

Gaining Insights with Power BI

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Agenda

- Introduction to Power BI
- What are Dashboards & Reports?
- Administration
- Viewing & Sharing
- Working With Your Data
- DAX



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DanielGlenn.com



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Live Show
every Monday!

Recordings and get updates:
<https://MessageCenter.Show>

Who is InfoWorks?



Who is InfoWorks?

- ◆ Agile solution provider in the Mid-South region
- ◆ Focused on helping our client partners achieve great things
- ◆ 100% Employee Owned
- ◆ Diverse expertise to deliver sustainable solutions
- ◆ Voted a Best Place to Work nine times



Who
we are

960

Total Repairs

23

Average Repair Time (min)

10

Average Response Time (min)

14

Out of Service days

69

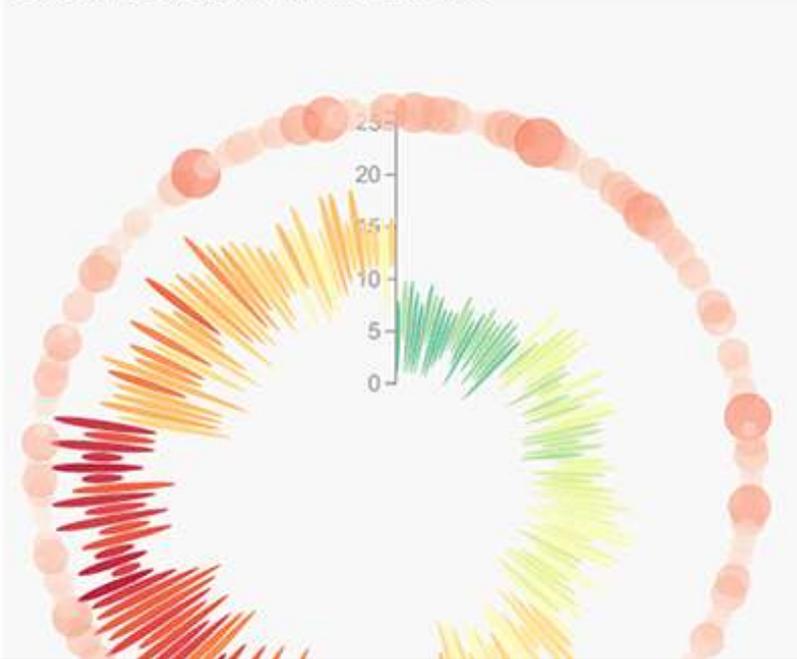
MTBF



Repairs and Average Repair Time by Year and Month



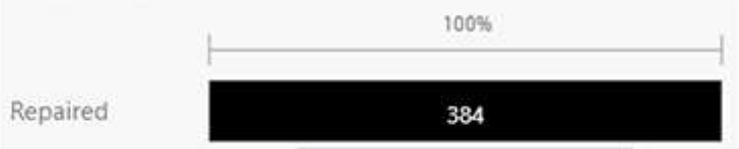
Temperature (C°) and Repairs Over Time



Count of Repairs by Location



Repairs by Action Taken



What is Power BI?

Experience Your Insight – any data, any way, anywhere

MICROSOFT CLOUD

Microsoft Azure Office 365
Microsoft Dynamics

Stream Analytics

NON-MICROSOFT CLOUD

Acumatica Marketo salesforce
COMSCORE Intuit QuickBooks twilio



Analysis

ON-PREMISE DATA

Hadoop SAP Microsoft SQL Server
ORACLE TERADATA IBM

Intelligent Apps



5,000,000+
subscribers

190+
countries

200,000+
organizations



Datasets

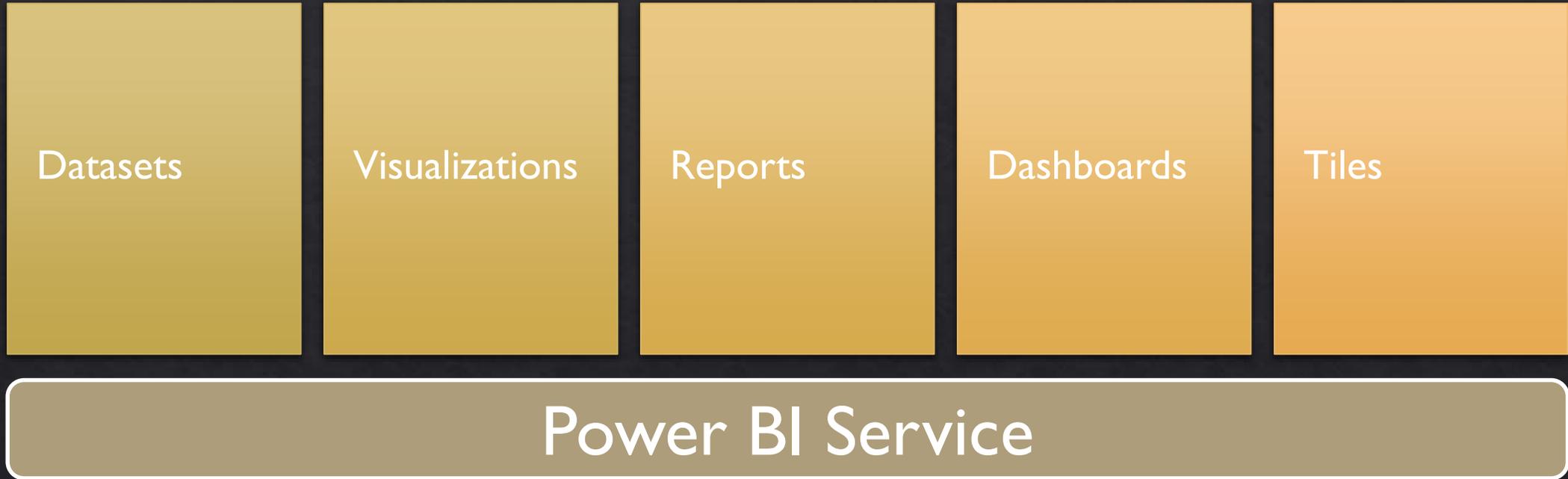
Visualizations

Reports

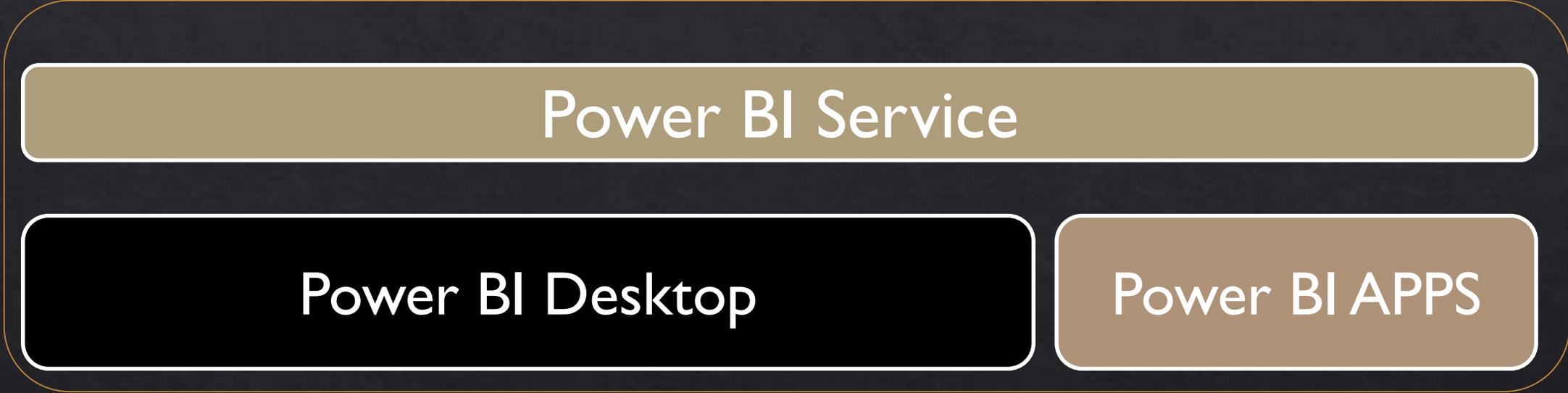
Dashboards

Tiles

Power BI building blocks



Power BI building blocks



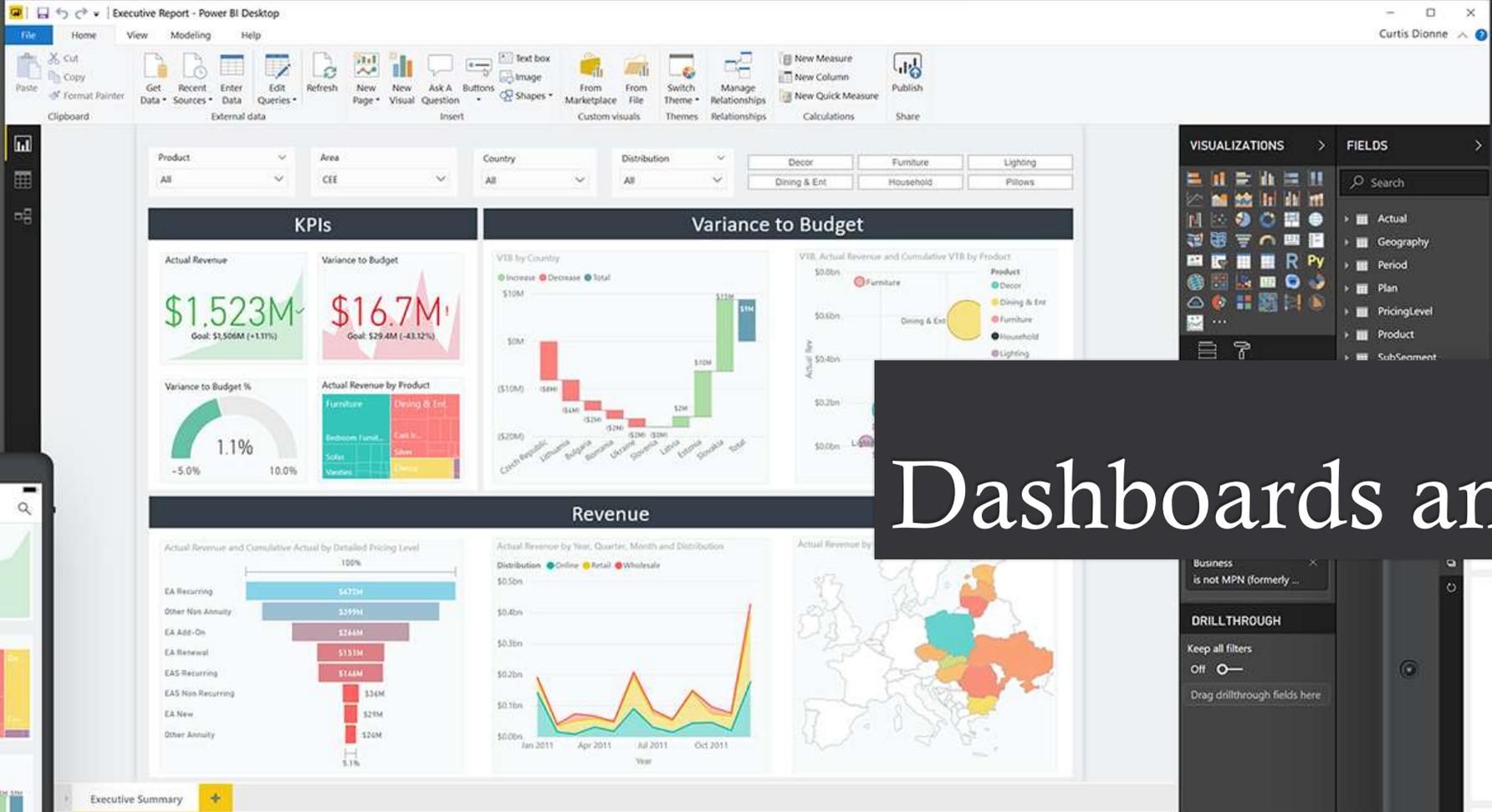
The diagram illustrates the building blocks of Power BI. It features a large, rounded rectangular container with a thin gold border. Inside this container, there are three smaller rounded rectangular boxes. At the top is a wide, light olive-green box containing the text 'Power BI Service'. Below it are two smaller boxes: one on the left is black with a white border and contains 'Power BI Desktop'; one on the right is a medium brown color and contains 'Power BI APPS'.

Power BI Service

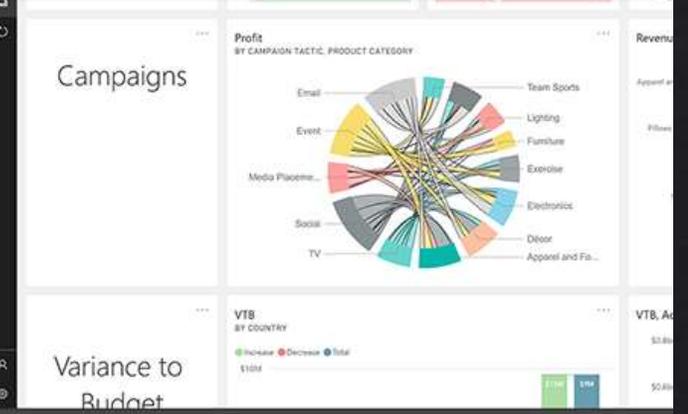
Power BI Desktop

Power BI APPS

Power BI building blocks



Dashboards and Reports



Why use a dashboard?

Transform business data into insights

Keep the organization focused

Tell your data story and be an influence

Make it compelling

- Business-driven & updated often
- Use Key Performance Indicators
- Actionable



Make it compelling

- Business-driven & updated often
- Use Key Performance Indicators
- Actionable



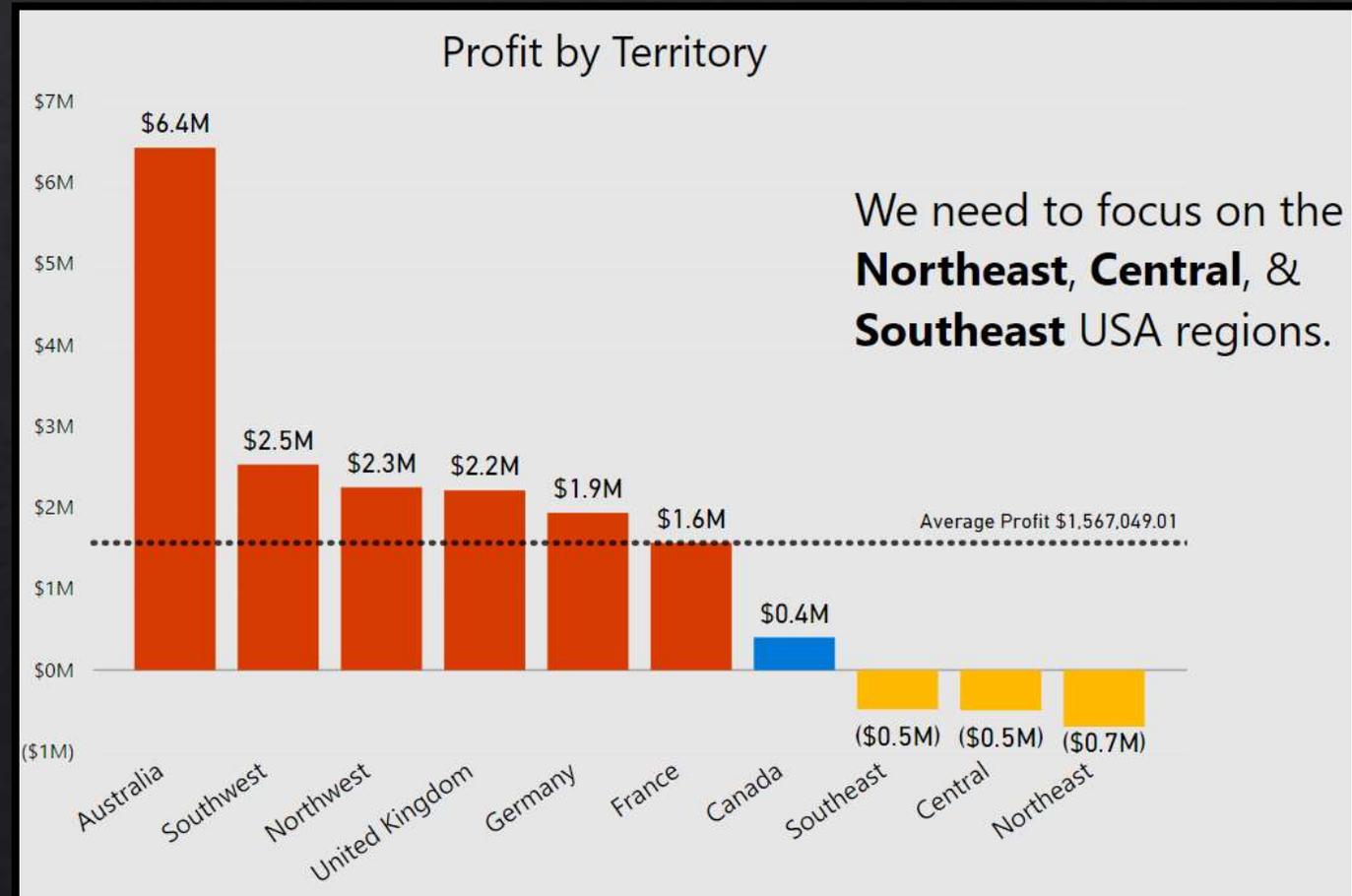
Make it compelling

- Tell and show with labels, descriptions
- No thinking required for quick analysis
- Less is more
- Minimize distractions
 - Continuity
 - Symmetry
 - Proximity
 - Similarity



Make it compelling

- Tell and show with labels, descriptions
- No thinking required for quick analysis
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 - Similarity



Dashboards - Main Takeaways

Tell a story

- Limit the number of points you are trying to make
- 3-5 charts on a page
- Present with text (connect points with commentary)
- Where should I start looking, what's next, where to end

Call to action

Make it clear what decision should be made

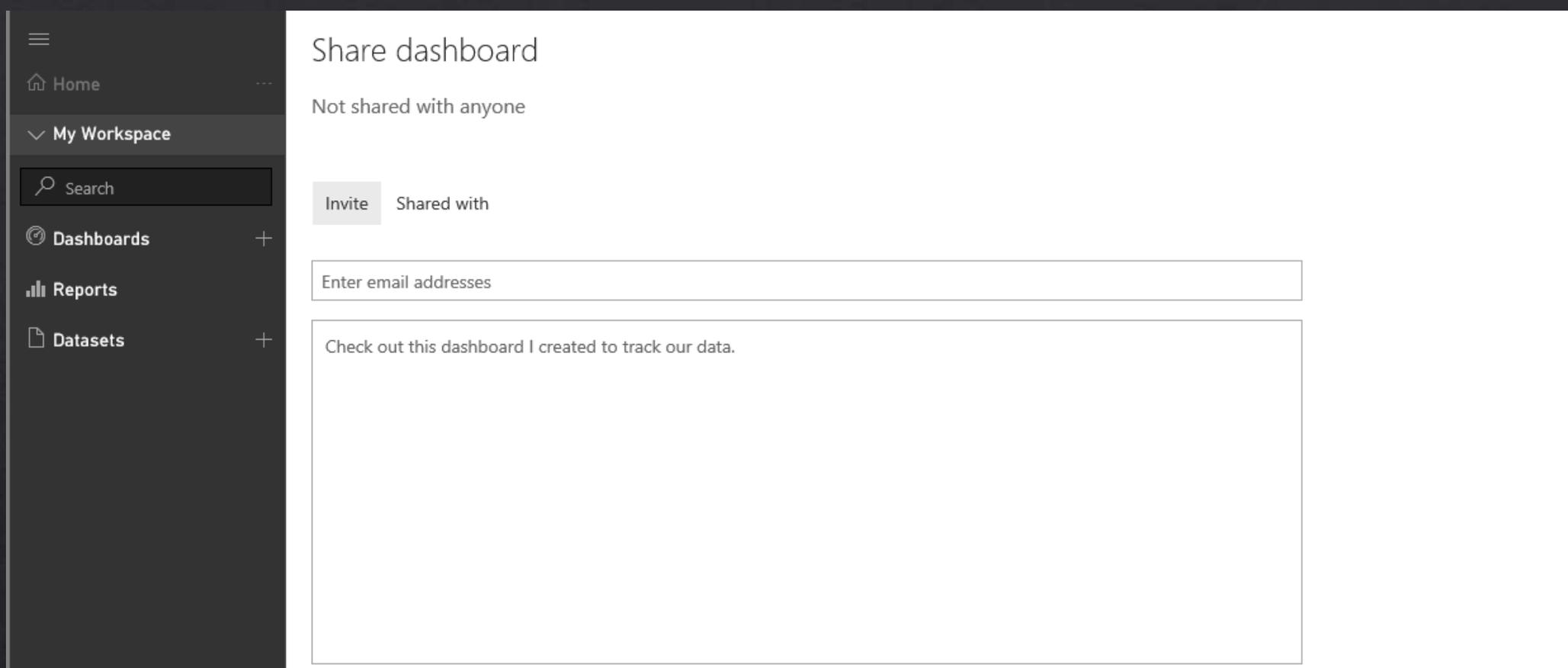
reorgan
procedure un
administration
management
direc
ration r

Administration

Administration

Power BI
Admin
Portal

Desktop
rollout and
updates



Viewing and Sharing

Embedding reports

File View Edit report | Explore Refresh

-  **Save as**
Save a copy of this report
-  **Print**
Print current page
-  **Embed**
Securely embed this report in a website or portal
-  **Embed in SharePoint Online**
Get a link to securely embed this report in a SharePoint page
-  **Publish to web**
Embed this report for public access by anyone on the Internet
-  **Download report (Preview)**
Download a .pbix copy

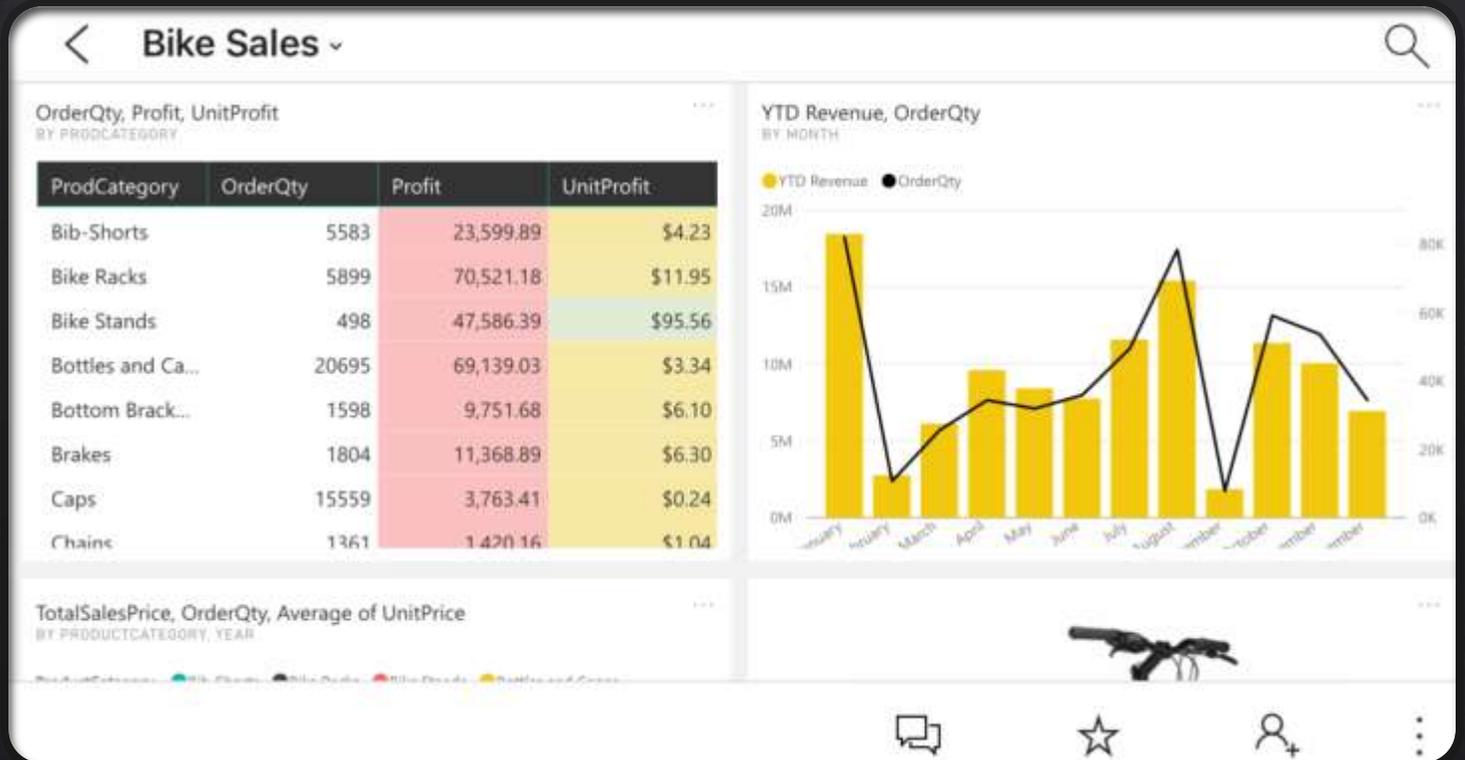
Private embedding

Mobile viewing

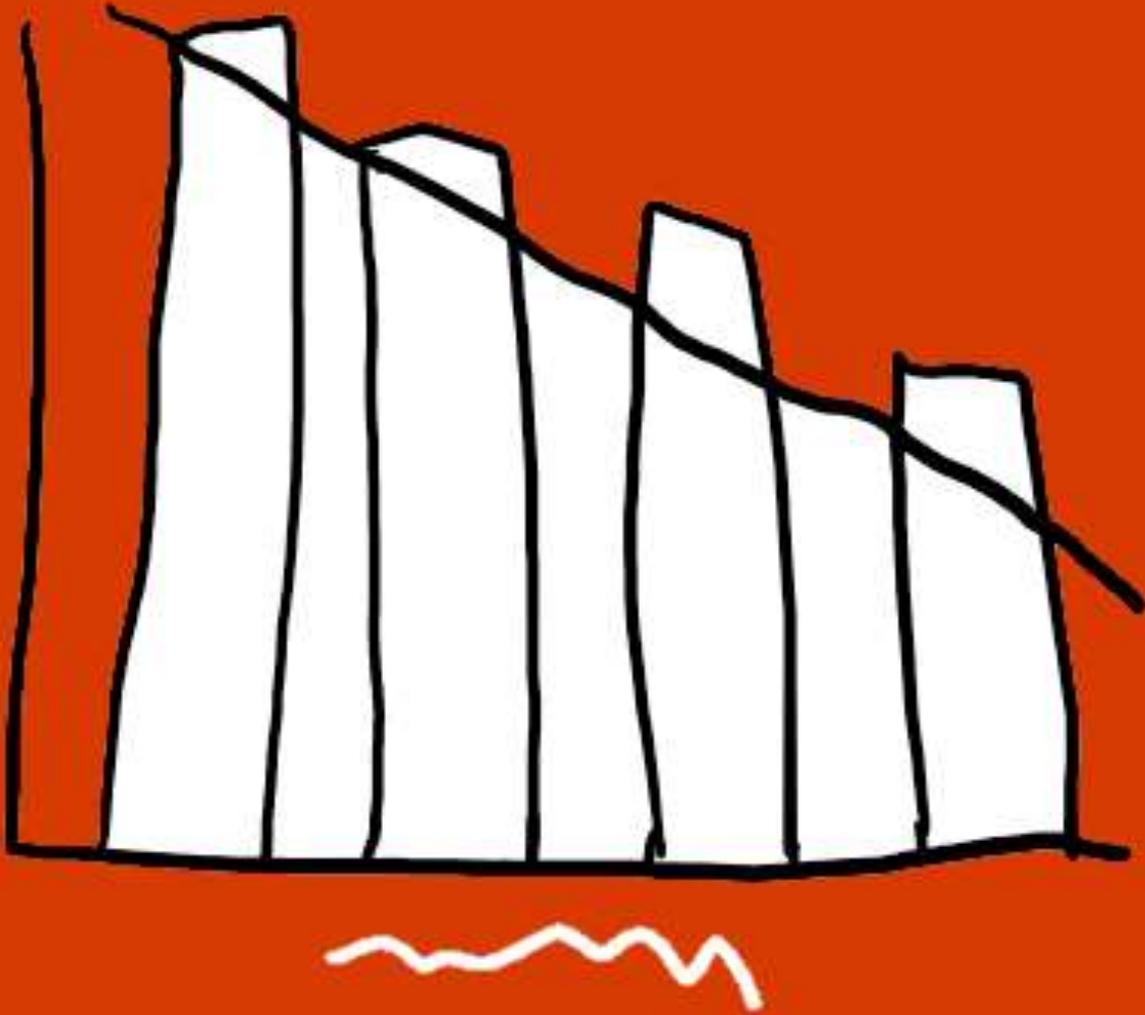
◇ Power BI mobile apps

◇ iOS

◇ Android



Working with Data



Your Data

- ◆ Study and know your data
- ◆ Data sources galore

*If using on-premises data, a data gateway is needed to be installed on your network before you can share your reports, etc.

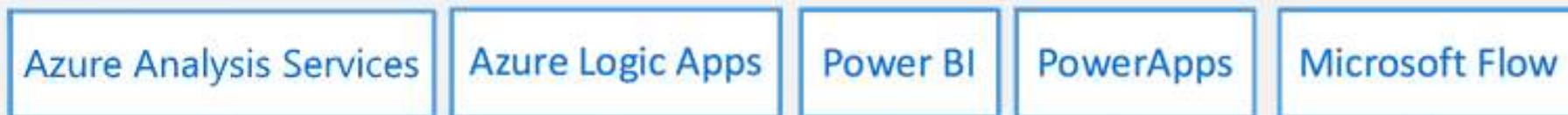
Exploring data import options

- ◇ Many options for getting data
 - ◇ Excel
 - ◇ SQL Server
 - ◇ Text
 - ◇ Web
 - ◇ Odata feeds
 - ◇ and more!

On-premises data gateway

One gateway for multiple cloud services and experiences

Cloud services



Gateway Cloud Service

- Encrypts and stores data source credentials and on-premises data gateway details
- Routes queries and results between cloud services, on-premises data gateway, and data source



Azure Service Bus



On-premises data gateway

- Decrypts data source credentials and connects to data source
- Sends queries to data source and returns the results to gateway cloud service

On-premises data sources



Identify

Identify gateway server



Install

Install data gateway



Connect

Connect with Azure

Gateway Configuration Steps



Intro to DAX

INTRO TO DAX

- ◆ **DAX** stands for **Data Analysis Expressions**
- ◆ It is a functional language
- ◆ Two primary data types: Numeric and 'Other'
 - ◆ Numeric: integers, decimals, currency
 - ◆ Other: strings and binary objects
- ◆ Uses operator overloading
 - ◆ Mix data types in your calculations
 - ◆ Results will change based on the input data type
 - ◆ Happens automatically – could have negative consequences (KNOW YOUR DATA)

DAX Resources

- ◆ DAX Basics:
[DanielGlenn.com/DAX
Basics](http://DanielGlenn.com/DAXBasics)
- ◆ Video Course:
[DanielGlenn.com/DAX
videos](http://DanielGlenn.com/DAXvideos)

Questions?

Resources

- Guy in a Cube - GuyInACube.com
- Podcasts: BiFocal Show
- InfoWorks, Inc. – contact me!
- Help in the app
- Docs on Microsoft.com



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