Power BI Adoption Plan

Writers:

Technical Reviewers:

Contents

Section 1. Introduction

Executive Summary

Purpose of this Plan

Current BI State

Measures of Success

Section 2. Roles and Responsibilities

The following individuals have been identified and have been involved in the decisions made within this document:

Roles	Individual - Team / Roles
Corporate Sponsor	
Power BI Champion	
Data / Information Security Manager	
Data Architect	
Data Steward	
BI Developer	
Power BI Administrator	
BAU Support Specialist	
Business Support Specialist	

Responsibilities

Section 3. Data Sources

There are a number of [data sources](#) that can be used with Power BI.

Below is a summary of the identified data sources:

Data Source	Source Type

SQL Server

When working with a SQL Server Database there are a few things to consider when it comes to deciding how to use it with Power BI. You need to consider the location of the data source (on-premises or cloud), if security exists on the data source and whether its purpose is as a transactional or a reporting database.

Excel Files

Master Data Management

Enterprise Data Catalog

Enterprise Data Dictionary

Section 4. User Roles

Power BI can be used in a variety of ways, from content creation, to embedding in customer application or support. In this section we will identify the different types of users, what they will do and what license/tools they require

Application and Service Requirements

Training

Section 5. Process

There are a number of elements of Power BI that need to be controlled by a process to provide a consistent experience, which is clearly defined. Below are the agreed processes for how each of these will be done at Contoso.

License Assignment

User, Group and Workspace Management

Security Group Creation

App Workspaces

Power BI Tenant Setting Changes

Section 6. Installation and Configuration

There are a number of elements of Power BI that need to be installed, e.g. Power BI Desktop and Gateways, as well as configured, such as Tenant Settings or Premium capacities. Below are the key decisions for how each of these will be done at Contoso.

Power BI Desktop

Power BI Mobile

Power BI Tenant Settings

The following Tenant Settings have been agreed:

Setting	Configuration
Create workspaces (new)	
Share content with external users	
Publish to web	
Export data	
Export reports as PowerPoint presentations	
Print dashboards and reports	
Publish content packs and apps to the entire organization	
Create template organizational content packs and apps	
Push apps to end users	
Ask questions about data using Cortana	
Use Analyze in Excel with on-premises datasets	
Use ArcGIS Maps for Power BI	
Use global search for Power BI	
Custom visuals	
Interact with and share R visuals	
Create audit logs for internal activity auditing and compliance	

Usage metrics for content creators	
Per-user data in usage metrics for content creators	
Data classification for dashboards	
Embed content in apps	
Create and use dataflows	

Power BI Environment Access

Access to non-Corporate Tenants

2-Factor Authentication

Self Sign-Up

ExpressRoute

Auditing

Gateways

Power BI Premium

Section 7. Rollout

When rolling out Power BI there are a few areas to consider, including who will get access when, how this will be communicated and document what will be supported.

Communications

Project Prioritization

Section 8. Centre of Excellence

Ways of Working

Section 9. Support

There are a number of elements of Power BI that need to be supports, e.g. Power BI Desktop and Gateways, as well as configured, such as Tenant Settings or Premium capacities. Below is a list of the support tasks and the individual who has been identified to support this task.

Area	Responsibility	Individual – Team / Role

Section 10. Next Steps

There are a number of steps required to complete the rollout of Power BI and a number of different parties involved. Below is a summary of what needs to be done and who needs to do it, as well as who will be responsible for supporting the different elements of Power BI.

These are the actions required before Power BI can be rolled out further.

Area	Action	Individual – Team / Role

Section 11. Getting Support from Microsoft and the Community

It is inevitable that, at some point, you will encounter a problem that you do not know how to solve. The first thing you must do is determine the kind of problem you have, and once you have done that you can determine the appropriate course of action and who you can ask for help.

Support and Help

Power BI Support, Service Outages, and Degradations
Although the Power BI Service is extremely reliable, there may be times when the Service is unavailable or certain features do not work as expected. The support page will tell you about any outages or degradations that Microsoft is currently aware of and the timelines for getting them resolved. You can also open a support ticket from this page, which is available to users with paid Power BI Pro licenses.
Power BI Service: https://powerbi.microsoft.com/en-us/support/
Power BI Embedded: https://azure.microsoft.com/en-us/status/

Reporting Issues
If you suspect that something is wrong with the Power BI Service and that Microsoft is unaware of the problem, or if you find a bug in Power BI Desktop, the place to report the problem is the Power BI Issues forum. Before you post, please search the forum to check whether someone else has already posted the same issue. If you have a new issue, when you post, make sure that you include full details of the steps needed to reproduce the problem and screenshots of any error messages that you receive.
Issues: https://community.powerbi.com/t5/Issues/idb-p/Issues/tab/most-recent

Getting Help with Power BI Development
If you are having trouble with any aspect of Power BI development or configuration, then the Power BI community forums are a great place to get free help and support from Microsoft and from other members of the Power BI community. Search the forums to see whether anyone else has asked the same question before you post. You will increase the chances of getting your problem solved if you post in the right forum for your issue, you supply all the necessary technical details and examples of your data, and you are polite and courteous.
Forums: https://community.powerbi.com/t5/Forums/ct-p/Forums

Issues, Feedback, and Suggestions for Improving Power BI

On the Power BI Ideas site (also known as User Voice) you can suggest improvements, add new ideas, vote for and/or comment on existing ideas, and view status of ideas that have been picked up by the product team (such as started, or under review). As always, please check to see whether a similar idea has already been suggested before you post. You can also vote for issues that other people have posted. Microsoft takes the feedback on this forum very seriously - the more votes an issue receives the more likely that it will be implemented.

UserVoice: https://ideas.powerbi.com/forums/265200-power-bi-ideas/filters/top

Finding a Consultant or Partner to Accelerate Your Power BI Roll-Out

Sometimes, building or extending an analytics solution requires bringing onboard a professional with deep knowledge in Power BI to architect the solution, setup the infrastructure, implement the first set of reports and dashboards and do a knowledge transfer to your team. Microsoft has a rich ecosystem of partners to build packaged industry solutions that can be customized and will result in reducing the time/cost required to build analytics solution by up to 50%-70%. High quality consulting service offerings that have clear deliverables and predictable prices make it easier to start quickly.

Power BI Partner page: https://powerbi.microsoft.com/en-us/partners/

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Learning More About Power BI

Power BI Team Blog and Videos

Power BI is a very powerful product that continually evolves and improves, so there is always more to learn about it. The Power BI blog has regular roundups of new updates and features, technical tips, and announcements. To keep your knowledge up-to-date, you should follow all posts on the official Power BI blog. The .pbix files used in the monthly release videos are now posted on GitHub.

Team blog: https://powerbi.microsoft.com/en-us/blog/

GitHub: https://github.com/Microsoft/powerbi-desktop-samples

Guy In a Cube YouTube Channel

The Guy In a Cube YouTube channel is another excellent resource available for you to learn about Power BI:

Guy In a Cube: https://www.youtube.com/channel/UCFp1vaKzpfvoGai0vE5VJ0w

Power BI Documentation

The official Power BI documentation site is very detailed and updated on a regular basis, and should be your primary reference when you need to learn about a feature of Power BI.
System Documentation: https://powerbi.microsoft.com/en-us/documentation/
What's New in the Power BI Service: https://docs.microsoft.com/en-us/power-bi/service-whats-new

Power BI Community Site

The Power BI Community Site includes many contributions including a community knowledgebase, forums for Q&A, announcements, and several galleries such as the Themes Gallery, Data Stories Gallery, R Scripts Gallery, Quick Measures Gallery, among others.
Power BI Community: http://community.powerbi.com/

Power BI User Groups

Power BI user groups have been established in many places around the world. User groups are a great place to hear presentations by Power BI experts, talk to other Power BI users, and potentially even recruit new staff. Conference dates and locations, such as the Power BI World Tour, are also announced through this site.
User Groups: https://www.pbiusergroup.com

Guided Learning

For introductory training on Power BI, the videos in the Guided Learning area of the Power BI site are useful place to start. Videos and written instructions are available in an easy-to-learn format.
Guided Learning: https://powerbi.microsoft.com/en-us/guided-learning/

Power BI Community Bloggers

The Power BI blog roll occasionally aggregates posts from many bloggers in the Power BI community. There's a wealth of knowledge available an enthusiastic community of bloggers. As with all online resources, pay attention to the date published as information could be out of date due to the pace of change with Power BI.
Blog Roll: https://community.powerbi.com/t5/custom/page/page-id/BlogRollExtracts

Power BI Roadmap

Details of the Power BI roadmap and planned features can be found in the Power BI section of the Business Applications Group's release notes site.
Roadmap: https://docs.microsoft.com/en-us/business-applications-release-notes/april18/power-bi/overview

Community Tools

Following are some of the tools contributed by the vibrant Power BI user community. These are independent tools not supported by Microsoft, some of which are free and others are paid products.

DAX Studio

DAX Studio is a client tool for executing and troubleshooting DAX queries.
Contributed and supported by: [SQLBI](#)
http://daxstudio.org/

DAX Formatter

The DAX Formatter tool improves the readability of DAX.
Contributed and supported by: [SQLBI](#)
http://www.daxformatter.com/

Lingo

Lingo is a web-based code editor for editing the linguistic schema in Power BI, for the purpose of improving how the natural language Q&A functionality.
Contributed and supported by: [Power BI Tips](#)
https://powerbi.tips/2018/04/introducing-lingo/

Report Theme Generator

The Report Theme Generator is a web-based tool which allows a user to specify properties and download into a JSON file to be used in a Power BI theme.
Contributed and supported by: [Power BI Tips](#)
https://powerbi.tips/tools/report-theme-generator-v3/

Power BI Helper

The Power BI Helper aids in removing unused data elements from a model, finding dependencies, and in documenting a model.
Contributed and supported by: [RADACAD](#)
http://radacad.com/power-bi-helper

Power BI Documenter

Power BI Documenter is a tool which auto-generates documentation from Power BI Desktop, for the purpose of identifying and documenting data usage, visuals, and development practices.
Contributed and supported by: [Data Vizioner](#)
http://www.datavizioner.com/power-bi-documenter/how-to-use-power-bi-documenter/

Power Update

Power Update is a tool which moves scheduled refresh operations for datasets in Power BI Desktop or Excel to a local machine.
Contributed and supported by: [Power On BI](http://poweronbi.com/power-update/)
http://poweronbi.com/power-update/

Power BI Visual Planning

The Visual Planning tool allows for users to edit data directly in a report or dashboard.
Contributed and supported by: [Power On BI](http://poweronbi.com/powerbi-visual-planning/)
http://poweronbi.com/powerbi-visual-planning/

Power Pivot Utilities

Power Pivot Utilities is an add-in for Excel. It aids with documenting models, relationships, calculated columns, unused columns, and memory usage via a set of VBA macros.
Contributed and supported by: Bertrand d'Arbonneau
https://www.sqlbi.com/tools/power-pivot-utilities/

Turbo.net Power BI Desktop Application

The Turbo.net tools allow applications to run on any desktop. Their version allows Power BI Desktop to run on an Apple Mac.
Contributed and supported by: [Turbo.net](https://turbo.net/run/powerbi/powerbi)
https://turbo.net/run/powerbi/powerbi

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Additional Resources and Links

Power BI Premium	Microsoft Power BI Premium Whitepaper
	This whitepaper, which was published October 2017, describes Power BI Premium.
	https://aka.ms/pbipremiumwhitepaper
	Power BI Premium Planning and Deployment Whitepaper
	This whitepaper provides guidance and best practices for planning and deploying Premium capacity for well-defined workloads.
	https://aka.ms/Premium-Capacity-Planning-Deployment
	Power BI Premium Calculator
	The online calculator is helpful for estimating pricing for dedicated Premium capacity in Power BI.
	https://powerbi.microsoft.com/en-us/calculator/

DATAMARTIN

Power BI Embedded	**Plan Capacity for Embedded Analytics Whitepaper** This whitepaper provides guidance for application developers and ISVs (independent software vendors) for how to determine capacity for Power BI Embedded. https://aka.ms/pbiewhitepaper
Power BI Report Server	**Support Timeline and Version History** This page describes the timeline for support for each release of Power BI Report Server, as well as the history of releases. https://powerbi.microsoft.com/en-us/documentation/reportserver-support-timeline/ **Capacity Planning Guidance** This whitepaper offers guidance on capacity planning for Power BI Report Server by sharing results of numerous load test executions of various workloads. https://docs.microsoft.com/en-us/power-bi/report-server/capacity-planning
Security and Privacy	**Power BI Security Whitepaper** The Power BI Security Whitepaper was updated December 2017. https://powerbi.microsoft.com/en-us/documentation/powerbi-admin-power-bi-security/ **Power BI and GDPR** This whitepaper discusses GDPR (General Data Protection Regulation) compliance, data protection, privacy, and how it relates to Power BI. https://aka.ms/power-bi-gdpr-whitepaper **Microsoft Trust Center** The Trust Center publishes the status for compliance, certifications, and attestations. Security-related information is available as well. https://www.microsoft.com/en-us/trustcenter/cloudservices/powerbi **Microsoft Enterprise Privacy Statement** Includes the privacy terms for Microsoft Online Services, including Power BI. Data collection, and how personal data is used, is described here. https://www.microsoft.com/EN-US/privacystatement/OnlineServices/Default.aspx
Business-to-Business Distribution	**Distribute Power BI Content to External Guest Users Whitepaper** This whitepaper outlines how to distribute content to users outside the organization using Azure Active Directory Business-to-business (AAD B2B) capabilities. https://aka.ms/powerbi-b2b-whitepaper

Governance and Best Practices	**Power BI Governance and Deployment Approaches Whitepaper**
	This whitepaper discusses governance and ways to deploy Power BI. It was published March 2016, but the ideas and processes discussed are still relevant. https://powerbi.microsoft.com/en-us/documentation/powerbi-admin-governance/
	Best Design Practices for Reports and Visuals
	This page provides a wealth of information about design principles for effective Power BI data visualizations. https://docs.microsoft.com/en-us/power-bi/power-bi-visualization-best-practices
	Bidirectional Filtering in Power BI
	This whitepaper discusses the impact of using bidirectional cross-filtering in Power BI Desktop (and Analysis Services), including behaviors a data modeler/author needs to be aware of in order to use the capability without unintended side effects. https://docs.microsoft.com/en-us/power-bi/desktop-bidirectional-filtering
Other	**Advanced Analytics with Power BI**
	This whitepaper discusses advanced analytics capabilities of Power BI, including predictive analytics, data visualizations, R integration, and DAX (Data Analysis eXpressions). https://info.microsoft.com/advanced-analytics-with-power-bi.html
	Power BI and SAP BW
	This document describes how SAP customers can benefit from connecting Power BI to existing SAP Business Warehouse (BW) systems. https://aka.ms/powerbiandsapbw
	Microsoft Online Services Terms
	This page documents the terms which govern Microsoft Online Services, including Power BI. http://www.microsoftvolumelicensing.com/DocumentSearch.aspx?Mode=3&DocumentTypeId=31
	Sovereign Clouds
	This page lists Power BI Service availability for sovereign clouds which comply with local regulations. https://powerbi.microsoft.com/en-us/clouds/

Appendix

Notes

Adoption

- Do you have an existing governance plan?

Governance

- Who is fulfilling the different roles? - **ADD THIS QUESTION**
- What is your organisation's current state of BI?
- What data sources are accessible for analysis?
  - Location
  - Data Source type
  - Size
  - Refresh frequency
  - Who can access
  - How can someone request access
  - Monitoring
  - Performance implications
- Do you currently have a Master Data Management Process?
- Do you currently have an Enterprise Data Catalog?
- Do you currently have an Enterprise Data Dictionary?

Service Management

- What licensing do you currently have available?
- How will you assign Power BI Pro licenses?
- Who is responsible for creating security groups? **MOVE THIS QUESTION to after tenant settings**
- Which type of App Workspaces do you want to use? **- Security person should be in this to talk about data sharing**
- Who can create workspaces? - add this as an explicit question
- When should they create workspaces? - add this as an explicit question
- How will you manage installing Power BI Desktop?
- How will users install drivers on their machines (if required)?
- Do you want to use Power BI Mobile?
- Who will be responsible for administering Power BI Mobile?
- Do you want to manage mobile devices?
- Who will be responsible for administering Power BI tenant settings?
- What should the Power BI Tenant Settings be set to? - **UPDATE SETTINGS**
  - Create workspaces
    - Enabled

- Share content with external users
  - Enabled
- Publish to web
  - Enabled
- Export data
  - Enabled
- Export reports as PowerPoint presentations or PDF documents
  - Enabled
- Print dashboards and reports
  - Enabled
- Publish content packs and apps to the entire organisation
  - Enabled
- Create template organisational content packs and apps
  - Disabled
- Push apps to end users
  - Disabled
- Ask questions about data using Cortana
  - Enabled
- Use Analyze in Excel with on-premises datasets
  - Enabled
- Use ArcGIS Maps for Power BI
  - Enabled
- Use global search for Power BI
  - Enabled
- Add and use custom visuals
  - Enabled
- Allow only certified custom visuals (blocked uncertified)
  - Enabled
- Create audit logs for internal activity and compliance
  - Enabled
- Usage metrics for content creators
  - Enabled
- Per-user data in usage metrics for content creators
  - Enabled
- Data classification for dashboards
  - Disabled
- Embed content in apps
  - Enabled
- Allow service principals to use Power BI APIs
  - Disabled
- Create and use dataflows
  - Enabled
- Create Template Apps
  - Enabled
- Install template apps
  - Enabled

- Do you want to create reports on the Audit log?
- How will audit log data be used?

- Do you require connectivity to on-premises Data Sources?
- Who will be responsible for administering and monitoring Gateways?
- Where will Gateways be installed and how will they be configured?
- Do you require Power BI Premium?
- When should someone use Premium? - add this as an explicit question
- How will you purchase and configure Premium?
- How will you monitor Premium?

Security

- Do you want users to be able to access non-corporate tenants?
- Do you want to have 2 factor authentication for user access?
- Do you want to disable self-sign up for Power BI?
- Do you want to bypass the internet when connecting to Power BI?
- When should you use the various sharing options?

Roll Out and Support

- Have you identified initial projects to work on?
- What are the key user roles for Power BI?
- What licences are required by role?
- What skills are required for each role?
- Who will support Power BI?
- What level of support will you give users?
- What do you need to consider when someone changes role?
- Are you looking to build a Centre of Excellence Team?