About this PBIX

I created the sales metrics reported in this PBIX by using window functions in a SQL query. I then created a view from the query in MySQL and imported the data into Power BI.

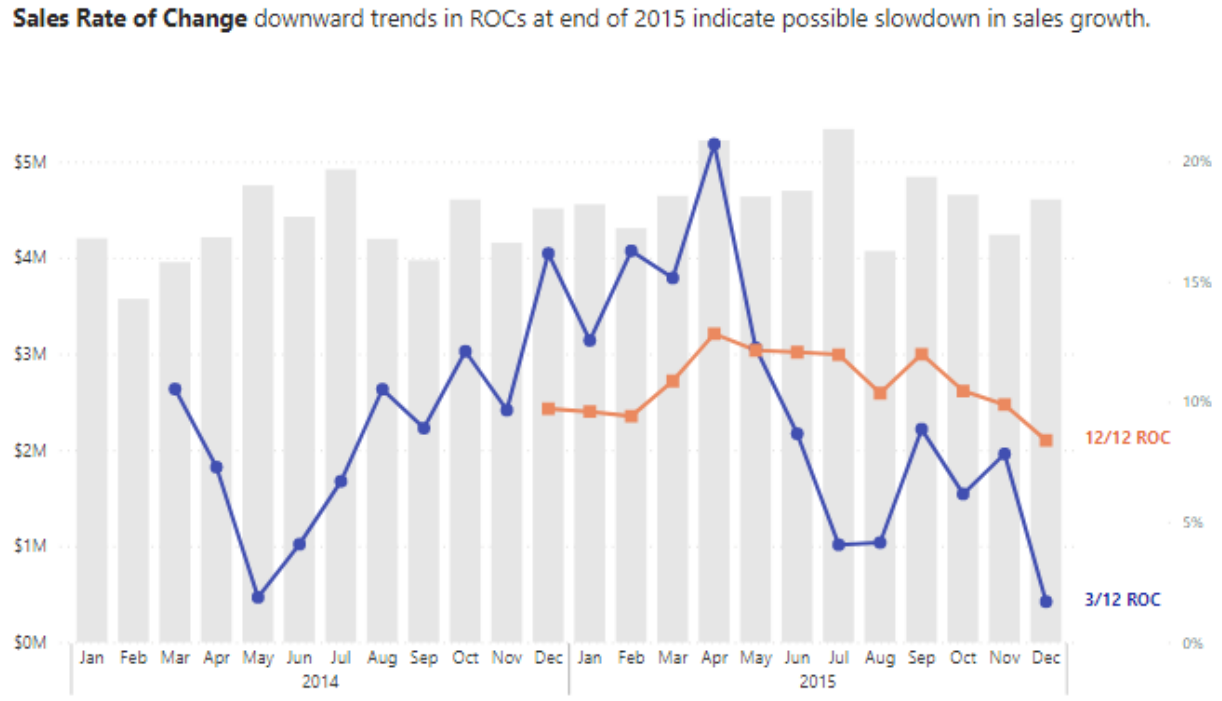
In Power BI, I created measures using straightforward SUM and AVERAGE formulas. These measures are much simpler than what is typically required to create measures for the types of metrics reported here. For example, the DAX formula for the 12-month moving average of sales based on the SQL field is:

```
Sales 12 MMA = AVERAGE('Sales Metrics'[sales_12_mma] )
```

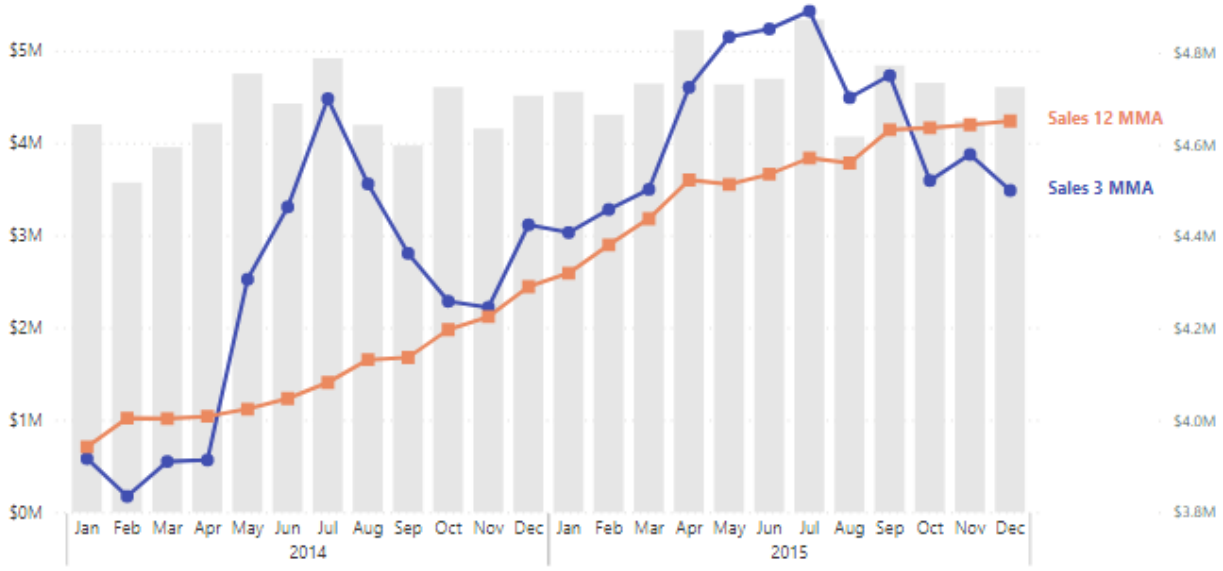
Aside from simplifying the formulas needed in Power BI, metrics calculated in SQL are available for use in other reporting tools.

Examples in Power BI

All the metrics displayed in the Power BI visuals were calculated in SQL using SQL window functions.



Sales Moving Average the 3-month moving average is on a downward trend at the end of 2015, while the 12-month moving average has leveled off.



Sales vs Prior Year Sales

- (●) 2015
- ( ) 2014

Year	Month	Sales	Sales LY	Sales YoY	Sales YoY %
2015	Jan	$4,556.1K	$4,202.6K	$353.5K	8.4%
2015	Feb	$4,307.8K	$3,572.7K	$735.1K	20.6%
2015	Mar	$4,644.6K	$3,955.3K	$689.4K	17.4%
2015	Apr	$5,222.6K	$4,212.9K	$1,009.7K	24.0%
2015	May	$4,636.6K	$4,753.2K	($116.6K)	-2.5%
2015	Jun	$4,696.9K	$4,427.6K	$269.3K	6.1%
2015	Jul	$5,339.2K	$4,919.8K	$419.4K	8.5%
2015	Aug	$4,070.5K	$4,197.3K	($126.7K)	-3.0%
2015	Sep	$4,841.9K	$3,973.9K	$868.0K	21.8%
2015	Oct	$4,653.8K	$4,606.5K	$47.4K	1.0%
2015	Nov	$4,240.6K	$4,157.3K	$83.3K	2.0%
2015	Dec	$4,607.2K	$4,513.1K	$94.1K	2.1%
Total		**$55,817.9K**	**$51,492.0K**	**$4,325.9K**	**8.9%**