POWER BI WITH DYNAMICS 365 CE

Empowering organizations by turning data into knowledge with easy to implement visualizations

November 14, 2018
Today’s presenters

**Brian Connelly**  
Senior Associate  
Blue Bell, PA  
Business Intelligence  
8+ years Industry Experience  
Email: [Brian.Connelly@rsmus.com](mailto:Brian.Connelly@rsmus.com)  
D: 215.648.3039

**Faisal Muhammed**  
Manager  
Boston, MA  
Business Intelligence  
10+ years Industry Experience  
Email: [Faisal.Muhammed@rsmus.com](mailto:Faisal.Muhammed@rsmus.com)  
D: 617.241.4697
Agenda

• RSM Business Intelligence Services Overview
• Power BI Introduction
• Power BI with Dynamics 365 CE
  - Power BI has a connector for CRM
  - Power BI to Analyze CRM
  - Power BI & CRM Q&A
  - Power BI & Drillthrough on your CRM Visual
  - Power BI & Analyze Your CRM Visual
  - Power BI & Analyze In Excel
  - Power BI & Email Report View
  - CRM Demo

• Q&A
Business intelligence is about empowering organizations to truly leverage their data to foster innovation, drive organizational excellence and create competitive advantage.

<table>
<thead>
<tr>
<th>Strategic</th>
<th>Data Foundation</th>
<th>Reporting &amp; Analytics</th>
<th>Information Delivery</th>
<th>Support &amp; Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI Strategy &amp; Roadmap</td>
<td>Data Warehouse/Data Mart</td>
<td>Descriptive Analytics</td>
<td>Cloud Business Intelligence</td>
<td>Business Intelligence Ongoing Support</td>
</tr>
<tr>
<td>BI Rapid Assessment</td>
<td>Data Integration/Migration</td>
<td>Diagnostic Analytics</td>
<td>Mobile Business Intelligence</td>
<td>SQL Server Health Check</td>
</tr>
<tr>
<td>BI Software Selection</td>
<td>Data Quality</td>
<td>Predictive Analytics</td>
<td>SharePoint Integration</td>
<td>Database Administration as a Service</td>
</tr>
<tr>
<td>Data Governance</td>
<td>Master Data Management</td>
<td>Prescriptive Analytics</td>
<td>Analytic Applications</td>
<td>SQL Server Upgrade</td>
</tr>
</tbody>
</table>

RSM Business Intelligence
POWER BI
INTRODUCTION
Power BI is a stack of two “companion” applications

- **Power BI Desktop** is a free, standalone self-service BI application
- **Power BI Service** is a SaaS application that provides a simple, interactive, and user-friendly interface to create, view, share dashboards/visualizations, interact with the data and collaborate across the organization. Users interact with the service using a web browser or a mobile application
### Power BI Introduction – The Elements

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Power BI Report</th>
<th>Dashboards</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Collection of data that is imported or connected to&lt;br&gt;• Can be used by multiple reports</td>
<td>• One or more visuals&lt;br&gt;• One or more pages&lt;br&gt;• Consist of one or more dataset when combined in desktop and uploaded&lt;br&gt;• Can be pinned to multiple dashboards&lt;br&gt;• Reports allow for interactivity and drill through</td>
<td>• Consists or one or more report visuals&lt;br&gt;• Visuals can be pinned from multiple reports&lt;br&gt;• Are listed as “Your”, however may not have been created by you&lt;br&gt;• Underlining datasets may not be accessible&lt;br&gt;• Dashboards allow for interactivity but you’re not able to drill through</td>
</tr>
</tbody>
</table>

*Power BI Pro License is needed to view shared dashboards and to share a dashboard*
Power BI Introduction - Data Sources

Power BI provides a solution to keep critical data in one place to reduce the time and effort of discovering data and maximizing the time for analytics and insights that matter to the organization.

File
- Excel
- Text/CSV
- XML
- JSON
- Folder
- SharePoint Folder

Database
- SQL Server Database
- MySQL Database
- PostgreSQL Database
- Sybase Database
- Teradata Database
- Amazon Redshift
- Many Others...

Azure
- Azure SQL Database
- Azure SQL Data Warehouse
- Azure Analysis Services database
- Azure Data Lake Store
- Many Others...

Online Services
- Microsoft Exchange Online
- Dynamics
- Salesforce
- Google Analytics
- Adobe Analytics
- Many Others...

Other
- Hadoop File
- Spark (Beta)
- R Script
- ODBC
- OLE DB
- Blank Query
- Many Others...
POWER BI WITH DYNAMICS 365 CE
Power BI has a direct data source connector to CRM, which uses the CRM Web API (OData) to create a model with all of the entities and measures, e.g. opportunities, leads, accounts, and more. The connector allows the dashboard developer to choose which tables* to import.

*Does require an understanding of the entities schema names
Interactive data visualizations can be created from Dynamics 365 CE and important business insights can be shared across the organization.

Visualizations can include a large spectrum of options such as Comparison, Change over time, Part-to-whole, Flow, Ranking, and many more. Power BI also enables rapid insights to organizational datasets with AI-assisted visualizations.
Power BI & CRM Q&A

Just ask with Q&A
- Discovery who are the most profitable customers?
- Discovery how many new leads were generated and by who?
- Which products should be inventoried?

Using Natural Query technology, Power BI provides the ability for users to Q&A their data in an interactive and entertaining way.

Key Considerations*:
- Uses common phases and natural language
- Synonyms can be added to tables and fields, i.e. unit price is equal to line price.
- Q&A will choose the best answer based on one or more datasets that leveraged by dashboards
- Add Featured Questions

*Q&A is not supported with live connections to SSAS or Direct Query models.
Power BI & Drill-through on your CRM Visual

Power BI with CRM can deliver the insights needed and allows users to focus on a specific CRM details such as opportunities, work-orders, products, and more.

The drill-through feature allows the user to drill into the focused detail of a specific entity and ascertain required details within the filtered context.
Power BI with CRM can deliver additional insights that can explain what is driving the increases or decreases.

Key Points:

- Analysis is provided based on previous data point in the visual
- Use Machine Learning Algorithms to provide analysis
- There are limitations
Excel queries the Power BI dataset that has been published to the Power BI Service. Analyze in Excel works for data import, direct query, and Analysis Services Tabular or Multidimensional databases.

Users are enabled to create their own PivotTables, visualizations, and can add additional data from other sources.

Within Excel, different worksheets can be created with as many views on the data to supplement the analysis.
Email subscriptions can be scribed for users for both report pages and dashboards by sending a snapshot to their inbox at a daily or weekly frequency.

Considerations:

- RLS – restricts the ability to create a subscription
- Emails are only sent when an underlying dataset is updated or refreshes
Power BI & Mobile View

Power BI provides users the ability to view the reports on their phone. Reports are adapted for phone view by rearranging and resizing visuals and creating responsive visuals and responsive slicers. End users will have access to any filters and can also interact with them as well.

Image Source: https://docs.microsoft.com/en-us/power-bi/desktop-create-phone-report

© 2018 RSM US LLP. All Rights Reserved.
QUESTIONS AND ANSWERS