

# Data Visualization Choices

What, When, and How?

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Please silence  
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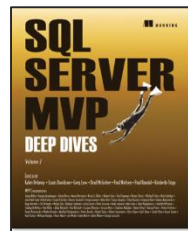
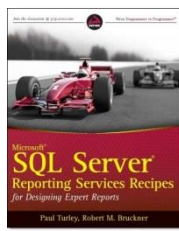
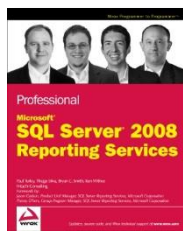
# Presenter Introduction

Mentor

BI Solution Architect

Microsoft certified consultant & trainer

Author



## Expectations

This session is non-technical by design

...it's about choosing what tool to use rather than specifically how to use each tool

# User Needs and Wants



what tools provide these capabilities?

# Establish User Roles & Use Cases

## User Roles

- Executive Leaders
- Business Unit Leaders
- Department Managers
- Business Analysts
- Operational Users

## Use Cases

- Use prepared dashboards
- Create & publish team reports
- Browse & analyze business metrics
- Perform mobile analysis
- Prepare presentations
- Receive proactive alerts

# Products and Platforms

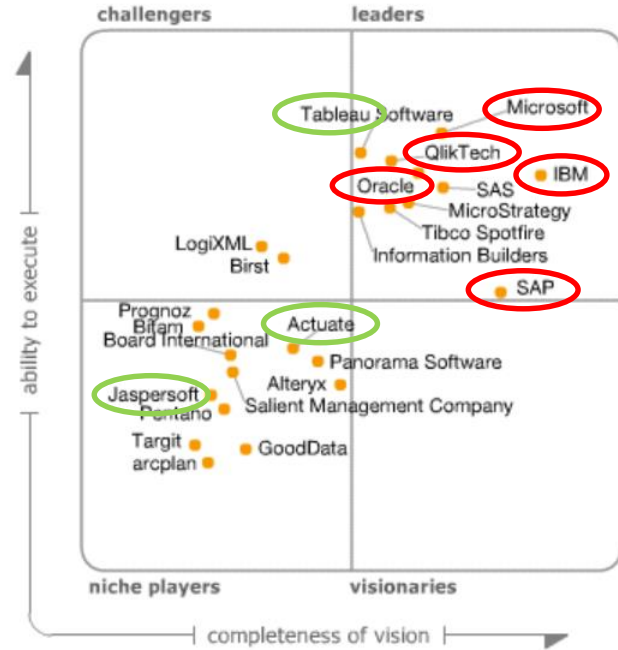
## in the industry

Vendors have different approaches to BI solutions:

- Complete, packaged software solutions that include semantic models & reporting tools
- Programmable reporting tools
- Best-in-class ad-hoc visualizations

Microsoft BI offers a very strong semantic model platform paired with some good reporting & visualization tools

Gartner Magic Quadrant for Business Intelligence and Analytics Platforms - 2013



As of February 2013

Source: Gartner (February 2013)

# Products and Platforms in the Microsoft ecosystem

One tool may not meet all your user and business needs

Using too many tools is confusing & complicated

## Semantic / Data Layer



Relational data marts



Multidimensional SSAS



PowerPivot in Excel



PowerPivot in SharePoint



Tabular SSAS

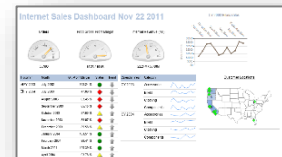
## Visualization / Presentation Layer



Excel / Excel Services



Power View (Excel or SharePoint)



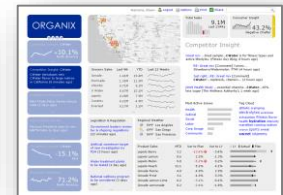
Reporting Services



Mobility\*



PerformancePoint



After-market components



# How this statement make you FEEL?

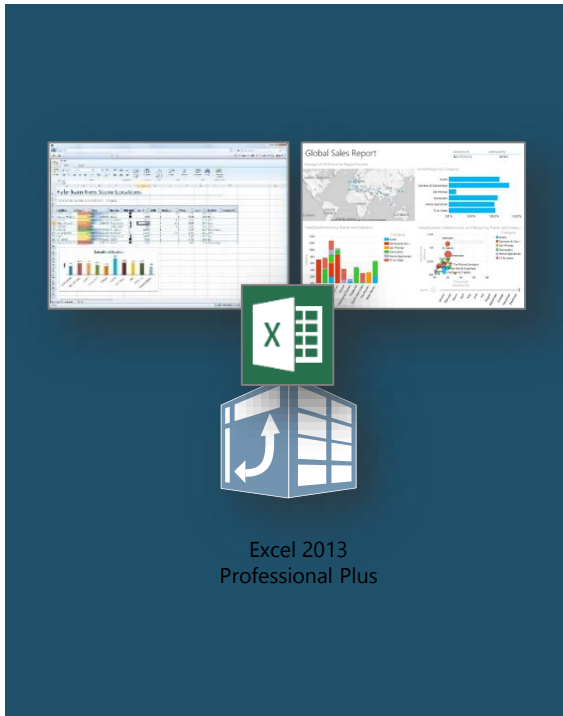


“Microsoft gives me  
a lot of tool choices”

# Visuals & Solutions

the Microsoft BI strategy

## Personal BI



A dark blue background featuring two overlapping BI dashboard screenshots. The left dashboard shows a table with columns for 'Salesperson', 'Sales', and 'Profit'. The right dashboard, titled 'Global Sales Report', includes a world map and a bar chart. Below the screenshots is the Excel 2013 Professional Plus logo, which consists of a green 'X' in a square above a blue cube with a white arrow.

Excel 2013  
Professional Plus

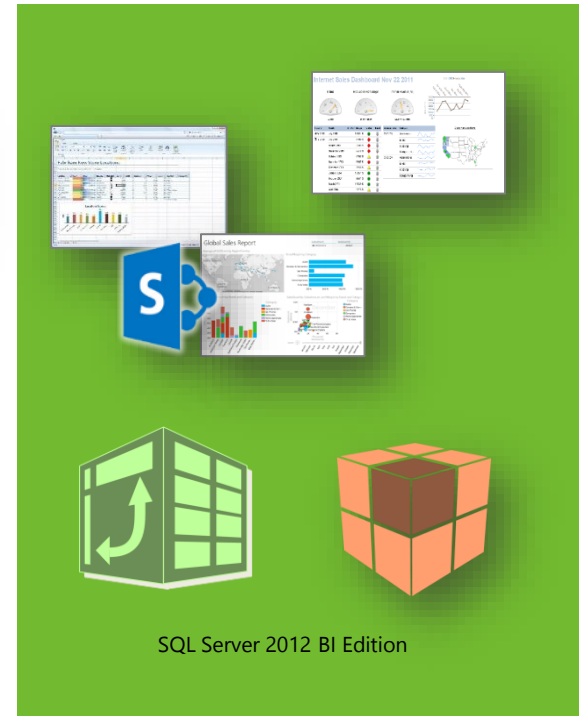
## Team BI



A bright blue background featuring three overlapping BI dashboard screenshots. The top-left dashboard shows a table with columns for 'Salesperson', 'Sales', and 'Profit'. The top-right dashboard, titled 'Internet Sales Dashboard Nov 22 2011', includes a line graph and a world map. The bottom dashboard, titled 'Global Sales Report', includes a world map and a bar chart. Below the screenshots is the SharePoint logo (a blue 'S' in a square) and the SQL Server logo (a blue cube with a white arrow).

SharePoint 2010 or 2013 Enterprise Edition  
SQL Server 2008 R2 or 2012 BI Edition

## Enterprise BI

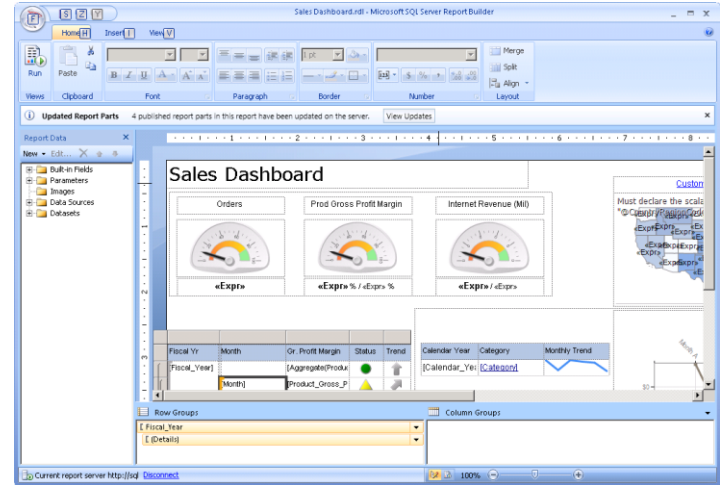


A green background featuring four overlapping BI dashboard screenshots. The top-left dashboard shows a table with columns for 'Salesperson', 'Sales', and 'Profit'. The top-right dashboard, titled 'Internet Sales Dashboard Nov 22 2011', includes a line graph and a world map. The middle dashboard, titled 'Global Sales Report', includes a world map and a bar chart. The bottom-left dashboard shows a table with columns for 'Salesperson', 'Sales', and 'Profit'. Below the screenshots is the SQL Server logo (a green cube with a white arrow) and a 3D Rubik's cube.

SQL Server 2012 BI Edition

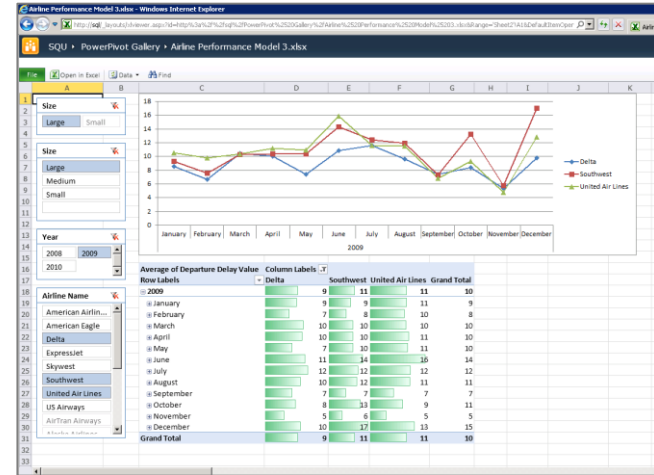
# Report Builder & SSRS

- Reporting Services continues to be one of the most capable dashboard & report design tools
- Compared to some other tools, report design can be more complex & time-consuming but more intricate designs are possible
- Report actions & advanced features are possible but interactions are less tactile & responsive than tools like Power View



# Excel Visuals

- Excel is the tool of choice for many financial & business analysts
- Classic data-sprawl issues can be avoided with SharePoint Excel Services & through organizational governance
- Improved charts, PivotTable, slicers & conditional formatting features were introduced in Excel 2007



Ease of Use



Analytic Flexibility



Solution Integration

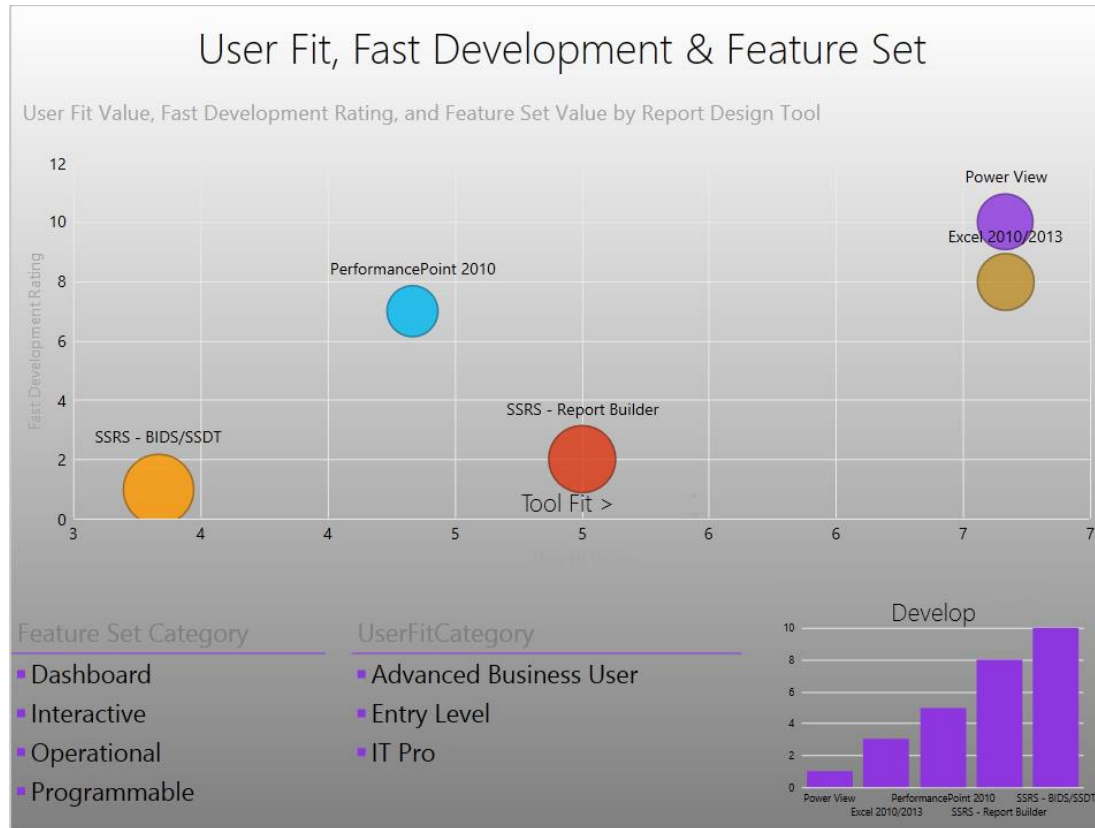


Programability





# Measuring BI Tool Fit & Feature Set



# Demonstrations

## Excel 2013 used to visualize a model

- PivotTable with KPI & conditional formatting
- Slicers
- Publish to SharePoint & interact through Excel Services

## Power View in Excel 2013

- KPI scorecard with drill-down
- Map report with geo hierarchy
- Bubble chart with play axis

## Power View in SharePoint

- Multiple views
- Export & present in PowerPoint

## Report Builder using a published PowerPivot model






















- Demonstrate time & complexity to build a drill-down table
- ... KPI indicator
- ... drill-through action

# Mobility Choices

- Excel Services & Reporting Services reports render in multiple browsers including IE 7, 8 , 9 & 10 for Windows, Firefox for Windows & Safari for iOS.
- Several good after-market tools integrate with the Microsoft BI platform, including Tableau & Strategy Companion.
- Microsoft Mobile BI product (native mobile app for iOS, Surface RT & Pro) is currently in development. Look for more details, likely later this year.
- Power View cross browser support.



# Tool Capabilities Summary

	Excel/ PowerPivot	Power View	Report Builder	SSDT / Visual Studio
Ad-hoc data exploration				
True end-user report creation				
Dashboard integration				
Complex business rules				
Complex UI control				
Custom application integration				
Parameterization				
Mobile device support				

# Questions



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*Your feedback is important and valuable. All feedback will be used to improve and select sessions for future events.*

This presentation will be on my blog at [SqlServerBiBlog.com](http://SqlServerBiBlog.com)

I can be contacted at [Paul.Turley@SolidQ.com](mailto:Paul.Turley@SolidQ.com)

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# Thank you!

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