

# DataOps 201

Bringing DataOps to Power BI



# About Me

## Experience

- 11+ years with Microsoft BI stack
- 8+ years with PowerPivot/Power BI
- 5+ years with Azure DevOps

## Credentials

- MCSE: Productivity
- MS: PBI Data Analyst
- PMP



## Contact Me

 @JKerski

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Slides:



# Agenda

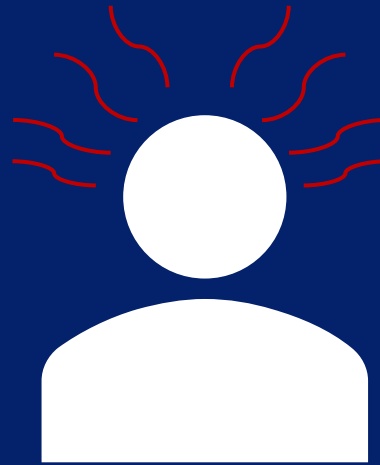
- The Challenges We Face
- DataOps
- Overcoming These Challenges
- Demos

# The Challenges We Face

*This report looks  
wrong?*

*Why does it take this  
long to build?*

*This doesn't look  
right...*



*Why is the dashboard not  
updated?*

*This was working yesterday...*

*Why is it broken?*

# DataOps

# What is DataOps?



# Make it Reproducible

Reproducible results are required and therefore we **version** everything: data, low-level hardware and software configurations, and the code and configuration specific to each tool in the toolchain.

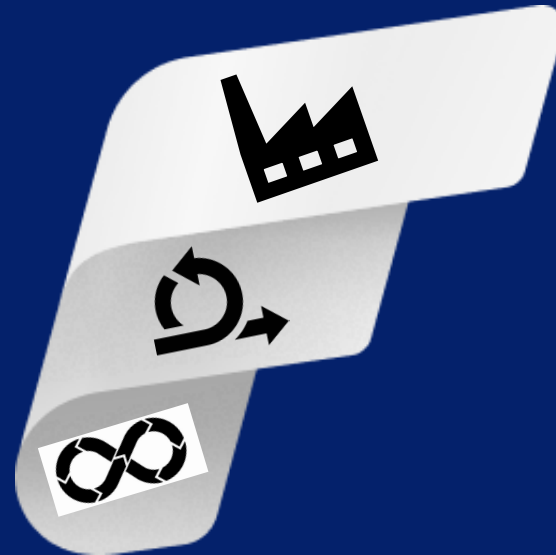
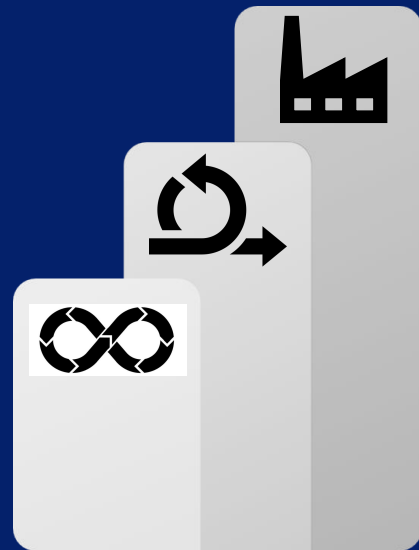
*Get your work into Version Control*

# Overcoming the Challenges

**Version Control**

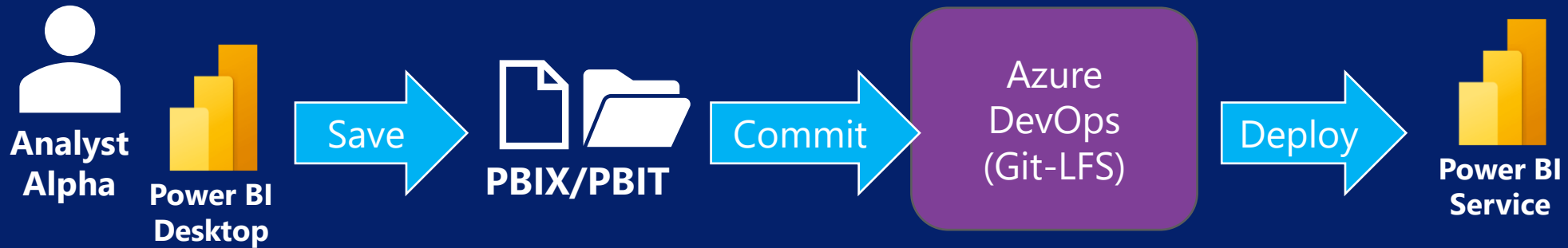


# Power BI Datasets

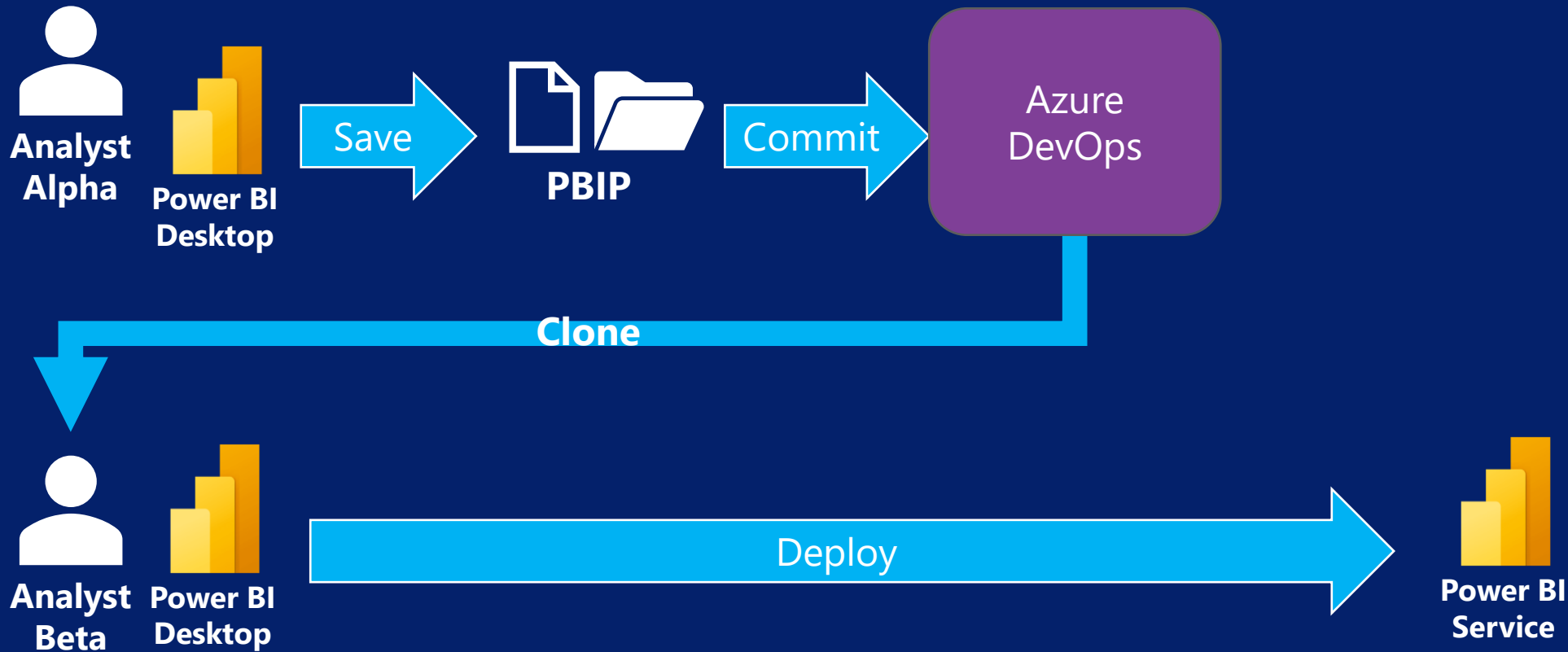




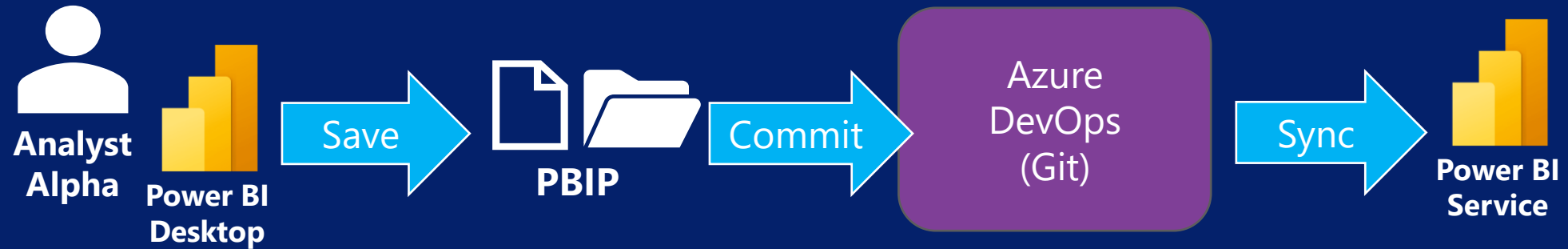
# Pro/PPU Way – Version Control (Classic)



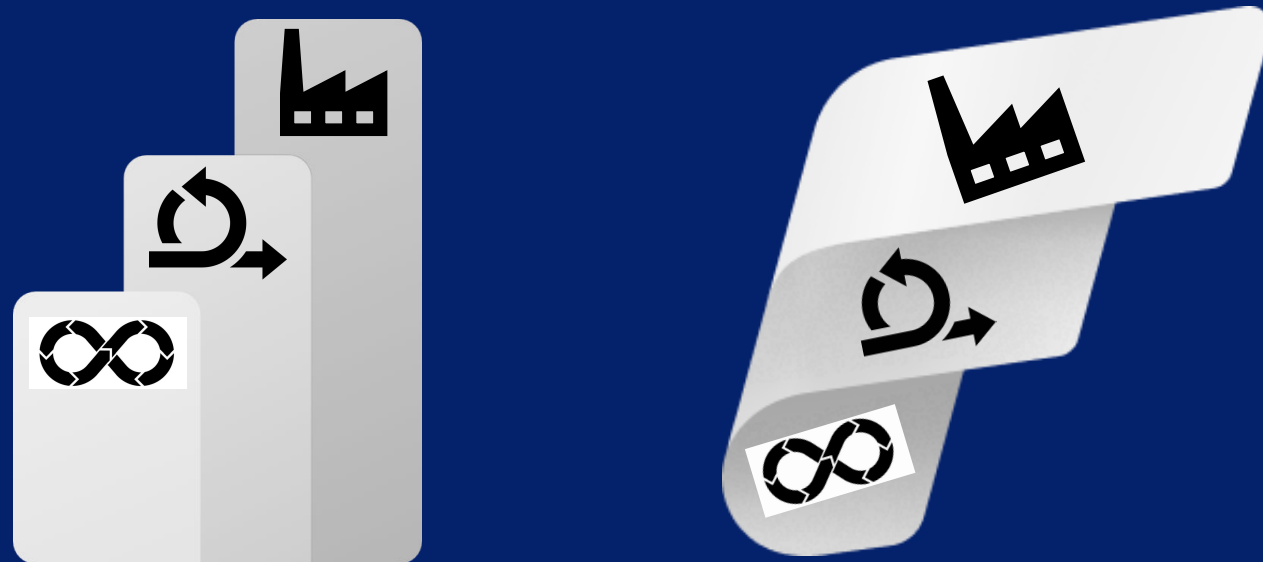
# Pro/PPU Way – Version Control (PBIP)



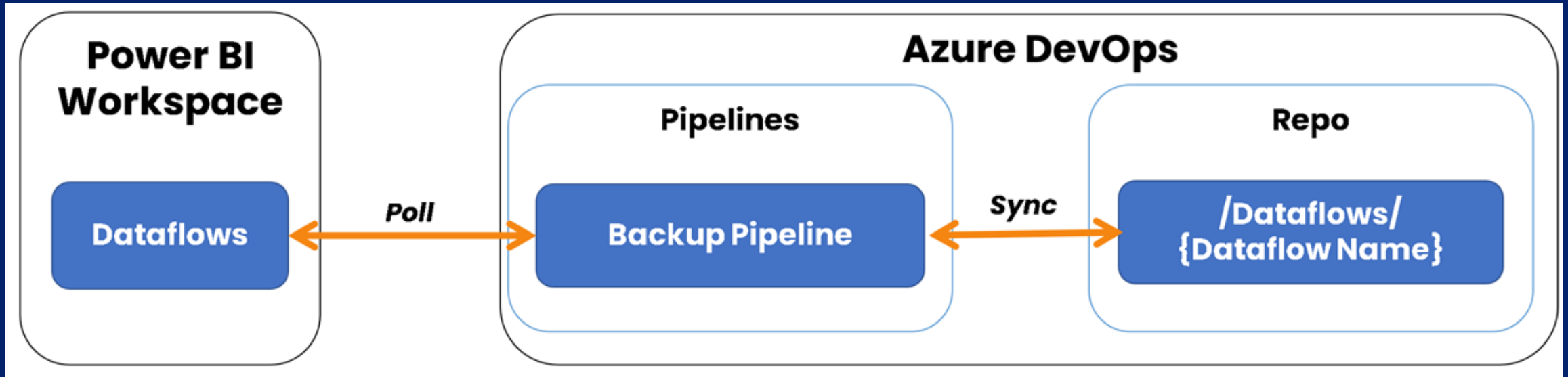
# Fabric Way – Version Control



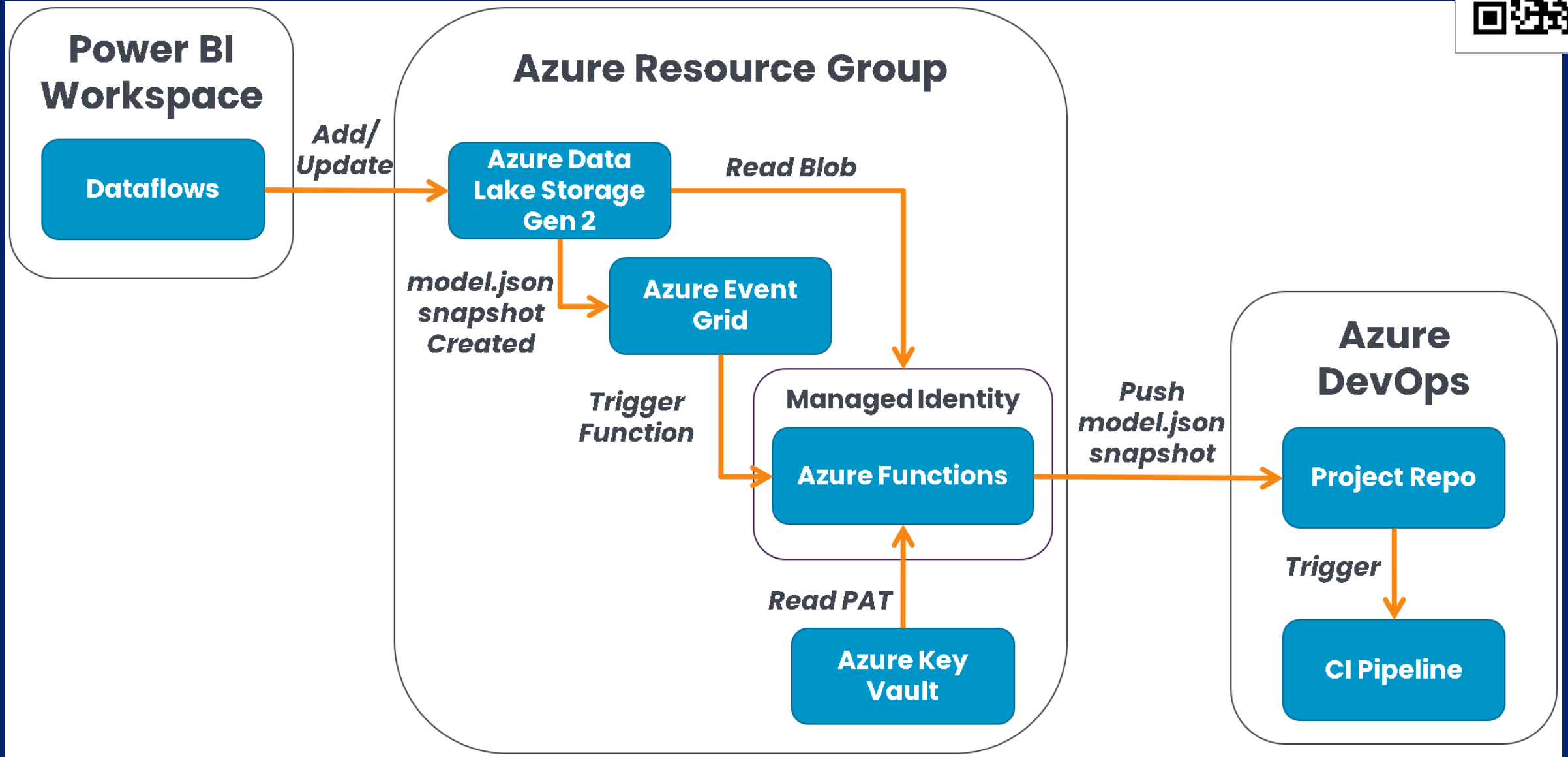
# Power BI Dataflows



# Pro/PPU Way – Version Control (Polling)



# Pro/PPU Way – Version Control (Push)



# Quality is Paramount

Analytic pipelines should be built with a foundation capable of **automated detection of abnormalities** and security issues in code, configuration, and data, and should provide continuous feedback to operators for error avoidance.

*Establish Testing Framework*



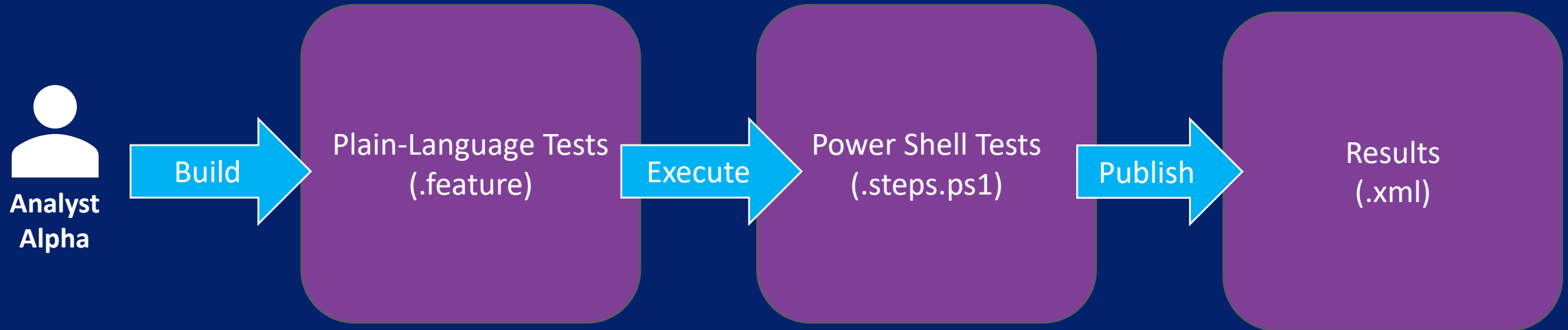
# Best Practices

- Have a Test Dataset
- Test the Tables
  - Number of rows in a fact table.
  - Number of rows in a dimension.
  - The presence of a value in a column that shouldn't be there.
  - The existence of blank columns.
  - The values in a custom column are correct.
- Test The DAX
  - Example: *IF(SUM('TableX'[ColumnY])<0,"Condition 1","Condition 2")*
    - The summation is > 0
    - The summation is = 0
    - The summation is < 0
    - The summation is blank

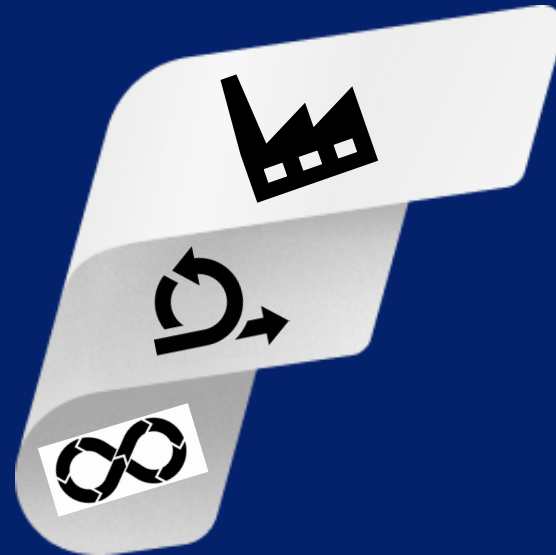
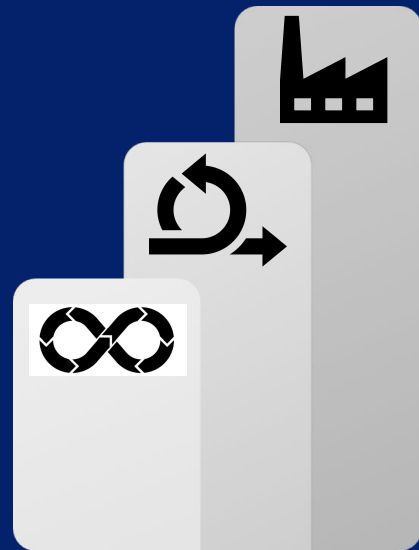
# Overcoming the Challenges

**Testing**

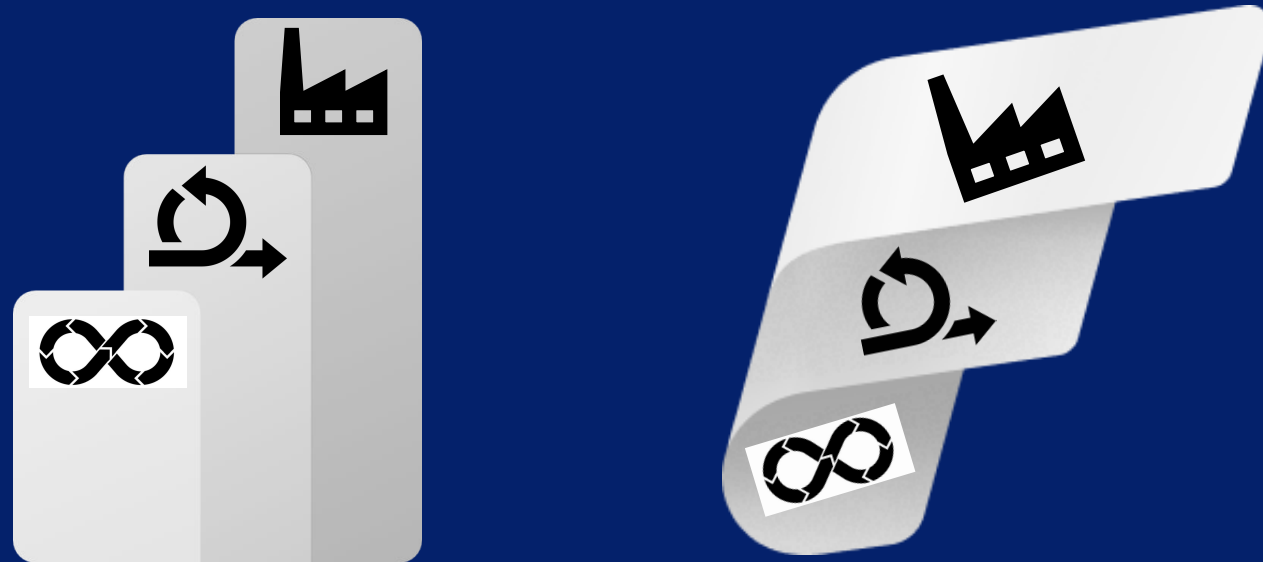
# Testing - Gherkin



# Power BI Datasets (Demo)



# Power BI Dataflows (Demo)



# Questions?

Slides:



# How was the session?

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