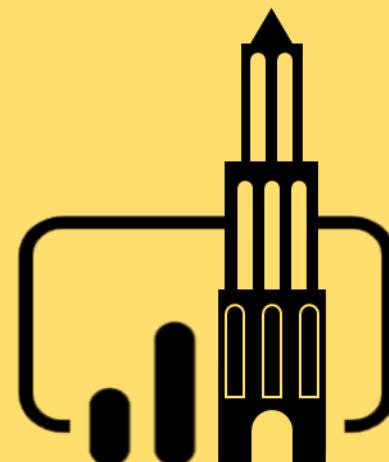




Power BI (Premium) Implementatie in een Financiële Instelling

Jeroen Schalken
Data Management Architect

Nicky van Vroenhoven
Lead BI Developer Data management



MET DANK AAN ONZE PARTNERS

Platinum Partners



Gold Partner



Power BI Gebruikersdag 2019
Jaarbeurs, Utrecht

MET DANK AAN ONZE PARTNERS

Silver Partners



Community Partners



Power BI Gebruikersdag 2019
Jaarbeurs, Utrecht

Microsoft Office Lens app

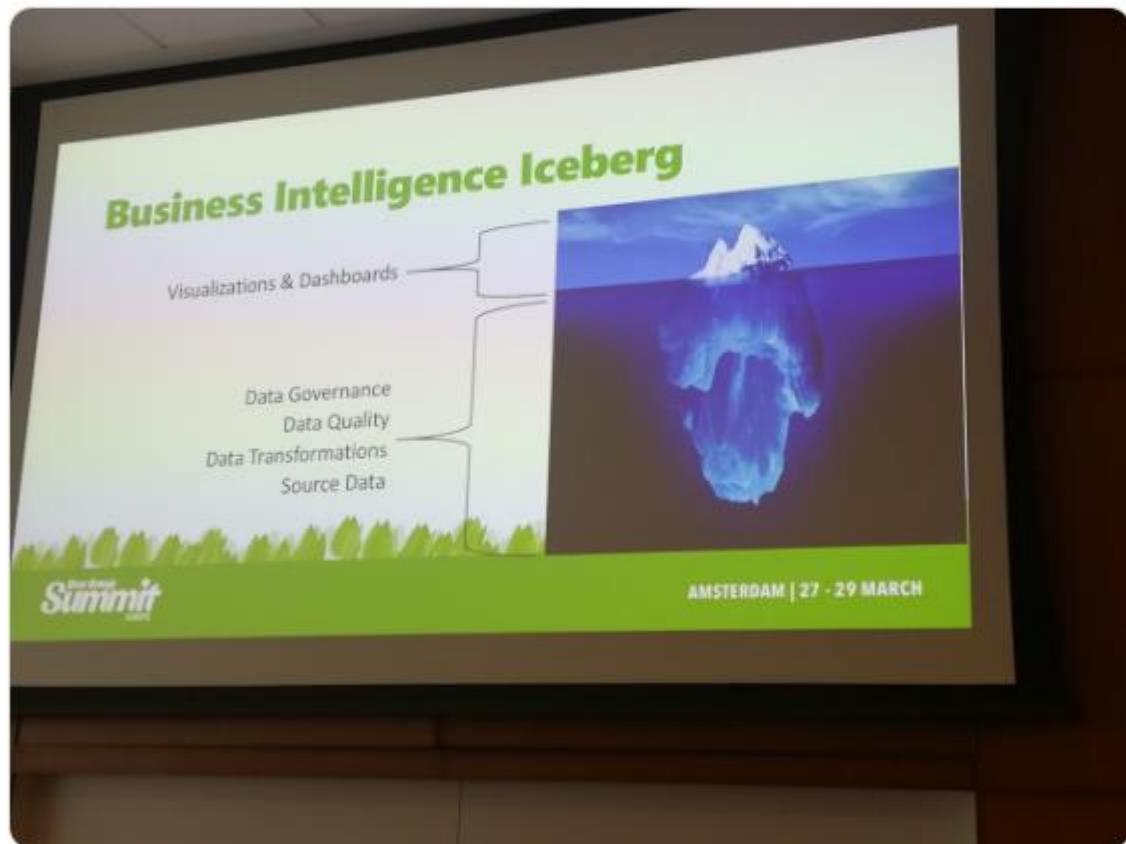
Andriod

iOS



I should show this to all my customers
[#powerplatformsummit](#)

[Tweet vertalen](#)



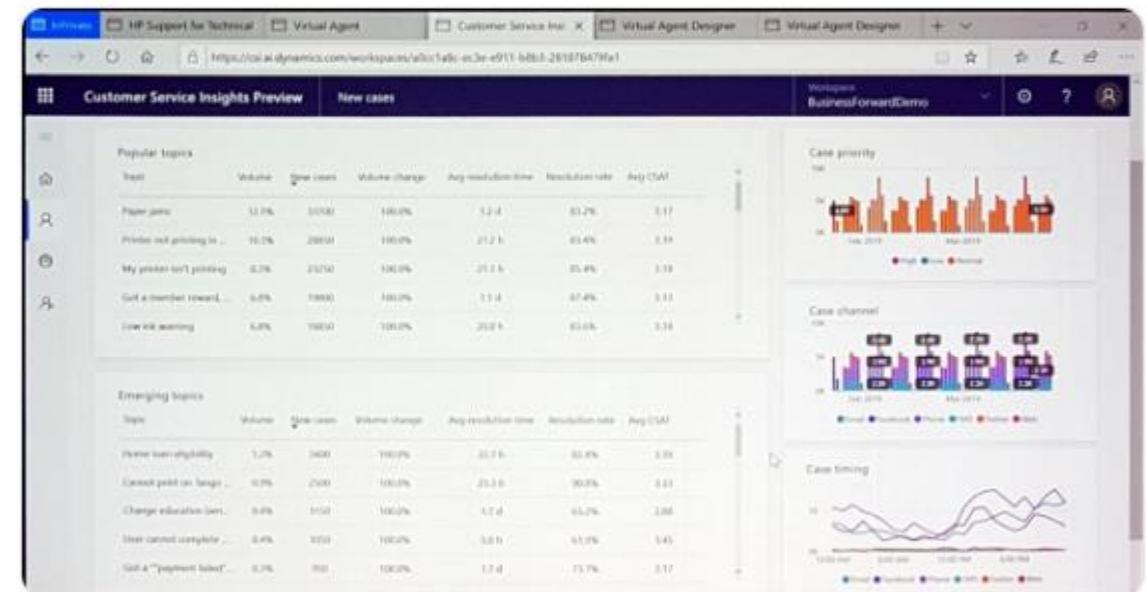
09:08 - 28 mrt. 2019



Nicky van Vroenhoven @ #PowerPla...
@NickyvV

Pro tip for making pictures of the screen:
please use the Microsoft Office Lens app,
available on both iOS and Android! :-)
[#PowerPlatformSummit](#)

[Tweet vertalen](#)



09:29 - 27 mrt. 2019 vanuit RAI Theater

2 retweets 4 vind-ik-leuks



Agenda

- Organisatie
- Data
- Rapporteren
- Samenwerken
- Ondersteuning
- Lessons learned
- Next steps



Agenda

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Van Lanschot Kempen

een gespecialiseerde wealth manager

Van Lanschot Kempen is het oudste, onafhankelijke financiële instituut van Nederland.

Onze missie is het **behoud** en de **opbouw** van vermogen voor onze klanten.



Gespecialiseerd in de
toekomst



evi



Iedereen verdient Evi



Van Lanschot
SINCS 1737



Uitgesproken persoonlijk



Kempen



turning dedication into
dazzling prospects



Toon resultaten uit:

2018 ▾

Jaarresultaten

Trading updates

Halfjaarresultaten

Client assets

€ 81,2 miljard

Nettoresultaat

€ 80,3 miljoen

Balanstotaal

€ 14 miljard

Onderliggend nettoresultaat
(exclusief reorganisatielasten
en investeringsprogramma
Strategy 2020)

€ 103 miljoen

Common Equity Tier 1-ratio
(CET 1 fully loaded, incl.
ingehouden winst)

21,4 %

Efficiencyratio

79,4 %



1737



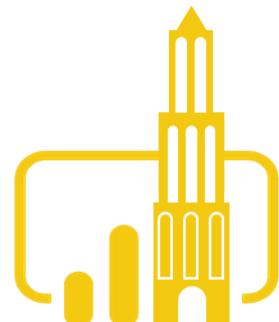
Wie zijn wij

Jeroen Schalken

- Architect
- 20+ jaar IT/consultancy ervaring
- 5 jaar bij VLK
- j.schalken@vanlanschotkempen.com
- @JeroenSchalken

Nicky van Vroenhoven

- MS BI Developer
- 9 jaar consultancy
- 1,5 jaar bij VLK
- Blog op nickyvv.com
- @NickyvV



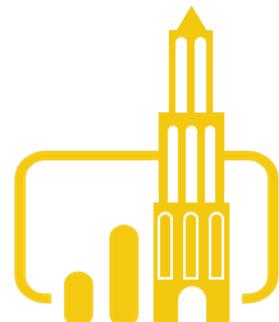
Wie zijn jullie?

Ik ben een...

- BI-er
- IT-er/IT-admin
- Manager
- Consultant
- Eindgebruiker
-?

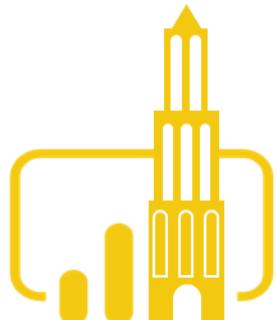
Ik werk met...

- Power BI Desktop
- PowerBI.com
- App Workspaces
- Apps
- Power BI Premium



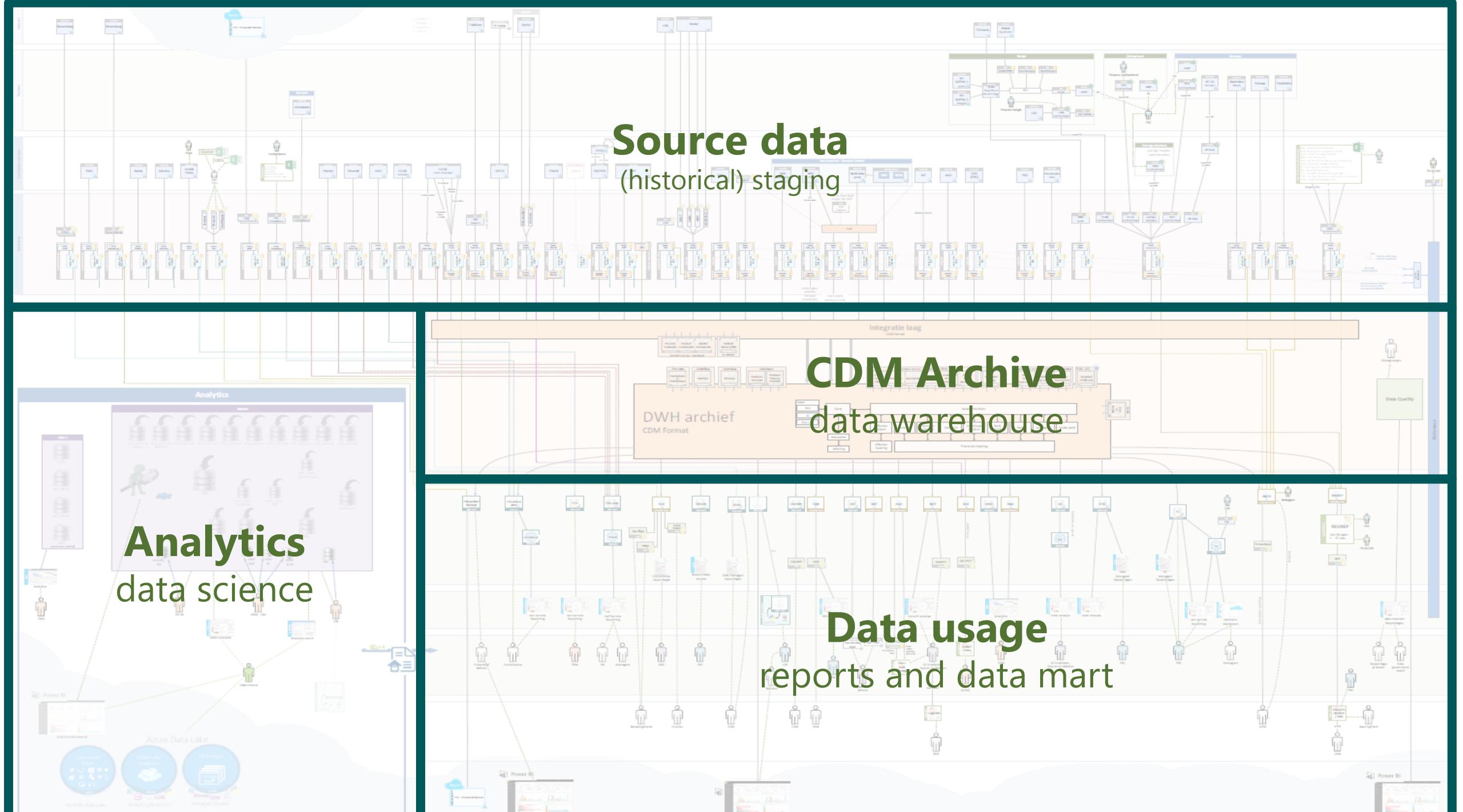
Agenda

- Organisatie
- Data
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- Lessons learned
- Next steps





Data management



Source data
(historical) staging

CDM Archive
data warehouse

Analytics
data science

Data usage
reports and data mart

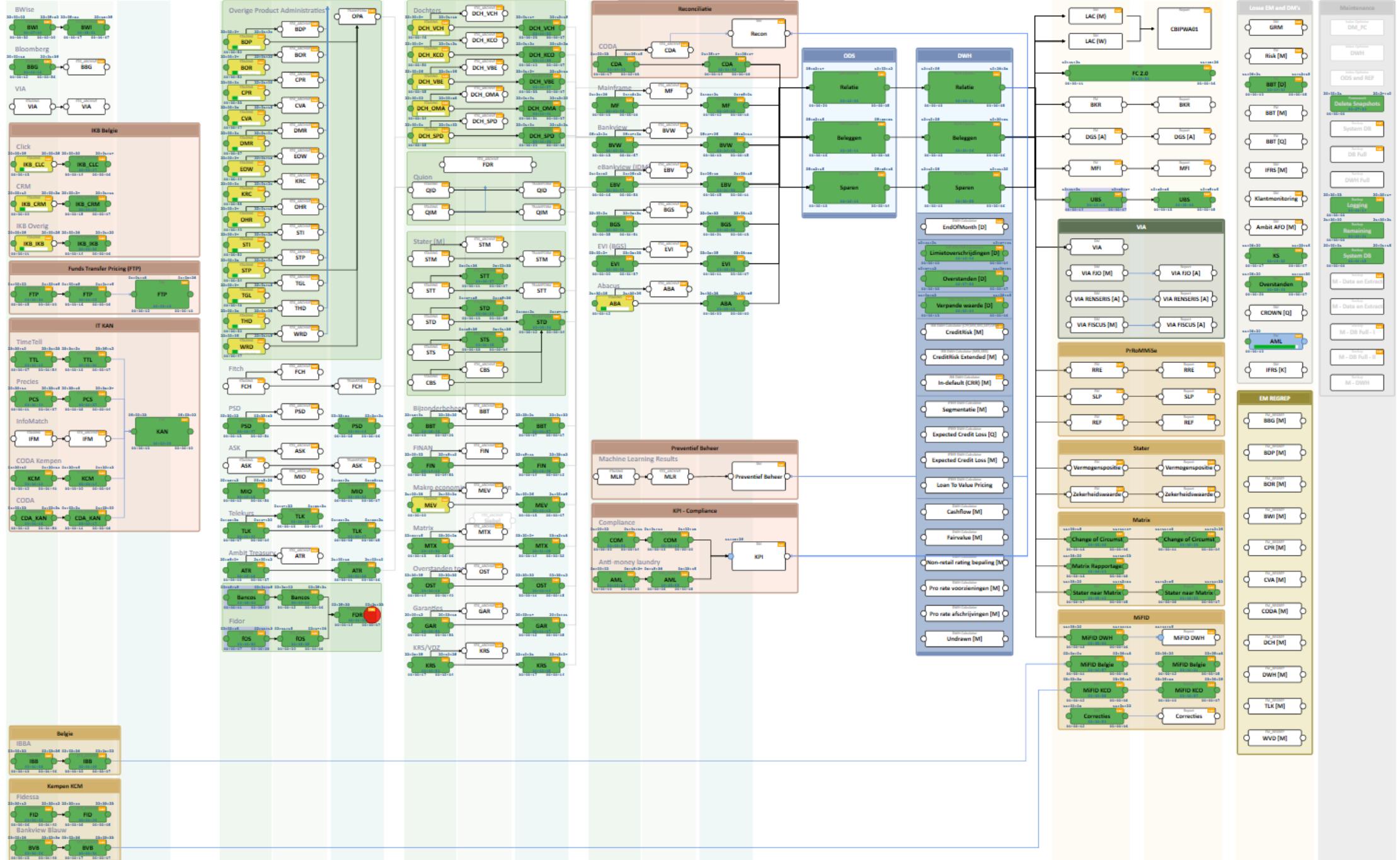
DWH statistieken

Data warehouse statistics		
NR	Label	Values
1	Aantal ontsloten bronnen	72 bronnen
2 waarvan aangesloten op het datawarehouse:	39 bronnen
3	Verwerkte records per dag (staging):	42 miljoen
5	Verschillende datavelden in het datawarehouse:	1652 datavelden
6 waarvan aangesloten op het datawarehouse:	29 DM's en EM's



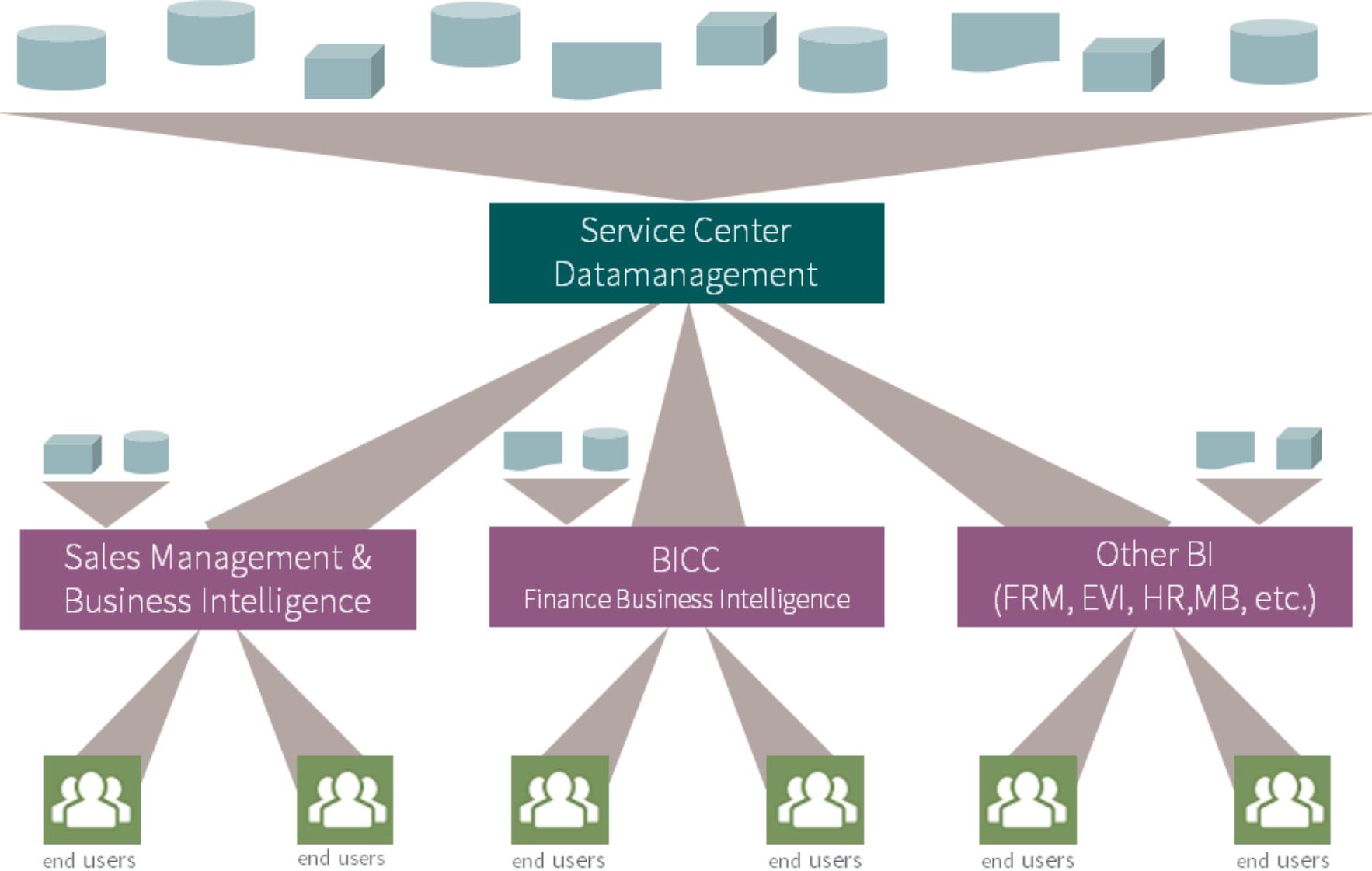


DWH		DM_LAC		STAGING_FINAN		STAGING_Matrix		DM_VIA		ODS		CALC_D...	
								Data Space (GB) 30		Free Space (GB) 40			
Data Space (GB) 222	Index Space (GB) 205	Data Space (GB) 119	Free Space (GB) 27	Data Space (GB) 67	Index Space (GB) ...	Data Space (GB) 51	Free ...	Free Spa...	Index S...	Data Sp...	Index ...	Data Space (G...	Data Space (G...
Free Space (GB) 57	AM_AML	Data Space (GB) 104	Index Space (GB) ...	Data Space (GB) 90	Fre...	STG_ARC...	STG_ARC...	DWH_C...	EM_RISK	STAGI...	EM_RE...	Data Space...	Data Space...
DM_GRM	Index Space (GB) 205	Data Space (GB) 104	Index Space (GB) ...	Data Space (GB) 68	Free Space (GB) ...	Data Space (G...	Index Space (...	Free Space (G...	Data Space ...	Data Space...	Data Space...	Data Space...	Data Space...
Data Space (GB) 121	Index Space (GB) 52	Data Space (GB) 44	Free ...	DM_FC	Index Space...	STAGING_PSD	TRAN...	DM_...	TRA...	STG_...	STG...	EM_...	EM_...
Free Space (GB) 86	STG_ARCHIVE_Bankview	Data Space (GB) 60	Free Spa...	Index Sp...	Data Space (GB) 71	Free Spa...	Free Space (G...	Fr... D...	Data Spa...	Free Sp...	Free Sp...	Index S...	Data S...
Index Sp...	DM_Klantmonitoring	Data Space (GB) 54	Index Space (...	STG_ARCHIVE_Mainframe	Index Sp...	DBA_monitor...	TRANSF...	STG...	STA...	CA...	ST...	ST...	ST...
Free Space (G...	EM_DGS	Data Space (GB) 54	Index Space (...	Free Space (G...	Free Spa...	AM_FTP	STAG...	Data S...	Data S...	Data...	Data...	Data...	Data...
Free Space (G...	DM_Preventi...	Data Space (GB) 54	Index Space (...	DM_Preventi...	Fr...	STG_AR...	TRA...	AM...	AM...	EM_A...	EM_A...	EM_A...	EM_A...
Free Space (G...	TRANSF...	Data Space (GB) 54	Free Space (G...	TRANSF...	Fr...	STAGIN...	STAG...	T...	S...	S...	S...	S...	S...

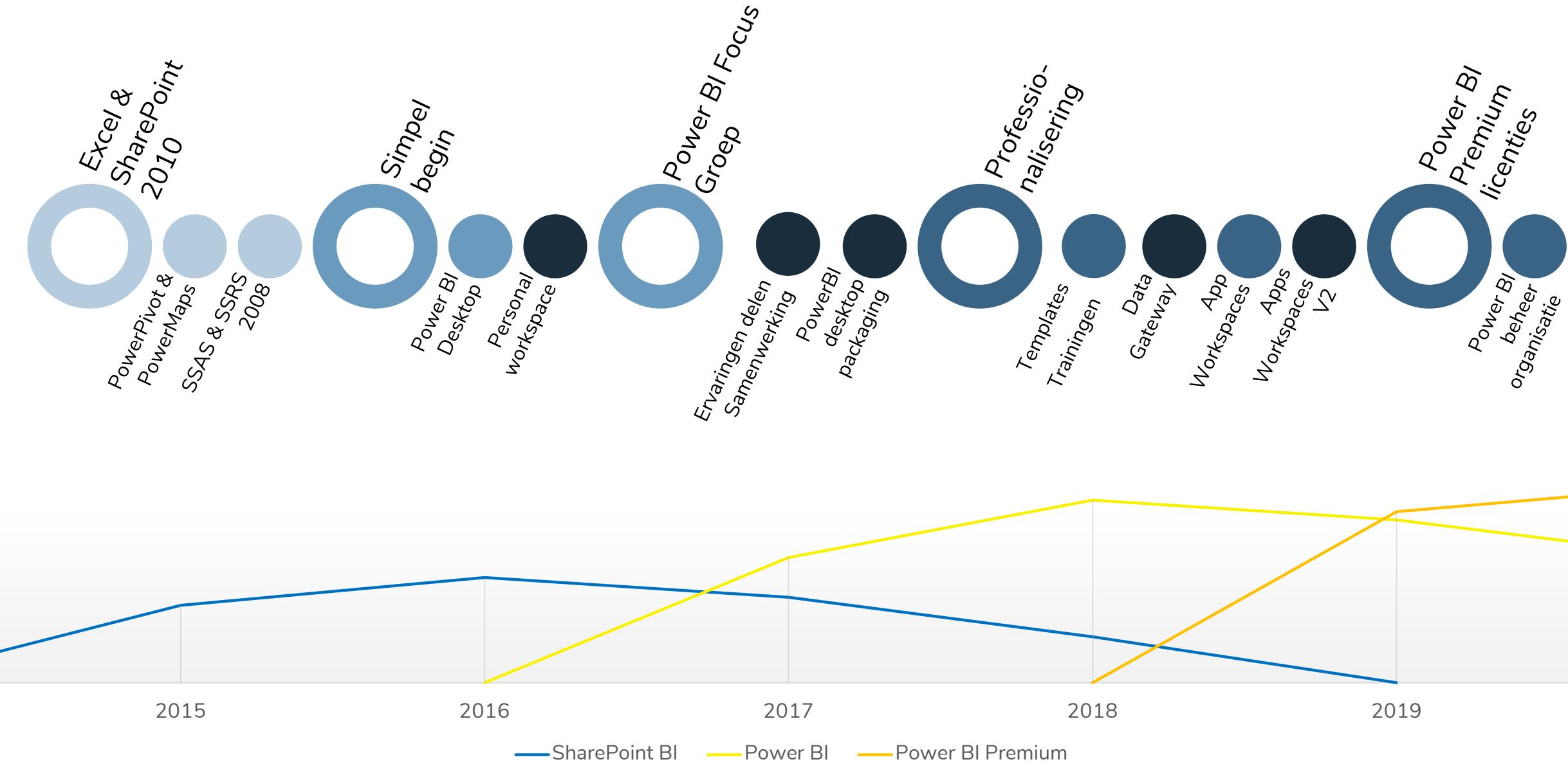


BI Organisatie

Central expertise center
Specialist BI teams



Historie en verloop



BI in een financiële instelling

BI bij een bank heeft zo zijn uitdagingen

- Wettelijke vereisten en beperkingen
 - Nationale en Europese toezichthouders (AFM, DNB, ECB)
- Gevoelige data
 - Privacy wetgeving (AVG / GDPR)

IT versus Business

Structuur vs regulatie vs vrijheid

Zoeken naar het beste van beide werelden:

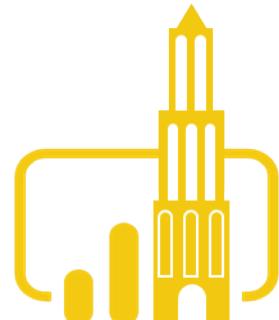
- IT voor structuur en herhaalbaarheid
- Business voor kennis, bruikbaarheid en flexibiliteit

Vertrouwen is key

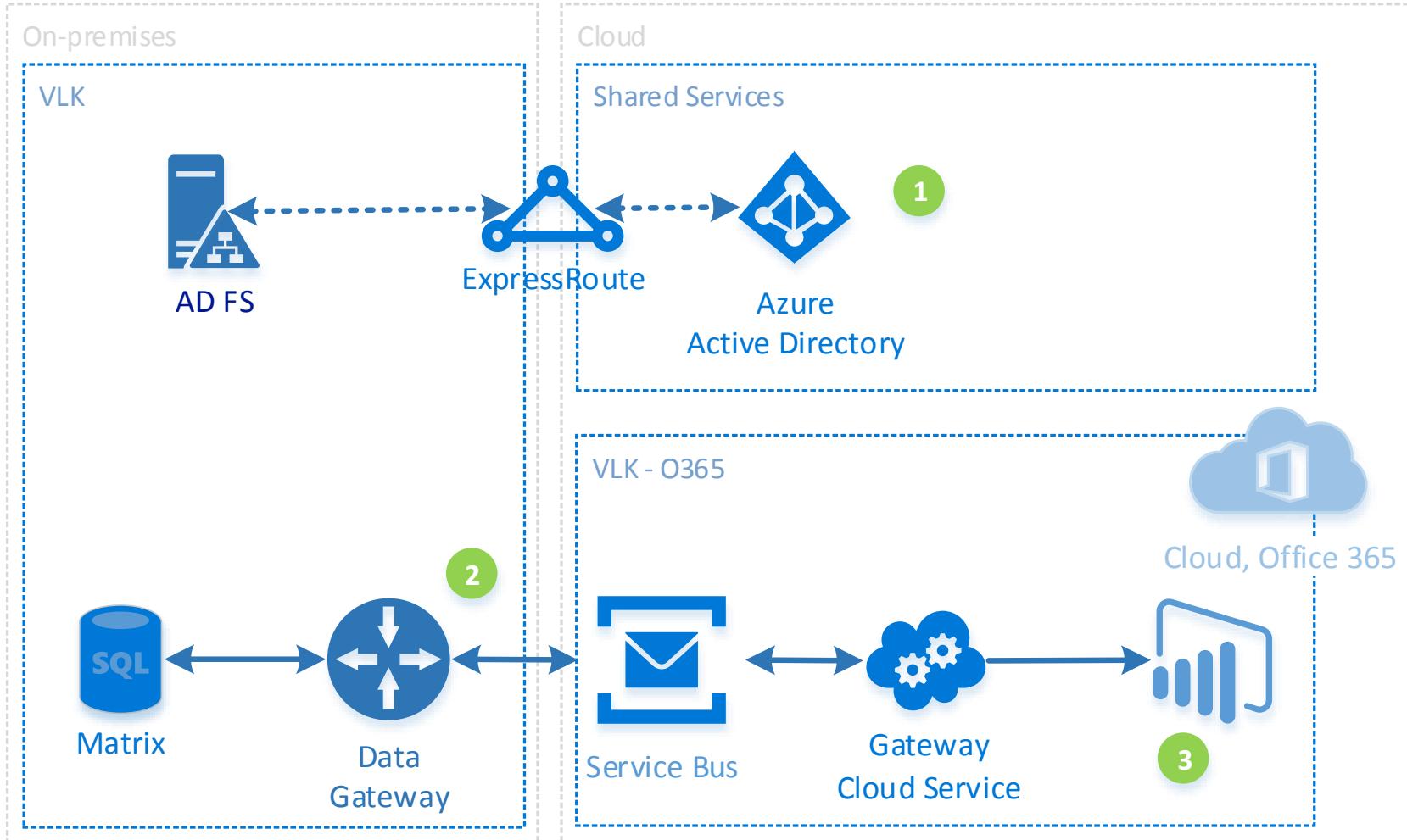
Monitoren om wildgroei te voorkomen



1737



Data en authenticatie architectuur



Steps:

- 1 Authenticatie gebeurt bij toegang tot O365 tegen de AAD. De AAD is in sync met de on-premises AD omgevingen.
- 2 De data voor de PowerBI wordt via een on-premises Data Gateway opgehaald (direct query of in-memory)
- 3 Power BI alleen toegankelijk voor geauthentiseerde en geautoriseerde gebruikers. Rapport en data autorisatie gebeurt in PowerBI.



Agenda

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A woman with black hair, wearing a purple blazer over a green top, stands prominently in the center of the frame. She is positioned in an office setting where several people are working at their desks. In the foreground, a person with long dark hair is seen from behind, wearing a teal shirt. The background shows office cubicles, desks with computer monitors, and a whiteboard. The overall atmosphere is professional and focused.

Power BI in de praktijk

Power BI in gebruik

The screenshot shows a Power BI dashboard with the following components:

- Templates:** A sidebar on the left lists available templates, including "VLK, VL, Kempen, Evi".
- DIAH 2016 Performance:** A main title for the dashboard.
- Revenue and Units by MonthName:** A bar chart with green bars representing Revenue and a purple line representing Units over time. The Y-axis ranges from 1M to 9K.
- Revenue by Segment:** A donut chart showing revenue distribution across segments: Moderation (36.84%), Convenience (29.33%), Extreme (17.04%), Productivity (8.51%), Select (4.02%), and All Season (1.1%).
- iedereen verdient evi:** A section with the text "iedereen verdient evi" and a small illustration of a person.
- Manufacturer Revenue:** A table listing manufacturer names and their total revenue.
- Revenue by State and Segment:** A map of the United States where states are colored based on their revenue segment composition, with callouts showing pie charts for California, Texas, and New York.

Listed items:

- VLK, VL, Kempen, Evi
- Maandelijkse updates PBI Desktop
- App Workspaces, Apps en Onedrive voor versioning



Client Name

Search

Instrument Name

Turnover Classes

Search

Entered Date

9/22/2017

4/25/2018

> \$M

Client 1

MERCHANT BANK DWH
REFRESHED 5/25/2018 12:30:19 PM

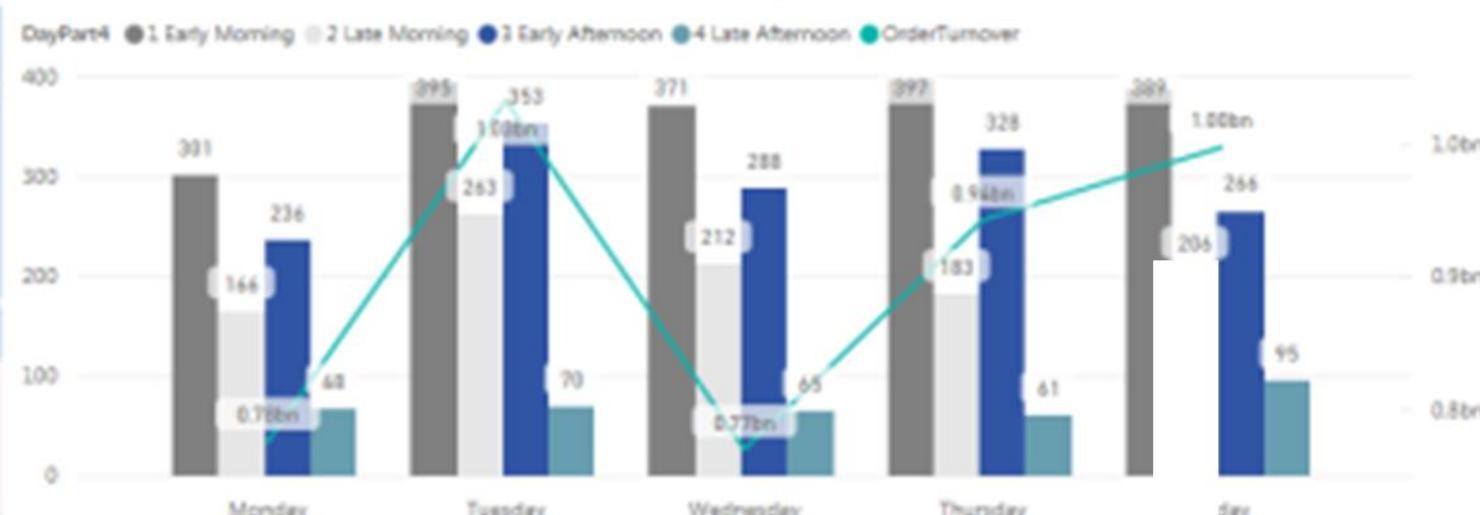
TRADE ANALYZER

Kempen

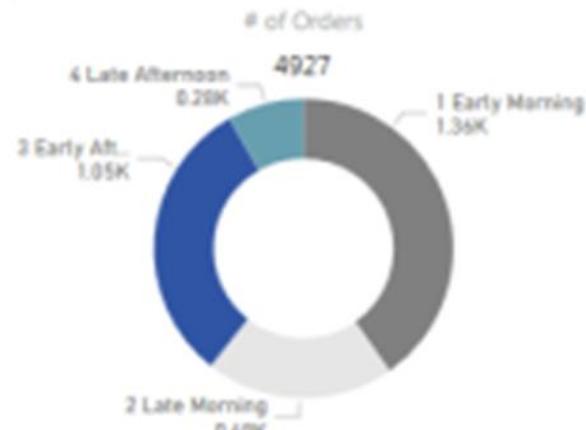
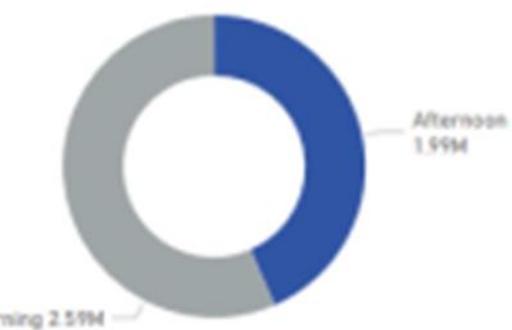
of Orders by Country Listed



of Orders per day of the week



Commission Booked



Bing

Datum

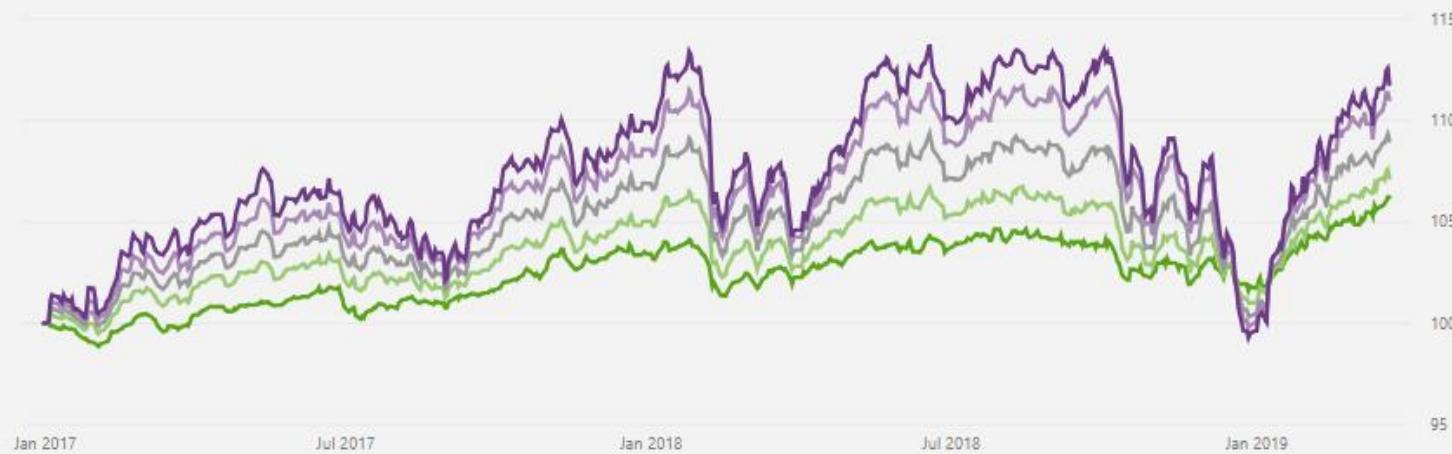
12/31/2016 3/22/2019

iedereen verdient evi

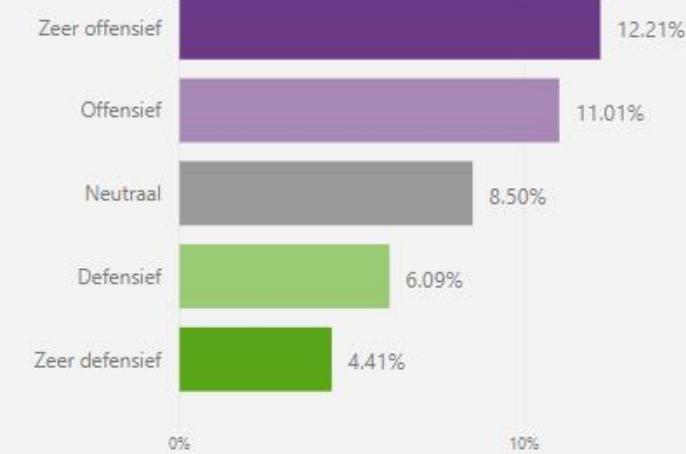


Bruto performance van de modelportefeuilles

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

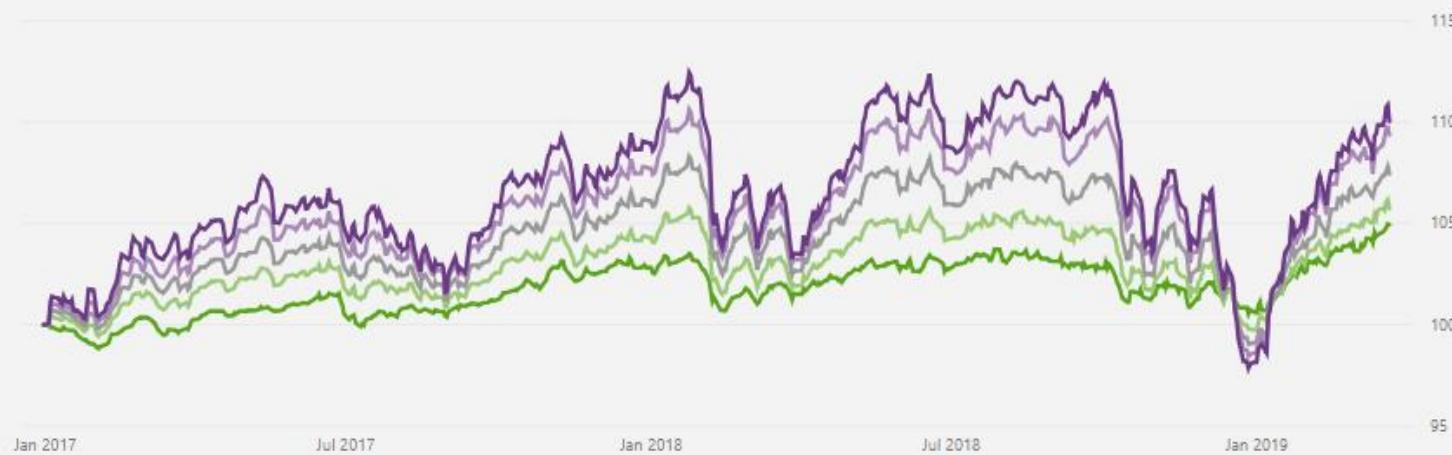
**Bruto**

Bruto performance YTD per modelportefeuille

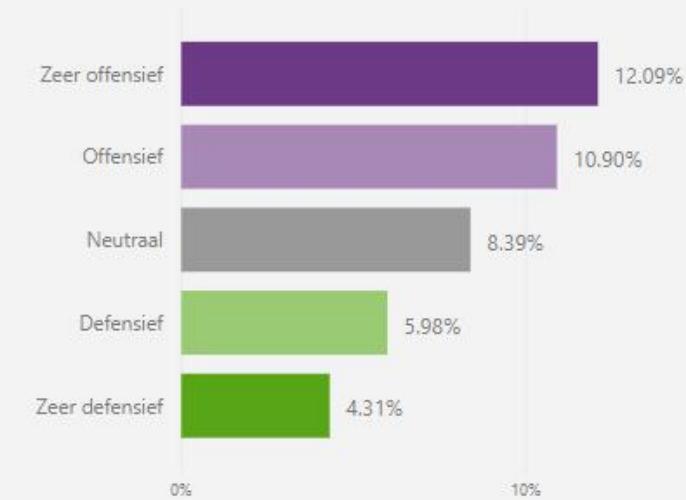
**Netto**

Netto performance van de modelportefeuilles

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



Netto performance YTD per modelportefeuille



Data Quality dashboard in Power BI

VAN LANSCHOT KEMPEN

Brondatum: 2019-03-13

PROD TEST

Prioriteit

- Low
- Medium
- TOPS

Jaar

- 2019

Hits per Normsteller

Normsteller	Hits
IFRS9	36030
DGS	804
RegRep	640
VIA	73
MIFIDII	56
CDD	27
SCDM	4
IRB	2
MngRep	1

Aantal 0 hits per Normsteller

Normsteller	Aantal 0 hits
RegRep	10
IFRS9	9
MngRep	6
IRB	5
MIFIDII	5
SCDM	4
CDD	3
BB	2
VIA	1
DGS	0

Unique Hits per Oplosgroep

Oplosgroep	Unique Hits
SCDM_FB	35688
ClientSupport	1526
Accounting	343
InternalControl	27
EVI	1

Verwisseling

Brondatum: 2019-02-19

Norm filter

- Huidig boven norm
- Huidig onder norm

Status

- PROD
- TEST

Filter

- Vorige = 0
- xbeiden = 0

Prioriteit

- High
- Low
- Medium
- TOPS

Oplosgroep

BijzonderBeheer	ClientSupport	InternalControl	SCDM_FB
-----------------	---------------	-----------------	---------

Normsteller

CDD	DGS	IFRS9	IRB	MIFIDII	RegRep	SCDM	VIA
-----	-----	-------	-----	---------	--------	------	-----

Validationenaam

Jaar

- 2019

Maand naam

- Februari

Datum huidige maand

- 2019-02-19
- 2019-02-18
- 2019-02-15
- 2019-02-14

Datum vorige maand

- 2019-02-18
- 2019-02-15
- 2019-02-14
- 2019-02-13

Aantal rijen

24

Validationenaam

DWH154: Ontbrekende LEInr in Telekurs (op basis van GK nummers uit DWH en eigenboek)

SCDM_FB TOPS 0 0 ↓ 16 15

DWH158: Issuers in DWH rating tabel zonder geldige rating (niet LICRLC, LTC, LTIR)

SCDM_FB TOPS 0 0 ↓ 10 7

MTX106: Klant: KvKnr niet gevuld bij een in NL belastingplichtige Organisatie

ClientSupport TOPS 100 0 2 0

MTX130: Klant: Minderjarige Portfoliohouder zonder wettelijk vertegenwoordiger

ClientSupport TOPS 10 0 ↑ 6 104

MTX134: Klant: Minderjarige Portfoliohouder zonder beschikkingbevoegde (exclusief kantoor 510)

ClientSupport TOPS 10 0 ↓ 15 10

MTX143: Klant: Organisatie met DGS Product zonder Beschikkingbevoegde in Portfolio (exclusief kantoor 510)

ClientSupport TOPS 100 0 984 625

MTX145: Klant: Organisatie met DGS Product is gekoppeld aan Beschikkingbevoegde zonder ESNr (exclusief kantoor 510)

ClientSupport TOPS 50 0 82 65

MTX151: Klant: afgesloten Portfolio met producten met saldo

ClientSupport TOPS 0 0 ↑ 0 1

MTX174: Klant: SICcode versus Tegenpartij categorie niet in lijn bij Portfoliohouders met actieve producten

ClientSupport TOPS 0 0 ↓ 5 0

MTX176: Particuliere relatie met CDD klasse ongelijk HOOG, woonachtig in een HOOG risicoland

InternalControl TOPS 5 0 ↓ 4 3

MTX179: Particuliere PEP-relatie (Politically Exposed) heeft CDD klasse ongelijk HOOG

InternalControl TOPS 5 0 ↑ 0 1

MTX186: Portfoliohouder is US ingezetene met een Effectenpositie

InternalControl TOPS 6 0 ↑ 12 12

MTX187: US ingezetene is UBO van een organisatie met een Effectenpositie

InternalControl TOPS 5 0 ↓ 1 1

MTX191: Raadslid met nomineerde hoofd CRimanda van een tot twee nieuwe kamerleden CRimanda niet Dilemma

ClientSupport TOPS 0 0 ↑ 0 12

Totaal

1252 1994

Weekoverzicht suspicious cases

Huidige week

2018-47

11/19/2018 WeekStart 11/25/2018 WeekEnd

relatienvr

All ▾

segment

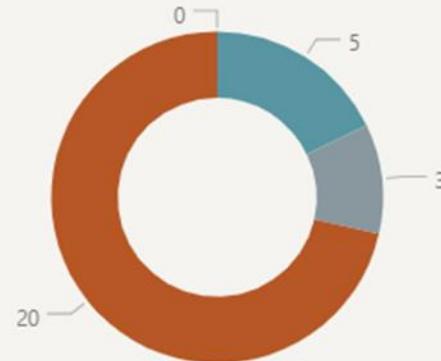
All ▾

weeknr

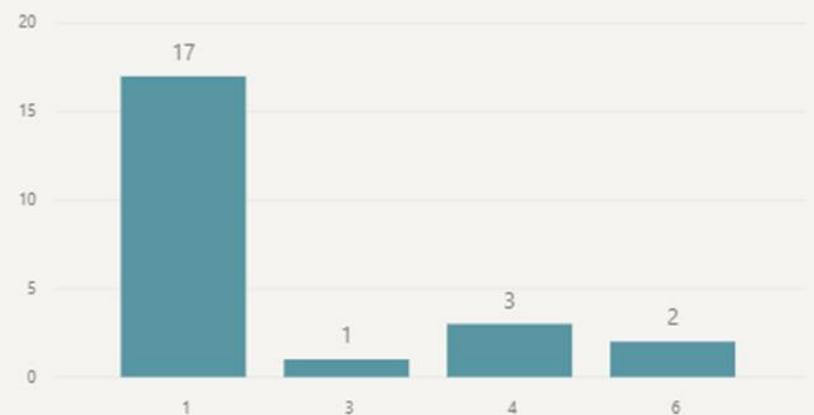
2018-36 ▾

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

Aantal alerts per type



Aantal cases per score



Feedback toevoegen

ID: **Save**

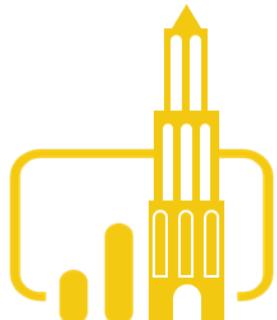
Week:

Verdacht **Verdacht**

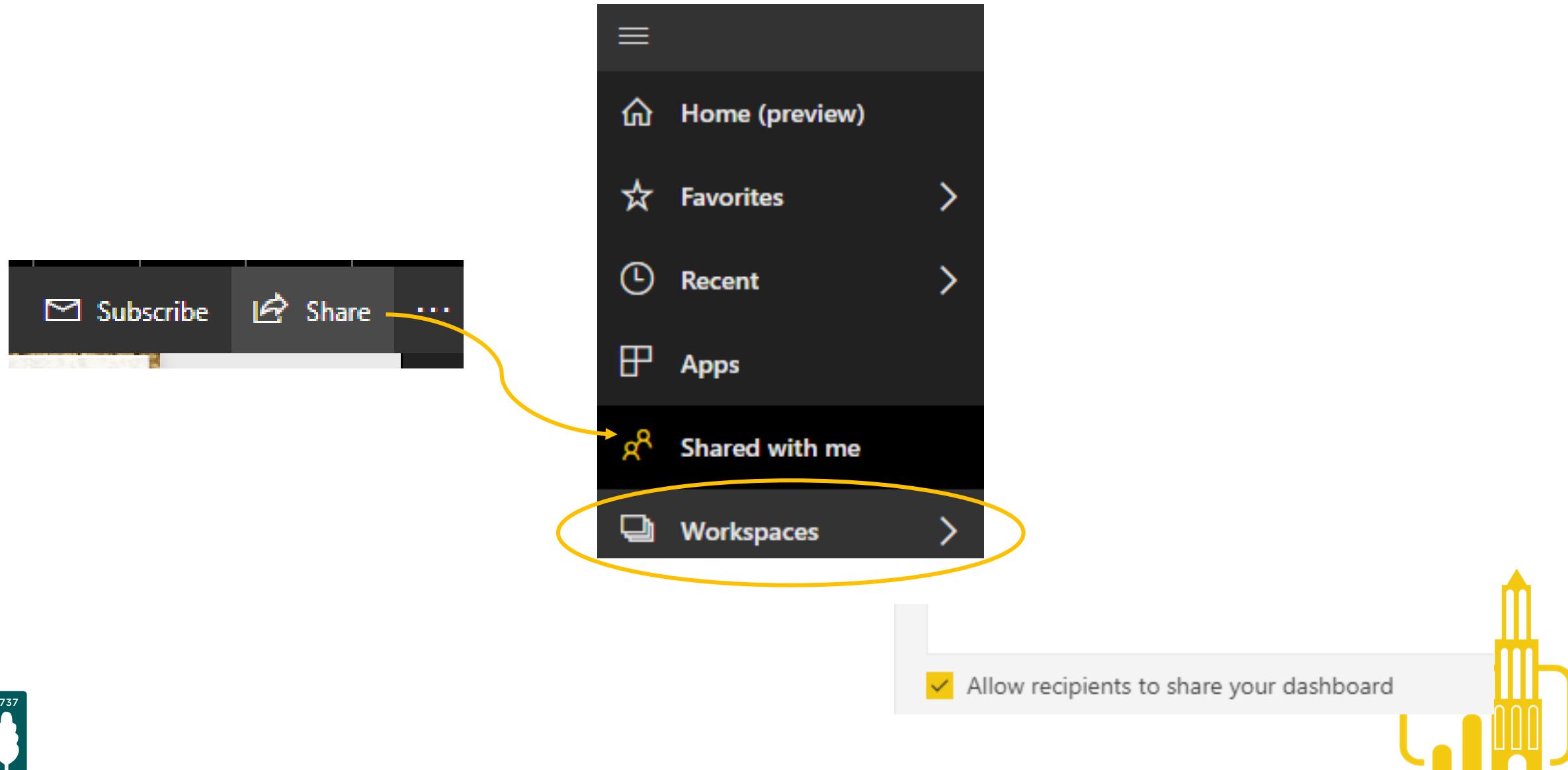
unshor: case gegenereerd ivm gebruik woorden Panama papers in meeting

Agenda

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Power BI App Workspaces en Apps



Power BI App Workspaces en Apps

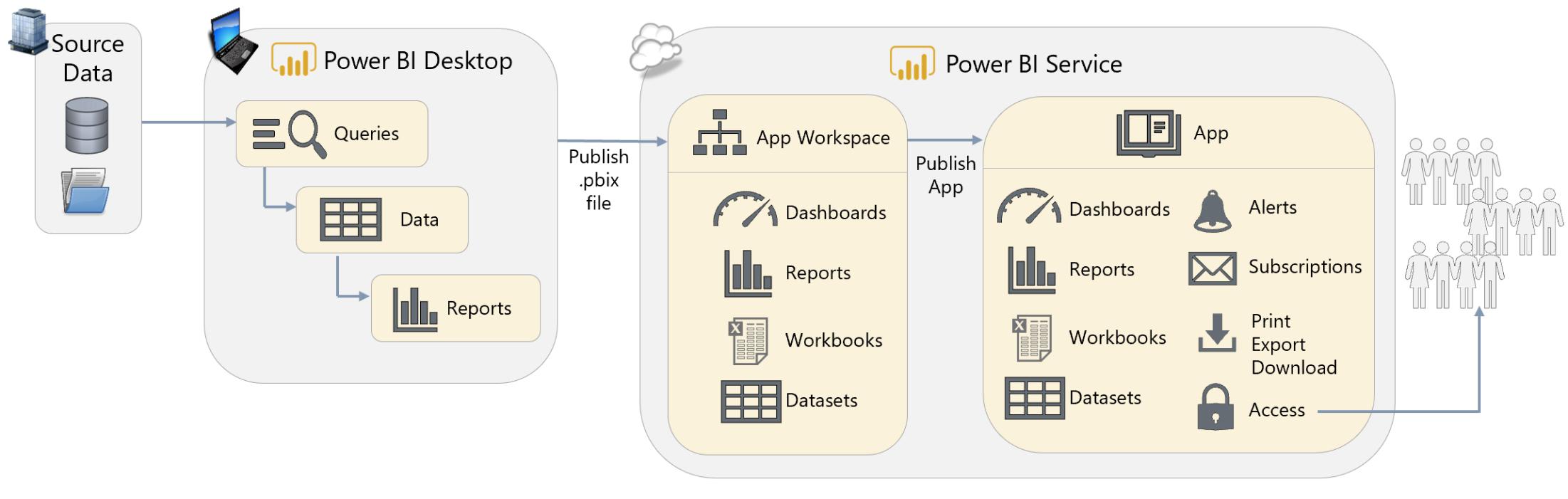
- Relatie App workspace <> App is 1:1
- Functionele scheiding van rapportages
- Delen via Apps, niet via “Gedeeld met mij”
- App workspaces V2

Voordelen

- App workspace is staging omgeving
- Overzichtelijk voor eindgebruikers
- Geen Pro licentie bij Premium



Power BI App Workspaces en Apps



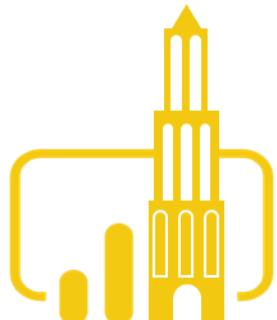
Ongoing changes will be made in the App Workspace area by an author, then published to an App when finalized.

Content is consumed (read-only) in the App by the user population



Agenda

- Organisatie
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Power BI Premium

Redenen voor Premium

- Kosten (# licenties)
 - Features, waaronder:
 - 48x verversen/dag
 - Dataflows
 - Incremental refresh
 - Grootte datamodel
 - Datasets pinnen in memory
- ← management ☺
← BI-ers ☺☺

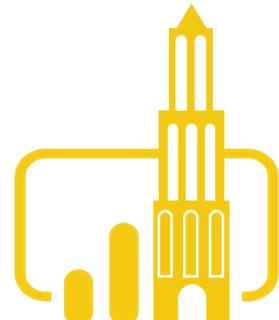
Uitdagingen

- Aantal licenties terugdringen
- Power BI Beheerorganisatie professionaliseren



Professionalisatie Beheerorganisatie

- Audit via Identity Management
- 3 AD-groepen per workspace
 - Admin, Members, Viewers
- V2 workspaces, anders huidige workspaces omzetten
- Power BI **super users** zelf (V2) workspaces laten maken
 - Microsoft Teams Wiki
 - Workflow Topdesk
 - Naamgevingen
- Gepersonaliseerde help-knop



Gepersonaliseerde help-knop

Admin portal

Usage metrics

Users

Audit logs

Tenant settings

Capacity settings

Embed Codes

Organization visuals

Dataflow settings (preview)

Workspaces

Help and support settings

▲ Publish "Get Help" information

Enabled for the entire organization

Users in the organization can go to internal help and support resources from the Power BI help menu.



Enabled

Training documentation:

https://vlkco.sharepoint.com/:f/s/ts-BI/EqbhZW2ovNBGoiqtsKCGwMQBeDJCATlu_03B4X

Discussion Forum:

<https://vlkco.sharepoint.com/Sites/ts-BI/Lists/Power%20BI%20Forum/AllItems.aspx>

Licensing requests:

<https://servicedesk.vlkintern.nl/tas/public/ssp/content/serviceflow?unid=9f20456baae34>

Help Desk:

<https://servicedesk.vlkintern.nl/tas/public/ssp/content/serviceflow?unid=0ec6987f62654>

Apply to:

The entire organization

Specific security groups



Premium Capacity Metrics App

The screenshot shows the Microsoft AppSource interface. On the left is a dark sidebar menu with the following items:

- Home (preview)
- Favorites
- Recent
- Apps
- Shared with me
- Workspaces
- My Workspace

On the right, there is a search bar labeled "Search content..." and a yellow "Get apps" button. Below the sidebar, two app cards are displayed:

- Power BI Premium Capa...** (March 18, 2019) - This card features a circular icon with a bar chart and a diamond, followed by the app name and its publish date.
- Get more apps from Microsoft AppSource** - This card features a circular icon with a grid of four squares, followed by the text "Get more apps from Microsoft AppSource".



Premium Capacity Metrics App

AppSource | Apps for Power BI

Apps (1) My organization (0) Other apps ▾



Power BI Premium Capacity Metrics
By Microsoft
Power BI apps

This app provides Power BI Premium admins comprehensive metrics history for up to seven

★★★★★ (57)

[Get it now](#)



Selected Capacity

Date Range

Refreshes

Query Durations

Query Waits

Datasets

[Learn more](#)

All

3/18/2019 3/25/2019

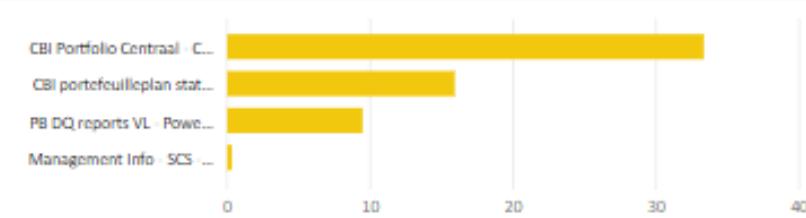
Last Refresh

3/25/2019 3:00:00 PM

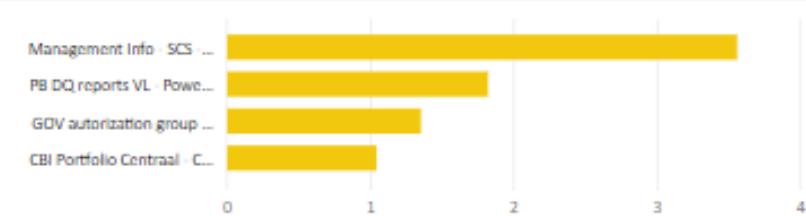
Refreshes

Workspace/Dataset	Total Count	Reliability	Avg Wait Time (minutes)	Max Wait Time (minutes)	Avg Duration (minutes)	Max Duration (minutes)
CBI Analytical Suite	32	84.38%	1.00	2.87	12.97	58.47
CBI portefeuilleplan status VKK & Activiteiten	9	44.44%	0.36	1.32	15.92	22.35
CBI Portfolio Centraal	8	100.00%	1.04	2.63	33.33	58.47
GOV autorization group members	15	100.00%	1.35	2.87	0.34	0.43
GPA - Incremental Refresh - Dev	1	100.00%	0.00	0.00	0.13	0.13
PBI - Refresh Sample	1	100.00%	0.00	0.00	0.13	0.13
PowerBI-DataQuality	7	100.00%	1.82	2.38	9.48	18.50
PB DQ reports VL	7	100.00%	1.82	2.38	9.48	18.50
SCS - Transactions - MiFid	56	100.00%	3.56	25.58	0.34	0.93
Management Info	56	100.00%	3.56	25.58	0.34	0.93
Total	96	94.79%	2.54	25.58	5.21	58.47

Top 5 Datasets by Average Duration (minutes)



Top 5 Datasets by Average Wait Time (minutes)



Hourly Refresh Count and Memory Consumption (GB)

(Success Count) (Failure Count) (Memory Consumption) (Datasets Memory Limit)

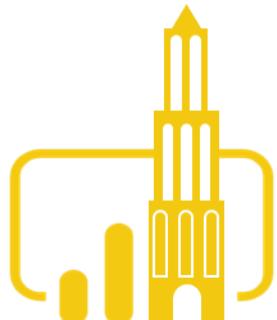


Hourly Average Refresh Wait Times (minutes)



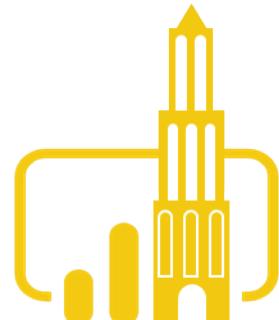
Agenda

- Organisatie
- Data
- Rapporteren
- Samenwerken
- Ondersteuning
- **Lessons learned**
- Next steps



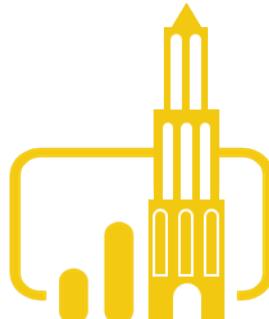
Kennis is key

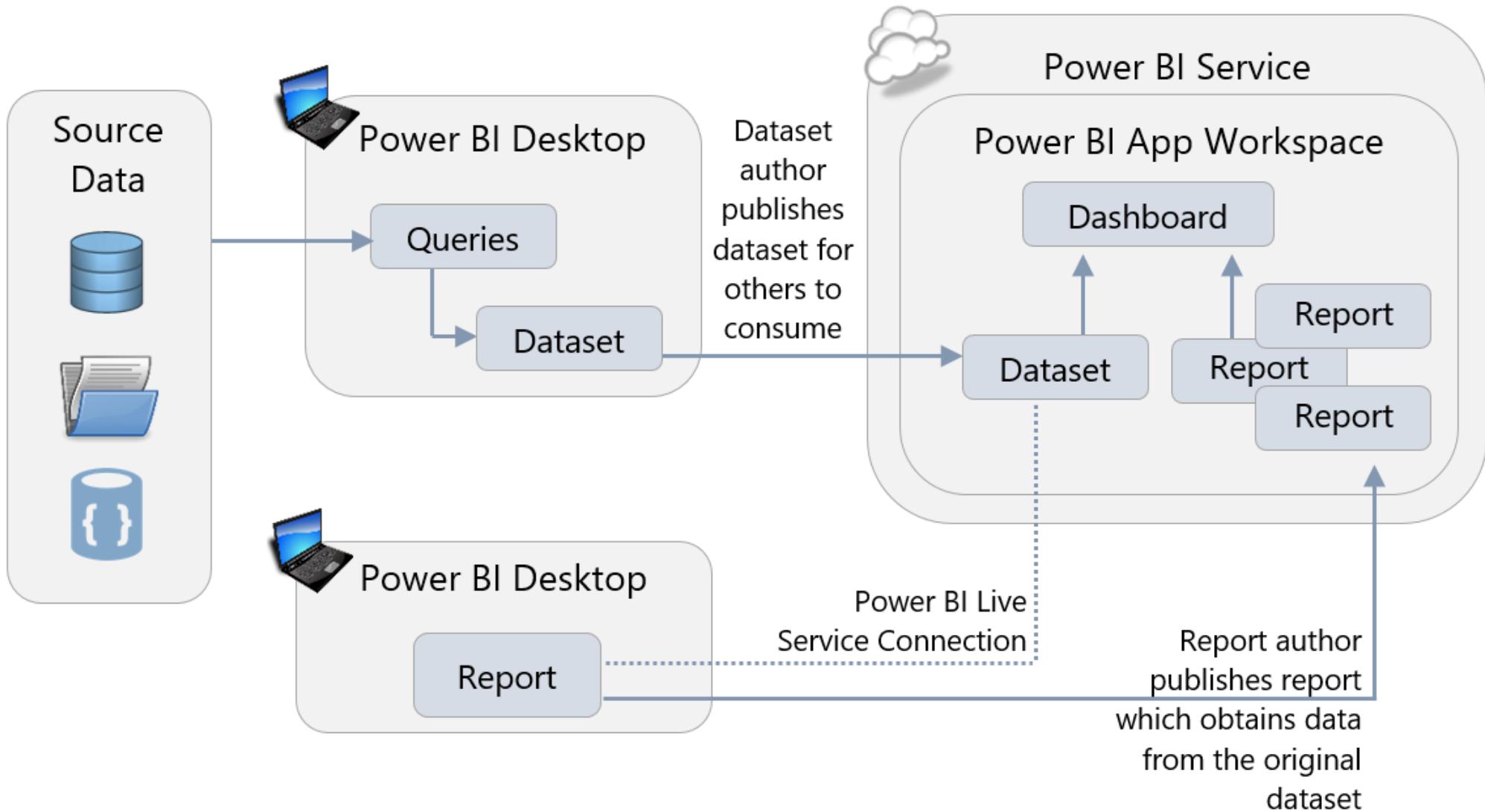
- Power BI trainingen door de hele organisatie
- BI Focus Groep
 - Gestart met wisselende content
 - Nu met 2 tracks:
 - Eindgebruikers
 - Ervaringen/projecten delen met Power BI en/of Data Science
 - Nieuwe features in PBI Desktop
 - Advanced technical
 - Row vs. filter context
 - DAX
 - Synergy met citizen developers uit de data science groep



Lessons Learned & Best Practices

- 38 Best practices (Power BIble, aangepast naar onze wensen)
 - DAX, Maintenance/Developing, Modelling, M-Query, Reporting & Visualization, Sharing & Security
- Naamgevingconventies voor App Workspaces
 - Afdeling – Team – Naam
- App Workspaces V2
- Onedrive voor versiebeheer
- Naamgevingconventies Gateway Data Sources
 - Type – Server – Database
 - Power BI Idea: Add the ability to Sort and Categorize Gateway Data Sources
- Ontkoppel de dataset van rapportontwikkeling



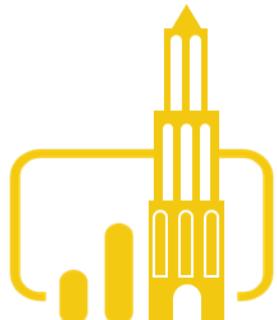


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Agenda

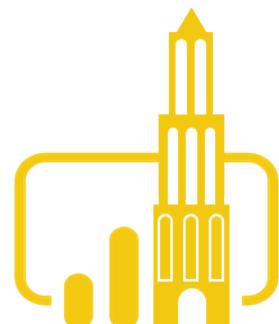
- Organisatie
- Data
- Rapporteren
- Samenwerken
- Ondersteuning
- Lessons learned
- **Next steps**



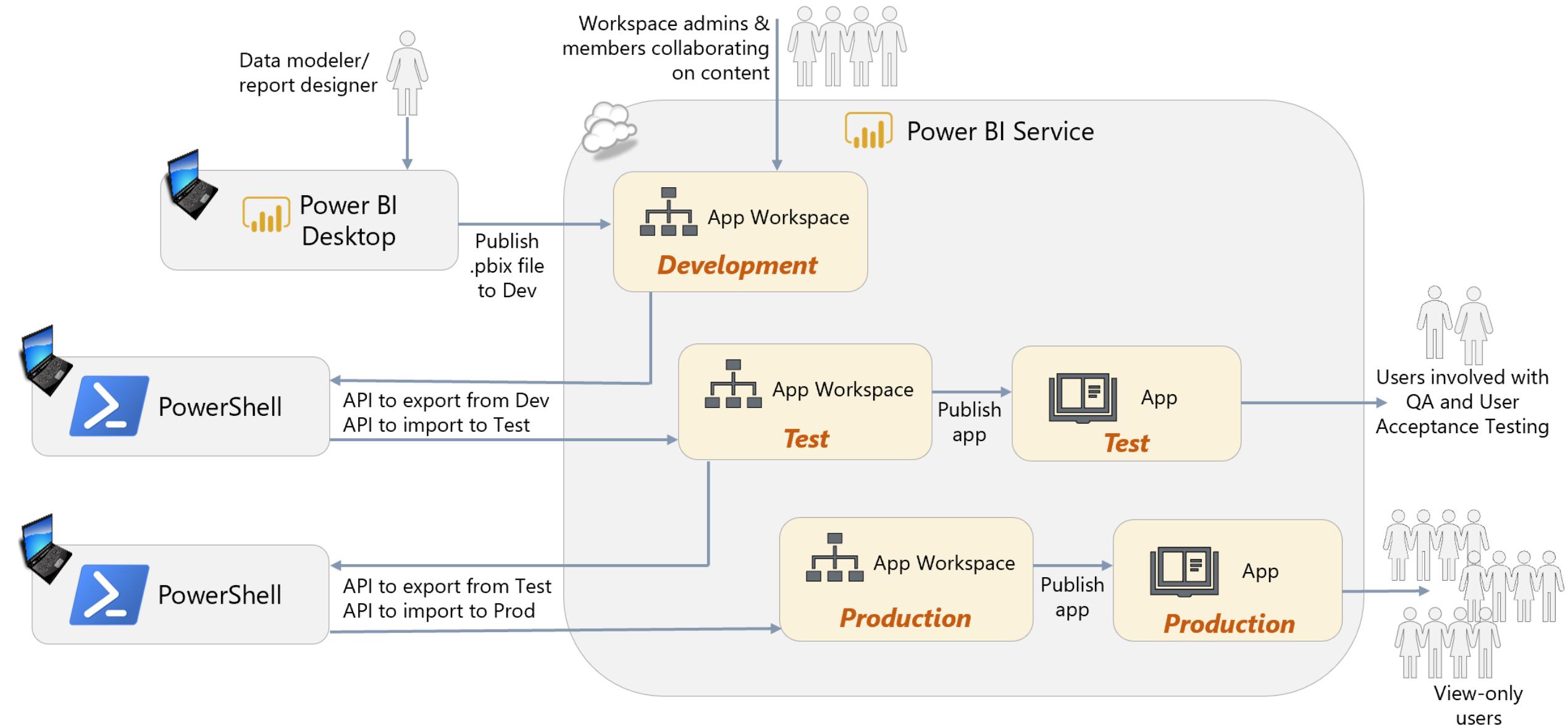
Roadmap en verder naar de toekomst

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

- New Workspace experience GA
- Automatische verversing dataset
- Reporting Services
- Data Science
- Meer PowerApps integratie
- Development Pipeline / Continuous Delivery



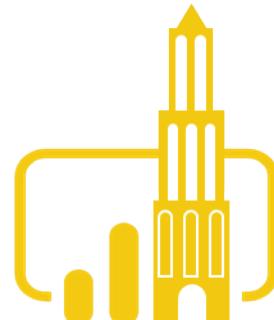
Roadmap – development pipeline



Roadmap en verder naar de toekomst

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

- New Workspace experience General Availability: [link](#)
- Automatische verversing dataset
- Reporting Services
- Data Science
- Development Pipeline / Continuous Delivery
- Dataflows
- Lange termijn logging/monitoring
- App workspace creatie workflow



Power BI (Premium) resources

- Power BI Premium FAQ
 - <https://docs.microsoft.com/en-us/power-bi/service-premium-faq>
- Whitepaper: Deploying and Managing Power BI Premium Capacities
 - <https://docs.microsoft.com/en-us/power-bi/whitepaper-powerbi-premium-deployment>
- Power BI Premium: Licensing and Capacity Made Easy
 - <https://dawgdata.com/power-bi-premium-licenses-and-capacity-made-easy/>
- Whitepaper: Planning a Power BI Enterprise Deployment
 - <https://aka.ms/pbienterprisedeploy>
- Whitepaper: Power BI Premium
 - <https://aka.ms/pbipremiumwhitepaper>
- All Power BI whitepapers:
 - <https://docs.microsoft.com/en-us/power-bi/whitepapers>
- Power BI Tutorial Report
 - <https://www.pbiusergroup.com/blogs/stephan-de-jong/2018...>
- Power BI Best practices: Power BIbble
 - <https://www.linkedin.com/pulse/power-bible-jeroen-luitwieler/>
- Power BI Idea for sorting Gateway Data Sources
 - [Add the ability to Sort and Categorize Gateway Data Sources](#)



Vragen?

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Wat vond je van de sessie?

Scan de QR code



...of ga naar: bit.ly/sessie2019



Power BI Gebruikersdag 2019

Bedankt en let's connect!

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