



SENTURUS

Power BI modeling use cases: Desktop to enterprise

Four different ways to source and prepare your data

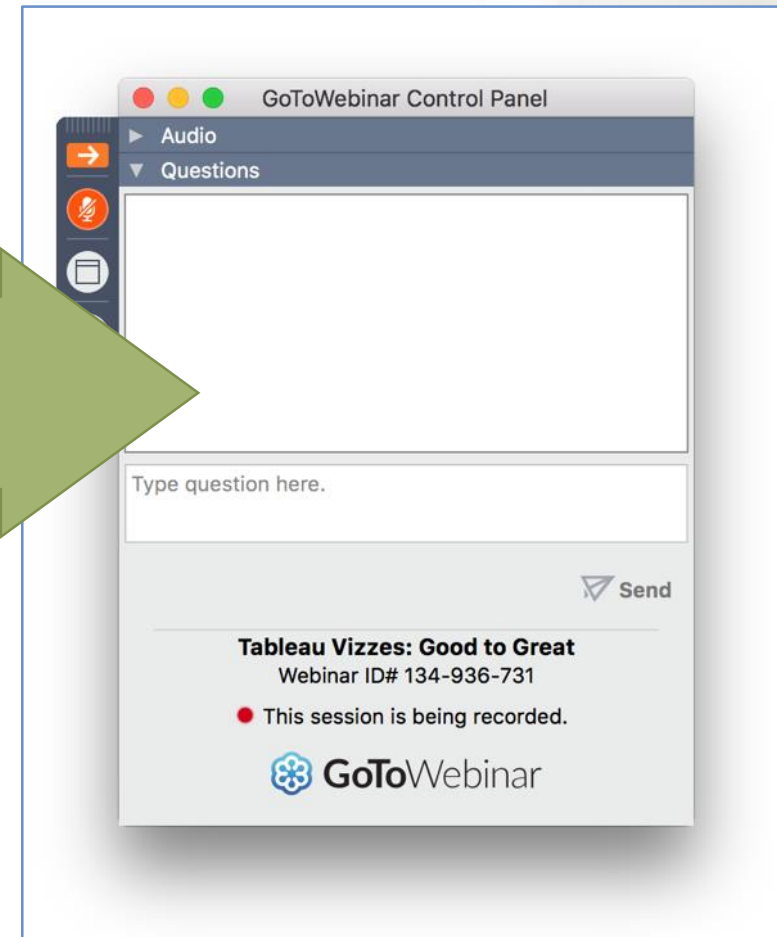


GoToWebinar control panel

Click arrow to restore full control panel



Submit questions in this section



To obtain this presentation

Visit the Resource Library
on the Senturus website
to download this presentation
and explore other assets:

senturus.com/resources

RESOURCE LIBRARY

Welcome to our extensive, free library of past webinars, demos, whitepapers, presentations and helpful hints. Use the topic boxes to the right to filter through and easily locate content. We are constantly adding new materials, so please check back often to see our latest content. Enjoy!

SEARCH RESOURCES

GO

SORT BY

Popularity

Date

Title

Type



RESOURCE TITLE

TYPE

GO

SHEDDING LIGHT ON CLOUD BI OPTIONS

Amazon. IBM Cognos Cloud. Microsoft Power BI Service. Tableau Online. Azure.



BUSINESS STRATEGY



IBM COGNOS REPORTING TOOLS: FEATURE SET COMPARISON
Visual Reference Guide



FEATURES



A COMPARISON OF POWER BI, TABLEAU & COGNOS
Differentiators Demo'd



FEATURES



Agenda

Introduction

Power BI overview

Query methods with pros and cons

Senturus overview

Additional resources

Q&A



Introduction



Michael Weinbauer

Director of Training and Content
Senturus, Inc.

Poll #1

Is your organization currently using Power BI Premium?

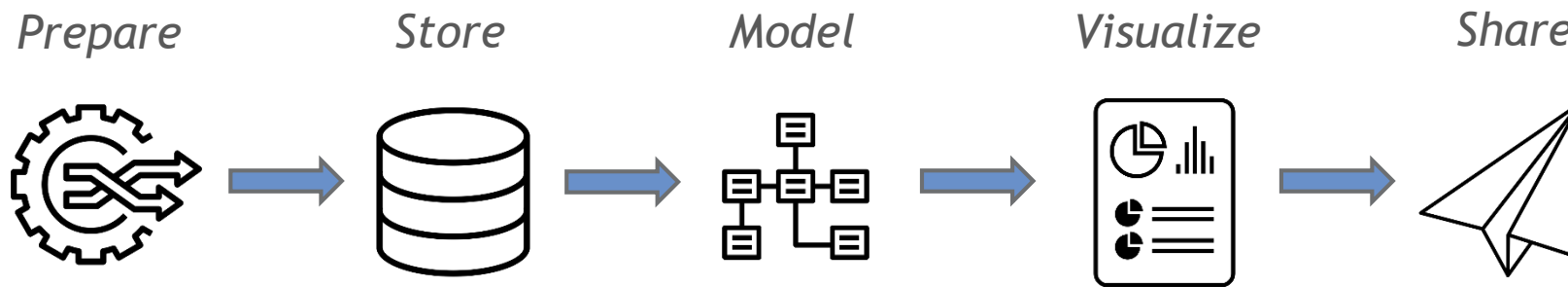
- Yes
- No
- Don't know

Poll #2

How do you connect to Power BI data currently? (select all that apply)

- Import
- DirectQuery to transactional/operational system
- Data warehouse/SSAS
- Dataflows
- Datasets

The rise of self-service



Can one tool do it all????

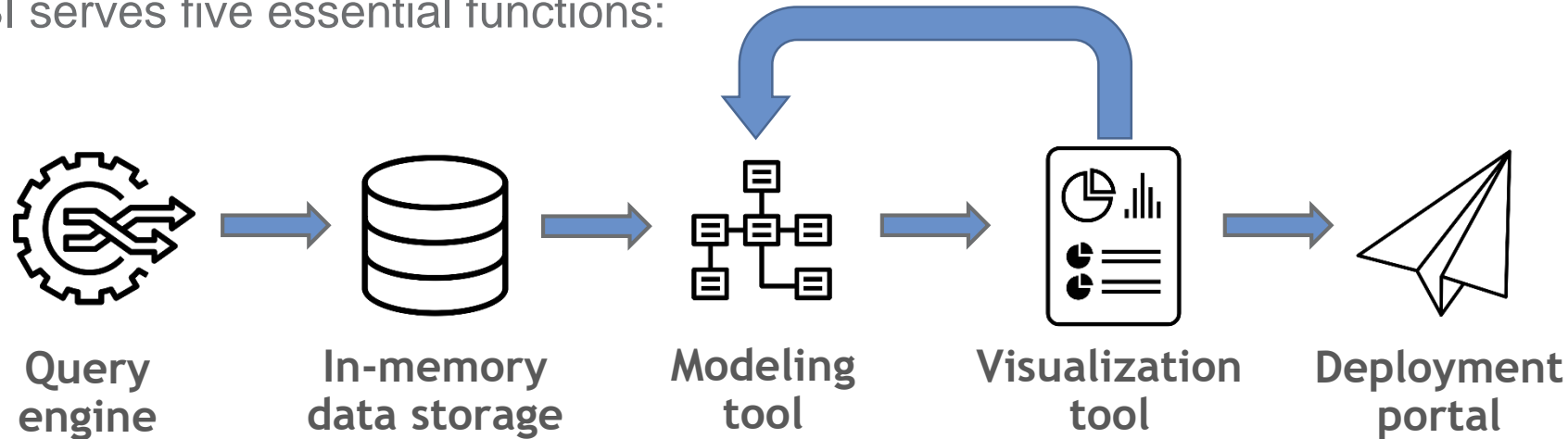
Microsoft BI offerings – through the years

	Excel	SQL Server	Access	Integration Services	Analysis Services	Reporting Services (MD)	PerformancePoint	Power Query	Power Pivot	Power View	Analysis Services (Tab)	Power BI
	87	89	92	98	98	04	07	10	10	10	12	15
Prepare	?	?	x	x				x				x
Store	?	x	x		x				x		x	x
Model	?		?		x				x		x	x
Visualize (reports)	?		x			x				x		x
Visualize (dashboards)							x			x		x
Share						x	x					x
In-memory		x							x		x	x
Self-service	x		x					x	x	x		x

What is Power BI?

A **self-service analytics** solution that lets you **prepare and present data** for your organization

Power BI serves five essential functions:



Power BI is actually a **set** of integrated tools:

Power BI **Desktop**

Power BI **Service**

Power BI **Report Server**

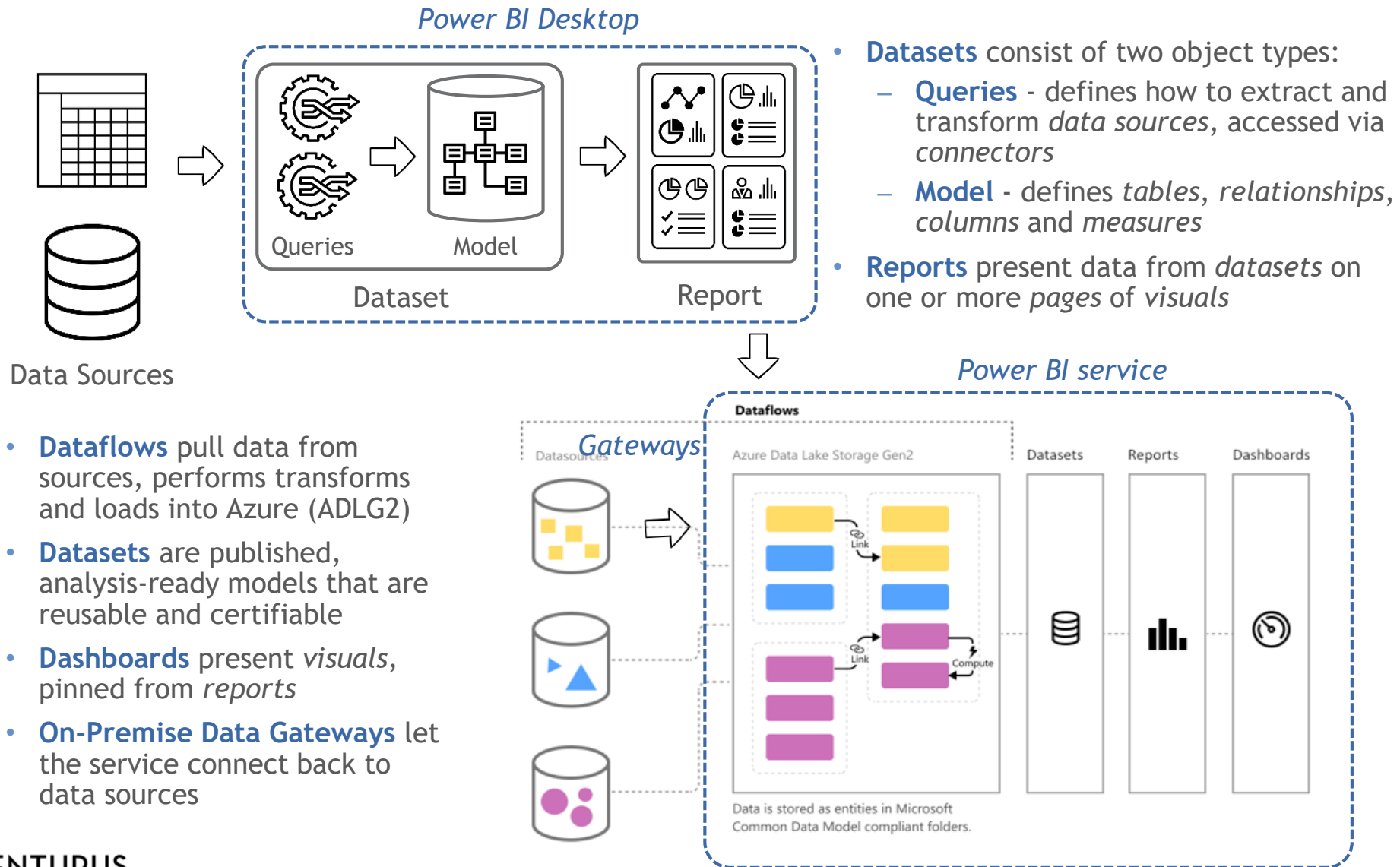
Power BI **Mobile**

Power BI **Embedded**

Power BI **Data Gateway**

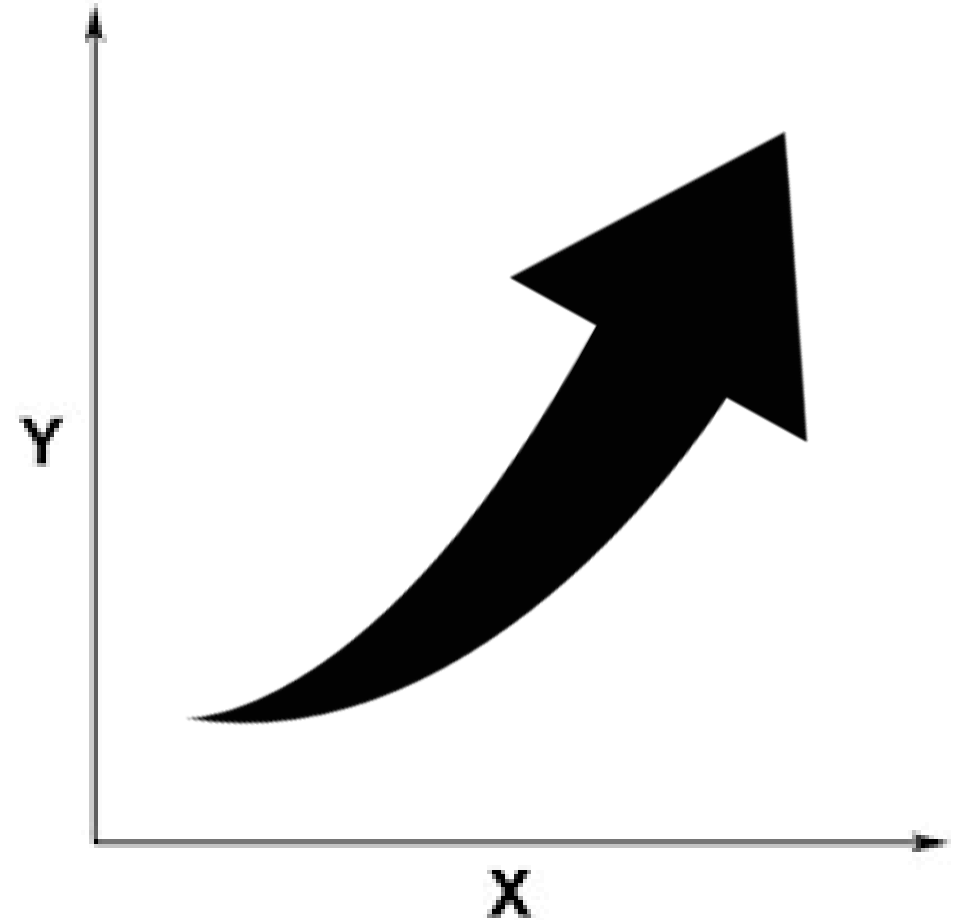
...and **Excel** (???)

Power BI core concepts and workflow



Tradeoffs and considerations

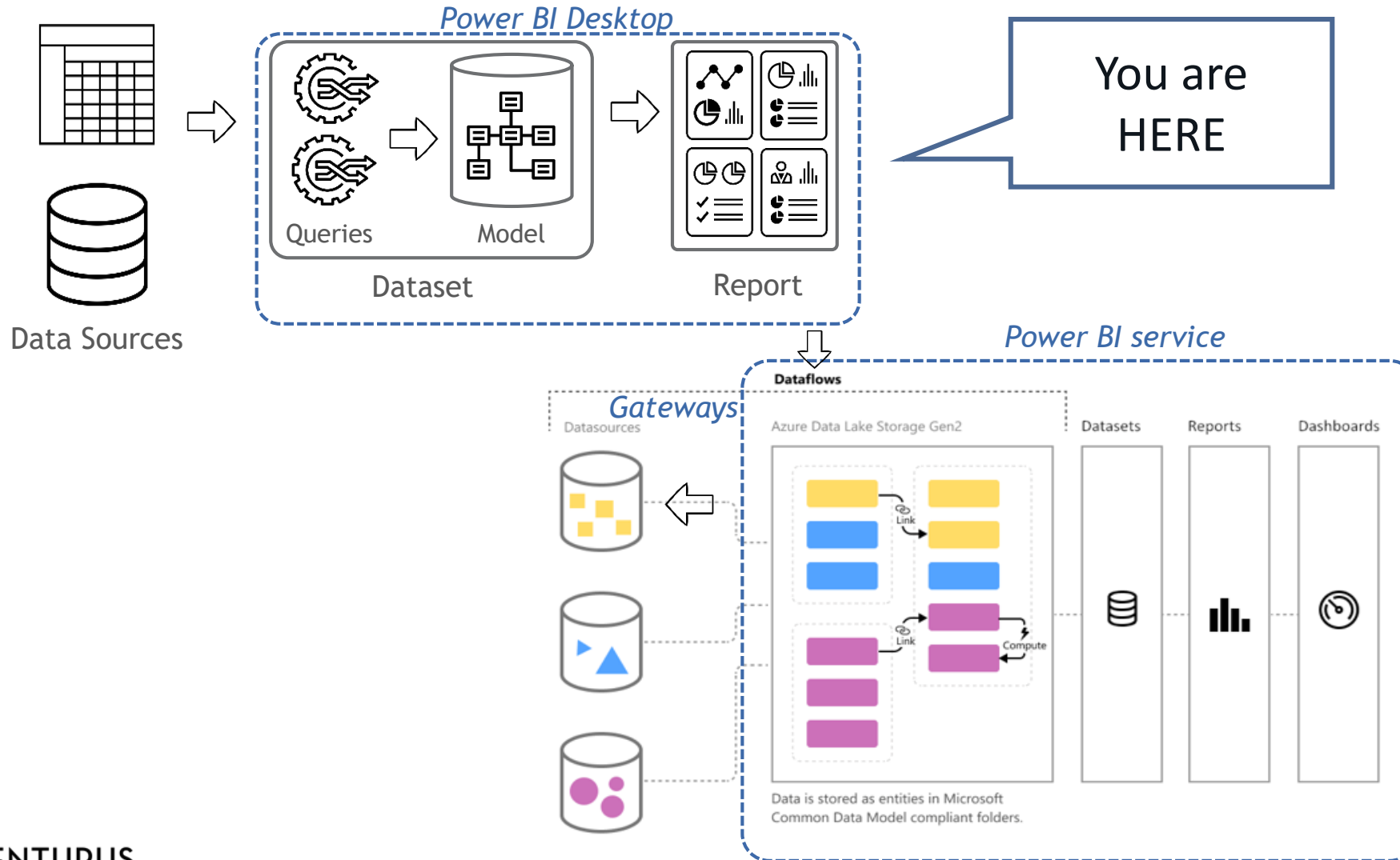
- Real-time vs. latent
- Store once vs. multiple copies
- Analysis ready vs. transactional
- Cost
- Performance
- Scalability
- On-prem vs. cloud
- Governance vs. agility
- Security



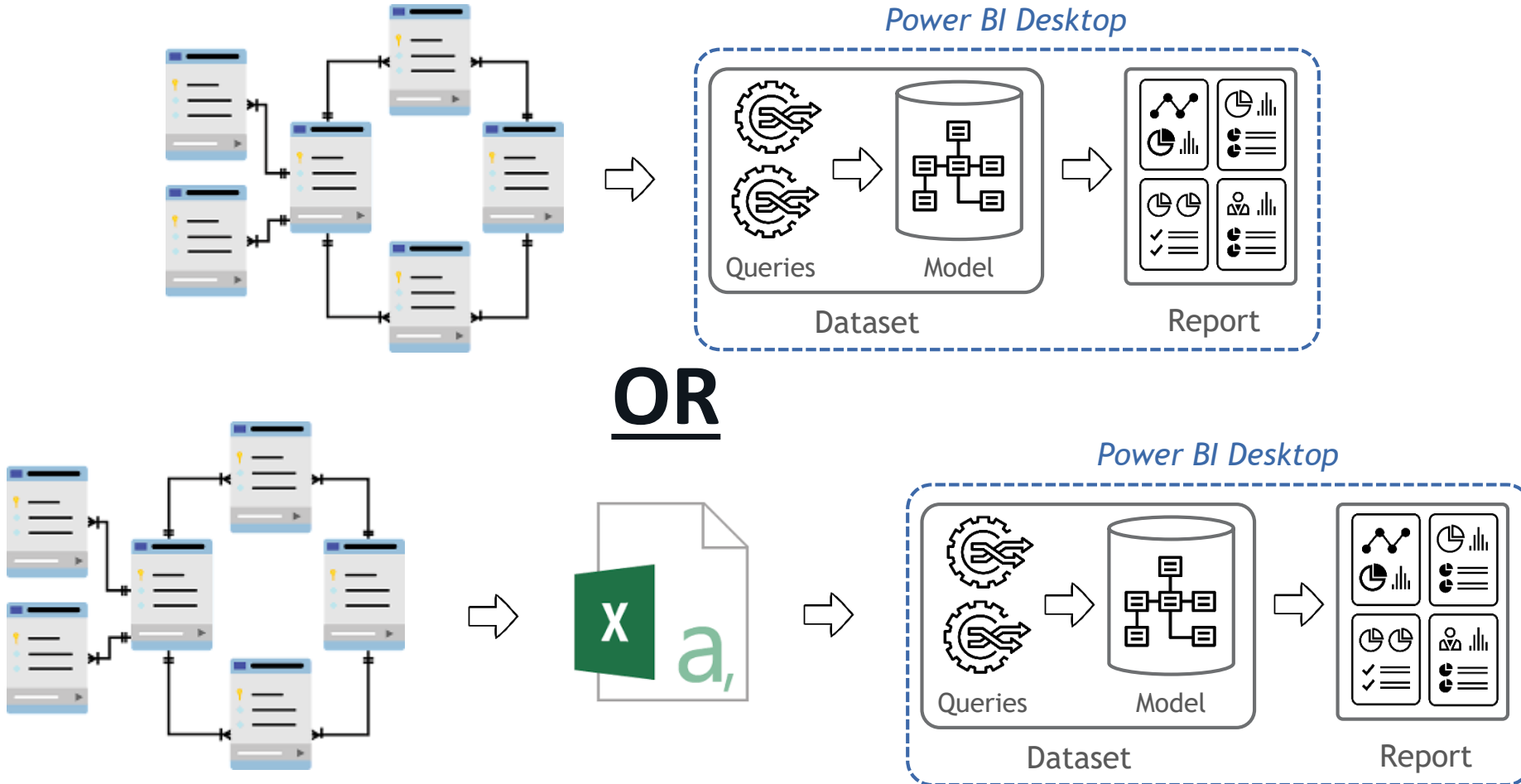
Query methods - definitions

- DirectQuery – live query to data modeled in Power BI
- Live – live query to pre-modeled data (datasets or SSAS)
- Import – data is pulled from source into Power BI data model
- Composite/dual – aggregate data is pulled into an import; query engine determines if Import or DirectQuery is used

Option #1 – direct connection to transactional data



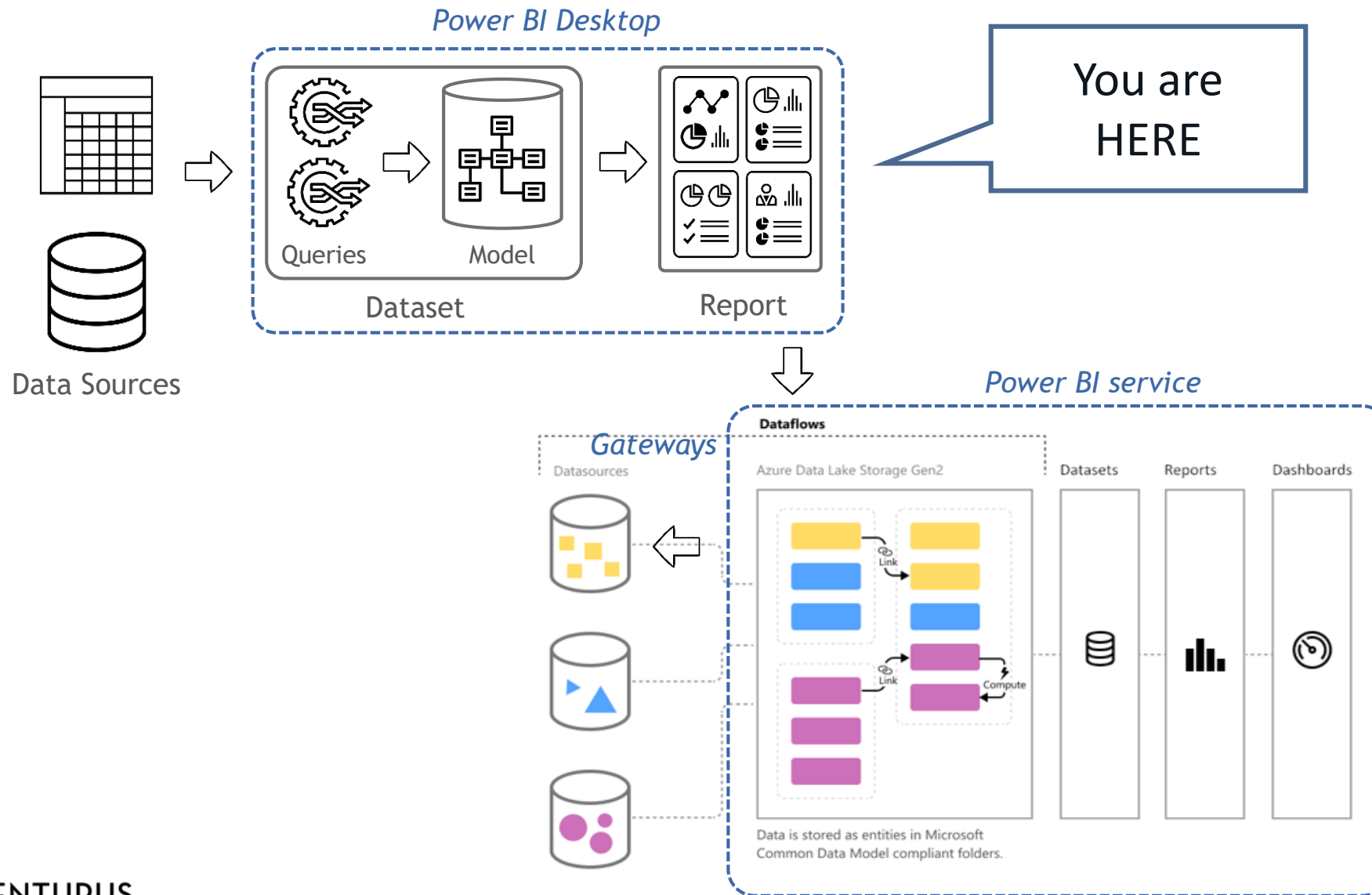
Option #1 – direct connection to transactional data



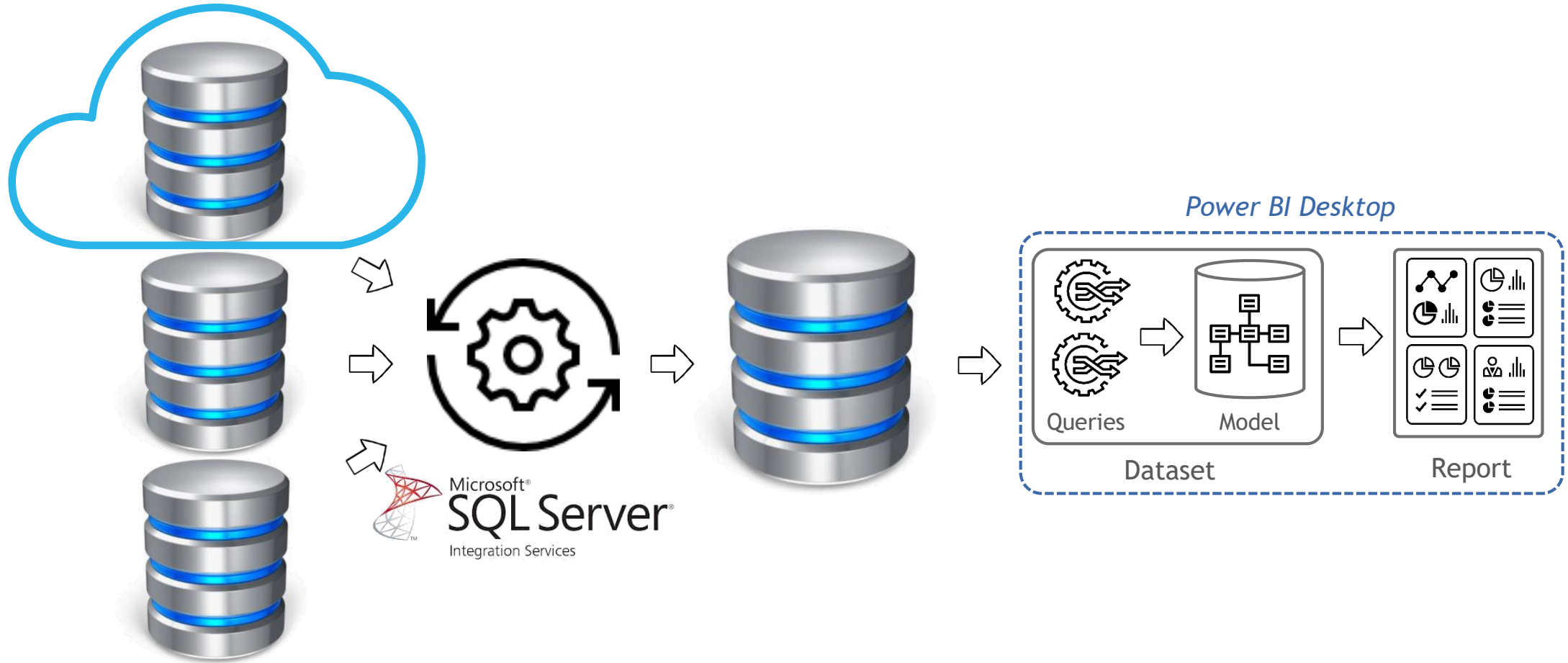
Option #1 – direct connection to transactional data

- Pros: real-time, no data redundancy, low cost, agile, powerful
- Cons: performance, system impact, effort, low reuse, point in time (lacks history, trending, change data capture)
- Ideal for: small groups, real-time use cases, prototypes
- Methods: DirectQuery, import or composite/dual
- BI maturity: beginner

Option #2 – connect to EDW



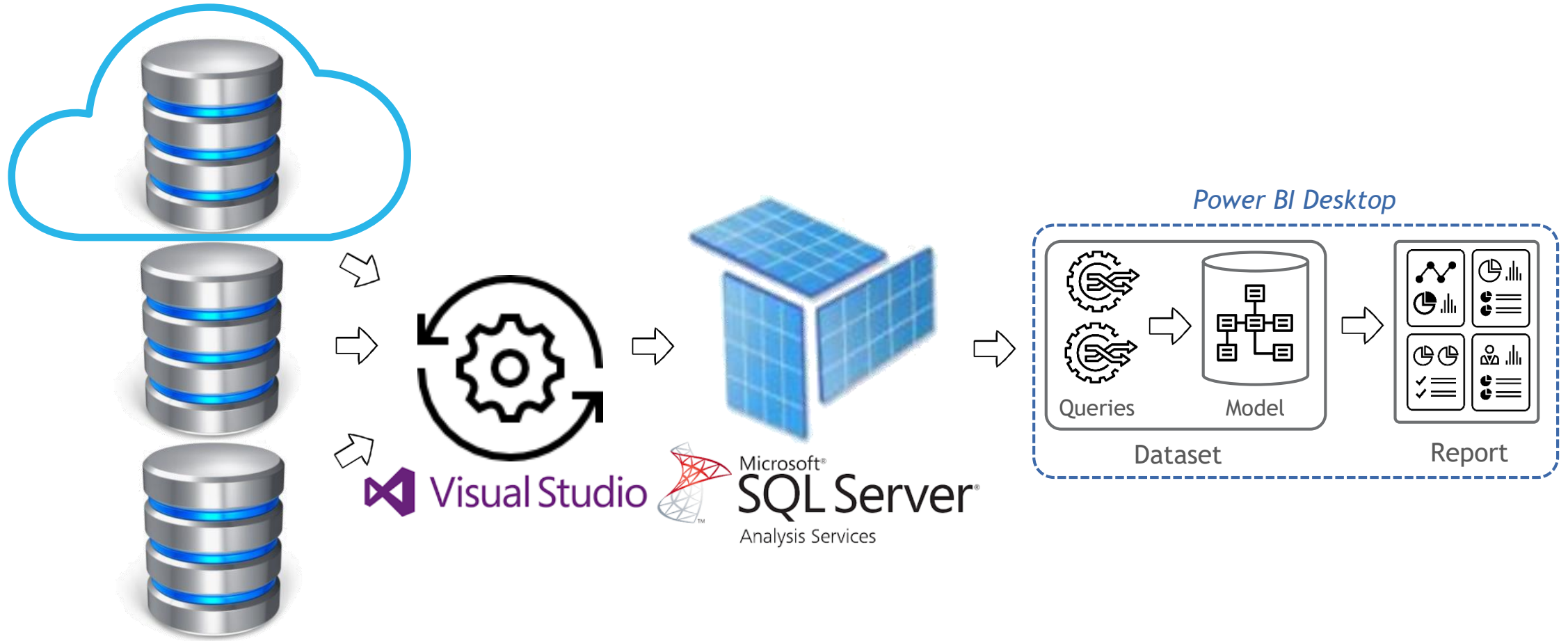
Option #2 – connect to EDW



Option #2 – connect to EDW

- Pros: easy, designed for analysis, governed, performant, scales, history, trends, change capture, reusable, aligned business metrics
- Cons: latency, recency, cost, unagile, completeness
- Ideal for: medium/large enterprises, governed data needs
- Methods: DirectQuery, import or composite/dual
- BI maturity: intermediate

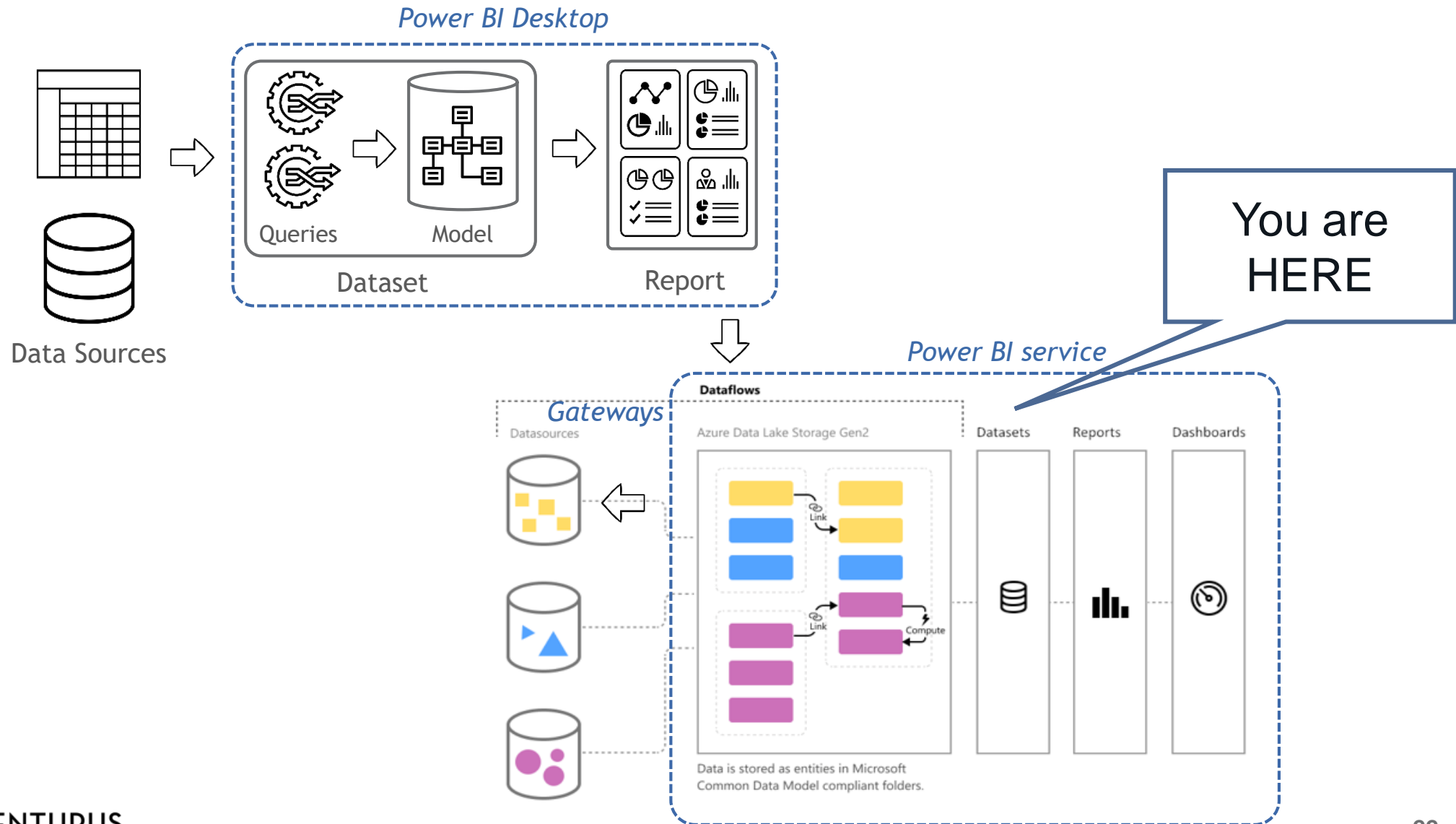
Option #2a – connect to SSAS



Option #2a – connect to SSAS

- Pros: easy, designed for analysis, governed, performant, scales, history, trends, change capture, reusable, aligned business metrics
- Cons: latency, recency, cost, unagile, completeness
- Ideal for: medium/large enterprises, governed data needs
- Methods: live
- BI maturity: intermediate



Option #3 – shared datasets



Option #3 – shared datasets

Select a dataset to create a report

🔍 Search

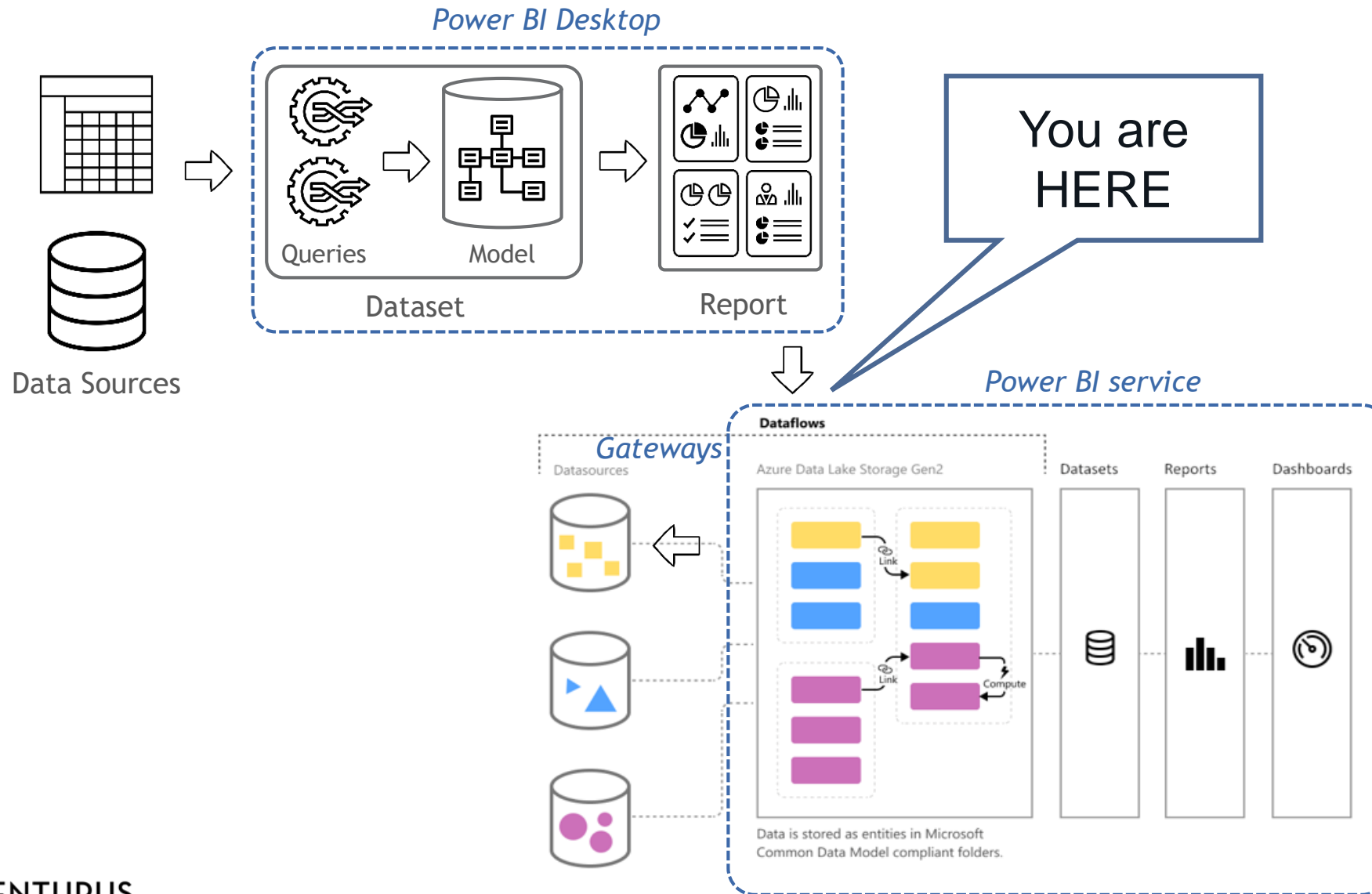
Name	Endorsement	Owner	Workspace	Refreshed
Senturus Analytics Connector Demo	 Certified	Michael Weinbauer	MWeinbauer@senturus.co...	3 months ago
MKW Test 4_2 Demo 20190916	 Promoted	Michael Weinbauer	MWeinbauer@senturus.co...	32 minutes ago
Adventure Works Dataset		PBI Instructor01	PBI Training Demo	7 months ago
Adventure Works Dataset		Stephen Wullschleger	PBI Training Dev	5 months ago
Adventure Works Report		PBI Instructor01	PBI Training Demo	7 months ago
airports		Bob Looney	Webinar	6 months ago
Connector Web Demo		Bob Looney	Wide World Importers	15 minutes ago

Create Cancel

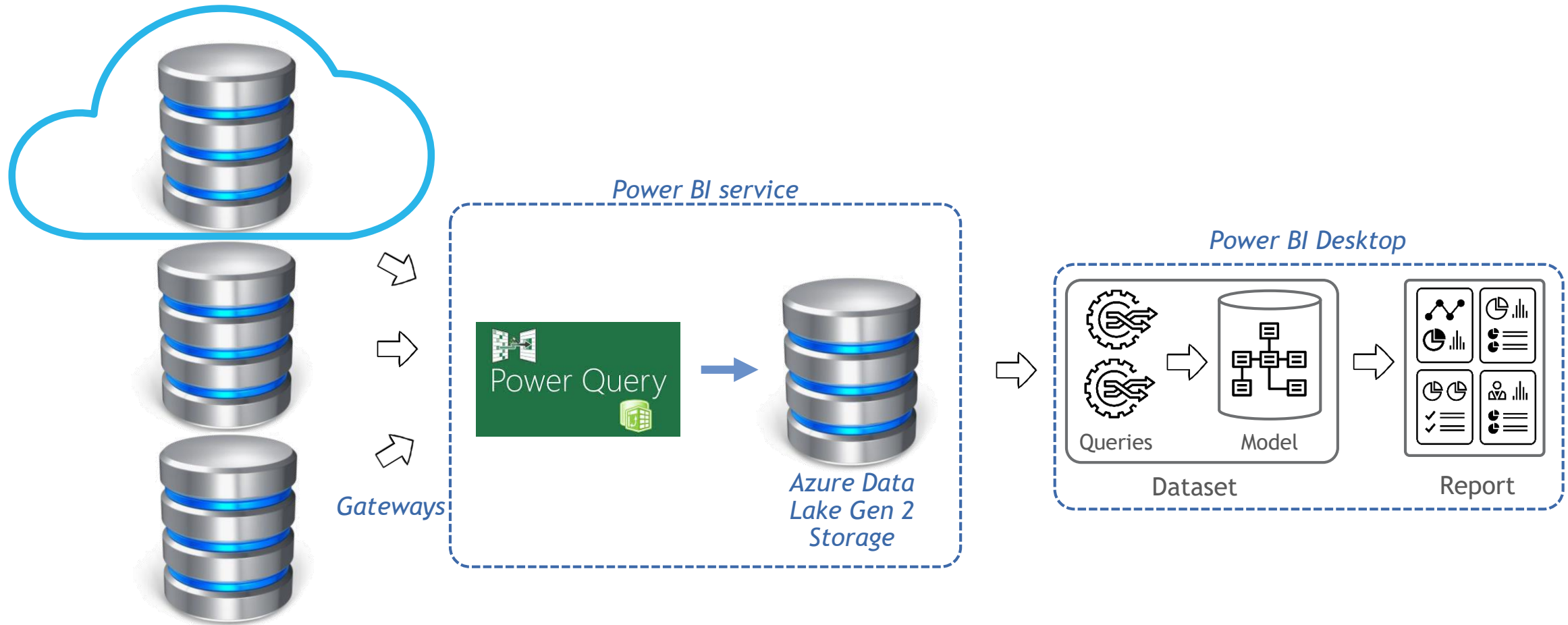
Option #3 – shared datasets

- Pros: governed, certifiable/promotable, performant, reusable, reduced impact on sources, aligned business metrics
- Cons: governance need/consequences of lack of governance, agility
- Ideal for: sharing data across similar reporting use cases
- Methods: live
- BI maturity: intermediate

Option #4 – dataflows



Option #4 – dataflows



Option #4 – dataflows

- Pros: transformation reuse, governance, performance, agility
- Cons: recency, data duplication
- Ideal for: orgs wanting to move from desktop to cloud/enterprise, governed reporting use cases
- Method: import
- BI maturity: pro

Summary comparison matrix

	<i>Query Method</i>	<i>Model Resides</i>	<i>Performance</i>	<i>Cost</i>	<i>Recency</i>	<i>Data Redundancy</i>	<i>Reusability</i>	<i>Security</i>	<i>Governance</i>	<i>Agility</i>	<i>Ease</i>
Transactional	DirectQuery	Power BI Desktop	Varies	Low	High	No	Low	Low	Low	High	Low
	Import/Composite	Power BI Desktop	High	Low	Med	Yes	Low	Low	Low	High	Low
ODS/Data Lake	DirectQuery	Power BI Desktop	Varies	Med	Med	Yes	Low	High	Low	Med	Low
	Import/Composite	Power BI Desktop	High	Med	Med	Yes	Low	Low	Low	Med	Low
EDW	DirectQuery	Power BI Desktop	High	High	Low	Yes	Med	High	High	Low	Med
	Import/Composite	Power BI Desktop	High	High	Low	Yes	Med	Med	Med	Med	Med
SSAS	Live	SSAS	High	Med	Low	Yes	Med	High	High	Low	High
	Import	Power BI Desktop	High	Med	Low	Yes	Med	Med	High	Med	High
Datasets	Live	Power BI Service	High	Low	Varies	No	High	Med	Med	Low	High
Dataflow	Import	Power BI Service	High	Low	Low	Yes	High	Med	High	Med	Med

Your mileage may vary

Use cases by approach

	<i>Query Method</i>	<i>Best Practice</i>	<i>Use Case</i>
Direct	DirectQuery	1	no budget, real time
	Import/Composite	2	no budget, reduce impact
ODS/Data Lake	DirectQuery	3	frequently landed data or detail level
	Import/Composite	4	prototyping or no EDW
EDW	DirectQuery	5	frequent ETL or detail level reporting
	Import/Composite	5	high quality models
SSAS	Live	6	enterprise solution, scaling, optimization
Datasets	Live	6	sharing datasets across reports
Dataflow	Import	6	sharing data sources across datasets

Which is best for you?

- Some/all of the above
- Depends on size, use case(s)
- Balance of factors
- Iterative process – morphs over time

Answer (Check all that apply):

☐ A, D, and E

☐ A, D, E, and F

☐ A, D, E, F, G

☒ All of the Above

☒ Other

Power BI mentoring session

Focus on the issues that have the biggest impact to your organization, including

- Speed up dashboard creation
- Reuse data sets
- Share dashboards across departments
- Perform rapid, on-the-fly recalculations
- Reduce errors from manual data manipulation
- Restrict access to sensitive data

Learn more

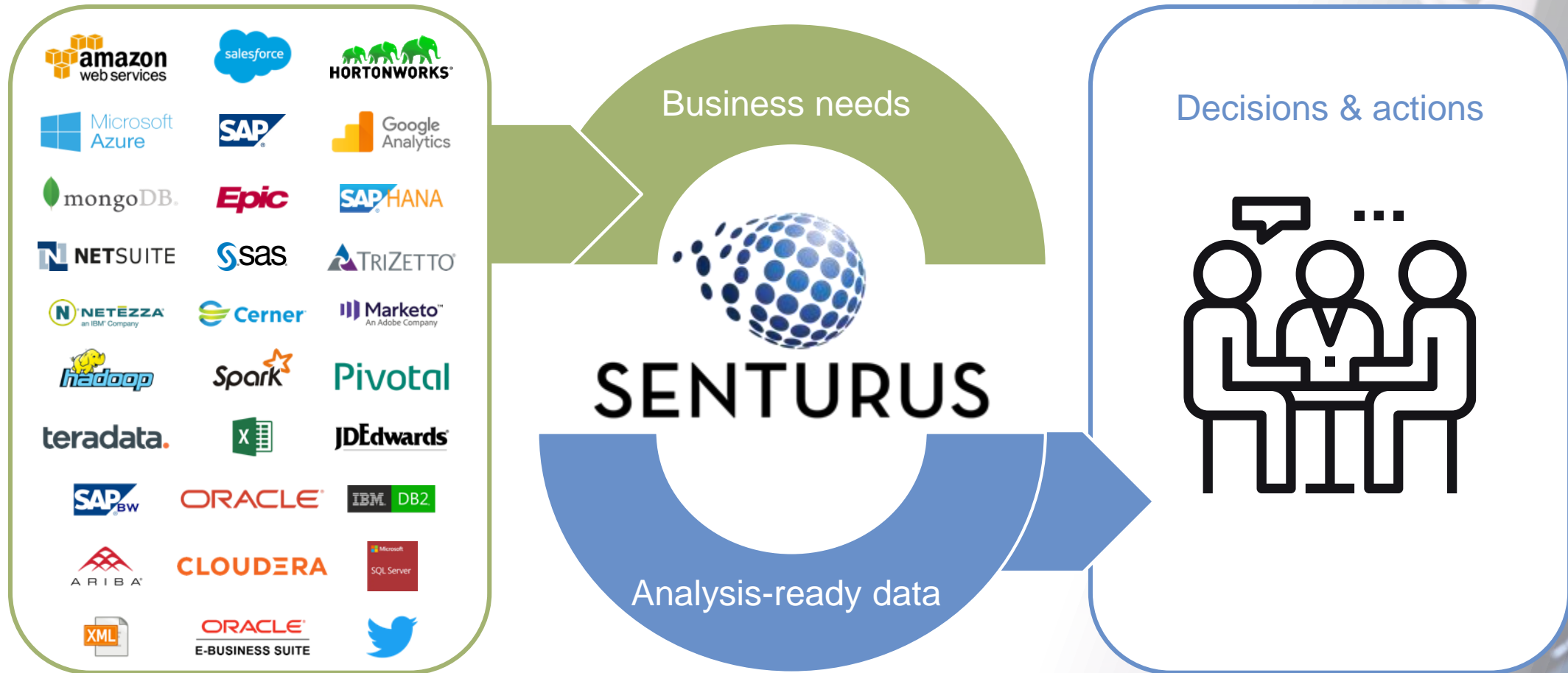
<https://Senturus.com/power-bi-desktop-to-enterprise>

The authority in Business Intelligence

Exclusively focused on BI,
Senturus is unrivaled in its
expertise across the BI stack



Bridging the data & decisioning gap



Full spectrum of BI services

- Dashboards, reporting and visualizations
- Data preparation and modern data warehousing
- Hybrid BI environments (migrations, security, etc.)
- Software to enable bimodal BI and platform migrations
- BI support retainer (expertise on demand)
- Training and mentoring

A long, strong history of success

- 19+ years
- 1300+ clients
- 2500+ projects



Expand your knowledge

Find more resources
on the Senturus website:

senturus.com/senturus-resources



Upcoming events

Complex Aggregations in Tableau

Leveraging table and level of detail calculations

Thursday, Mar. 26, 2020, 11am PT/2pm ET

What's New in Cognos 11.1.6

Live Q&A with IBM offering manager

Thursday, Apr. 16, 2020, 11am PT/2pm ET

Tableau Prep: A Visualization's BFF

Overview of self-service data prep for Tableau

Thursday, Apr. 23, 2020, 11am PT/2pm ET

Complete BI training offerings



Power BI



Tailored group sessions



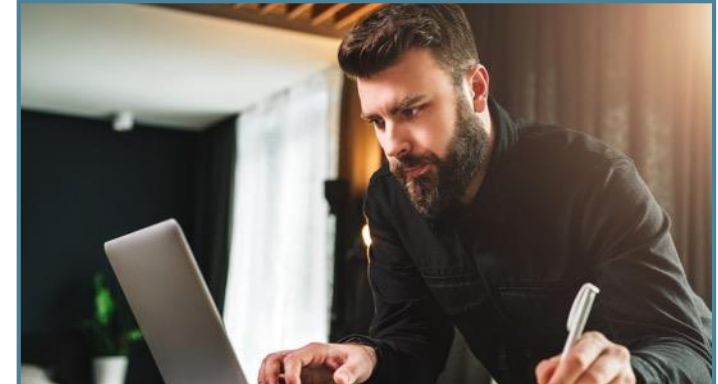
Mentoring



Instructor-led online courses



Self-paced learning



Additional resources from Senturus

Unbiased product reviews



Technical tips



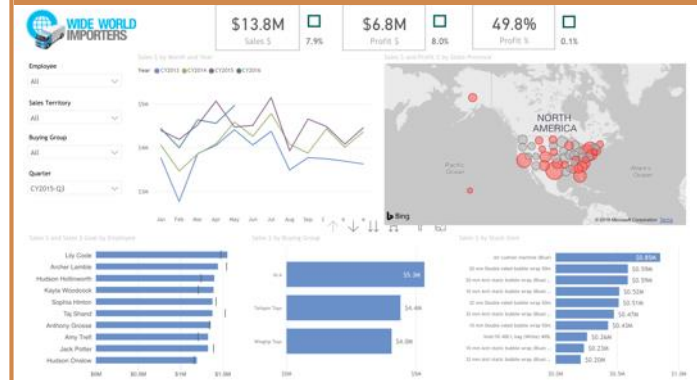
Insider viewpoints



More on this subject



Product demos



Upcoming events

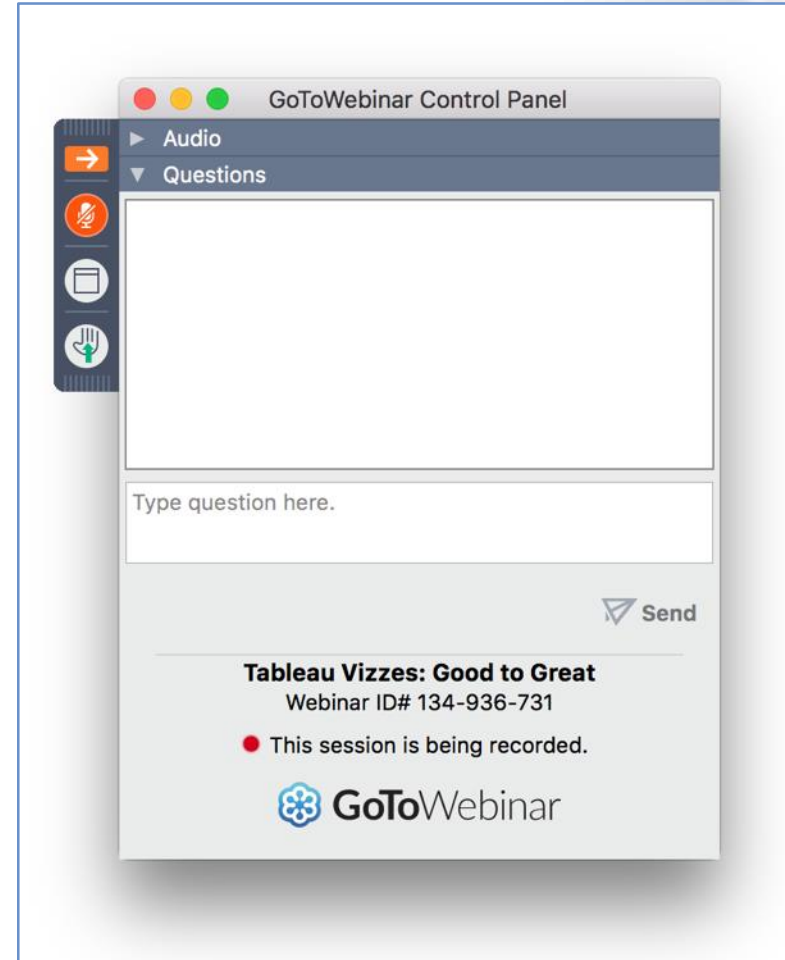


Q & A

If your question or issue is broader than what we are able to answer today, contact us at

info@senturus.com

and we will set up a free consultation.



Thank You



SENTURUS

Contact Kay Knowles

kknowles@senturus.com

303 330 7321

www.senturus.com

888 601 6010

info@senturus.com

© 2020 by Senturus, Inc. This presentation may not be reused or distributed without the written consent of Senturus, Inc.