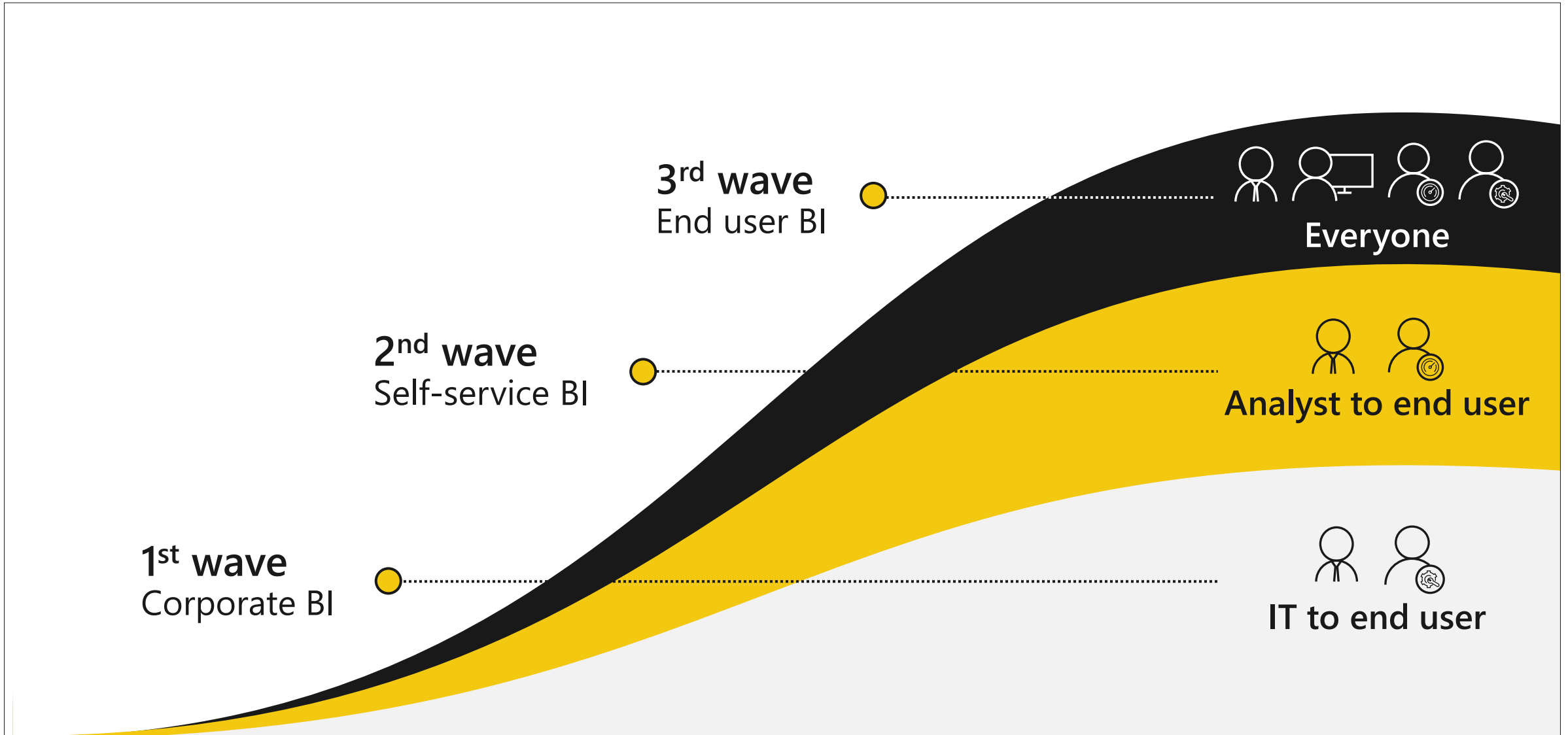
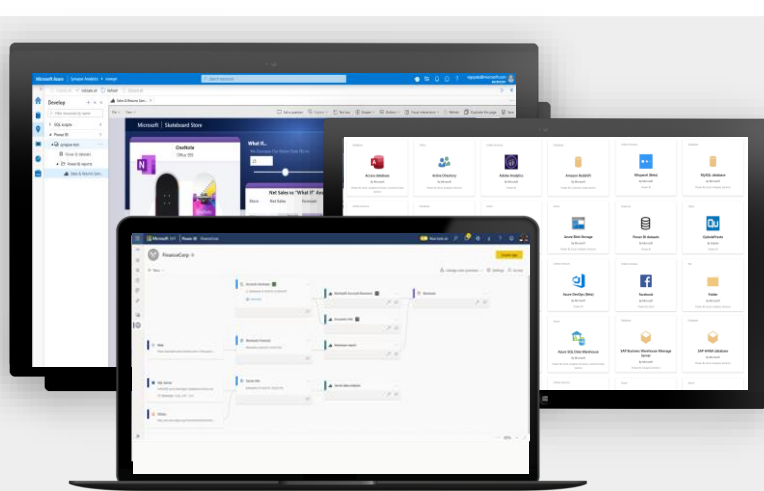


Power BI Reports Building Course.

The Evolution of BI



Power BI



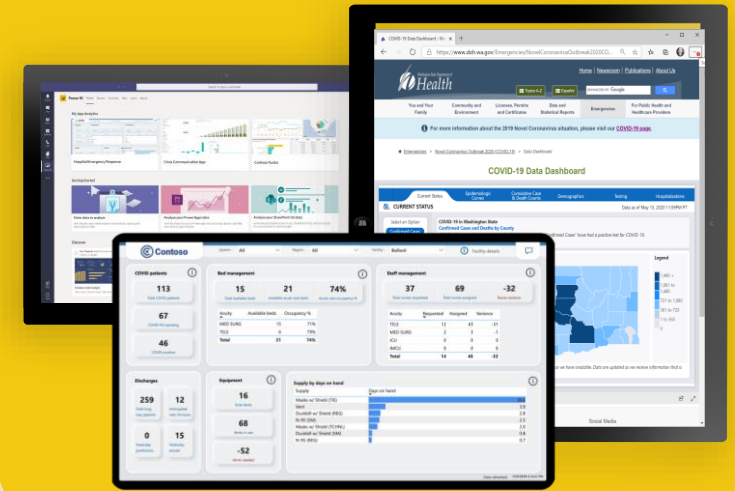
All Data

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

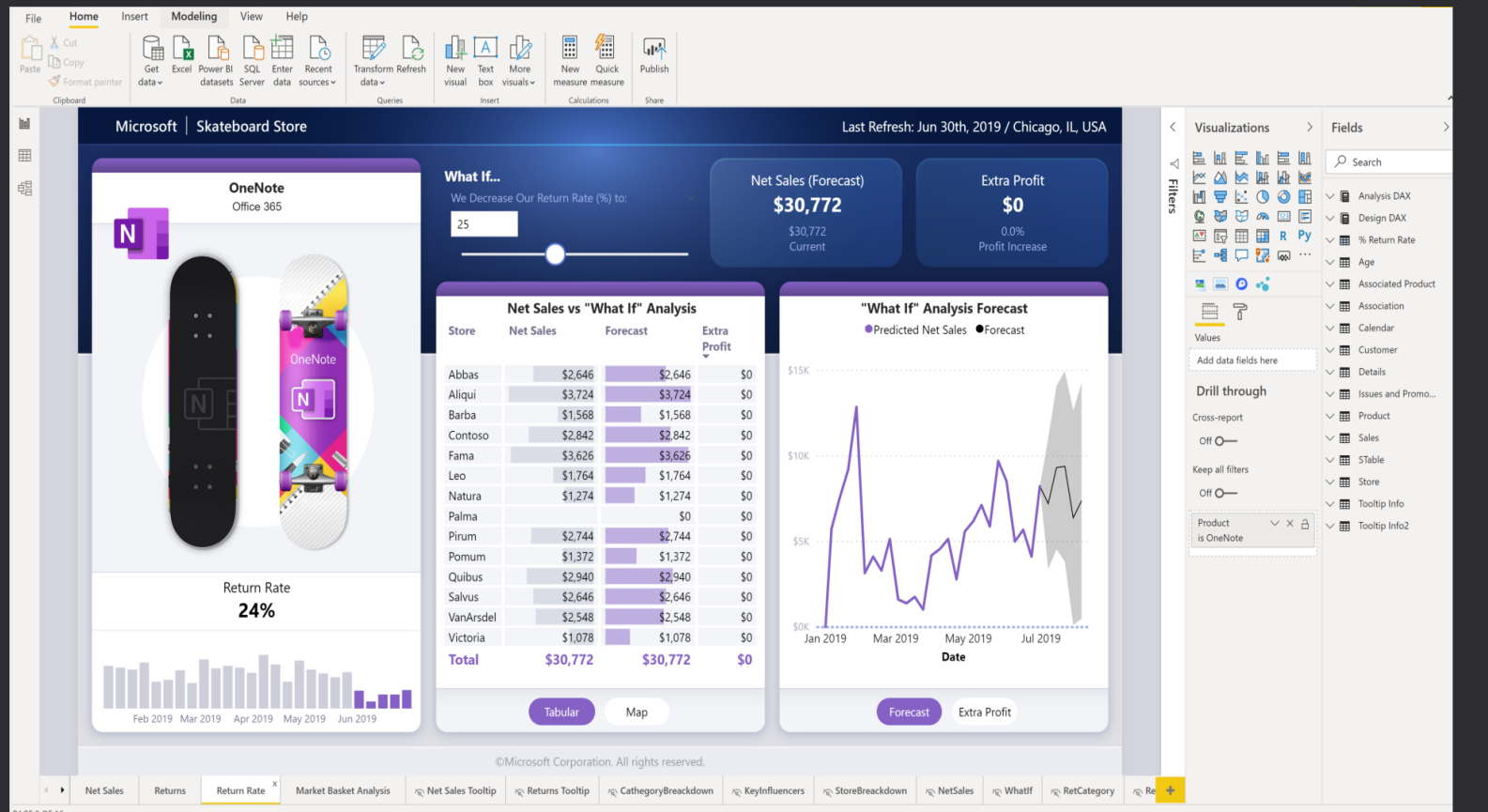


Custom visualizations and custom connectors

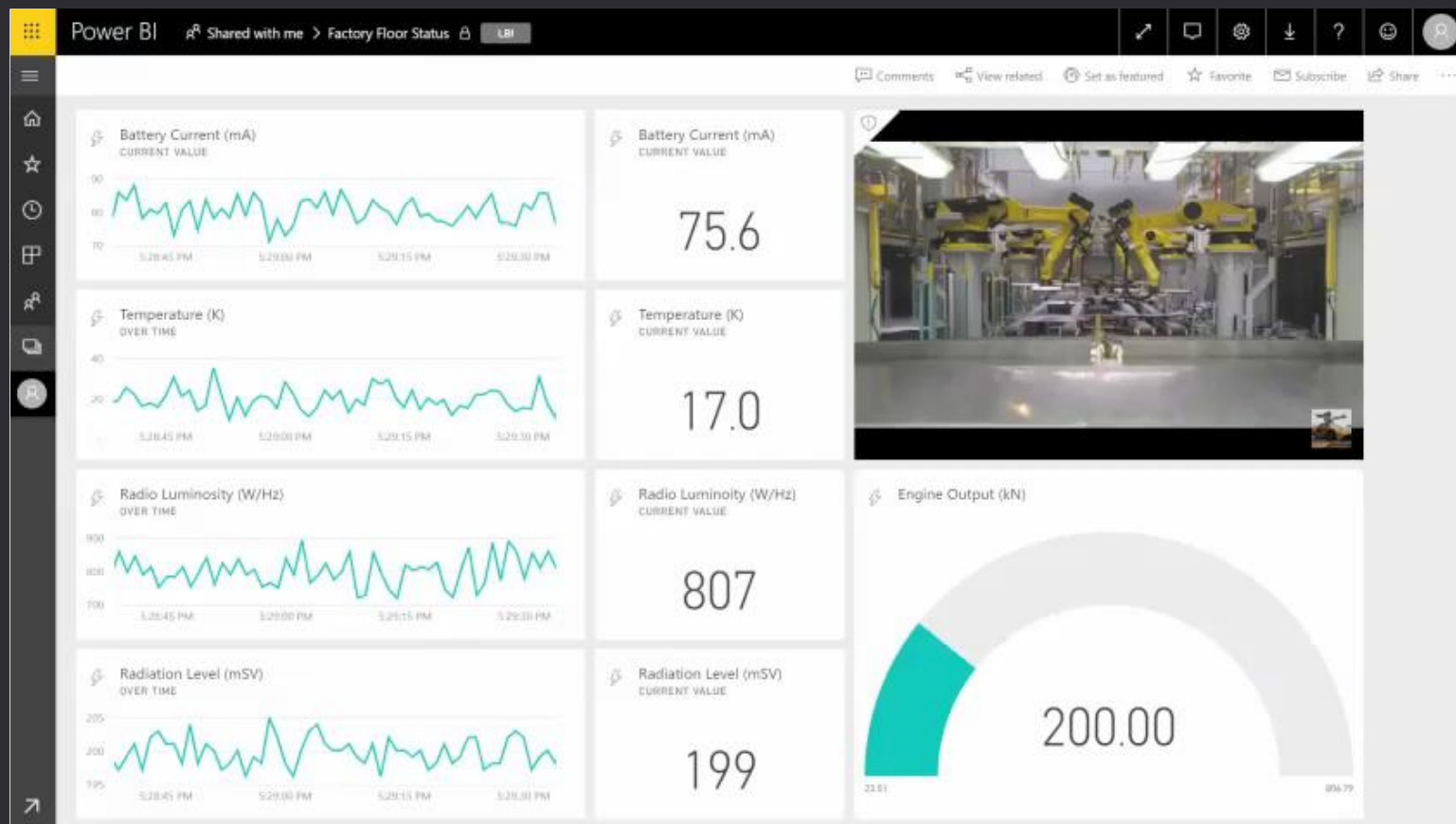


Integration with Excel, Power Point, SharePoint and TEAMS

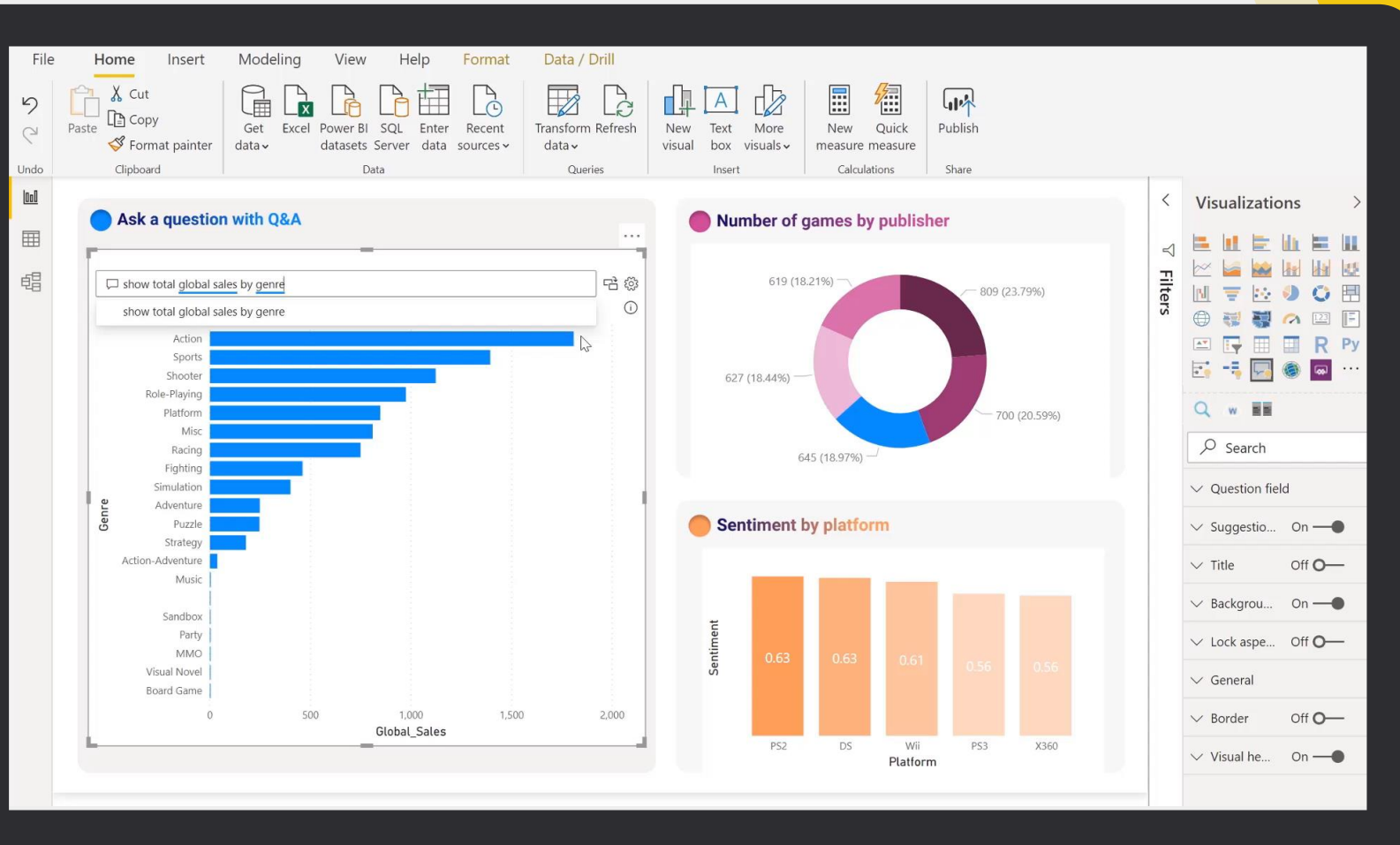
Power BI Desktop is free

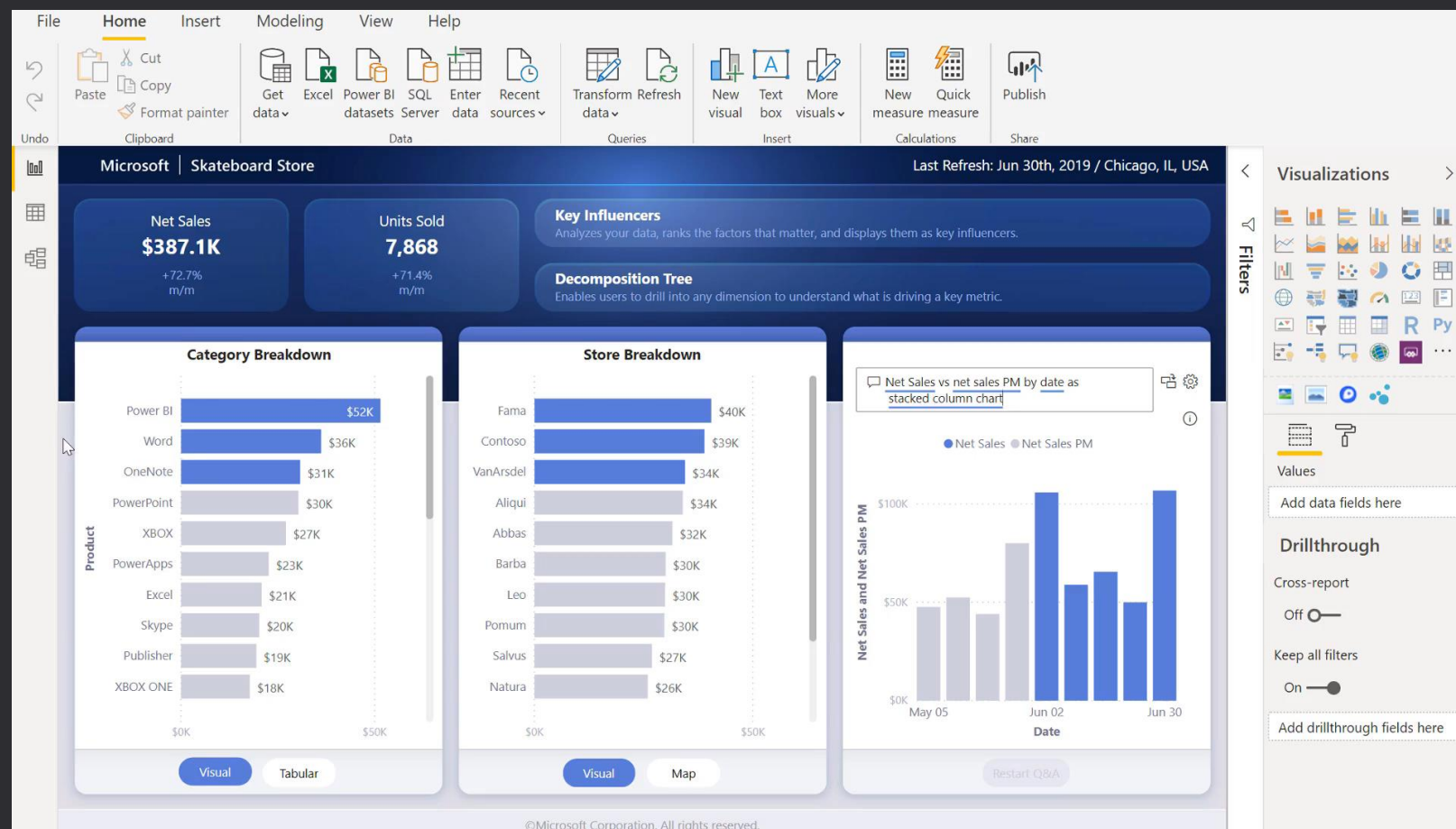
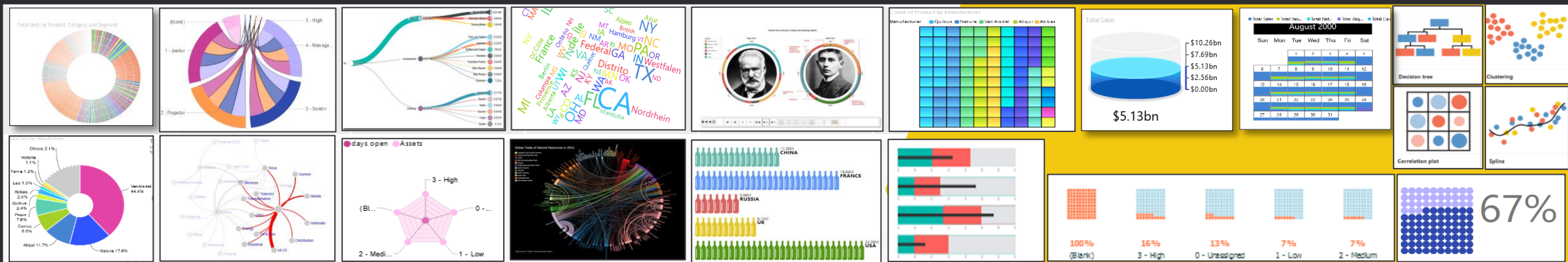


Real time dashboards and interactive reports



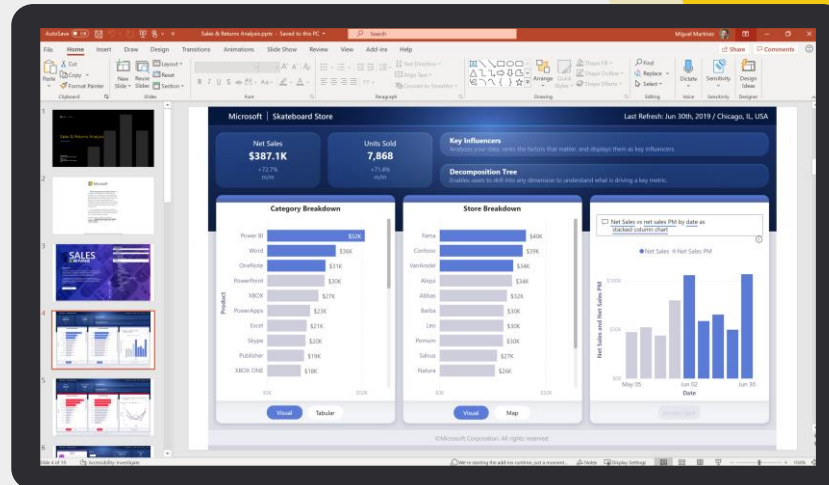
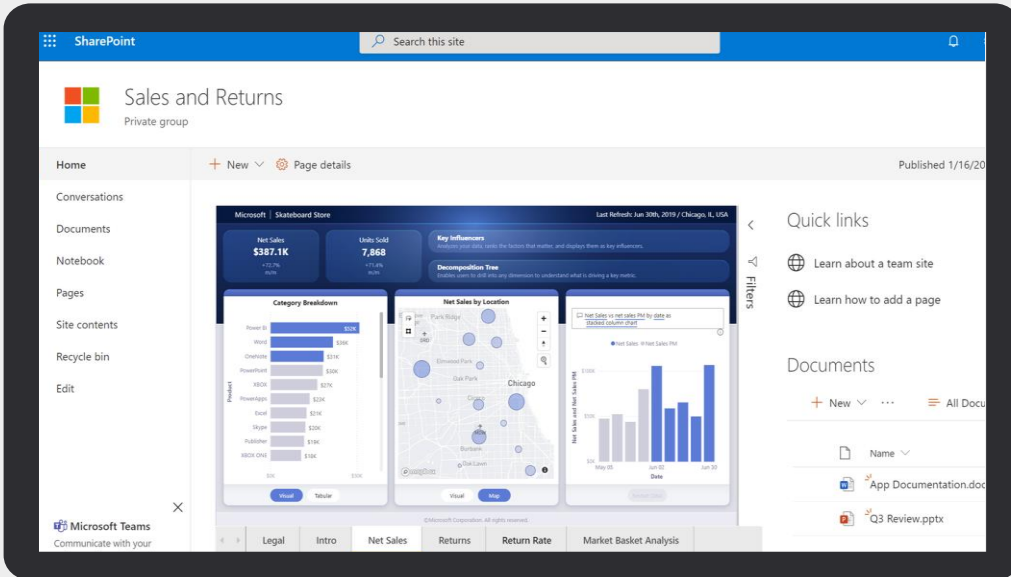
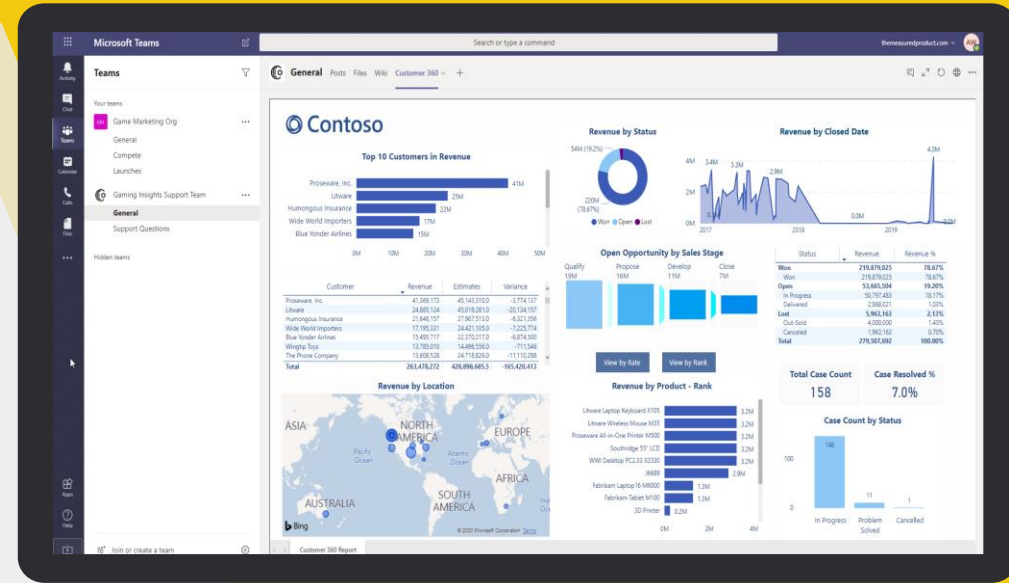
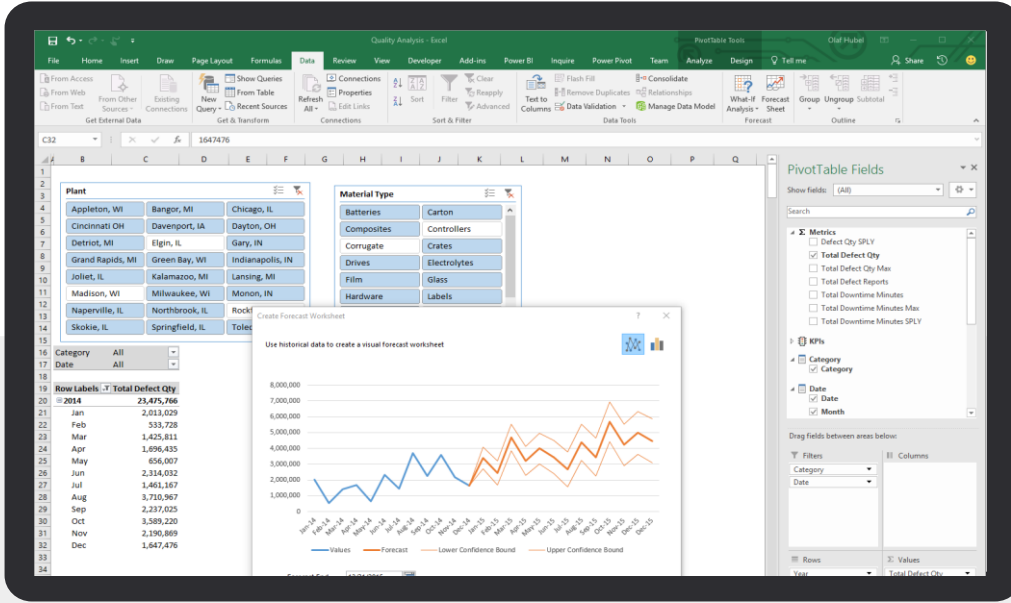
Natural Language query & AI insights



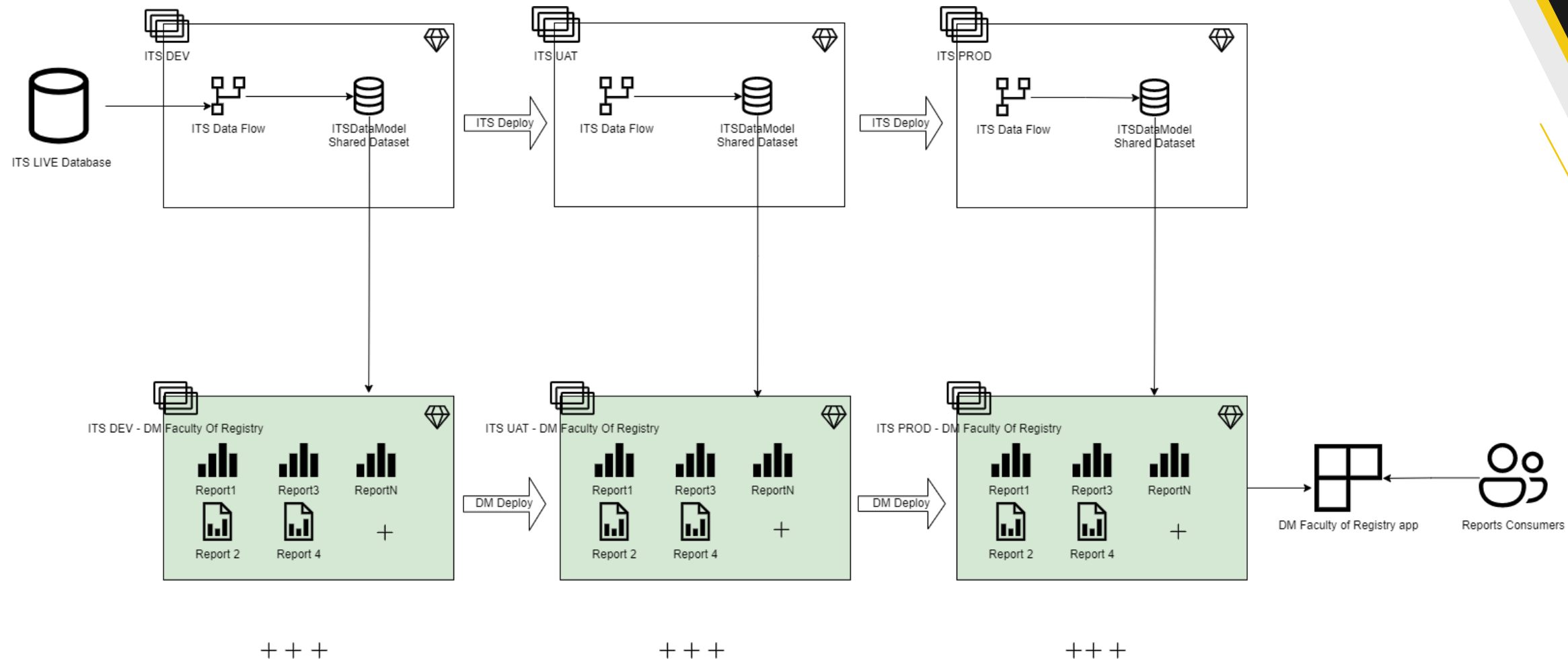


250+ Custom visuals

Integration with Excel, Power Point, SharePoint and TEAMS



ITS Power BI Reports Solution Architecture



Lab

Building Power BI Report

Lab. Building Power BI Report



2022 AZ Status PG

Qualification:
 Choice:
 Award Type:
 Description:

Full Name	Student Number	Faculty	Surname	Status	Code	Choice	Year	Interview Date	Study Period	Qualification	Description	Award Type
Aaron Kelly	21219083	7500	Kelly	1		21	2022		1	PME	Professional Master of Education	6
Adam Bober	21211294	2000	Bober	1		21	2022		1	HDEAT	H.Dip Engineering Analysis & Technology	18
Adam Flanagan	21210590	7500	Flanagan	1		21	2022		1	PMEP	Professional Master of Education Primary	6
Adam Gorman	21210617	7500	Gorman	1		21	2022		1	PMEP	Professional Master of Education Primary	6
Adrian Diver	21210878	7500	Diver	1		21	2022		1	GDILS	Grad Dip in Incl.Ed Learning Supp.&Sp.Ed	5
Adrian Donohoe	21211246	2000	Donohoe	1		21	2022		1	GCIOT	Grad Cert in the Internet of Things	4
Adrienne Keogh	21210534	7500	Keogh	1		21	2022		1	PMEP	Professional Master of Education Primary	6
Ahmed Abbas	21211289	2000	Abbas	1		21	2022		1	GCAI	Grad Cert in Artificial Intelligence	4
Ailbhe Roche	21210742	7500	Roche	1		21	2022		1	PMEP	Professional Master of Education Primary	6
Ailish Mc Gowan	21210811	7500	Mc Gowan	1		21	2022		1	GDILS	Grad Dip in Incl.Ed Learning Supp.&Sp.Ed	5
Aimee Good	21210922	7500	Good	1		21	2022		1	GCEAS	Grad Cert in Edu of Pupils on Autism Spe	4
Aimee Lynch	21210812	7500	Lynch	1		21	2022		1	GDILS	Grad Dip in Incl.Ed Learning Supp.&Sp.Ed	5
Aimee Mc Guirk	17369516	7500	Mc Guirk	1		21	2022		1	PMEP	Professional Master of Education Primary	3
Aimee Mc Guirk	17369516	7500	Mc Guirk	1		21	2022		1	PMEP	Professional Master of Education Primary	6
Aine Cannon	18348531	7500	Cannon	1		21	2022		1	PME	Professional Master of Education	3
Aine Cannon	18348531	7500	Cannon	1		21	2022		1	PME	Professional Master of Education	6
Aisling Halligan	18492262	7500	Halligan	1		21	2022		1	PMEP	Professional Master of Education Primary	3
Aisling Halligan	18492262	7500	Halligan	1		21	2022		1	PMEP	Professional Master of Education Primary	6
Aisling Mc Garraghy	12417698	7500	Mc Garraghy	1		21	2022		1	GDILS	Grad Dip in Incl.Ed Learning Supp.&Sp.Ed	5
Aisling Mc Garraghy	12417698	7500	Mc Garraghy	1		21	2022		1	GDILS	Grad Dip in Incl.Ed Learning Supp.&Sp.Ed	6
Aisling Nolan	21210576	7500	Nolan	1		21	2022		1	PMEP	Professional Master of Education Primary	6
Alan Nally	21219016	7500	Nally	1		21	2022		1	PME	Professional Master of Education	6

Lab. Building Power BI Report. Prerequisites.

1. Access to Power BI Desktop on DCU Virtual Desktop
2. Power BI PRO account on Power BI Service
3. Access to ITS Training Development/UAT/PRO Workspaces on Power BI Service
4. Access to V:\\ITS Power BI Training\\Assets folder, where can be found:
 1. Power BI Report samples
 2. ReportQueries.sql – Original SQL queries of the reports on ITS database.
 3. DCU_PBIColorTheme.json – report theme file
 4. DCU Logo pictures

Lab. Building Power BI Report: "2022 AZ Status PG"

Building the report in **Power BI Desktop**:

1. From Power BI Desktop connect to the dataset "**ITS Data Model**".
2. Review the report query in ReportQueries.sql: identify tables that's been used for the report.
3. Review those **tables** in the model. Identify **relationships** between tables based on the query.
4. Create a table visual with all fields from "SELECT" clause of the report query.
5. Add filters on **Filter pane** for the table.
6. Add **Dropdown slicers** to the report for Qualification, Choice, Award Type and Description.
7. Add picture of **DCU Logo** on the report.
8. Add **Header** of the report as a text field.
9. Adjust **look and feel** of the report page, slicers, table. Import report **Color theme**: DCU_PBIColorTheme.json
10. Save the report with your initials and name like <FullName>_2022 AZ Status PG.pbix

Lab 02 -

Building Power BI Report based on Direct Query

Reports Deployment Stages

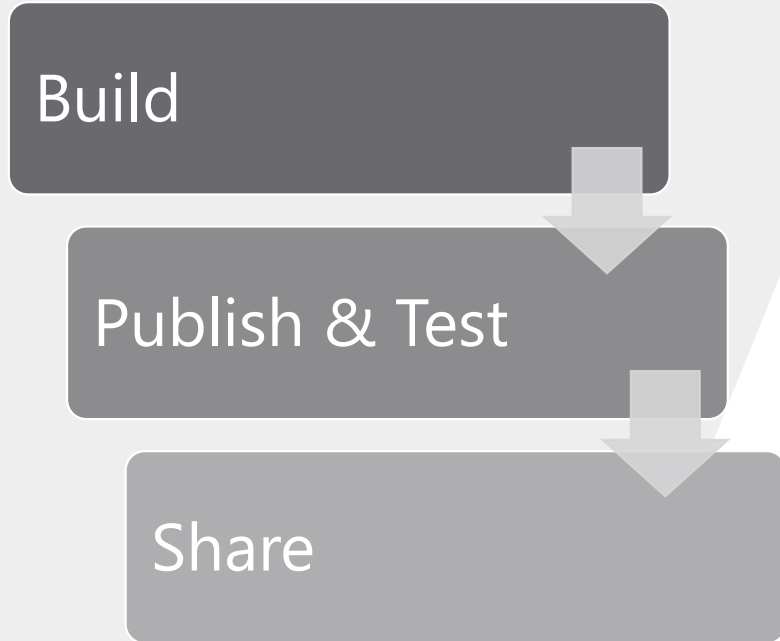


Lab. Building Power BI Report: “2022 AZ Status PG”

Publishing and Share the report on **Power BI Service**:

1. From Power BI Desktop publish the report on Power BI Service **ITS Training Development** workspace.
2. Review the report on ITS Training Development.
3. Request deployment of ITS Training Development content to **ITS Training UAT** workspace from admins.
4. Review the report on **ITS Training UAT** when deployed by admins
5. Create/Update an **app** to share the report with testers.
6. Request Deployment on **ITS Training PROD** from admins.
7. Create/Update an **app** to share the report with end users.

Reports Building Flow Recap



1. Connect to ITS Data Model dataset from Power BI Desktop.
2. Request the dataset access "build" permission from DCU dataset designers if missing.
3. Build the report using existing tables and relationships in the dataset.
4. Request missing data and relationships from DCU data model designers providing requirements.
5. Save report locally as pbix file.
6. Publish the report into destination workspace on DEV environment on Power BI Service.
7. Test report internally on Power BI Service
8. Request deployment to UAT and PROD from DCU reports admins
9. Add report viewers into workspace app auditory and create/update the app.

Q&A

Svetlana.Korshunova@spanishpoint.ie

Recommended Resources

- Power BI Learning: https://docs.microsoft.com/en-us/learn/powerplatform/power-bi?WT.mc_id=powerbi_landingpage-docs-link
- YouTube Power BI Latest News: <https://www.youtube.com/user/mspowerbi>
- Power BI Community: <https://community.powerbi.com/>
- Sqlbi portal: <http://www.sqlbi.com/>
- Introducing Dax Free video Course: <http://www.sqlbi.com/p/introducing-dax-video-course/>
- DAX Guide from sqlbi.com: <https://dax.guide>
- DAX Reference: <https://msdn.microsoft.com/en-us/library/gg413422.aspx>
- Power Query M Reference: <https://microsoft.com/en-us/documentation/powerbi-service-visualization-best-practices/msdn.microsoft.com/en-us/library/mt211003.aspx>
- Power BI Design best practices: <https://powerbi..microsoft.com/en-us/documentation/powerbi-service-visualization-best-practices/>