



envision
VIRTUAL SUMMIT SERIES
DATA & ANALYTICS

How to Fix an Inherited Report

Presented by Kristyna Hughes

Wednesday, September 13, 2023

PRESENTED BY 3Cloud

About Me ~ Kristyna Hughes

Senior data & analytics consultant at 3Cloud, PASS MN Board Member, Lexington Data Technology Group co-organizer, co-author on DataOnWheels, co-founder of Data On Rails

My experience includes implementing and managing enterprise-level Power BI instances, training teams on reporting best practices, learning new coding languages to hack into Power BI, and building templates for scalable analytics.

- Check out my blog:
<https://dataonwheels.wordpress.com/>
- Check out my blog platform:
<https://dataonrailsblog.wordpress.com/>
- Connect on LinkedIn:
<https://www.linkedin.com/in/kristyna-hughes-dataonwheels/>
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GitHub



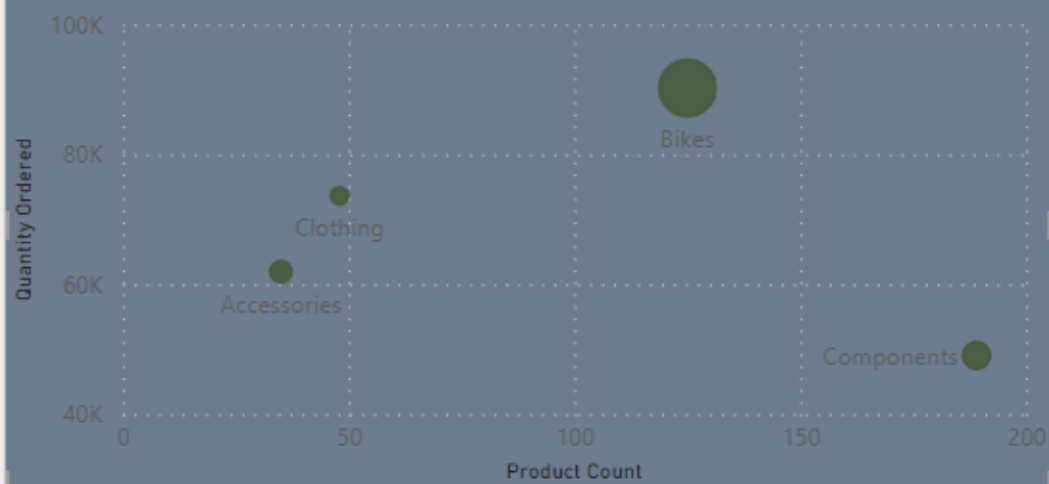
The Big Break



Ope



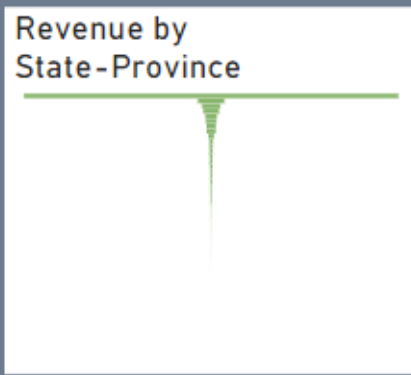
Product Count, Quantity Ordered and Average Profit by Category



Subcategory Model Product	Product Count	Quantity Ordered	Average Profit
⊕ Road Frames	70	11,747	
⊕ Road Bikes	65	47,148	
⊕ Mountain Frames	40	11,620	
⊕ Mountain Bikes	38	28,321	
⊕ Touring Bikes	22	14,751	
⊕ Touring Frames	18	3,725	
⊕ Jerseys	16	22,711	
⊕ Handlebars	14	3,950	
⊕ Wheels	14	5,263	
⊕ Tires and Tubes	11	18,006	
⊕ Gloves	9	12,983	
⊕ Helmets	9	19,541	
⊕ Saddles	9	2,145	
⊕ Pedals	7	3,931	
⊕ Shorts	7	9,965	
⊕ Socks	4	5,217	
⊕ Bib-Shorts	3	3,111	
⊕ Bottles and Cages	3	10,552	
⊕ Bottom Brackets	3	921	
Total	397	274,776	

Terrible Report

397
Product Count



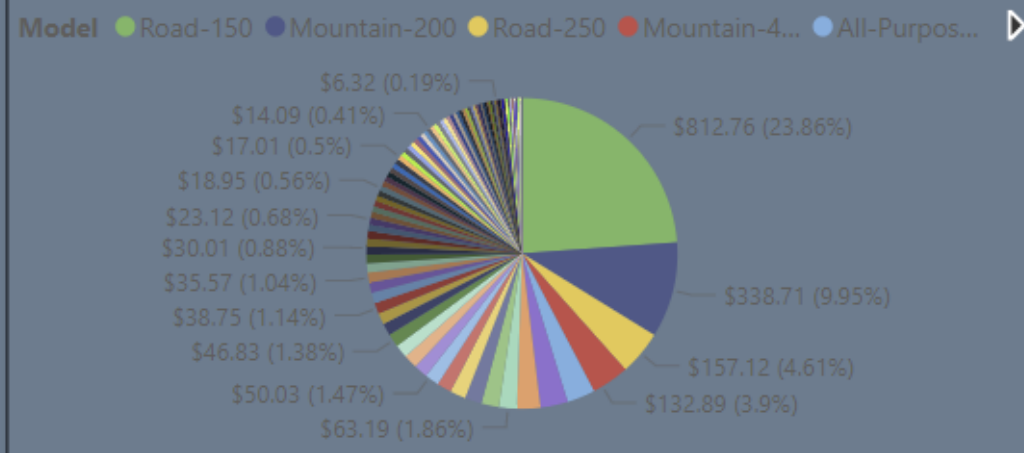
275K

Quantity Ordered

(Blank)	FY2019	FY2021
FY2018	FY2020	



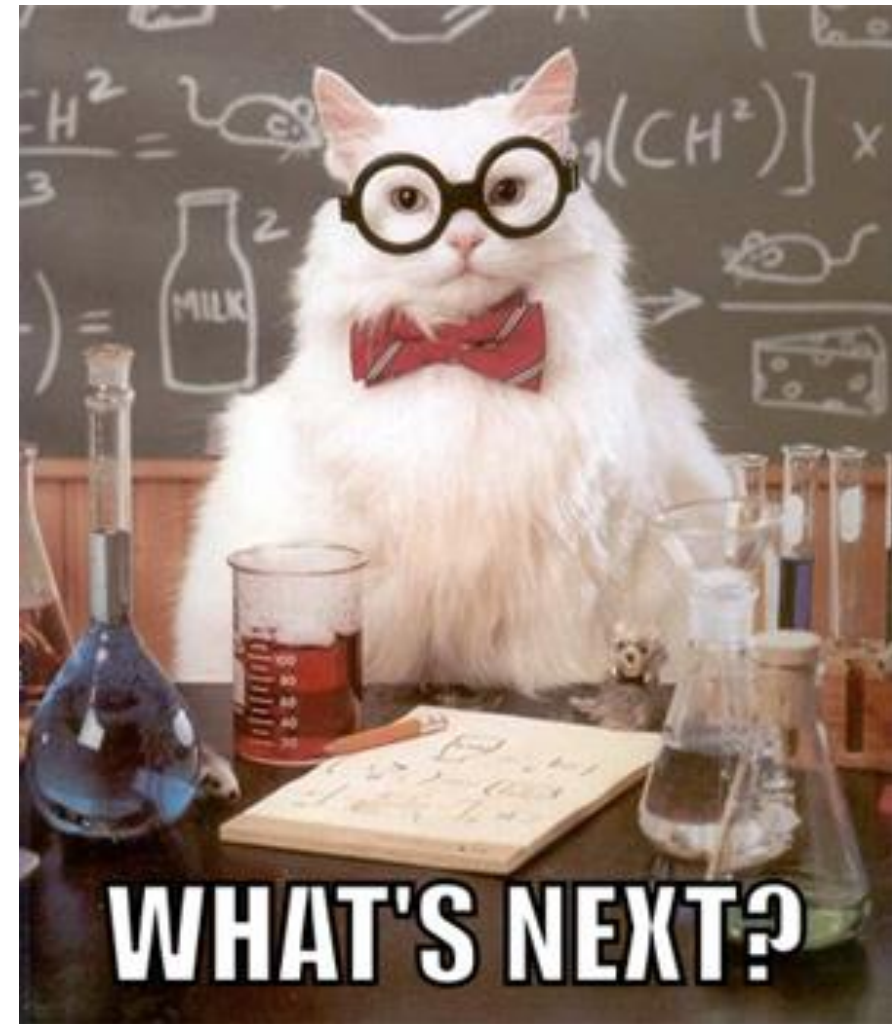
Average Profit by Model



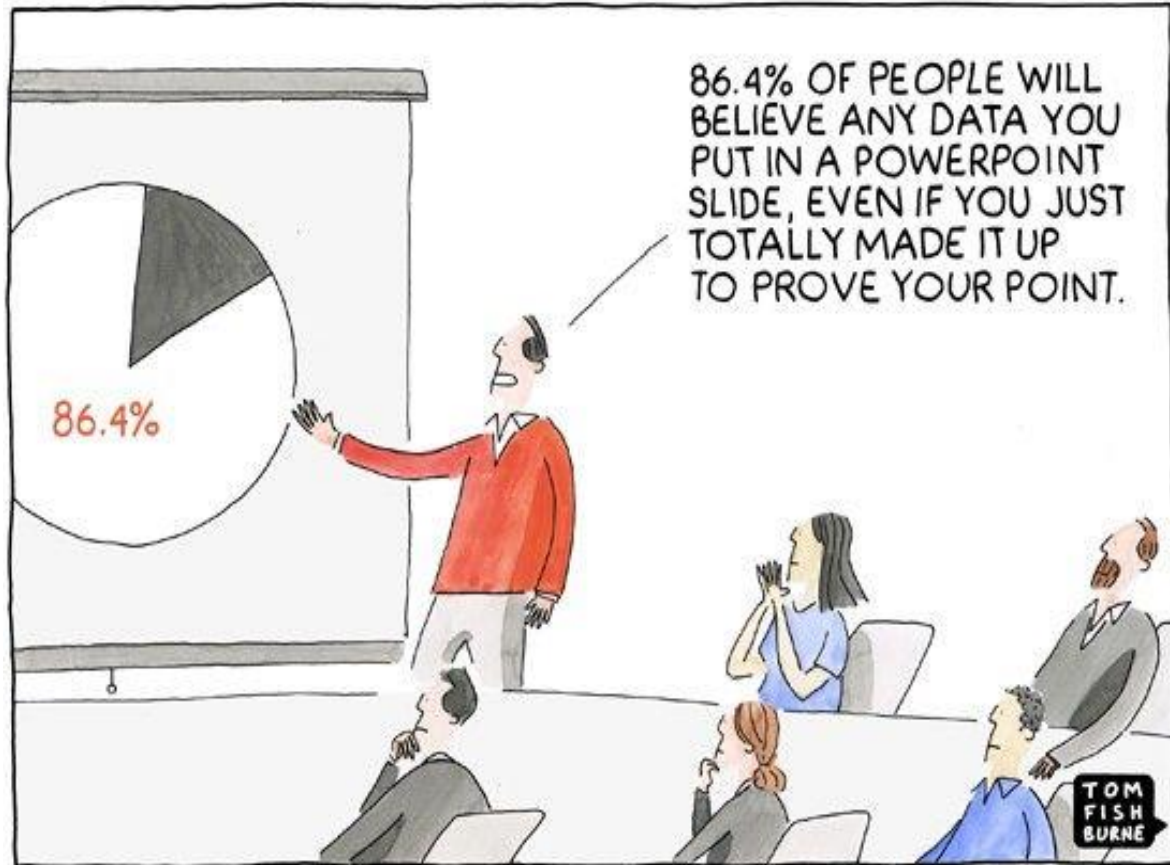
Model	Product	Product Count	Cost
All-Purpose Bike Stand	All-Purpose Bike Stand	1	\$14,807.03
Bike Wash	Bike Wash - Dissolver	1	\$9,868.38
Cable Lock	Cable Lock	1	\$11,199.38
Chain	Chain	1	\$6,955.63
Classic Vest	Classic Vest, L	1	\$4,916.04
Classic Vest	Classic Vest, M	1	\$54,242.72
Classic Vest	Classic Vest, S	1	\$100,862.00
Cycling Cap	AWC Logo Cap	3	\$52,432.64
Fender Set - Mountain	Fender Set - Mountain	1	\$17,435.68
Front Brakes	Front Brakes	1	\$37,308.65
Total		397	\$97,257,907.95

Next Steps

1. Save a copy of the report before changing anything.
2. Meet with stakeholders to understand what's working, and more importantly what's no working. Key is to build trust.
3. Break down the issues into manageable tasks.
4. Define "done" with stakeholders to avoid a development spiral.
5. Remember – there are things you cannot fix.



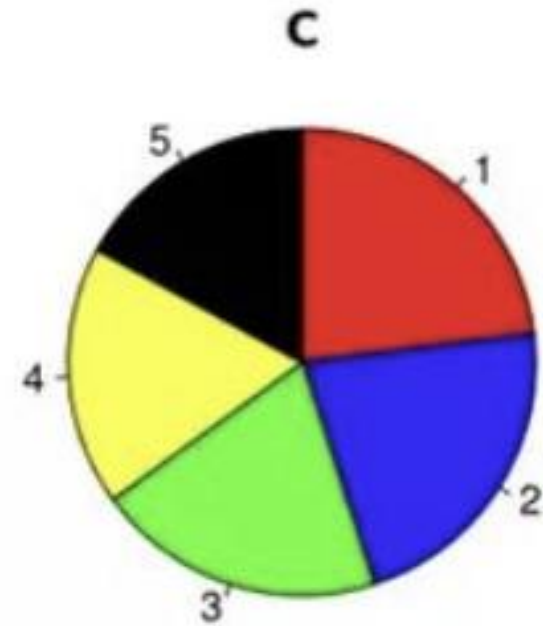
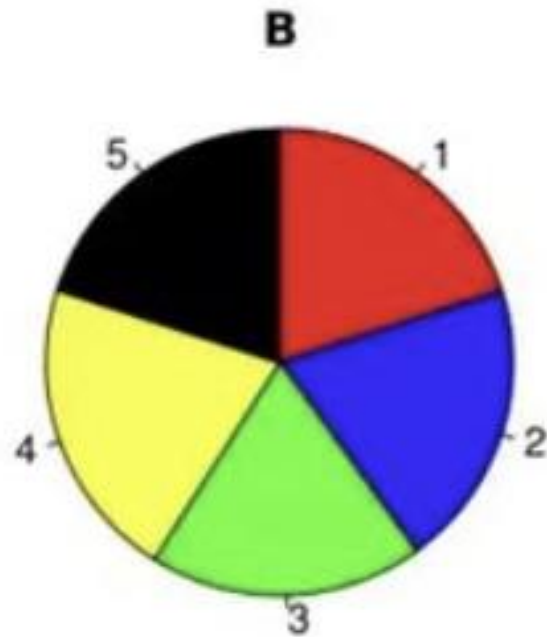
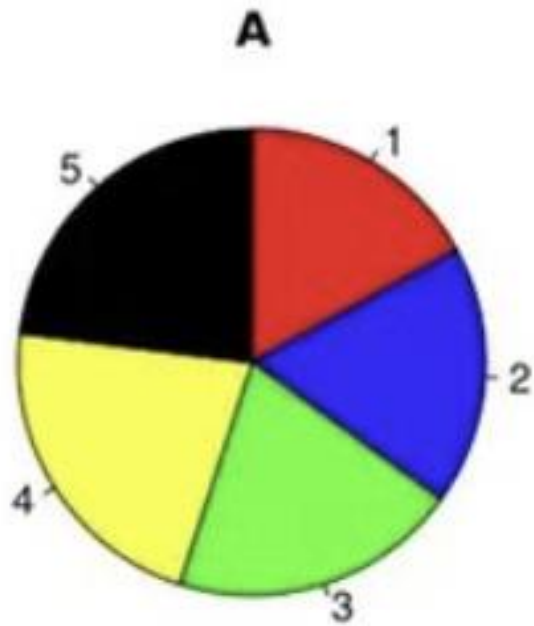
Accuracy = Trust = Adoption



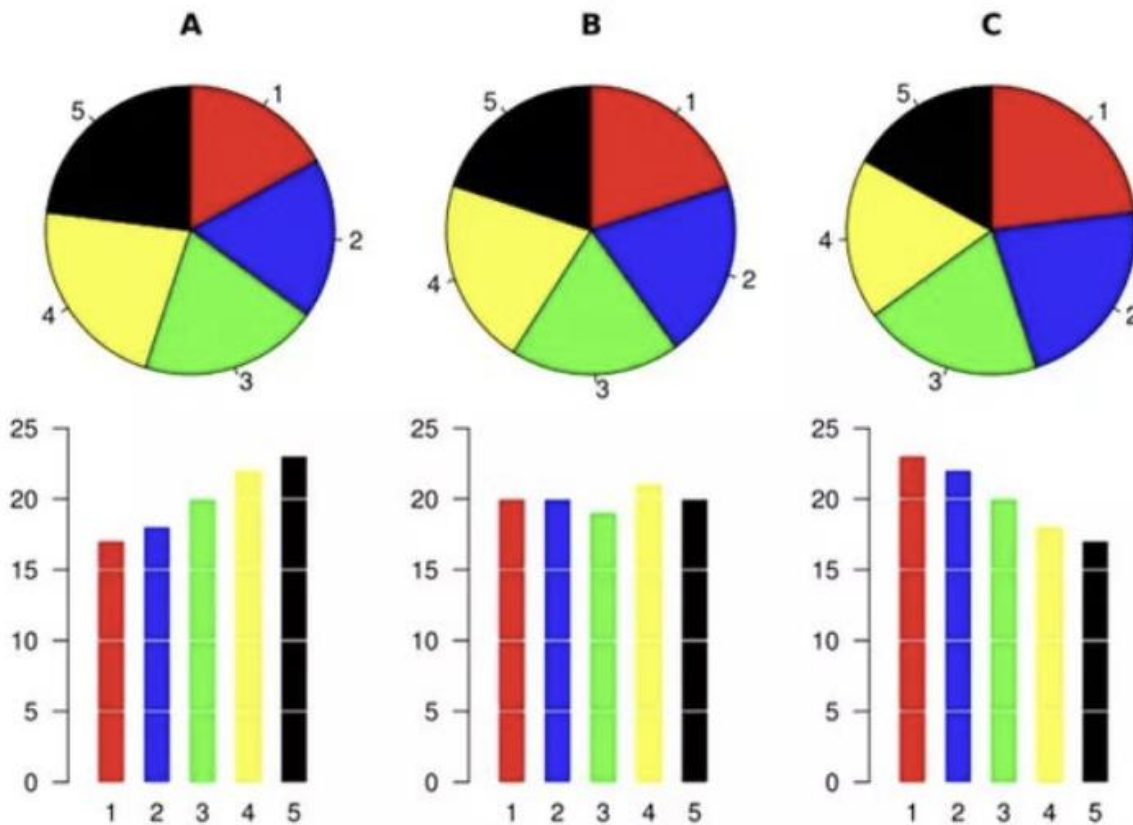
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- Working with stakeholders builds trust, and when they trust a report, they will use it more often.
- Data accuracy is paramount to building trust. Consistently check data accuracy of the existing report and make sure insights are clear and easy to understand.
- Avoid pie charts, avoid confusion.

Can you pick out the largest slice in each circle?



Results, how many did you get right?



- A
 - 5, 4, 3, 2, 1
- B
 - 4, 5/2/1, 3
- C
 - 1, 2, 3, 4, 5

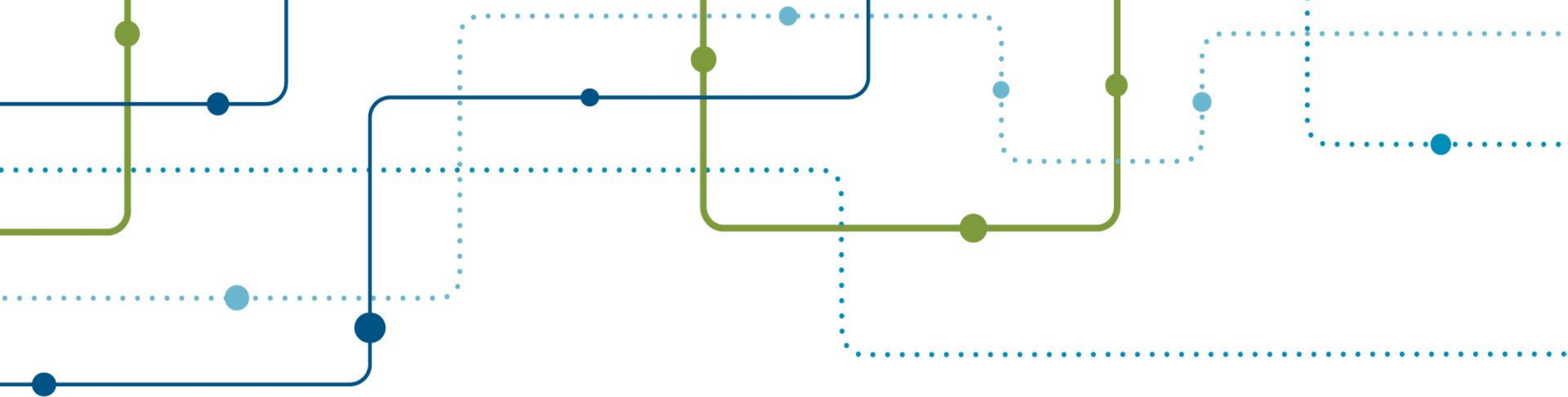
The Design Checklist

Front End Design

- **About 6- 10 insights per page**
- Be mindful of using the correct visual
- Include trending visuals
- Group related metrics
- Size visuals to be readable
- **Use consistent color palette**
- **Add clear headings & labels**
- Round numbers where necessary
- Run through the report from top to bottom from left to right like reading a news paper
- Super useful reference:
<https://www.numerro.io/guides/the-complete-guide-to-designing-power-bi-reports>

Back End Design

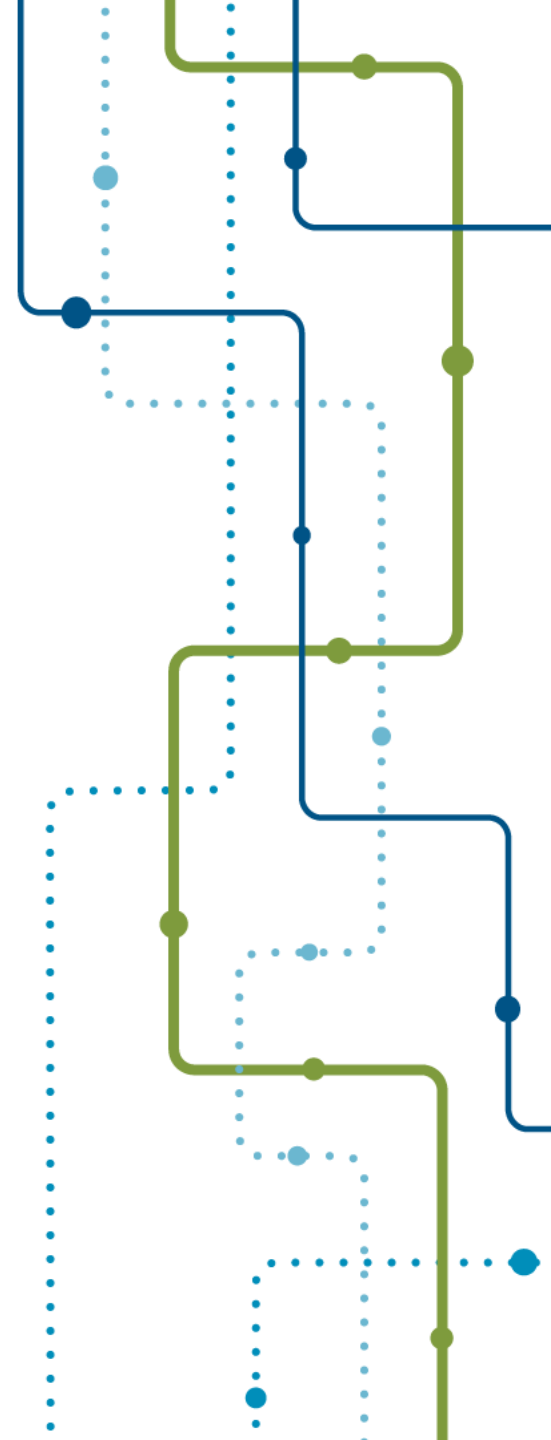
- All columns and tables are used for either a visual or metric
- No extra metrics
- **No many to many relationships (very rare cases for these)**
- Metrics and data have been tested and are trusted by stakeholders
- Relationships flow the correct direction and are on the correct fields
- **Organize the modeling view**
- **Use a calculations table to house all your metrics**
- Know when to build from scratch



Demo Time!



Questions?




Don't forget to connect,
thanks for listening!

LinkedIn



Twitter: @data_dragoiness



Blog: <https://dataonwheels.wordpress.com/>



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