INTRO TO POWER BI

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JAMEY JOHNSTON

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Project Coach & Professor
Texas A&M Analytics

Education

Texas A&M - MS in Analytics

LSU - BS in Spatial Analysis

Photographer

http://jamey.photos

Blog

http://STATCowboy.com

Code

https://github.com/STATCowboy/IntroPowerBI-TAMU

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 or per User

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

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

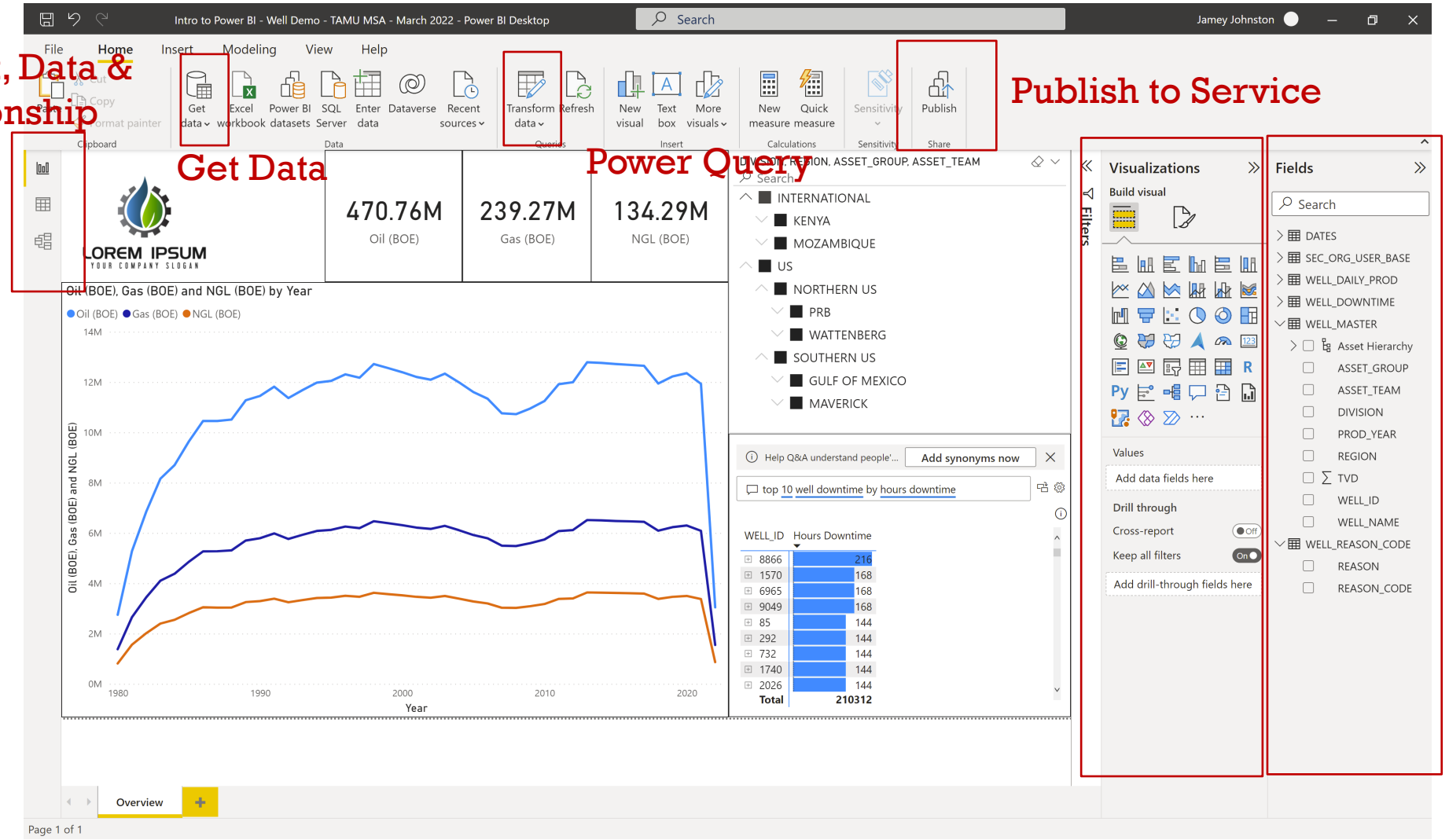
POWER BI DESKTOP

Report, Data & Relationship View

Get Data

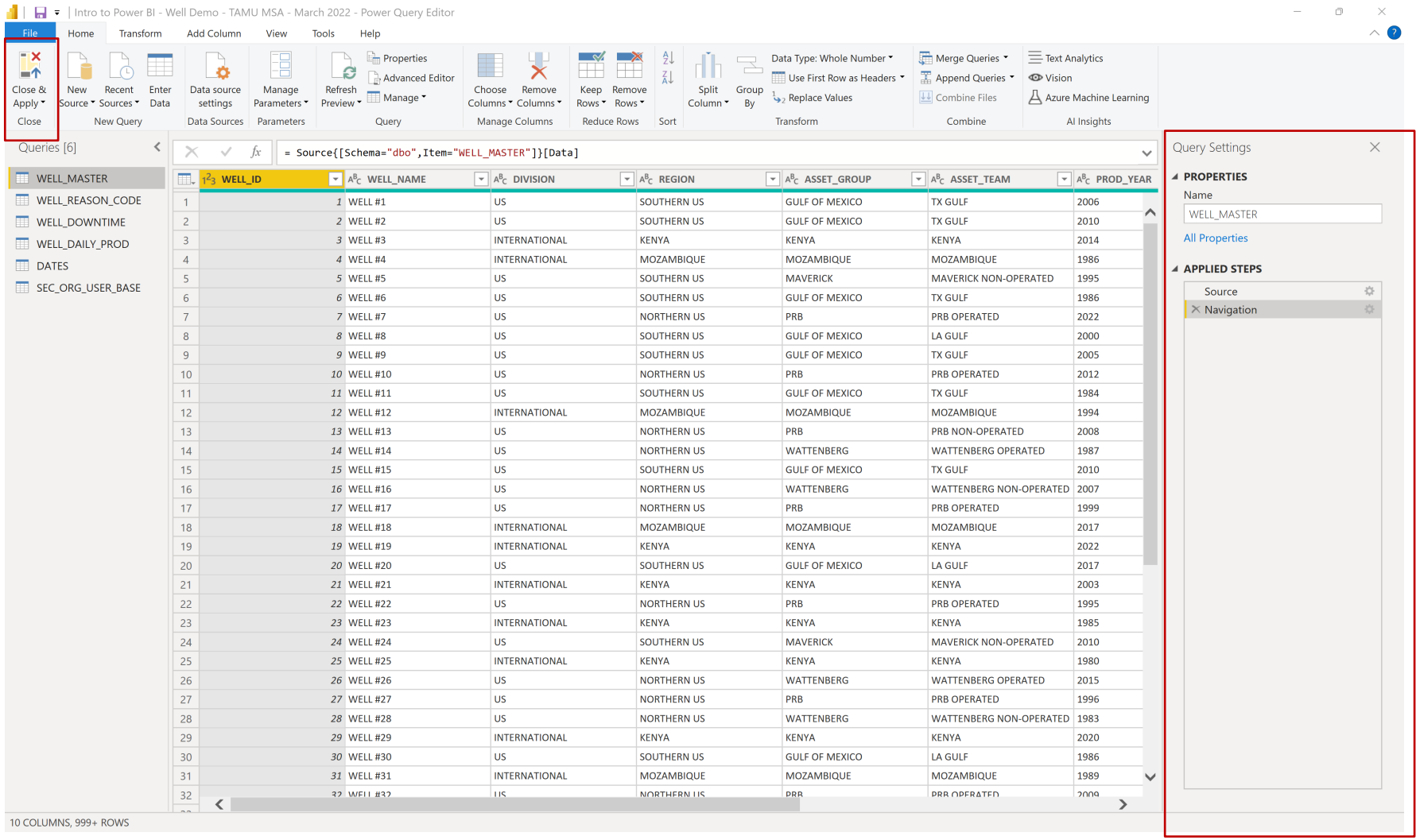
Power Query

Publish to Service



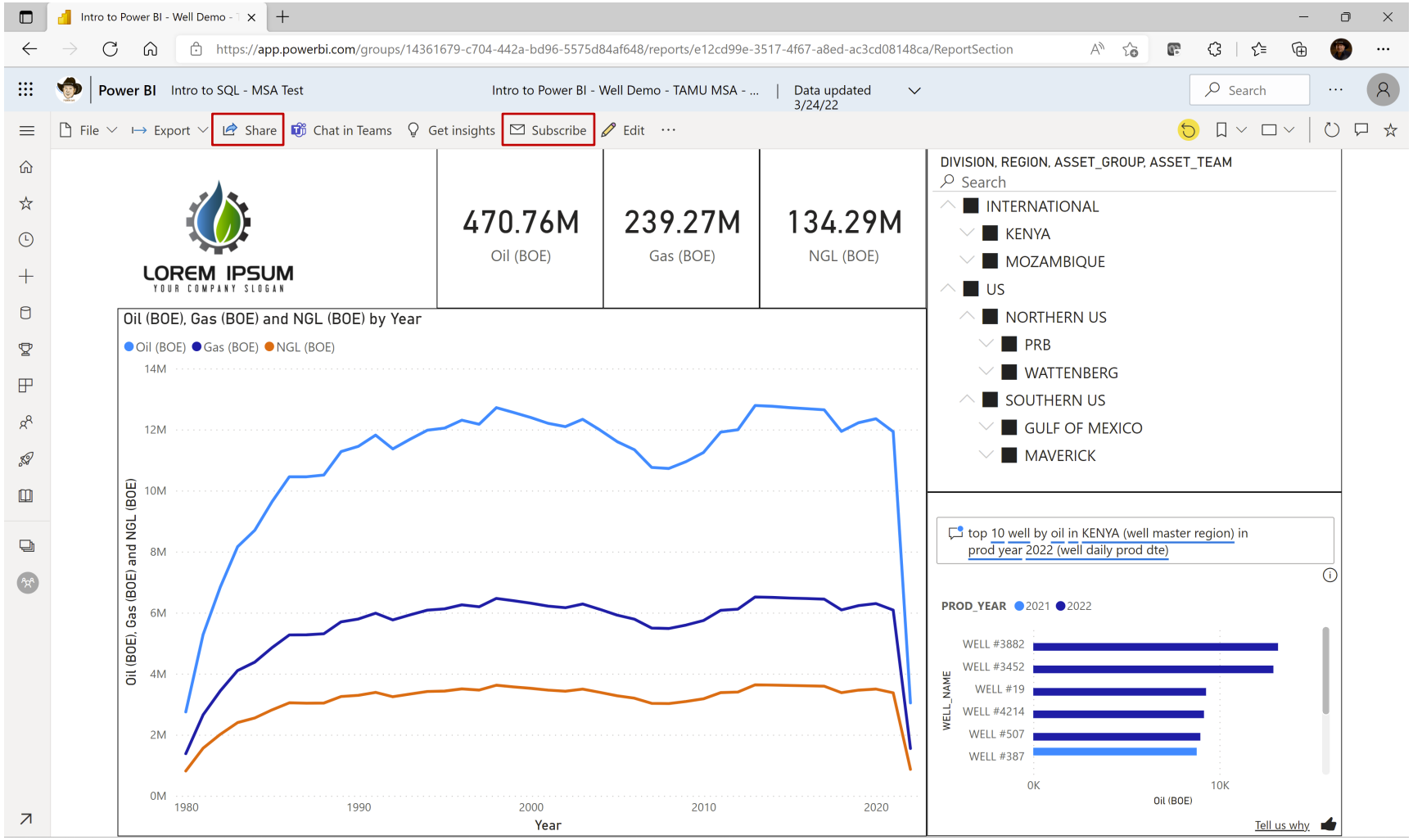
POWER BI DESKTOP – POWER QUERY

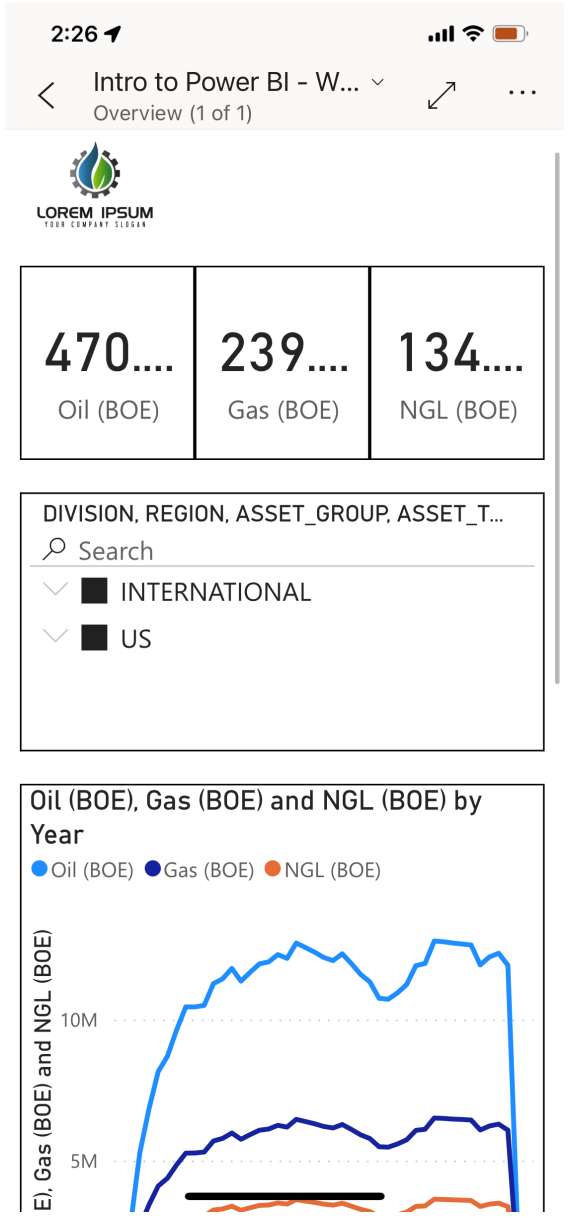
Close & Apply

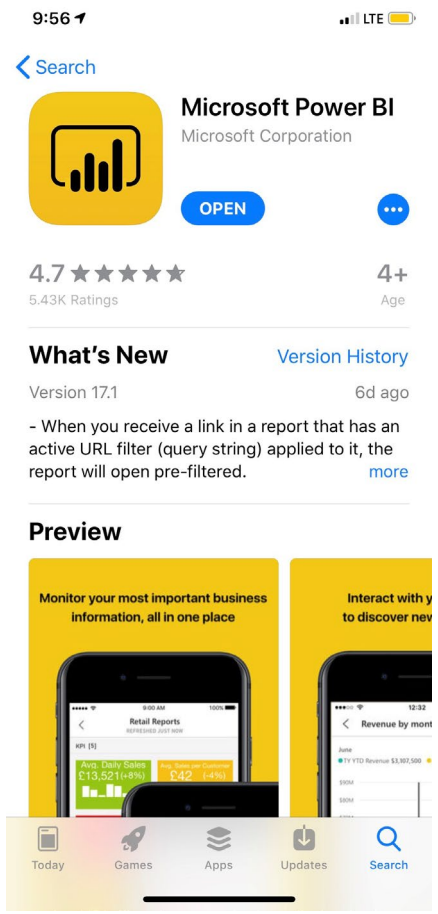


POWER BI SERVICE

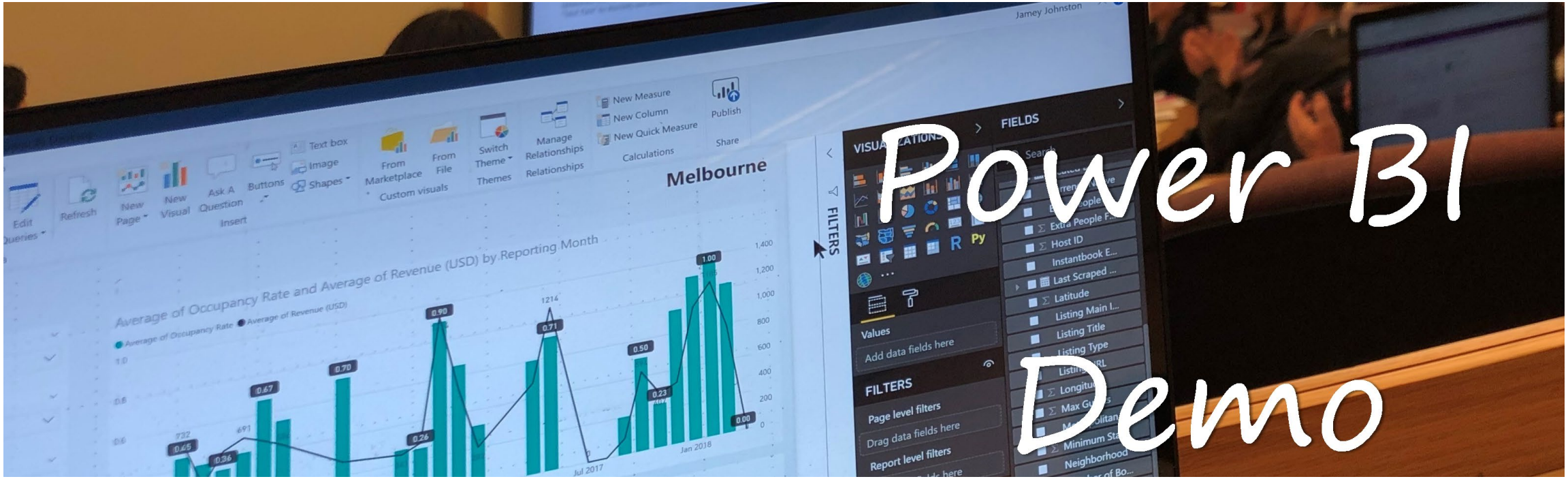
Share & Subscribe







POWER BI MOBILE



DEMO

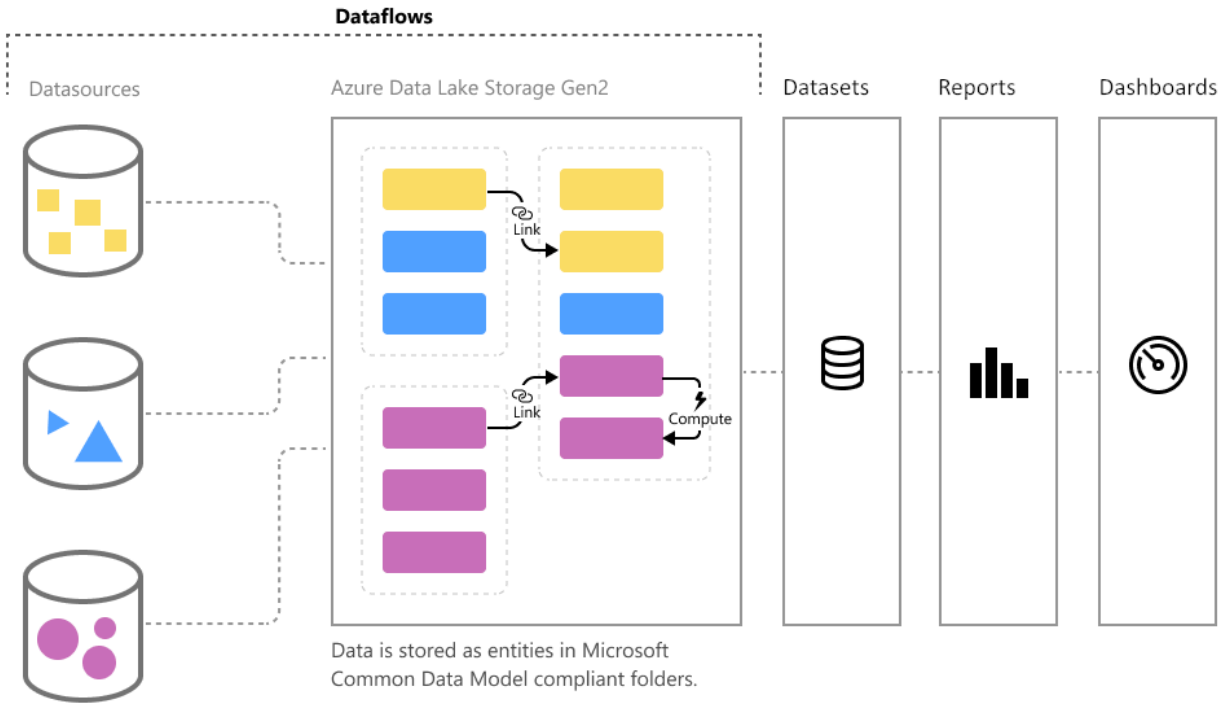
https://pbiaitutorials.blob.core.windows.net/textanalytics/FabrikamComments.csv

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/
STATCowboy	• https://www.statcowboy.com • https://www.youtube.com/channel/UCRfDzZXUgr7O4A6YsL9rW2Q

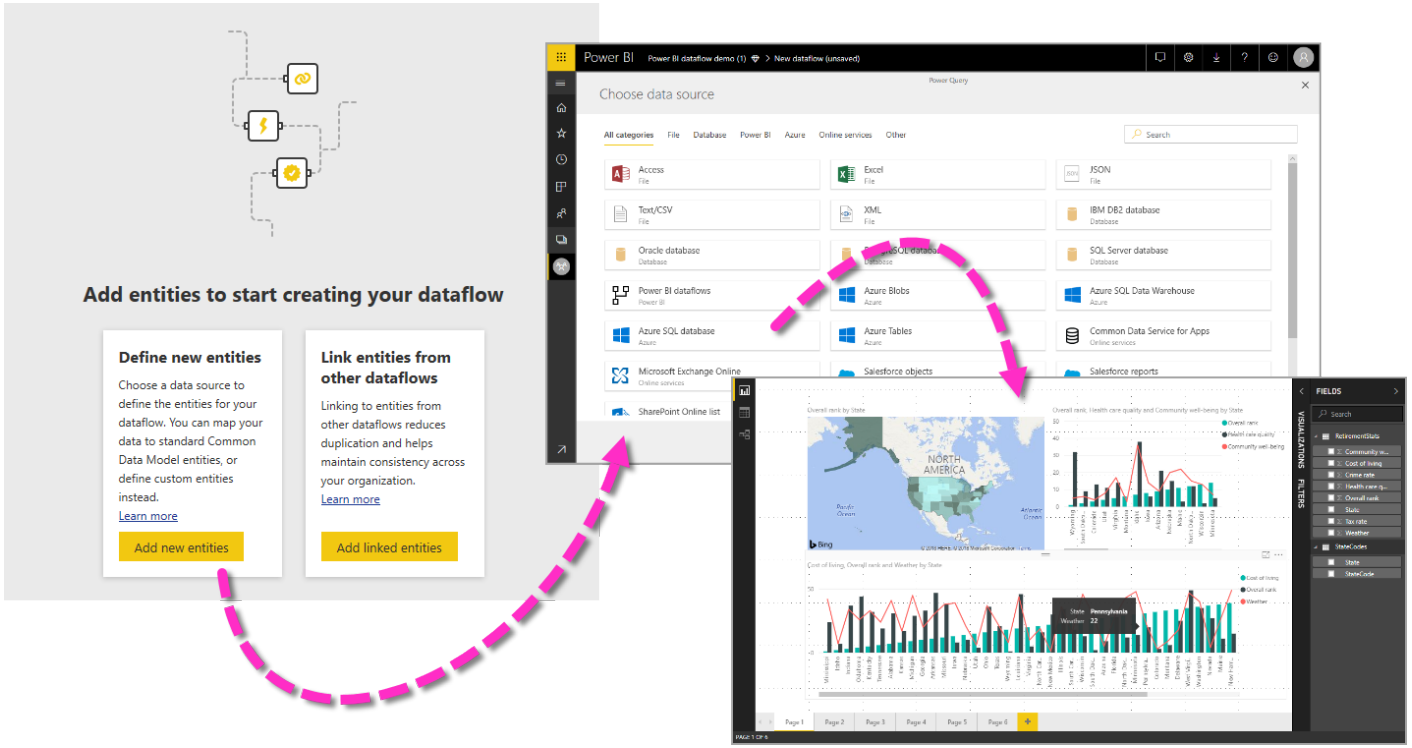
APPENDIX

Wait … there is more!



POWER BI DATAFLOWS

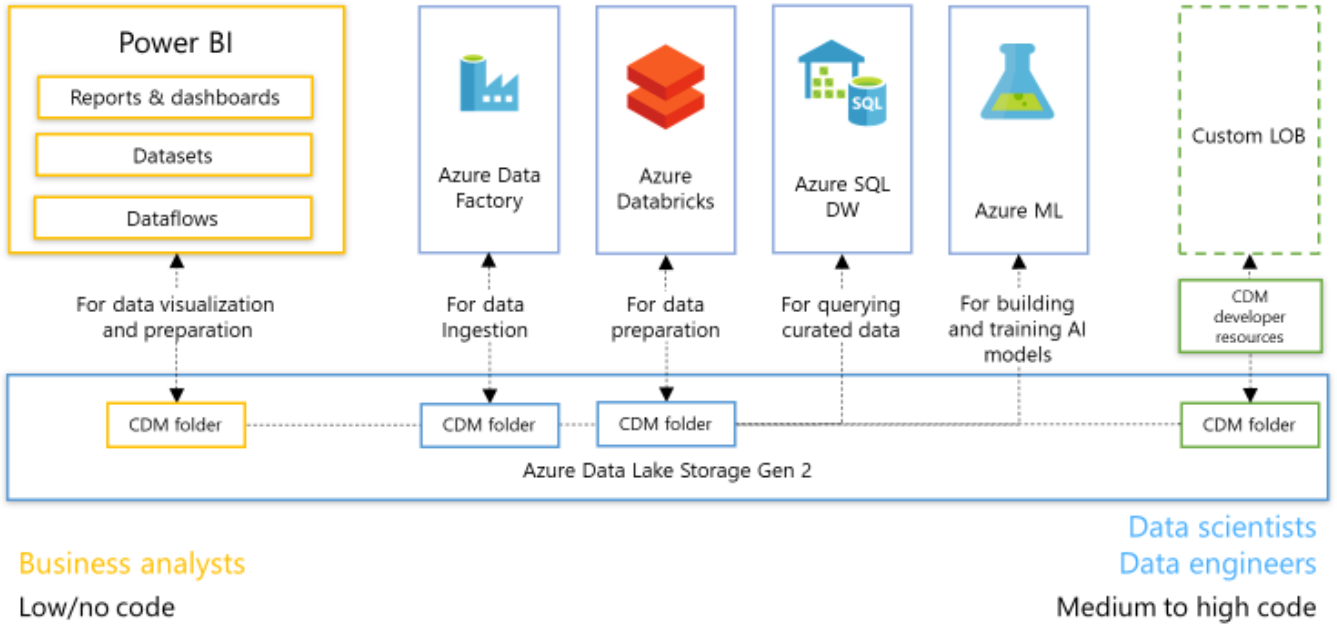
https://docs.microsoft.com/en-us/power-bi/service-dataflows-overview
https://powerbi.microsoft.com/pt-pt/blog/introducing-power-bi-data-prep-wtih-dataflows/



POWER BI DATAFLOWS

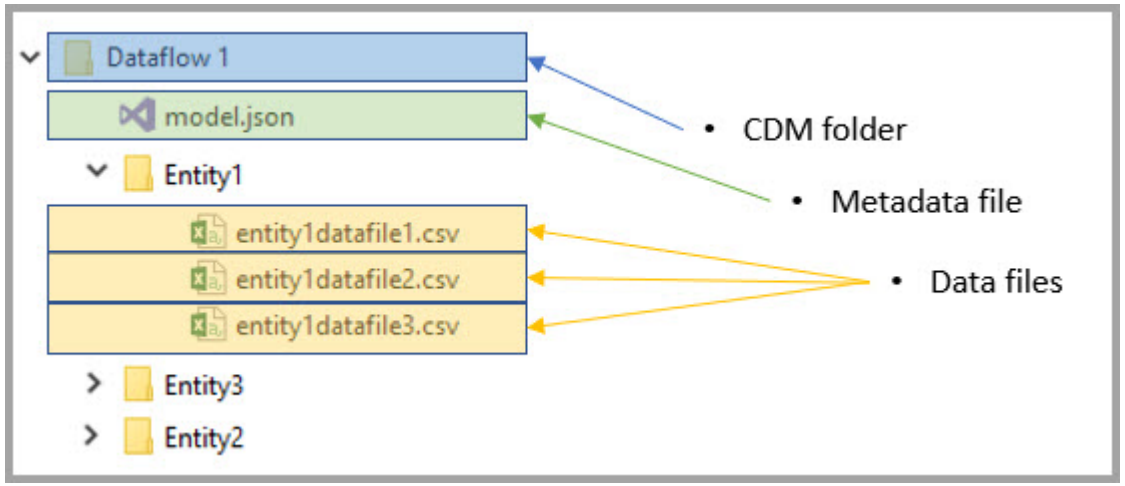
https://docs.microsoft.com/en-us/power-bi/service-dataflows-create-use

POWER BI DATAFLOWS & ADLS INTEGRATION

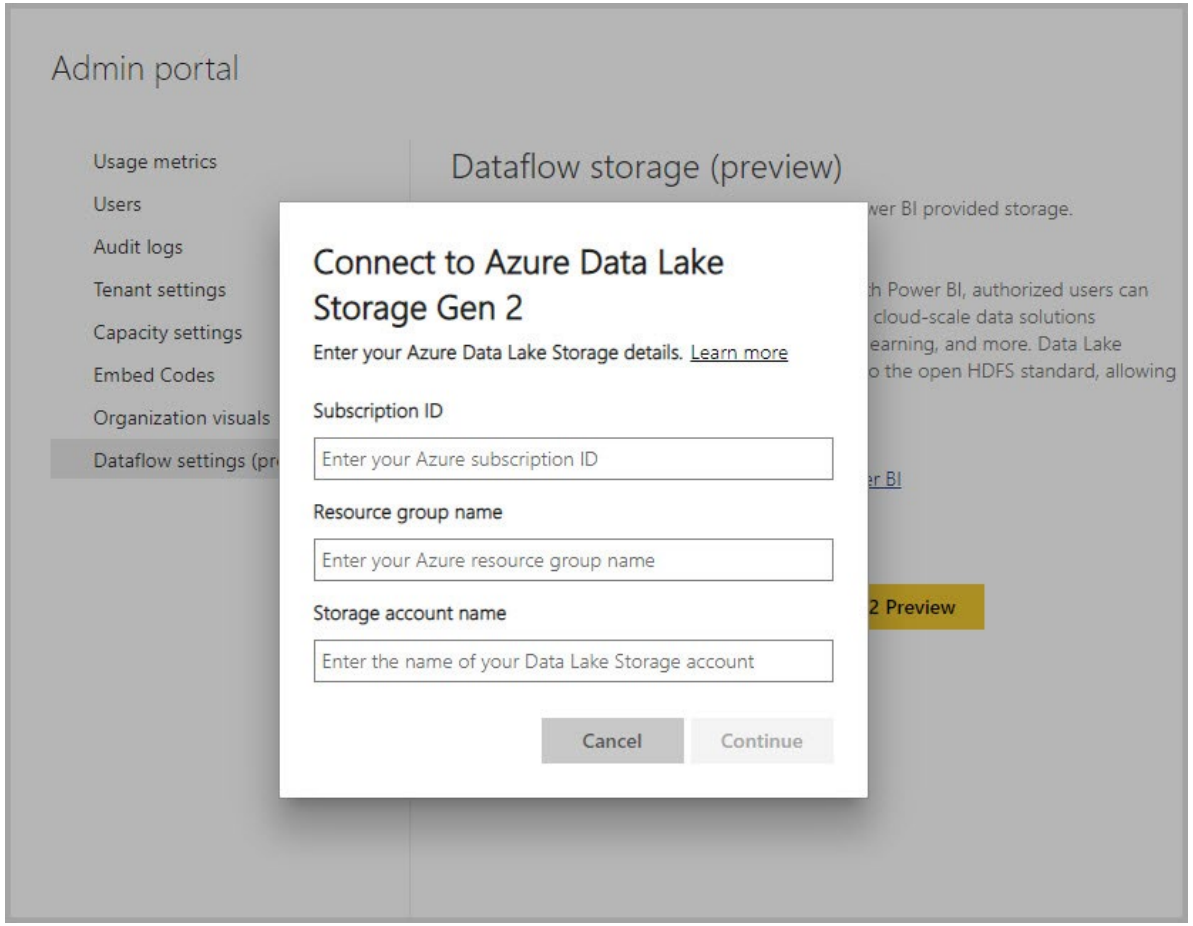


https://docs.microsoft.com/en-us/azure/storage/blobs/data-lake-storage-introduction

POWER BI DATAFLOWS CDM FOLDER

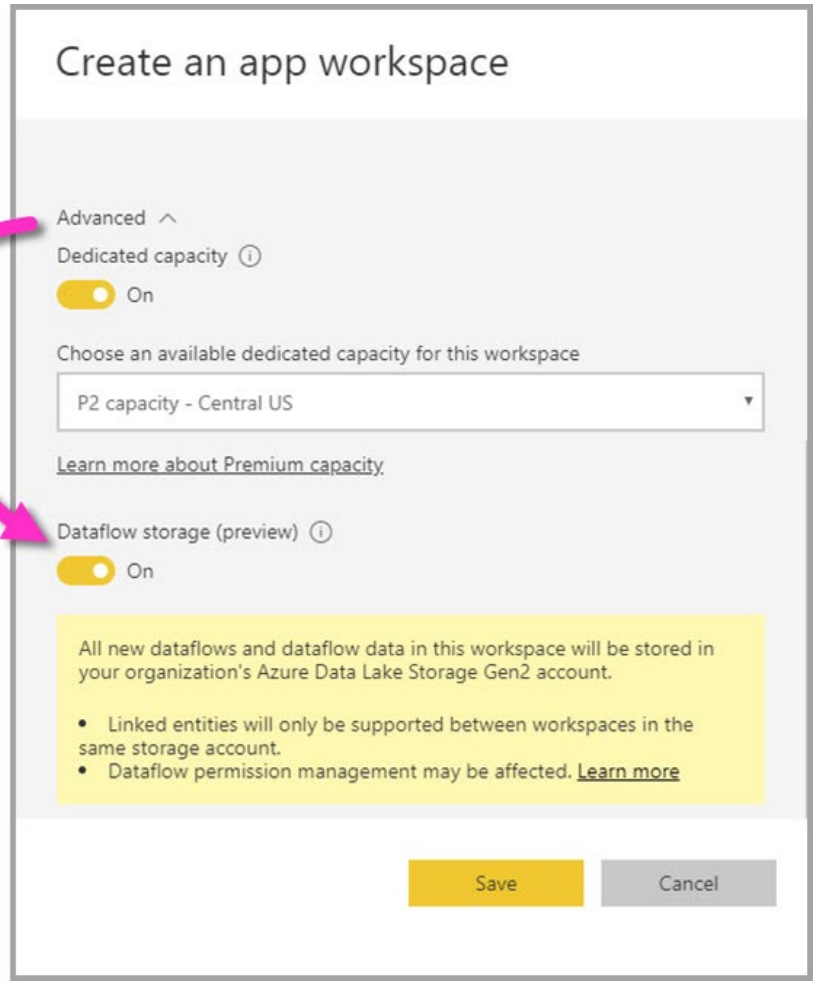


https://docs.microsoft.com/en-us/power-bi/service-dataflows-azure-data-lake-integration



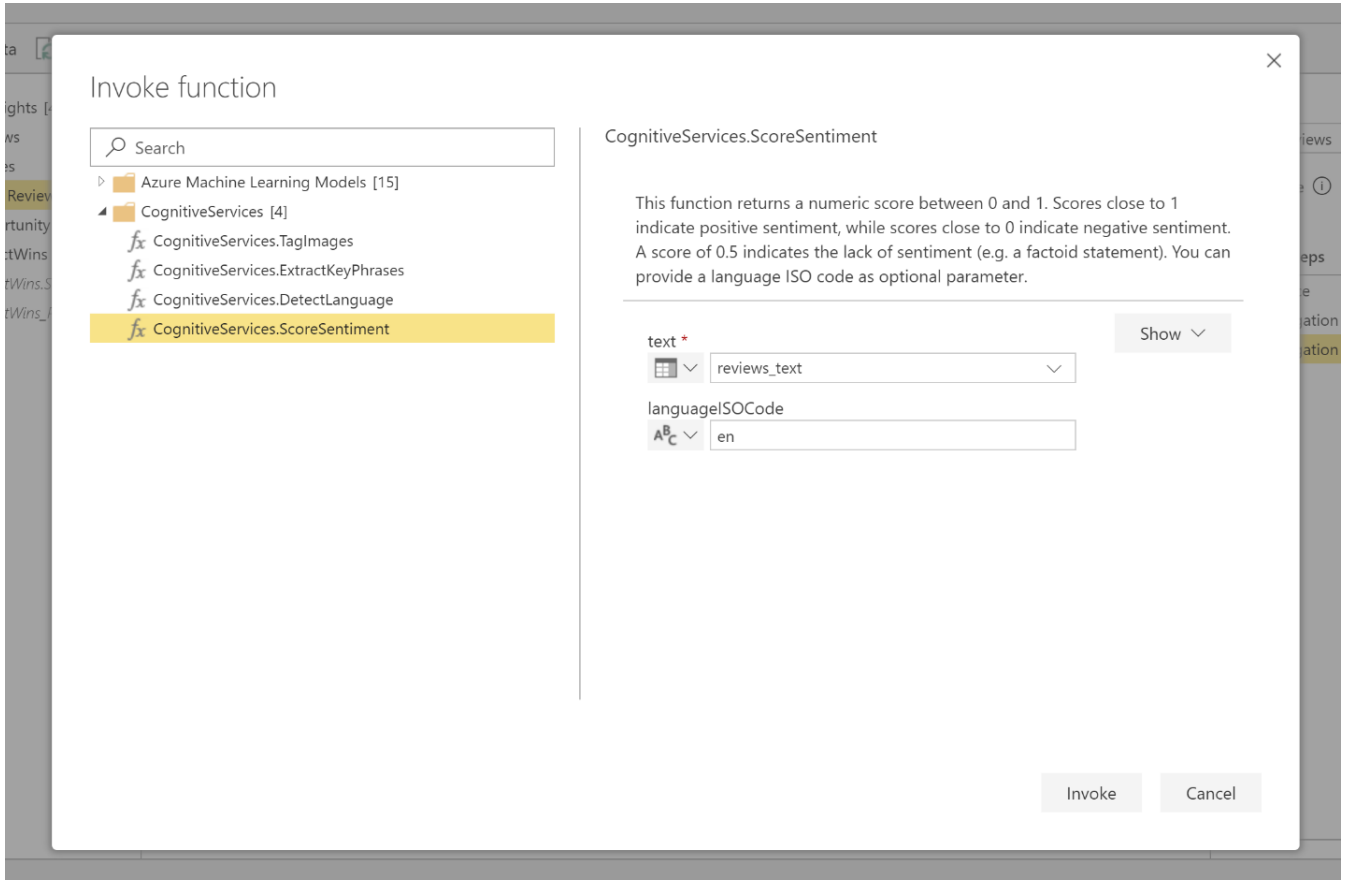
CONNECT DATAFLOWS TO ADLS GEN2

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



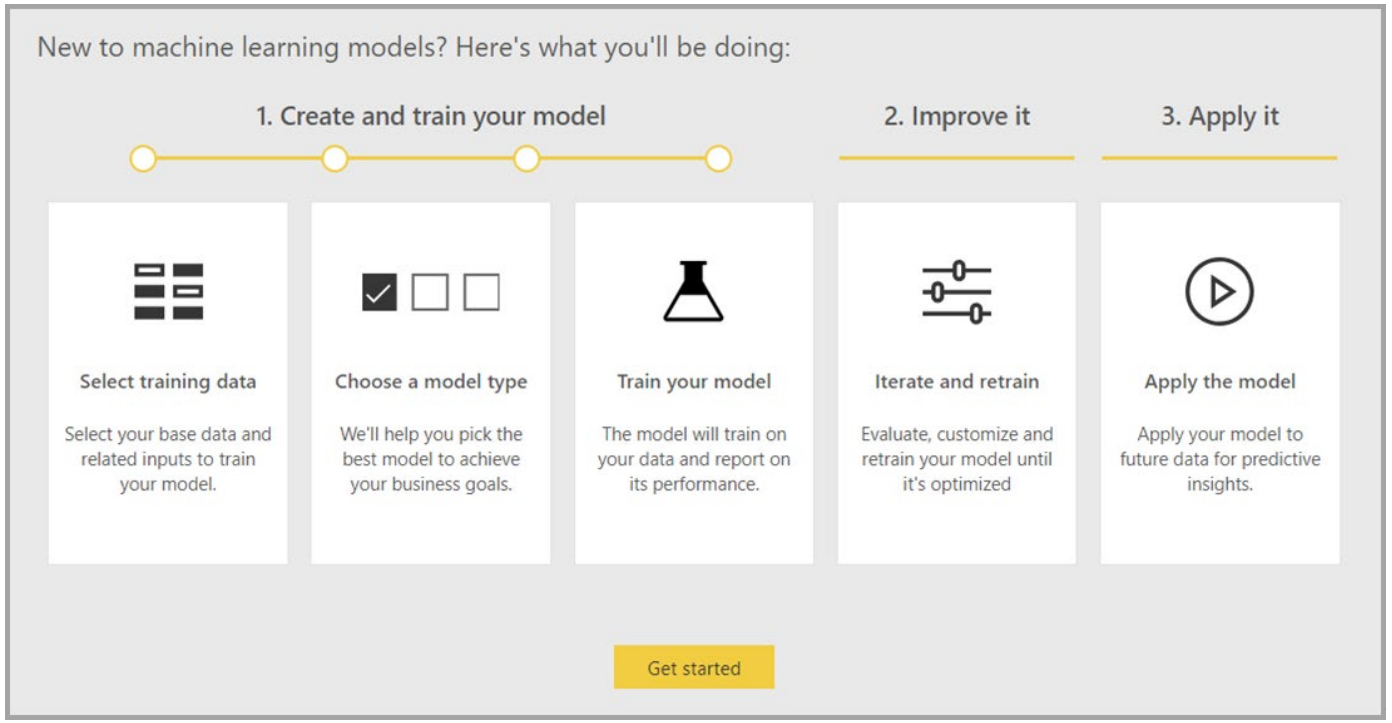
CONFIGURE WORKSPACE FOR POWER BI DATAFLOWS

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



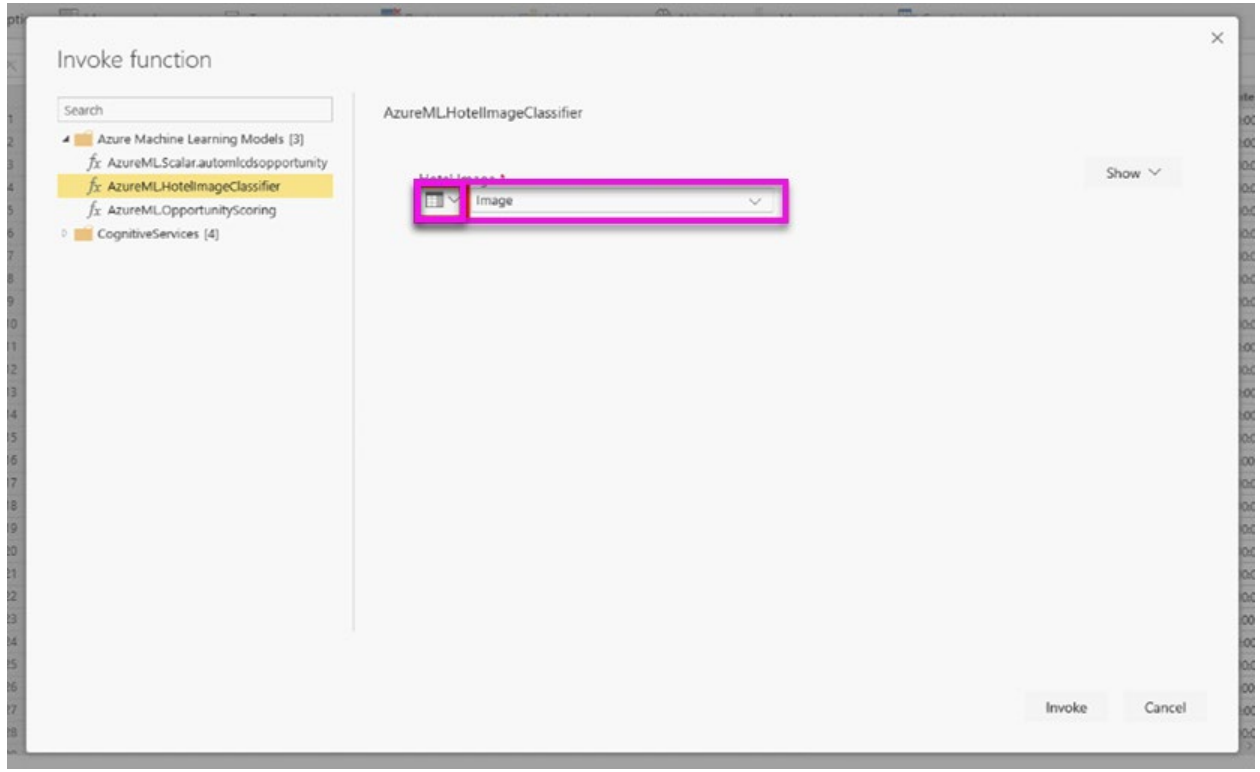
COGNITIVE SERVICES IN POWER BI DATAFLOWS

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