

Melek Series : Building an insightful dashboard with Power BI

Lee Hsiang
Cloud Solution Architect
Microsoft Asia Pacific

Prerequisites and setup steps

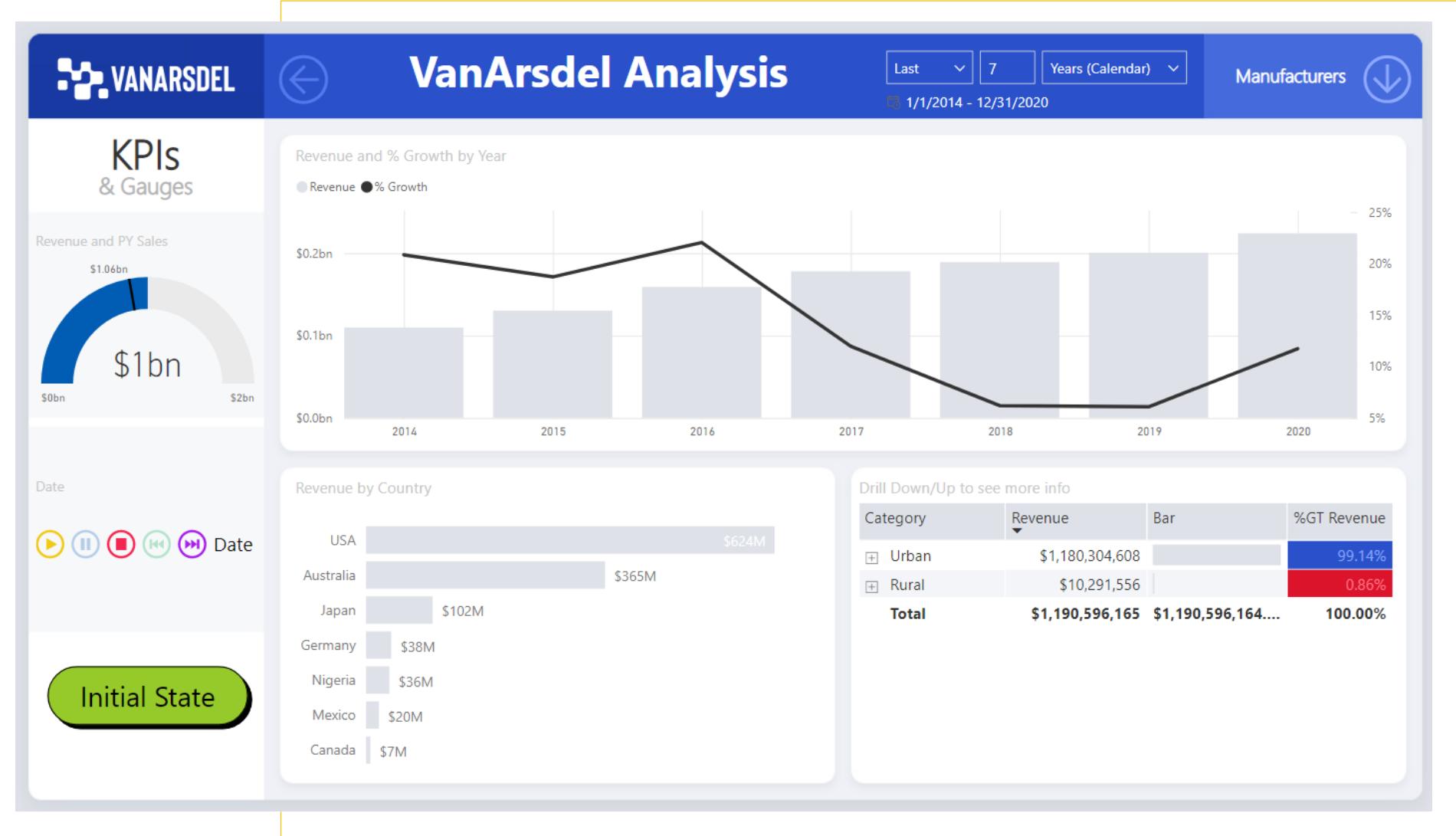
- At minimum, a computer with 2-cores and 4GB RAM running Windows 8 / Windows Server 2008 R2, or later
- **Display:** At least 1440x900 or 1600x900 (16:9) recommended.
- **Internet connectivity:** You must have the ability to connect to the Internet outside your organization
- **Microsoft Power BI Desktop installed:** you should have downloaded and installed Power BI Desktop from the Microsoft Store <https://go.microsoft.com/fwlink/?linkid=2135345> or from the download center <https://go.microsoft.com/fwlink/?linkid=2135519>
- Microsoft Power BI Desktop requires Internet Explorer 10 or later.
- **Signup for Power BI:** Go to <http://aka.ms/pbidiadtraining> and sign up for Power BI with a business email address. If you cannot sign up for Power BI, let the instructor know.
- If you have an existing account, please go to <http://aka.ms/pbidiadtraining> and **Sign in** using your **Power BI account**
- **Attending Online session** – you must get the meeting invite and synchronize with the presenter prior to the event start for online attendance computability

Agenda (times are approximate and will be fluid with the class)

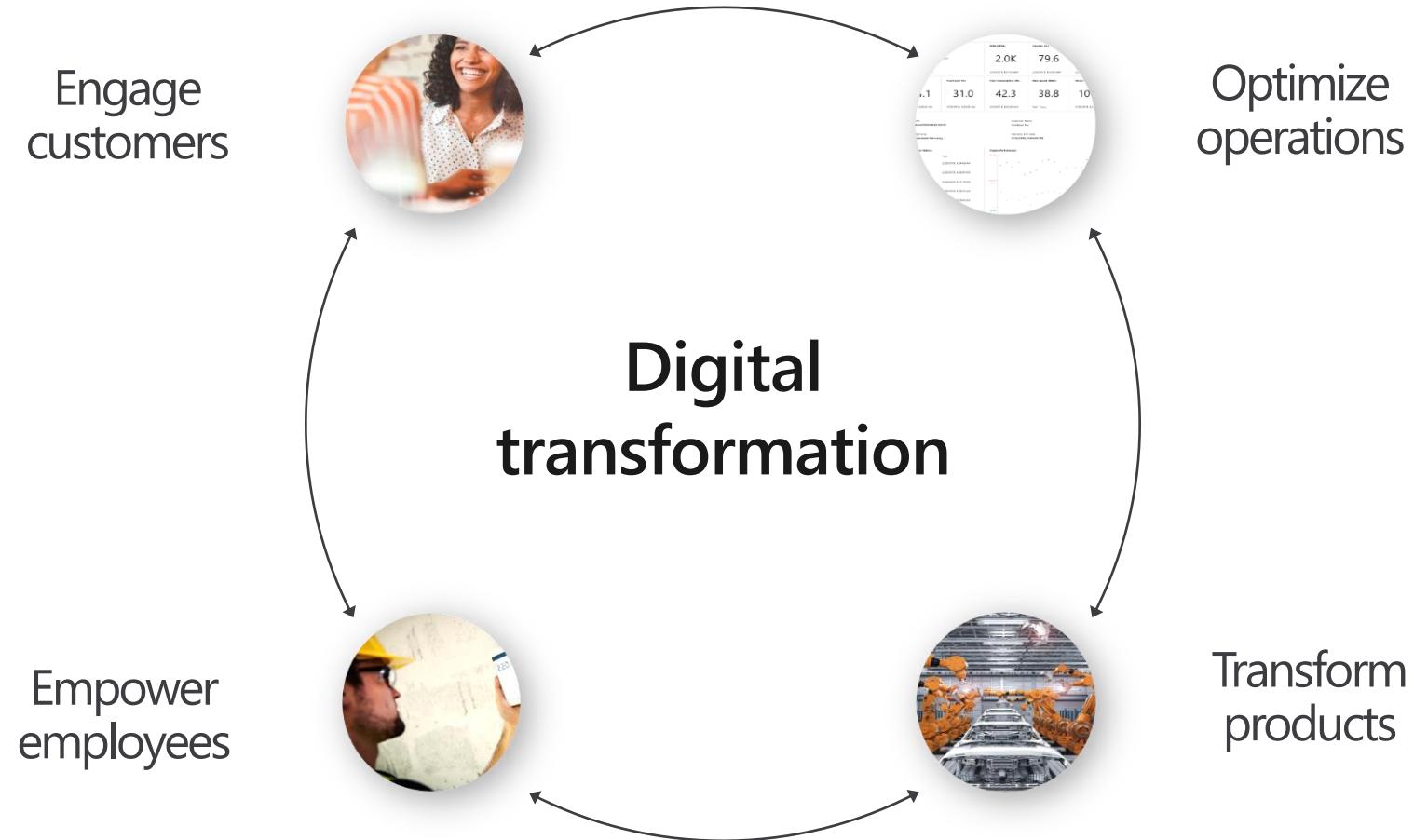
Agenda

10:00 AM – 10:30 AM	Introduction to Power BI
10:30 AM – 11:00 AM	Power BI Lab 1
11:00 AM – 11:10 AM	Quiz
11:10 AM – 11:50 AM	Create your own report
11:50 AM – 12:00 PM	Quiz and Q&A

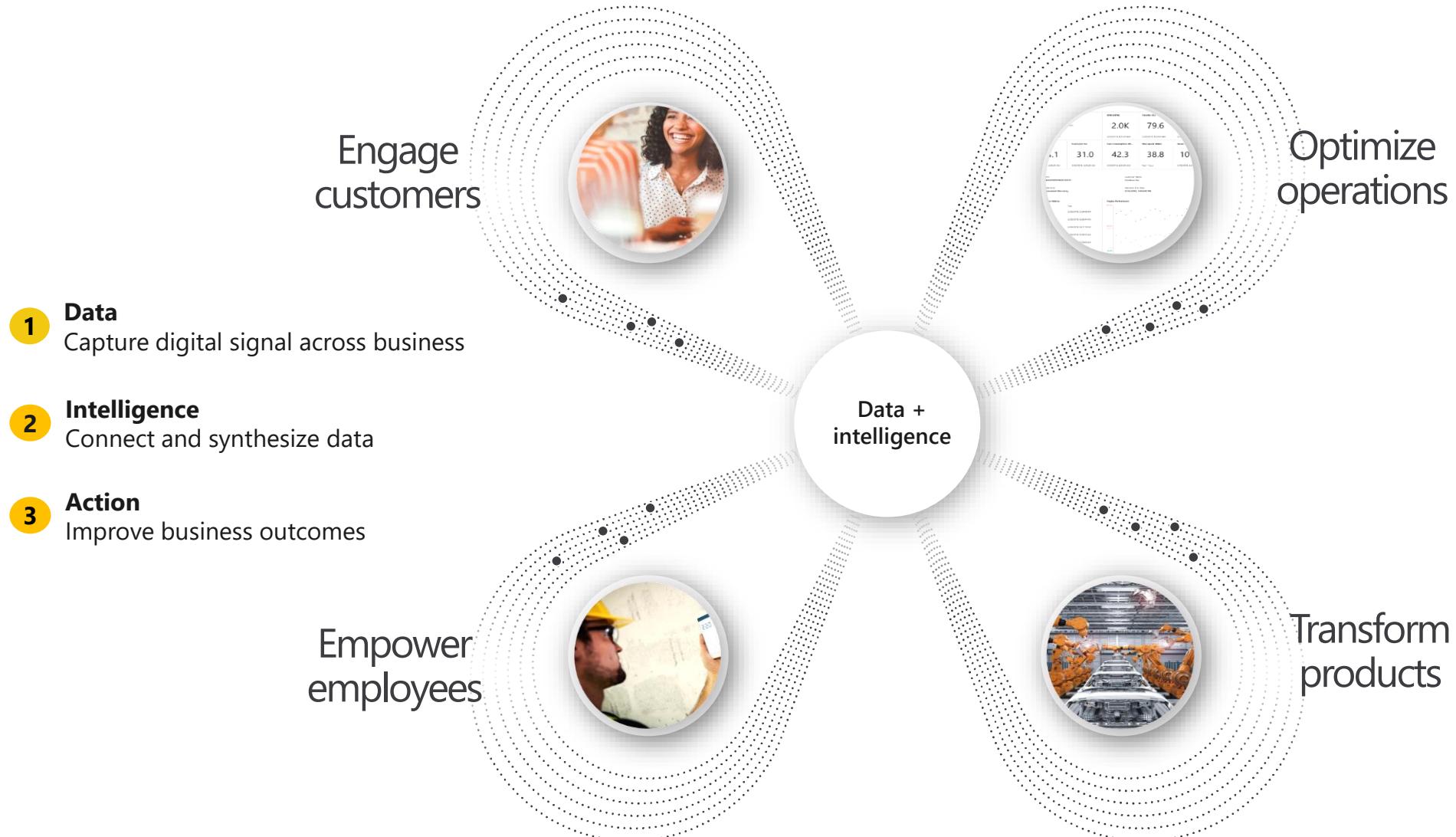
Dashboard in a Day Demo



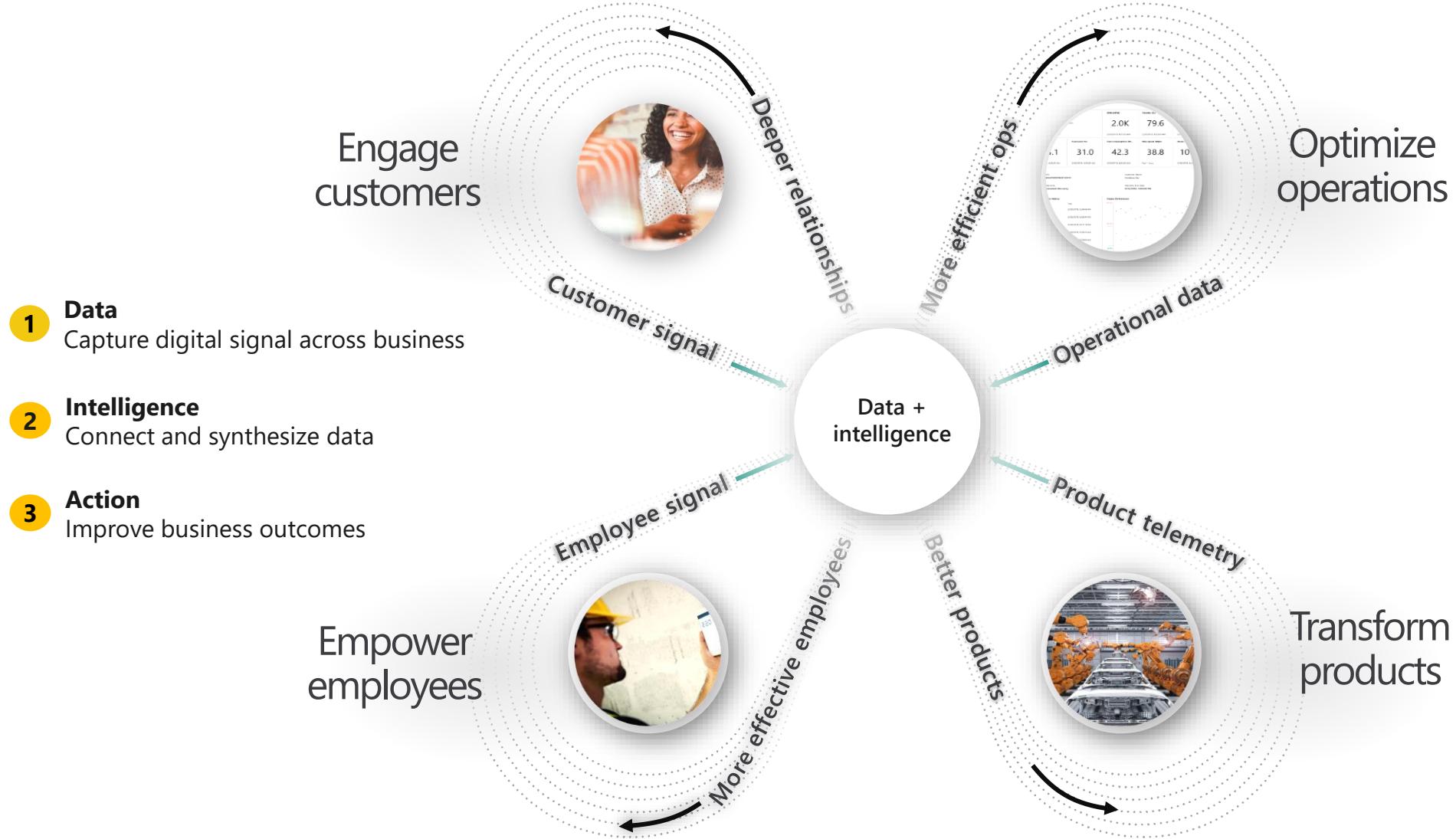
Digital Transformation



Digital Feedback Loop



Digital Feedback Loop

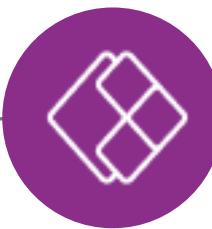


Microsoft Power Platform

The low-code platform that spans Office 365, Azure, Dynamics 365, and standalone applications
Innovation anywhere. Unlocks value everywhere.



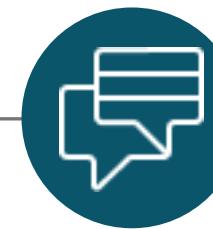
Power BI
Business analytics



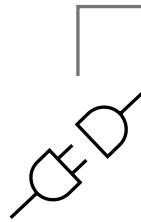
Power Apps
Application development



Power Automate
Process automation



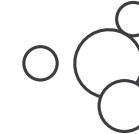
Power Virtual Agents
Intelligent chatbots



Data
connectors



Portals

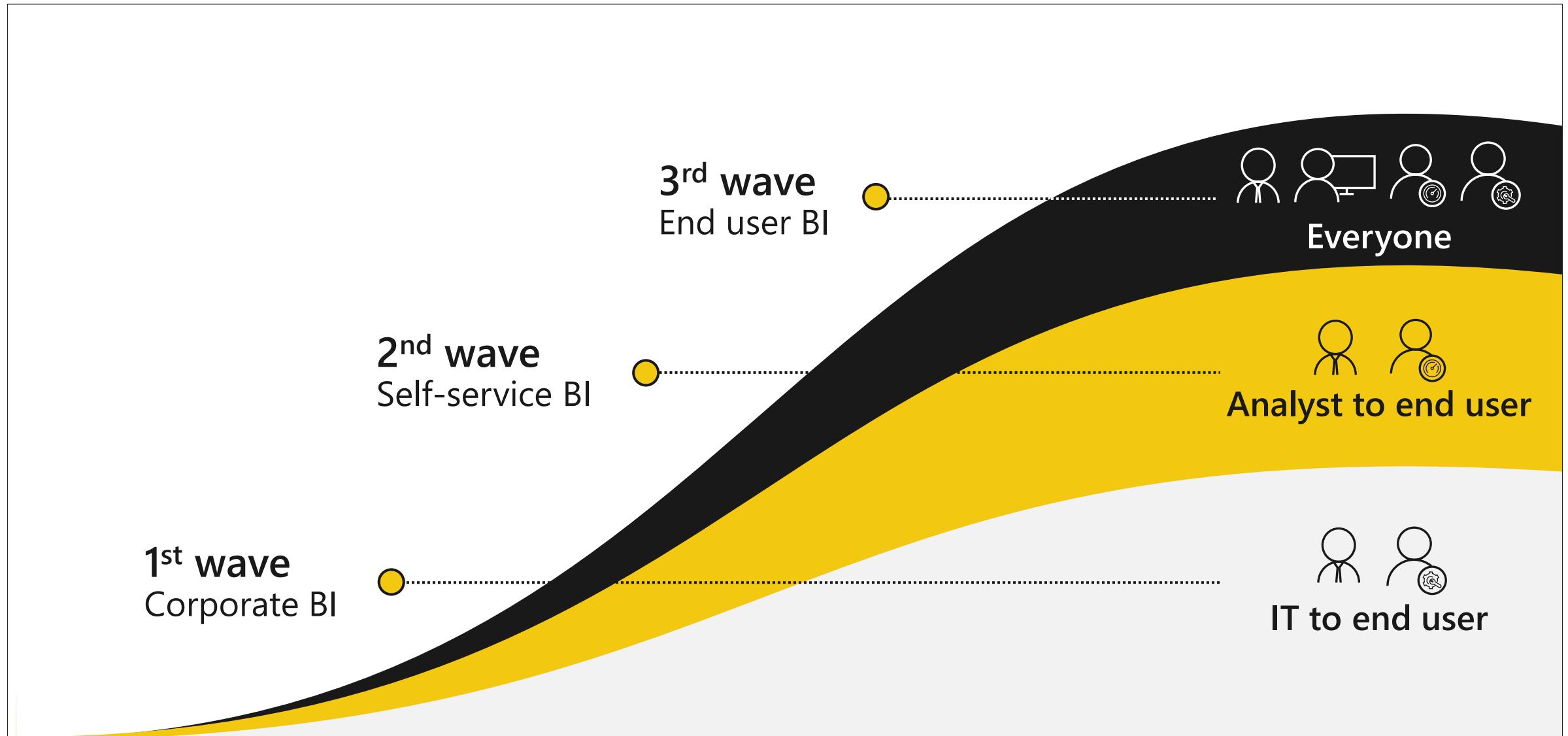


AI Builder

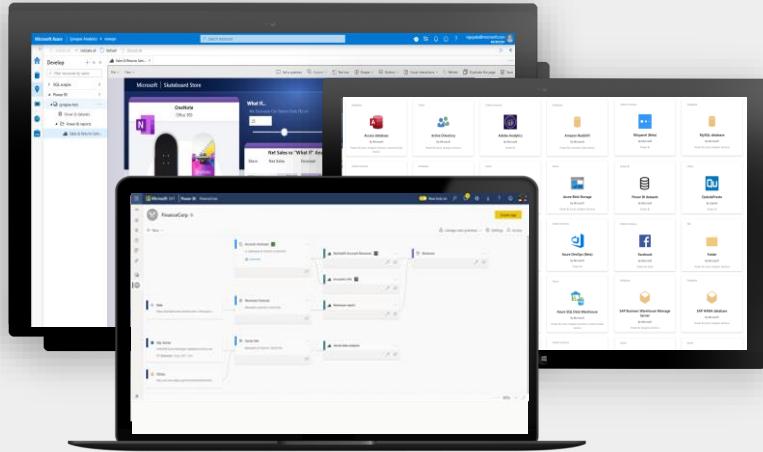


Dataverse

The Evolution of BI



Power BI



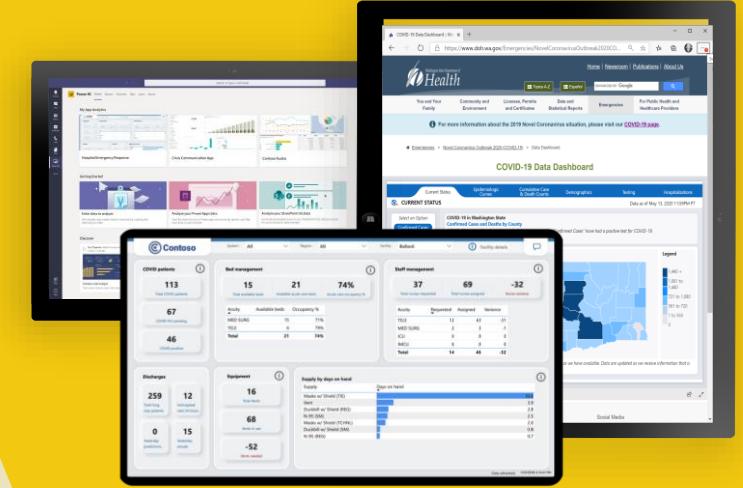
All Data

Break down data silos and enrich your data with intelligence



For Everyone

Create rich-interactive data experiences with AI infused insights



For Every Decision

Integrate trusted and secure BI into the fabric of your organization and apps

Power BI drives a data culture for everyone and every decision

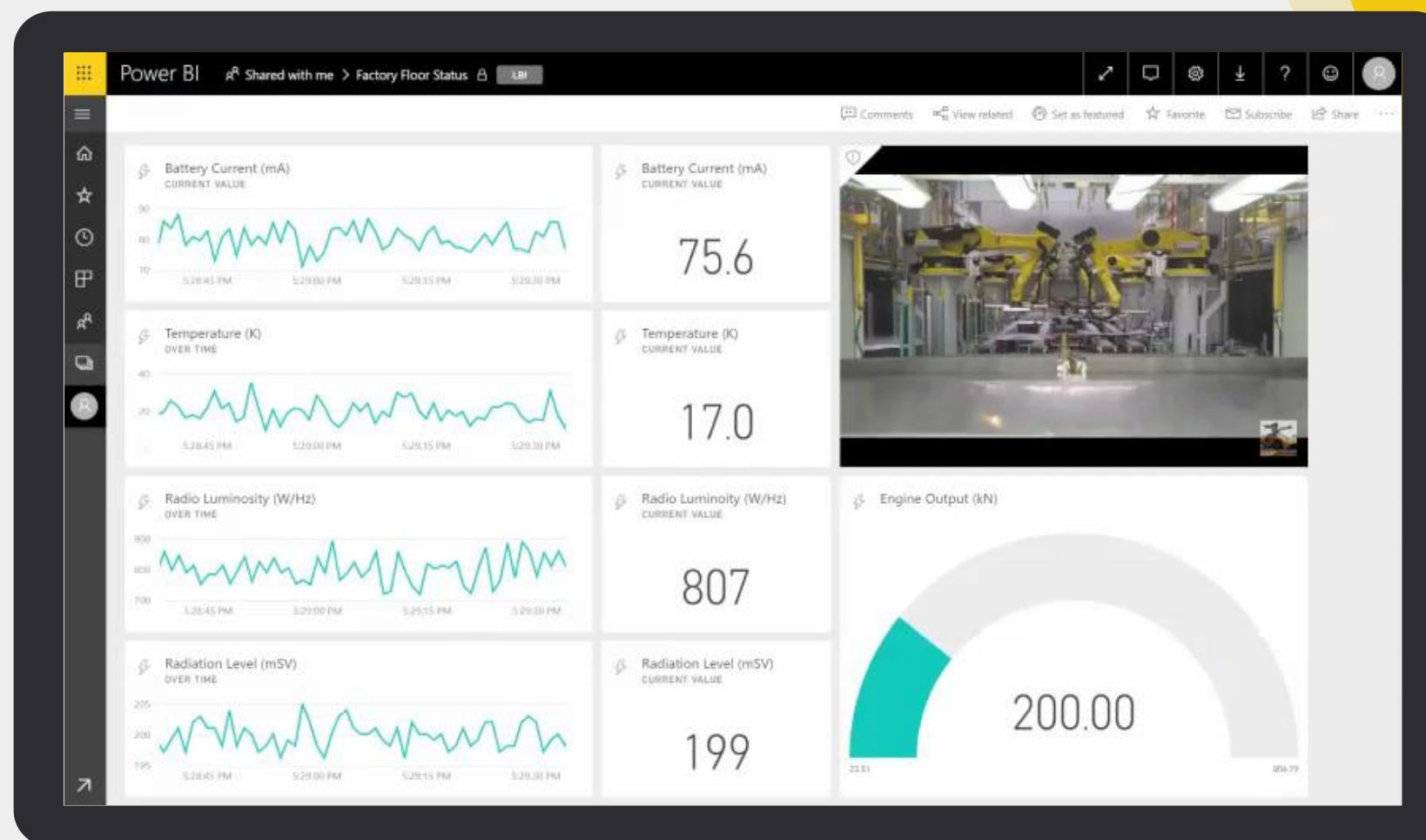
Why Power BI?

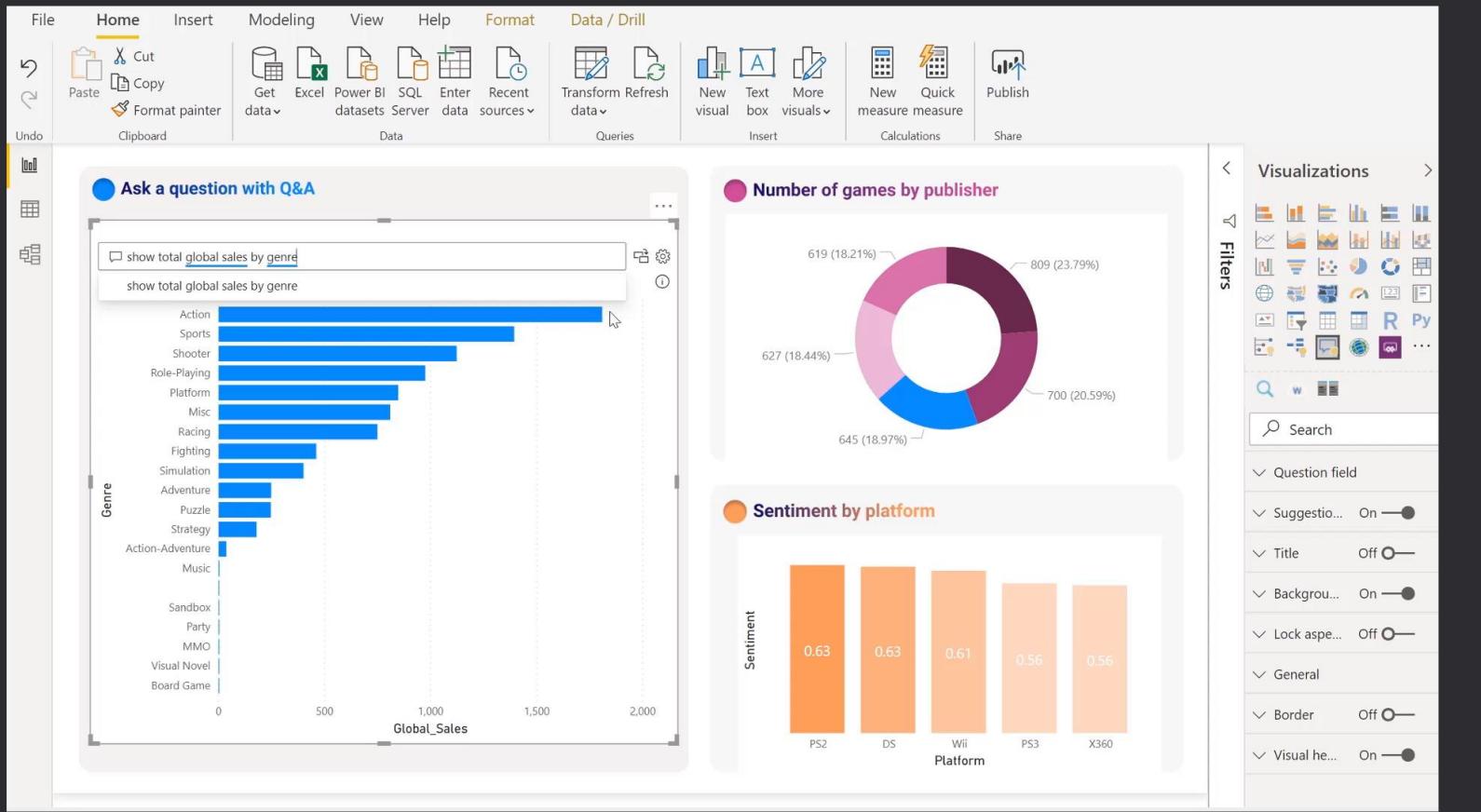
-  Power BI Desktop is free
-  Real time dashboards and interactive reports
-  Natural Language query & AI insights
-  Custom visualizations and custom connectors
-  Integration with Excel, Power Point, SharePoint and Teams

Power BI Desktop is free

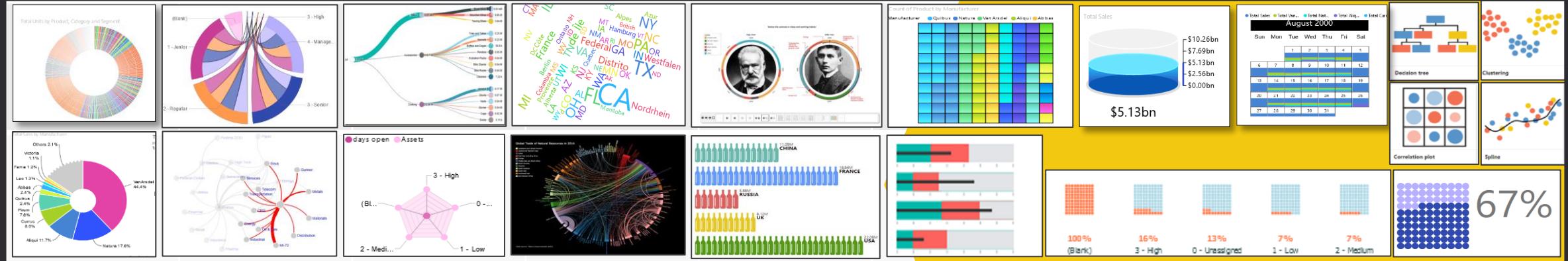
The screenshot displays a Microsoft Power BI Desktop interface. The ribbon at the top includes File, Home, Insert, Modeling, View, Help, External Tools, and Table tools. The Home tab is selected, showing various icons for data management and visualization creation. The main workspace shows a dashboard titled "Microsoft | Skateboard Store". The dashboard features a "What If..." section where users can change the "Return Rate" from 25% to 24%. It also includes a bar chart comparing "Net Sales" and "Forecast" across different stores, a line chart showing the "What If" analysis forecast over time, and a table detailing net sales for each store. The bottom of the screen shows navigation buttons and a footer with copyright information.

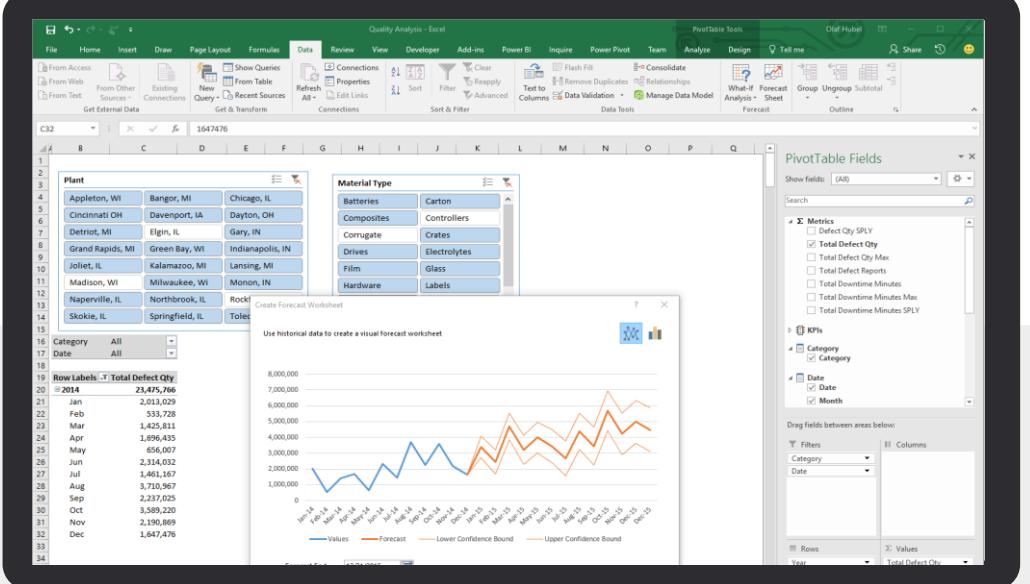
Real time dashboards and interactive reports



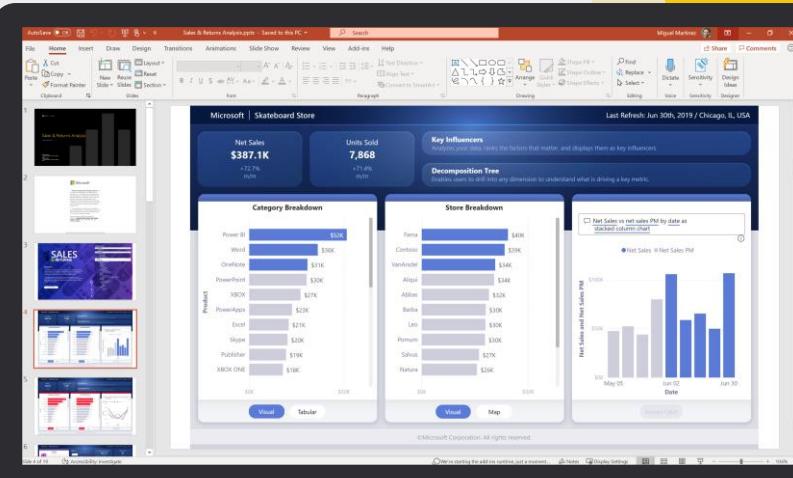


Natural Language query & AI insights





This screenshot shows a Microsoft SharePoint page titled "Sales and Returns" within a "Private group". The page includes a "Home" navigation bar and a "Quick links" sidebar. The main content area displays a Power BI visualization titled "Microsoft | Skateboard Store". The visualization includes a dashboard with various charts and tables, such as "Category Breakdown", "Net Sales by Location", and "Key Influencers". Below the dashboard, there are sections for "Documents" containing files like "App Documentation.docx" and "Q3 Review.pptx", and a "Market Basket Analysis" section.



Integration with Excel, Power Point, SharePoint and TEAMS



The **LARGEST GLOBAL FOOTPRINT**

43

Languages

40

Primary and backup
datacenters worldwide

**National
Clouds**

US Government,
China & Germany



China GB 18030



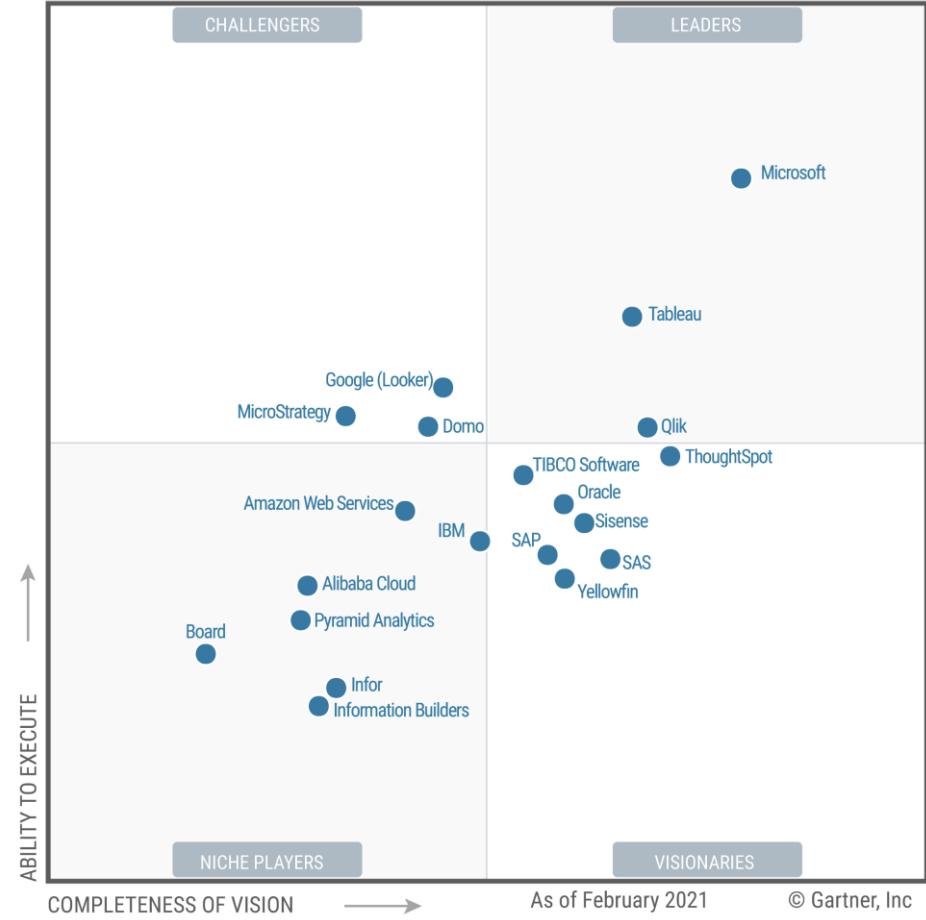
Bundesamt
für Sicherheit
in der
Informationstechnik



February 2021

Gartner Magic Quadrant for Analytics and Business Intelligence Platforms*

Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms



Source: Gartner (February 2021)

As of February 2021

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2021 Gartner Magic Quadrant for Analytics and Business Intelligence Platforms, Analyst(s): James Richardson, Kurt Schlegel, Rita Sallam, Austin Kronz, Julian Sun

Create out-of-the-box dashboards with cloud services

Power BI GitHub

Github

Search

File Share Chat in Teams Comment Subscribe Edit ...

You're viewing this app with sample data. [Connect your data](#)

Home Favorites Recent Create Datasets Goals Apps Shared with me Learn Workspaces GitHub

Pull Requests by Month

Open PULL REQUESTS

5

(Blank)

Pull Requests THIS WEEK

Avg Hours to Pull by Month

Pull Requests THIS MONTH

GitHub

Issues by Status, Date

Open Issues

864

Closed THIS MONTH

183

Avg Hours to Close BY DATE

Avg Age DAYS

118.3

Contributors with open issues

Contributor	Open Issues
haider392	34
pawarbi	25
CeciAc	20
Mike-H...	18
eifchl	12
asocorro	11
dhruvin...	10
edfreem...	10
gkens	10
KerryWa...	10
marcelij...	10
mpoedekl	10

Commits

Additions & Deletions

Users with > 2.5% of total c...

maggiesMSFT mihart guyina...

Get data

This dashboard provides a comprehensive overview of GitHub activity across different dimensions. Key metrics include the number of open pull requests (5), average hours to pull (13), and contributors with open issues (haider392 with 34 issues). The 'Issues by Status, Date' chart shows a significant spike in closed issues in March 2019. The 'Commits' chart shows a single commit in July 2018. The 'Additions & Deletions' chart shows a single addition in July 2018. The 'Contributors with open issues' chart lists several contributors with their respective counts.

Step 1 : From Power BI service, select Get Data

The screenshot shows the Power BI service home page. On the left, there's a navigation sidebar with options like Home, Favorites, Recent, Create, Datasets, Apps, Shared with me, Deployment pipelines, Learn, Workspaces, and a user profile section. A large red arrow points down to the 'Get data' button at the bottom of the sidebar. The main area displays a dashboard titled 'VanArsdel' with several visualizations: a large percentage value '55.41%', a bar chart for '% Growth BY MANUFACTURER' showing values for Currus, VanArsdel, Aliqui, Pirum, and Natura, a table for 'VanArsdel Revenue BY COUNTRY' with USA at \$624M, Australia at \$365M, Japan at \$102M, Germany at \$38M, and Nigeria at \$36M, a table for 'VanArsdel Market Share BY COUNTRY' showing values for Germany, Japan, USA, Nigeria, Australia, Canada, Mexico, and Japan, a line chart for 'Revenue BY COUNTRY' from 2016 to 2019, and a stacked bar chart for 'Revenue BY COUNTRY'. Below the dashboard, there's a section for 'Favorites + frequent' items.

Power BI Home

Search

...

Home

Favorites >

Recent >

Create

Datasets

Apps

Shared with me

Deployment pipelines

Learn

Workspaces >

DIAD_cort@obvi... ▾

Get data

Good morning,

Find and share actionable insights to make data-driven decisions

VanArsdel ⓘ

55.41%

% Growth BY MANUFACTURER

Manufacturer	Growth (%)
Currus	~15%
VanArsdel	~12%
Aliqui	~10%
Pirum	~8%
Natura	~7%

VanArsdel Revenue BY COUNTRY

Country	Revenue (\$M)
USA	\$624M
Australia	\$365M
Japan	\$102M
Germany	\$38M
Nigeria	\$36M

VanArsdel Market Share BY COUNTRY

Country	Share (%)
Germany	60.67%
Japan	48.23%
USA	39.51%
Nigeria	45.57%
Australia	51.49%
Canada	38.46%
Mexico	~10%

Revenue BY COUNTRY

0K (Blank) 2016 2017 2018 2019

Revenue BY COUNTRY

Favorites + frequent

Dynamics 365

Step 2 : Select Get from the Services Box

The screenshot shows the 'Get Data' page in the Power BI service. On the left, a sidebar menu lists various options like Home, Favorites, Recent, Create, Datasets, Apps, Shared with me, Deployment pipelines, Learn, Workspaces, and a user profile. Below the sidebar, a 'Get data' button is visible. The main content area is titled 'Get Data' and features a callout 'Download Power BI Desktop for the best report-building experience'. A 'Discover content' section contains two cards: 'My organization' (Discover apps published by other people in your organization) and 'Services' (Choose apps from online services that you use), each with a yellow 'Get' button. Below this, a 'Create new content' section contains three cards: 'Files' (Bring in your reports, workbooks, or data from Excel, Power BI Desktop or CSV files), 'Databases' (Use Power BI Desktop to connect to data in Azure SQL Database and more), and 'Dataflows' (Unify disparate data types, define ETL logic, and prepare your data for modeling), each with a yellow 'Get' button. The 'Dataflows' card also has a 'Learn more' link.

Home

Favorites >

Recent >

Create

Datasets

Apps

Shared with me

Deployment pipelines

Learn

Workspaces >

DIAD_cort@obvi...

Get Data

[Download Power BI Desktop](#) for the best report-building experience

Discover content

My organization
Discover apps published by other people in your organization.

Services
Choose apps from online services that you use.

Get **Get**

Create new content

Files
Bring in your reports, workbooks, or data from Excel, Power BI Desktop or CSV files.

Databases
Use Power BI Desktop to connect to data in Azure SQL Database and more.

Dataflows
Unify disparate data types, define ETL logic, and prepare your data for modeling.
[Learn more](#)

Get **Get** **Get started**

Get data

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Dynamics 365

Step 3 : For this lab, select Github

Power BI apps

Install apps that provide actionable insights and drive business results

All apps Organizational apps Template apps

Search

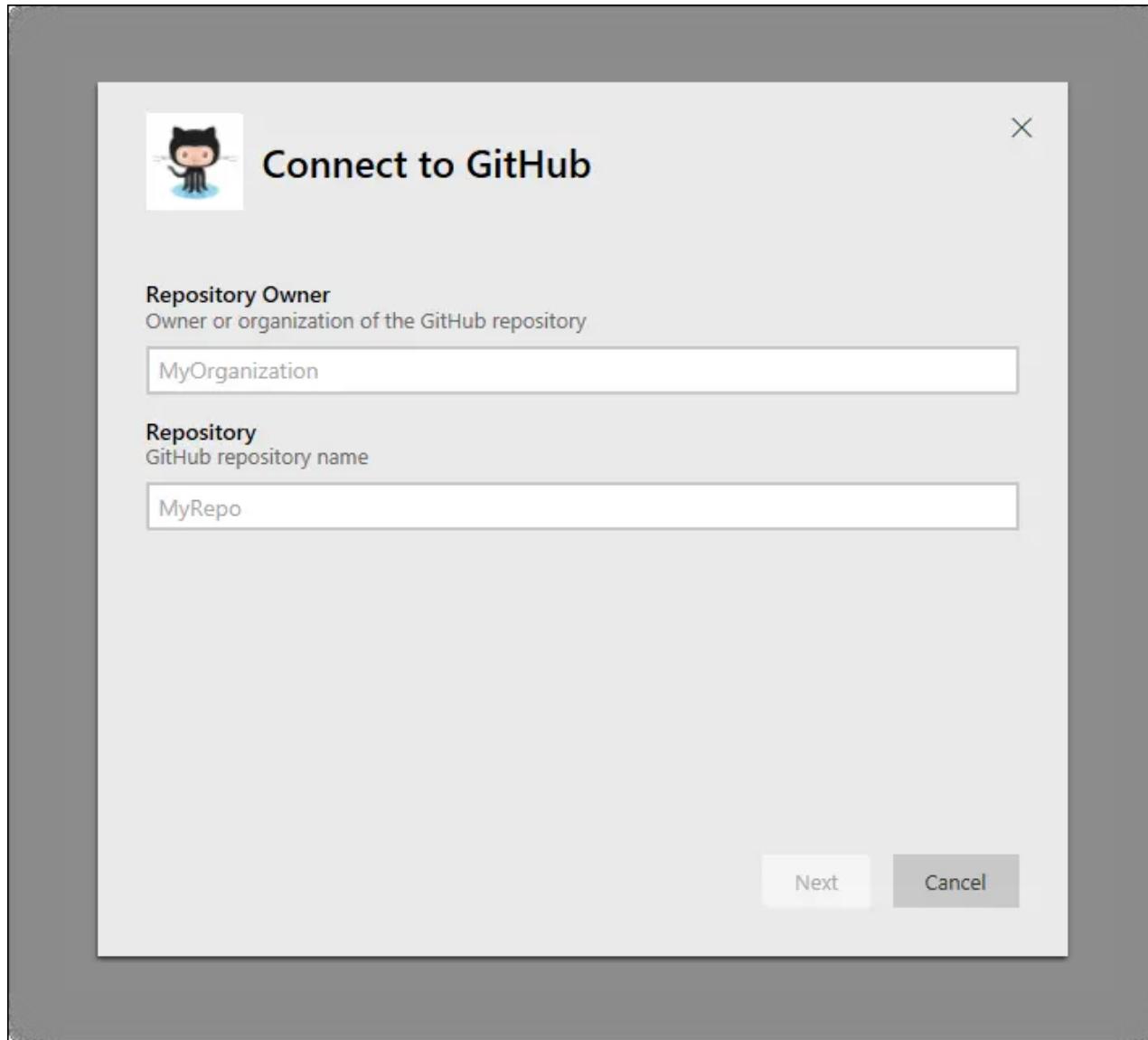
The screenshot shows a grid of nine Power BI apps. Each app card includes a thumbnail, name, author, and a 'Get it now' button. Some cards also show a star rating and a download count.

App Name	Author	Rating	Downloads
DIAD_	Cort Ferina		Get it now
KnowledgeBank	Nikil Prabhakar		Get it now
COVID-19 US Track...	Microsoft	★★★★★ (7)	
Samples	Andre Fomin		Get it now
Azure DevOps Das...	Data Maru	★★★★★ (7)	
Google Analytics R...	Havens Consulting Inc	★★★★★ (36)	
(Thumbnail)			
Github			
Microsoft 365			

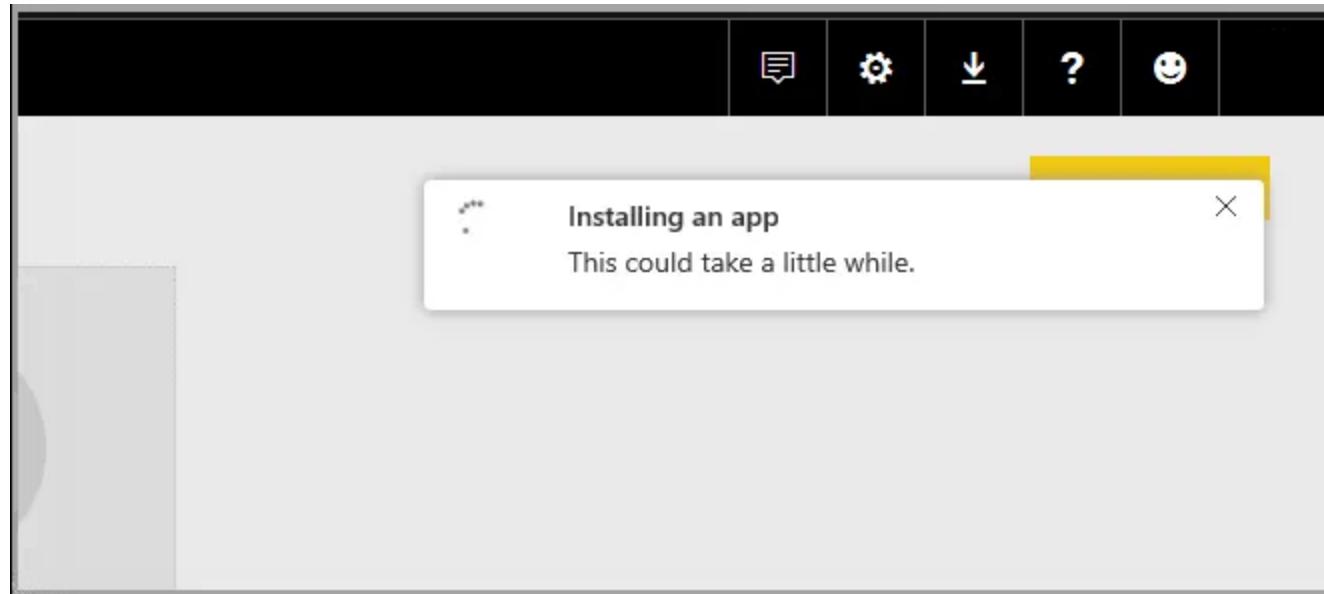
© Microsoft Corporation

Dynamics 365

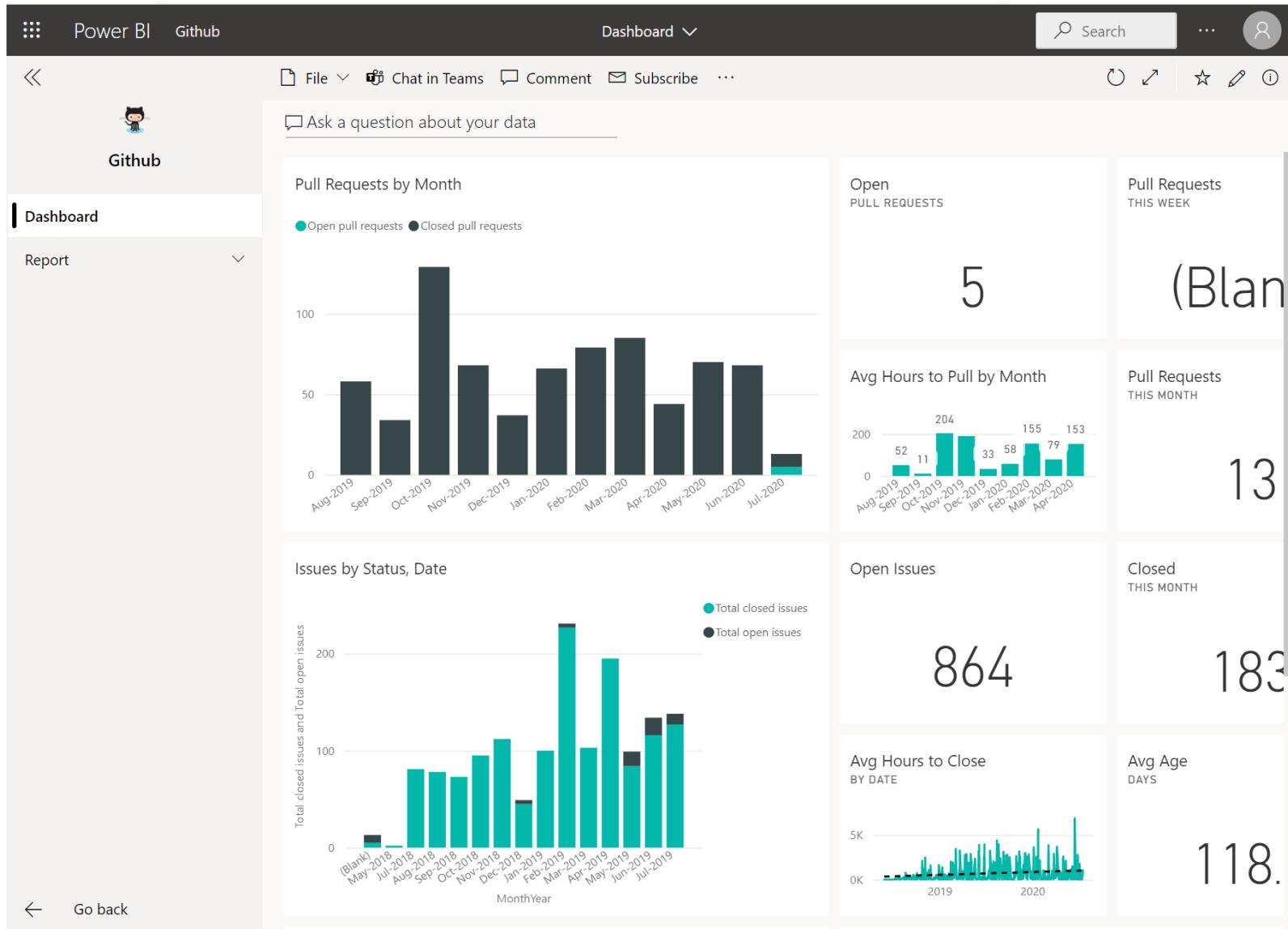
Step 4 : Connect to Github



Step 5 : Installation of app



Step 6 : Predefined Github app dashboard appears.



Step 7 : Report and dataset are created during the import.

Power BI | Github

Report | Data updated 2/17/21 ▾

File ▾ Export ▾ Share ▾ Chat in Teams Comment ...

Dashboard Report

Top 100 Contributors

Traffic

Contributor Commits

Pull Requests

Punch Card

Issues

Top 100 Contributors all time - Note: commits data excludes merges

user	Total commits	Total additions	Total deletions
maggiesMSFT	2,273	66,967	54,720
mihart	1,550	53,498	42,148
guyinacube	1,290	89,388	82,774
markingmyname	1,240	22,875	19,643
mgblythe	910	60,569	67,588
davidseminger	807	45,930	16,513
KesemSharabi	496	23,229	20,970
peter-myers	339	9,716	3,991
Minevskian	214	4,523	2,923
mshenhan	212	1,513	1,067
Total	13,094	672,366	560,518

Commits

Additions & Deletions

Users with > 2.5% of total commits

Report | Data updated 2/17/21 ▾

File ▾ Export ▾ Share ▾ Chat in Teams Comment ...

Dashboard Report

Top 100 Contributors

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Commits

Additions & Deletions

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Report | Data updated 2/17/21 ▾

File ▾ Export ▾ Share ▾ Chat in Teams Comment ...

Dashboard Report

Top 100 Contributors

Traffic

Contributor Commits

Pull Requests

Punch Card

Issues

Step 8 : Select pull request section and click any visuals.

Power BI GitHub Report | Data updated 2/17/21

You're viewing this app with sample data. [Connect your data](#)

Pull Requests

This week This month Prior 12 Months Open Closed this month

(Blank) 13 751 5 8

Repository powerbi-docs last run date (UTC) 7/21/2020

Pull Requests by Month

Open pull requests Closed pull requests

Total Hours to Pull by Month

Avg Hours to Pull by Month

Total pull requests by user

Filters

Search

Filters on this page

isPrior12Months is True

Label

- Select all
- aq-traged
- Change sent to author
- do-not-merge
- powerbi/svc
- powerbi-admin/subsvc
- powerbi-consume/s...
- powerbi-custom/vs...
- powerbi-desktop/sub...
- powerbi-developer/s...
- powerbi-eim/subvc
- powerbi-gateway/su...
- powerbi-report/serve...
- powerbi-service/subs...
- powerbi-template.ap...

Go back

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Dynamics 365

Step 9 : Update date in Power BI service

Screenshot of the Power BI service interface showing the "Github" app.

The left sidebar shows navigation links: Home, Favorites, Recent, Create, Datasets, Apps, Shared with me, Deployment pipelines, Learn, Workspaces, and Github (selected).

The main area displays the "Github" app with the following details:

- Name:** Github
- Type:** Dashboard
- Owner:** Github
- Refreshed:** —
- Next refresh:** —
- Endorsements:** —

The main area also shows a report and a dataset:

- Name:** GitHub
- Type:** Report
- Owner:** Github
- Refreshed:** 2/17/21, 12:08:55 PM
- Next refresh:** —
- Endorsements:** —

- Name:** GitHub
- Type:** Dataset
- Owner:** Github
- Refreshed:** 2/17/21, 12:08:55 PM
- Next refresh:** N/A
- Endorsements:** —

A red box highlights the refresh icon (a circular arrow with a hand cursor) for the GitHub dataset row.

Step 10 : Select scheduled refresh.

The screenshot shows the Power BI dataset settings page for a dataset named "GitHub". The "Datasets" tab is selected in the top navigation bar. The main content area displays "Settings for GitHub" with the following configuration:

- Refresh history**: A link to view refresh history.
- Gateway connection**: A section for managing the gateway connection.
- Data source credentials**: A section for managing GitHub credentials, with a link to "Edit credentials" and "Show in lineage view".
- Parameters**: A section for managing parameters.
- Scheduled refresh**: A section with the heading "Keep your data up to date" and a toggle switch set to "On". This section is highlighted with a red box.
- Refresh frequency**: Set to "Daily".
- Time zone**: Set to "(UTC-06:00) Central Time (US and Ca)".
- Time**: A link to "Add another time".
- Send refresh failure notifications to**:
 - Dataset owner
 - These contacts:
Enter email addresses

A cursor arrow is visible on the right side of the page.

Quiz

kahoot code : xxxx

Exploration

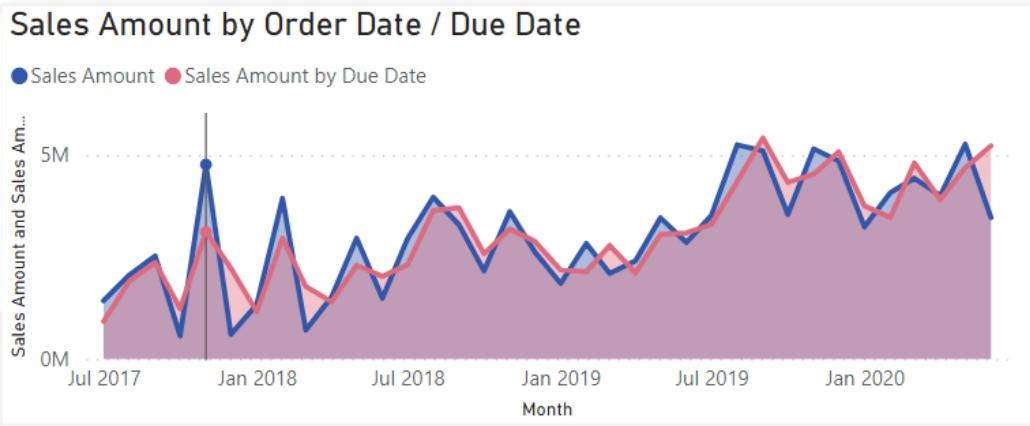
- You will have 40 mins to explore with Power BI
- Build a report and publish to Power BI
- Download the dataset from xxxxxxx
- 4 items as guidance

1. Year, Month Slicer
2. Sales Amount by order date & due date
3. Order Quantity by Reseller Country
4. Sales Amount by category

Example

Year, Month

- Select all
- (Blank)
- FY2018
- FY2019
- FY2020
- FY2021



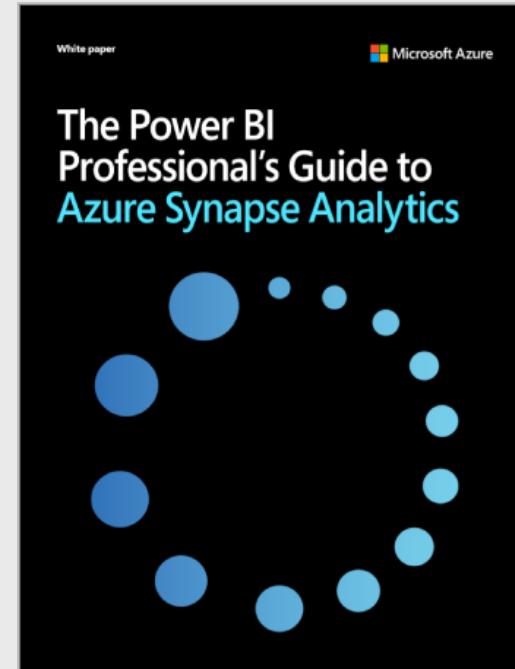
Category	Sales Amount	
Bikes		66,302,381.56
Specialty Bike Shop		6,080,117.73
Value Added Reseller		30,892,354.33
Warehouse		29,329,909.50
Components		11,799,076.66
Specialty Bike Shop		357,989.07
Value Added Reseller		3,307,774.48
Warehouse		8,133,313.11
Clothing		1,777,840.84
Specialty Bike Shop		252,933.91
Value Added Reseller		592,385.71
Warehouse		932,521.23
Accessories		571,297.93
Specialty Bike Shop		65,125.48
Value Added Reseller		175,002.81
Total		80,450,596.98

Community

Maximize your BI investments with Azure Synapse Analytics



Free Infographic



Free Whitepaper

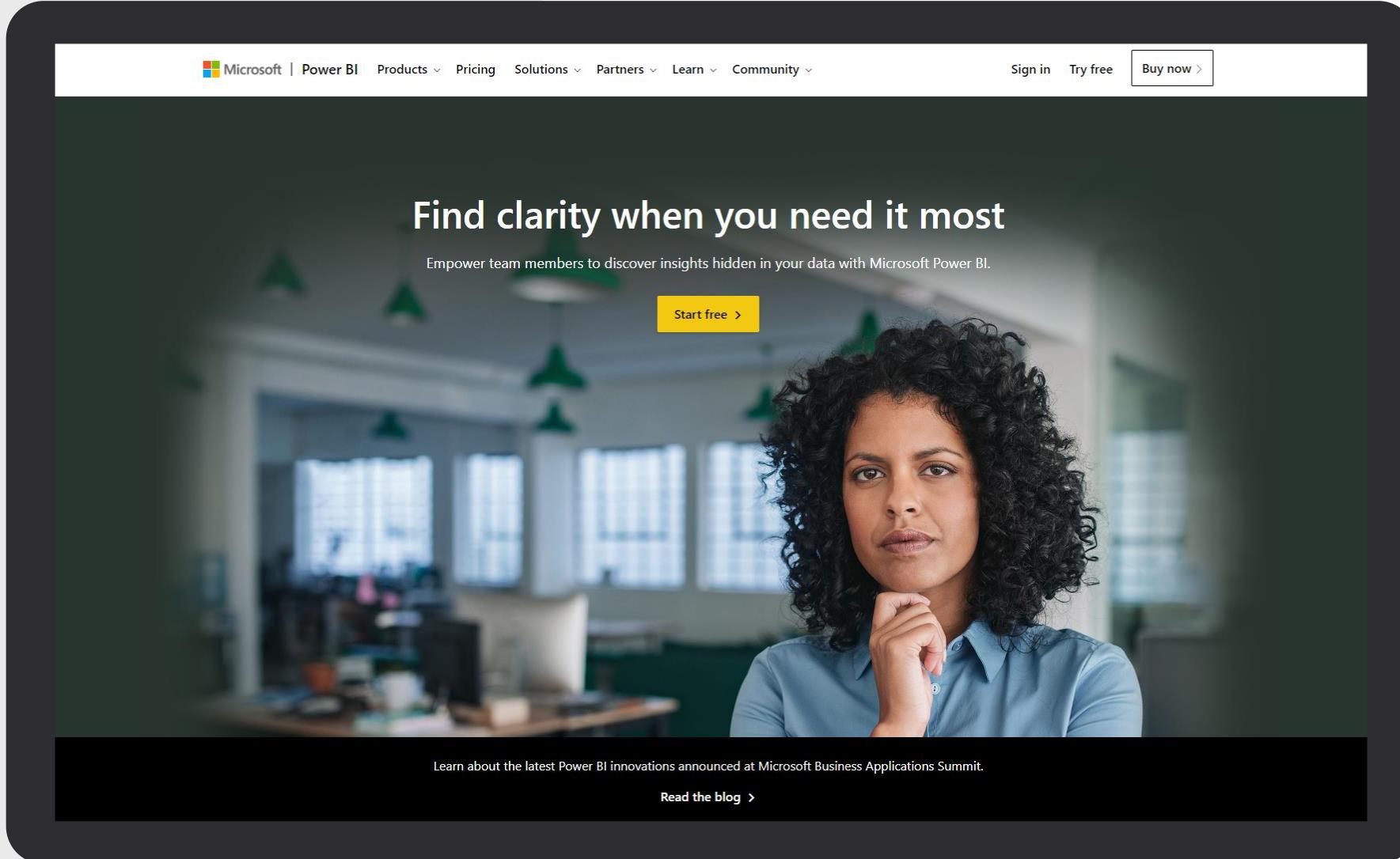


Free eBook



Free eBook

[Get Started Today with a Free Azure Synapse Analytics Trial](#)



The screenshot shows the Microsoft Power BI homepage. At the top, there's a navigation bar with the Microsoft logo, followed by 'Power BI' and several dropdown menus for 'Products', 'Pricing', 'Solutions', 'Partners', 'Learn', and 'Community'. To the right of the menu are 'Sign in', 'Try free', and a 'Buy now >' button. The main headline 'Find clarity when you need it most' is displayed in large white text over a background image of a woman in an office. Below the headline is a subtext: 'Empower team members to discover insights hidden in your data with Microsoft Power BI.' A yellow 'Start free >' button is located in the upper left of the image area. At the bottom of the page, a black footer bar contains the text 'Learn about the latest Power BI innovations announced at Microsoft Business Applications Summit.' and a 'Read the blog >' link.

Get Started Now at
PowerBI.com

Q&A