



Unified Power BI, Power Automate, Power Apps Governance with Doctor Flow and Isa



Isabelle Van Campenhoudt • @theSQLgrrrl

Serge Luca • @sergeluca

BIWUG



Code of Conduct



As event and experience organizers, we seek to provide a respectful, friendly, professional experience for everyone, regardless of gender, sexual orientation, physical appearance, disability, age, race or religion.

We do not tolerate any behavior that is degrading to any gender, race, sexual orientation, or disability, or any behavior that would be deemed harassment or discrimination.

Individuals are responsible for knowing and abiding by our standards and we encourage everyone to assist in creating a welcoming and safe environment. Please report any concerns, suspicious or disruptive activity or behavior to the organizing team, so that we can address the issue immediately.



More information can be found on the CollabDays Belgium & Netherlands website at <https://www.collabdays.org/2021-ben/about>

Our Platinum Sponsors



Community Sponsor



Our Gold Sponsors



Doctor Flow aka “Serge Luca”

Business Application MVP, Brussels

MVP 15th year

Business Apps, Office 365 Solution architect

Creator of the open-source Power Platform BPM Toolkit

Author of “Power Automate in a day”

Blog: sergeluca.wordpress.com

sergeluca@shareql.com

Twitter: @sergeluca



The Power Platform BPM Toolkit Preview (SharePoint version)

Welcome to the early release of the Power Platform BPM Toolkit for SharePoint.
The creator of this tool is serge luca aka 'Doctor Flow'.
[@sergeluca](#).

What is the BPM Toolkit ?

BPM means "Business Process Management".

[BPM in Wikipedia](#).
[BPM according to IBM](#).

The goal was to provide a highly secured approval system that can be used in HR, supply chain management, finance in order to fix some shortcomings in the Power Platform like the 30 days approval limitation, no tasks delegation, no state machine, no graphical view of the running workflows,...

100% written with the Power Platform	Free & Open Source	Business can create workflows	State Machines	Workflow can change at runtime	No workflow duration limit
Tasks delegation	Custom tasks Forms	Pipeline security	Visual Workflows	RPA Integration	No premium licenses (When using the SharePoint version). RPA license is needed

Isabelle Van Campenhoudt

Data Platform MVP, Brussels

Consultant, Speaker Trainer, Community Leader

SQL server since 1999

SharePoint BI & Power BI since it starts

Blog: theSQLGrrrl.wordpress.com

ivc@shareql.com

Twitter: @theSQLgrrrl

SQL 

BI 

Tuning 

Architecture 

Coffee making 



Agenda



Introduction

Vision

Attention Points

Conclusions





Why Unified ?

Unified approach

Power BI is often managed by a dedicated Power BI or the traditional BI team

- Confusing for everyone, including for sponsors

Conceptually the challenges are the same

- We have **Self-Service**
 - citizen devs and BI makers
 - Pro dev
 - People in between
- The **audiences overlap**
 - More and more Power BI makers become citizen devs (Power Apps/ Power Automate)
 - More and more citizen dev, integrate Power BI dashboard with their apps
- The **adoption** concepts are the same





How do we work?



The "Check-list"



➤ 300 Highly technical and non-technical topics

Last updated : 20/9/2021, Serge

Sequence Apps	Category	Sub Category	Frequency	Action
1	Nurture and educate	Training		Educate IT : what is the Power Platform, what are t
2	Nurture and educate	Training		Educate IT : Power Apps + Power Automate + Pow
3	Nurture and educate	Training		Educate IT : Licensing guide
4	Admin & governance	Training		Educate IT : Read the doc "Manage environments"
10	Strategy & Vision			Define vision : reduce backlog or increase innovati
20	Security	Training		Educate IT : Fully understand security roles
30	Strategy & Vision			Find executive sponsor
40	Security	Training		Understand user security : read the reference docu
50	Strategy & Vision			Define low code strategy team ????
60	Security			Assign Power Platform Admin role
70	Business value		Weekly	(???mot backlog)Start creating the real backlog - in
80	Security			Isolate the tenant & deactivate publish to web...
90	Strategy & Vision			Define Power Platform role in the IT portfolio
100	Security			Restrict creation of environment and powerBI wor
110	Security			Set up Azure AD conditional access
110	Admin & governance			Rename the default environment as Personal prod
120	Admin & governance			Define roles in operation (???Isa)
130	Security			Define email exfiltration blocking
140	Strategy & Vision			Define dedicated Power Platform product Owner
150	Admin & governance			Define environment (container) strategy
				Identify risks of citizen devs : technical debt,...fuite
				sécurité), bug, consommation des ressources (pre
				lente...), lenteur
160	Strategy & vision			Define DLP policies + powerBI policies (Isa todo D
170	Security			
180	Strategy & Vision		monthly	Define bottom-up and top-down innovation
190	Admin & governance			Activate standard Power Apps & Power Automate
200	Security			Define tenant and environment policies

Last updated : 2/10/2022, Isa

Sequence Apps	Category	Sub Category	Frequency	Action
	Admin & governance			Content backup
10	Admin & governance			Define "owners" of specific non Microsoft connectors (Like Adobe)
20	Admin & governance			Define a protocol with procurement in order to quickly be able to buy a connector licence
30	Admin & governance	ALM		Define ALM strategy
	Admin & governance			Define security roles for workspaces-- Personae and roles
#REF!	Admin & governance			Define procedure to request workspaces
#REF!	Admin & governance			Define roles in operation
#REF!	Admin & governance	Training		Educate IT : Read the doc Guidance
	Admin & governance			Identify delivery scope (Personal reports, Teams reports, Departmental reports, Enterprise Reports, B2B re
	Admin & governance		Weekly	Identify unused and orphaned resources
#REF!	Admin & governance			Install the On premises data gateway
	Admin & governance			Make data usage compliant
10	Admin & governance		Weekly	Plan & manage licences & capacity (storage & ...)
20	Admin & governance			Define personnal workspace usage
	Admin & governance		Weekly	Resource Cleanup
	Admin & governance			When a "Dev" workspace is created the devs can become workspaces member , admin remains to the tena
	Admin & governance			Prototyping Activities and Sharing
	Admin & governance			Workflow Automation + Updating Data from Within Power BI
	Admin & governance			Self-Service Data Preparation and Machine Learning
	Admin & governance			Power BI Service Modern Release Cycle
	Admin & governance			Power BI Premium Capacities
	Admin & governance			Deciding Whether to Use Power BI Premium
	Admin & governance			Power BI Dataflows
	Admin & governance			Organizational Purchasing of Power BI User Licenses
	Admin & governance			Self-Service Purchasing of Power BI User Licenses
	Admin & governance			Identities and Credentials Used by the Data Gateway
	Admin & governance			Managing Dataset Authorship
	Admin & governance			Using Templates to Speed Up and Standardize Report Development
	Admin & governance			Naming of Tables, Columns, and Measures
	Admin & governance			Verifying Accessibility on Reports
	Admin & governance			Using Custom Data Connectors
	Admin & governance			Collaboration, Sharing, and Distribution in the Power BI Service
	Admin & governance			Shared and Certified Datasets and Dataflows



Role of IT in the Power Platform





Maximize the benefits of using the Power Platform



Minimize the risks of using the Power Platform



React quickly & not slowing down the business



Delegate experts



Minimize risks

Short term :

- Bugs
- Lack of support
- Several versions of the truth
- Data Loss

Long term :

- Technical debt





First do this !!!

Before doing anything

Secure the Power Platform perimeter

1

Assign Power Platform admin role

2

Restrict creation of environments and Power BI workspaces to admin

3

Isolate the tenant

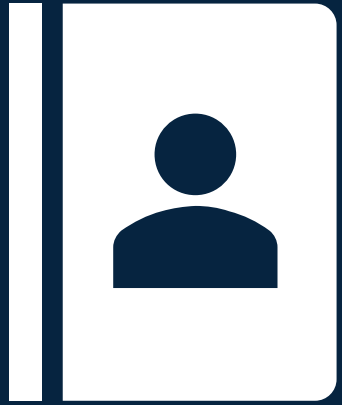
4

Review the Power BI tenant Settings

5

Define e-mail exfiltration blocking





Define the role of
the Power Platform
in the IT portfolio



Extensibility

Power Platform



Power Apps



Power Automate



Power Virtual Agents



Power BI



Dataverse

Every
developer
(low code)

Azure Services



API
Management



Azure
Functions



AKS



Logic
Apps



Cognitive
Services



Bot
Services

Pro
developers



Visual
Studio

VS
Code

Azure Office & Data Services



Microsoft
Graph



SQL Azure



Azure Synapse
Analytics



Cosmos DB



Analysis
Services



A platform for all makers



Intuitive to use & easy

Citizen Developer
Self-BI champions

One admin center to
rule them all for IT
Administrators

IT Administrator

World class Pro
Developer support
and ALM

Professional
Developer BI





Educate IT



Educate IT



1.(Workshop) What is the Power Platform, benefits, risks

2.(Course) Power Apps, Power Automate, Power BI

- With the business
- Makes sure this course cover the best practices and the rules in place
- Limitations of the tools
- Reduce risks

3. (Course) Power Platform Governance

Item Name	Category	Frequency	Action
Content backup	Admin & Governance	Weekly	Content backup
Define 'trusted' of specific non-Microsoft connectors (like Adalo)	Admin & Governance	Weekly	Define 'trusted' of specific non-Microsoft connectors (like Adalo)
Define security roles for workspaces - Permissions and roles	Admin & Governance	Weekly	Define security roles for workspaces - Permissions and roles
Define procedures to request workspaces	Admin & Governance	Weekly	Define procedures to request workspaces
Define roles to operators	Admin & Governance	Weekly	Define roles to operators
Manage all standard data governance	Admin & Governance	Weekly	Manage all standard data governance
Identify critical data sources (Reports, Tables, Reports, Business Process, etc.)	Admin & Governance	Weekly	Identify critical data sources (Reports, Tables, Reports, Business Process, etc.)
Identify critical and important resources	Admin & Governance	Weekly	Identify critical and important resources
Install the Data Governance data gateway	Admin & Governance	Weekly	Install the Data Governance data gateway
Make data usage transparent	Admin & Governance	Weekly	Make data usage transparent
Plan & manage licenses & capacity (Storage & ...)	Admin & Governance	Weekly	Plan & manage licenses & capacity (Storage & ...)
Define personal workspace usage	Admin & Governance	Weekly	Define personal workspace usage
Personal training	Admin & Governance	Weekly	Personal training
Monitor 'top' workspaces to ensure they have not become workspaces 'orphan' - which means they have	Admin & Governance	Weekly	Monitor 'top' workspaces to ensure they have not become workspaces 'orphan' - which means they have
Archiving Activities and Sharing	Admin & Governance	Weekly	Archiving Activities and Sharing
Workflow Automation - Updating Data from Within Power BI	Admin & Governance	Weekly	Workflow Automation - Updating Data from Within Power BI
Self-Service Data Preparation and Machine Learning	Admin & Governance	Weekly	Self-Service Data Preparation and Machine Learning
Power BI Service Desktop Release Cycle	Admin & Governance	Weekly	Power BI Service Desktop Release Cycle
Power BI Premium Support	Admin & Governance	Weekly	Power BI Premium Support
Deciding Whether to Use Power BI Premium	Admin & Governance	Weekly	Deciding Whether to Use Power BI Premium
Power BI Desktop	Admin & Governance	Weekly	Power BI Desktop
Organizational Publishing of Power BI user Licenses	Admin & Governance	Weekly	Organizational Publishing of Power BI user Licenses
Self-Service Publishing of Power BI user Licenses	Admin & Governance	Weekly	Self-Service Publishing of Power BI user Licenses
Identifies and Coordinates used by the Data Gateway	Admin & Governance	Weekly	Identifies and Coordinates used by the Data Gateway
Managing External Authentication	Admin & Governance	Weekly	Managing External Authentication
Using 'Trusted' to Grant (or Deny) Standard Report Development	Admin & Governance	Weekly	Using 'Trusted' to Grant (or Deny) Standard Report Development
Managing Tables, Columns, and Measures	Admin & Governance	Weekly	Managing Tables, Columns, and Measures
Verifying Connectivity to Reports	Admin & Governance	Weekly	Verifying Connectivity to Reports
Using Custom Data Connections	Admin & Governance	Weekly	Using Custom Data Connections
Collaboration, Sharing, and Distribution in the Power BI Service	Admin & Governance	Weekly	Collaboration, Sharing, and Distribution in the Power BI Service
Shared and Certified Datasets and Dashboards	Admin & Governance	Weekly	Shared and Certified Datasets and Dashboards

4.(Workshop) Deeply understand licensing

- Storage, connectors, throttling



Create a dedicated
Center of Excellence

CoE Scope



Mentoring

Training materials

Documentation and resources

Governance guidelines

System oversight and administration

Support issues --escalated from the help desk

Developing solutions and/or proofs of concept

Establishing and maintaining the BI platform and data architecture



CoE Roles



Power BI



Power Apps
Power Automate



Product Owner

Solution architect

Trainer, coach

Data pro

App pro

User support

Community leader





Install the Power Platform CoE Starter kit



The Power Platform CoE starter kit



At least these:



Core components

Governance components

Nurture components

Theming components

Innovation Backlog components

ALM Accelerator for Makers
components



Developi

App over

Canvas

My Expense

Personal Pro

DETAILS

Created

Submitted Ideas

X Search

+ Add idea

I would like to create an app

Edit

Email voters

Email creators

Share

Idea

Being developed for

I would like to create an app that notifies if a

Power Platform Request Center

+ New Refresh

My Live Environment Creation Requests (0)

Id	Environment name
----	------------------

Production

Developer

Sandbox

Show advanced options

New Environment Creation Request

Select connectors needed to create canvas apps and cloud flows.

adobe

	Name
<input type="checkbox"/>	Adobe Creative Cloud
<input checked="" type="checkbox"/>	Adobe PDF Services
<input type="checkbox"/>	Adobe Sign

Power BI CoE Kit ?

No dedicated integrated tool yet



What do you need?

- Inventory
- Monitoring
- Automation

How to achieve it ?

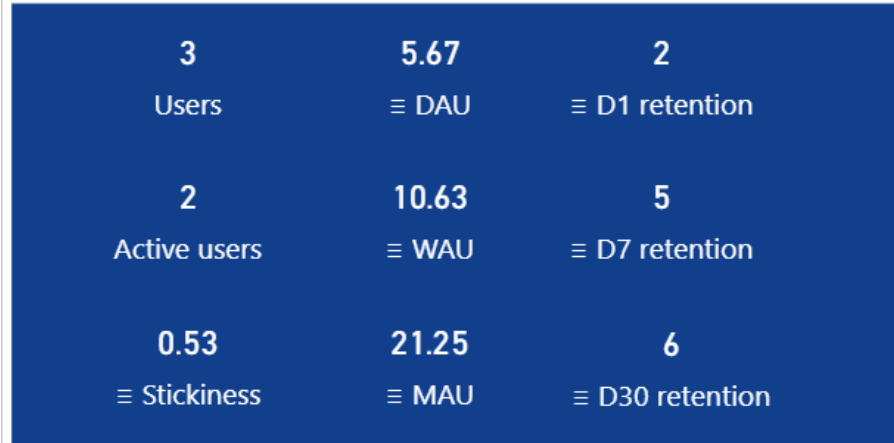
- Integrated tooling like Usage reports
- Power BI Rest APIs is the key
- Third party
- Azure PureView?



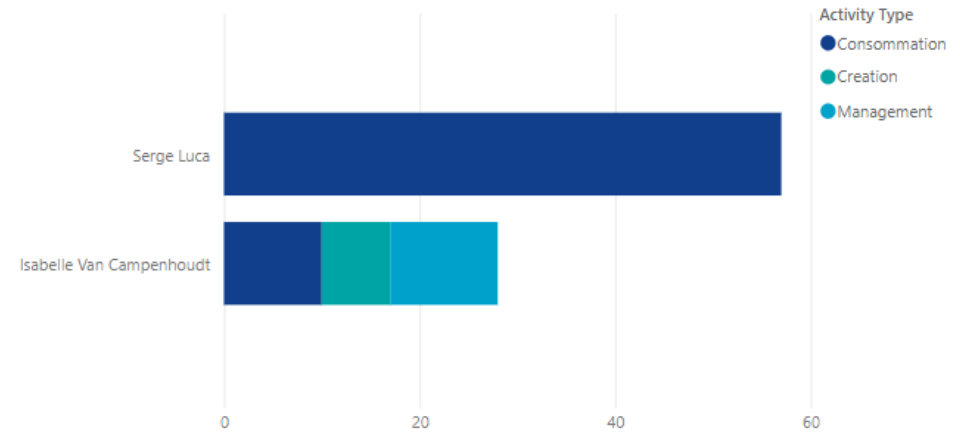
1/1/2013 12/31/2025

User Engagement Dashboard

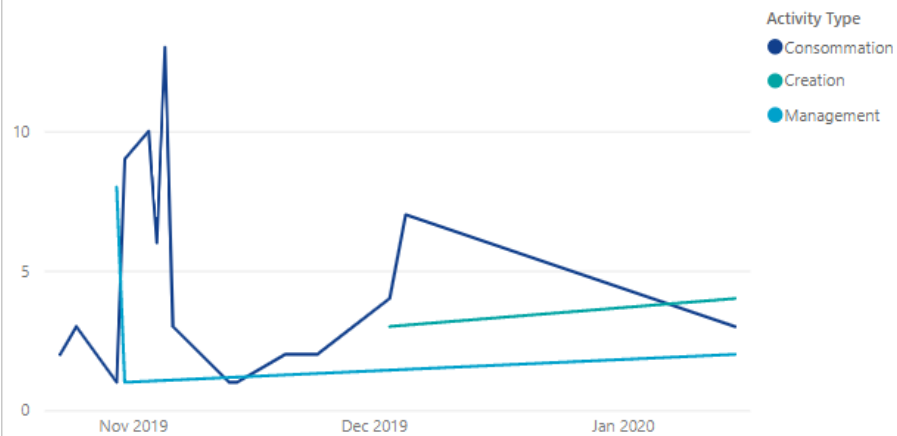
User engagement metrics



#Activity by users



#Activity by type



#Activities repartition





Define the container strategy

Containers



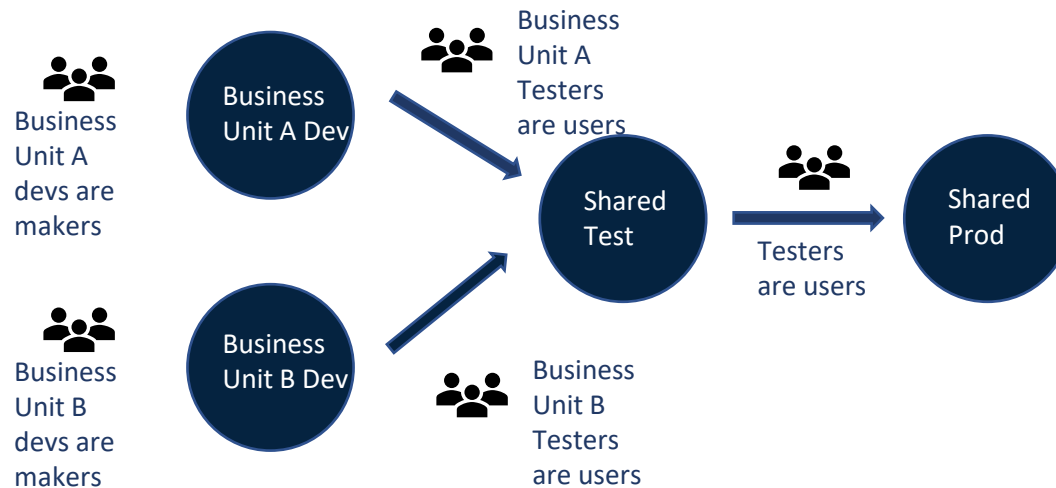
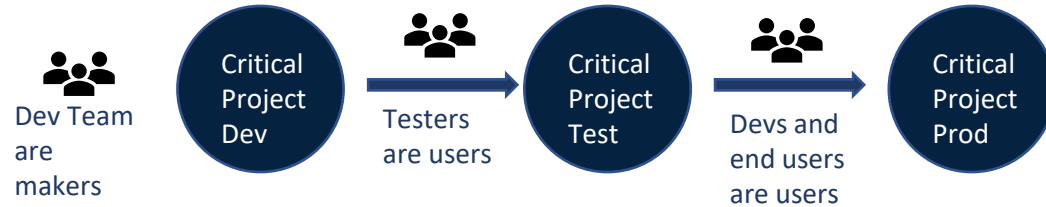
Power Apps
Power Automate

Environments

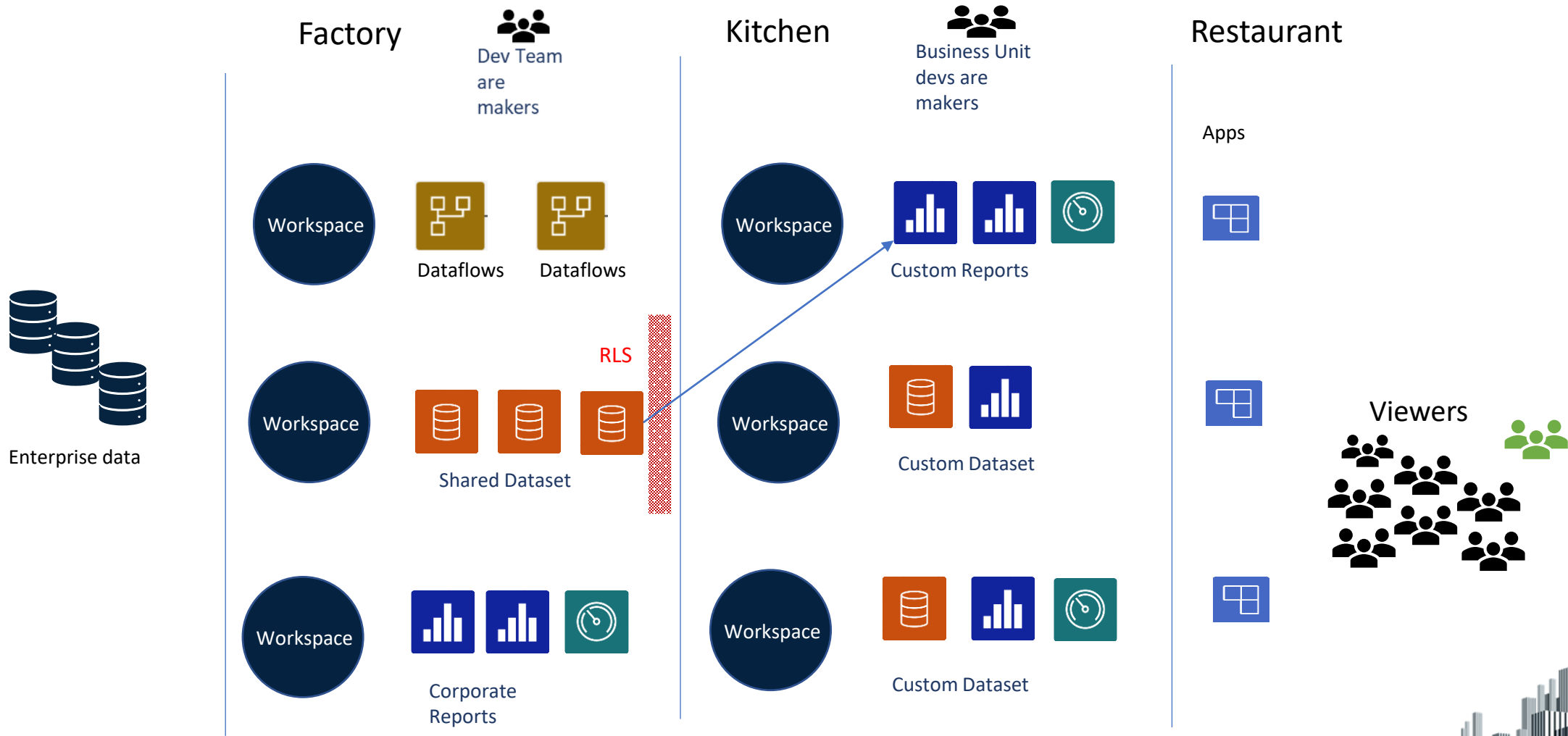
Power BI

Workspaces

Power Apps/Automate environment strategies



Power BI typical organisation





Define policies

The main concern = data loss

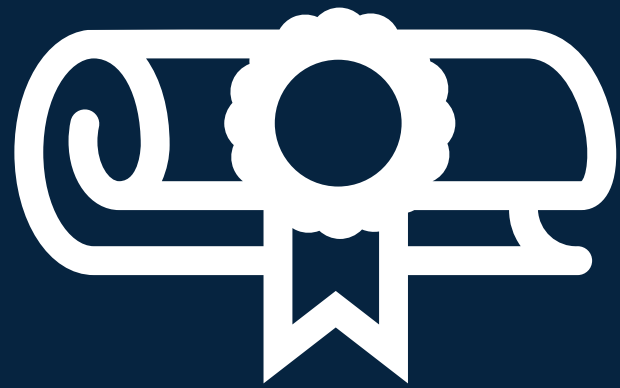
Power automate/Power apps

- **DLP Policies** (Block connectors, endpoint filtering, action control)
- **e-mail exfiltration blocking**
- **Classify and sensitivity label in Dataverse**

Manually configuration Power BI --- surface area

- **Dataset protection** with RLS and OLS
- **Classify and label sensitive Power BI data**
- **Enforce governance policies even when Power BI content is exported** to Excel, PowerPoint, or PDF...
- **Monitor user activity**





Educate :
data and apps
culture





Educate makers

Workshop : “What is the Power Platform, benefits, risks”

- For dept decision makers and dept directors

Course : “Power Apps, Power Automate, Power BI”

- Create 2 or 3 reference apps/dashboards
- Continuously improve & update them with new features /new practices
- Makes sure this course also covers the best practices and the rules in place
- Share the video of the course. Make sure people can do the labs alone
- Reduce risks

Make sure makers become aware of ALM issues

Sensibilize on Tests! Often underestimated

- Test ->User requirements must be used in test scenarios





Nurture



Grown a community



Welcome e-mail

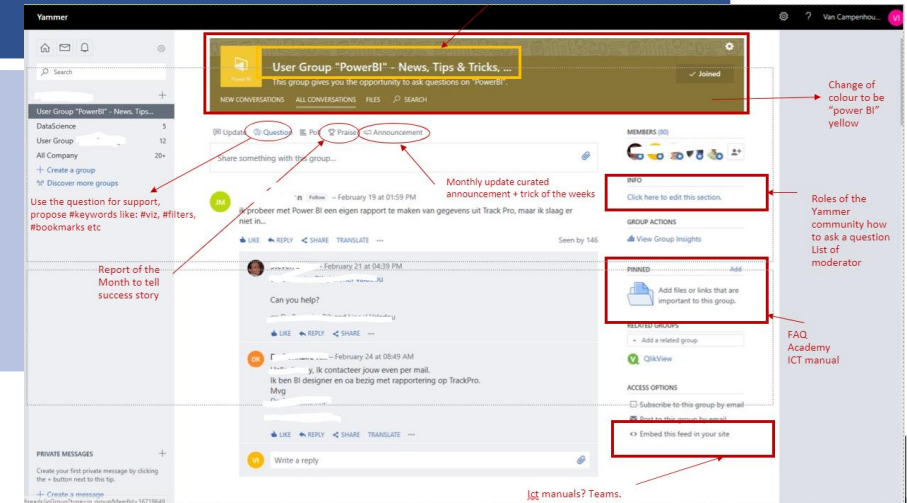
Define a SharePoint site

Define a Yammer (goal : organic support)

Newsletter

- Where users can
 - Learning
 - Request workspaces/environments
 - Request connectors
 - Request storage, Dataverse, certified dataset, Data access
 - Policies
 - Find the Yammer
 - Find the FAQ
 - The FAQ can feed the Bot
 - Get help
 - Get Power Platform news
 - Register to trainings

- Newsgroups by product
- General newsgroups
- Nominate champions (organic help)
- Update the reference apps/dashboards based on questions
- Encourage people to follow the courses
- Weekly meeting for CoE team -> frequent problems
- Feed the Faq



Adoption Campaigns



With internal
communications

- Show and tell sessions (monthly)
- Celebrate success stories (monthly)
- Define career path for makers
- Encourage makers to become ambassador across their dept
- Clinics (weekly)
- Workshops
- Bootcamps
- Newsletter



ALM

Continuous Integration/Delivery (CI/CD)

Simple scenario

- Deploy from DEV->TEST->PROD
 - Manuel
 - Automated
 - Power BI pipelines (premium)
 - Power Platform Build tools & Azure DevOps or Github

Complex scenario

- V1 is in PROD
- V2 is in DEV
- A critical bug must be deployed to V1 (PROD) asap
- It must also be included in V2 (DEV)
- We need source control, branching, merging
 - New immature tools for Power Apps (Power Apps source code Tool)
 - Not available yet for Power BI



Power Platform CoE ALM Accelerator

ALM Accelerator for Makers						
+ New Project Refresh		<div>All ▼ <input type="text" value="Search Projects"/></div>				
PROJECT	CREATED ON	CREATED BY	ACTION	CURRENT DEPLOYMENT ENVIRONMENT		STATUS
PENDING My Inspection App	1/15/2021 7:23 AM	Megan Bowen	<button>Deploy</button>	DEV	TEST	PROD
PENDING Project X	1/15/2021 7:22 AM	Megan Bowen	<button>Deploy</button>	DEV	TEST	PROD
APPROVED TestPro888 Open project solution	11/20/2020 3:18 AM	Megan Bowen	<button>Deploy</button>	DEV	TEST	PROD
						Deployment Completed

Power BI pipelines (Premium)

The screenshot displays the Power BI Deployment Pipelines interface for a workspace named "Power Platform Associates Demo". The interface is organized into three main stages: Development, Test, and Production, each with a description and a "Learn more" link.

- Development:** Design, review, and revise your content in a development workspace. When it's ready to test and preview, deploy the content to the test stage.
- Test:** Test and verify your content in a preproduction workspace. When it's ready to distribute, deploy the content to the production stage.
- Production:** Your content has been tested and is ready to distribute to your consumers as an app or by access to the production workspace.

Below these stages, three pipeline cards are shown, each representing a deployment pipeline for "Documentation demo".

- Development Pipeline:** Shows 1 Dataflow (preview), 2 Datasets (with a "Refresh all" link), 5 Reports, and 2 Dashboards. It includes a "Show more" link, a "Publish app" link, and a "Deploy to test" button.
- Test Pipeline:** Shows 1 Dataflow (preview), 2 Datasets (with a "Refresh all" link), 5 Reports, and 2 Dashboards. It includes a "Show less" link, a "Publish app" link, and a "Deploy to production" button. The pipeline is deployed on 6/7/2021, 10:03:13 AM.
- Production Pipeline:** Shows 1 Dataflow (preview), 2 Datasets (with a "Refresh all" link), 3 Reports, and 1 Dashboard. It includes a "Show less" link, a "Publish app" link, and an "Update app" button. The pipeline is deployed on 6/14/2021, 10:49:23 AM.

Each pipeline card also lists the content items included in the deployment:

- Development Pipeline Content:** CDM, MyFoods income, Sales analysis, MyFoods income, Sales analysis, CountrySalesPerformance, and OrganizationExpenditures.
- Test Pipeline Content:** CDM, MyFoods income, Sales analysis, MyFoods income, Sales analysis, CountrySalesPerformance, and OrganizationExpenditures.
- Production Pipeline Content:** CDM, MyFoods income, Sales analysis, MyFoods income, Sales analysis, and OrganizationExpenditures.

The interface also features a left-hand navigation pane with options like Home, Favorites, Recent, Create, Datasets, Goals, Apps, Shared with me, Deployment pipelines, Discover, Learn, Workspaces, and My workspace. The top right corner includes links for Access and Settings.

Summary

Role of Power Platform in IT portfolio

Role of IT

It makes sense to have a single CoE

Huge benefits of sharing a data/apps culture

ALM story is weak (work in progress)

Technical debt

It takes a village...

Without **empathy**, our 320 check list governance items don't work



Thank You

www.PowerPlatformAssociates.com

<https://github.com/sergeluca/Power-Platform-BPM-Toolkit>

<https://github.com/Power-Automate-in-a-day/Training-by-the-community>

Isabelle van Campenhoudt @theSQLgrrrl

Serge Luca @sergeluca



Deliverables www.shareql.com

