### Understanding Filtering in Power BI

with Amanda Lahrmann

# To understand how to use slicers in Power BI, we must understand how filtering a data set works

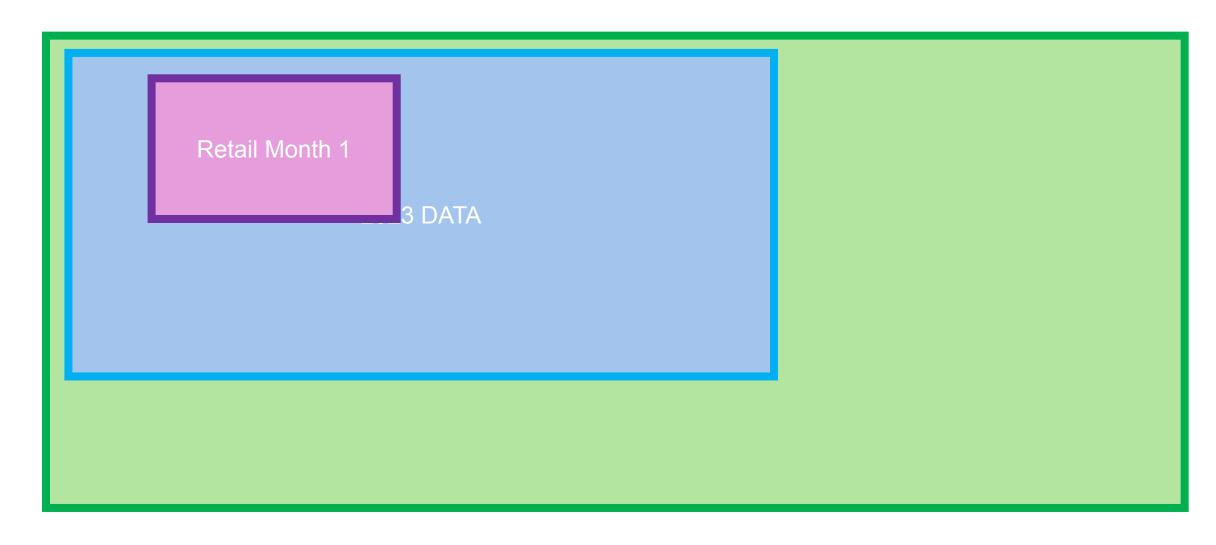
### All Data



### Data from 2023 Only



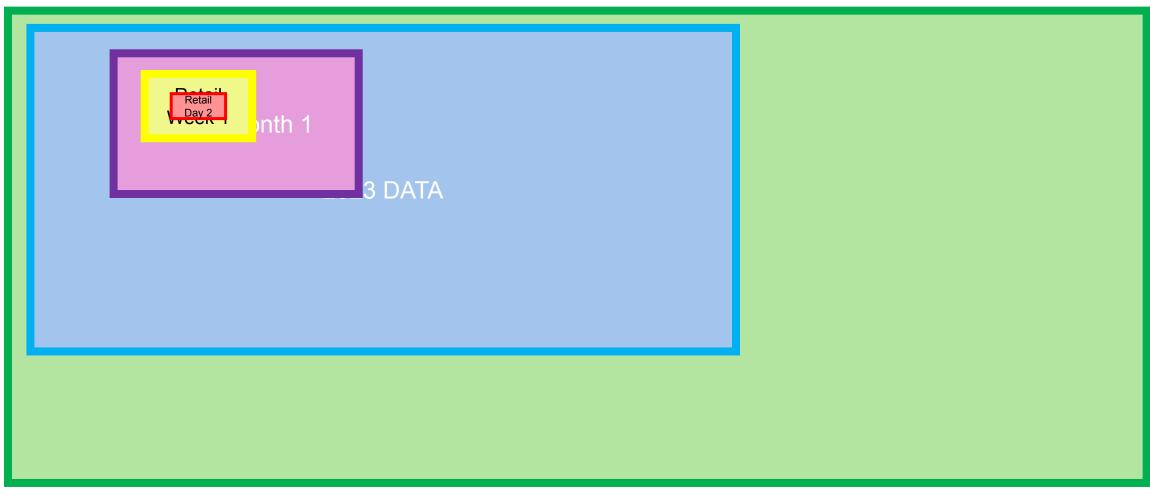
### Data from Retail Month 1, from 2023



### Data from Retail Week 1, from Retail Month 1, from 2023



### Data from Retail Day 2, from Retail Week 1, from Retail Month 1, from 2023



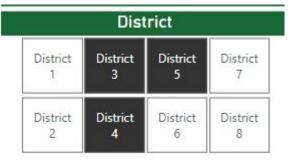
### Main Takeaway

- The lower the level, the more the data will filter out
  - Year > Month
  - Month > Week
  - Week > Day

## There are many ways to filter data in Power BI, here are two common ways

### Slicers

- Power BI's term for a visual that allows filtering on a report page
- Different kinds of slicers
  - Tiled
    - For shorter category lists
  - Between
    - Usually with Dates
  - Drop Downs
    - For long category lists (i.e. Store)
    - Can include a search bar
- Ctrl + Click to select multiple
- Type varies depending on space within the page and type of data being filtered on







### Selecting and Highlighting

- Selecting a row will:
  - Highlight the row visually
  - Grey out other information within the same table
  - Small black bar along the left side
  - Apply the same categories to other tables on the page (see next slide for example)

#### Running Total Net Sales Day

Retail Day With Date	Net Sales	% Chng	Avg Store Sales	Avg % Chng	Mkdwn %	
□ 51 - 3/25/2024	\$463,627	-2.2%	\$5,151	-5.5%	11.2%	
⊕ 0 - Pallets	\$61	0.0%	\$15		21.0%	
⊕ 1 - Consumables	\$185,815	-1.9%	\$2,065	-5,2%	4.3%	
⊕ 2 - Home	\$62,223	-5.5%	\$691	-8.7%	17.3%	
⊕ 3 - Hardlines	\$60,125	7.4%	\$668	3,9%	15.1%	
🗎 4 - Apparel	\$93,798	-5.0%	\$1,042	-8.2%	18.3%	
⊕ 5 - Furniture	\$16,423	-8.0%	\$213	-14.096	6.0%	
⊕ 6 - Seasonal	\$45,182	-2.7%	\$502	-5.9%	8.2%	
Total	\$463,627	-2.2%	\$5,151	-5.5%	11.2%	

### Selecting and Highlighting: Example

- "1- Consumables" row is highlighted in the Day table in the upper left
- WTD, MTD, and YTD will be filtered to show:
  - Category: 1-Consumables
  - Retail Day: 51 3/25/2024

**Net Sales** 

\$185,815

\$185,815

\$185.815

-1.9%

-1.9%

-1.9%

RetailMonth

- Consumables

Highlighted Net Sales matches across all tables (\$185,815)

% Chng Avg Store Sales Avg % Chng Mkdwn %

-5.2%

-5.2%

-5.2%

\$2,065

\$2,065

\$2,065

① - Pallets \$61		Avg Store Sales \$5,151	Sept. 1877	Mkdwn %	Retail Week	Net Sales	% Chng	Avg Store Sales	Ava % Chna	Mkdwn %
⊕ 0 - Pallets \$61		\$5,151								
170 200000	0.096		-5.5%	11.2%	□ 8	\$185,815	-1.9%	\$2,065	-5.2%	4.3%
P 4 0	0.070	\$15		21.07	⊕ 1 - Consumables	\$185,815	-1.9%	\$2,065	-5.2%	4.3%
⊞ 1 - Consumables \$185,815	-1.9%	\$2,065	-5.2%	4.3%	Total	\$185,815	-1.9%	\$2,065	-5.2%	4.3%
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⊕ 6 - Seasonal \$45,182	-2.7%	\$502	-5.9%	8.2%						
Total \$463,627	-2.2%	\$5,151	-5.5%	11.2%						

4.3%

4.3%

Retail Year

1 - Consumables

□ 2024

% Chng Avg Store Sales Avg % Chng Mkdwn %

-5.2%

-5.2%

4.3%

4.3%

\$2,065

\$2,065

\$2,065

**Net Sales** 

\$185,815

\$185,815

\$185,815

-1.9%

-1.9%

-1.9%

### Let's work through some examples together

### What do our slicers tell us?

\$3,098,105

\$1,375,935

\$14,283,400

\$401.571

2.4%

19.6%

5.6%

\$34,423

\$4,462

\$15,288

\$158,704

-1.0%

-13.8%

15.6%

2.0%

31,2%

6.4%

5.2%

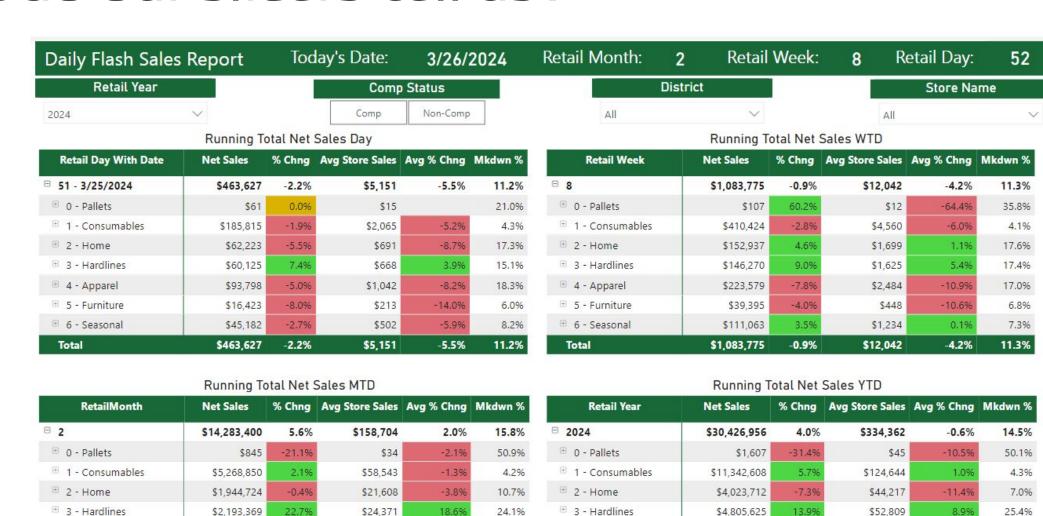
15.8%

⊕ 4 - Apparel

₱ 5 - Furniture

⊕ 6 - Seasonal

Total



# 4 - Apparel

⊕ 5 - Furniture

⊕ 6 - Seasonal

Total

\$6,728,415

\$757,253

\$2,767,736

\$30,426,956

2.4%

11.6%

4.0%

\$73,939

\$8.321

\$30,415

\$334,362

-2.1%

-21.2%

6.7%

-0.6%

27.2%

5.4%

4.5%

14.5%

### What do our slicers tell us?

- Retail Year = 2024
- All Comp Statuses
- All Districts
- All Stores



KetailMonth	Net Sales	% Chng	Avg Store Sales	Sales Avg % Chng Mkc		
⊟ 2	\$14,283,400	5.6%	\$158,704	2.0%	15.8%	
⊕ 0 - Pallets	\$845	-21.1%	\$34	-2.1%	50.9%	
⊕ 1 - Consumables	\$5,268,850	2.1%	\$58,543	-1.3%	4.2%	
⊕ 2 - Home	\$1,944,724	-0.4%	\$21,608	-3.8%	10.7%	
⊕ 3 - Hardlines	\$2,193,369	22.7%	\$24,371	18.6%	24.1%	
<sup>⊞</sup> 4 - Apparel	\$3,098,105	2.4%	<b>\$</b> 34,423	-1.0%	31.2%	
⊕ 5 - Furniture	\$401,571	-10.8%	\$4,462	-13.8%	6.4%	
⊕ 6 - Seasonal	\$1,375,935	19.6%	\$15,288	15.6%	5.2%	
Total	\$14,283,400	5.6%	\$158,704	2.0%	15.8%	

#### Running Total Net Sales YTD

Retail Year	Net Sales	% Chng	Avg Store Sales	Avg % Chng	g Mkdwn %	
□ 2024	\$30,426,956	4.0%	\$334,362	-0.6%	14.5%	
⊕ 0 - Pallets	\$1,607	-31.4%	\$45	-10.5%	50.1%	
⊕ 1 - Consumables	\$11,342,608	5.7%	\$124,644	1.0%	4.3%	
⊕ 2 - Home	\$4,023,712	-7.3%	\$44,217	-11.4%	7.0%	
⊕ 3 - Hardlines	\$4,805,625	13.9%	\$52,809	8.9%	25.4%	
⊕ 4 - Apparel	\$6,728,415	2,4%	\$73,939	-2.1%	27.2%	
⊕ 5 - Furniture	\$757,253	-17.6%	\$8,321	-21.2%	5.4%	
⊕ 6 - Seasonal	\$2,767,736	11.6%	\$30,415	6.7%	4.5%	
Total	\$30,426,956	4.0%	\$334,362	-0.6%	14.5%	

-0.4%

22.7%

2.4%

19.6%

5.6%

\$1,944,724

\$2,193,369

\$3,098,105

\$1,375,935

\$14,283,400

\$401.571

\$21,608

\$24,371

\$34,423

\$4,462

\$15,288

\$158,704

⊕ 2 - Home

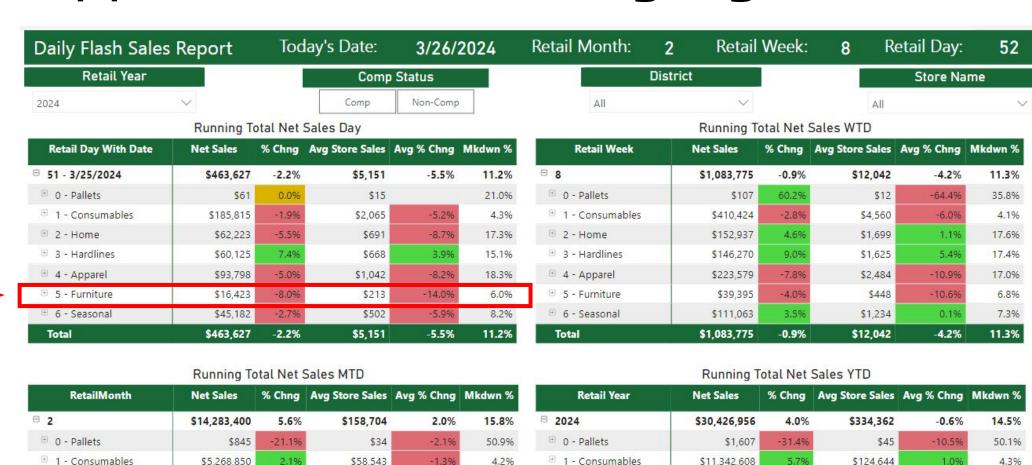
3 - Hardlines

# 4 - Apparel

₱ 5 - Furniture

⊕ 6 - Seasonal

Total



10.7%

24.1%

31.2%

6.4%

5.2%

15.8%

18.6%

-1.0%

-13.8%

15.6%

2.0%

1 2 - Home

3 - Hardlines

# 4 - Apparel

⊕ 5 - Furniture

⊕ 6 - Seasonal

Total

\$44,217

\$52.809

\$73,939

\$8.321

\$30,415

\$334,362

-11.4%

8.9%

-2.1%

-21.2%

6.7%

-0.6%

7.0%

25.4%

27.2%

5.4%

4.5%

14.5%

\$4,023,712

\$4,805,625

\$6,728,415

\$757.253

\$2,767,736

\$30,426,956

-7.3%

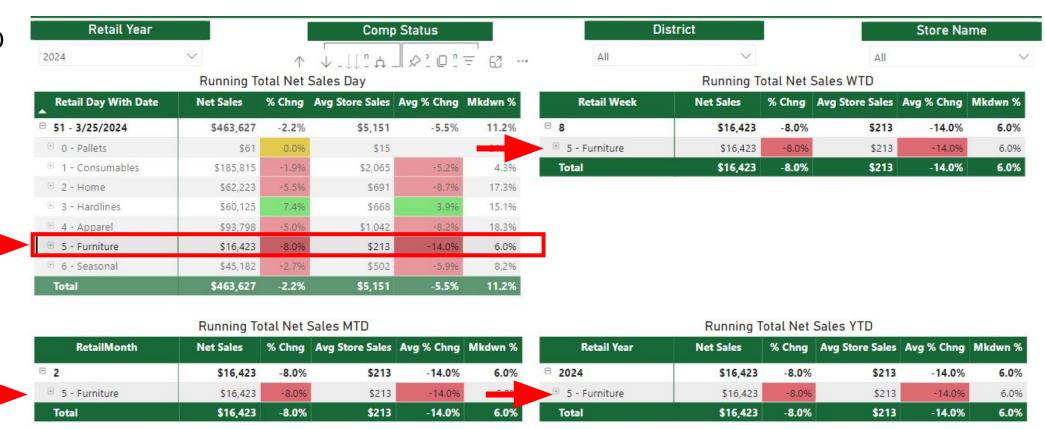
13.9%

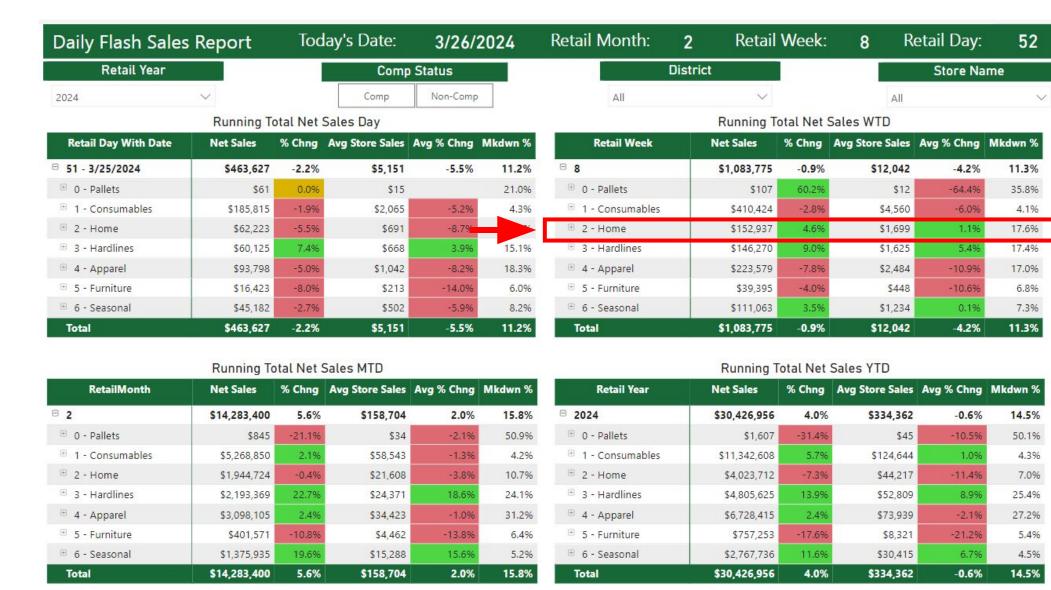
2.4%

11.6%

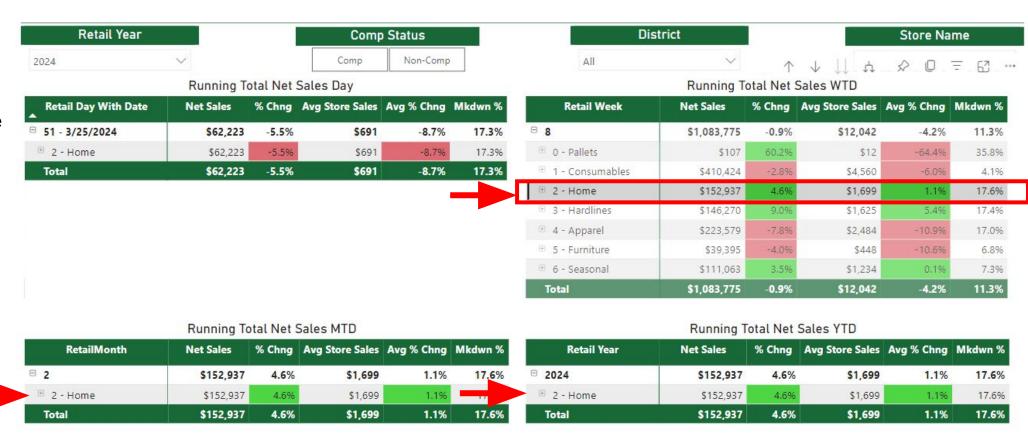
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- WTD, MTD, YTD tables will filter:
  - Division 5 Furniture
  - Retail Day 51 3/25/2024

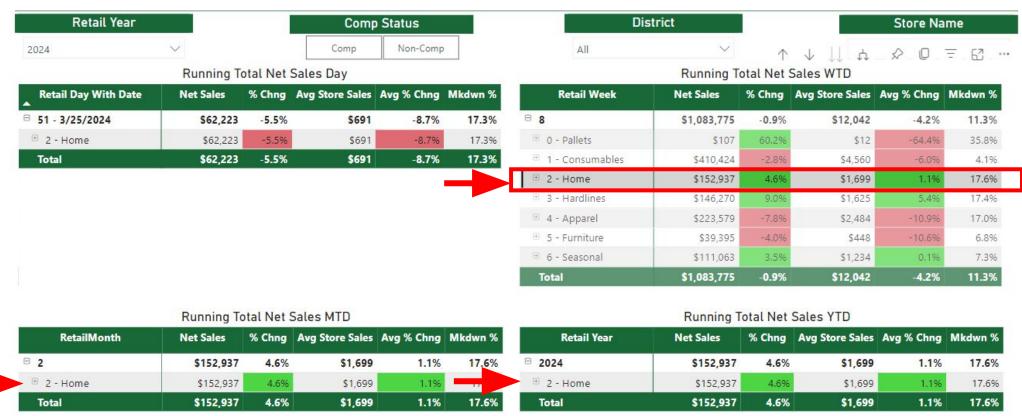




- MTD, YTD tables will filter:
  - Division 2 Home
  - Retail Week 8 (to date)
- What about the Day table?



- MTD, YTD tables will filter:
  - Division 2 Home
  - Retail Week 8 (to date)
- What about the Day table?
  - The Day table is a lower level than Week to Date
  - The data will stay the same since the filtering is being done at a higher level



### In Summary

- When approaching a new Power BI Report, take time to acclimate to the format
  - Slicers
  - Visual Titles
  - Categories
  - Documentation Page
- The lower the level, the more the data will filter

### A&D