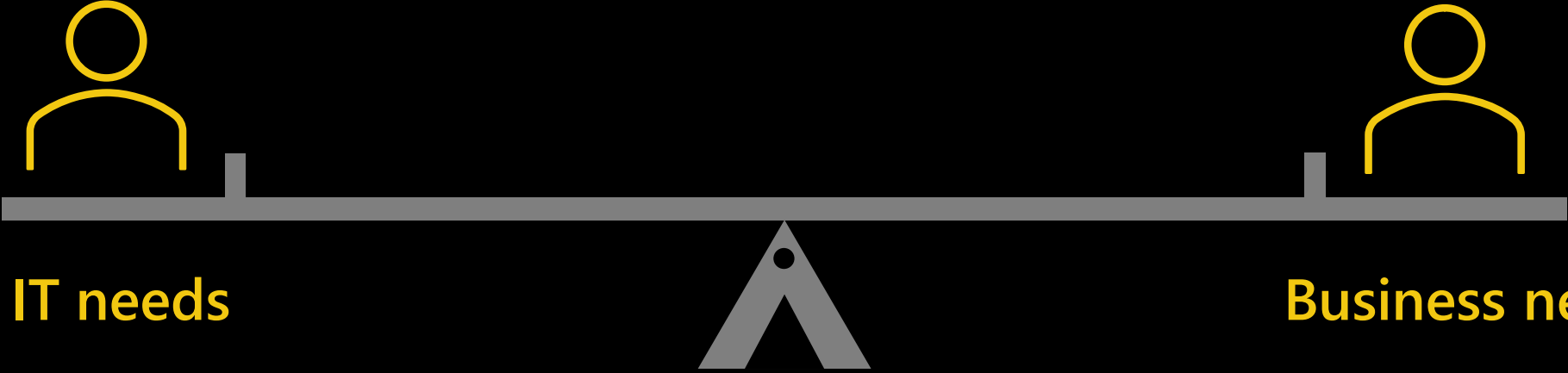




Power BI



Balance & Self-Service Analytics



IT needs

Business needs

- Governance
- Security
- Scalability

- Agility
- Speed
- Flexibility



Business Analyst



Nicht technisch genug, um SQL zu schreiben



Heterogene Datenlandschaft



Hohe Datenmengen erhöhen die Komplexität

Begrenzte Unterstützungsmöglichkeit der IT



IT



Begrenzte Personalressourcen



Lang laufende Datenintegration



Hohe Datenmengen & Komplexität

Herausforderungen für Kunden



Die Erstellung von Berichten, die aus verschiedenen Systemen stammen, ist schwierig, da jedes System unterschiedliche Datenschemata hat, die miteinander in Einklang gebracht werden müssen.



Eine schnelle Skalierung und die Gewährleistung einer einheitlichen Anwendung der Datensicherheit, um den Verlust wichtiger Unternehmensdaten zu verhindern, kann eine Herausforderung darstellen.



Benutzer, die nicht über eine analytische Ausbildung verfügen, haben es schwer, Erkenntnisse aus Transaktionsdaten zu gewinnen.



Fachanwender haben keine Zeit, sich einzuarbeiten, und müssen schnell Antworten finden, was den Einstieg in Self-Service-Dashboards erschwert und das Festhalten an alten Workloads zur Folge hat.

Datengetriebene Entscheidungsfindung

Microsoft Power BI ist eine Self-Service- und Enterprise-Business-Intelligence-Plattform, die ein intuitives Benutzererlebnis mit der Integration leistungsstarker Azure-Analysetools kombiniert, um einen tieferen Einblick in die Daten zu ermöglichen. Verbessern Sie die Zusammenarbeit mit nativen Integrationserfahrungen in Microsoft Produktivitätstools wie Teams, Excel und SharePoint.



Große Datenmengen
speichern, anreichern und
visualisieren

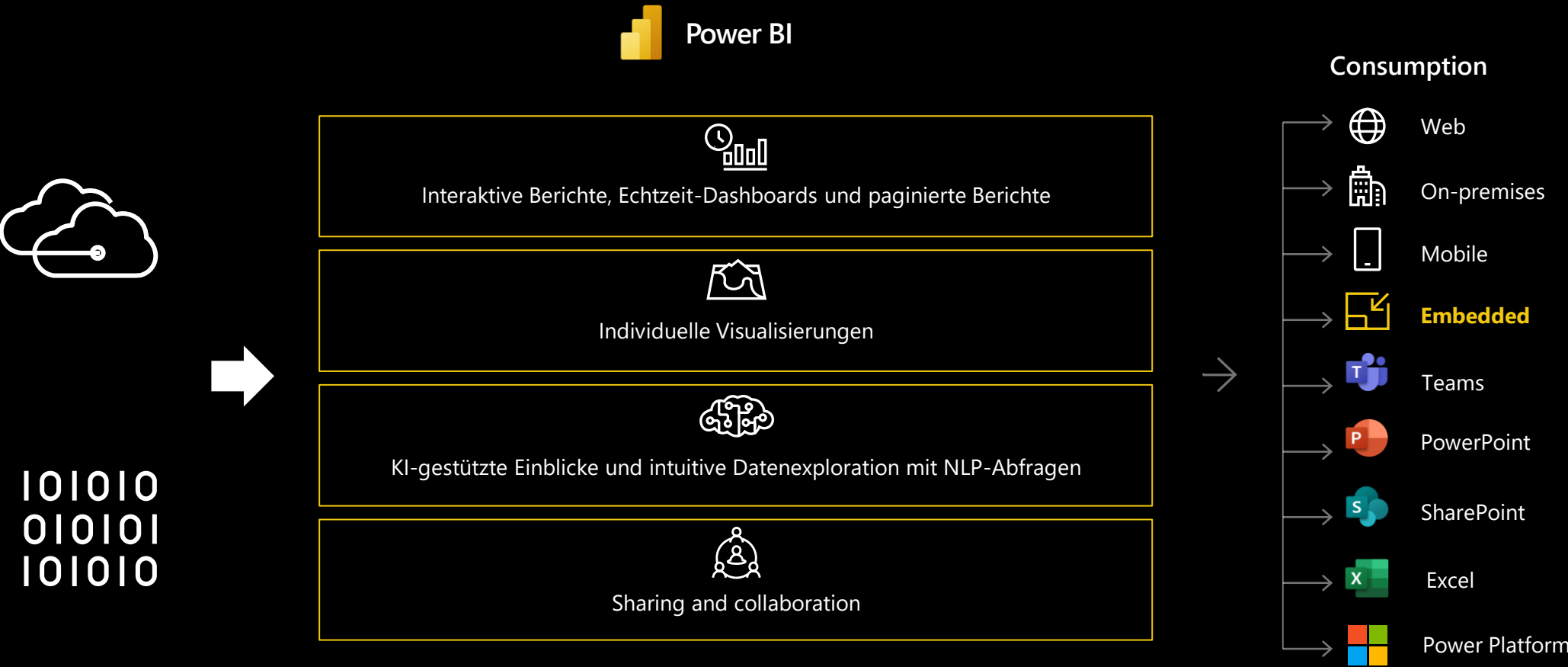


Schneller und einfacher
Zugang zu Daten



Integrieren Sie
Intelligenz in jeden
Prozess

Die Brücke zwischen Daten und Entscheidungen



Monatliche aktive Nutzung von
Power BI

6 Jahre

rapides Wachstum

300k+

Organisationen





1.6M

Community
Members

Gartner®

January 2022

A Leader in Analytics & BI Platforms*

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2022 Gartner Magic Quadrant for Analytics and Business Intelligence Platforms, Austin Kronz, Kurt Schlegel, Julian Sun, David Pidsley, Anirudh Ganeshan, 22 March 2022

Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms



Source: Gartner (March 2022)

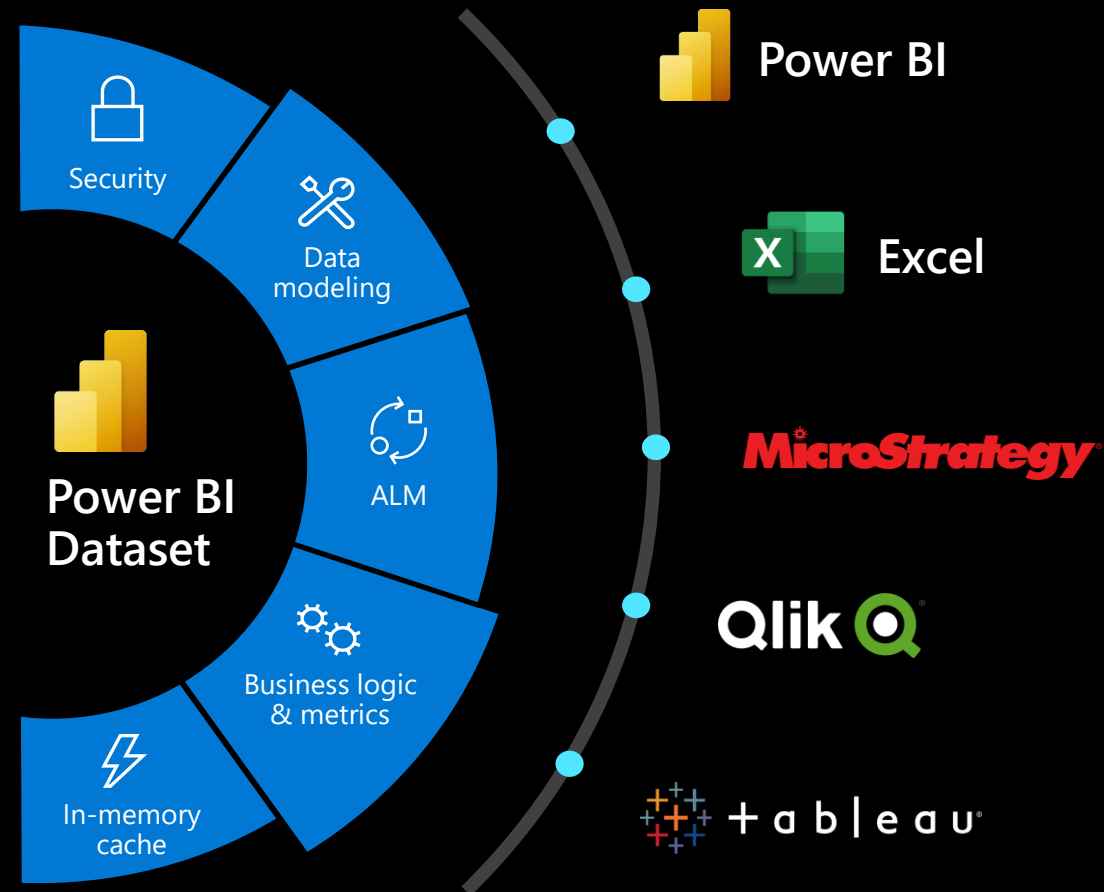
97%

der Fortune 500
Unternehmen nutzen
Power BI





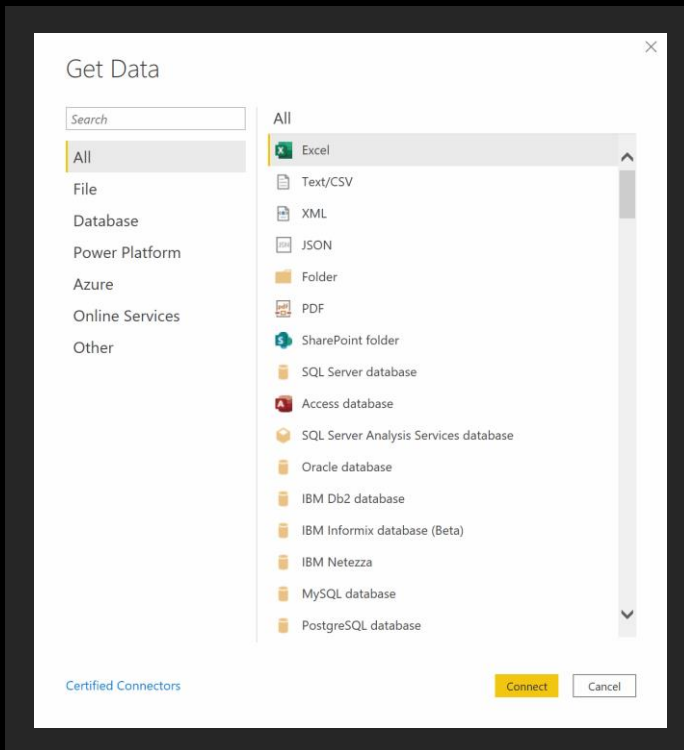
Weltweit führende OLAP- Technologie





Umfangreichste Datenkonnektivität im Markt

150+ Datenanschlüsse out-of-the-box



82

Entwickelt von Microsoft

- Entwickelt von unserem Produktteam
- Gebündelt mit Power Query
- **Beispiele:** SQL Server, Analysis Services, PDF Files, SAP BW & HANA, Web Page & Web API, ODBC, etc.

70

Entwickelt von ISVs

- Entwickelt von 3rd party ISVs, mithilfe unseres Konnektoren- SDK
- Zertifiziert und ausgeliefert durch Microsoft
- Gebündelt mit Power Query
- **Beispiele:** Denodo, Databricks, etc.

1,000s

Benutzerdefiniert

- Entwickelt von 3rd party ISVs, SIs, Partnern, etc.
- Integration durch users/admins nach Power Query & On-premises data gateway



Starke Integration an SAP Schnittstellen

Mehr als 3,500 Kunden

Smithfield

★ Heineken

Medtronic

L'ORÉAL



Braskem

Mondelēz
International

stryker



MARS

FERRERO



ECOLAB





Self-service Data Prep Power BI Dataflows

Power Query - Edit queries

Home Transform Add column View

Get data Enter data Options Parameters Refresh Advanced editor Manage Choose columns Remove columns Keep rows Remove rows Sort Split column Group by Data type Use first row as headers Merge queries Append queries Combine files

Customers
OData Navigation Choose columns Remove dupli... Filter rows

Orders
OData Navigation Choose columns Expand Remove dupli... Group by

Top customers
Merge

Table.NestedJoin(Customers, {"CustomerID"}, Orders, {"CustomerID"}, "Orders", JoinKind.Inner)

CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region	PostalCode	Country	Phone	Orders	
1	RATTC	Rattiesnake Canyon Grocery	Paula Wilson	Assistant Sales Representati...	2817 Milton Dr.	Albuquerque	NM	87110	USA	(505) 555-5839	[Table]
2	WHITC	White Clover Markets	Karl Jablonski	Owner	305 - 14th Ave. S. Suite 38	Seattle	WA	98128	USA	(206) 555-4112	[Table]
3	SPLRC	Split Rail Beer & Ale	Art Braunschweiger	Sales Manager	P.O. Box 555	Lander	WY	82520	USA	(307) 555-4680	[Table]
4	OLDWO	Old World Delicatessen	Rene Phillips	Sales Representative	2743 Bering St.	Anchorage	AK	99508	USA	(907) 555-7584	[Table]
5	LONEP	Lonesome Pine Restaurant	Fran Wilson	Sales Manager	89 Chiarosuro Rd.	Portland	OR	97219	USA	(503) 555-9573	[Table]
6	THEBI	The Big Cheese	Liz Niwon	Marketing Manager	89 Jefferson Way Suite 2	Portland	OR	97201	USA	(503) 555-3612	[Table]

Create



KI-gestütztes Data Prep

The screenshot displays the Microsoft Power Query Editor interface. The main window shows a data table with the following columns: CustomerKey, FirstName, LastName, and Sales. The data is organized into 40 rows. The ribbon at the top includes tabs for File, Home, Transform, Add Column, View, Tools, and Help. The Home tab is active, showing various data manipulation options such as Close & Apply, New Source, Recent Sources, Enter Data, Data source settings, Manage Parameters, Refresh Preview, Advanced Editor, Choose Columns, Remove Columns, Keep Rows, Remove Rows, Split Column, Group By, Data Type: Whole Number, Merge Queries, Test Analytics, Append Queries, Use First Row as Headers, Replace Values, Combine Files, and Azure Machine Learning. The right-hand pane shows the Query Settings for the current query, including the Properties section (Name: Employee Sales) and the Applied Steps section (Source, Expanded InternetSales, Removed Columns, Reordered Columns, Grouped Rows). The status bar at the bottom indicates 4 COLUMNS, 999+ ROWS and Column profiling based on top 1000 rows. The preview is downloaded at 8:55 AM.

CustomerKey	FirstName	LastName	Sales
1	Ion	Yang	57
2	Eugene	Huang	82
3	Ruben	Torres	18
4	Christy	Zhu	28
5	Elizabeth	Johnson	34
6	julio	Ruiz	31
7	Janet	Alvarez	13
8	Marco	Mehta	36
9	Rob	Vernhoff	17
10	Shannon	Carlson	28
11	Jacquelyn	Suarez	23
12	Curtis	Lu	30
13	Lauren	Walker	28
14	Ian	Jenkins	24
15	Sydney	Bennett	38
16	Chloe	Young	3
17	Wyatt	Hill	15
18	Shannon	Wang	5
19	Clarence	Rai	26
20	Luke	Lai	304
21	Jordan	King	1
22	Destiny	Wilson	9
23	Ethan	Zhang	6
24	Seth	Edwards	24
25	Russell	Xie	90
26	Alexandro	Beck	39
27	Harold	Sai	67
28	Jessie	Zhao	53
29	Jill	Jimenez	35
30	Jimmy	Moreno	54
31	Bethany	Yuan	40
32	Theresa	Ramos	91
33	Denise	Stone	167
34	Jaime	Nath	84
35	Ebony	Gonzalez	23
36	Wendy	Dominguez	38
37	Jennifer	Russell	10
38	Chloe	Garcia	21
39	Diana	Hernandez	26



Daten modellierung

Nahtlose Kombination und
Erweiterung von BI-
Modellen

The screenshot shows the Power BI Desktop interface. The main view is a 'Sales Report' dashboard. At the top, there are three summary cards: 'Recharge Amount' at \$8.6M, 'Sales' at \$94.12M, and 'Pipeline' at \$78.71M. Below these is a table with the following data:

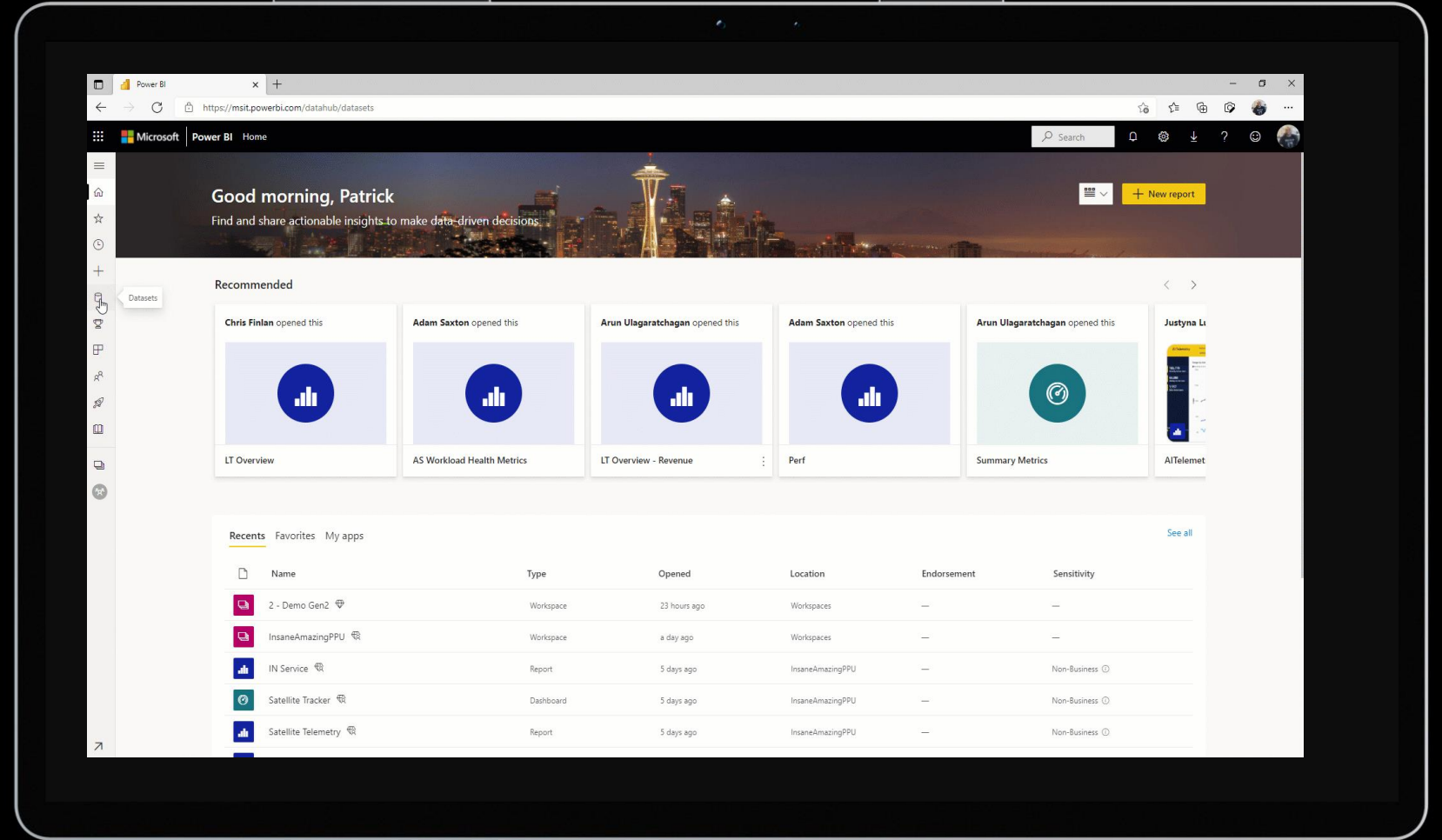
Date	Sales
4/24/2020	\$7,092,263.04
4/25/2020	\$7,627,960.2
4/26/2020	\$7,832,140.77
4/27/2020	\$7,417,329.26
4/28/2020	\$6,768,925.96
4/29/2020	\$6,478,403.22
4/30/2020	\$6,762,418.12
5/1/2020	\$7,211,322.3
5/2/2020	\$7,593,083.56
5/3/2020	\$7,883,966.76
5/4/2020	\$7,480,390.01
5/5/2020	\$6,983,100.07

The dashboard also features a 'Hour of Sale' filter with input boxes for 0 and 23, and a 'Dynamics 365' filter with buttons for 0, 1, 2, 3, 4, 5, and 6. The right-hand pane shows the 'Visualizations' and 'Fields' panes. The 'Fields' pane lists various data fields like 'Completion Chec...', 'Customer', 'Date', 'Finish Time', 'Geography', 'Lead Time', 'Pricing Level', 'Sales', and 'Sales Model'. The 'Visualizations' pane shows various chart and table icons. The bottom status bar indicates 'PAGE 1 OF 1' and 'Storage Mode: DirectQuery (click to change)'.



Dataset Hub

Power BI service



Die umfassendsten KI-Funktionen in einem BI-Produkt

 Data scientists


Extend with Azure ML



Create ML models


Choose a model Select data to study

Classification




Binary Prediction

Predict whether or not an outcome will be achieved.



General Classification

Distinguish between three or more outcomes.



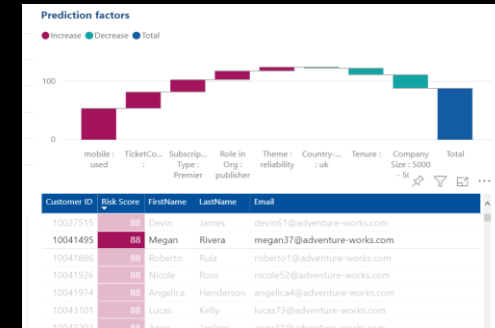
Regression

Estimate a numeric value.

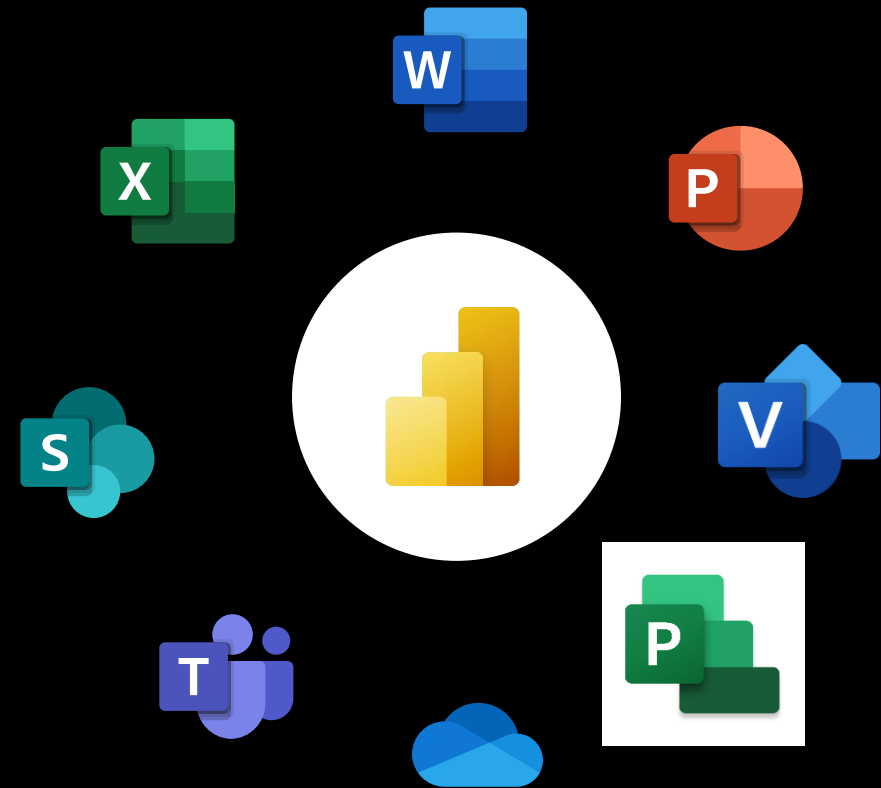
Python & R Integration



Explore Predictions



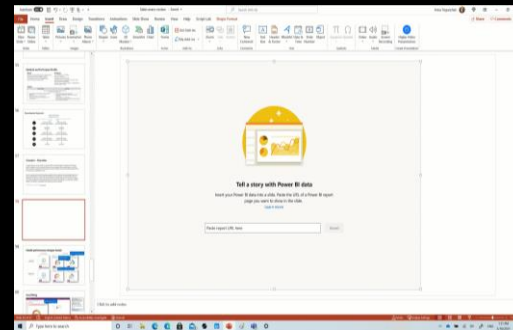
Integration zu Office und Teams



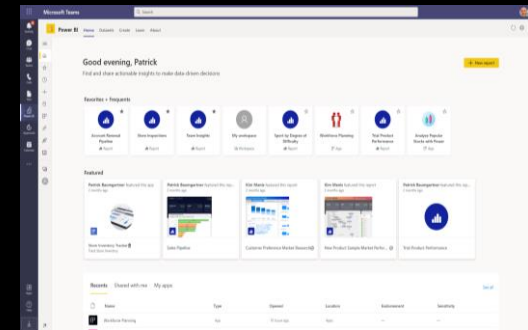
Erstellen, Zusammenarbeiten und
Teilen von Erkenntnissen mit
Office

Nahtlose Integration vollständig
interaktiver Berichte

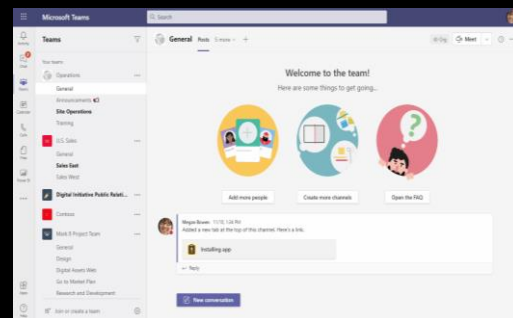
Storytelling with PowerPoint



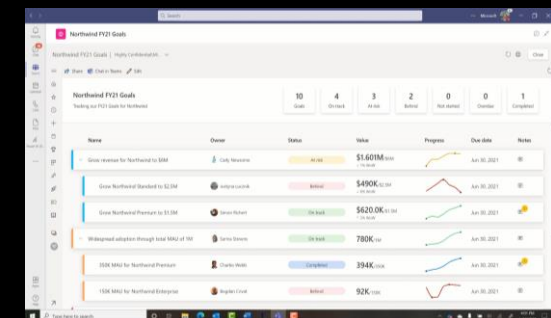
Your data is where you collaborate



Use data to inform discussions
in Teams



Goals in Power BI





Power BI in the real world

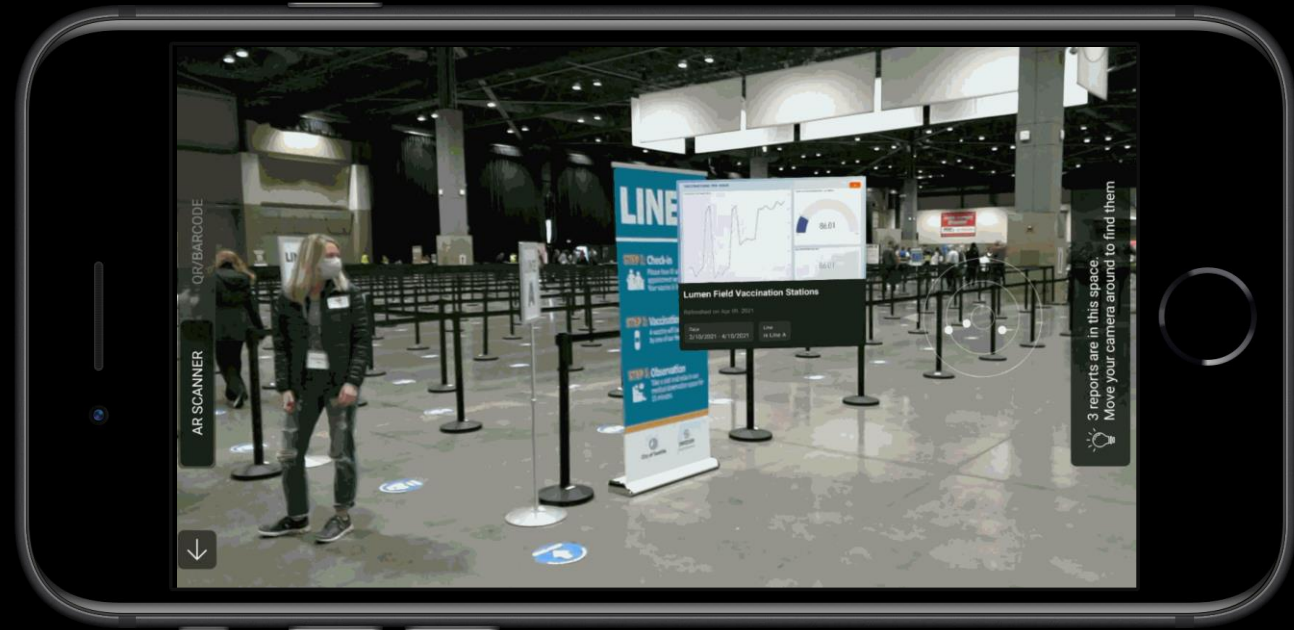
HoloLens 2





Power BI in the real world

Data in space







Power BI Security-Strategie

Cloud & remote work

Data residency

Large global footprint, offering storage in 54 data centers WW

Multi-geo capacities

Certifications

119 local and international compliance standards

34 local and international industry certifications

Network security

Service tags

Private links

VNet

TLS 1.2 enforcement

Data encryption

BYOK encryption via Azure Key Vault

Double encryption at rest

Data loss prevention

Classify and protect data with MIP

Monitor and protect data with MCAS

Integrated security policy management, audit and compliance

Power BI tenant admin governance - permissions, settings, metrics

Microsoft Platform to empower everyone to achieve more

