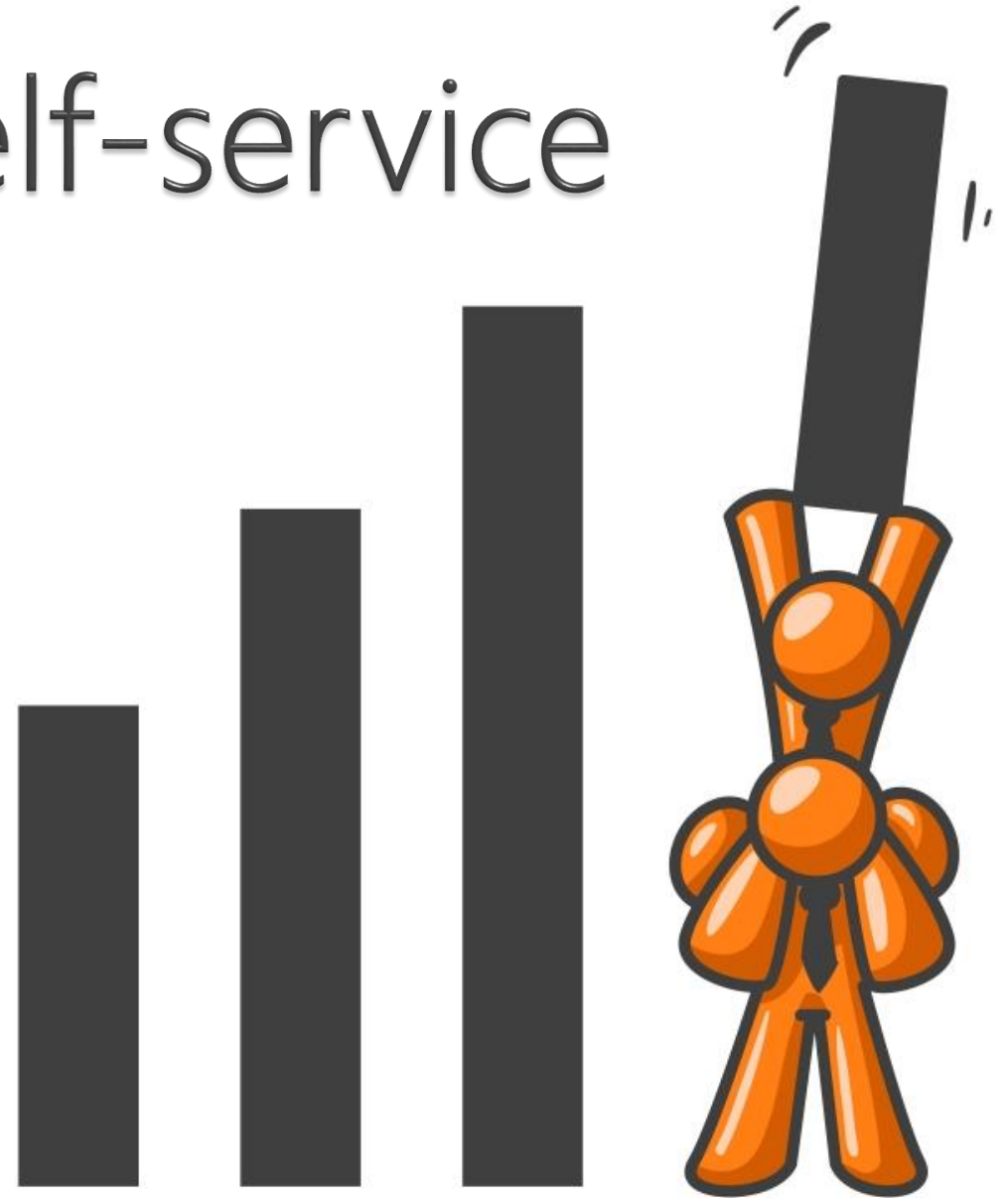


Enterprise and Self-service in Power BI

- Better together

ORANGEMAN



Just Thorning Blindbæk

- ▶ Founder of Power BI UG Denmark
- ▶ Consultant in justB
- ▶ Trainer at Orange Man
- ▶ 10+ years of experience with Microsoft BI
- ▶ Strong focus on the front-end tools
 - Analysis Services
 - Reporting Services
 - PerformancePoint Services
 - Excel and Power Pivot
 - Power BI
- ▶ just@blindbaek.dk / blog.justB.dk / [@justblindbaek](https://twitter.com/justblindbaek)



Microsoft
CERTIFIED
Trainer

Microsoft
CERTIFIED
IT Professional

SSAS
MAESTRO
by Microsoft

MVP **Microsoft**
Most Valuable
Professional

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Before we start

- ▶ Business Users?
- ▶ IT Professionals?
- ▶ All in one?



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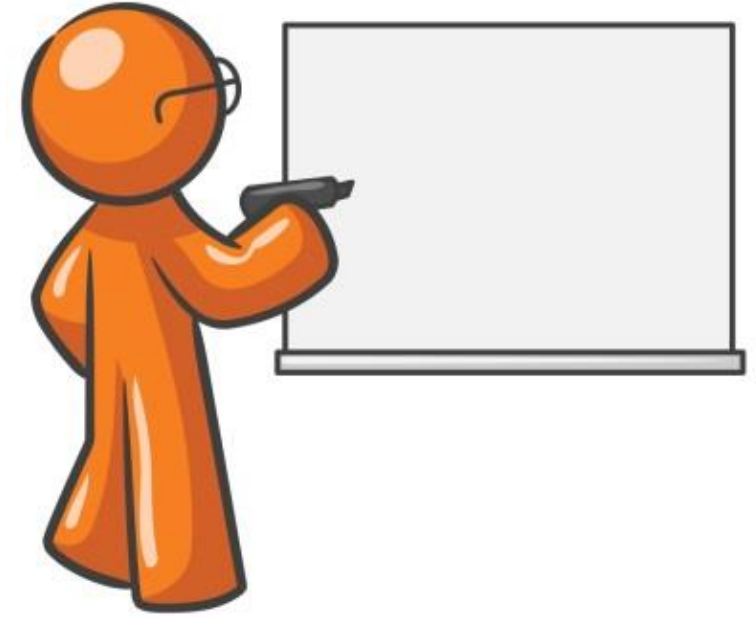
Agenda

- ▶ Delivery of Power BI
- ▶ Ownership transfer
- ▶ Security
- ▶ Content workflow
- ▶ Governance

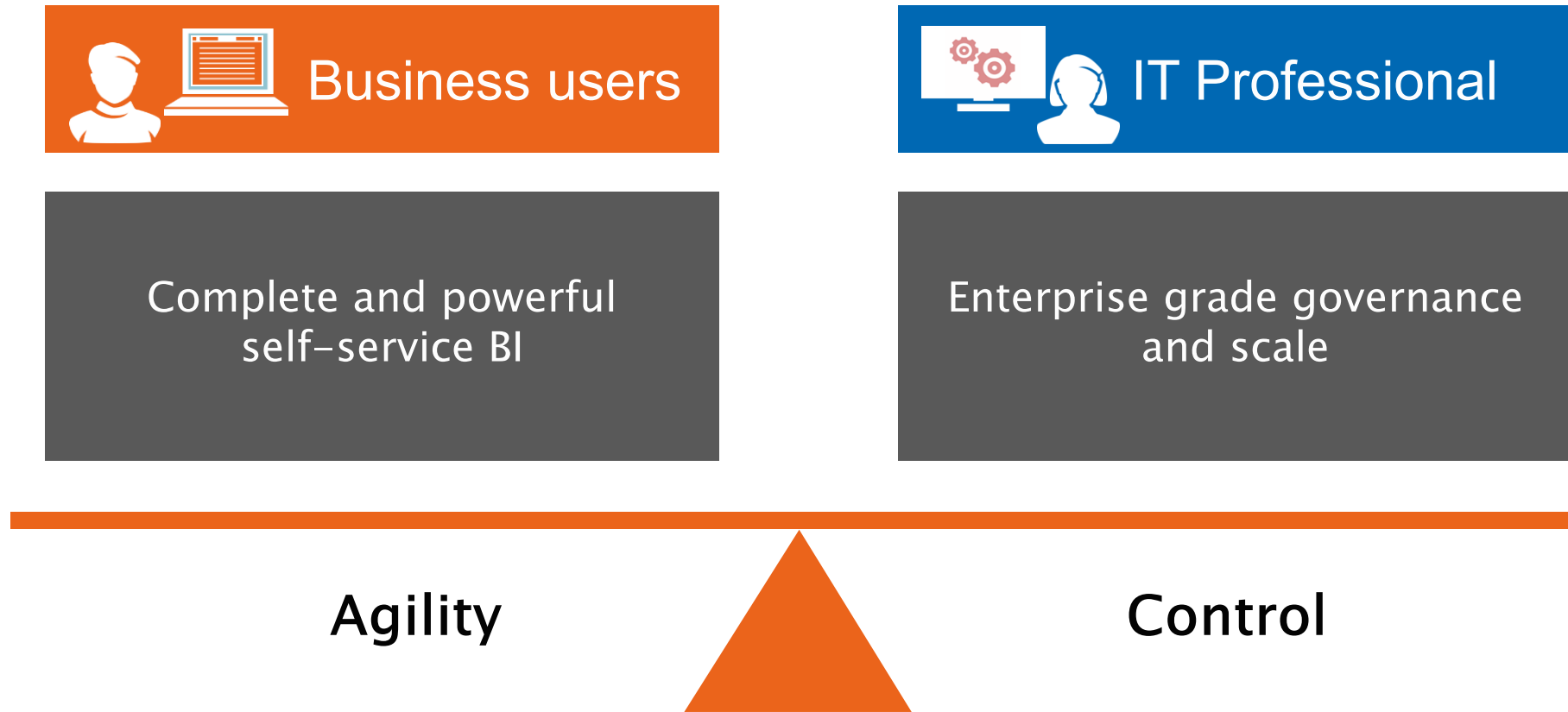


Delivery of Power BI

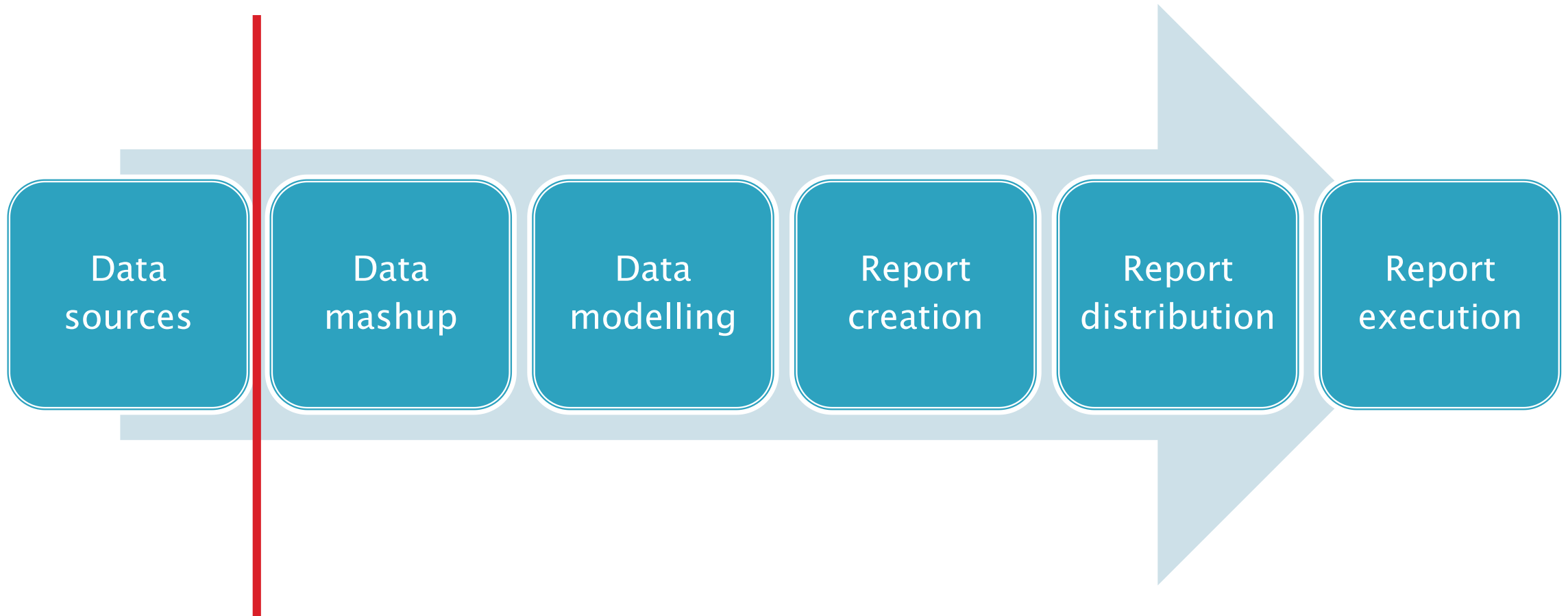
- ▶ Self-service vs. Corporate BI



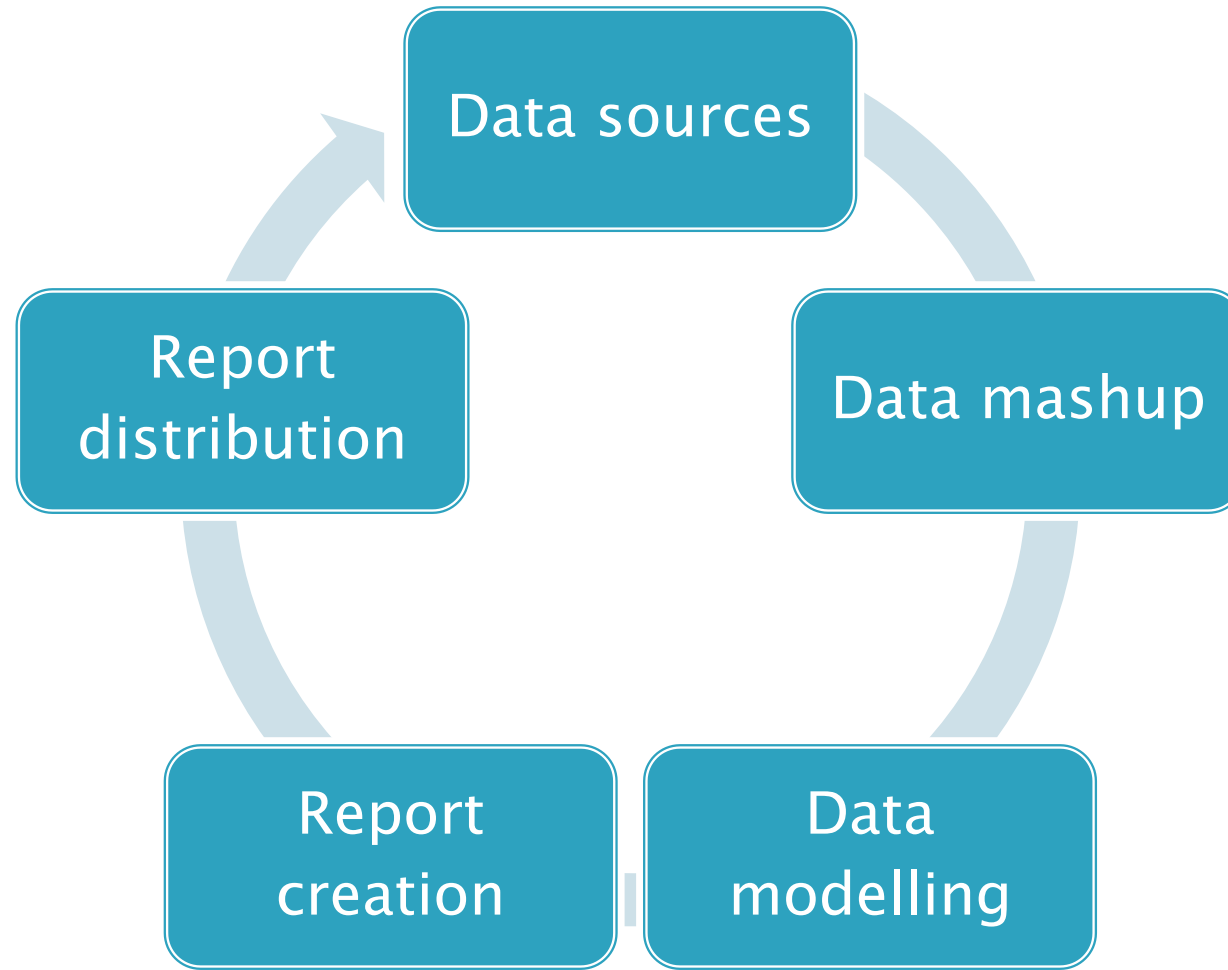
Delivering Power BI is not easy



Power BI development: IT vs Business



Power BI development: Agile development



Power BI Delivery Approaches

Business-Led Self-Service BI



Bottom-Up Approach

Analysis using any type of data source; emphasis on data exploration and freedom to innovate

Ownership:

Business supports all elements of the solution

Business users:

Data mashup, data modeling, report creation, distribution & execution

Governed by:

Business

IT-Managed Self-Service BI



Blended Approach

A “managed” approach wherein reporting utilizes only predefined/governed data sources

Ownership:

IT: data + semantic layer
Business: reports

Business users:

Creation of reports and dashboards

Governed by:

IT: data + semantic layer
Business: reports

Corporate BI



Top-Down Approach

Utilization of reports and dashboards published by IT for business users to consume

Ownership:

IT supports all elements of the solution

Business users:

Execution of published reports

Governed by:

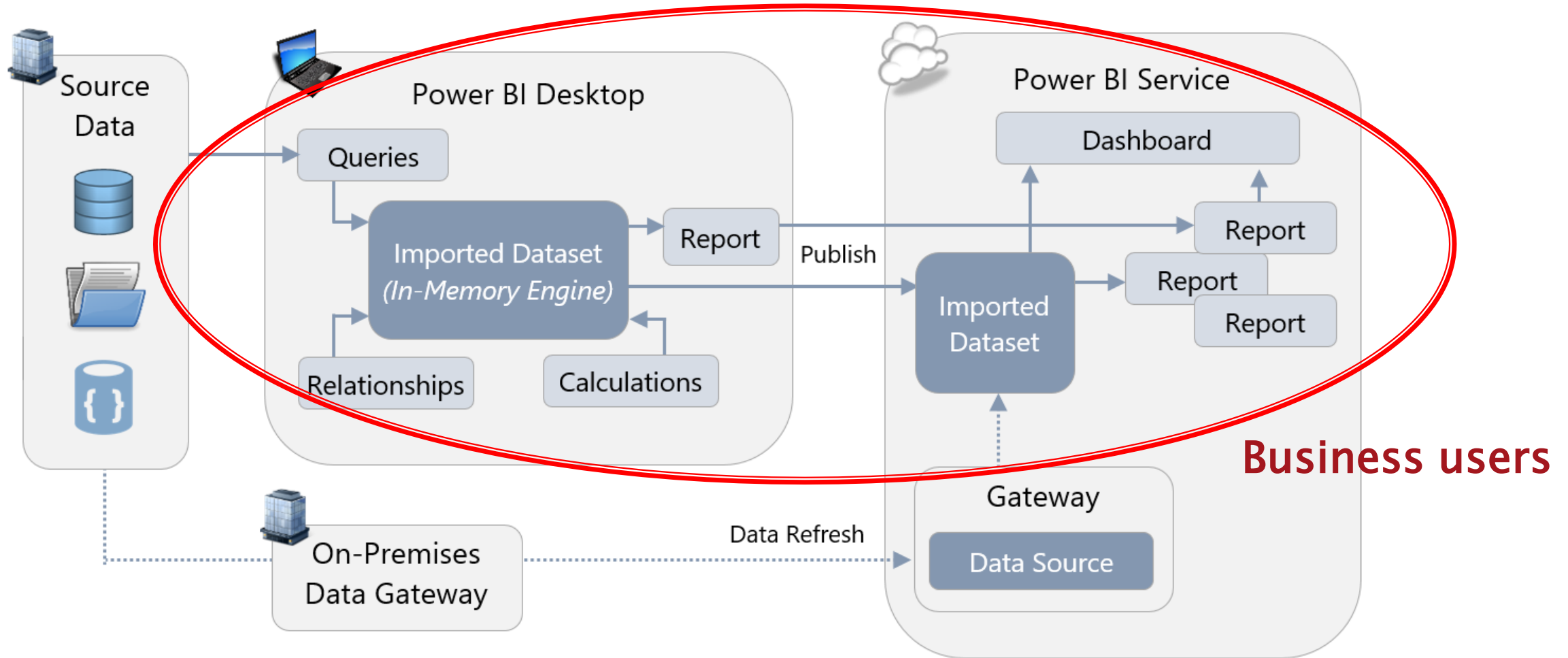
IT



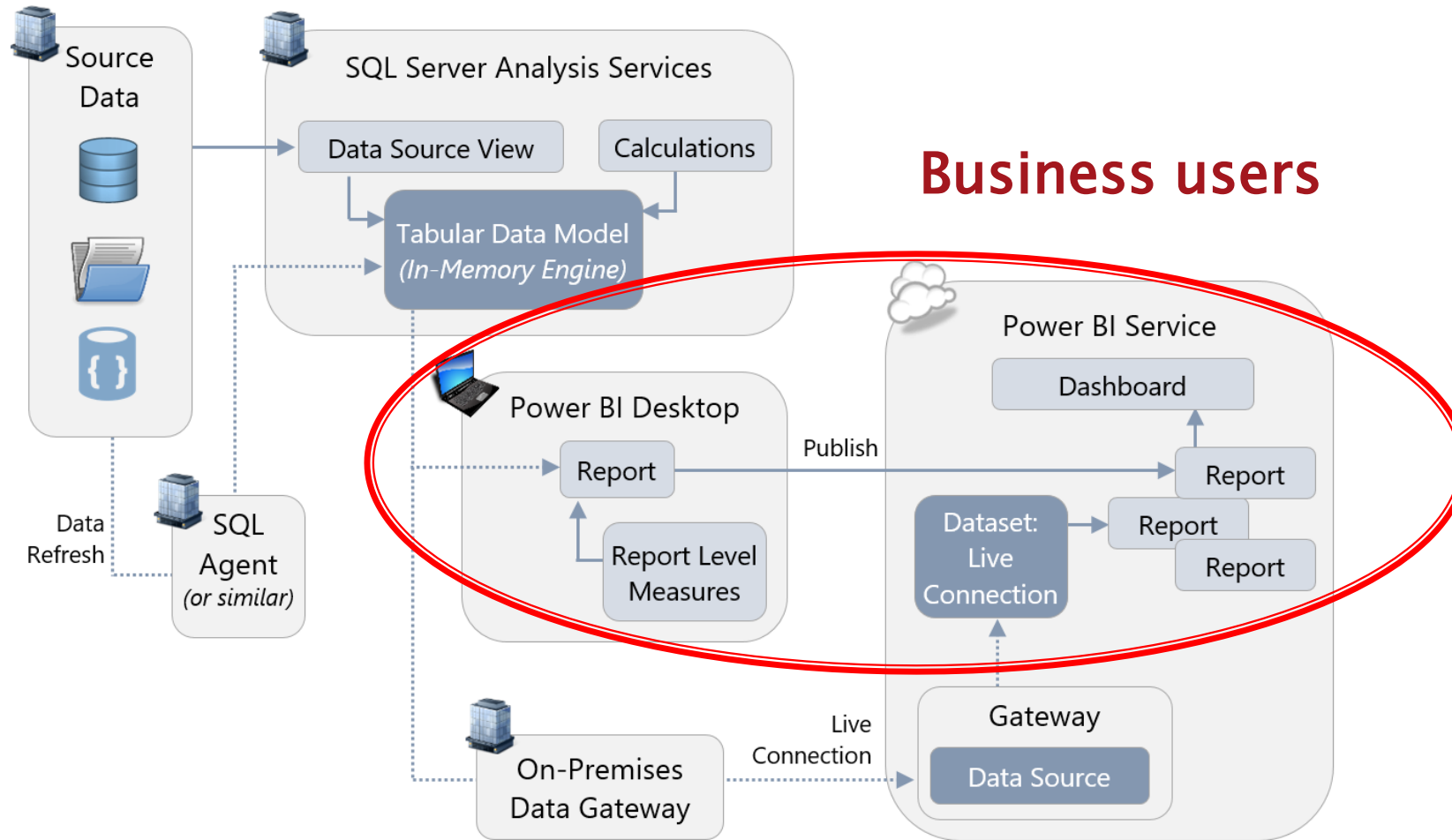
Ownership Transfer

Over time, certain self-service solutions deemed as critical to the business may transfer ownership and maintenance to IT. It's also possible for business users to adopt a prototype created by IT.

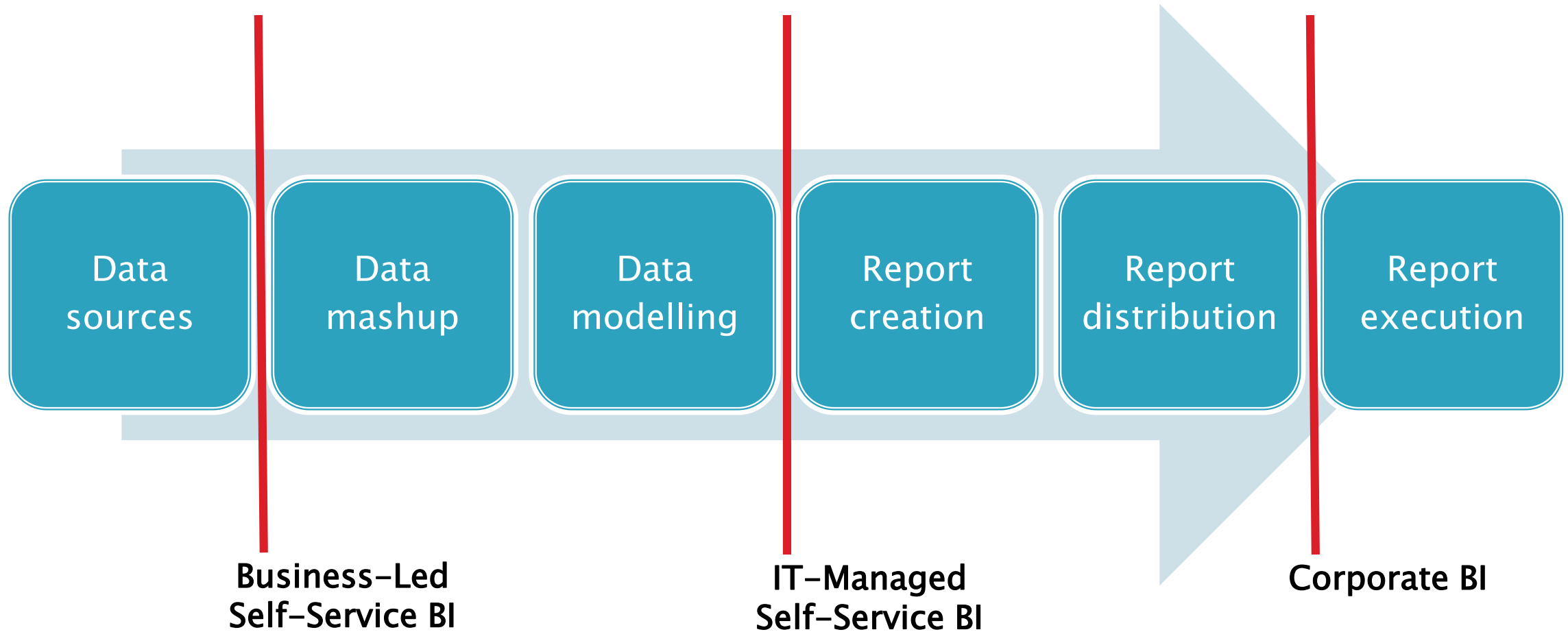
Business-Led Self-Service BI: Importing Data



IT-Managed Self-Service BI: Live Connection to Analysis Services

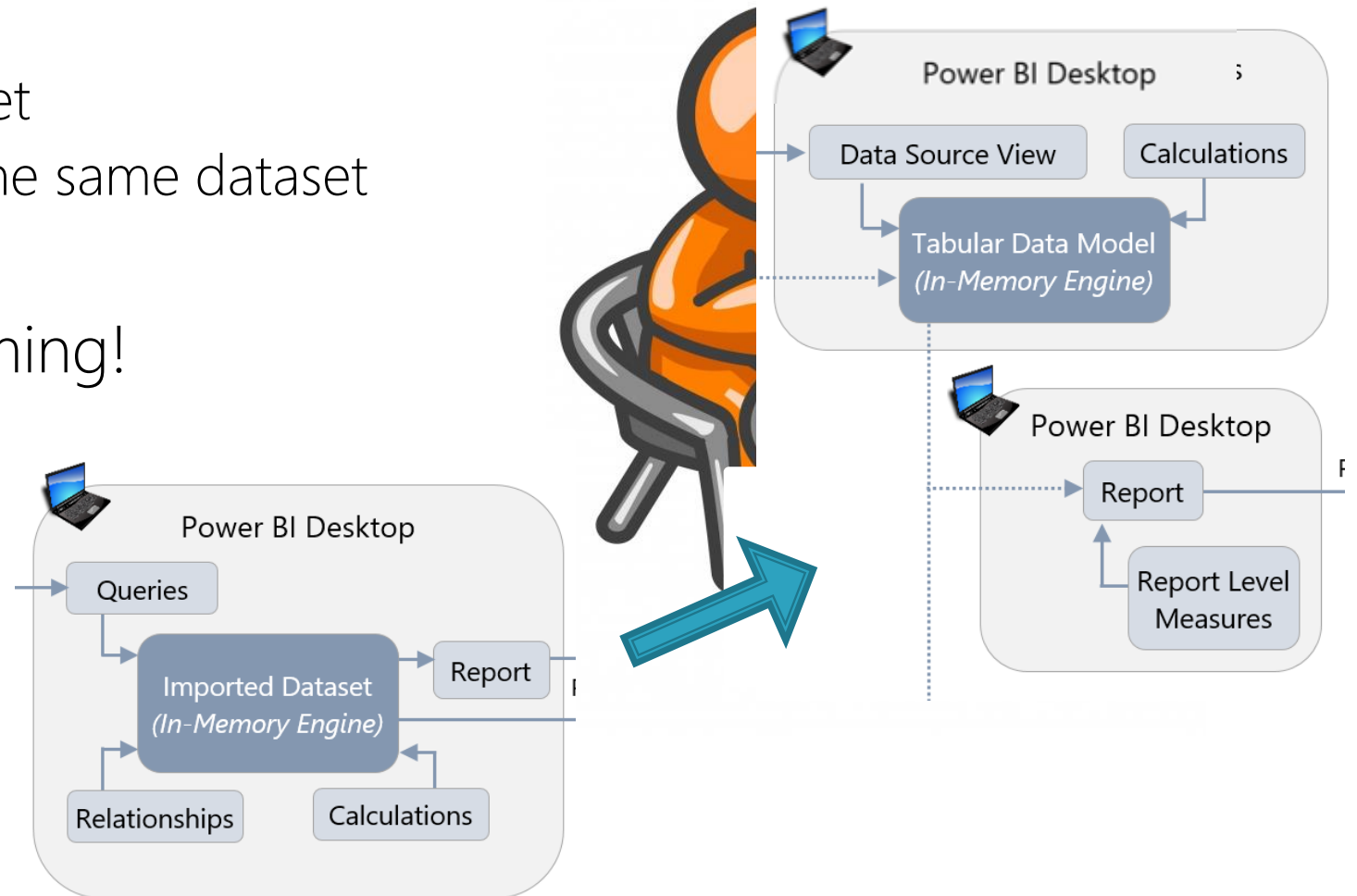


Recap: Power BI Ownership Approaches



Demo: Ownership transfer

- ▶ Let se some Magic !
 - Split the report and dataset
 - Connect more report to the same dataset
- ▶ Dataset discovery is coming!
 - Between workspaces
 - Shared datasets
 - Certified datasets









Shared and certified datasets

- ▶ Reuse and preserves a single version of the truth
- ▶ Find reliable and high-quality data quickly and easily in both the service and Power BI Desktop
- ▶ Single dataset to be used by multiple reports, across workspaces

- ▶ Preview feature
 - Rolling out these days!

Select a dataset to create a report

All datasets ▾

| Name | ENDORSEMENT ↓ | Owner | Workspace/App | Refreshed |
|------------------------|--|--------------|---------------|-------------|
| Retail Analysis |  Certified | Steve Myer | Retail | 4 days ago |
| Customer Profitability |  Certified | Susan Mailer | Customer | 6/23/17 |
| Ventage Global |  Promoted | Lane Barnes | Ventage | 3/3/18 |
| IT Spend Analytics |  Promoted | Ari Gold | IT | 3 hours ago |
| Team Analytics |  Promoted | Ana Smith | Analytics | 7/12/18 |
| Opportunity Analysis |  Promoted | Lane Barnes | My Workspace | 6/12/17 |
| Retail | | Lane Barnes | My Workspace | 2 days ago |
| Procurement Analysis | | Lane Barnes | My Workspace | 7/22/18 |
| Sales | | Lane Barnes | My Workspace | 1/24/17 |

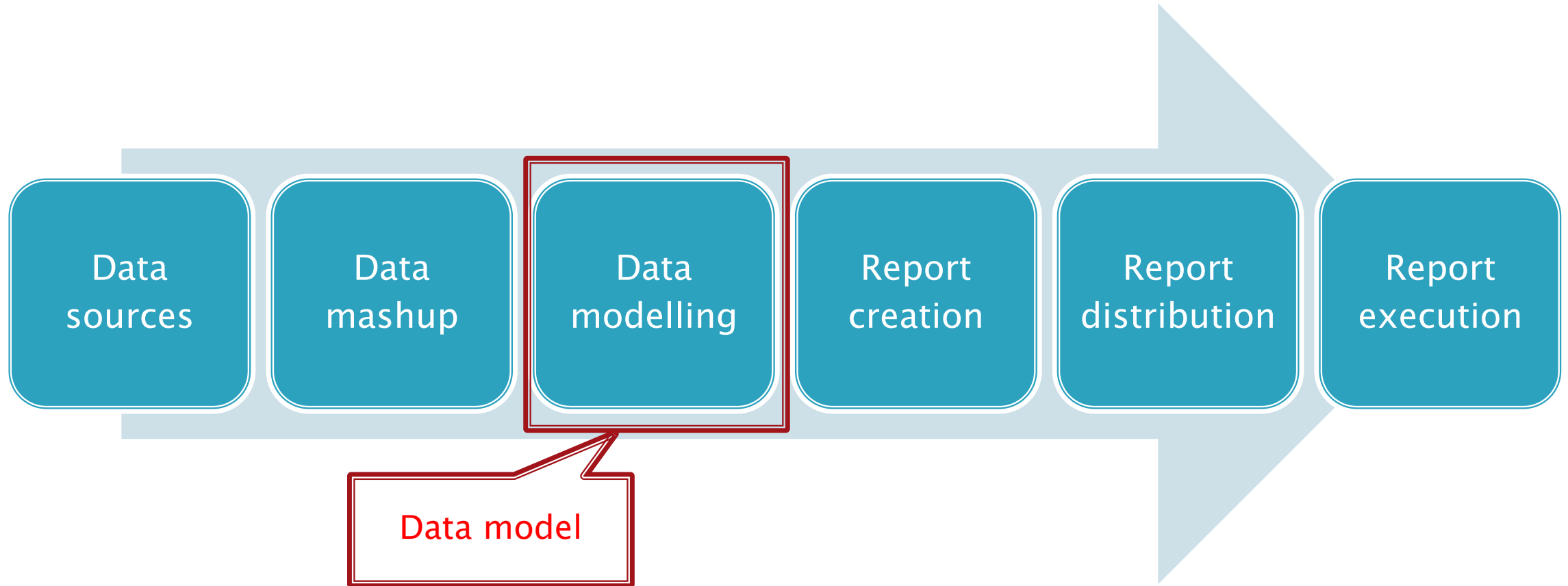
OK Cancel

Security

- ▶ Where and how to set it up?



Where to setup security



Row-level Security (RLS)

- ▶ Restrict data access for given users on row level
 - ▶ Define roles and rules in Power BI Desktop
 - DAX expressions. Eg. Customer[City] = "Atlanta".
 - ▶ Validate the roles in Power BI Desktop
 - ▶ Assign users to roles in the Power BI Service
-
- ▶ Dynamic security can be setup within Power BI Desktop by making use of the username() or userprincipalname() DAX functions

Content Workflow

- ▶ Workspaces, Apps, Deployment



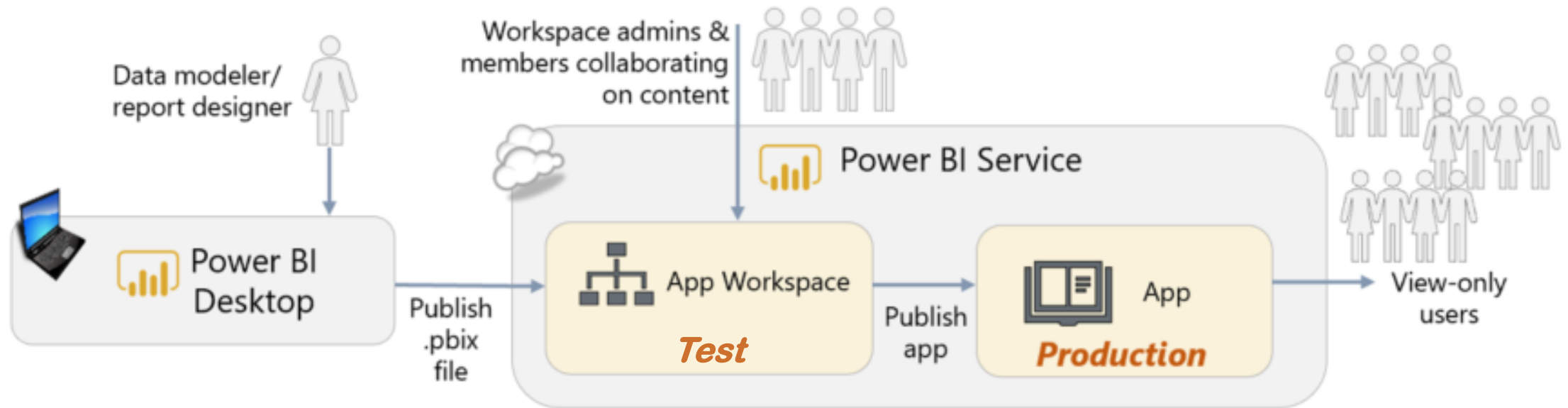
Workspaces – private and app

- ▶ Everyone has their own private workspace they can publish to. Its called: “My Workspace”. **Only** use it for:
 - Personal usage
 - Testing purposes
- ▶ App **Workspaces** is somewhere report developers can **work together** on the same business problem
- ▶ When you create an App Workspace you become its administrator and
 - Control its access and sharing settings
 - Add/remove members and contributors – viewer role is forthcoming.

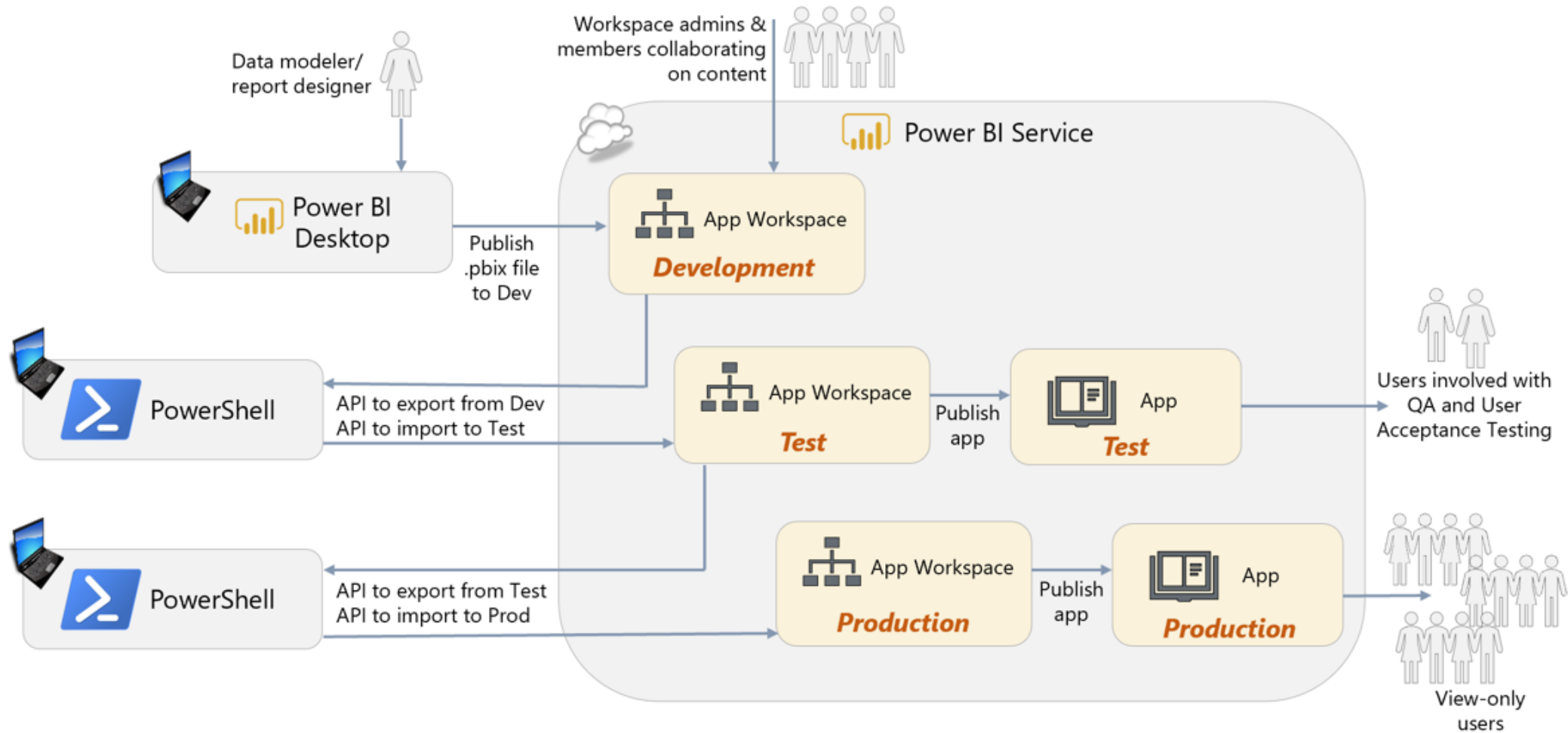
Apps

- ▶ The contents of App Workspaces can be published as Apps
 - Possible to exclude items
- ▶ Other users can then 'install' the App or have it pushed to them
- ▶ When users install an App they can see the dashboards and reports in there
 - They can interact with slicers
 - They cannot edit the reports or dashboards
- ▶ New: App navigation experience!
 - Customize the name of your app

Simple App deployment process



Advanced App deployment process

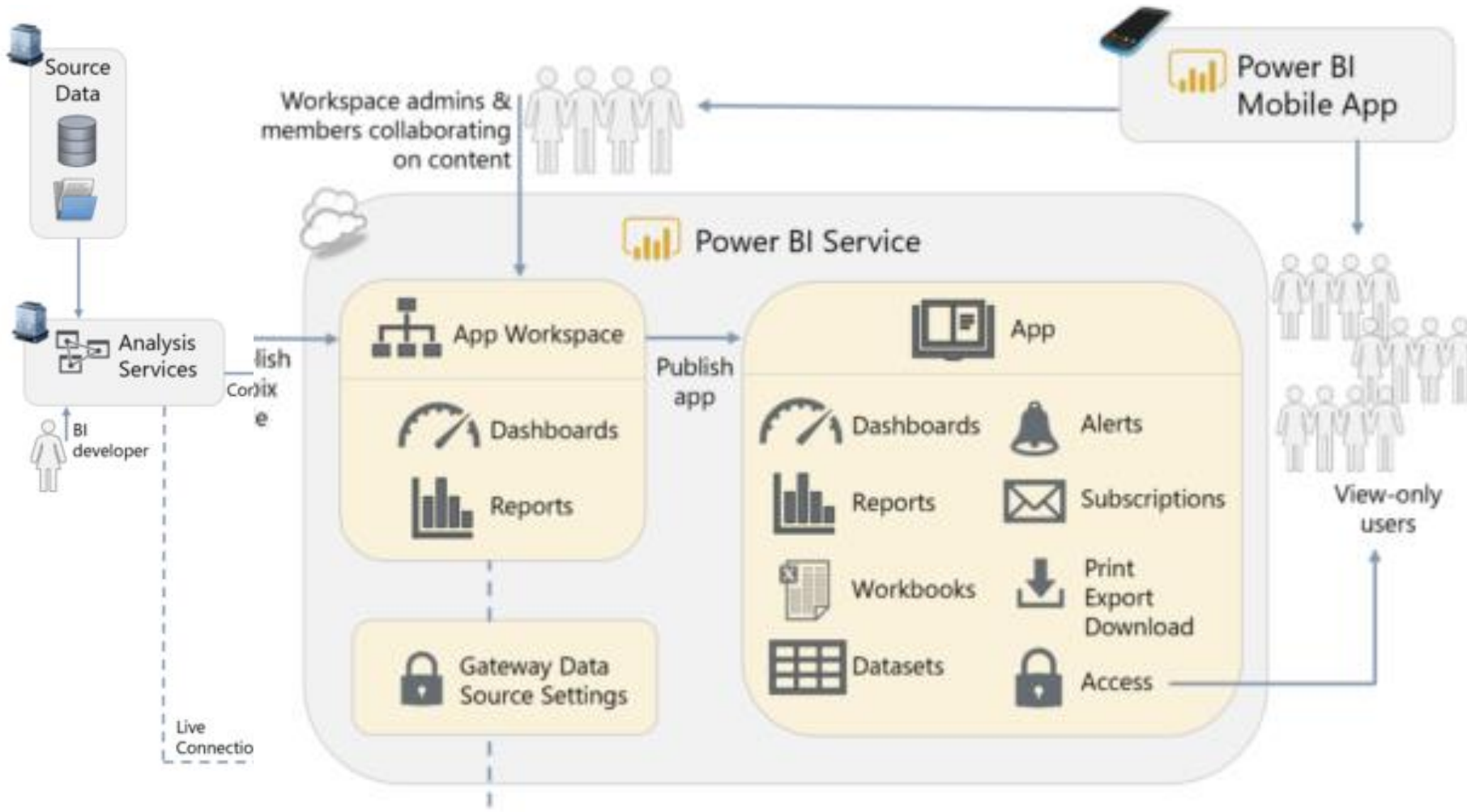


Demo: Content Workflow

- ▶ Create App Workspace
 - New experience preview
- ▶ Publish App
 - Setup view/execution security

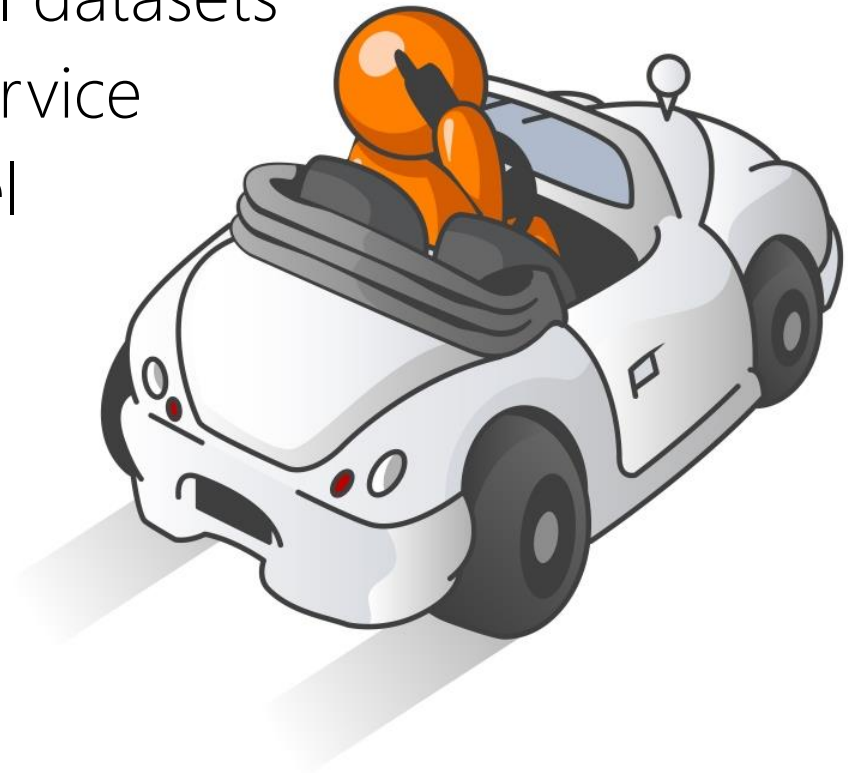


Full architecture: IT-Managed Self-Service BI



XMLA endpoints – open-platform connectivity

- ▶ XMLA is the same protocol used for managing SQL Server Analysis Services and Azure Analysis Services models, a variety of Microsoft and third-party tools can be used with Power BI datasets
- ▶ Analysis Services engine in the Power BI service
- ▶ Taking **transfer ownership** to the NEXT level
- ▶ Preview feature!
- ▶ Requires Premium capacity!



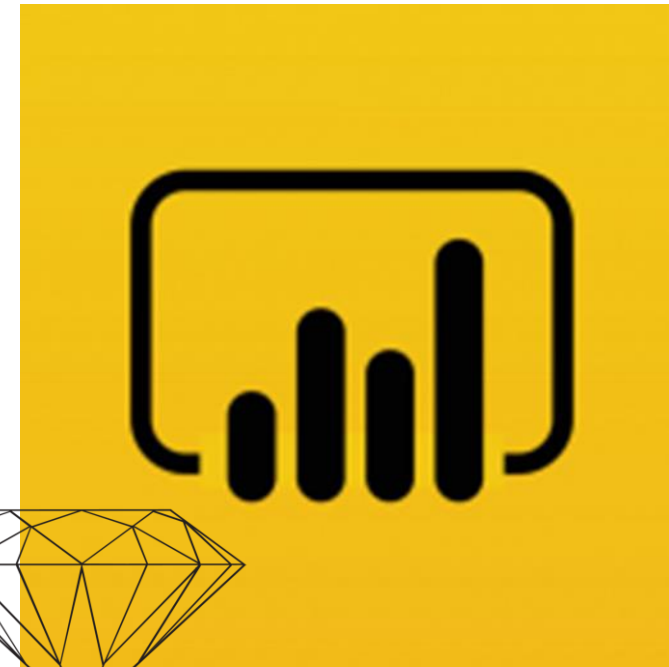
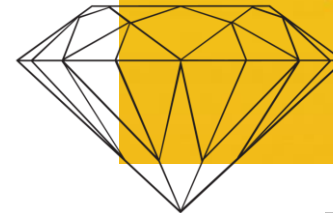
Power BI merging with Azure AS

Enterprise BI

All BI users self-service BI users

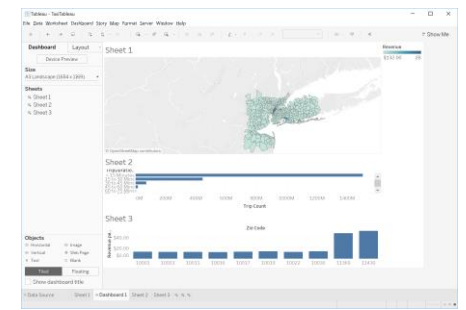
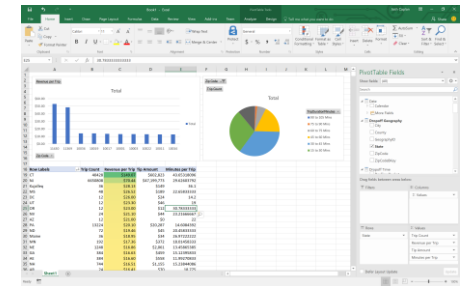
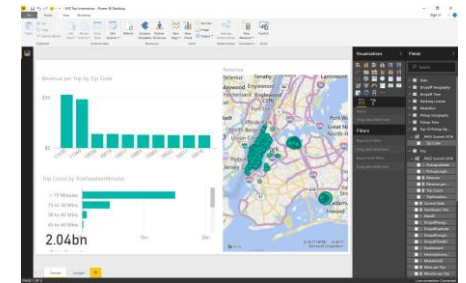
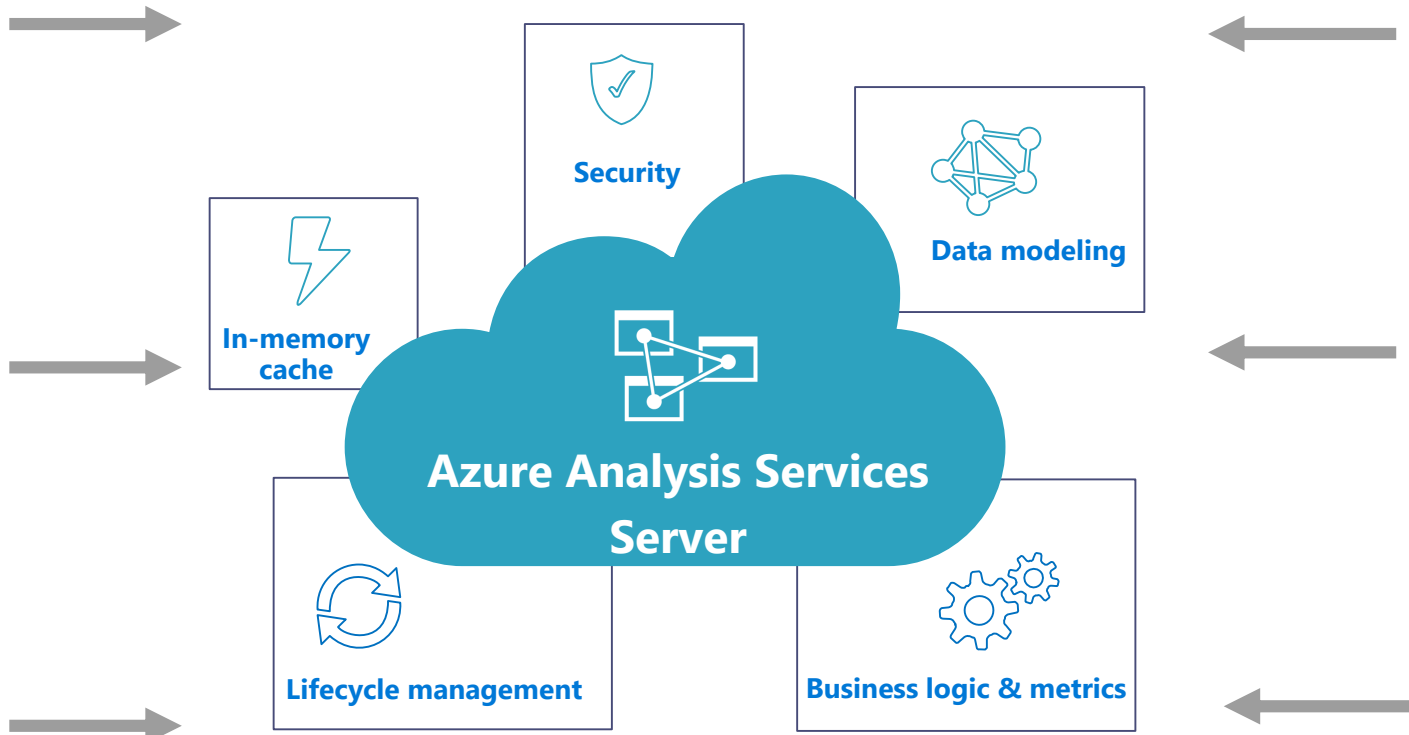
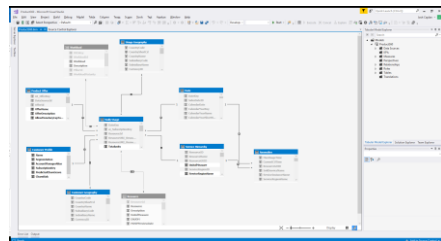
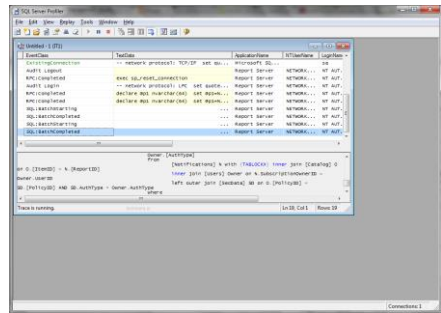
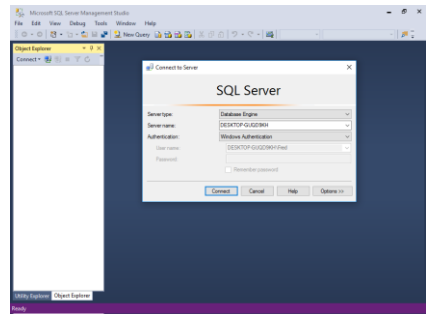


Azure Analysis Services Power BI
Premium

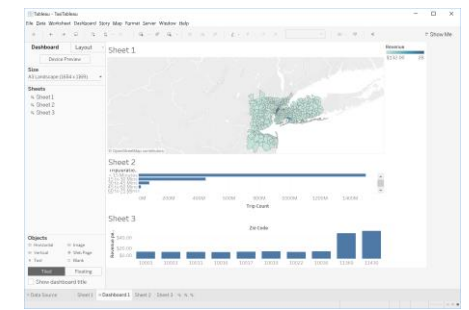
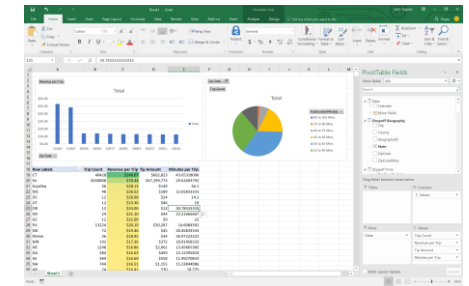
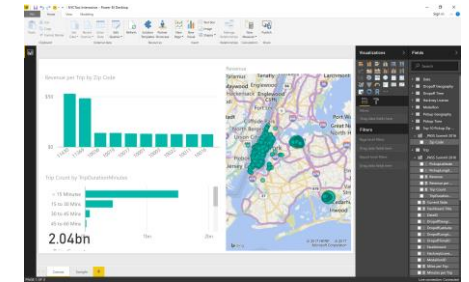
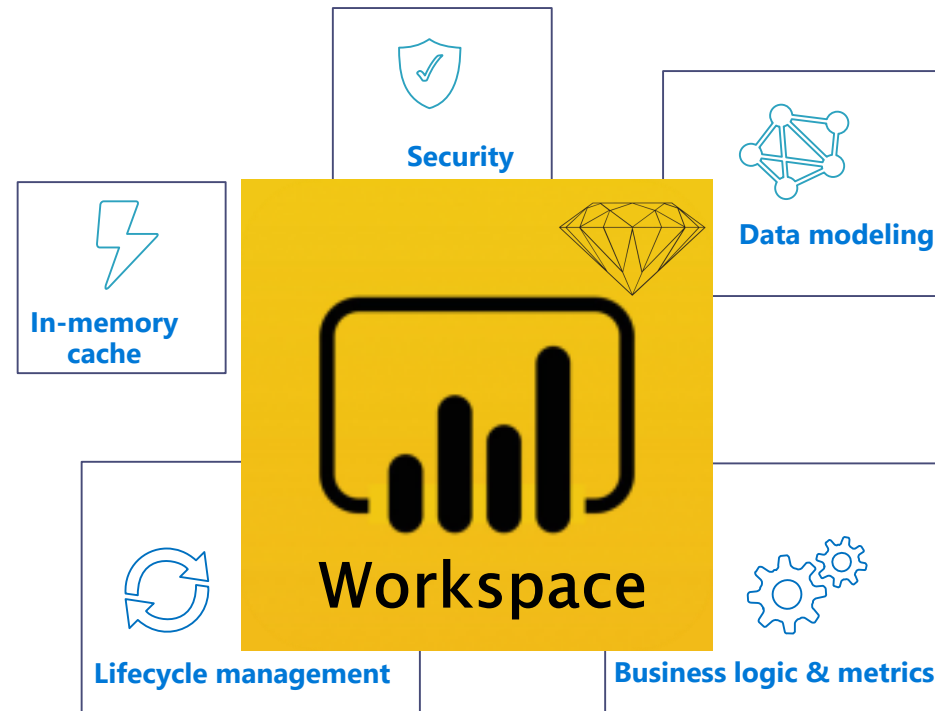
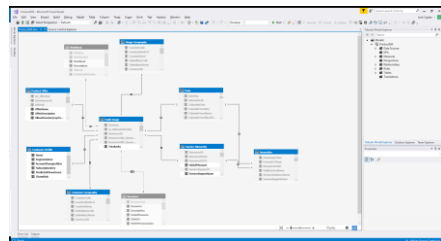
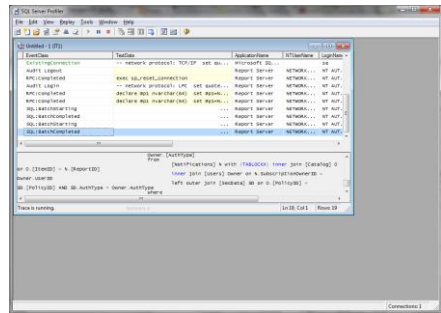
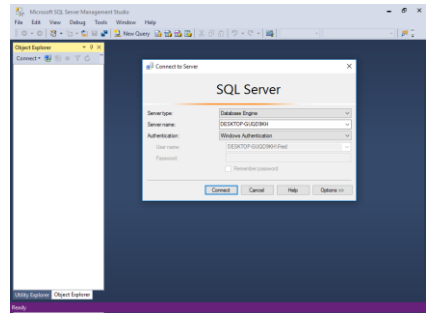


Power BI

Connectivity: Analysis Services

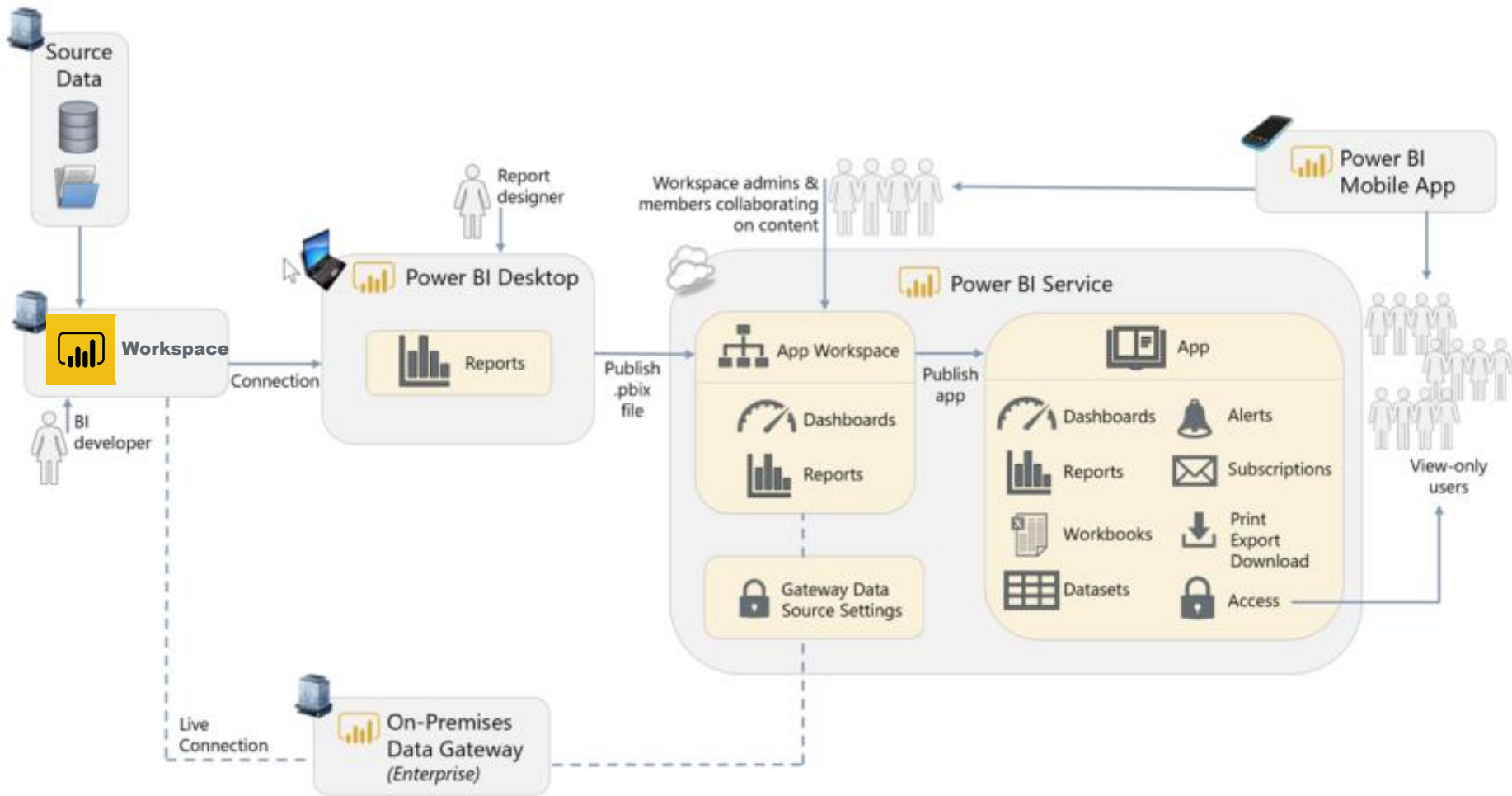


Connectivity: Power BI Premium



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Full architecture: IT-Managed Self-Service BI



Governance

- ▶ What and how?



Where can you implement governance?

- ▶ Transfer the ownership
 - Gateway Data Sources
- ▶ Data refresh
 - Gateway Data Sources
- ▶ Service tenant settings
 - Admin portal
 - Create App workspaces
 - Deploy Apps
 - Sharing
- ▶ Setup processes
 - Review, test, approval



Demo: Tenant settings in the admin portal

- ▶ Enabled for the entire organization
- ▶ Disabled for the entire organization
- ▶ Enabled for a subset of the organization
- ▶ Disabled for a subset of the organization



Questions



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Usefull ressources



- ▶ Planning a Power BI Enterprise Deployment (whitepaper):
<https://go.microsoft.com/fwlink/?linkid=2057861>
- ▶ Planning Large-Scale Power BI Deployments (video):
<https://www.youtube.com/watch?v=PgS2kuD94xA>
- ▶ Administering Power BI in the admin portal (how-to):
<https://docs.microsoft.com/en-us/power-bi/service-admin-portal>
- ▶ Designing custom navigation for Power BI apps:
<https://powerbi.microsoft.com/en-us/blog/designing-custom-navigation-for-power-bi-apps-is-now-available/>
- ▶ Shared and certified datasets: <https://powerbi.microsoft.com/en-us/blog/heads-up-shared-and-certified-datasets-are-coming-to-power-bi/>