MAGNIFICENT 7 -
SIMPLE TRICKS TO BOOST YOUR POWER BI DEVELOPMENT

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Make Music From Your Data!

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NIKOLA ILIC

- Data fanatic
- Multi-year experience with MS Data Platform
- Power BI, SQL Server, SSAS, SSIS, SSRS
- Father of 2 and true football (and Barca) fan!

NEW STARS
OF **DATA**

redgate

Wolfgang Strasser

CREDITS

- ❑ Organizers
- ❑ Volunteers
- ❑ Sponsors
- ❑ Mentor

PREREQUISITES

- ✓ Level 100 Session
- ✓ Basic knowledge of Power BI would help
- ✓ You don't need to know any DAX !

```
1  Dates =
2  VAR BaseCalendar =
3      CALENDAR ( DATE ( 2005, 1, 1 ), DATE ( 2010, 12, 31 ) )
4  RETURN
5      GENERATE (
6          BaseCalendar
7          VAR BaseDate = [Date]
8          VAR YearDate = YEAR ( BaseDate )
9          VAR MonthNumber = MONTH ( BaseDate )
10         VAR MonthName = FORMAT ( BaseDate, "mmmm" )
11         VAR YearMonthName = FORMAT ( BaseDate, "mmm yy" )
12         VAR YearMonthNumber = YearDate * 10 + MonthNumber - 1
13         RETURN ROW (
14             "Day", BaseDate,
15             "Year", YearDate,
16             "Month Number", MonthNumber,
17             "Month", MonthName,
18             "Year Month Number", YearMonthNumber,
19             "Year Month", YearMonthName
20         )
21     )
```

POLL

What is your Power BI level of expertise?

1. What is Power BI ?
2. Heard some (cool) people talk about it, but never used it
3. Created few reports just to see those fancy charts
4. I can't start my day without coffee and Power BI
5. Super-Duper Power BI user

NEW STARS
OF DATA

AGENDA

1. Dynamic Filtering
2. Display Totals in Stacked Column Visual
3. Tooltip Pages + Animated Tooltips
4. Turn plain Matrix to a „custom" visual
5. Build an unforgettable Slicer pane with Bookmarks
6. Drillthrough like a PRO using buttons
7. Push Card visuals to a new level with Bookmarks

NEW STARS
OF DATA

#1. DYNAMIC FILTERING

Problem

❑ Users choose what they want to see

❑ Solution with buttons and bookmarks ?

❑ What if we need multiple options to select from ?

| Year	Month	Sales Amt	Sales Amt YTD
2009	January	$57,453,262.7812	$57,453,262.7812
2009	February	$59,891,424.7116	$117,344,687.4928
2009	March	$60,807,494.095	$178,152,181.5878
2009	April	$69,888,328.7379	$248,040,510.3257
2009	May	$82,082,708.7124	$330,123,219.0381
2009	June	$81,822,800.062	$411,946,019.1001
2009	July	$82,779,485.6864	$494,725,504.7865
2009	August	$77,599,793.8982	$572,325,298.6847
2009	September	$74,684,747.963	$647,010,046.6477
2009	October	$75,213,262.4072	$722,223,309.0549
2009	November	$67,175,159.9519	$789,398,469.0068
Total		**$857,728,031.3459**	**$857,728,031.3459**
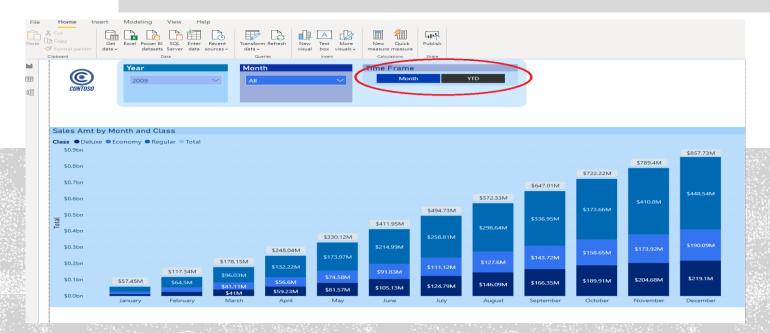
#1. DYNAMIC FILTERING

Solution

- ✓ More flexible solution using simple techniques !
- ✓ Faster development
- ✓ Easily extendable and scalable

#1. DYNAMIC FILTERING

#2. DISPLAY TOTALS IN STACKED COLUMN VISUAL

Problem

- ❑ Stacked Column visual is one of the most used visuals
- ❑ Lack of totals often force to apply other solutions

Sales Amt by Month and Class

#2. DISPLAY TOTALS IN STACKED COLUMN VISUAL

Solution

✓ Solution found by an accident!

✓ Bug or a „feature" – but it works as a charm!

#2. DISPLAY TOTALS IN STACKED COLUMN VISUAL

#3. TOOLTIP PAGES + ANIMATED TOOLTIP

Problem

- ❑ Default options are often not enough attractive?

- ❑ How can we enhance user experience when using Tooltips?

#3. TOOLTIP PAGES + ANIMATED TOOLTIP

Solution

✓ Tooltip pages are a powerful way of communicating information!

✓ Bonus Tip – create a fully animated Tooltip page!

✓ Credits to Jason Cockington for the idea

❖ *Don't get crazy with creating too many of them !!!*

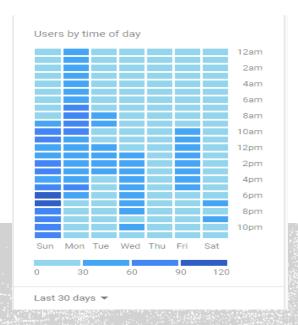# #3. TOOLTIP PAGES + ANIMATED TOOLTIP

#4. TURN MATRIX TO A „CUSTOM" VISUAL

Problem

❑ Extremely large collection of visuals

❑ Plain old Matrix from SSRS time

BrandName	January	February	March	April	May	June	July	August	September	October	November	December
Contoso	$12,733,921.3405	$13,007,311.4274	$13,841,231.3109	$14,914,925.4774	$18,380,230.486	$17,731,021.376	$18,361,414.862	$17,181,879.474	$16,018,224.272	$17,114,563.384	$15,180,624.3155	$15,914,746.8915
Fabrikam	$10,552,000.1455	$10,693,724.1732	$11,586,317.9418	$13,387,361.6044	$16,034,759.398	$15,496,999.178	$15,424,918.14	$15,147,267.48	$14,222,039.884	$14,672,958.964	$12,572,902.217	$12,342,298.1035
Litware	$7,424,729.075	$7,440,393.7551	$7,337,920.7331	$8,592,361.024	$9,702,414.474	$10,104,099.696	$10,599,477.506	$9,776,520.098	$8,936,203.614	$9,443,814.548	$8,225,575.733	$7,986,138.227
Adventure Works	$6,527,894.491	$7,424,825.3685	$6,971,319.7092	$8,617,416.0574	$9,484,248.836	$9,434,170.734	$10,127,778.462	$9,156,018.27	$9,279,751.25	$8,652,246.808	$7,751,165.2205	$7,707,983.662
Proseware	$5,530,067.2905	$5,691,123.2997	$5,494,337.0982	$6,198,313.0356	$6,979,790.392	$7,669,914.07	$6,910,460.332	$6,322,025.689	$6,087,462.219	$6,040,569.904	$5,598,227.834	$6,239,298.1685
Wide World Importers	$4,199,834.022	$5,122,981.6578	$4,935,585.0366	$5,966,167.5188	$7,173,392.468	$7,225,609.942	$7,095,303.696	$6,666,348.144	$6,655,965.93	$6,406,962.52	$5,738,437.283	$5,654,271.303
The Phone Company	$2,687,305.55	$2,792,622.33	$2,974,390.47	$3,397,971.38	$3,984,418.6	$3,918,853	$3,709,269.2	$3,683,443.6	$3,697,655.2	$3,683,824.8	$3,099,878.75	$3,536,055.25
A. Datum	$2,957,456.155	$2,715,461.802	$2,660,161.365	$3,000,453.388	$3,660,974.8	$3,629,196.32	$3,547,691.68	$3,363,519.47	$3,219,549.21	$3,153,197.16	$3,007,574.795	$3,120,833.145
Southridge Video	$2,291,667.736	$2,241,556.2846	$2,497,950.5031	$2,655,627.2383	$3,464,101.96	$3,375,447.388	$3,290,618.168	$2,981,614.677	$3,068,592.812	$2,944,700.712	$3,085,222.2115	$3,032,403.03
Northwind Traders	$1,400,926.5545	$1,555,736.9451	$1,418,523.5775	$2,037,168.0186	$1,828,069.808	$1,777,609.59	$2,099,735.932	$1,915,544.61	$2,130,414.921	$1,773,984.116	$1,704,075.2805	$1,518,035.0365
Tailspin Toys	$1,147,460.4212	$1,205,687.6682	$1,089,756.3496	$1,120,563.9954	$1,390,307.4904	$1,459,878.768	$1,612,817.7084	$1,405,612.3862	$1,368,888.651	$1,326,439.4912	$1,211,476.3119	$1,277,499.5221

Users by time of day

12am
2am
4am
6am
8am
10am
12pm
2pm
4pm
6pm
8pm
10pm

Sun Mon Tue Wed Thu Fri Sat

0   30   60   90   120

Last 30 days ▼

#4. TURN MATRIX TO A „CUSTOM" VISUAL

Solution

- ✓ Use the power of conditional formatting!
- ✓ Transform Matrix to a „heatmap-like" visual
- ✓ Easy spot trends!

#4. TURN MATRIX TO A „CUSTOM" VISUAL

#5. BUILD SLICER PANE WITH BOOKMARKS

Bookmarks Overview

- ❑ Bookmarks are one of the favorite features in Power BI
- ❑ Many use cases
- ❑ Gives your Power BI report an app-like experience

#5. BUILD SLICER PANE WITH BOOKMARKS

Problem

❑ What would you do in case your users need many slicers on the page?

❑ Create separate page only for slicers ?

#5. BUILD SLICER PANE WITH BOOKMARKS

Solution

✓ Powerful combination of bookmarks, buttons and actions will make you a hero!

✓ Brings your Power BI report to a whole new level

#5. BUILD SLICER PANE WITH BOOKMARKS

#6. DRILLTHROUGH LIKE A „PRO" USING BUTTONS

Problem
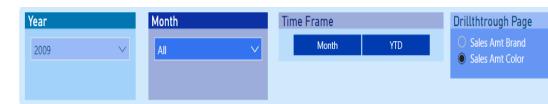
- ❑ Relatively new feature in Power BI
- ❑ Previous experience was not so intuitive
- ❑ More flexibility in creating reports

#6. DRILLTHROUGH LIKE A „PRO" USING BUTTONS

Solution

- ✓ Cover multiple scenarios with little DAX

- ✓ Dynamically set properties – your users will love you!

- ✓ Proper formatting is super important!

#6. DRILLTHROUGH LIKE A „PRO" USING BUTTONS

#7. PUSH CARD VISUALS TO A NEW LEVEL WITH BOOKMARKS

Problem

- ❑ Another use-case scenario for Bookmarks
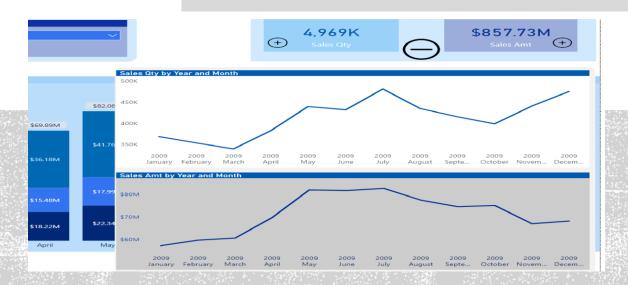- ❑ Out-of-the-box solutions sometimes are not enough

#7. PUSH CARD VISUALS TO A NEW LEVEL WITH BOOKMARKS

Solution

- ✓ By default static visuals, can become dynamic

- ✓ Biggest advantage – can be used like regular visuals for cross-filtering

- ✓ Little tweakings sometimes bring great benefit!

❖ Be careful with usage – don't create an overhead instead of functionality!

#7. PUSH CARD VISUALS TO A NEW LEVEL WITH BOOKMARKS

QUESTIONS ?

THANK YOU!

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