POWER BI DATAFLOWS AND ANALYTICS WITH MICROSOFT POWER BI

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Education

Texas A&M - MS in Analytics

LSU - BS in Spatial Analysis

Photographer

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Blog

http://STATCowboy.com

Code

https://github.com/STATCowboy

POWER BI OVERVIEW

Power BI Desktop

- Windows app to author self-service data driven analytic reports
- Install from Microsoft Store (monthly updates automagically!)

Power BI Service

- MS hosted service for publishing Power BI reports and dashboards
- http://app.powerbi.com

Power BI Mobile

- App for Windows, iOS (phones and tablets) & Android

On-premises Data Gateway

- Bridge to query & load data from on-premises data sources to Power BI Service

Power BI Report Server

- On-premises version of the PowerBI.com service (limited features than cloud version)

POWER BI LANGUAGES

M

- Used in Power Query for Data Wrangling
- https://docs.microsoft.com/en-us/powerquery-m/power-query-m-reference

DAX

- Used to create columns, measures, calculations in Power BI (in Excel, too!)
- https://docs.microsoft.com/en-us/dax/data-analysis-expressions-dax-reference

POWER BI FEATURES

Python

Supports Python for data wrangling and visualizations

R

Supports R for data wrangling and visualizations

Dataflows

Integrates Data Lake and ETL technology directly into Power BI

https://www.jamesserra.com/archive/2018/08/power-bi-dataflows/

POWER BI LICENSING

Power BI Desktop

It's Free!

Power BI Pro

Low price of $9.99 month!

Publish to Power BI Service

Power BI Premium

Adds support for dedicated capacity and an enterprise pricing model and new features

Varies by dedicated capacity needs (i.e. Nodes)

https://**power**bi.microsoft.com/Official-Site/Pricing

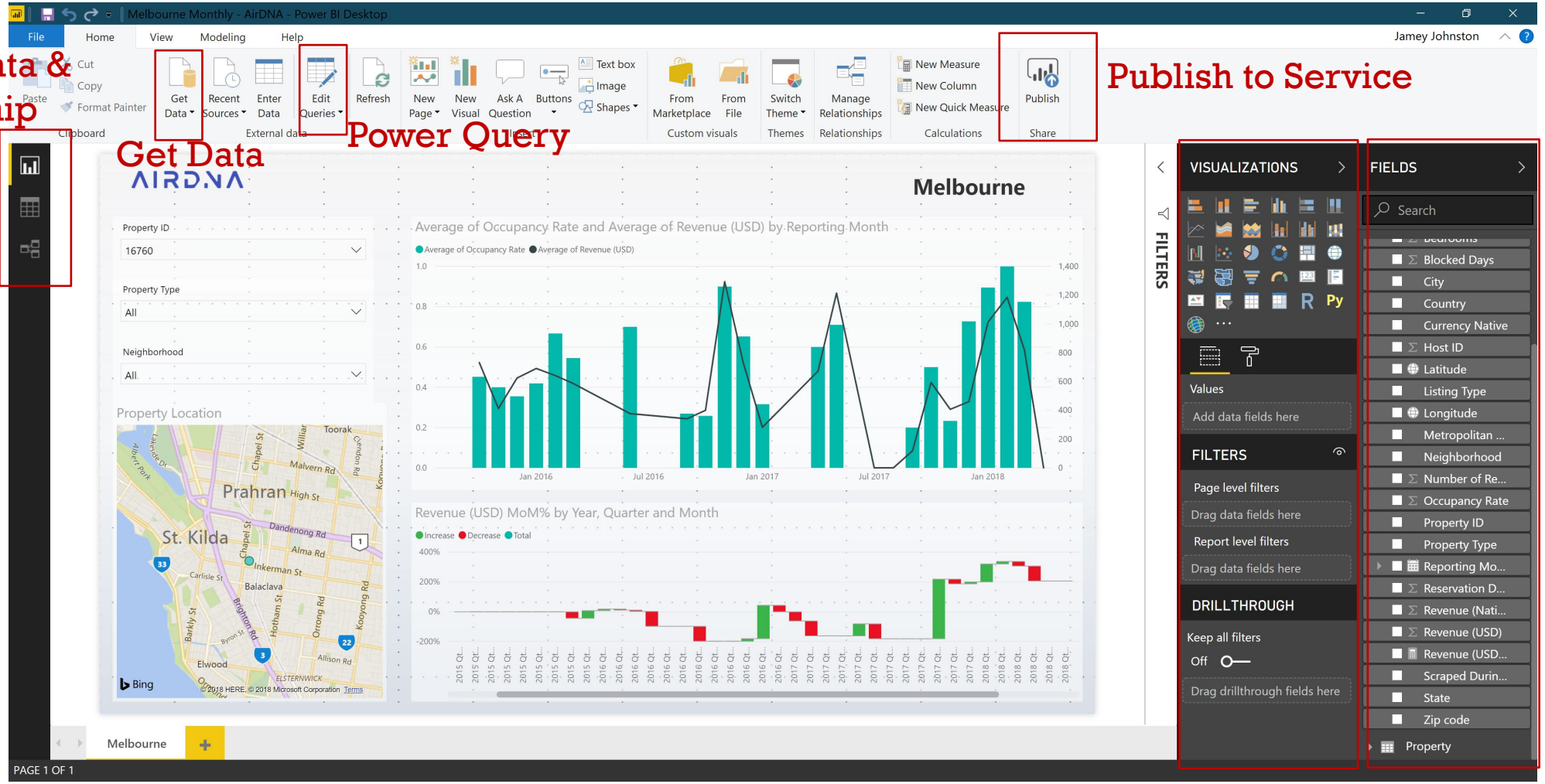
POWER BI DESKTOP

Report, Data & Relationship View

Get Data

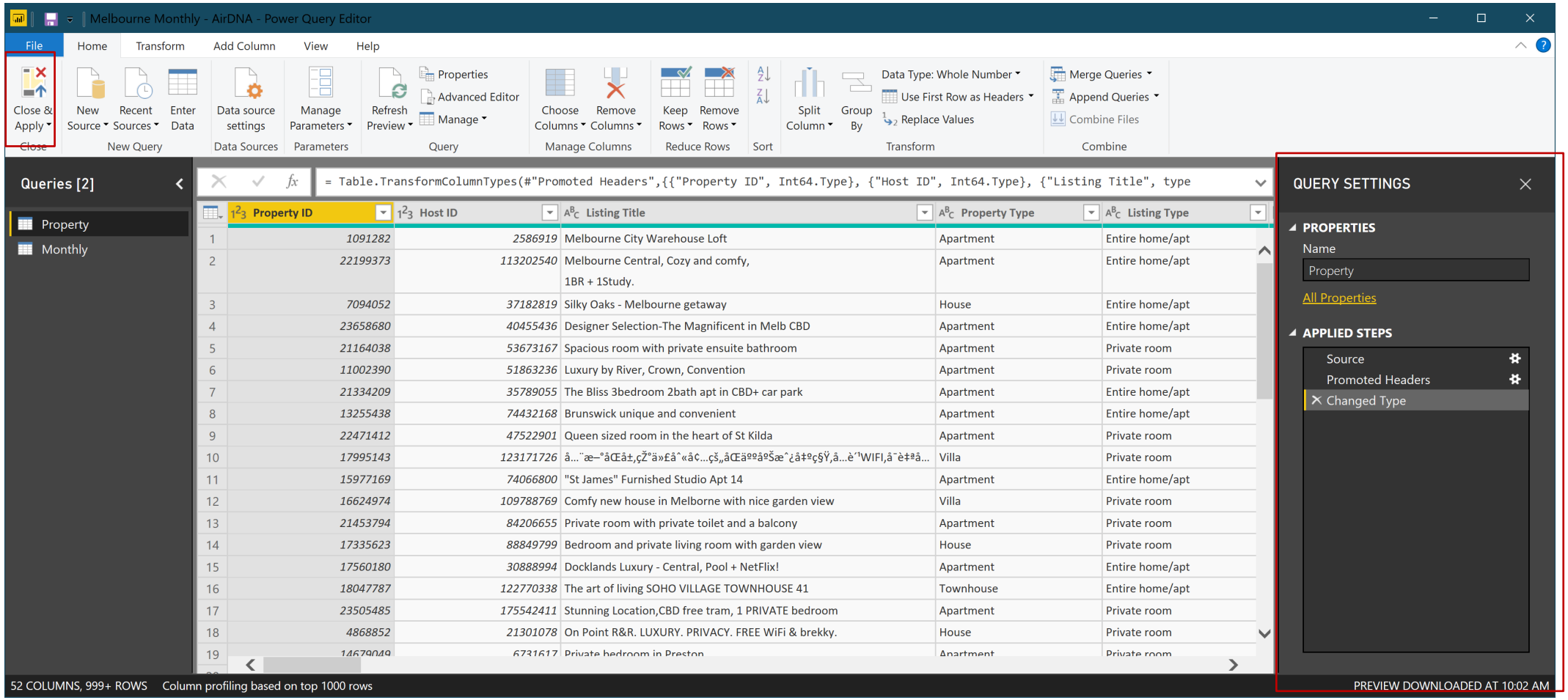
Power Query

Publish to Service



POWER BI DESKTOP – POWER QUERY

Close



POWER BI SERVICE

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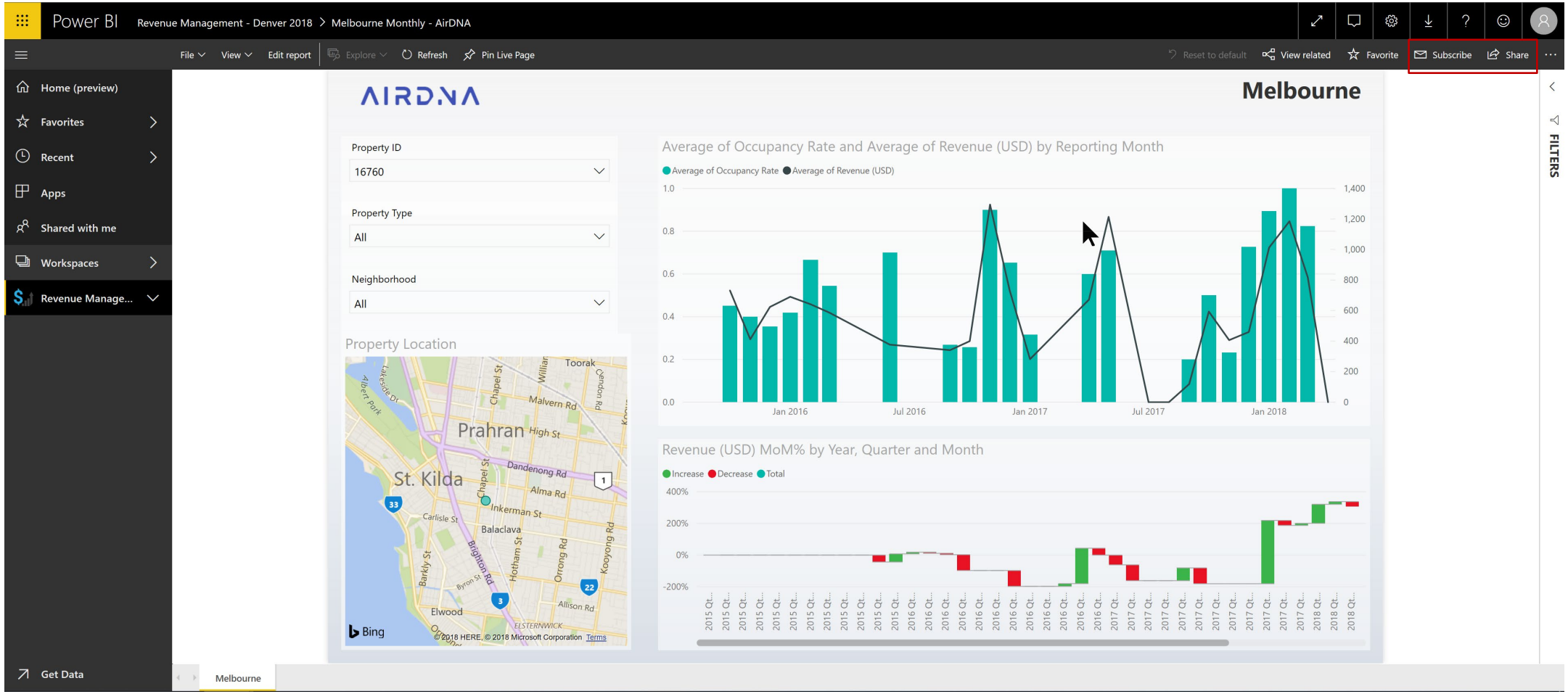
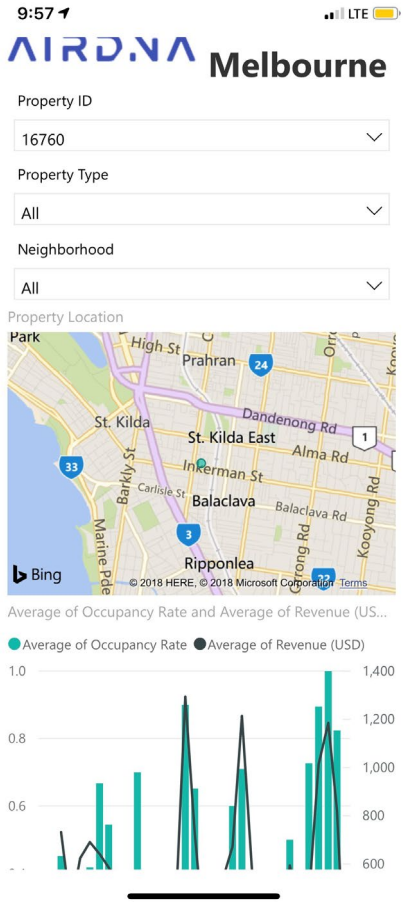
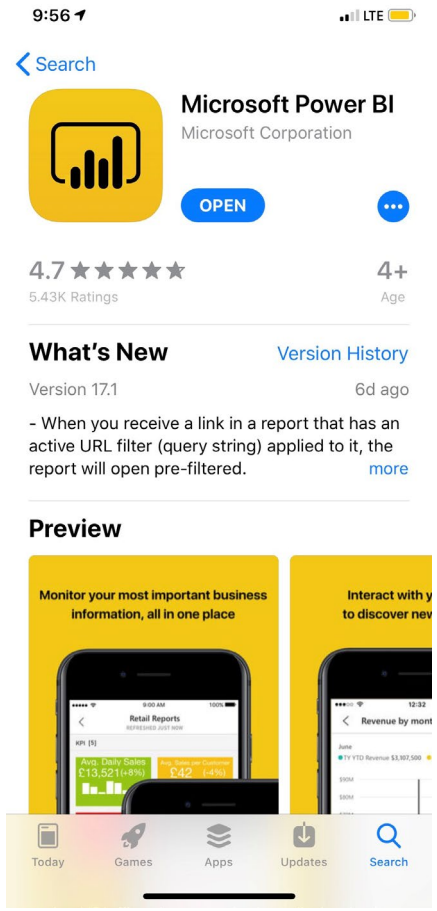
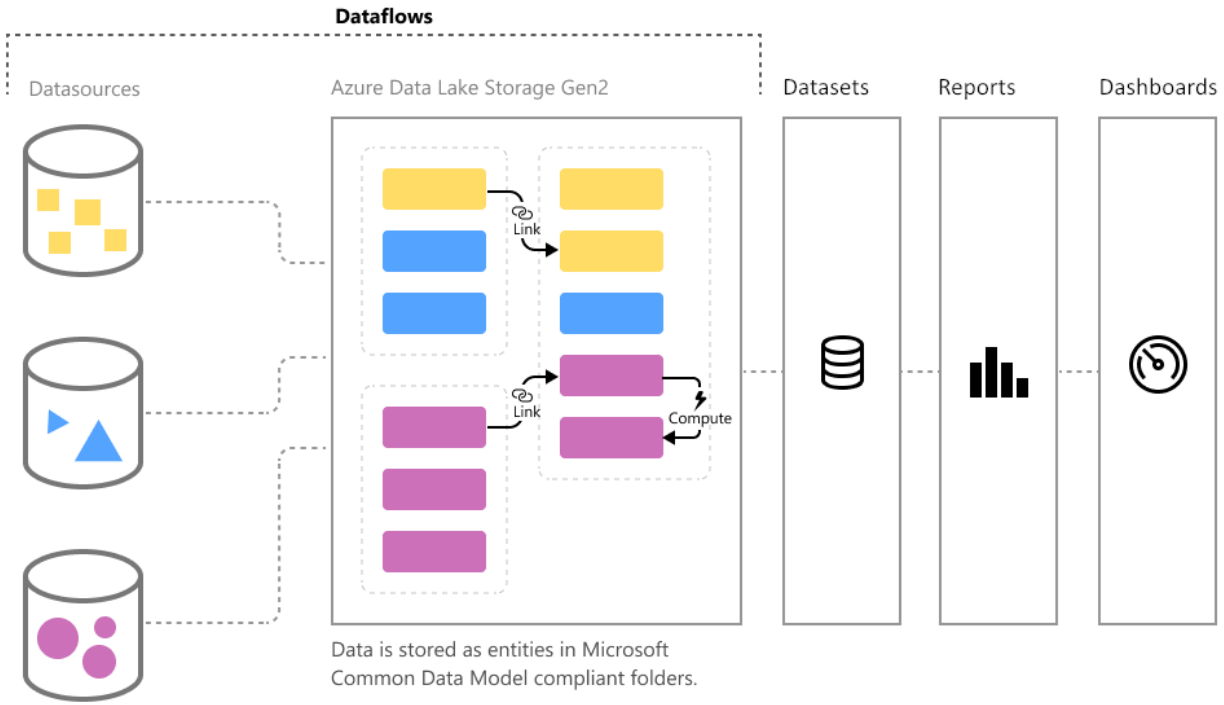




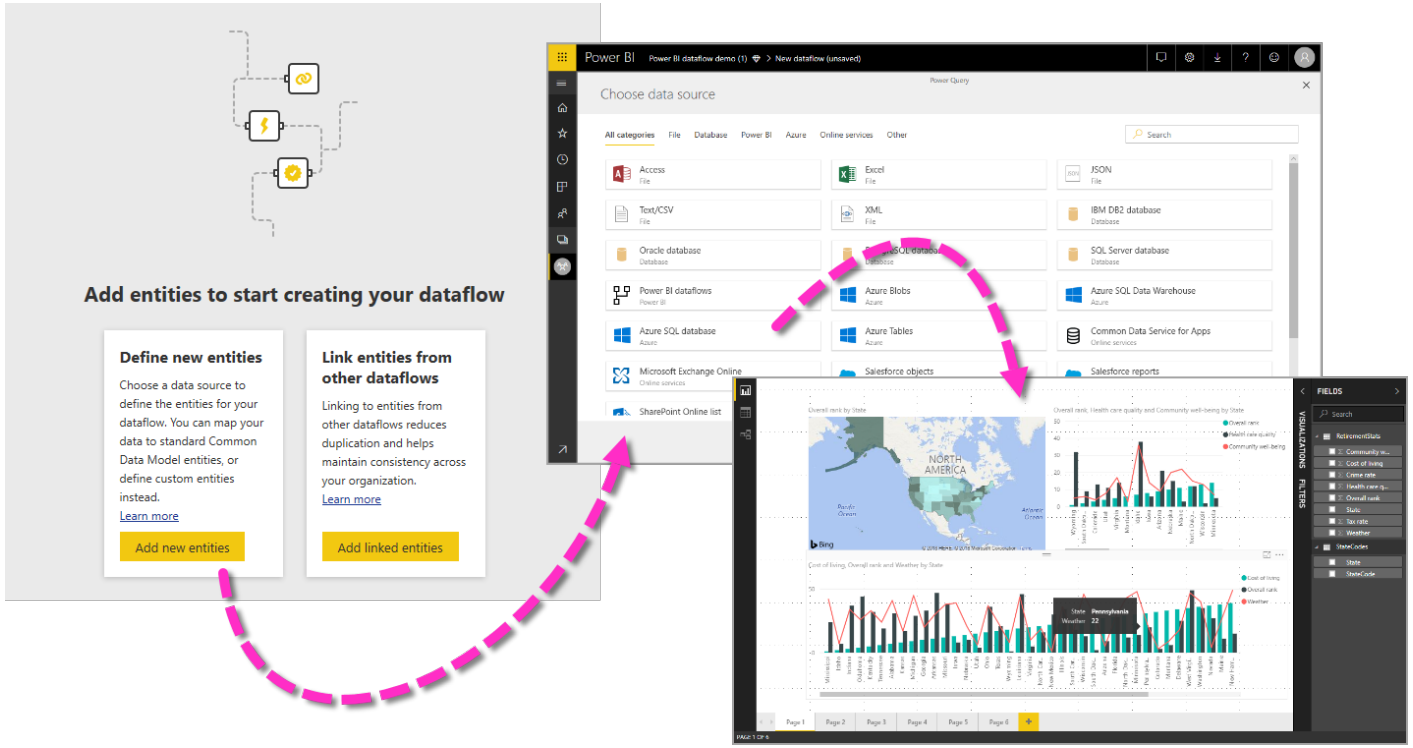


POWER BI MOBILE



POWER BI DATAFLOWS

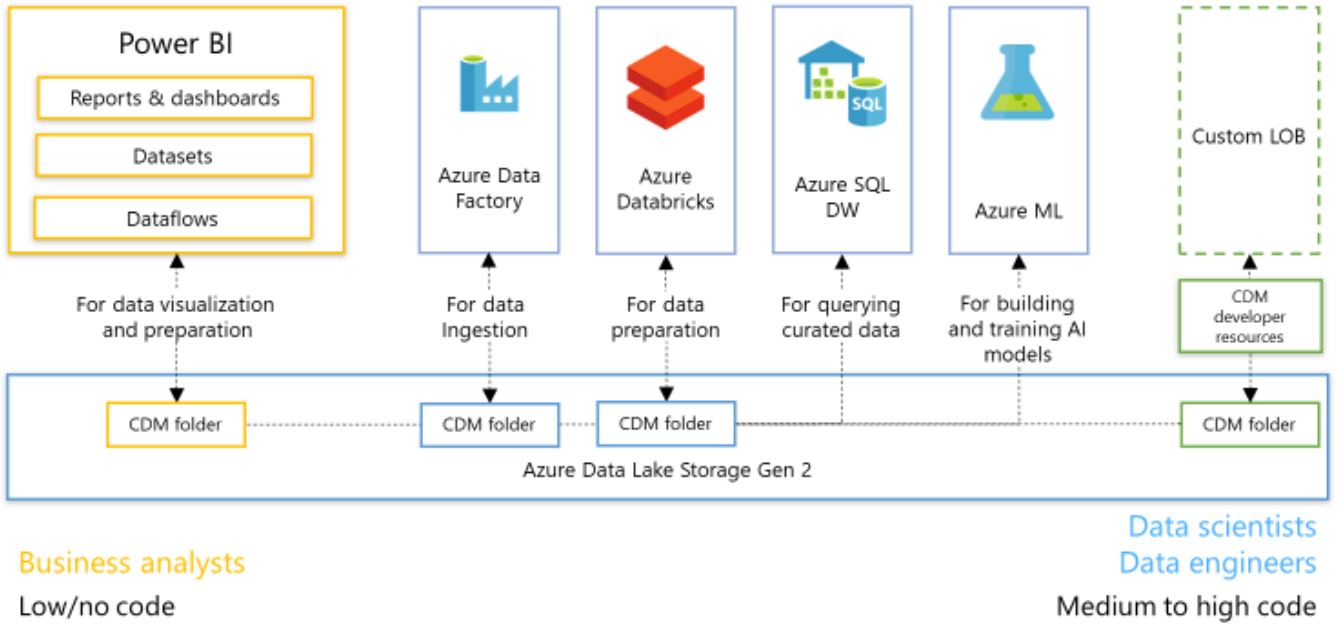
https://docs.microsoft.com/en-us/power-bi/service-dataflows-overview
https://powerbi.microsoft.com/pt-pt/blog/introducing-power-bi-data-prep-wtih-dataflows/



POWER BI DATAFLOWS

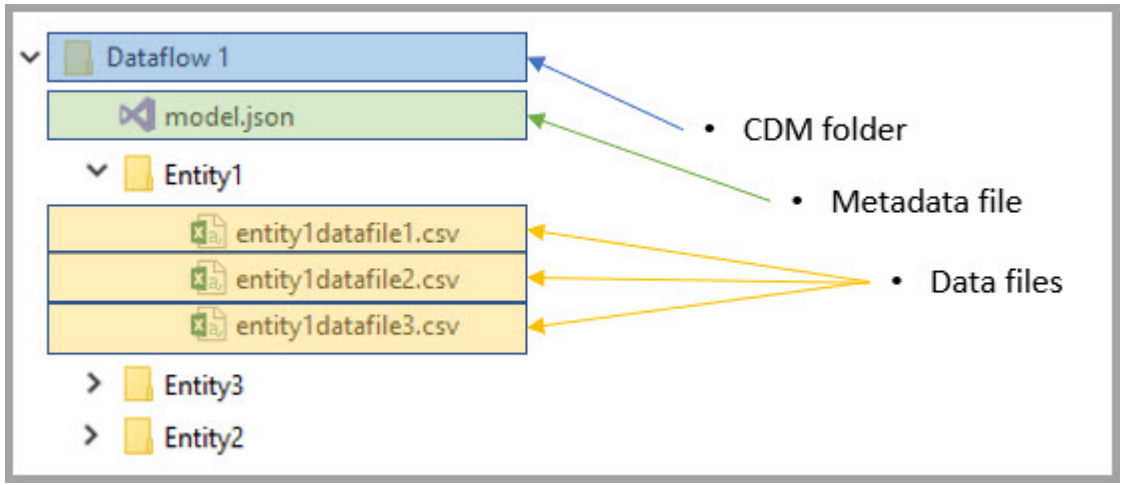
https://docs.microsoft.com/en-us/power-bi/service-dataflows-create-use

POWER BI DATAFLOWS & ADLS INTEGRATION

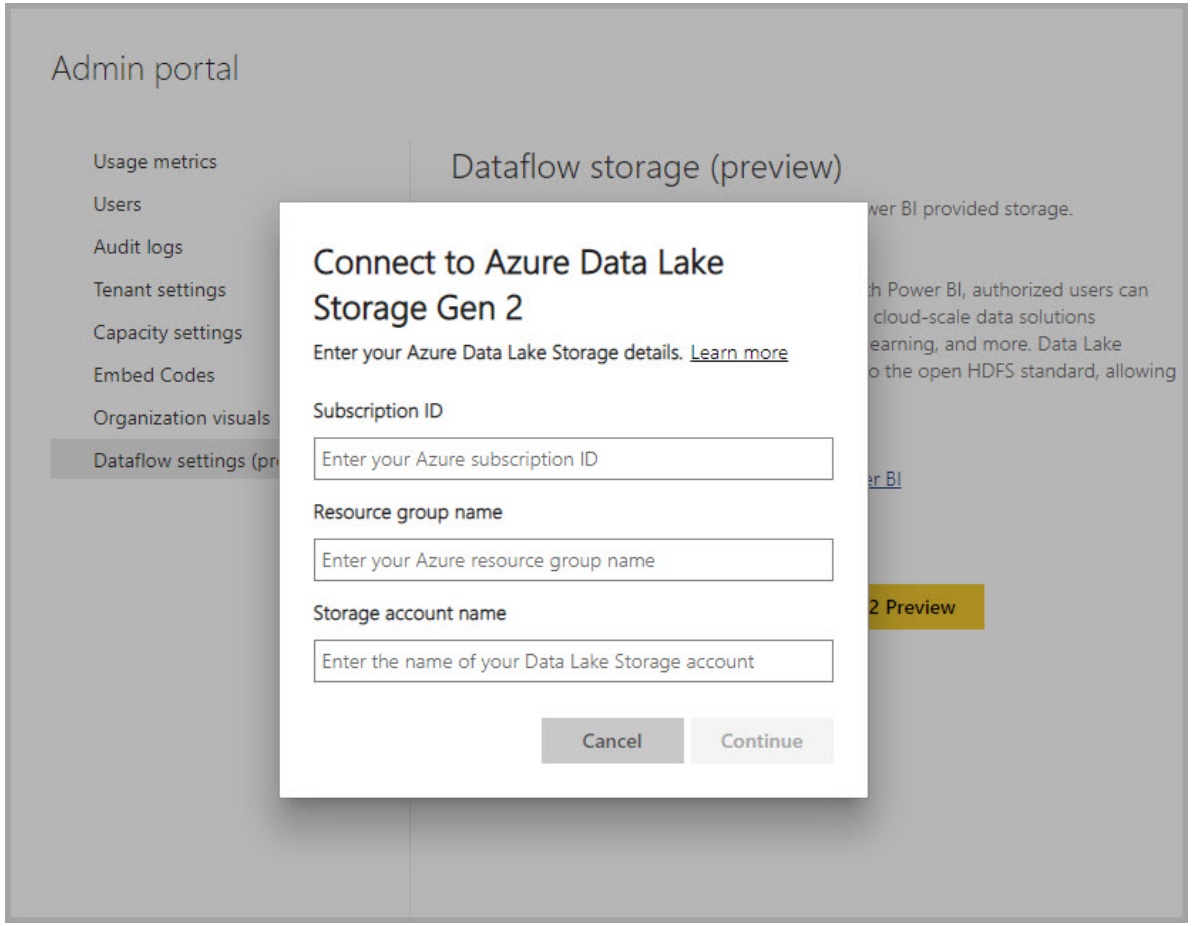


https://docs.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-introduction

POWER BI DATAFLOWS CDM FOLDER

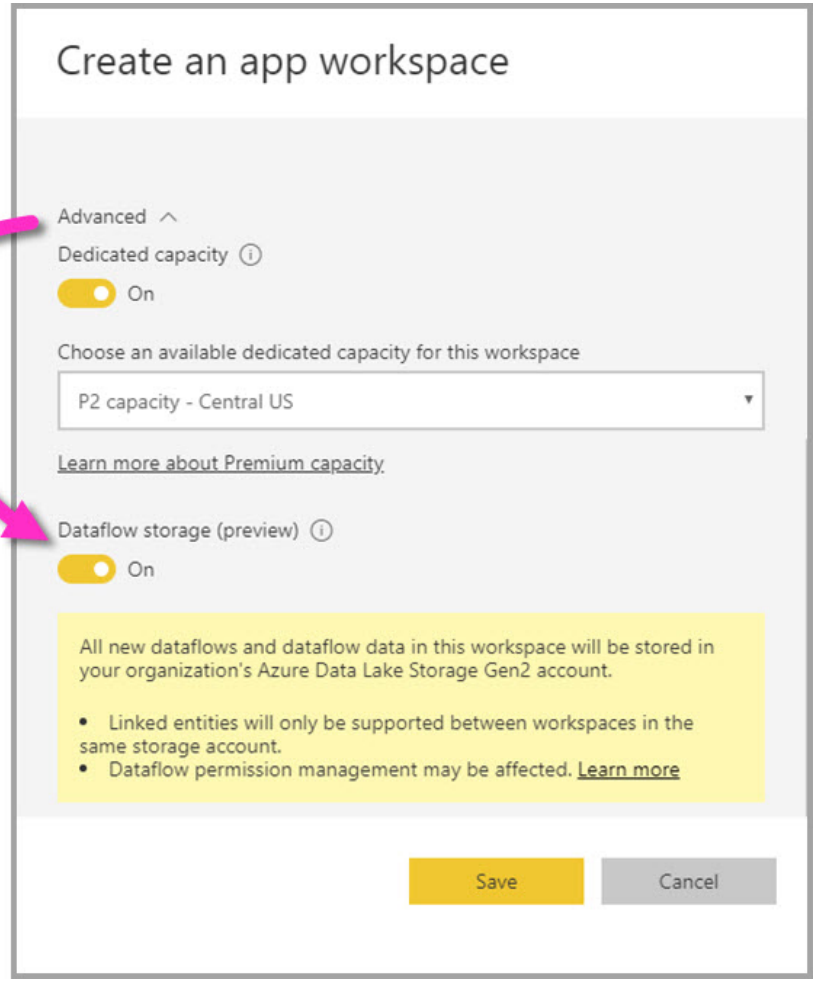


https://docs.microsoft.com/en-us/power-bi/service-dataflows-azure-data-lake-integration



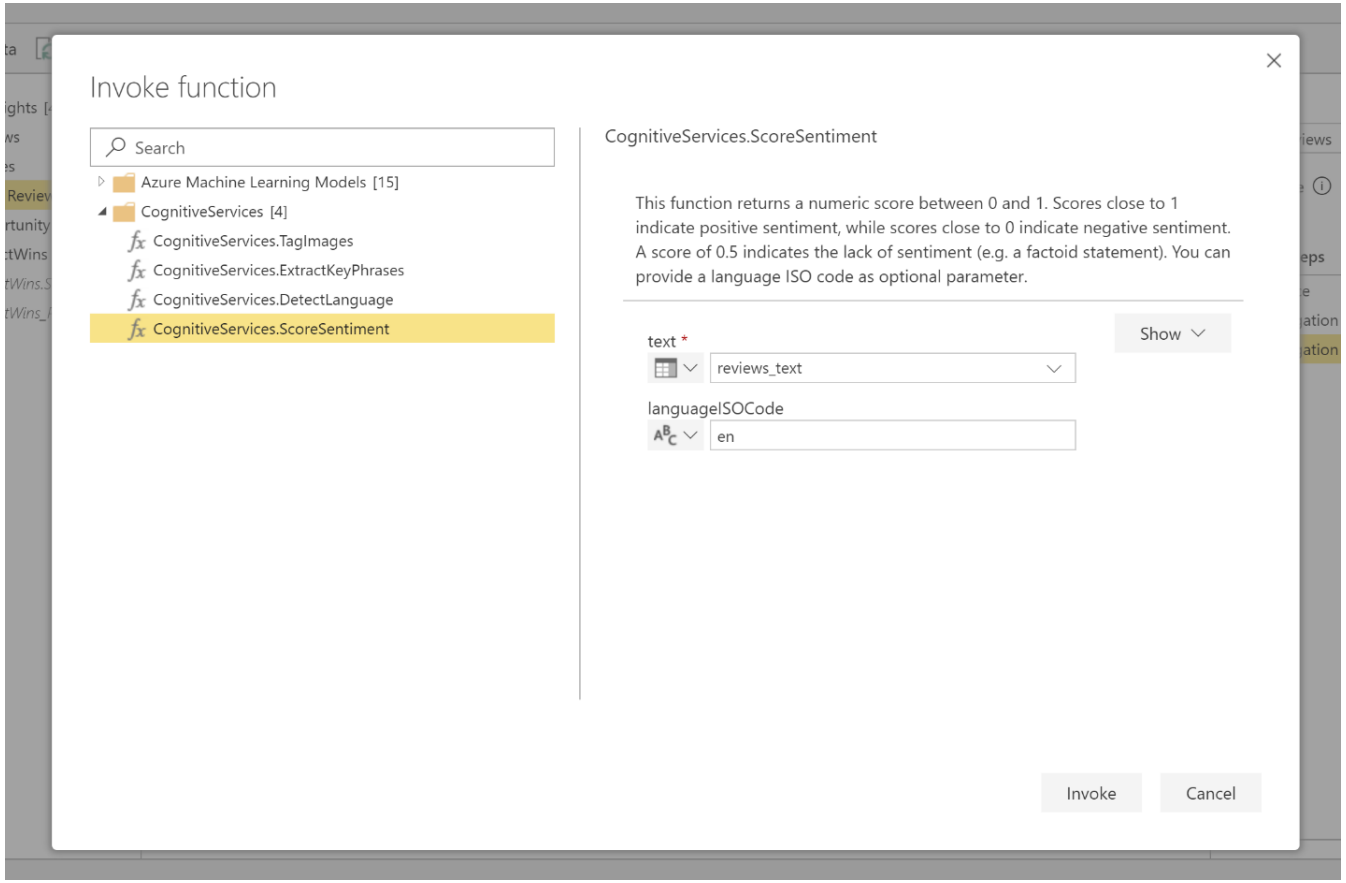
CONNECT DATAFLOWS TO ADLS GEN2

https://docs.microsoft.com/en-us/power-bi/service-dataflows-connect-azure-data-lake-storage-gen2



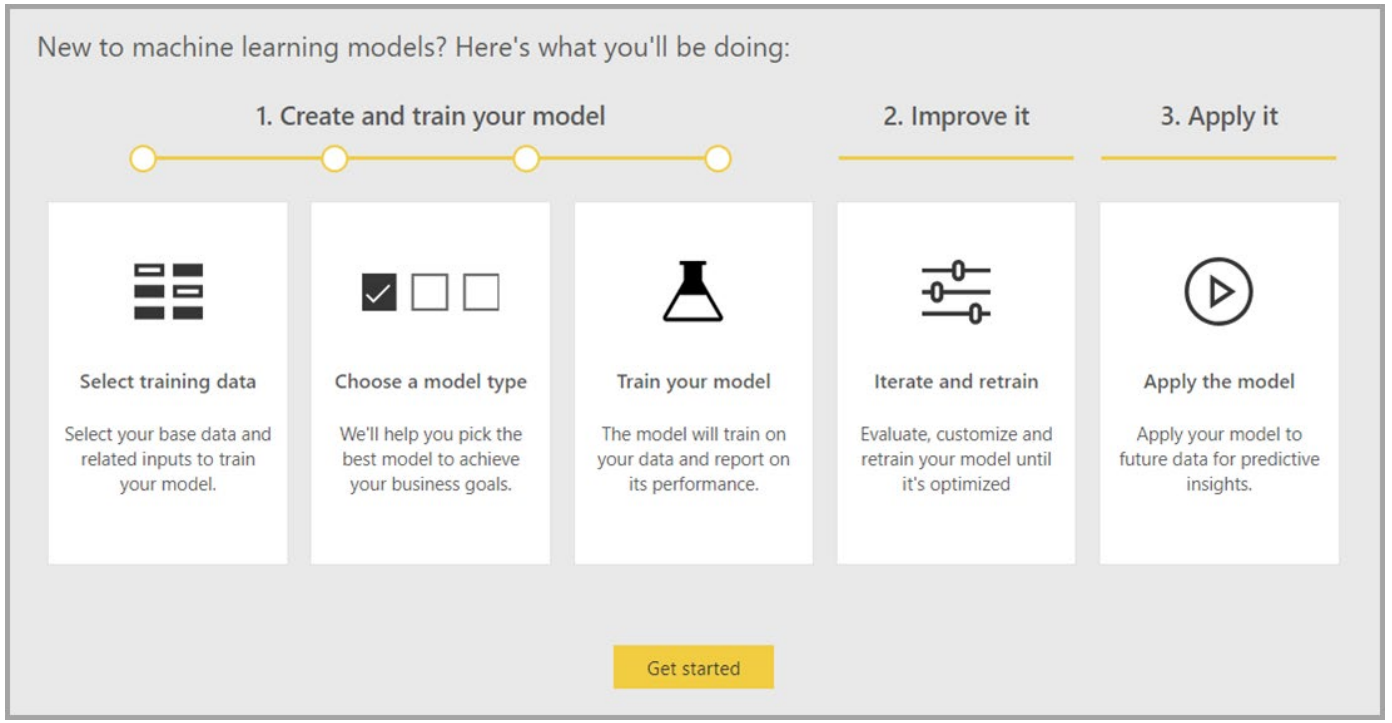
CONFIGURE WORKSPACE FOR POWER BI DATAFLOWS

https://docs.microsoft.com/en-us/power-bi/service-dataflows-configure-workspace-storage-settings



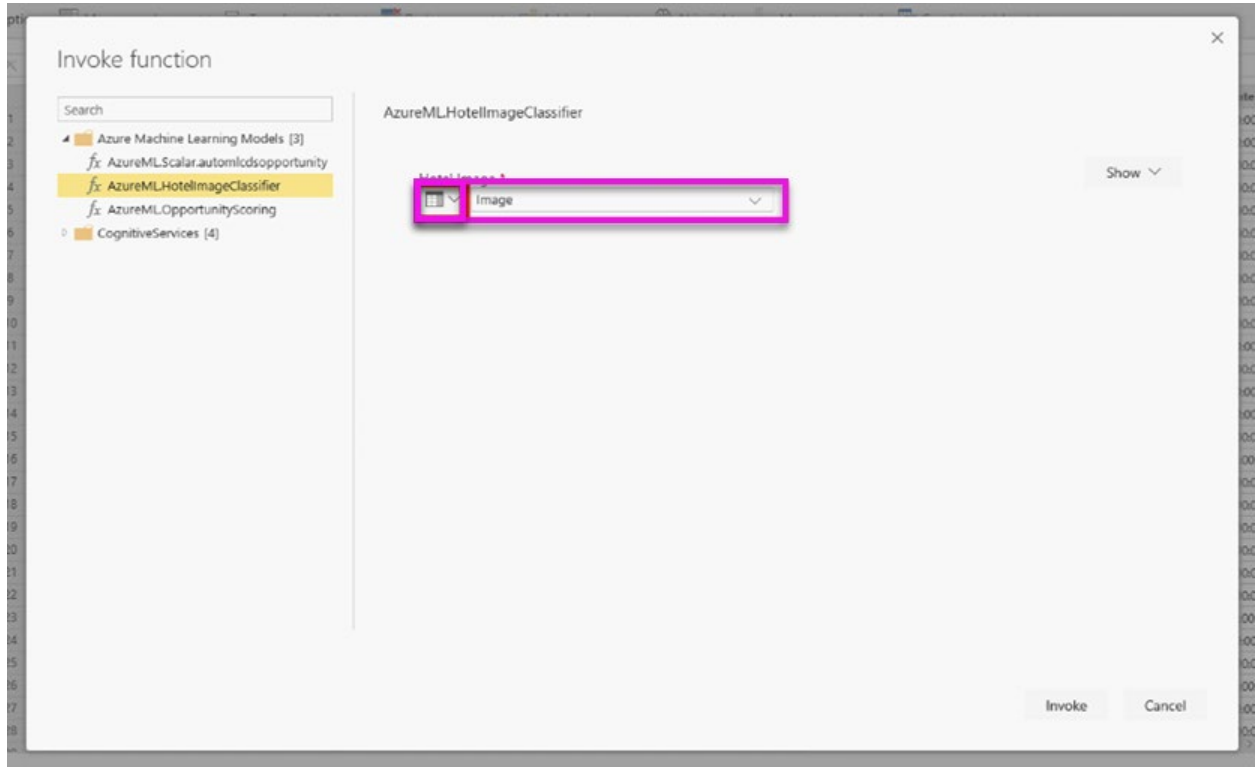
COGNITIVE SERVICES IN POWER BI DATAFLOWS

https://docs.microsoft.com/en-us/power-bi/service-cognitive-services



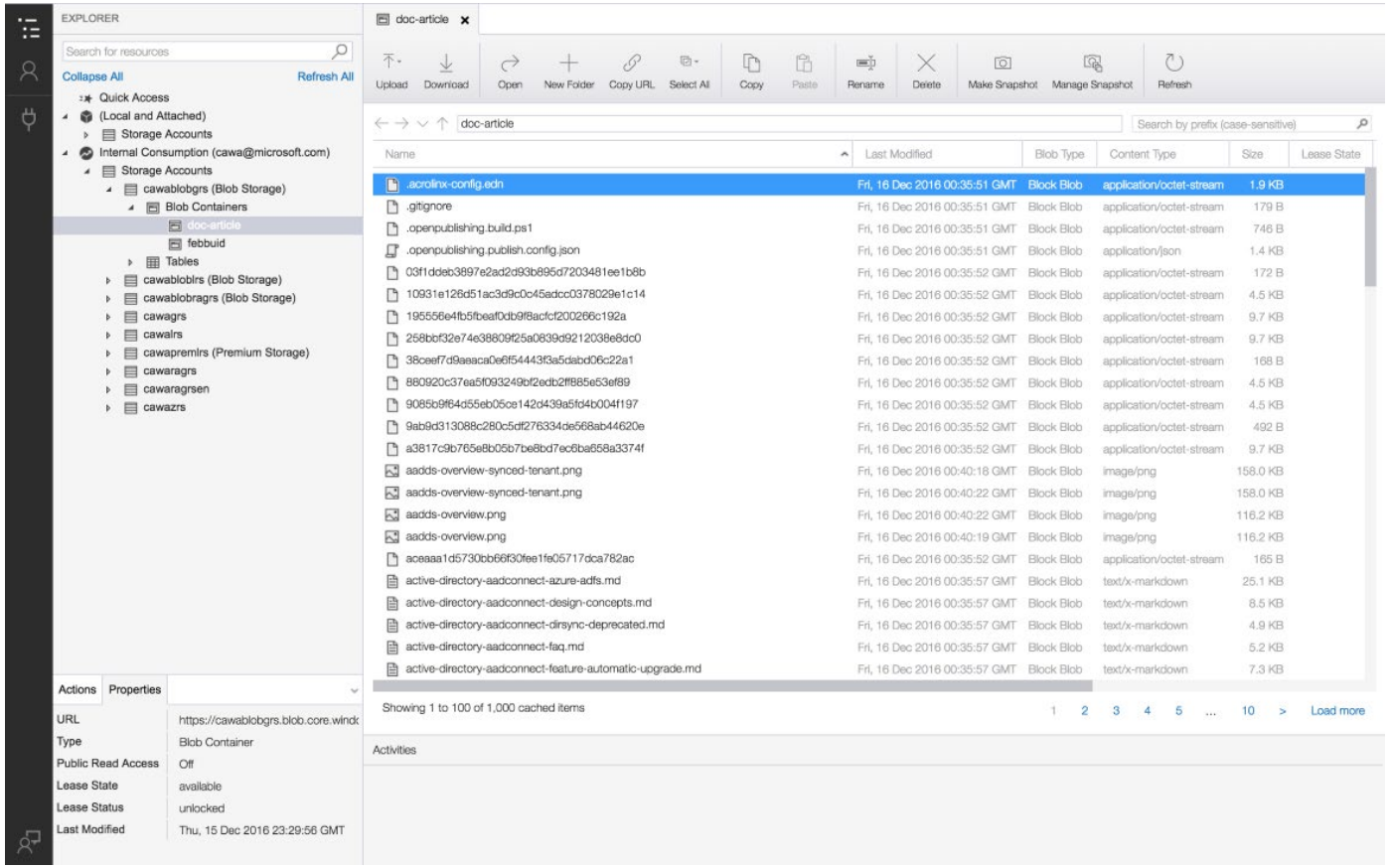
AUTOMATED ML IN POWER BI DATAFLOWS

https://docs.microsoft.com/en-us/power-bi/service-machine-learning-automated



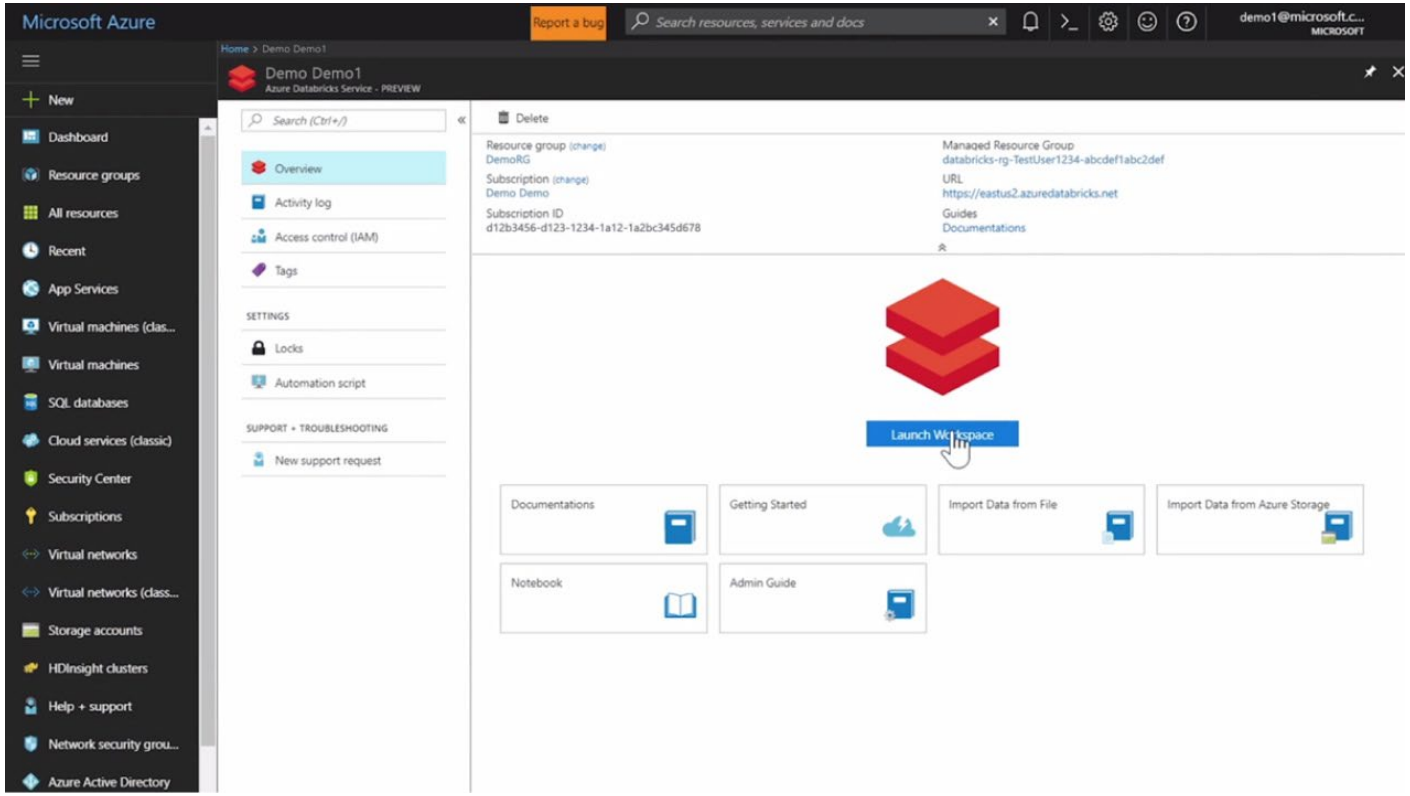
AZURE ML IN POWER BI DATAFLOWS

https://docs.microsoft.com/en-us/power-bi/service-machine-learning-integration



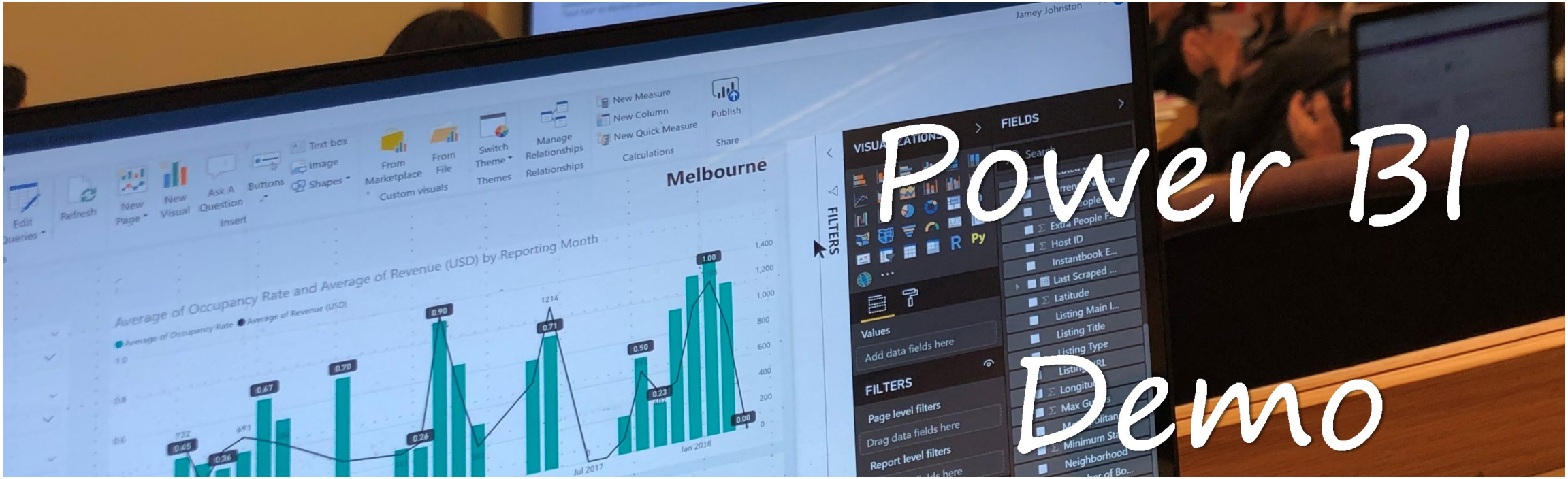
AZURE STORAGE EXPLORER

https://azure.microsoft.com/en-us/features/storage-explorer/



AZURE DATABRICKS

https://azure.microsoft.com/en-us/services/databricks/
https://docs.databricks.com/spark/latest/data-sources/azure/azure-datalake-gen2.html



DEMO

https://pbiaitutorials.blob.core.windows.net/textanalytics/FabrikamComments.csv

RESOURCES

Power BI Docs & Blog	• https://powerbi.microsoft.com/en-us/blog/ • https://docs.microsoft.com/en-us/power-bi/
Guy in a Cube YouTube Channel	• https://guyinacube.com/ • https://www.youtube.com/channel/UCFp1vaKzpfvoGai0vE5VJ0w
Power BI YouTube Channel	• https://www.youtube.com/user/mspowerbi
RADACAD	• http://radacad.com/
SQL BI	• https://www.sqlbi.com/

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