



# 3\* ways to bring Power BI under Source Control

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Worked with Data and the Microsoft stack for more than 10 years.

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# Who is this session for?



Managers

Power BI  
Admins



Business  
Analysts

Data  
Consumers

Data  
Owners







What is Source Control?

Why is it relevant?

How does it work with Power BI?

What are the options?



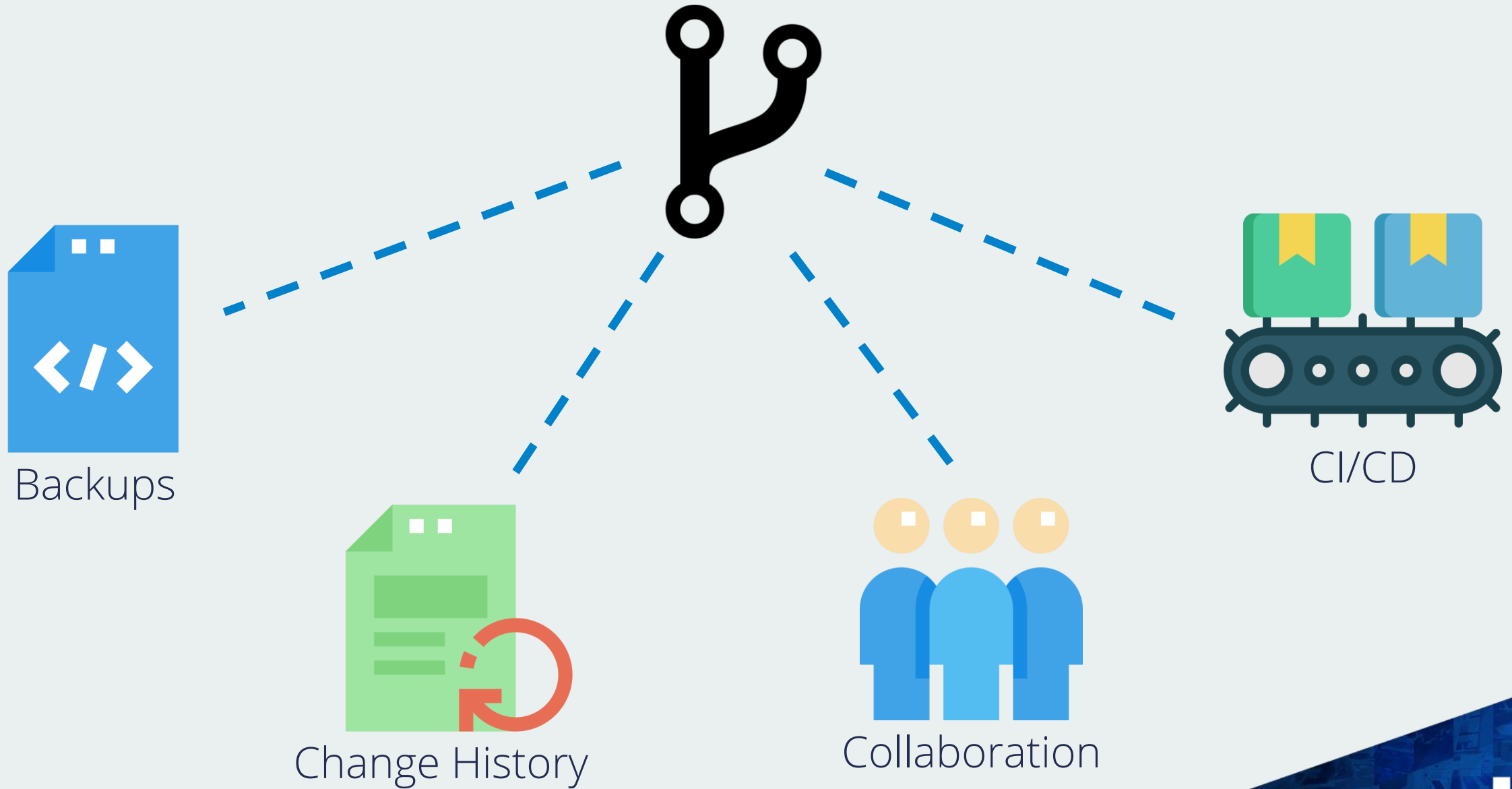
# What is Source Control?



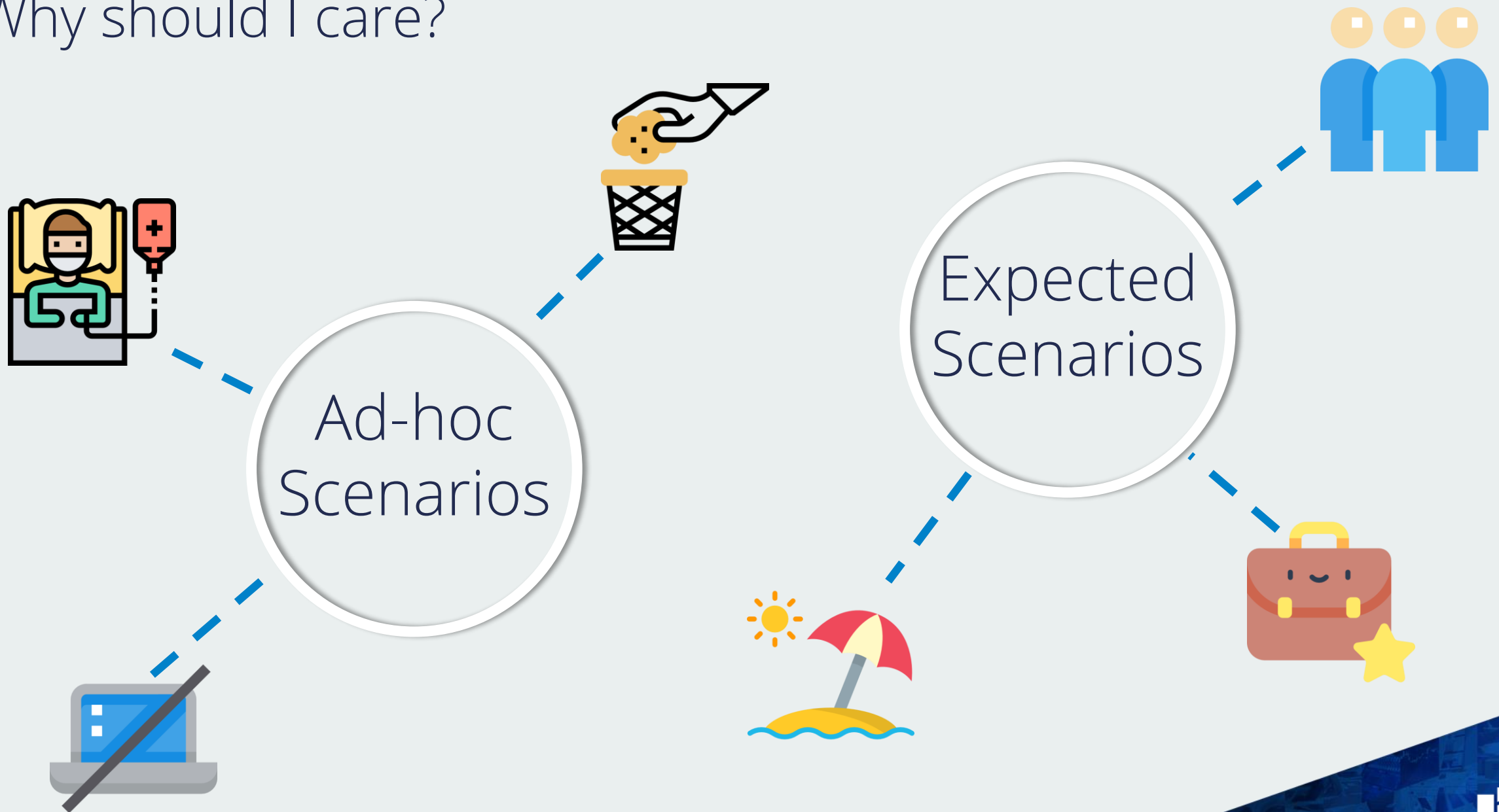
also known as revision control or version control, is the management of changes to documents, computer programs, large web sites, and other collections of information.



# What is Source Control?

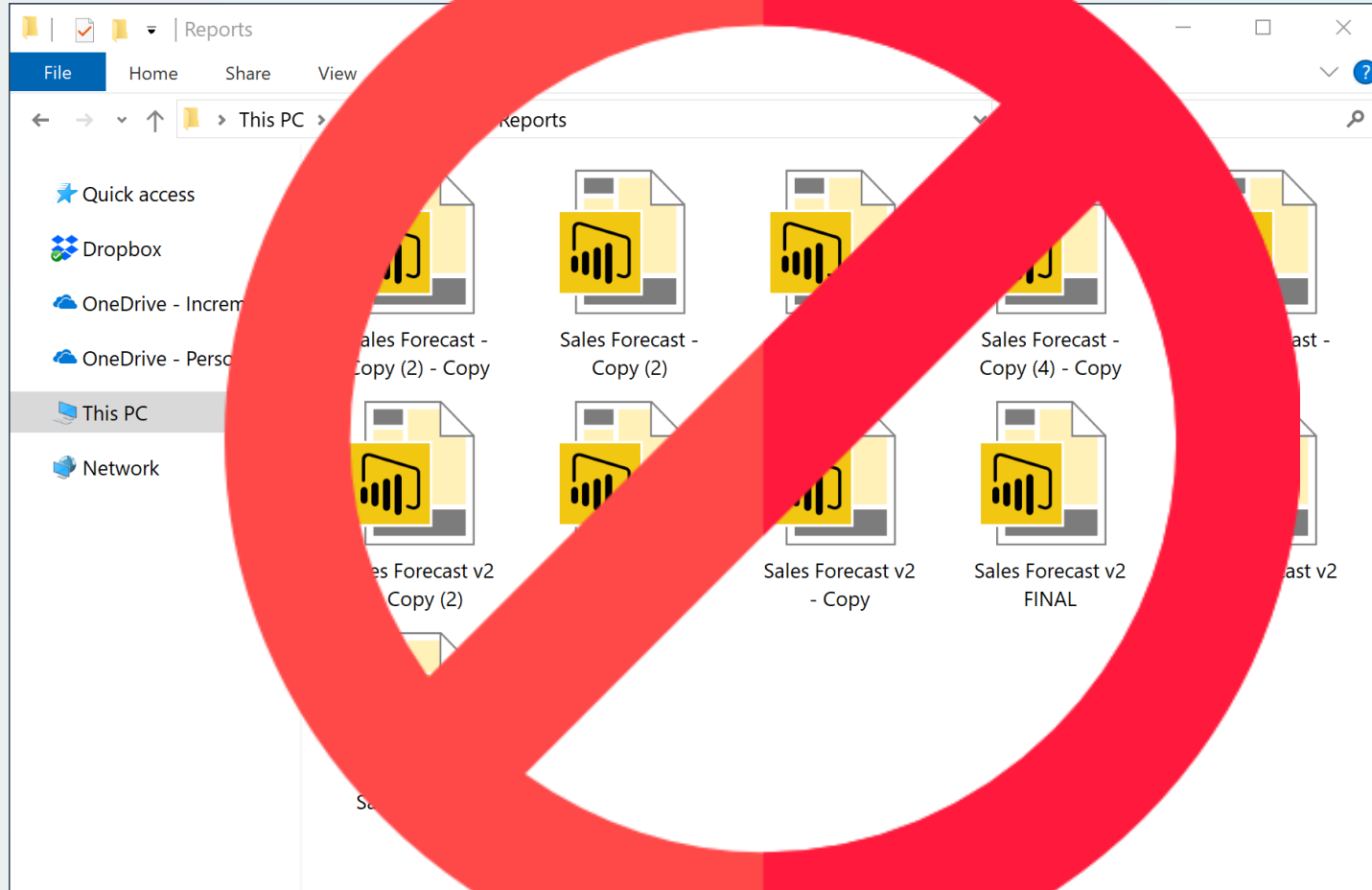


# Why should I care?





# DIY Source Control





# Power BI under Source Control

# Why it doesn't work with Power BI

May not know or care about Source Control.



Business Users



Power BI



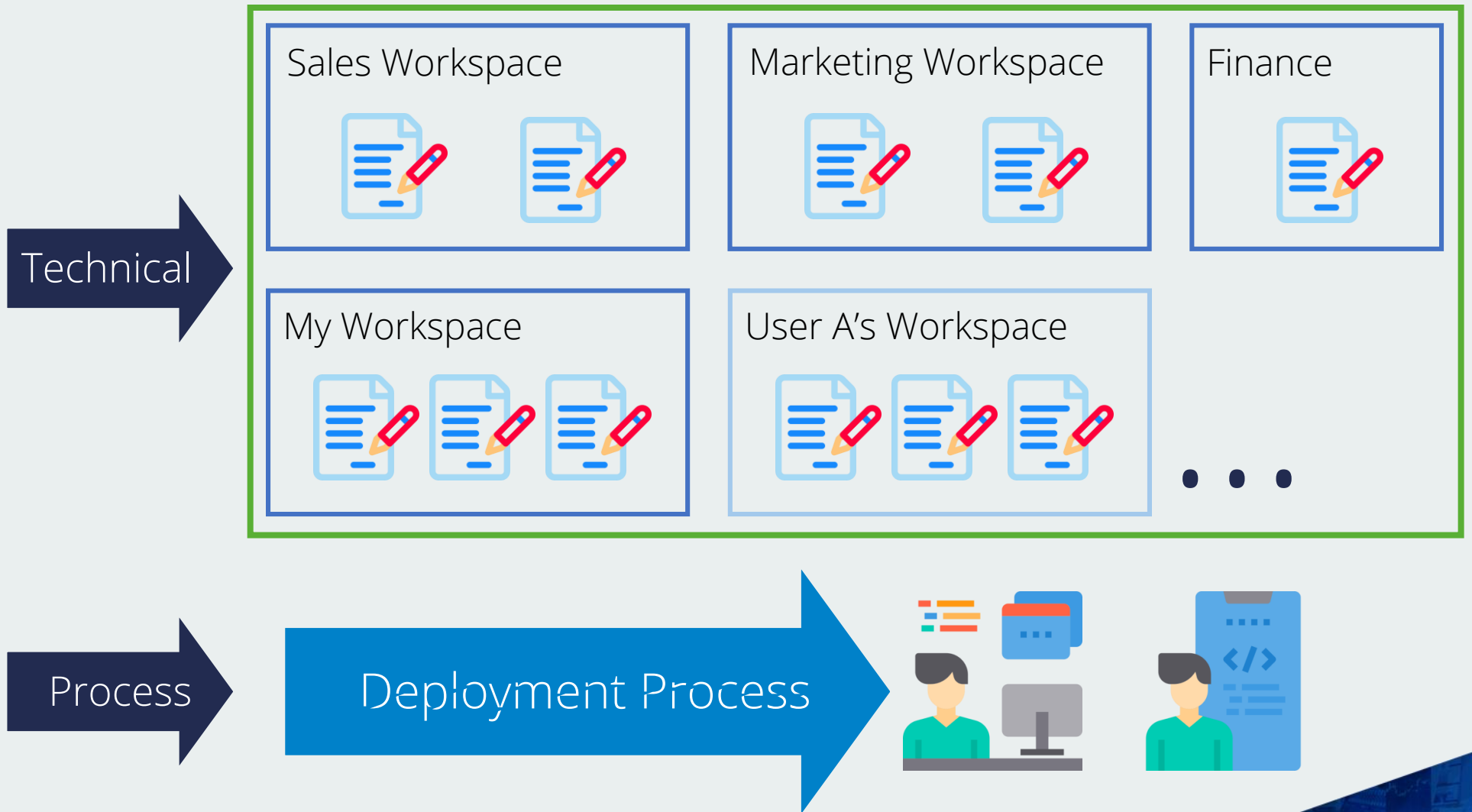
Developers/  
IT

Don't have control over all deployed content.

No source control  
management  
built-in



# What can we do?



# How do we do it?

## Cloud Storage



## Microsoft Flow



## PowerShell



Business User

Developer / Programmer



# Cloud Storage

Not real  
Source  
Control

File  
Version  
History

Backup  
Silos

Automatic  
Deployment  
of Datasets  
and Reports

\*On Power BI Workspace  
OneDrive. Must be  
set up manually  
with v2  
workspaces



Etc...

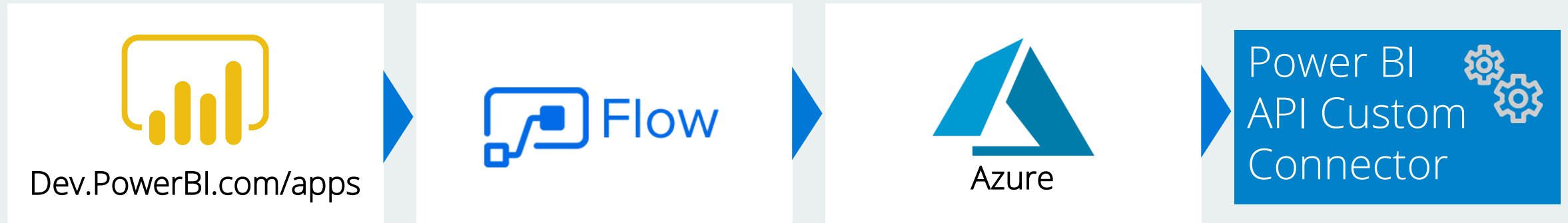






# Cloud Storage Demo

# Microsoft Flow Setup



Flow Custom Connector:

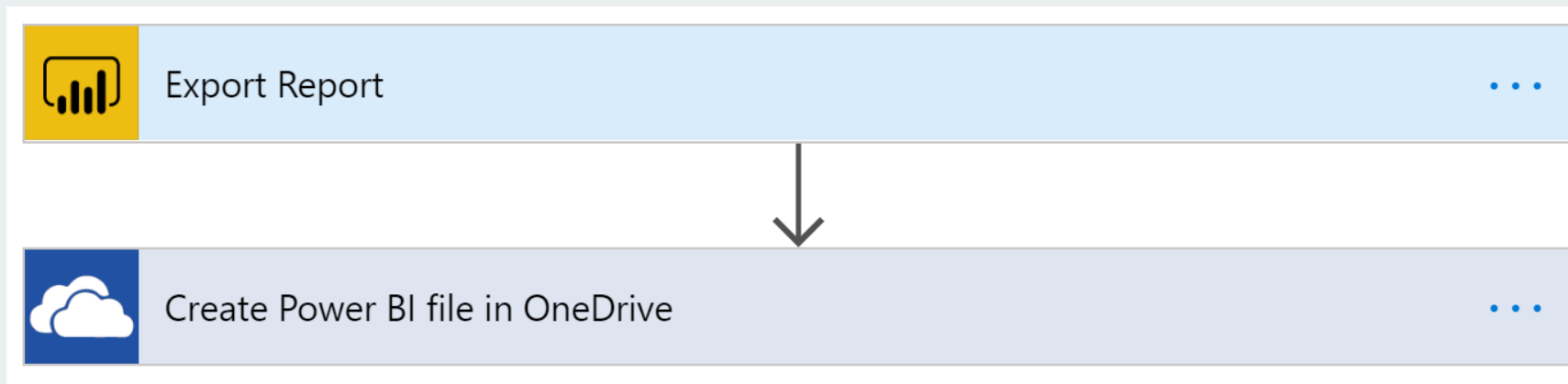
Ida Bergum

<https://www.idabergumdata.com/>



# Using Microsoft Flow

\*Works best using a Power BI Administrator





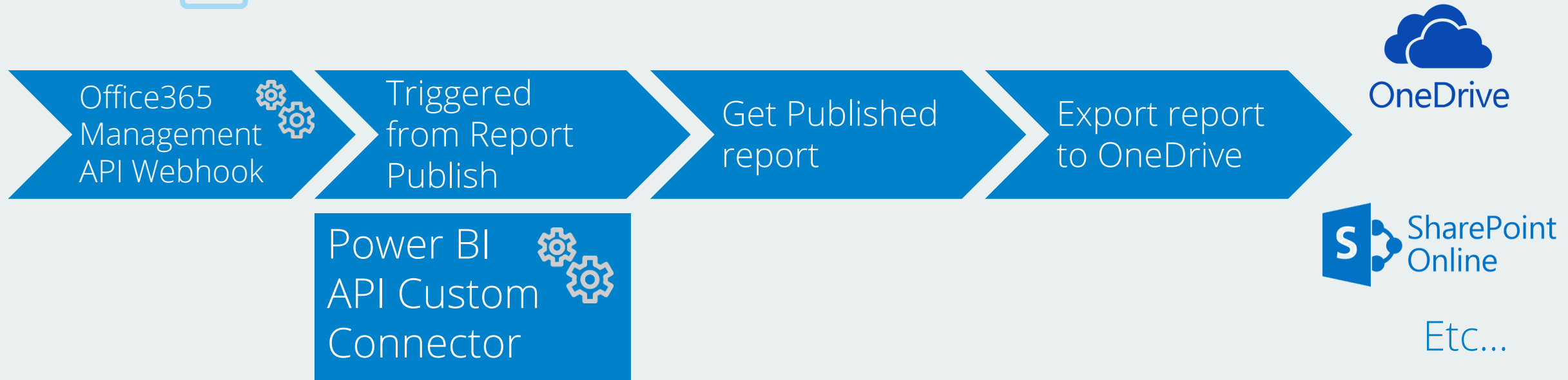


# Microsoft Flow Demo

# At Scale?

\*Must use a Power BI Administrator

...  x1000+ ?



Steve Howard - Microsoft Flow with O365 Mgmt API Webhook

<http://angryanalyticsblog.azurewebsites.net/index.php/2019/06/01/power-bi-governance-approve-reject-all-dataset-creation-in-your-tenant/>



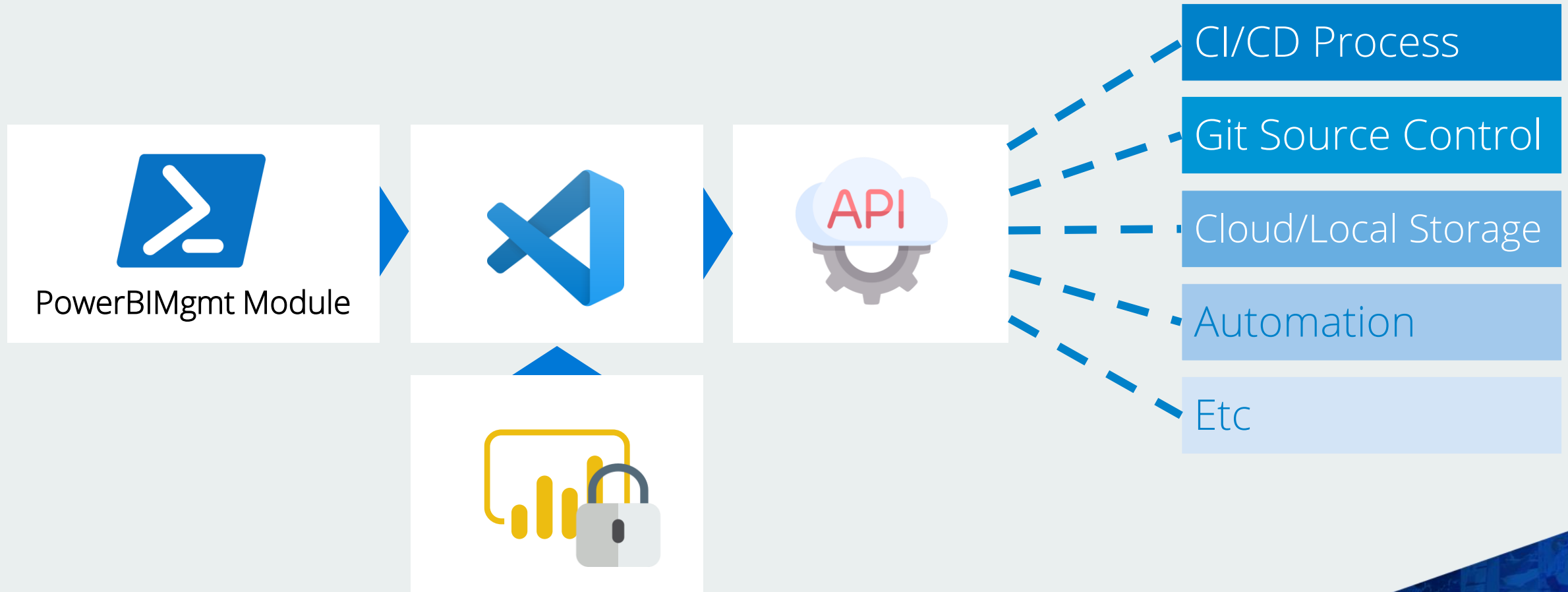




# Microsoft Flow Webhook Demo



# PowerShell



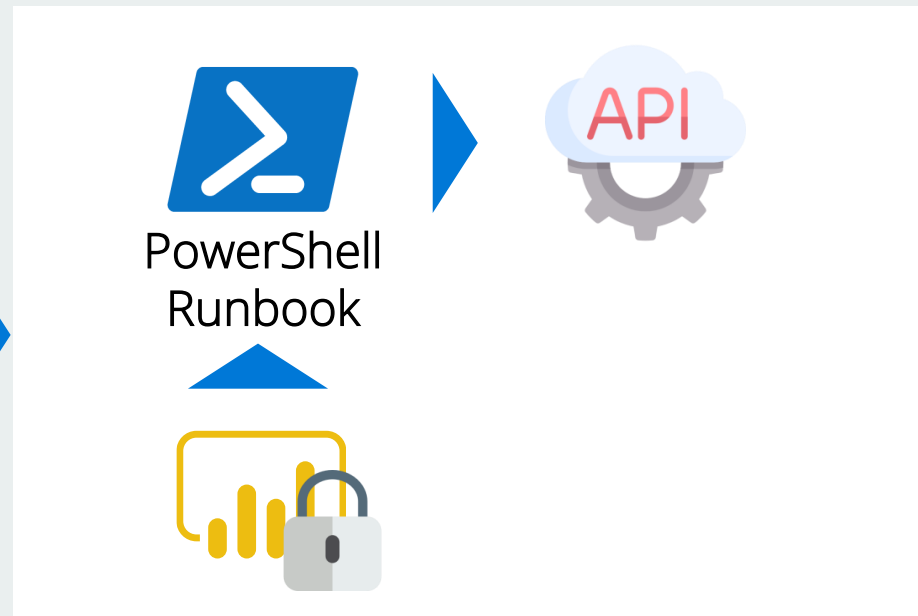


# PowerShell Demo

# Automating PowerShell



Azure Automation



CI/CD Process

Git Source Control

Cloud/Local Storage

Automation

Etc

Craig Porteous – REST API Automation with PowerShell and Azure  
<https://craigporteous.com/rest-api-automation-with-powershell-in-azure/>



## Cloud Storage



Simple

Easy to Implement

\*Power BI integration

Not true Source Control

Not Enterprise solution

Requires user process

## Microsoft Flow



Easy to use

Powerful

Many more capabilities

Initial setup difficult

Functional Limitations

Could be easier

## PowerShell



Versatile

Most powerful

Full capabilities of API

PS knowledge needed

Power BI Admin perms  
provide best results

Business User

Developer / Programmer



# Power BI Sentinel

Power BI  
Sentinel



Easy to use

Extensive features

Only way to do  
Change Tracking

Paid Solution

## Introductory Offer

Community	Professional	Enterprise
Free	£10pm (~\$13) exc. UK VAT	£150pm (~\$200) exc. UK VAT
<ul style="list-style-type: none"><li>✓ Access Personal Workspaces</li><li>✗ Access Shared Workspaces</li><li>✓ 10 Reports</li><li>✓ Documentation</li><li>✓ Change Tracking</li><li>✗ PBIX Backup</li><li>✗ Data Lineage</li><li>✗ Admin Control</li><li>✗ Multi-User</li><li>✓ E-mail Support</li><li>✗ No SLA</li></ul>	<ul style="list-style-type: none"><li>✓ SLA: 2 Business Days</li></ul>	<ul style="list-style-type: none"><li>✓ SLA: 1 Business Day</li></ul>
Sign Up	Sign Up	Sign Up

### Configure

#### Server Config

Use your own storage (to enable PBIX backups)

☒ Yes

Azure Connection String End point address is required ⚠

To enable backups of your deployed PBIX files, you first need to create a 'Storage account - blob, file, table, queue' resource in your Azure Portal, ideally in the same region as your Power BI account is located. Then copy the Connection String from the Access Keys page of the storage resource, and enter it in the box above.

If you don't set up your own storage then the documentation and change tracking will still work, but your PBIX files will **not be backed up**.



There is no golden bullet

Business Process

Technical Solution

Business Process

Technical Solution







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# Thank You

Questions?

# Session Feedback Day 2 (not optional!)

<http://bit.ly/DataGrillen2019Day2>



Event Feedback  
(not optional!)

<http://bit.ly/DataGrillen2019Event>

