-1,438,575.67	33,837	-16,389.00
☐ Headphones				



Evaluate

Evaluate & Test

Evaluate






- Continuous process
- Evaluate with audience
- Reflect & Feedback

Continuous process

- Don't evaluate just at the end.
- Get your audience involved as soon as possible.
- Test different versions of visuals.
- ~~Test~~ Don't make assumptions.
- Guide your audience through the process.

No Conditional Formatting			
Category	Product	Gross Sales	Difference LY
Office Electronics	Product 4	15,468,394	-583,396.53
	Product 6	12,043,158	1,804,151.16
	Product 5	10,276,638	5,093,043.05

No Conditional Formatting			
Category	Product	Gross Sales	Difference LY
Office Electronics	Product 4	15,468,394	▼
	Product 6	12,043,158	▲
	Product 5	10,276,638	▲

Conditional Formatting: Bar Charts			
Category	Product	Gross Sales	Difference LY
Office Electronics	Product 4	15,468,394	
	Product 6	12,043,158	
	Product 5	10,276,638	

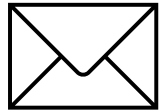
Gather feedback

- It's scary!
- It's not about you; it's about the usefulness of the report for the specific audience
- Only way to improve

Takeaway

- Get to know your audience.
- Understand the processes.
- What is the real question?
- No one size fits all!
- Evaluate continuously!

Contact



info@porcubi.nl



<https://www.linkedin.com/in/valeriejunk/>



@porcubi

Evaluations, evaluations...



https://evals.datagrillen.com/evals_vienna.aspx