

7/17/2019

Lessons Learned from a Successful Enterprise Power BI Deployment



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Agenda

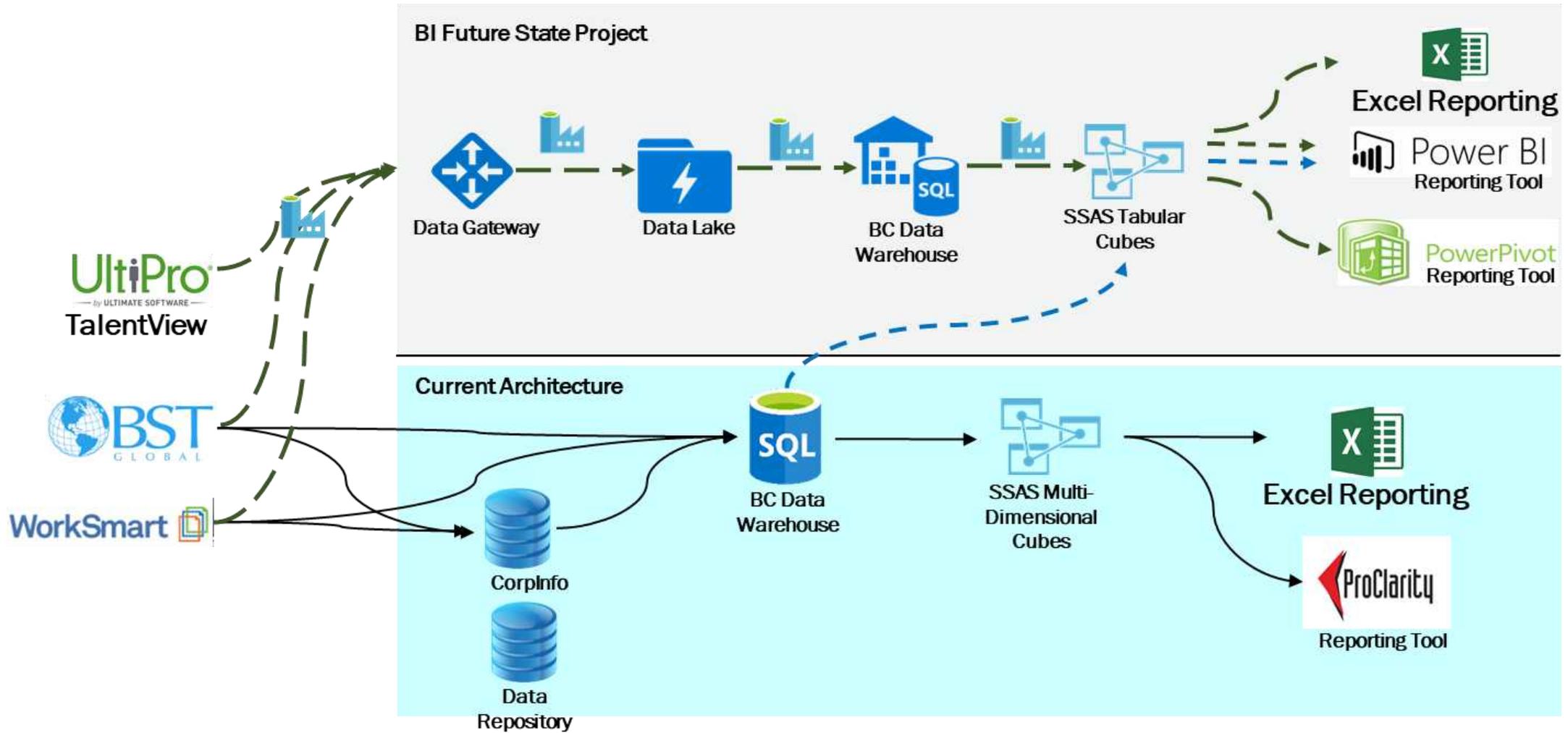
- What We Did / Architecture (Current & New)
- Executive Support
- Proof of Concepts (POCs) / Bake-Offs
- Tool Selection
- Deployment Stages / Agile BI
- Change Control (Communication)
- Training
- Tips & Tricks
- Q & A

What We Did

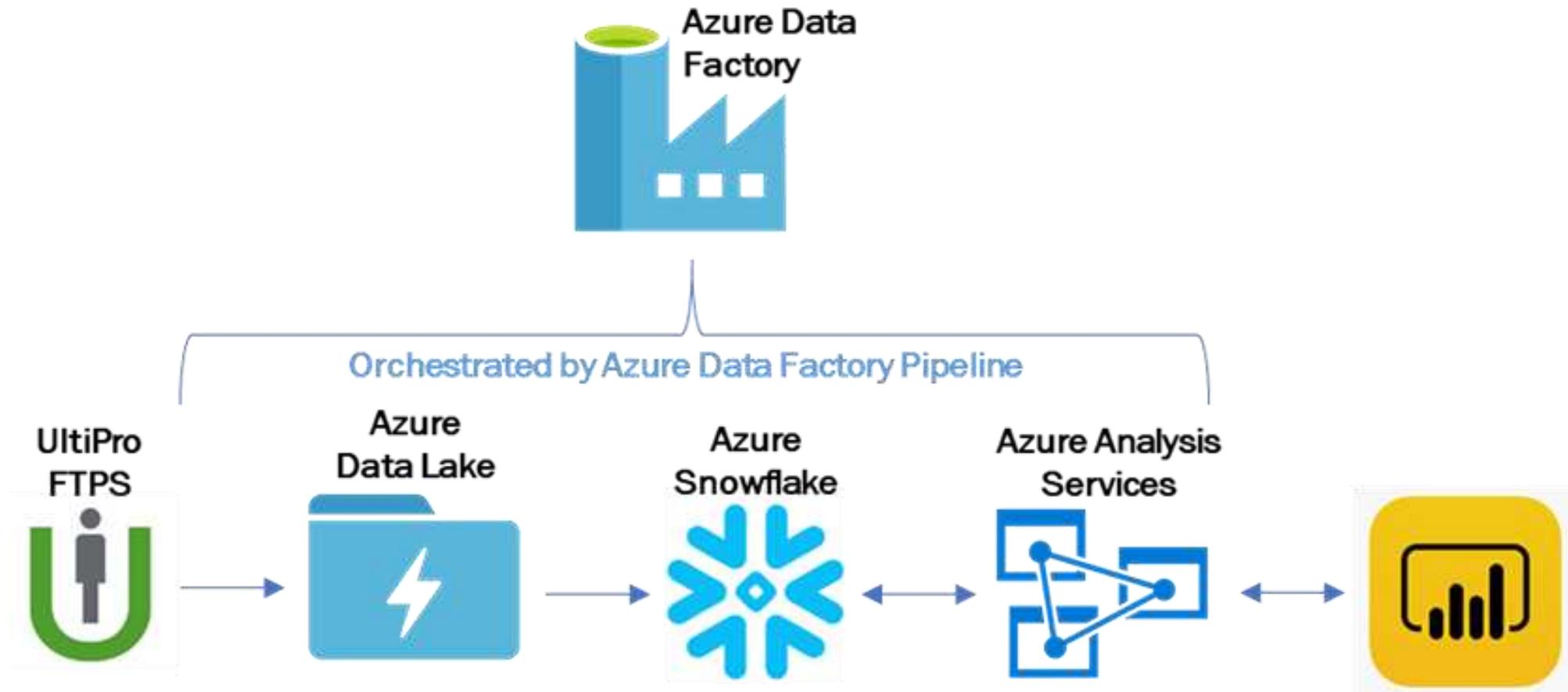
- New Snowflake Schema DW built on top of 5+ year old Star Schema DW
 - Leverages existing ETL
 - Quicker to get first reports out
- Move from 6+ Multi-Dimensional Cubes in on-prem SQL Server to 1 Tabular Model on Azure Analysis Services
- Replace Excel Spread-mart reporting with Power BI (using Power BI Premium to save costs for 1500+ users)
- 6 months after first Power BI report 1000+ users
- Replacing existing source system feeds to load Azure Data Lake and move to ELT with Azure Data Factory and Azure Databricks + Azure Snowflake for Staging/DW

Architecture (Current)

- Interim Prototyping
- Future State Integration
- Current State Integration



Architecture (New)



Executive Support

- Find support for the project within your company, **outside of IT**
- Higher level support from outside of IT helps
- Help to navigate politics
- Gives better view that it is not another “IT project”
- Can provide the necessary reach for committees that will be needed for standards, governance and policies

Proof of Concepts (POCs) / Bake-Offs

- Use them!
- Great chance to try out and learn new technologies/tools
- If you are trying unfamiliar technologies use 3rd party consultants
- If you have multiple technologies that will work use it as a bake-off
- Make sure to set achievable goals and timelines
- Document everything and save all scripts/code
- Talk to vendors to see about getting credits/time for evaluation

Tool Selection

- Before formal evaluation begins:
 - Set goals for what you want tools to do
 - Set time limits on evaluation
 - Make sure you are trying to be “fair” in the evaluation
- Don't let “future” upgrade promises drive your selection
- Involve the whole team or at least multiple people in on the process
- Get the latest prices directly from vendor, don't rely just on website
- Make sure that all company standards/procedures will work with tool
- Get quotes on support

Deployment Stages / Agile BI

- MVP – Minimally Viable Product
- Don't try for a “Big Bang” or everything at once delivery, things **WILL** change
- Find ways to break up the solution
- Keep in mind some technologies/tools don't work well with multiple devs at the same time (SSAS Tabular .bim for example)
- Use Source Control! Git now works just about everywhere in Azure
- [Azure DevOps](#) is free for teams of 5 or less!

Sample Phased Approach

Phase 1

Visual Reporting with Improved Data

- Scope**
- Ten Power BI reports on top of improved data presentation models (Tabular)
 - Minor Improvements to Data Warehouse design to support Tabular models
 - Start Data Governance Process Implementation.

- Why?**
- Fastest path to business value
 - Low risk roll-out and change management plan
 - Improvement to data quality, but quality issues will remain until integration is replaced in Phase 3+.
 - Minimizes re-work that

Phase 2

TalentView Reporting

- In Scope:
 - Core HRMS & Recruiting
 - Clear Review (spreadsheet load)
 - Exit Surveys (spreadsheet load)
 - New Hire Surveys (spreadsheet load)
 - BUTR Reports
- Out of Scope
 - Onboarding
 - Historical Conversion

- The TalentView (UltiPro) system is a go-forward application that has not been implemented in the data warehouse.
- Avoids re-work
- Lower risk path for implementing cloud technology.

Phase 3+

Application Replacements and Data Integration

- Scope will be determined as part of project planning

- Avoids very large amount of throw-away work
- This work is required to fully address the quality issues that we are experiencing today.



Demo – Azure DevOps

Change Control (Communication)

- **COMMUNICATE!**
- Let users know what/when/why/how in all messaging
- Provide links to all resources
- Use platforms like Microsoft Teams, Yammer or Slack to allow for open communication
- Find the right balance of communication, not too little or too much
- Release notes for changes available to everyone
- Provide webinars and other chances for users to see reports in action

Sample New Report Communication

Today we are releasing a redesigned report to all employees. The report is available in the secure cloud environment of Microsoft's Power BI.com website. We've listened and know that you want more information about how the company is performing. This report is the first of many reports to be released. This is an exciting time for us. We have worked hard to create a new foundation for user-friendly data and analytics. Many different stakeholder groups came together to design and develop this solution, and we are excited to share the first report today.

Please review the information and instructions below. Feel free to reach out to [xxx](#) as you have more questions or feedback.

Report Overview

Describe the report being released and some highlights of what it provides to the users.

How do I get Training?

Please watch these training videos before you begin:

[Quick Start: Finding Reports and Report Filters](#)

[BI Consumer Training](#)

[Report Walkthrough](#)

You can also dial into one of our upcoming brown bag sessions to ask questions and see examples:

12/31/9999 11:30AM MT

12/31/9999 12:30PM MT

You can click on the attached calendar invites to add to your calendar. All calls are on xxx and can be accessed from the following web link.

How do I access the Report?

All reports are accessed through www.powerbi.com. You can logon with your normal credentials.

After logging in, please follow these instructions to add the app:

- [Steps to add Power BI App](#)

After the app is installed, you can access the report by selecting the app and then clicking the report name. You can also use the link below to directly open the report.

This report will replace the report on the My Info -> xxx tab.

[\[Click Here to Access the Report\]](#)

Training

- Lots of free resources for Power BI online
 - Pragmatic Works free [Dashboard in a Day](#) online
 - [sqlbi.com](#) free Intro to DAX & Intro to Data Modeling for Power BI Video Courses
 - [community.powerbi.com](#)
 - [PowerBI.com](#)
 - Many more, just search for “Power BI training”
- Record your own videos using a screen capture application
 - Look into using business experts/users to narrate the walkthroughs
- Make experts available to help users (Center of Excellence)
- Send regular emails or messages with updated information on reports to keep users aware of changes

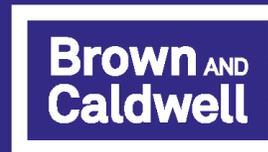
Tips & Tricks

- Power BI is still being updated constantly!
 - Users that need Power BI Desktop should get it from Microsoft Store as it auto-updates
 - Or it will have to manually updated
- Be careful creating a corporate theme for Power BI reports
 - Don't create every entry that is possible to configure, just what you need to override
 - As new theming items are added you will need to update the theme and re-apply to all reports
 - Use colors that are complementary and work well with vision issues ([see Meagan](#))

QUESTIONS?



it's about connecting



essential ingredients®

<https://tinyurl.com/DSSUGJune2019Steve>

Thank You

@stevewake

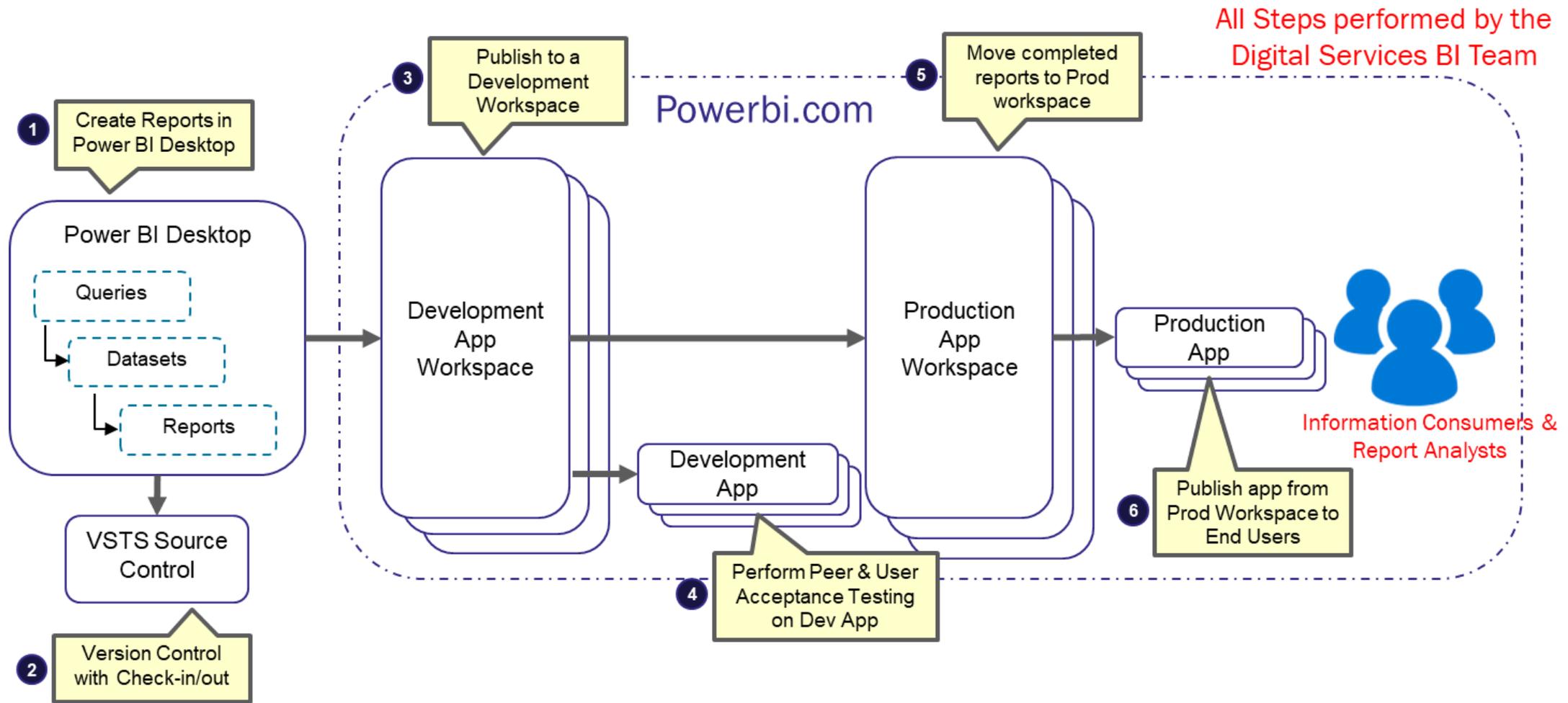
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Appendix

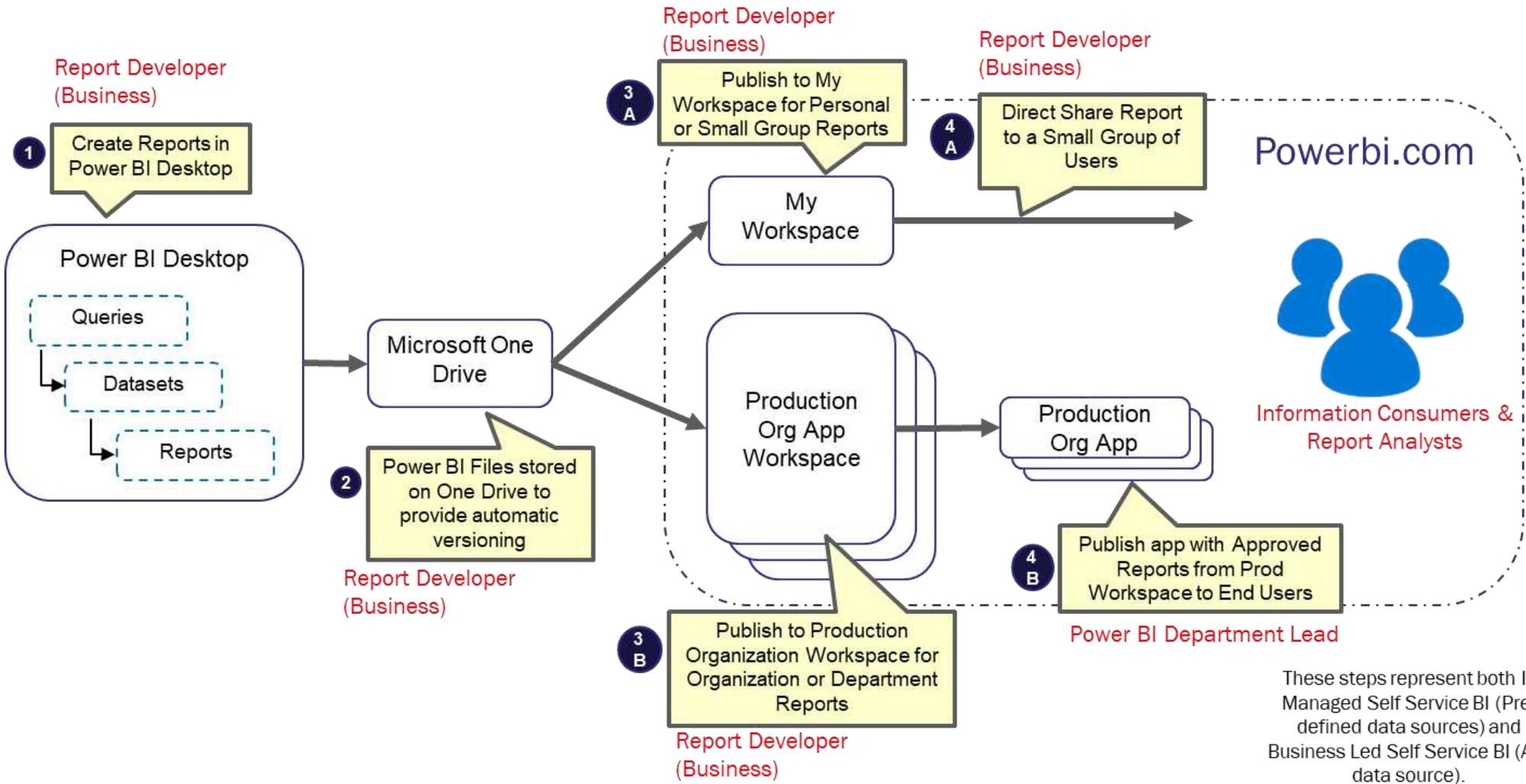


Standardized Corporate Report Development Steps



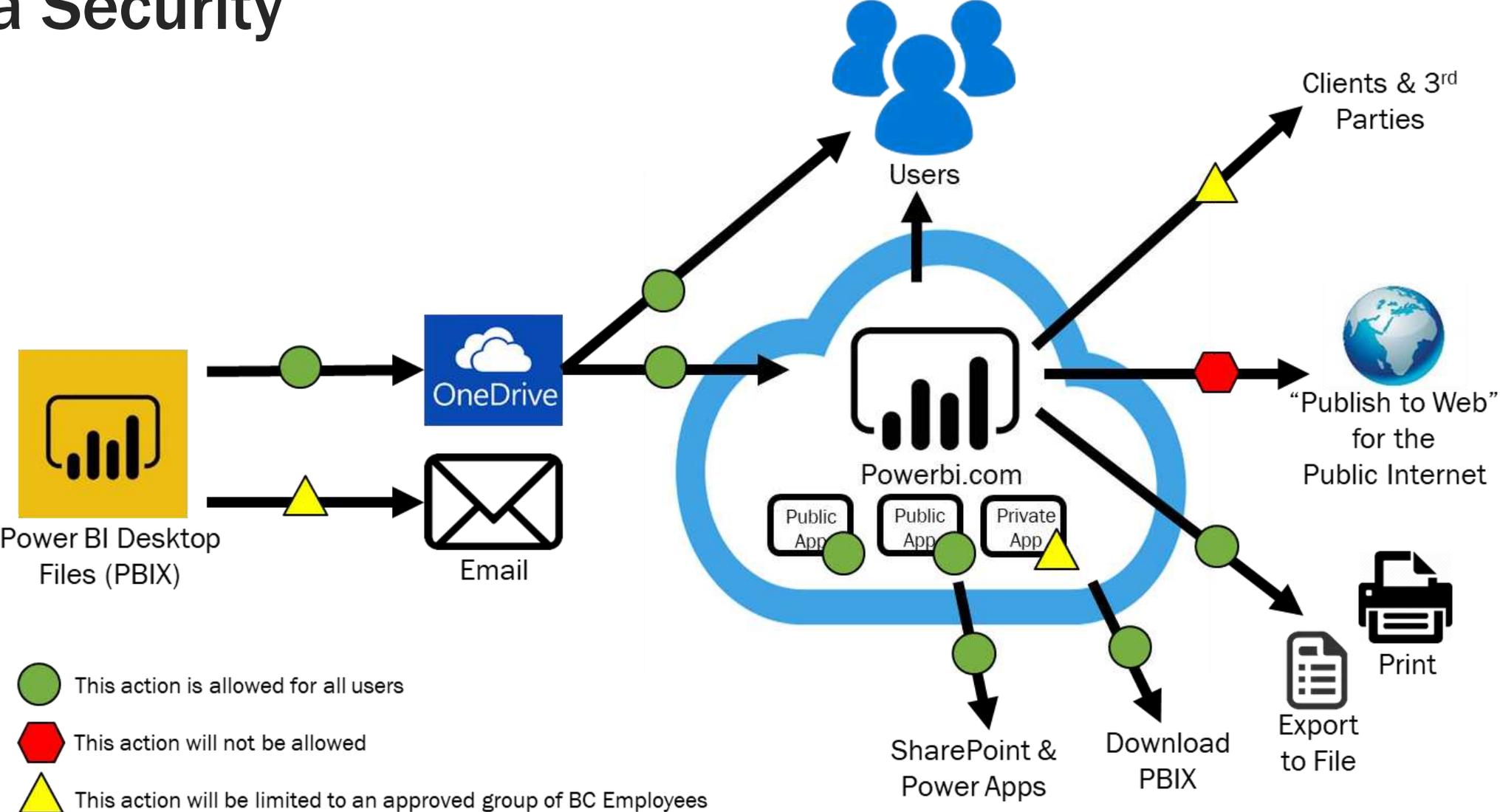
Note: Power BI APIs would allow for automated deployment (clone report to a new workspace, map to a different dataset, etc.)

Organization & Small Group Report Development Steps

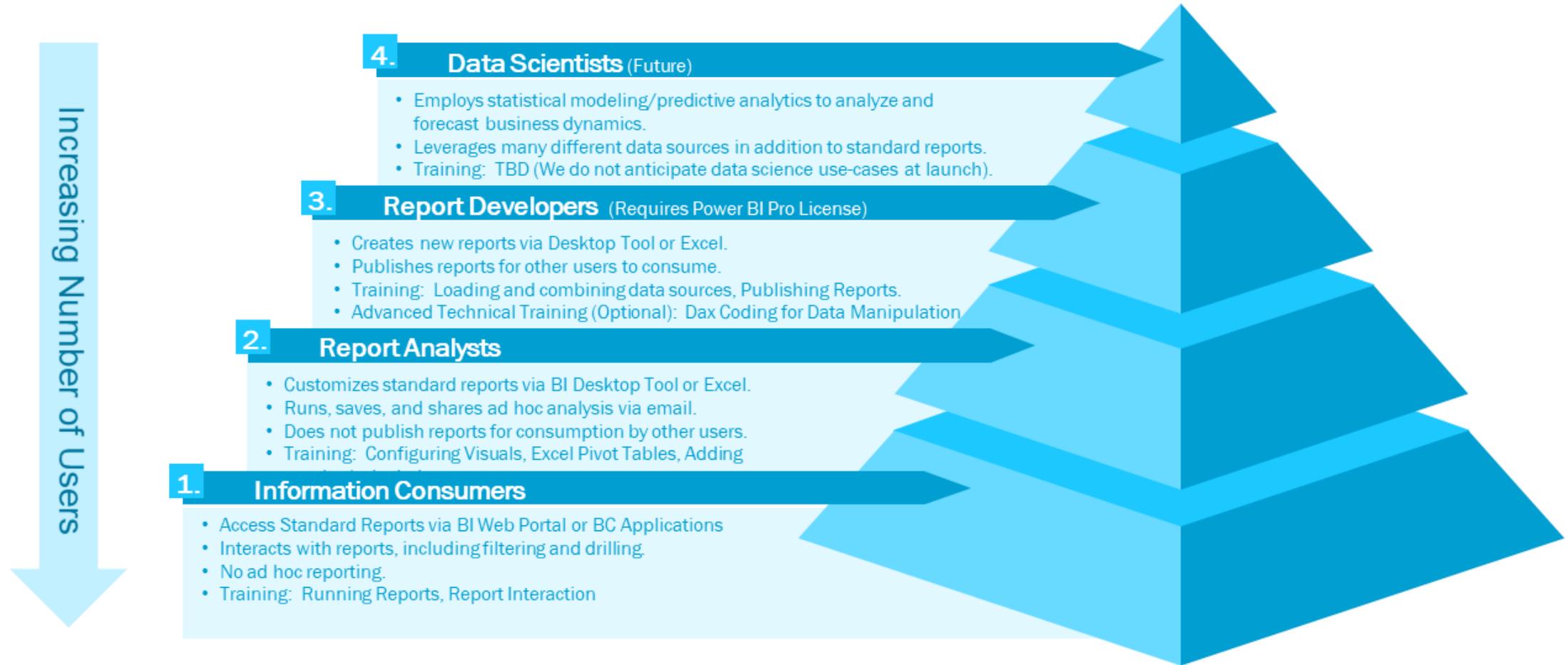


These steps represent both IT Managed Self Service BI (Pre-defined data sources) and Business Led Self Service BI (Any data source).

Data Security



Types of BI Users



Types of Reporting



* Digital Services will provide training and troubleshooting support for all types of reporting as time allows. However, the DS BI team is not staffed to support all reports in these categories.