

Summary



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Agenda



What is Power Query?

The Personal BI Stack and Power BI

Key Power Query Functions

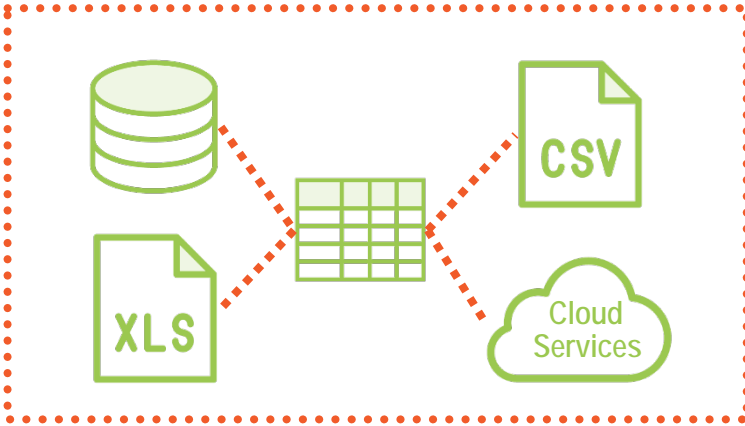
- Retrieve
- Cleanse
- Combine
- Share

Example BI reports with Power Query

References



What Exactly Is Power Query?



**Retrieve and Combine
Data from multiple
sources**



**Power Query is
available in Excel and
Power BI**



Excel Business Intelligence Tools



Power Query

Discover the data



Power Pivot

Model the data



Power View

Display the data



Power Query & Excel



2010

Download add-in



2013

Download add-in



2016

Built in feature

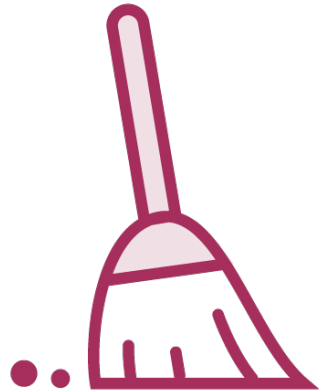
Get & Transform



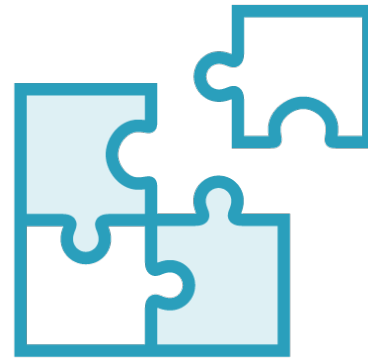
Power Query



Data retrieval



Cleanse



Combine



Share

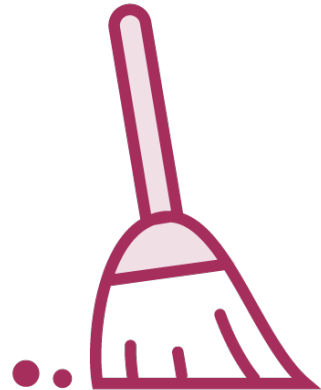
Data Retrieval



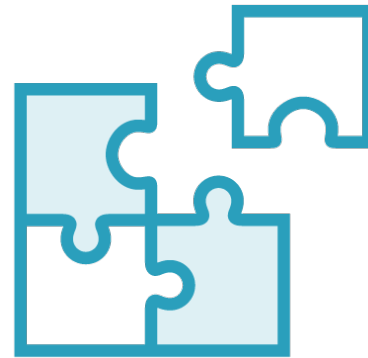
Power Query



Data retrieval



Cleanse

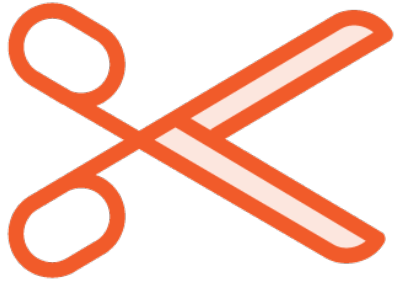


Combine



Share

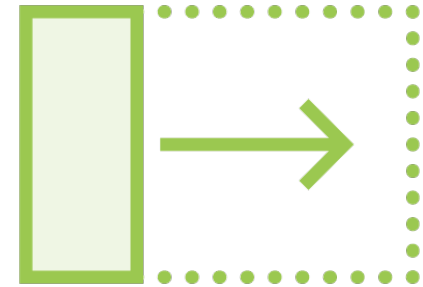
Cleansing and Shaping the Data



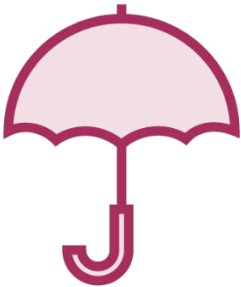
Step 1 – Delete columns



Step 2 – Filter rows



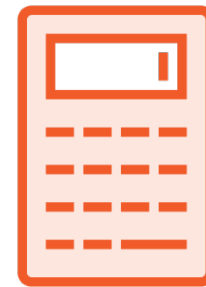
Step 3 – Split columns



Step 4 – Group



Step 5 - Sort



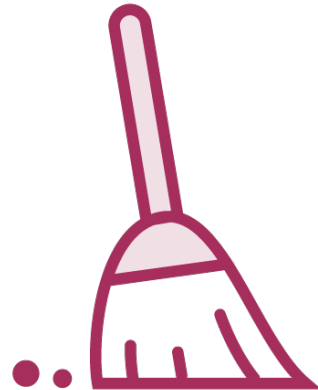
Step 6 – Custom calculation



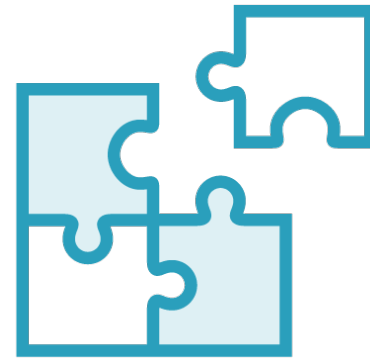
Power Query



Data retrieval



Cleanse

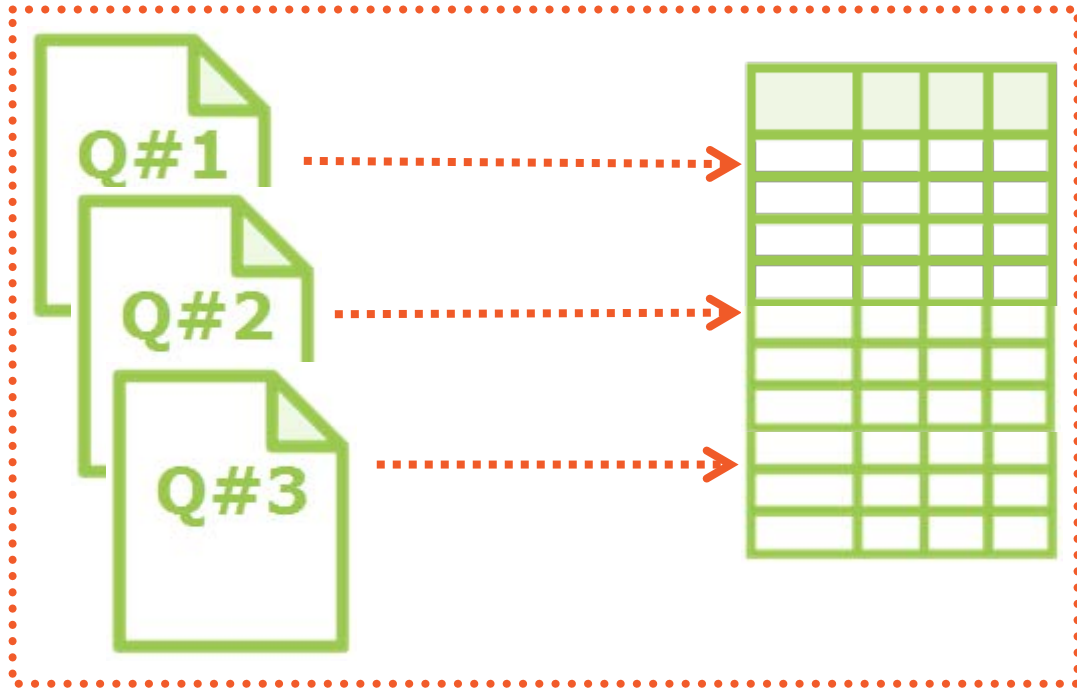


Combine



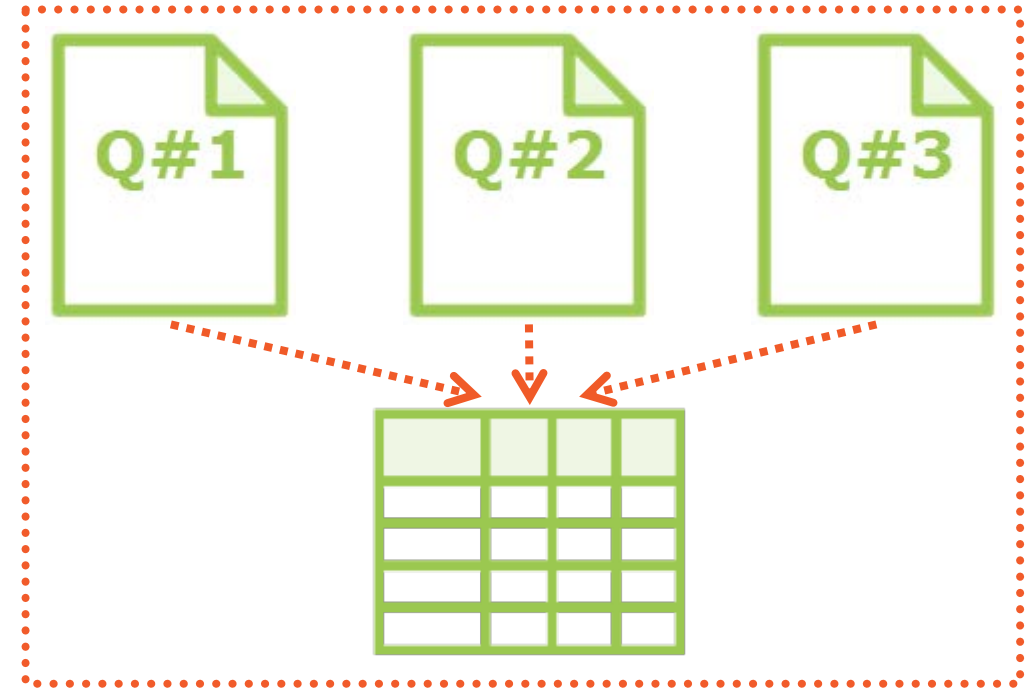
Share

Combining Queries



Append Queries

Data tends to be the same shape



Merge Queries

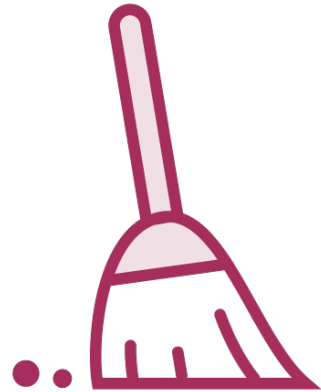
Data is combined using a matched column



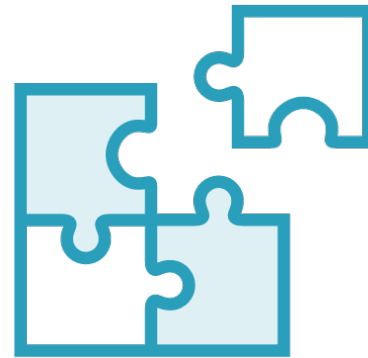
Power Query



Data retrieval



Cleanse

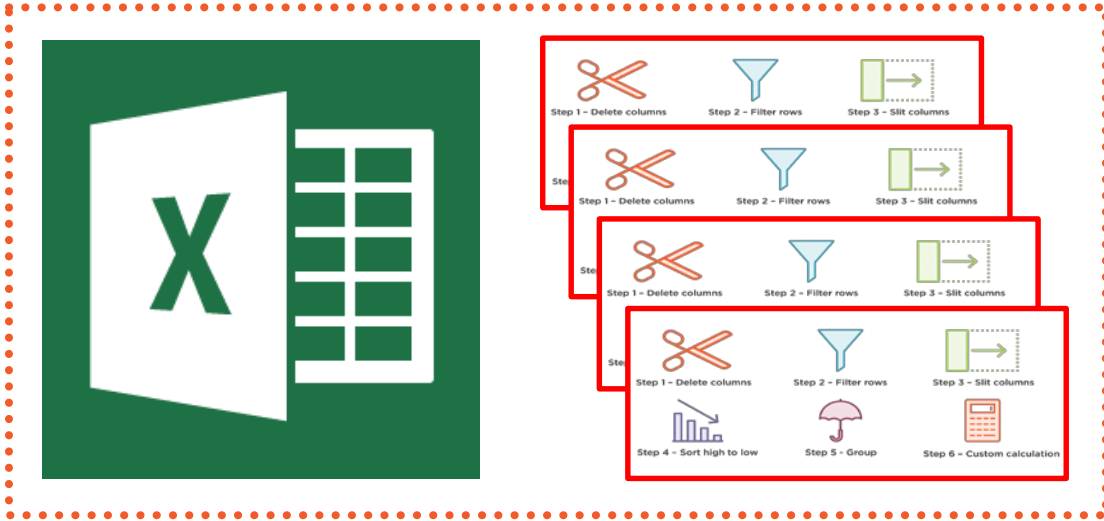


Combine



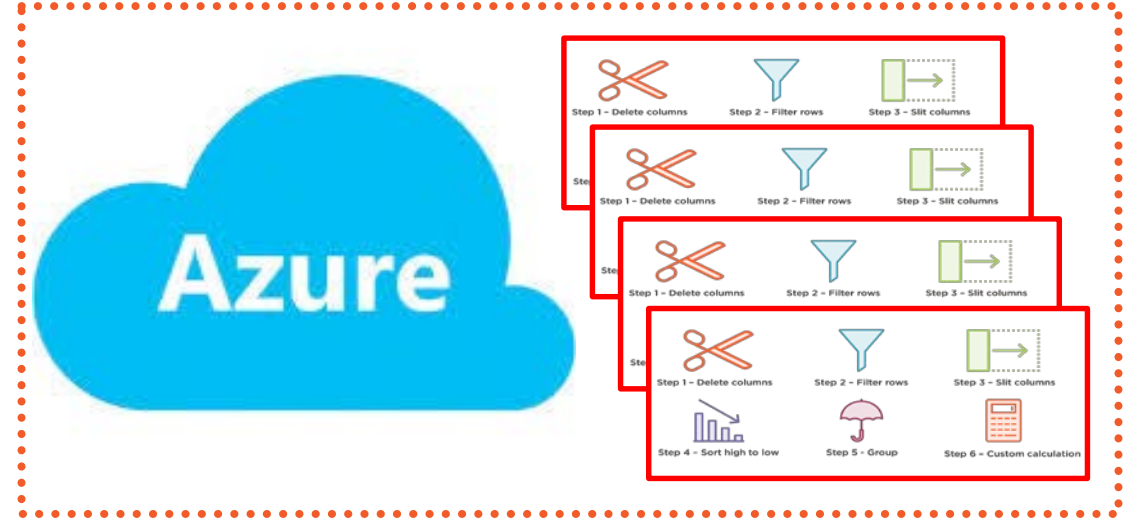
Share

Sharing Queries



Excel

Queries are stored in the Excel file.
Share the Excel file to share the queries.

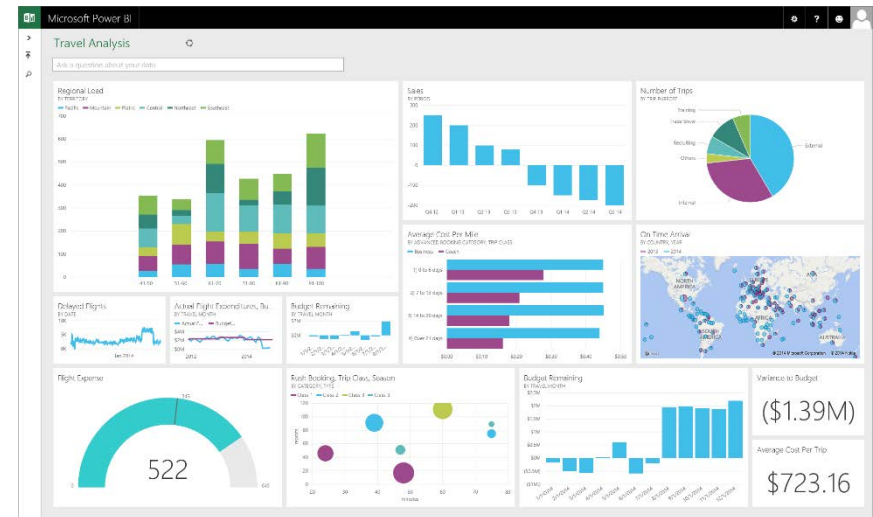
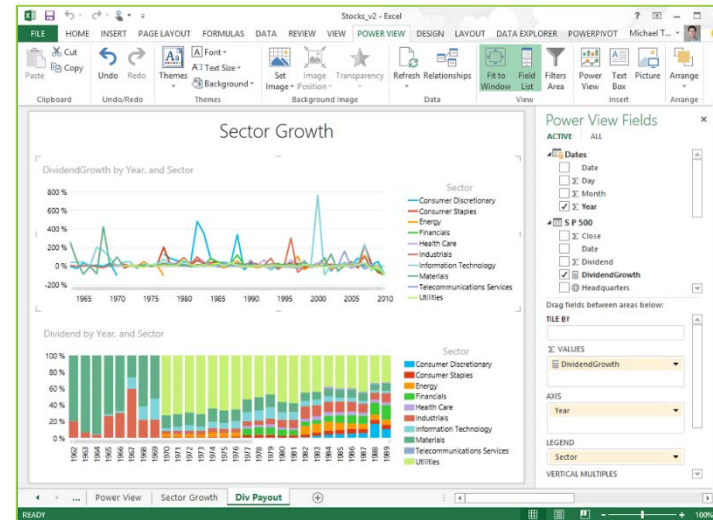


Data Catalog

Save the query to the Data Catalog.
Easier to discover, consume and
manage the queries across an
organisation.



Finished “Examples”



Power View - Enabled by Power Query

WC_HighestScoresByTeam - Query Editor

File Home Transform Add Column View

Close & Load Refresh Preview Properties Advanced Editor

Choose Columns Remove Columns Reduce Rows Sort Split Column Group By Data Type: Text Use First Row As Headers Replace Values Combine

Query

Queries

Runs Wickets lost Winning team Losing team Ground

1 417 6 Australia Afghanistan West
2 413 5 India Bermuda Que
3 411 4 South Africa Ireland Man
4 408 5 South Africa West Indies Syd
5 398 5 Sri Lanka Kenya Asgiri
6 377 6 Australia South Africa War
7 373 6 India Sri Lanka Cour
8 372 2 West Indies Zimbabwe Man
9 370 4 India Bangladesh Sher
10 363 5 New Zealand Canada Beau
11 360 4 West Indies Sri Lanka Natio
12 359 2 Australia India New
13 358 5 Australia Netherlands War
14 358 6 New Zealand Canada Wan
15 356 4 South Africa West Indies Que
16 353 3 South Africa Netherlands War
17 351 5 South Africa Netherlands Punj
18 349 10 Pakistan Zimbabwe Sabir
19 348 6 Australia New Zealand Que
20 342 9 Australia England Melk
21 340 2 Zimbabwe Namibia Hara

Query Settings

PROPERTIES

Name
WC_HighestScoresByTeam

APPLIED STEPS

Source
Navigation
Changed Type
Split Column by Delimiter
Changed Type1
Split Column by Delimiter1
Changed Type2
Split Column by Delimiter2
Duplicated Column
Changed Type3
Replaced Value
Replaced Value1
Replaced Value2
Replaced Value3
Replaced Value4
Replaced Value5

8 COLUMNS, 50+ ROWS

PREVIEW DOWNLOADED AT 10:24 AM.



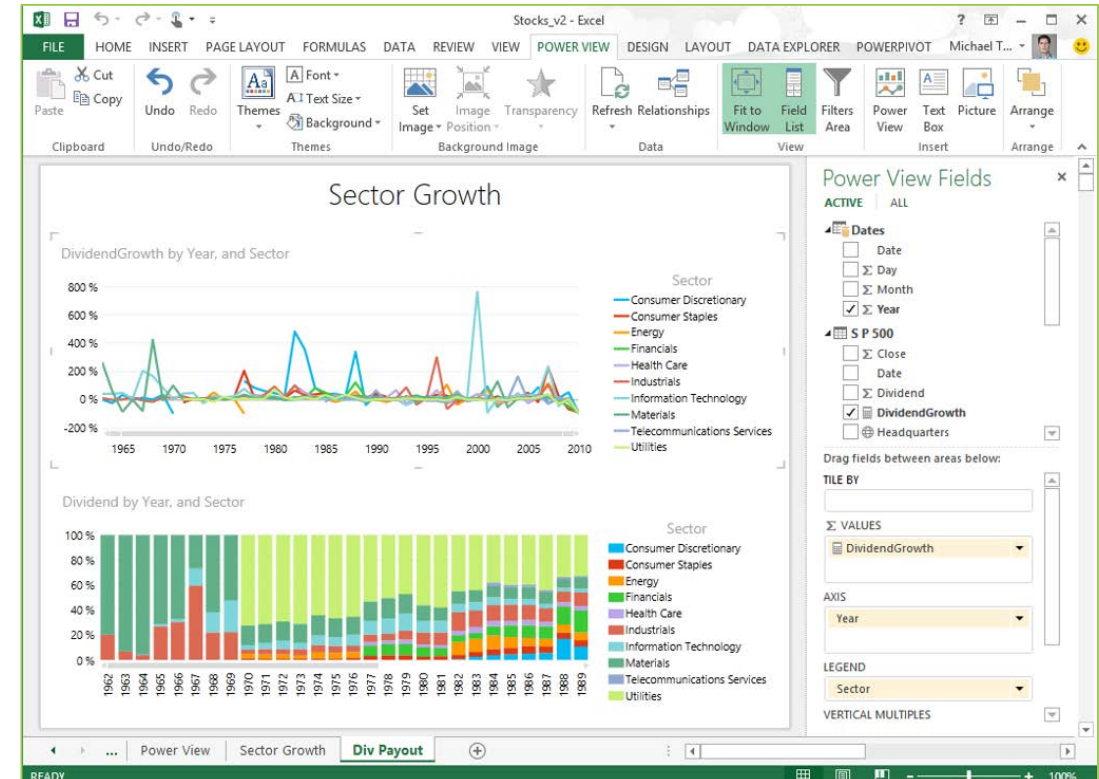
<https://blogs.office.com/2015/04/03/cricket-world-cup-fever-analyzing-the-data-with-power-query/>



Power View - Enabled by Power Query

The screenshot shows the Microsoft Excel interface with the 'Book1 - Excel' window. The ribbon includes FILE, HOME, INSERT, PAGE LAYOUT, FORMULAS, DATA, REVIEW, VIEW, DATA EXPLORER, and POWERPivot. The 'DATA EXPLORER' tab is active, showing a table of Dow Jones Industrial Average components. The table has columns for Company, Exchange, Symbol, Industry, Date Added, and Notes. The 'Online Search' sidebar on the right shows search results for 'dja'.

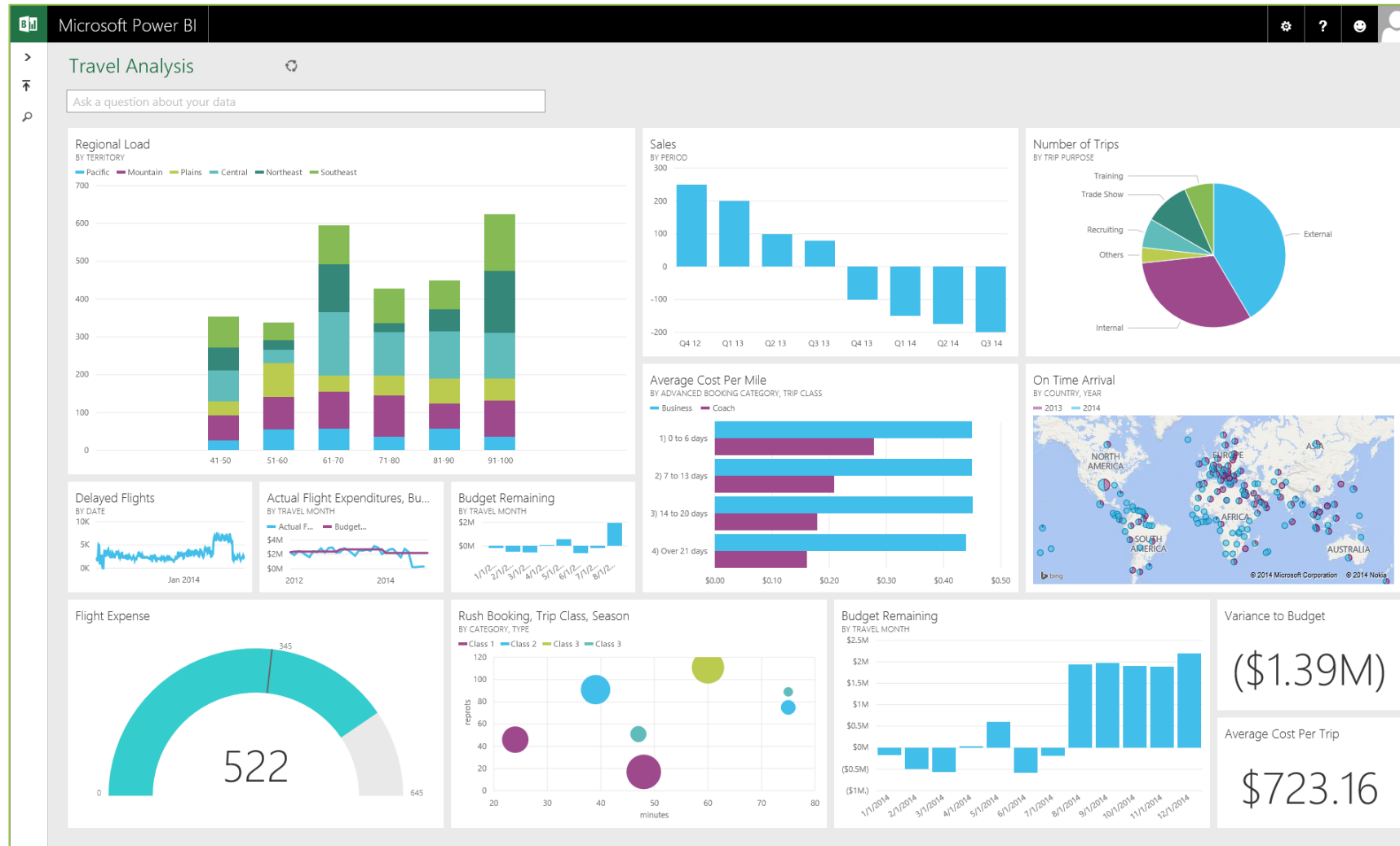
Company	Exchange	Symbol	Industry	Date Added	Notes
3M	NYSE	MMM	Conglomerate	1976-08-09	as Minnesota Mining and
Alcoa	NYSE	AA	Aluminum	1959-06-01	as Aluminum Company of
American Express	NYSE	AXP	Consumer finance	1982-08-30	
AT&T	NYSE	T	Telecommunication	1999-11-01	as SBC Communications
Bank of America	NYSE	BAC	Banking	2008-02-19	
Boeing	NYSE	BA	Aerospace and defense	1987-03-12	
Caterpillar	NYSE	CAT	Construction and mining equipment	1991-05-06	
Chevron Corporation	NYSE	CVX	Oil & gas	2008-02-19	
Cisco Systems	NASDAQ	CSCO	Computer networking	2009-06-08	
Coca-Cola	NYSE	KO	Beverages	1987-03-12	
DuPont	NYSE	DD	Chemical industry	1935-11-20	also 1924-01-22 to 1925-08
ExxonMobil	NYSE	XOM	Oil & gas	1928-10-01	as Standard Oil of New Je
General Electric	NYSE	GE	Conglomerate	1907-11-07	
Hewlett-Packard	NYSE	HPQ	Computers and technology	1997-03-17	
The Home Depot	NYSE	HD	Home improvement retailer	1999-11-01	
Intel	NASDAQ	INTC	Semiconductors	1999-11-01	
IBM	NYSE	IBM	Computers and technology	1979-06-29	
Johnson & Johnson	NYSE	JNJ	Pharmaceuticals	1997-03-17	



<https://blogs.office.com/2013/07/08/what-powers-power-bi-in-office-365/>



Power BI – Enabled by Power Query



Microsoft References

Power BI blog

- <https://powerbi.microsoft.com/en-us/blog/tag/power-query/>

Technet Power Query Forum

- <https://social.technet.microsoft.com/Forums/en-US/home?forum=powerquery>

Excel Answers

- https://answers.microsoft.com/en-us/msoffice/forum/msoffice_excel



Summary



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- Retrieve
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Examples & References

