

Tips & Tricks of a Large Scale Power BI Premium Implementation

Nicky van Vroenhoven

Who are you? bit.ly/TalkPowerBI



Nicky van Vroenhoven

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community.powerbi.com

 Power BI Days Dutch chapter
co-founder powerbidays.com



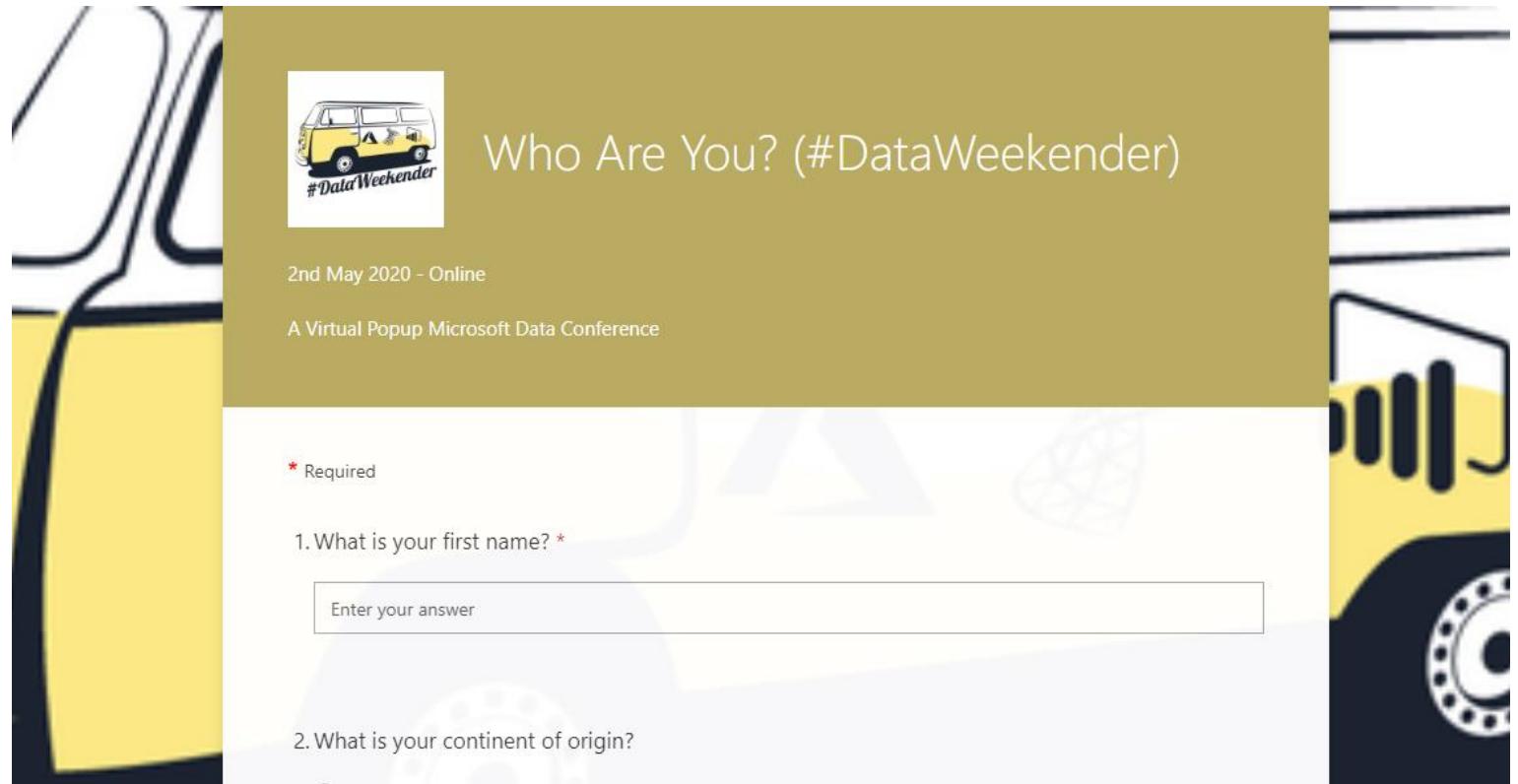
Data Platform MVP

Who are you? bit.ly/TalkPowerBI



Who Are You?

bit.ly/TalkPowerBI



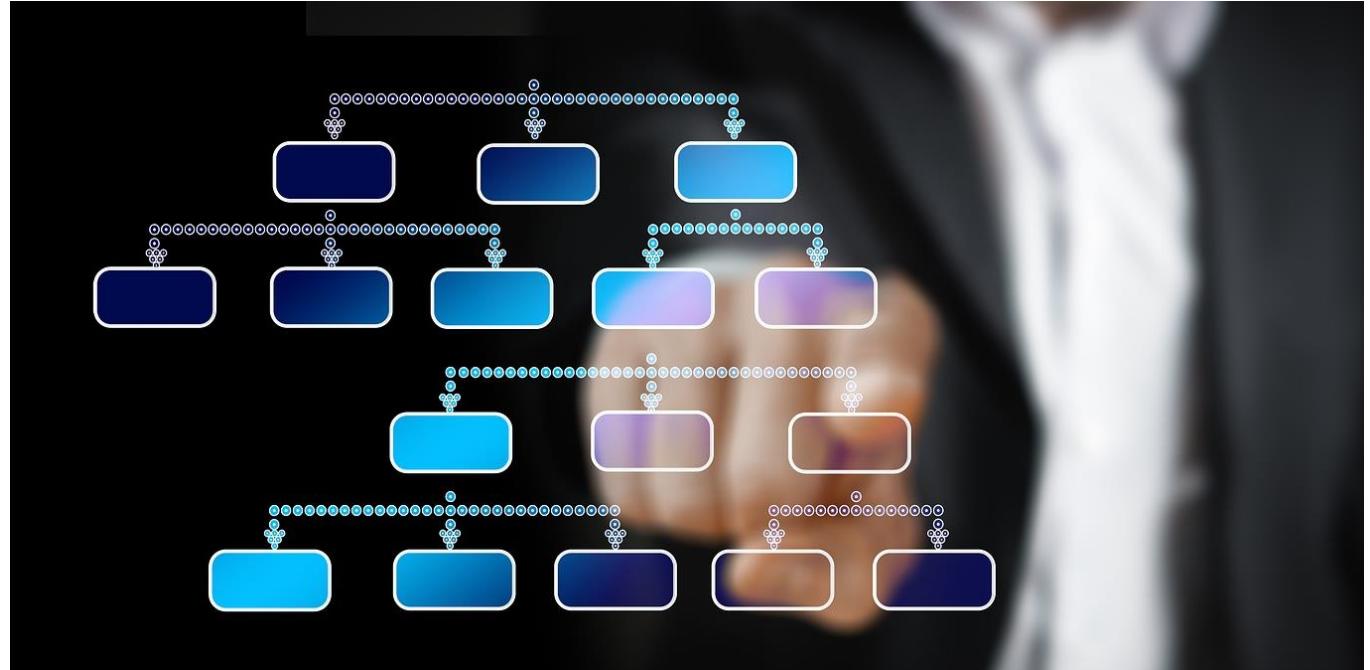
Check out my blog for a how-to:
www.nickyvv.com/2019/12

Agenda

- Organisation
- Data management
- Reporting
- Collaboration
- Premium / Support
- Lessons learned
- Next steps

Agenda

- **Organisation**
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Van Lanschot Kempen

a specialised wealth manager

Van Lanschot Kempen, a union of two specialized financial boutiques, is the oldest independent financial institution in the Netherlands.

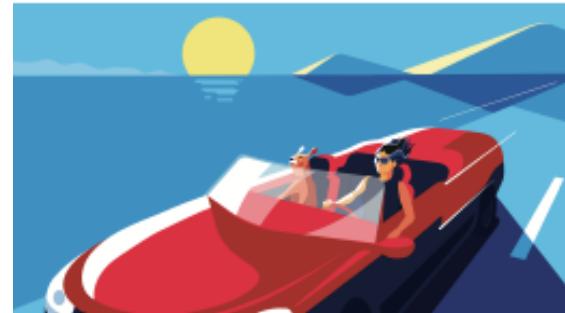
Mission: creation and preservation of wealth of our customers



Specialised in the future
since 1737



Everyone deserves Evi



Pronounced personally



turning dedication into
dazzling prospects

Show results from:

2019 ▾

Annual results

Trading updates

Half-year results

Client assets

€ 102.0 billion

Net result

€ 98.4 million

Balance sheet total

€ 14.3 billion

Underlying net result (excl.
expenses related to Strategy
2020 investment programme
and restructuring charges)

€ 98.4 million

Common Equity Tier 1 ratio
(CET1 fully loaded, incl.
retained earnings)

23.8 %

Efficiency ratio

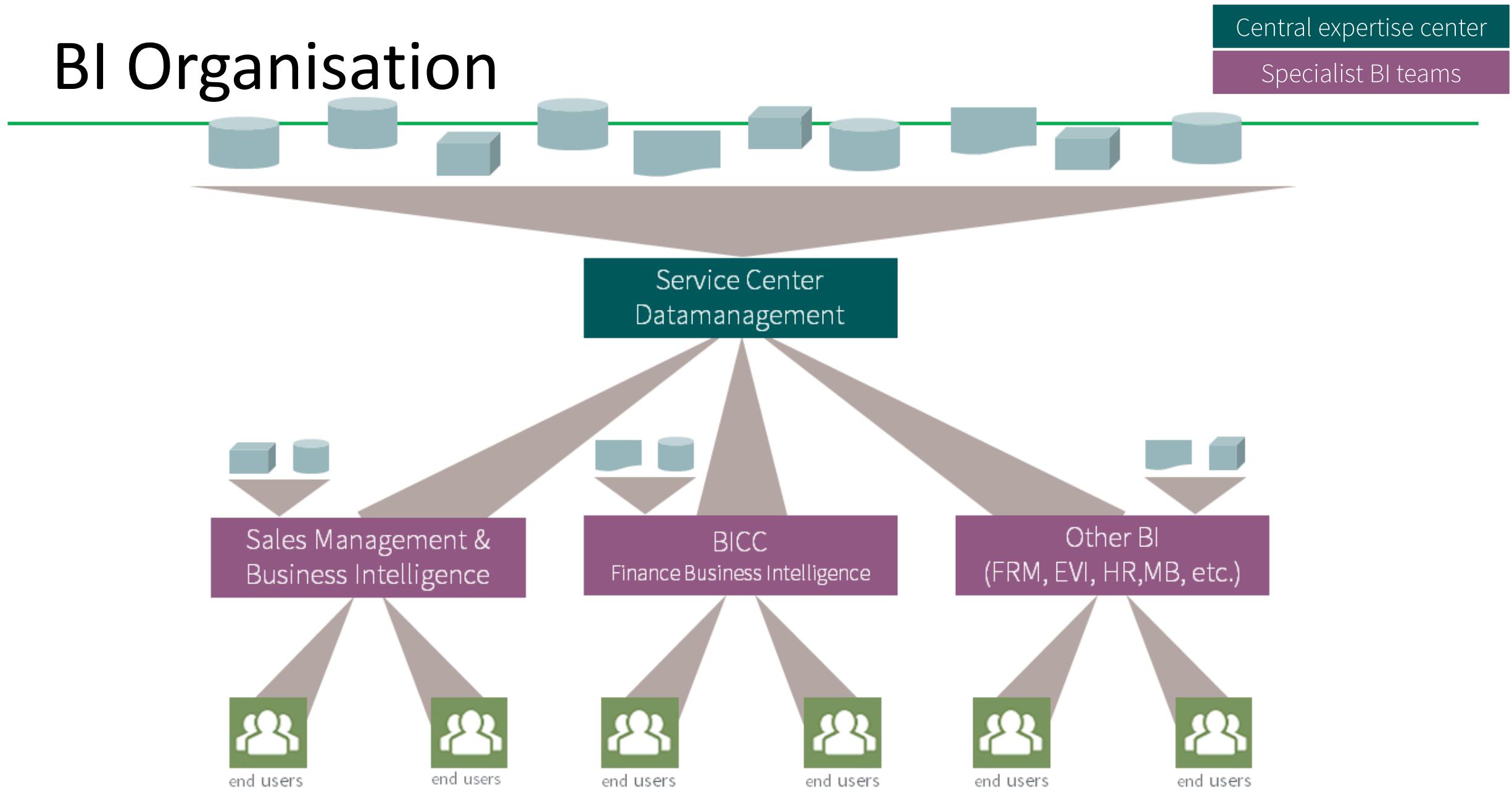
75.5 %

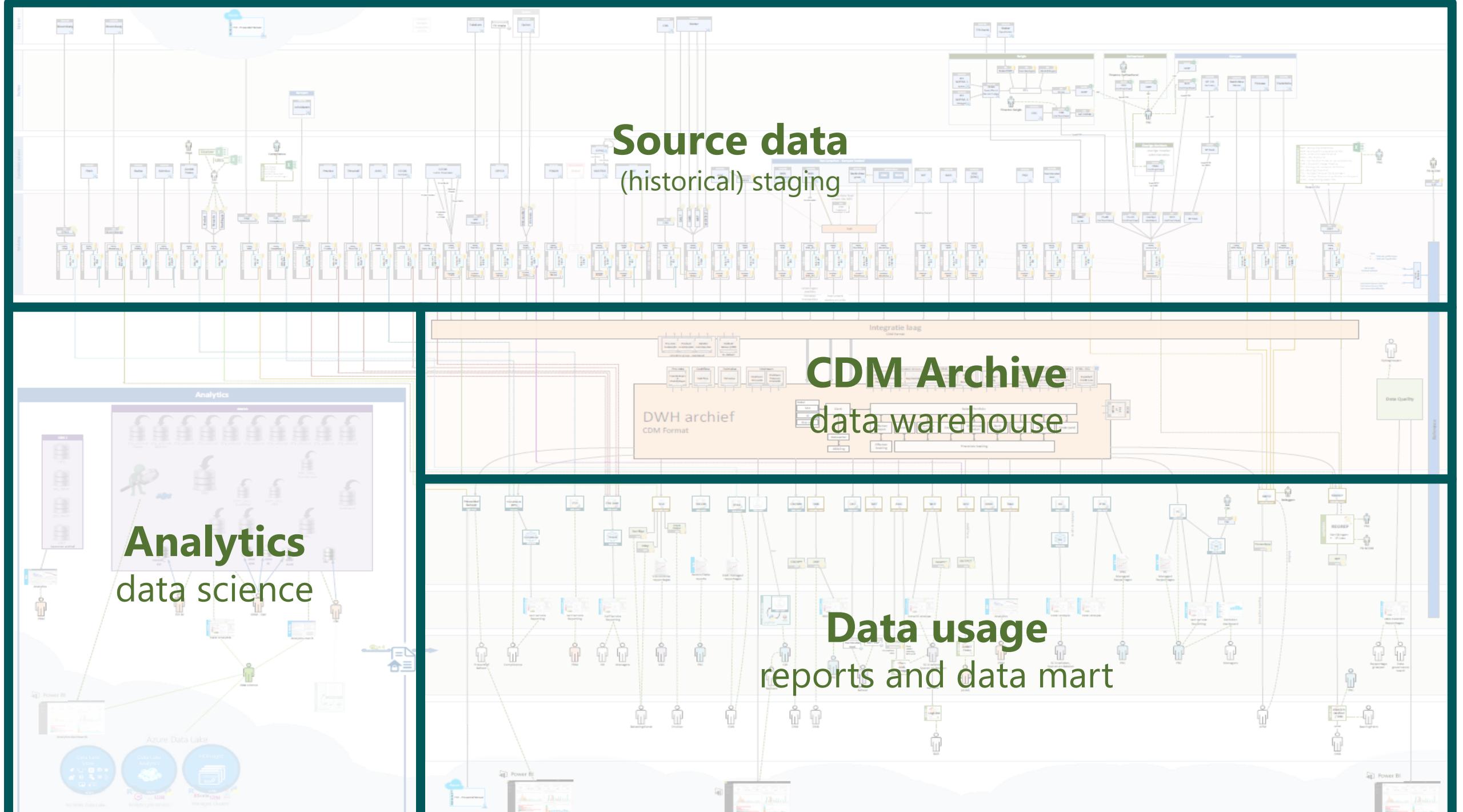
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BI Organisation





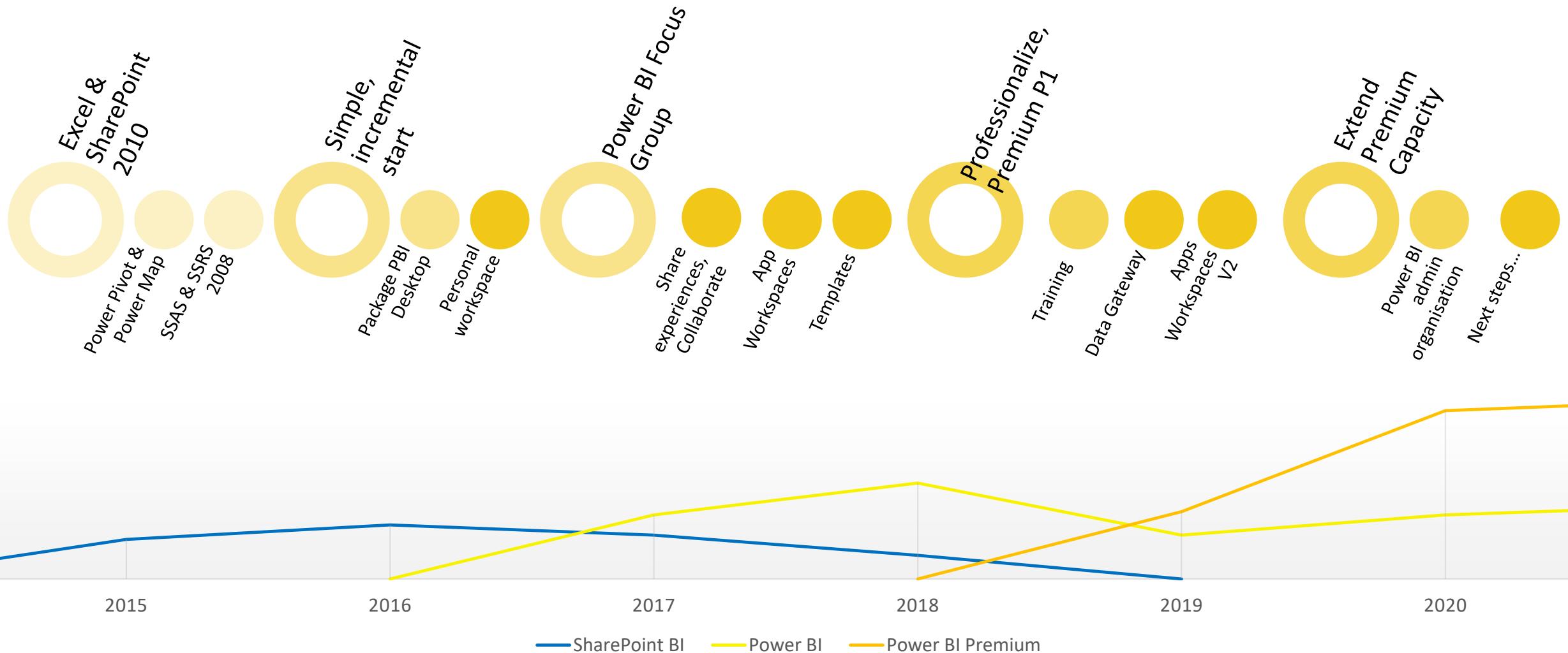
Source data
(historical) staging

CDM Archive
data warehouse

Analytics
data science

Data usage
reports and data mart

History and progress



BI in a financial institute

BI at a bank has its challenges

- Regulatory requirements and constraints
 - National and European supervisors (AFM, DNB, ECB)
- Sensitive data
 - Privacy laws: AVG (Dutch) and GDPR



IT versus Business

Structure _{vs} regulation _{vs} freedom

Searching for the best of both worlds:

- IT for structure and repeatability
- Business for knowledge, usability and flexibility



IT versus Business Structure _{vs} regulation _{vs} freedom



Trust is key

IT versus Business Structure _{vs} regulation _{vs} freedom

Monitor to prevent
proliferation

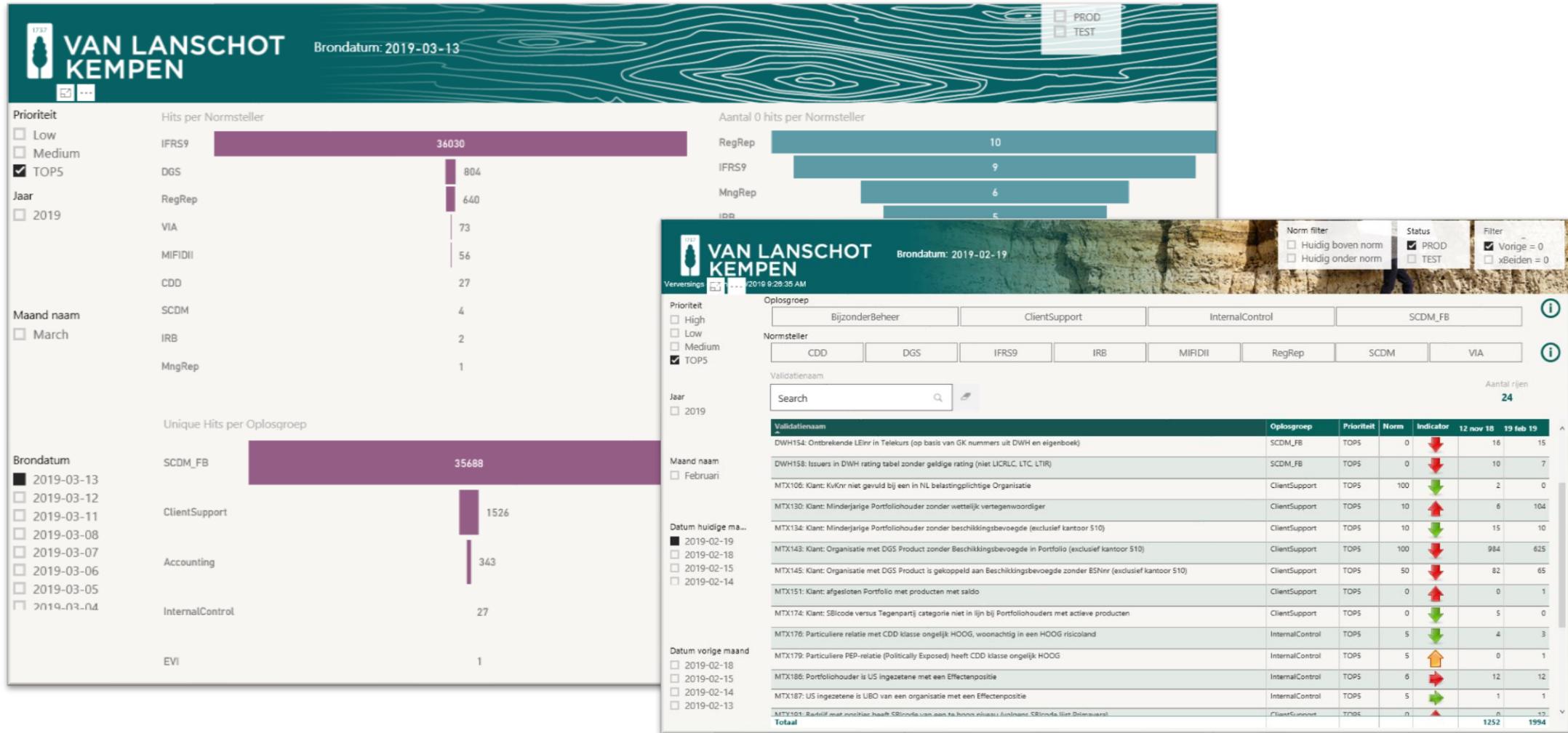


Agenda

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Data Quality Dashboard



Weekoverzicht suspicious cases

Huidige week

2018-47

11/19/2018 11/25/2018

WeekStart

WeekEnd

relatienvr

All ▾

segment

All ▾

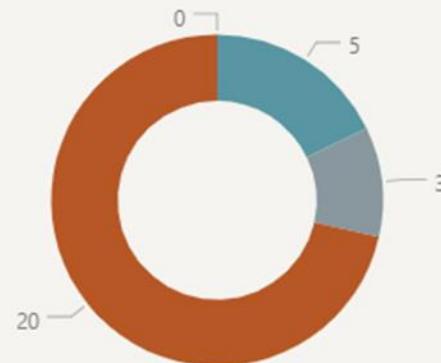
weeknr

2018-36 ▾

< >

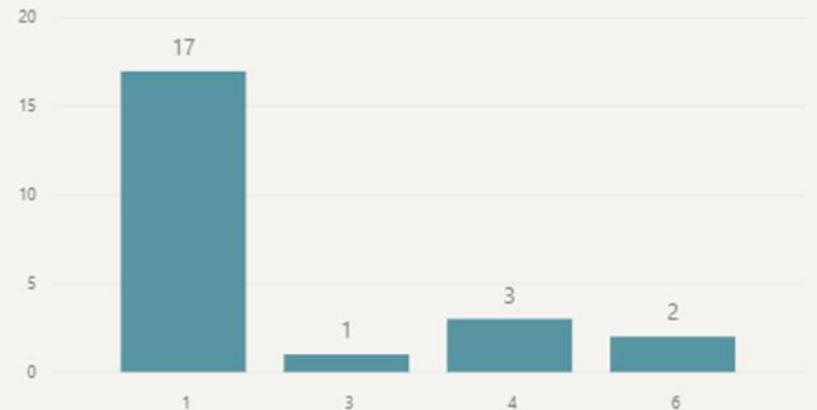
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Aantal alerts per type



- # bet.trans
- # eff.trans
- # keywords
- # watchlist

Aantal cases per score



Feedback toevoegen

ID: Week: 2018-36 Save

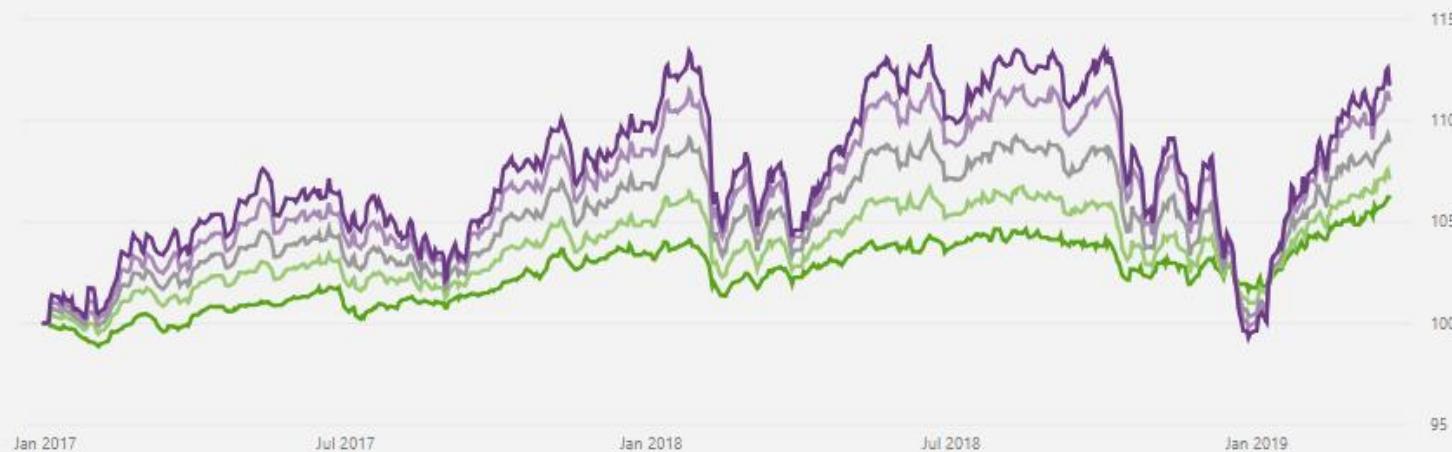
Verdacht

unshor: case gegenereerd ivm gebruik woorden Panama papers in meeting



Bruto performance van de modelportefeuilles

Modelportefeuille — Zeer defensief — Defensief — Neutraal — Offensief — Zeer offensief

**Bruto**

Jan 2017

Jul 2017

Jan 2018

Jul 2018

Jan 2019

115
110
105
100
95

12.21%

11.01%

8.50%

6.09%

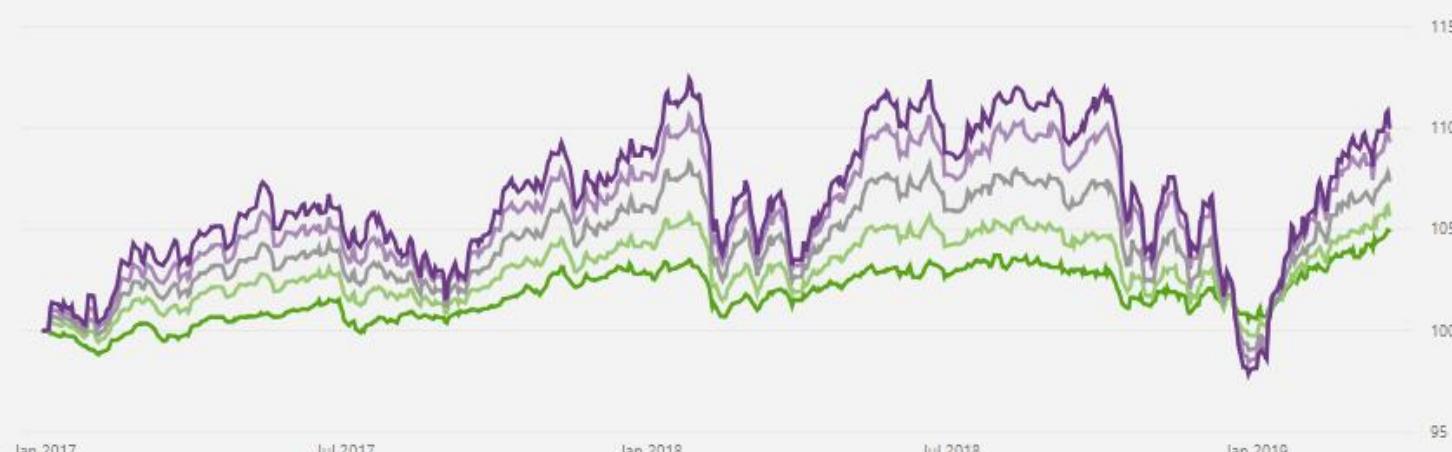
4.41%

0%

10%

Netto performance van de modelportefeuilles

Modelportefeuille — Zeer defensief — Defensief — Neutraal — Offensief — Zeer offensief

**Netto**

Jan 2017

Jul 2017

Jan 2018

Jul 2018

Jan 2019

95

Netto performance YTD per modelportefeuille

Zeer offensief

12.09%

Offensief

10.90%

Neutraal

8.39%

Defensief

5.98%

Zeer defensief

4.31%

0%

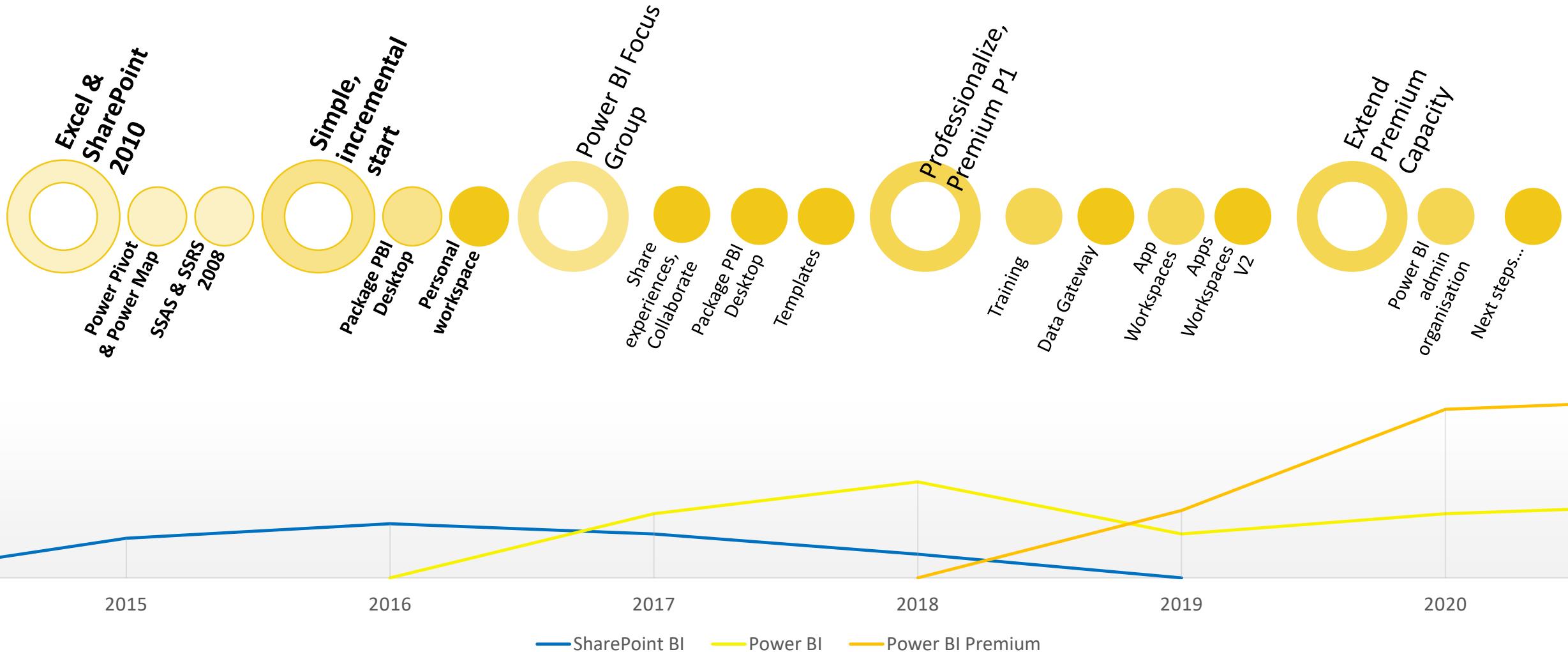
10%

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- **Collaboration**
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History and progress



Power BI Workspaces – Don'ts

The screenshot shows the Power BI interface. On the left, there's a navigation bar with 'Export' and 'Share' buttons. A large red 'X' is drawn over the 'Share' button. Below it is a list of items: 'Shared with me', 'Workspaces' (which is highlighted with a yellow oval), and 'My workspace'. To the right, a 'Share dashboard' dialog box is open for a workspace named 'SQLSATBE'. It has tabs for 'Share' and 'Access'. The 'Share' tab is selected, showing a note that recipients will have the same access as the user unless row-level security restricts them. It also includes fields for 'Grant access to' (with an 'Enter email addresses' input) and 'Include an optional message...'. At the bottom, there's a list of checkboxes with three checked: 'Allow recipients to share your dashboard' (which is highlighted with a red box), 'Allow users to build new content using the underlying datasets', and 'Send email notification to recipients'.

Share dashboard
SQLSATBE

Share Access

Recipients will have the same access as you unless row-level security on the dataset further restricts them. [Learn more](#)

Grant access to

Enter email addresses

Include an optional message...

Allow recipients to share your dashboard

Allow users to build new content using the underlying datasets

Send email notification to recipients

Power BI at VLK

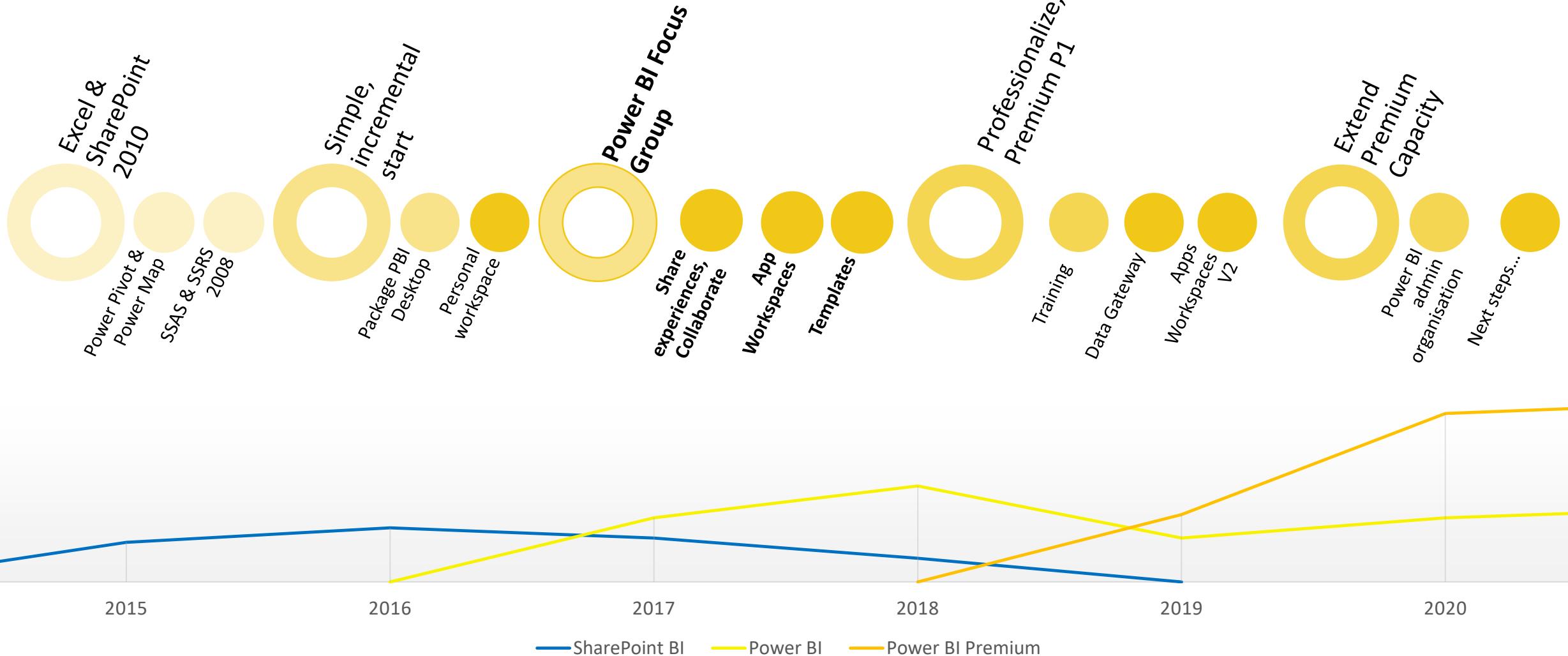


Packaging PBI Desktop monthly



Onedrive for versioning

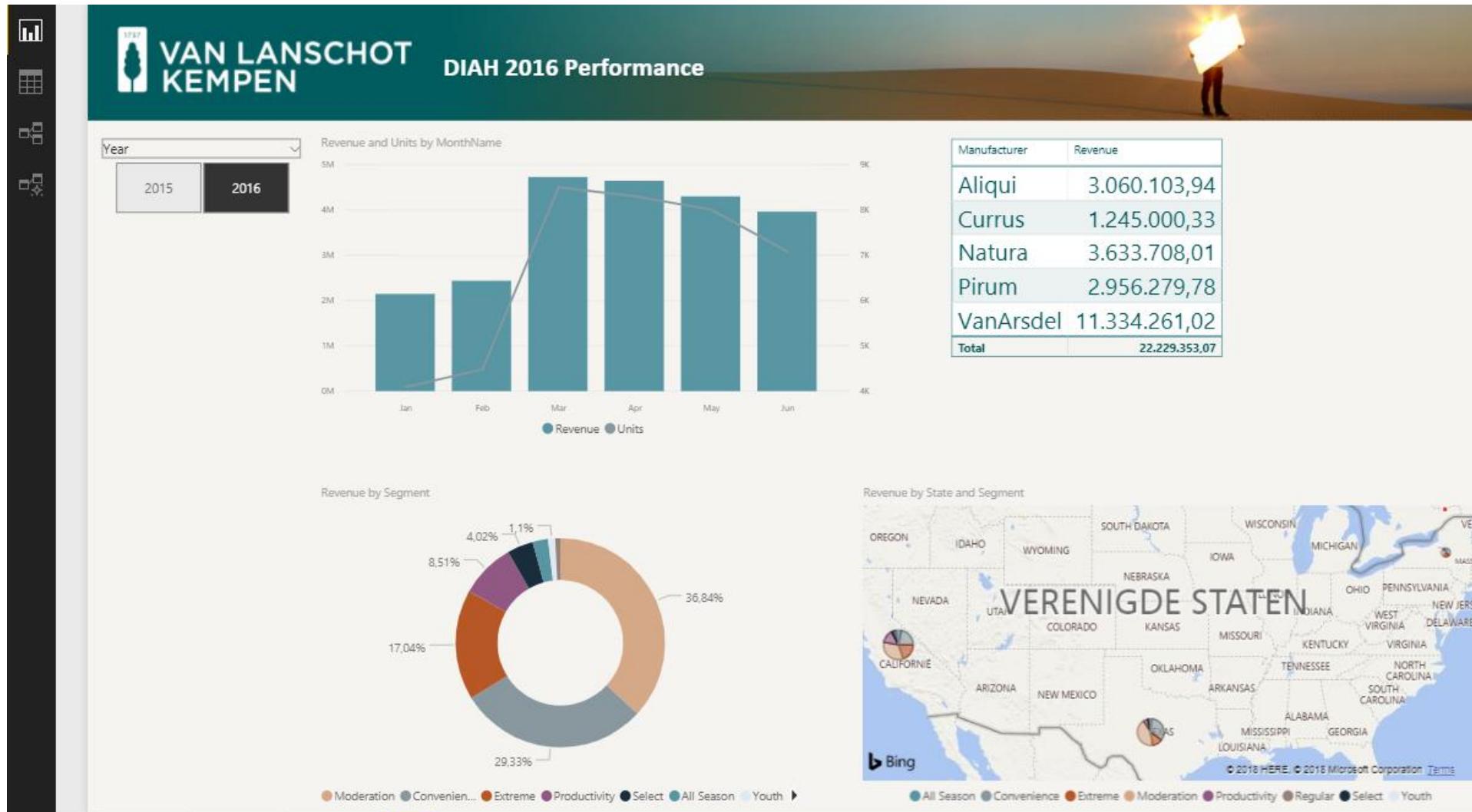
History and progress



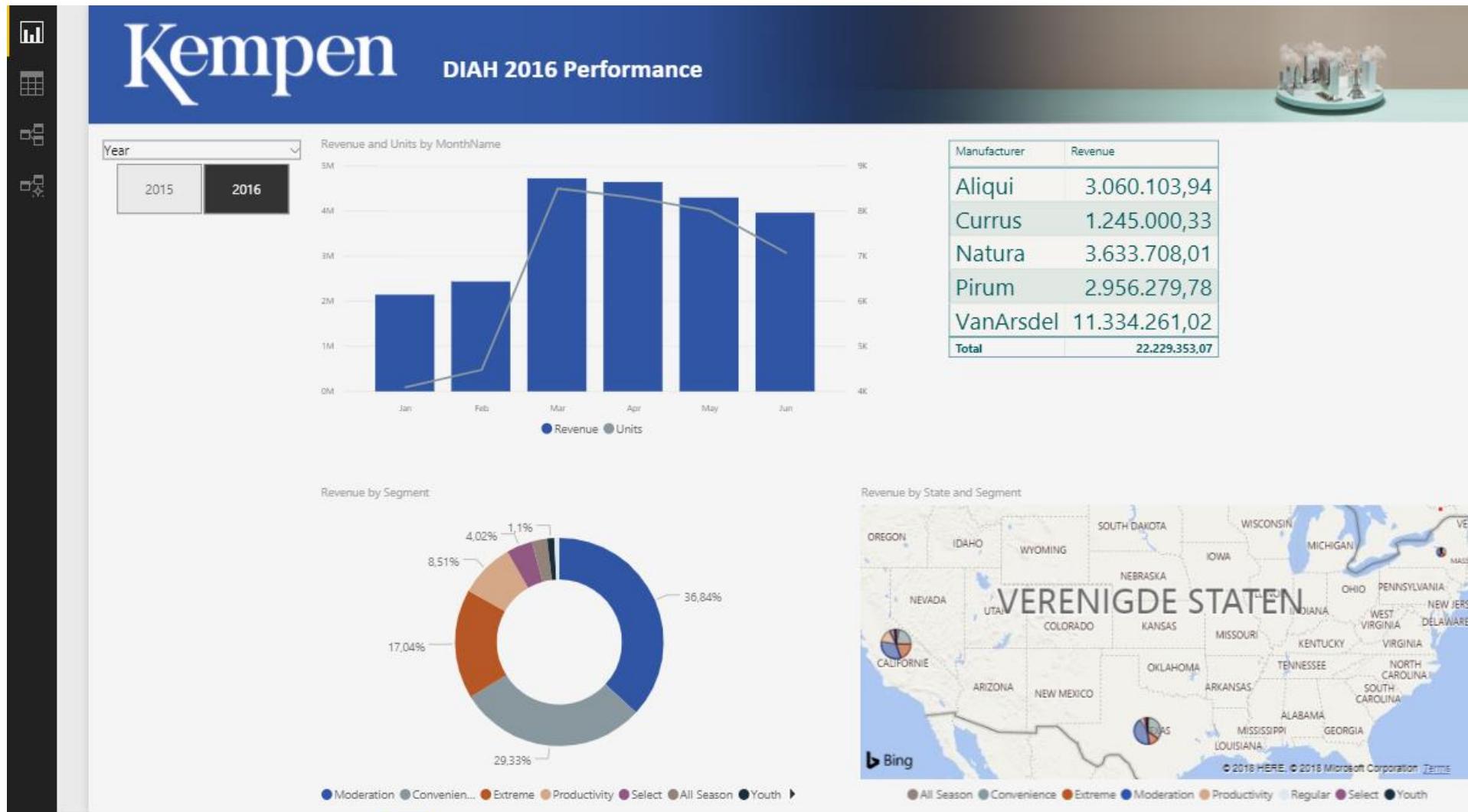
Power BI at VLK

- Templates
 - VLK, Kempen, Evi

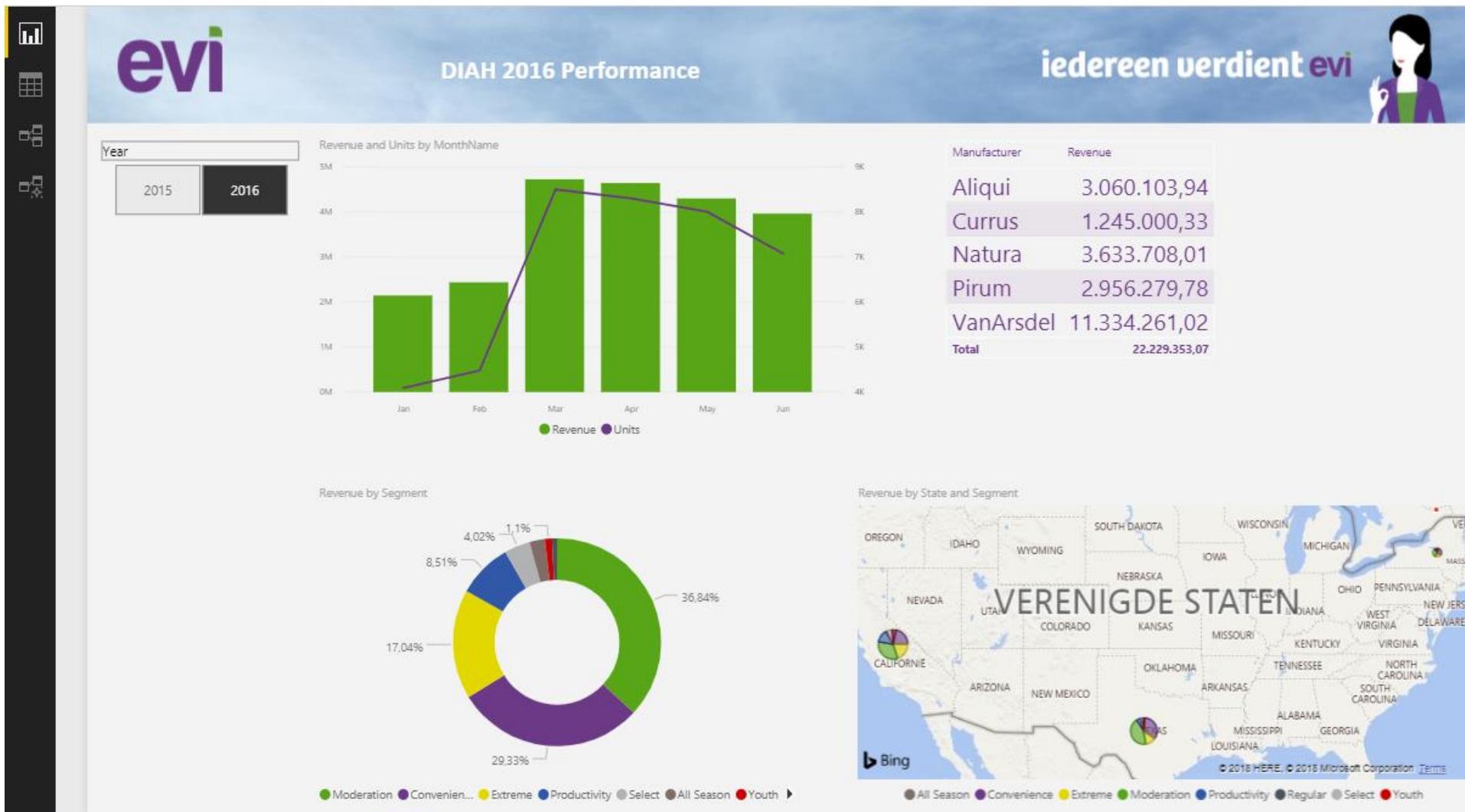
Power BI at VLK



Power BI at VLK



Power BI at VLK



Power BI at VLK

- Templates
 - VLK, VL, Kempen, Evi
- Custom Branding in the service

Custom branding in PowerBI.com

Admin portal

The screenshot shows the Power BI Admin portal interface. On the left, a sidebar menu lists various administrative settings: Usage metrics, Users, Audit logs, Tenant settings, Capacity settings, Embed Codes, Organizational visuals, Dataflow settings, Workspaces, and Custom branding. The 'Custom branding' option is selected and highlighted with a red box. The main content area is titled 'Custom branding' and contains three sections: 'Logo', 'Cover image', and 'Theme color'. The 'Logo' section features a placeholder for a user profile picture and includes 'Upload' and 'Delete' buttons. The 'Cover image' section has a similar structure. Below these, a 'Theme color' section displays a color swatch with the hex code #323130. A large red box highlights the entire top navigation bar and the main content area. At the bottom of the page, there is a footer bar with icons for a grid, a menu, a home, a star, and a clock, followed by the text 'Good afternoon, Nicky' and a search bar.

Custom branding

Customize the look of Power BI for your whole organization

Logo

For best results, upload a logo that's saved as a .png, 10 KB or smaller, and less than 160 pixels.

Upload Delete

Cover image

For best results, upload a cover image that's saved as a .jpg or .png, 10 KB or smaller, and less than 160 pixels.

Upload Delete

Theme color

#323130

VAN LANSCHOT KEMPEN

Snelle toegang

Activiteit

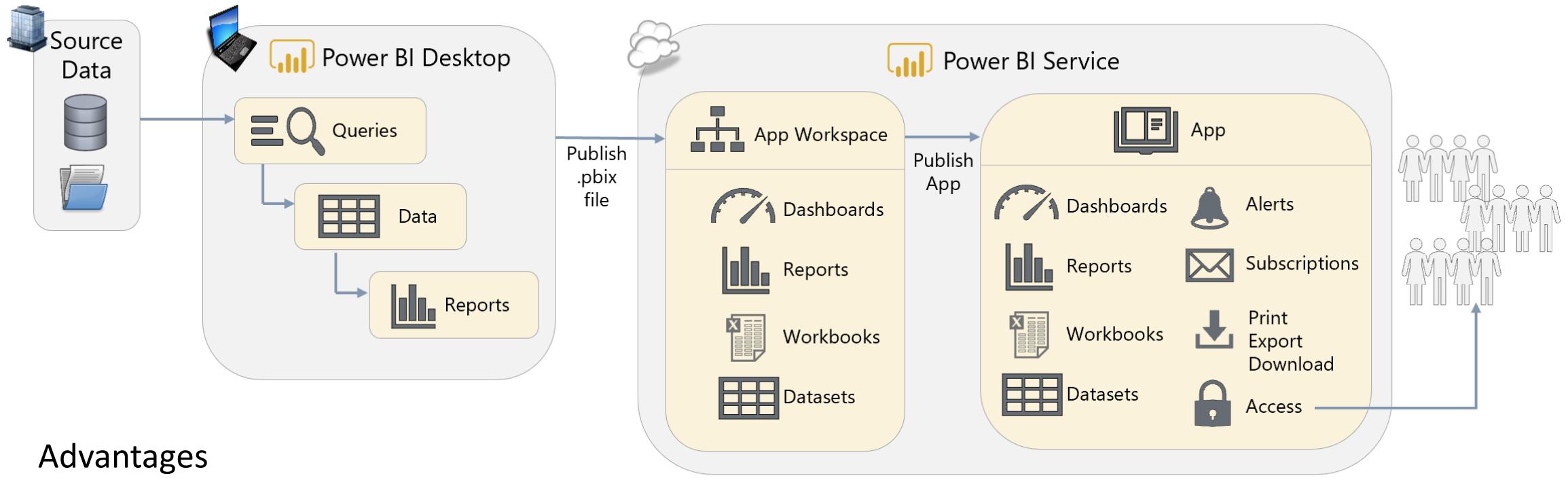
Good afternoon, Nicky

Search

Power BI at VLK

- Templates
 - VLK, VL, Kempen, Evi
- Custom Branding in the service
- Workspaces and Apps

Power BI Workspaces and Apps

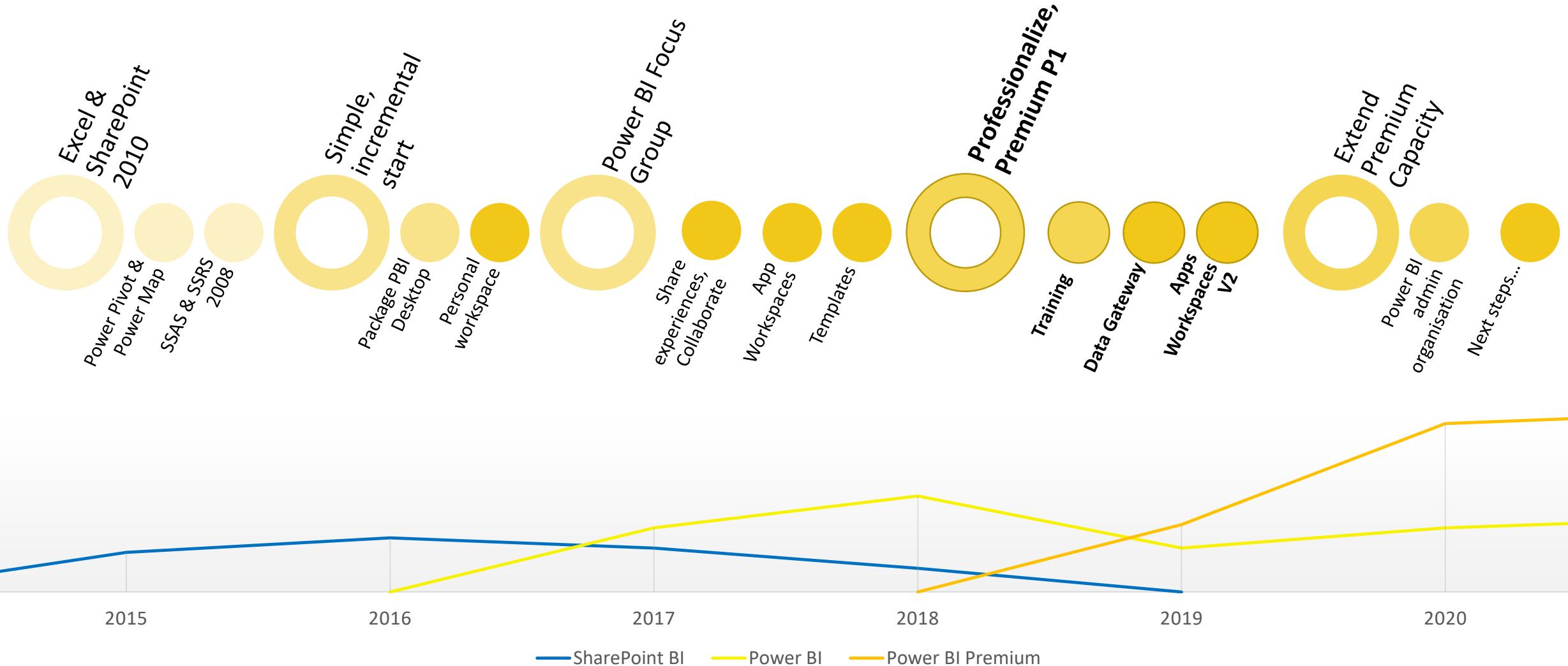


Agenda

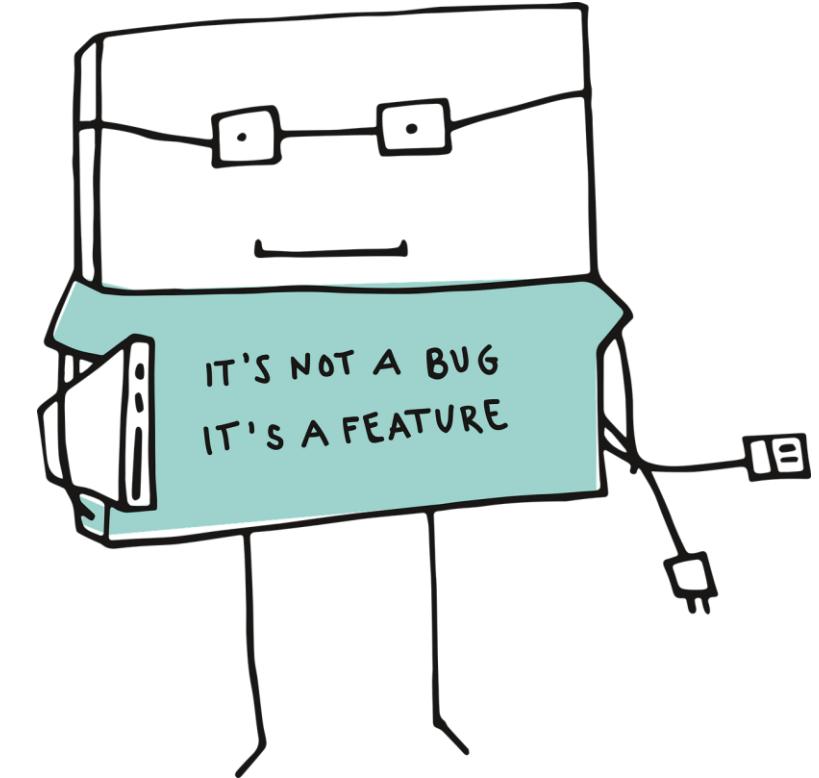
- Organisation
- Data management
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- Collaboration
- Premium / Support
- Lessons learned
- Next steps



History and progress

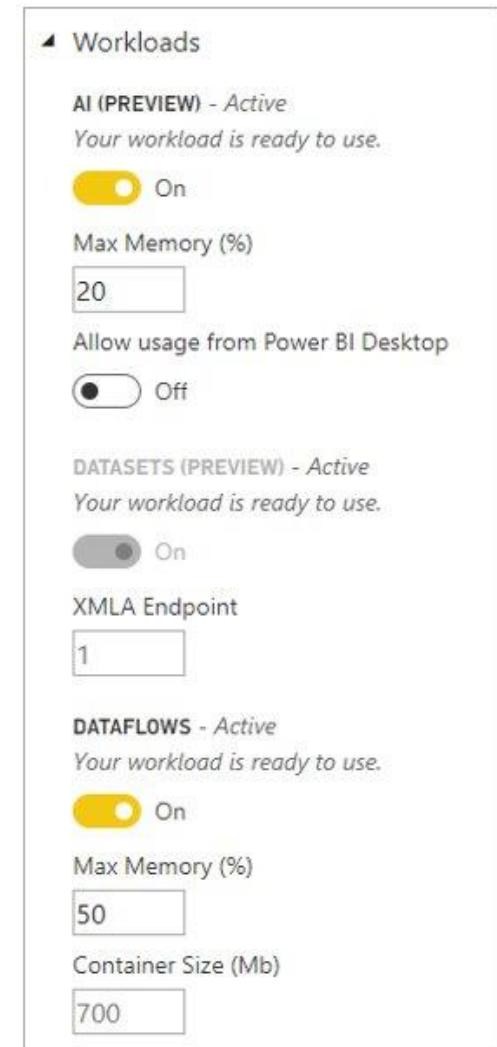


Power BI Premium



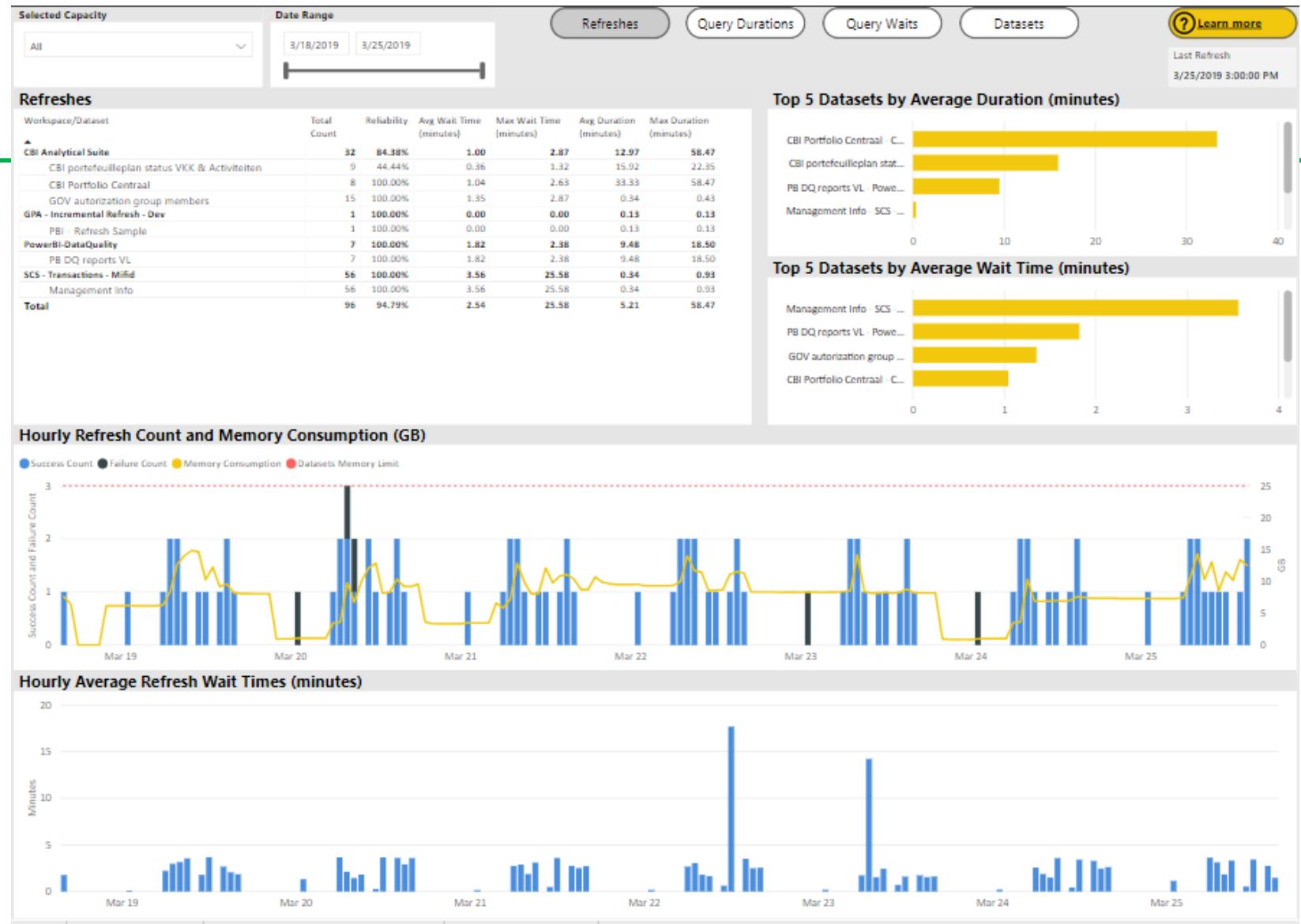
Power BI Premium features

- ▶ Licensing option
 - Unlimited consumers, both internal and external users
- ▶ Capacity based features
 - Dedicated hardware
 - Paginated reports (SSRS)
 - Big datasets
 - 48 refreshes per day
 - AI-powered data modeling using AutoML and Cognitive Services
 - Linked and Computed Entities in Dataflows
 - Export REST API
- ▶ Enterprise features
 - Multiple region support
 - Power BI Report Server
 - XMLA endpoint
 - Deployment pipelines
 - BYOK, VNET etc.



Premium Capacity Metrics App

The screenshot shows the Microsoft Power BI service interface. On the left, a dark sidebar menu includes options like Home (preview), Favorites, Recent, Apps (which is selected), Shared with me, Workspaces, and My Workspace. The main area displays a search bar with 'Search content...' and a yellow 'Get apps' button. A card for the 'Power BI Premium Capa...' app is shown, featuring a circular icon with a bar chart and diamond, the app name, a date of MAR 18, 2019, and a link to 'Get more apps from Microsoft AppSource'.



Premium Capacity

From 750 to 80 pro licences with Premium P1

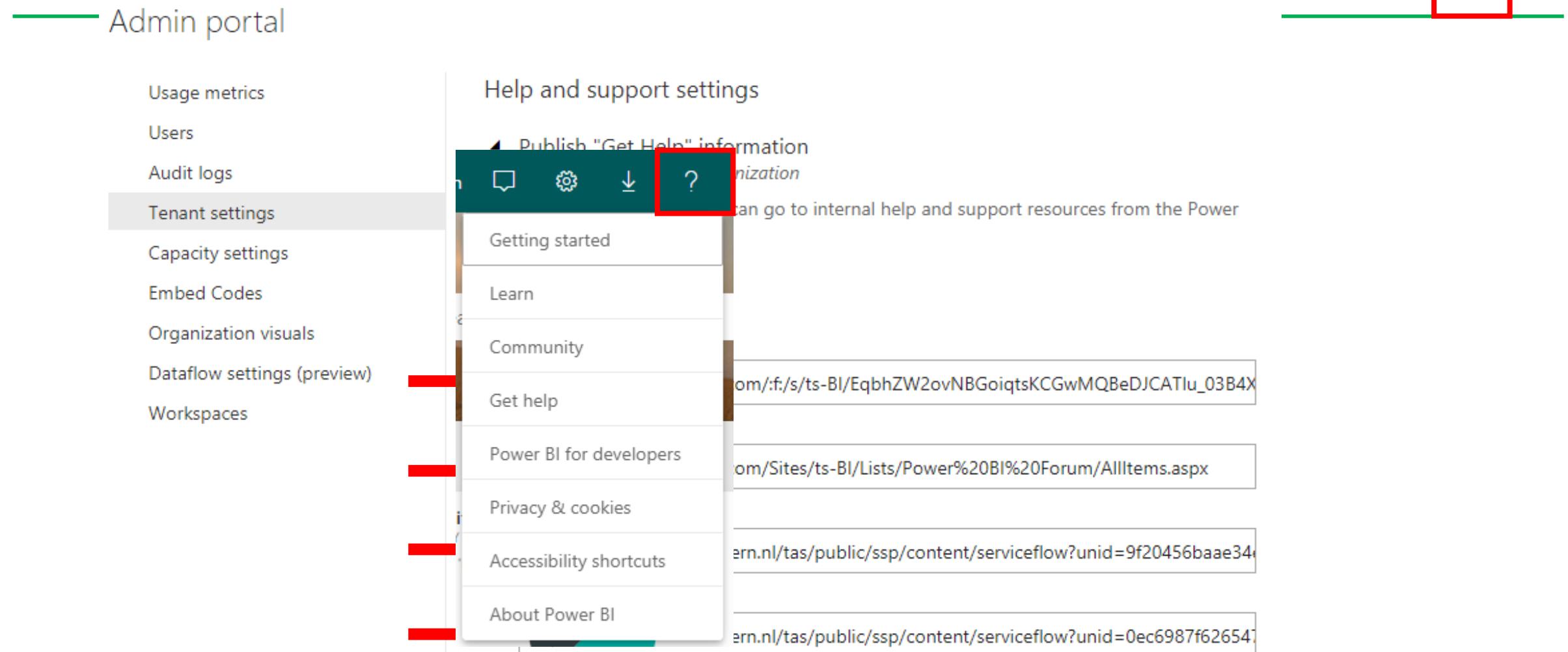
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2019												2020		
CAPACITY NODE	CORES	BACKEND CORES	FRONTEND CORES											
P1	8 v-Cores	4 cores, 25 GB RAM	4 cores											
P2	16 v-Cores	8 cores, 50 GB RAM	8 cores											
P3	32 v-Cores	16 cores, 100 GB RAM	16 cores											



Professionalize Power BI administration

- Audit via Identity Management
- New workspaces: 3 (A)AD-groups
 - Admins, Members, Viewers
- Power BI **super users** create workspaces
- Workflows for:
 - App workspace
 - Pro license

Personalised help button

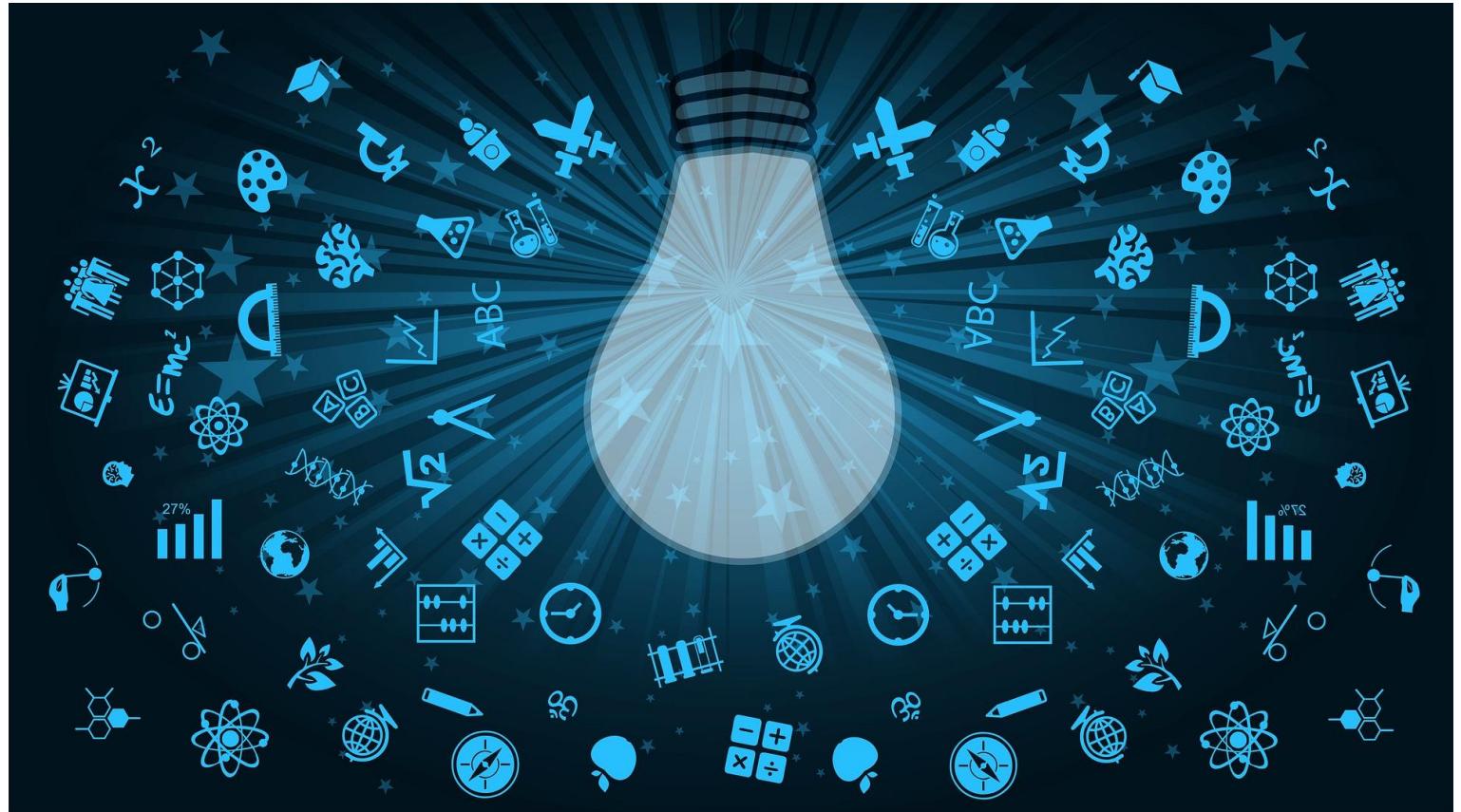


Apply to:

- The entire organization
 - Specific security groups

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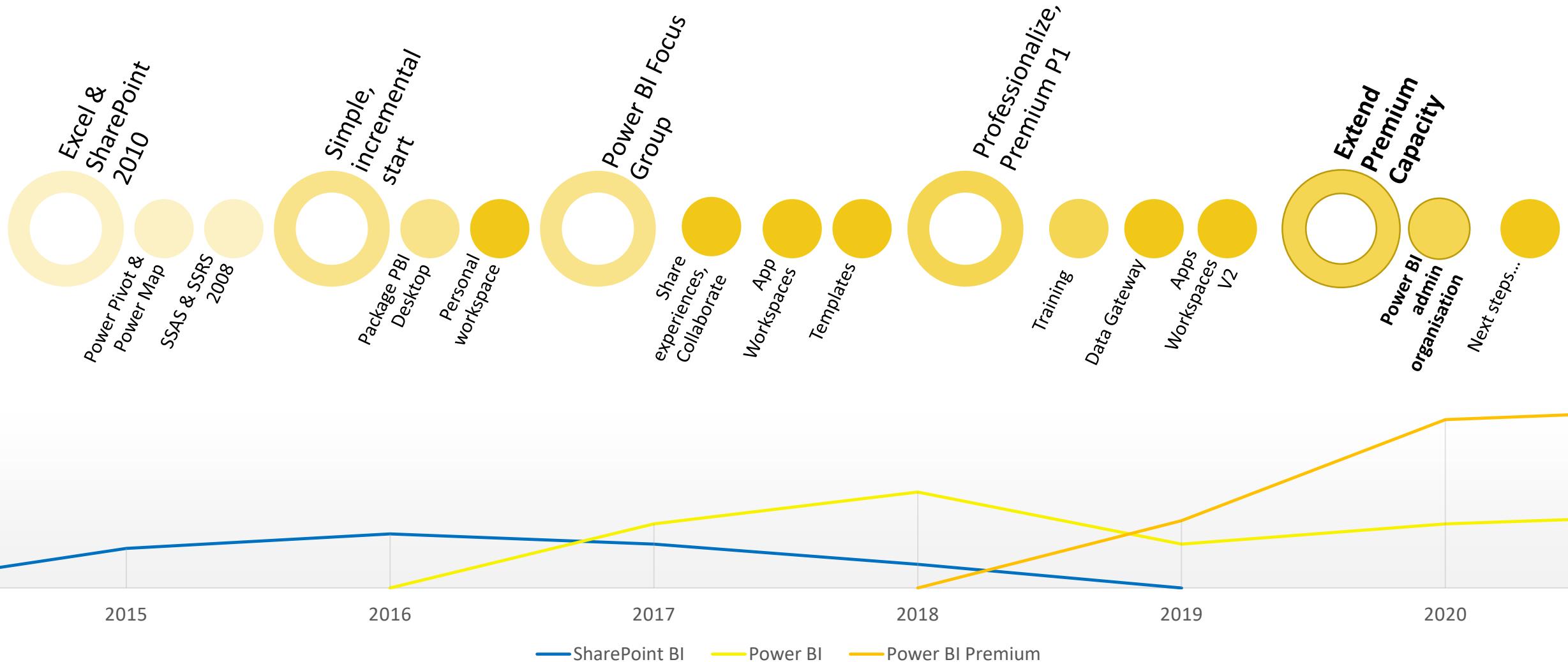


Knowledge is key

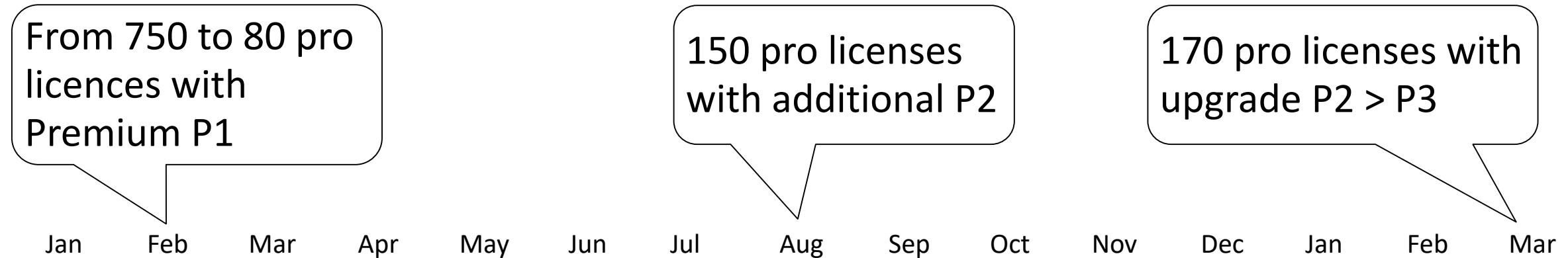
- Power BI (re)training
- BI Focus Group
 - Start: changing content
 - Now: 2 tracks
 - End users
 - In-depth



History and progress



Additional Premium Capacity



2019 2020

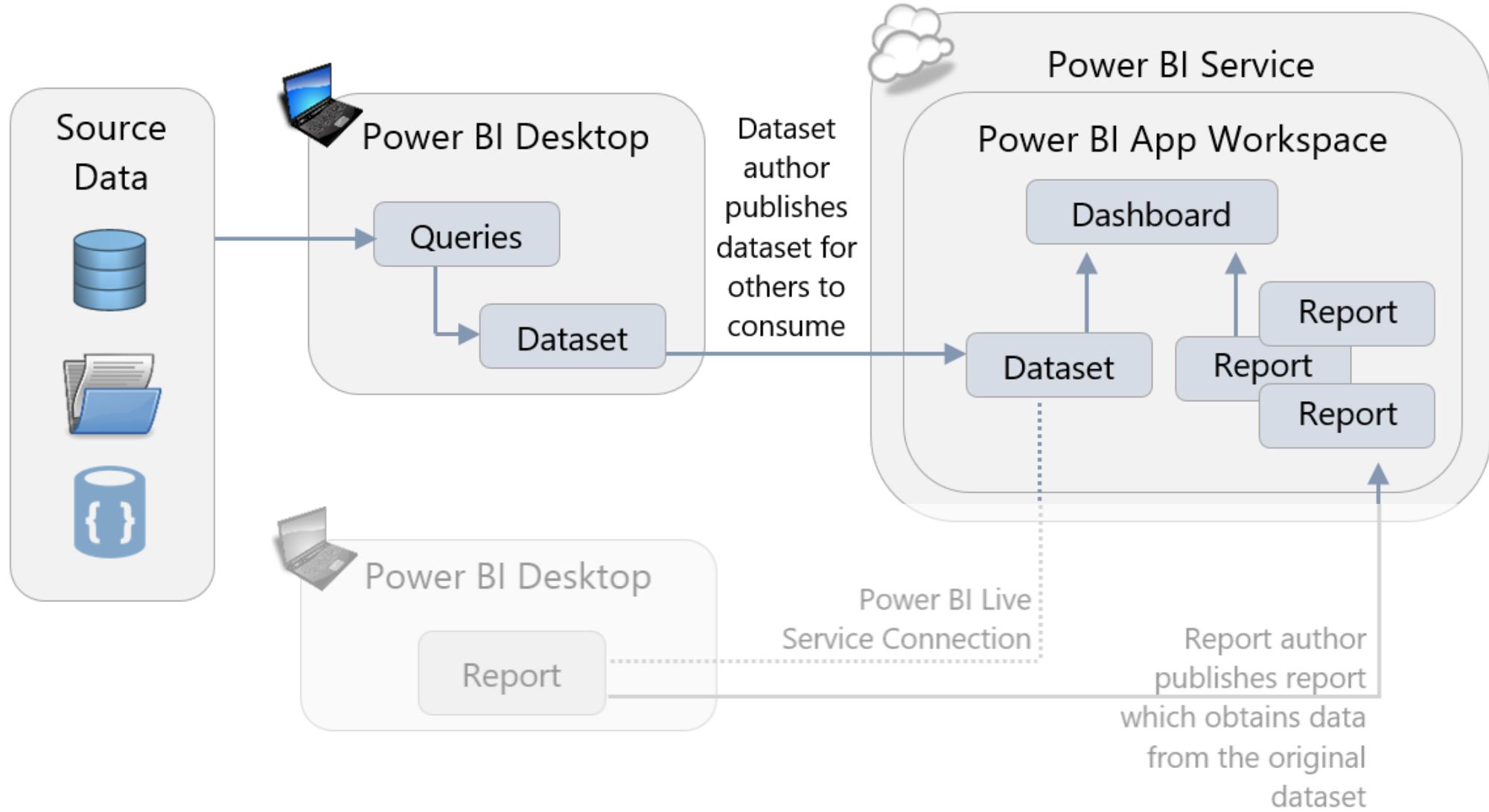
Lessons:

- Monitor performance
- Optimize data models

CAPACITY NODE	CORES	BACKEND CORES	FRONTEND CORES
P1	8 v-Cores	4 cores, 25 GB RAM	4 cores
P2	16 v-Cores	8 cores, 50 GB RAM	8 cores
P3	32 v-Cores	16 cores, 100 GB RAM	16 cores

Lessons Learned

- ± 40 Best practices Power BI Cheat Sheet: <https://bit.ly/cheatsheetpbi>)
 - Power Query, Data Model, Visualization, Miscellaneous
- Naming conventions
 - Workspaces: *Department – Team – Name*
 - Gateway Data Sources: *Type – Server – Database*
 - Power BI Idea: [Add the ability to Sort and Categorize Gateway Data Sources](#)
- Monitor Premium capacity
- Disconnect the dataset from report development

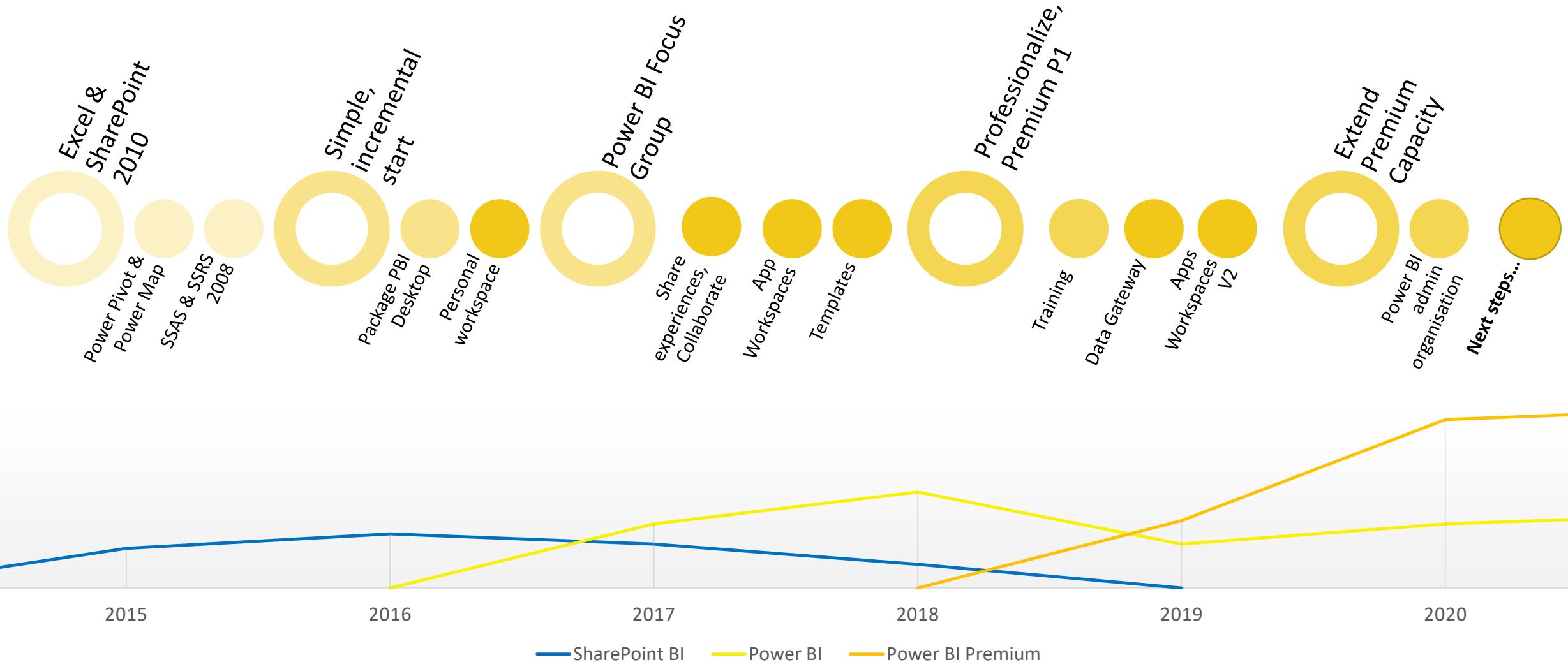


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History and progress



Roadmap and a look into the future

The present is always on the move; this is called future...

Already started:

- Automatic dataset refresh (PowerShell or **Flow Power Automate!**)



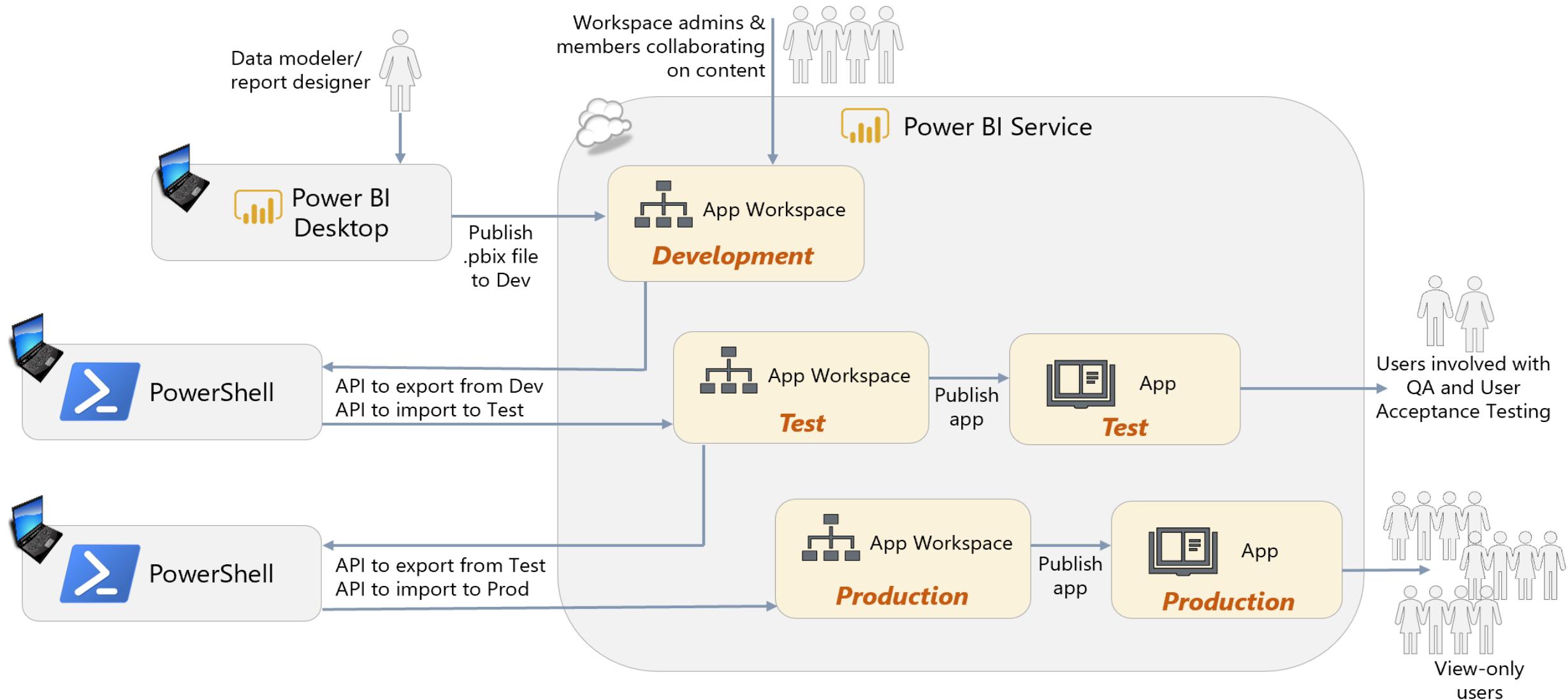
Roadmap and a look into the future

The present is always on the move; this is called future...

To do:

- **New workspace** migration (in preview)
- Long term **logging** (Premium) and **monitor** usage
- Power Platform governance & administration
- Development Pipeline

Roadmap – development pipeline



Roadmap and a look into the future

The present is always on the move; this is called future...

To do:

- **New workspace** migration (in preview)
- Long term **logging** (Premium) and **monitor** usage
- Power Platform governance & administration
- ~~Development Pipeline~~ Deployment pipelines

Deployment Pipelines (Premium)

Power BI Deployment pipelines (preview) New look on Search ? User icon

Bijzonder Beheer management informatie

Pipeline to deploy reports to workspace of Bijzonder Beheer

Access Settings ...

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. [Learn more](#)

Test

Test and verify your content in a preproduction workspace. When it's ready to distribute, deploy the content to the production stage. [Learn more](#)

Production

Your content has been tested and is ready to distribute to your consumers as an app or by access to the production workspace. [Learn more](#)

A workspace will be created here when content is deployed to this stage.

Bijzonder Beheer - MT - Ma... Deployed: 7/1/2020, 10:40:10 AM

4 Refresh now 8 0

DATASETS REPORTS DASHBOARDS

Show more Deploy to production

Bijzonder Beheer - MT - Ma... Deployed: 7/1/2020, 1:29:50 PM

4 Refresh now 8 0

DATASETS REPORTS DASHBOARDS

Show more View app Update app

Power BI (Premium) resources

- [Power BI Premium FAQ](#)
- [Whitepaper: Deploying and Managing Power BI Premium Capacities](#)
- [Power BI Premium: Licensing and Capacity Made Easy](#)
- [Whitepaper: Planning a Power BI Enterprise Deployment](#)
- [Whitepaper: Power BI Premium](#)
- [All Power BI whitepapers:](#)
- [Power BI Best practices: Power BIbible](#)
- [Power BI Idea for sorting Gateway Data Sources](#)
- [Power BI Cheat Sheet: http://bit.ly/cheatsheetpbi](http://bit.ly/cheatsheetpbi)
- [Pixabay.com for free images](#)

Thank you and let's connect!

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