# End-to-End Monitoring

For a successful Power BI implementation.









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Why monitoring

What do we want to monitor?

How to monitor this?

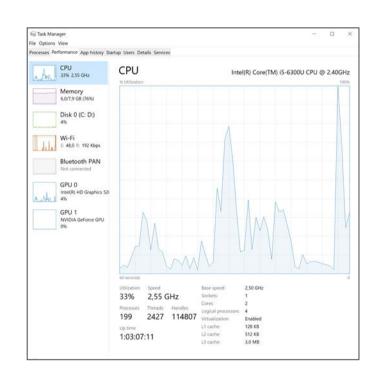




# First thoughts on monitoring?



Health monitoring



Task manager



Security







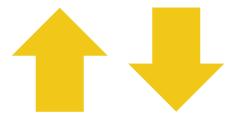
# **Delivery approaches**

**Business-Led Self-Service BI** 



Bottom-Up

IT- Managed Self-Service BI



Blended

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**Corporate BI** 



Top-Down



## **Exponential growth of content**

**Business-Led Self-Service BI** 



Bottom-Up



**Finance** 





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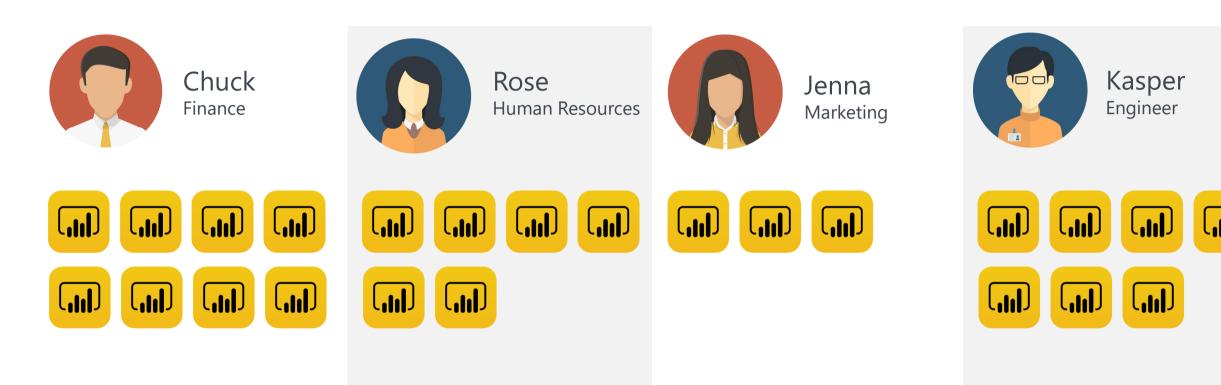








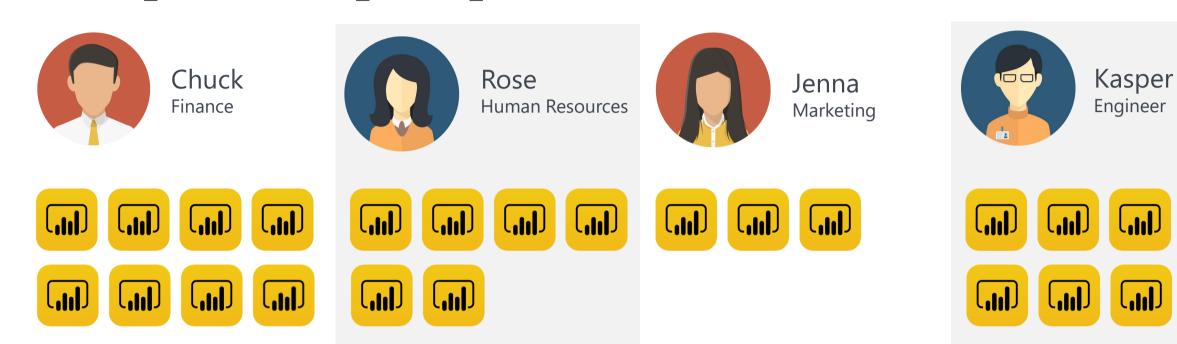
#### Get order in the chaos



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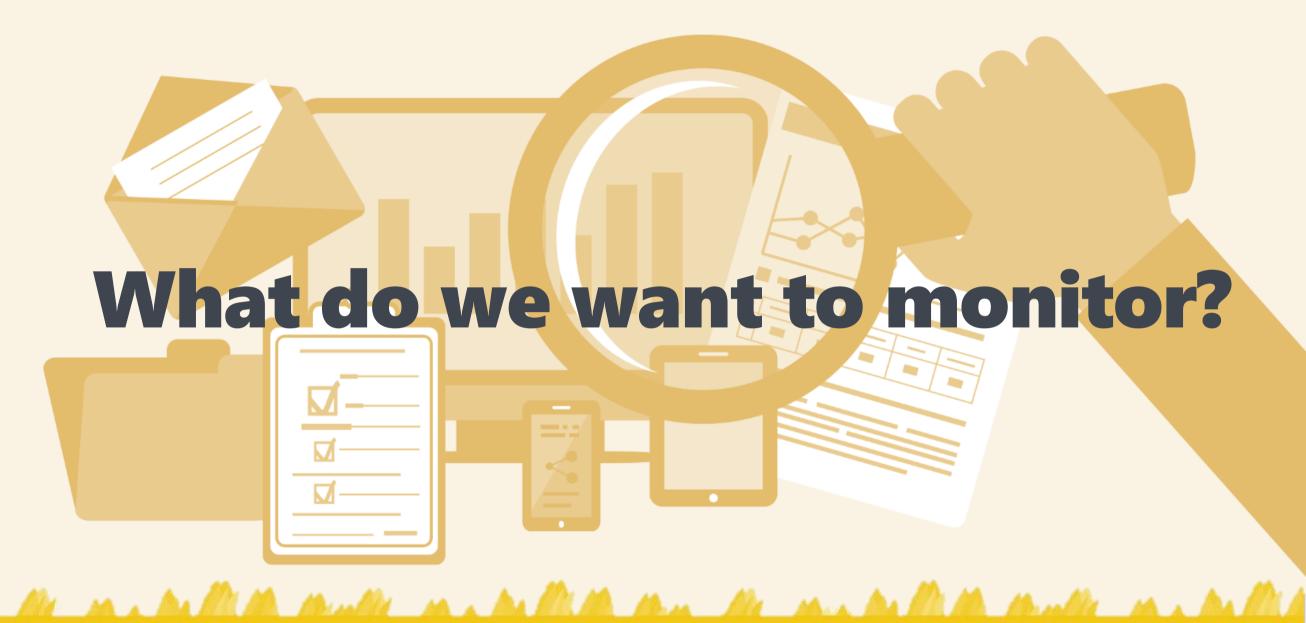


# Separate people and content!



According to a partle state from the sacretic to the sacretic state of the sacretic stat







#### What we need to monitor



Content availability



Usage

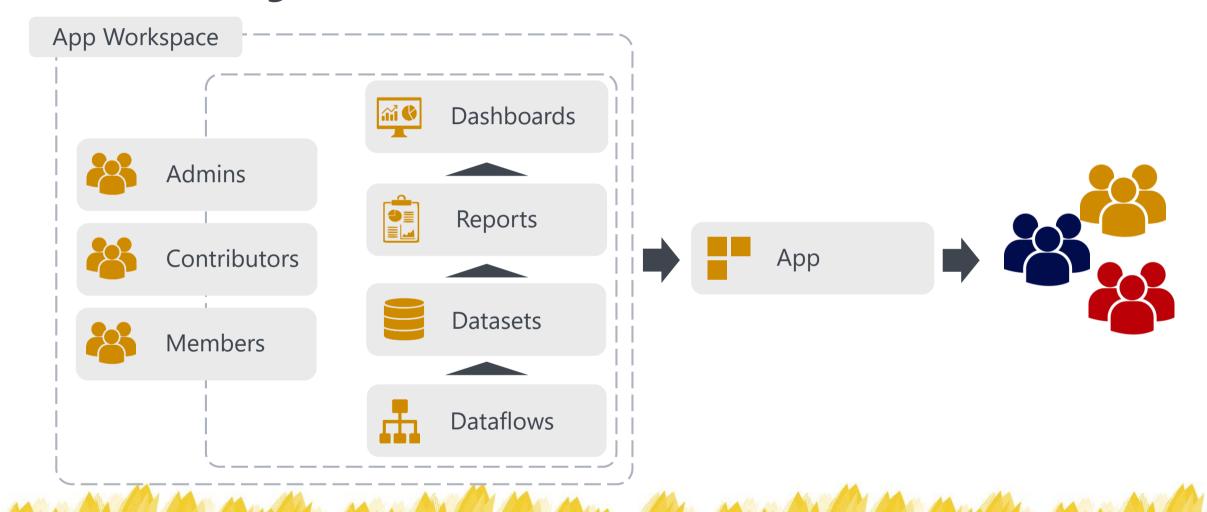
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Performance

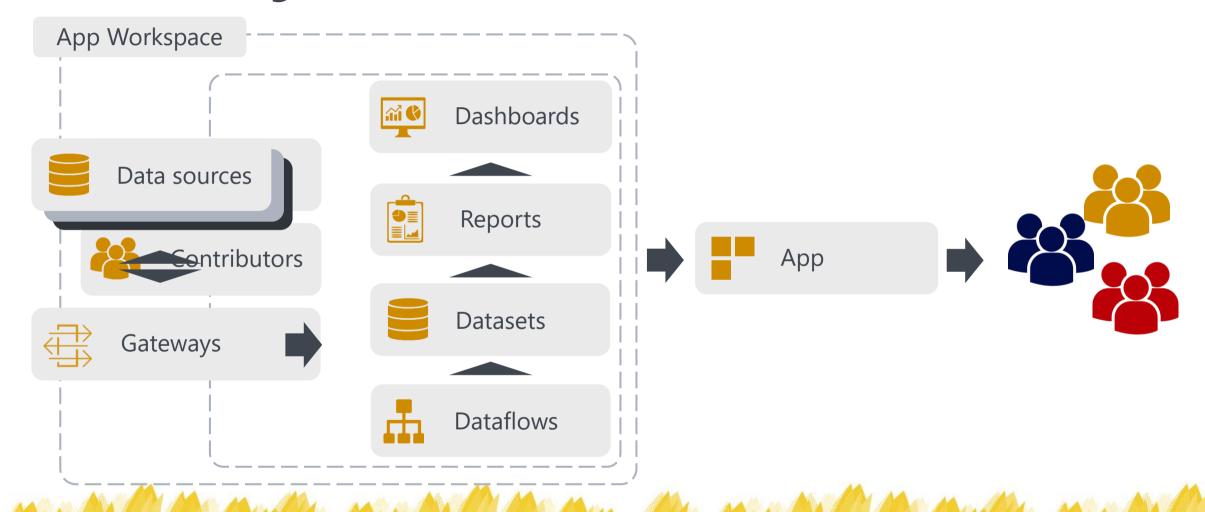


## What objects are available?



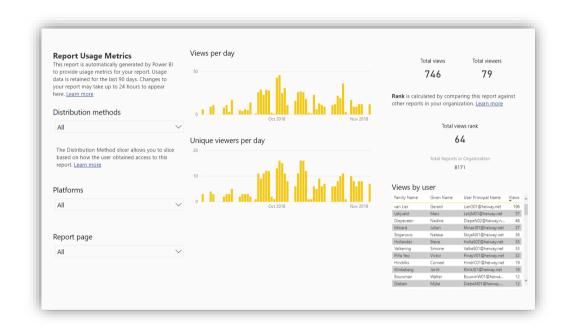


### What objects are available?

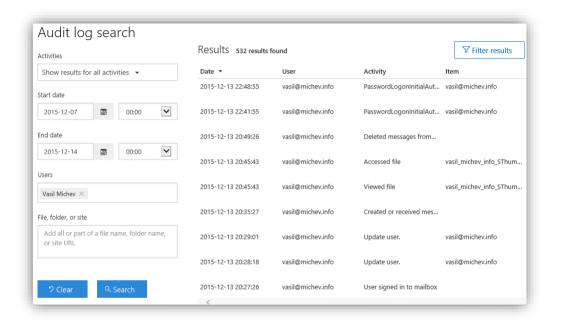




# What the Power BI Service provides



Usage Metrics in Power BI Service



Audit logs in O365 admin portal (manually)



## Power BI Audit Logs Activities

#### Power BI activities

Viewed Power BI dashboard

Edited Power BI dashboard

Shared Power BI dashboard

Viewed Power BI tile

Viewed Power BI report

Printed Power BI report page

Published Power BI report to web

Created Power BI report

Created Power BI dataset

Created Power BI group

Added Power BI group members

Created organizational Power BI content pack

Installed Power BI app

Updated organization's Power BI settings

Started Power BI extended trial

Created Power BI gateway

Added data source to Power BI gateway

Changed Power BI gateway admins

Created Power BI dashboard

Deleted Power BI dashboard

Printed Power BI dashboard

Exported Power BI tile data

Deleted Power BI report

Downloaded Power BI report

Exported Power BI report visual data

Edited Power BI report

Deleted Power BI dataset

Deleted Power BI group

Removed Power BI group members

Created Power BI app

Updated Power BI app

Started Power BI trial

Analyzed Power BI dataset

Deleted Power BI gateway

Removed data source from Power BI gatewi

Changed Power BI gateway data source use

Morally in a few Mills Mary Mr. Mary May May May May

Set scheduled refresh on Power BI dataset

Deleted organizational Power BI content pack

Edited Power BI dataset

Generated Power BI Embed Token

Updated Power BI dataset data sources

Binded Power BI dataset to gateway

Took over Power BI dataset

Imported file to Power BI

Generated Power BI datapool SAS token

Updated Power BI datapool

Viewed Power BI datapool

Set scheduled refresh on Power BI datapool

Received Power BI datapool secret from Key Vault

Updated Power BI email subscription

Created Power BI folder

Updated Power BI folder

Deleted Power BI folder access

Posted Power 81 comment

Analyzed Power BI report

Unpublished Power BI app

Renamed Power BI dashboard

Shared Power Bl report

Discovered Power BI dataset data sources

Requested Power BI dataset refresh

Changed Power BI dataset connections

Updated Power BI gateway data source credentials

Updated Power BI dataset parameters

Created Power BI datapool

Deleted Power BI datapool

Exported Power BI datapool

Requested Power BI datapool refresh

Created Power BI email subscription

Deleted Power BI email subscription

Deleted Power BI folder

Added Power BI folder access

Updated Power BI folder access

Deleted Power BI comment

Viewed Power Bl usage metrics







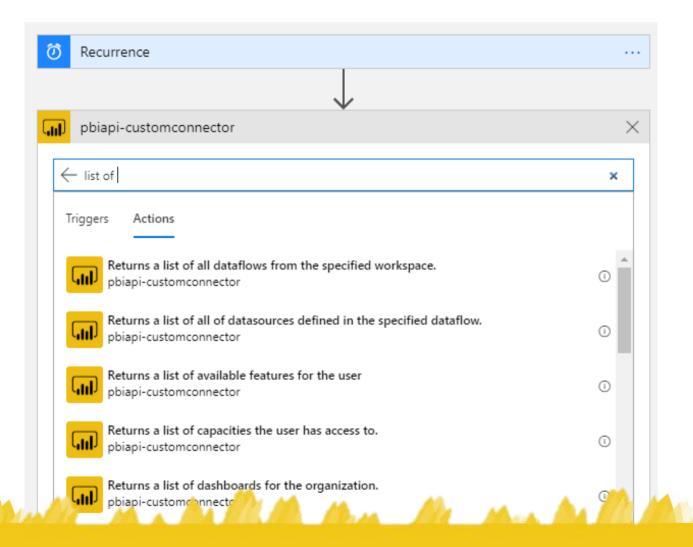
#### **High-level Architecture**

Ingest & Store Model & Serve Data sources **Audit logs** Azure Logic Apps Gateway logs Power BI Monitor Power BI Service API

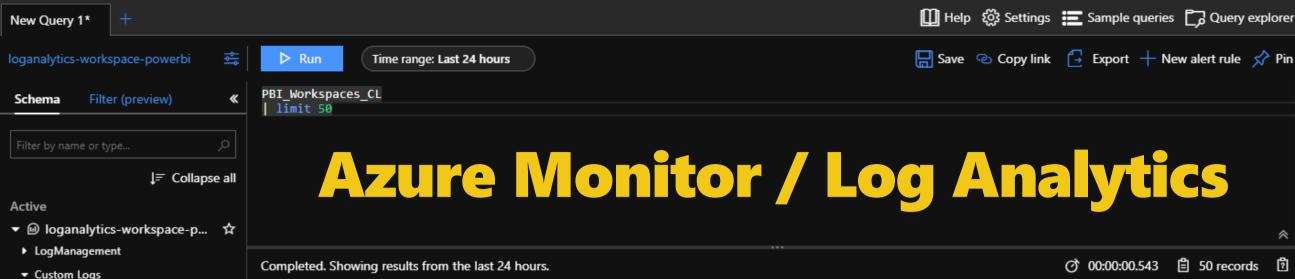
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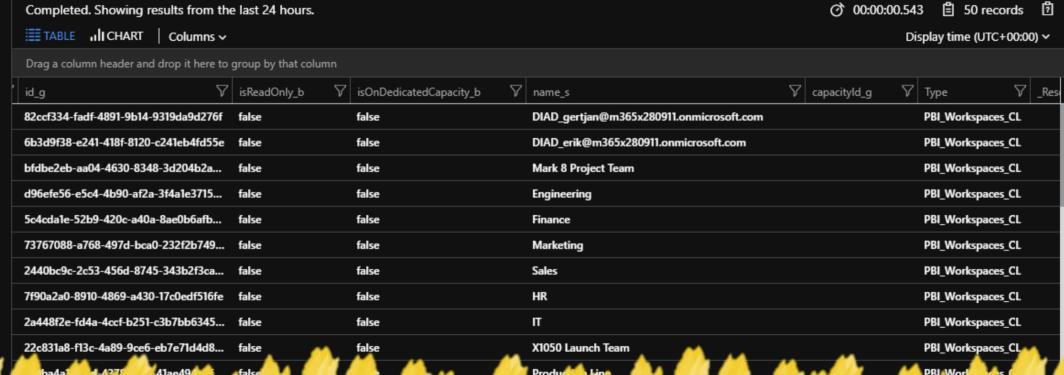


#### **Data collection**











▶ 目 GatewayErrorLog\_CL

▶ 目 GatewayInfoLog CL

▶ 目 MyRecordType CL

▶ 目 GatewayNetworkLog CL

▶ 目 OnPremDataGatewayLogs CL

▶ ₱ PBIMonitorAADActivitiesTE...

▶ ■ PBIMonitorGeneralActivities...

▶ ■ PBIMonitorTenantGroups CL

▶ 目 PBIMonitorTenantUserMem...

▶ ■ PBIMonitorTenantUsers CL

▶ 目 PBI\_AuditLog\_Activities\_CL

▶ 目 PBI\_WorkspaceUsers\_CL

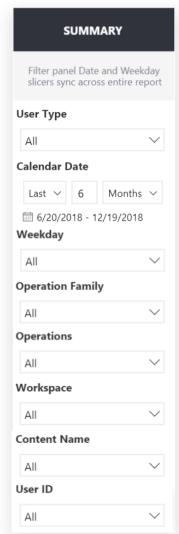
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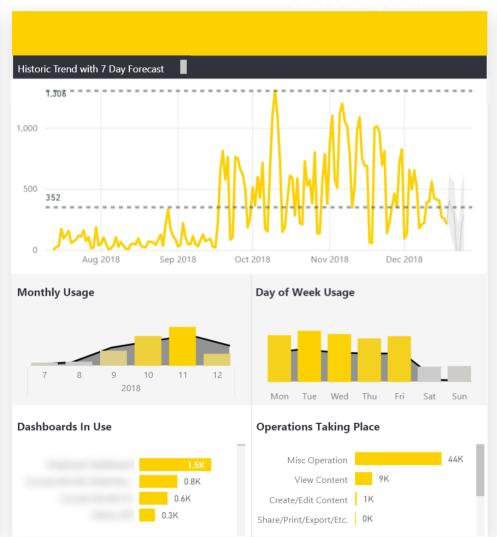
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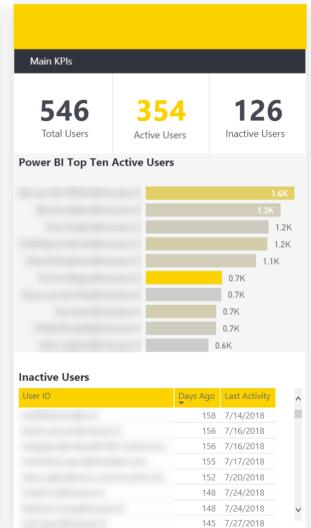
▶ **■ PBI\_Datasets\_CL** 

▶ 目 PBI\_Reports\_CL

## Report









9 MARCH

Summary Views Summary Dataset Summary Apps Summary Extraction Summary Creation & Deletion Summary Use Type Summary User Details Dataset Details Import

#### Recap

- Monitoring is more than usage insights.
- Monitor end-to-end, not only individual reports!
- Monitoring helps you with a successful implementation of Power BI within an enterprise environment.



#### Download for free!

Https://bit.ly/cheatsheetpbi



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# POWER BI CHEAT SHEET

#### Power Query

- Turn on the Formula Bar so you get familiar with Power Query (M) code. M is an easy way to quickly make small adustments.

#### when there are outler requirements (use real-time imagins). Did you know you can transform your data by using Python and R in the Power BI Query Editor? Code examples (don't forget that Power Query / M is case-sensitive!)

#### Excel.Workbook(Web.Contents/"[urt]/[filename].xlsx"), null, true)

- 'ower Query M Formula Reference: http://bit.ly/PQMReference

#### I'VE GOT THE POWER BI

#### Data Model

December 2018

- Only use DAX Calculated Columns when it's not possible to create it using Power Qi.

- Use DIVIDE() to prevent division by 0, and to improve the speed of your divisions

- ()Comment DAX lines by pressing Alt + Shift + A or CTRL + /, and Shift + Enter for line breaks

- Download Tabular Editor: https://tabulareditor.github.io/. Show the last refresh date of your dataset: https://bit.ly/KasperOnBiRefresh/

macaw



# Service Platform Service Supply Service Service Supply Service Supply Service Supply Service Service Supply Service Servi