

Databricks SQL

**Databricks' vision is to enable data-driven
innovation to **all enterprises****



Data Engineering

BI & SQL Analytics

Real-time Data Applications

Data Science & Machine Learning

Data Management & Governance

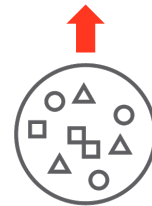
Open Data Lake



Structured



Semi-structured

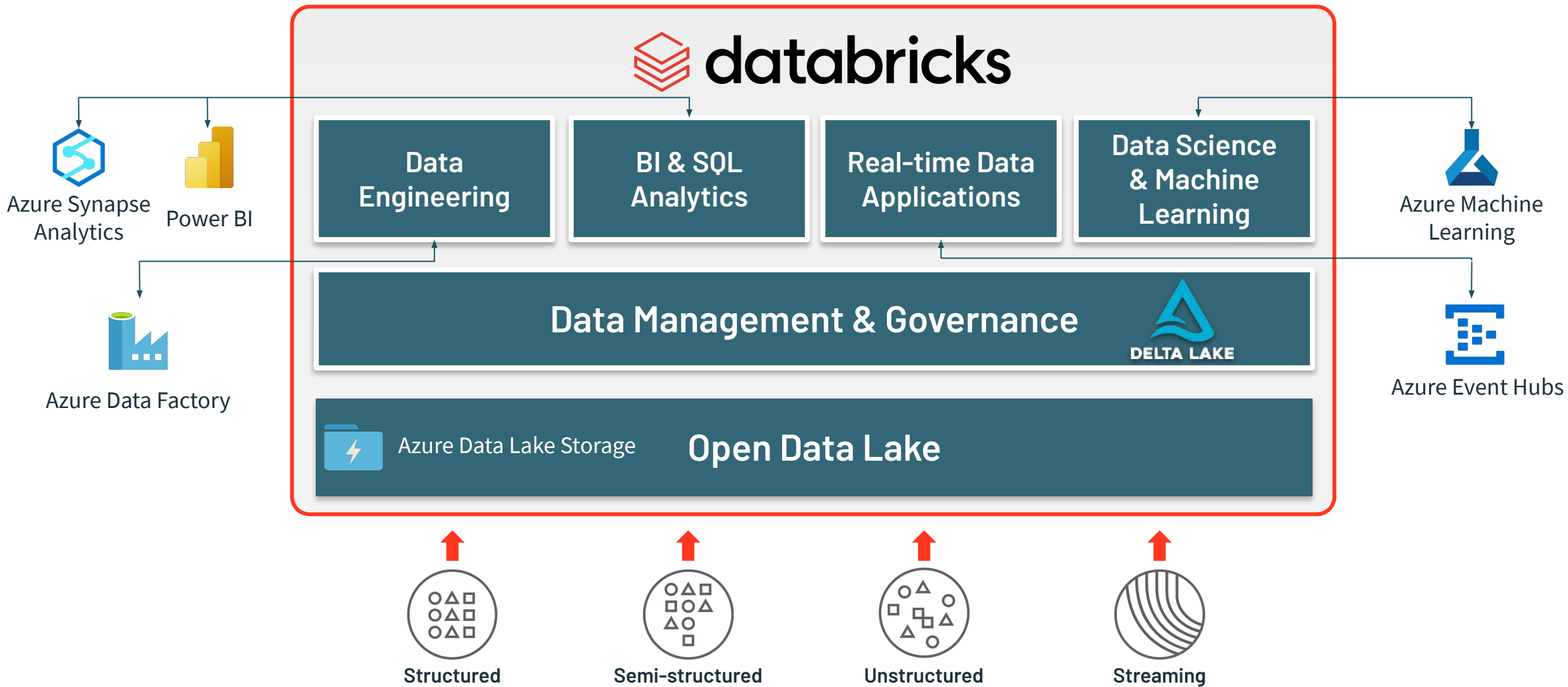


Unstructured



Streaming

cks



Databricks SQL: BI on the lake with your tools of choice



Data Engineering

BI & SQL

Real-time

DS & ML

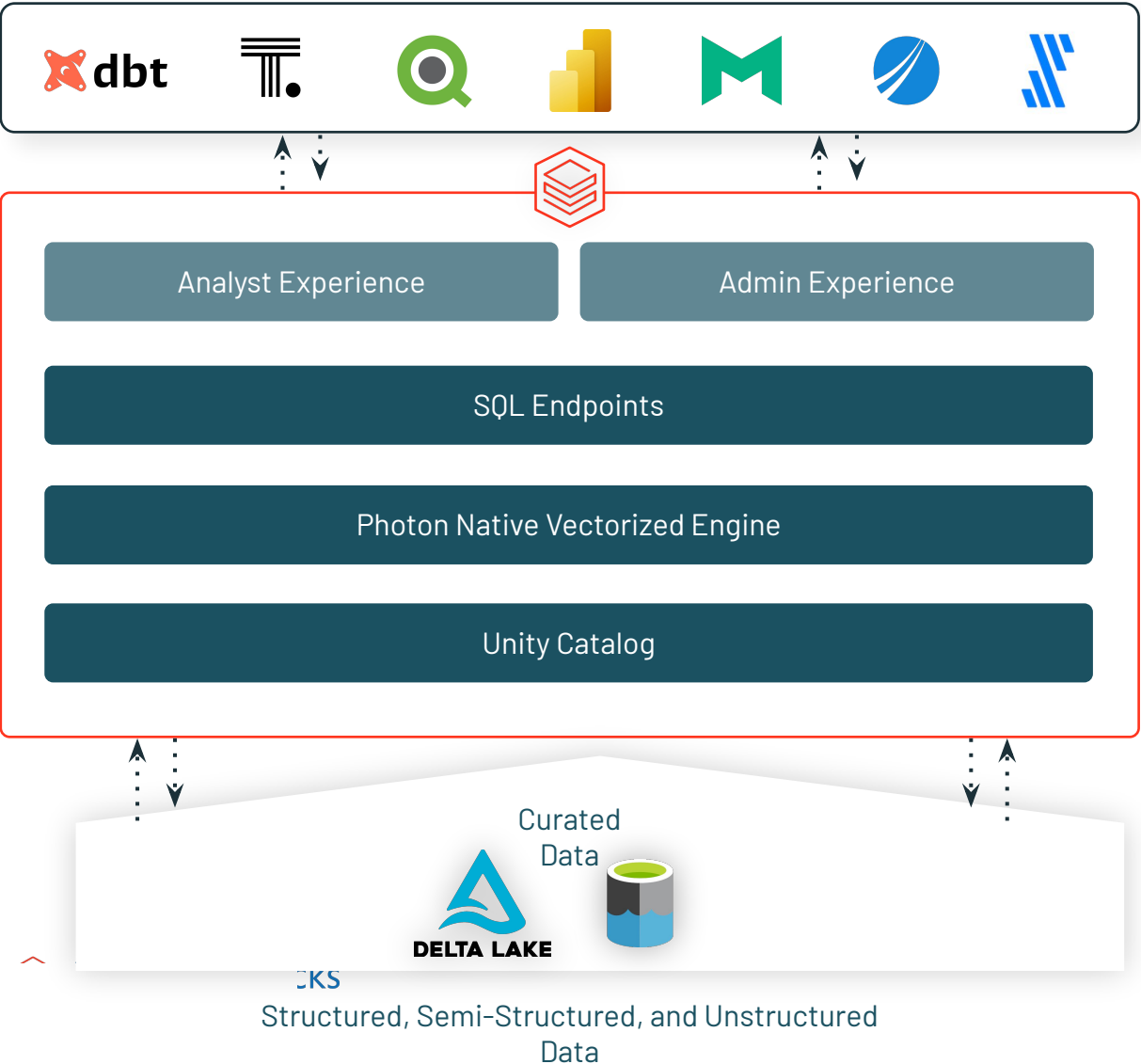
Data Management & Governance

Open Data Lake



SIMPLE • OPEN • COLLABORATIVE

Unpacking Databricks SQL



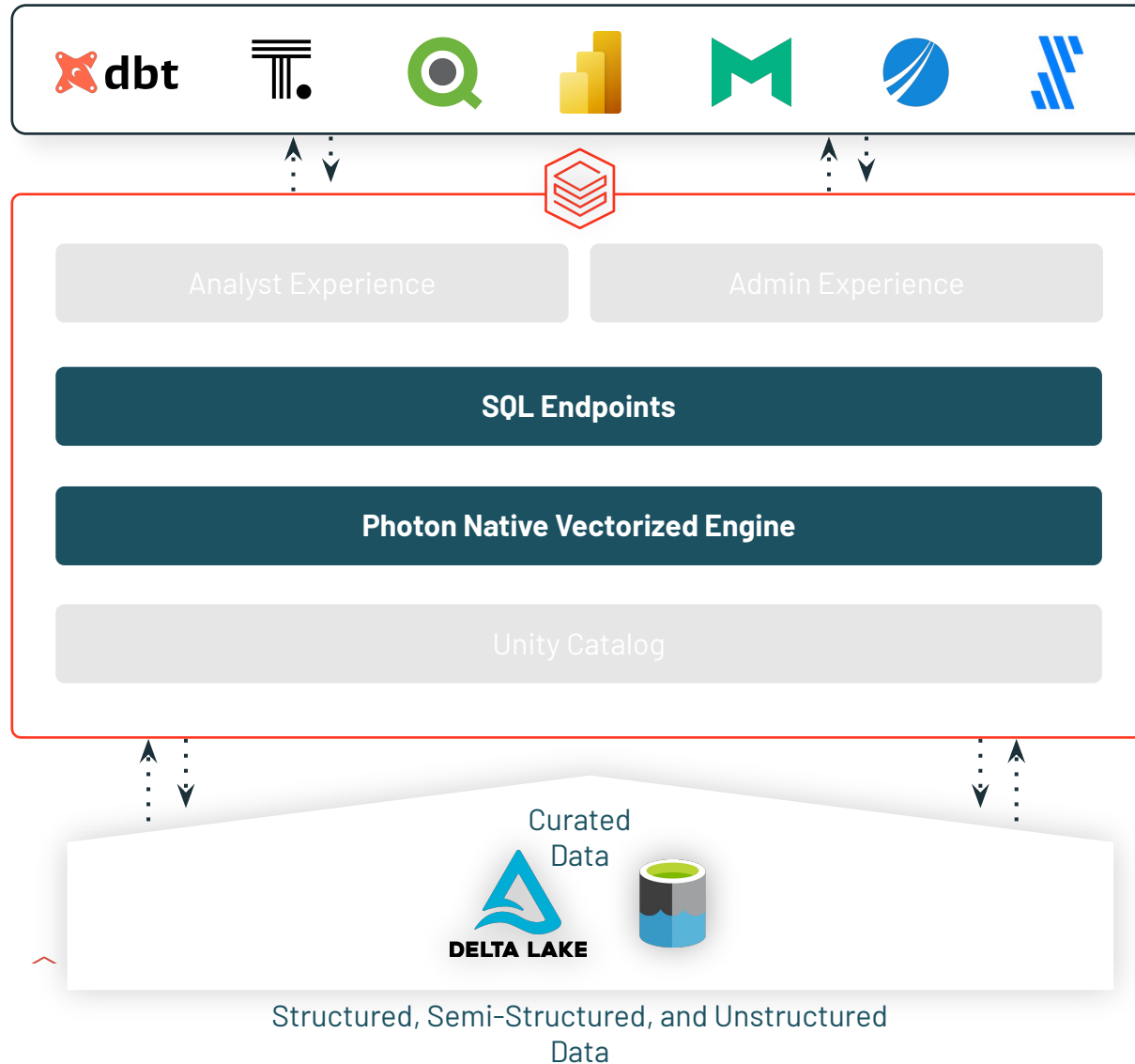
Ease of Use

Real-world Performance

Centralized Governance

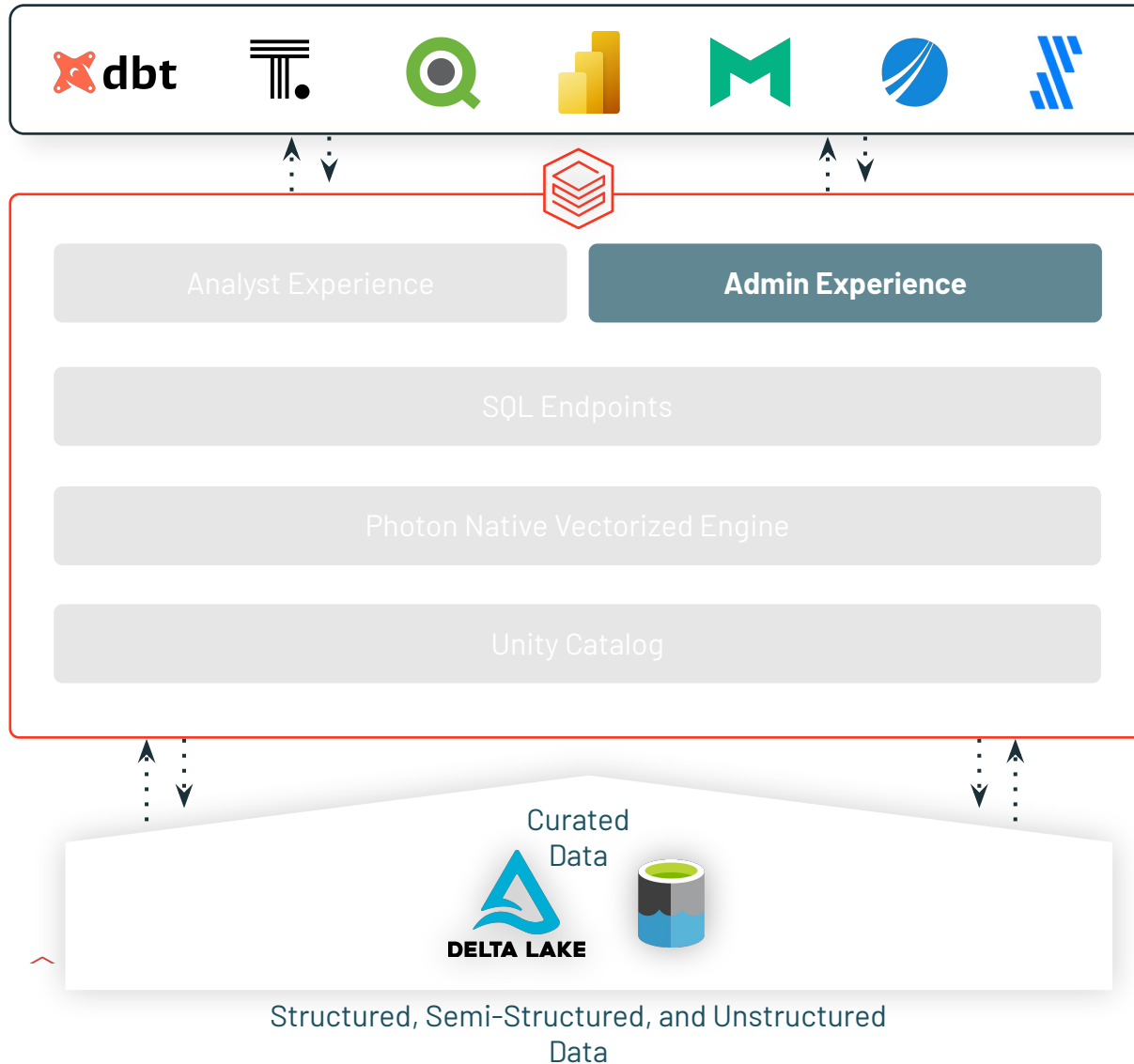
Open and Reliable Data Lake as our Foundation

Real-world Performance



Fast and predictable performance
for all queries

Simplified Administration

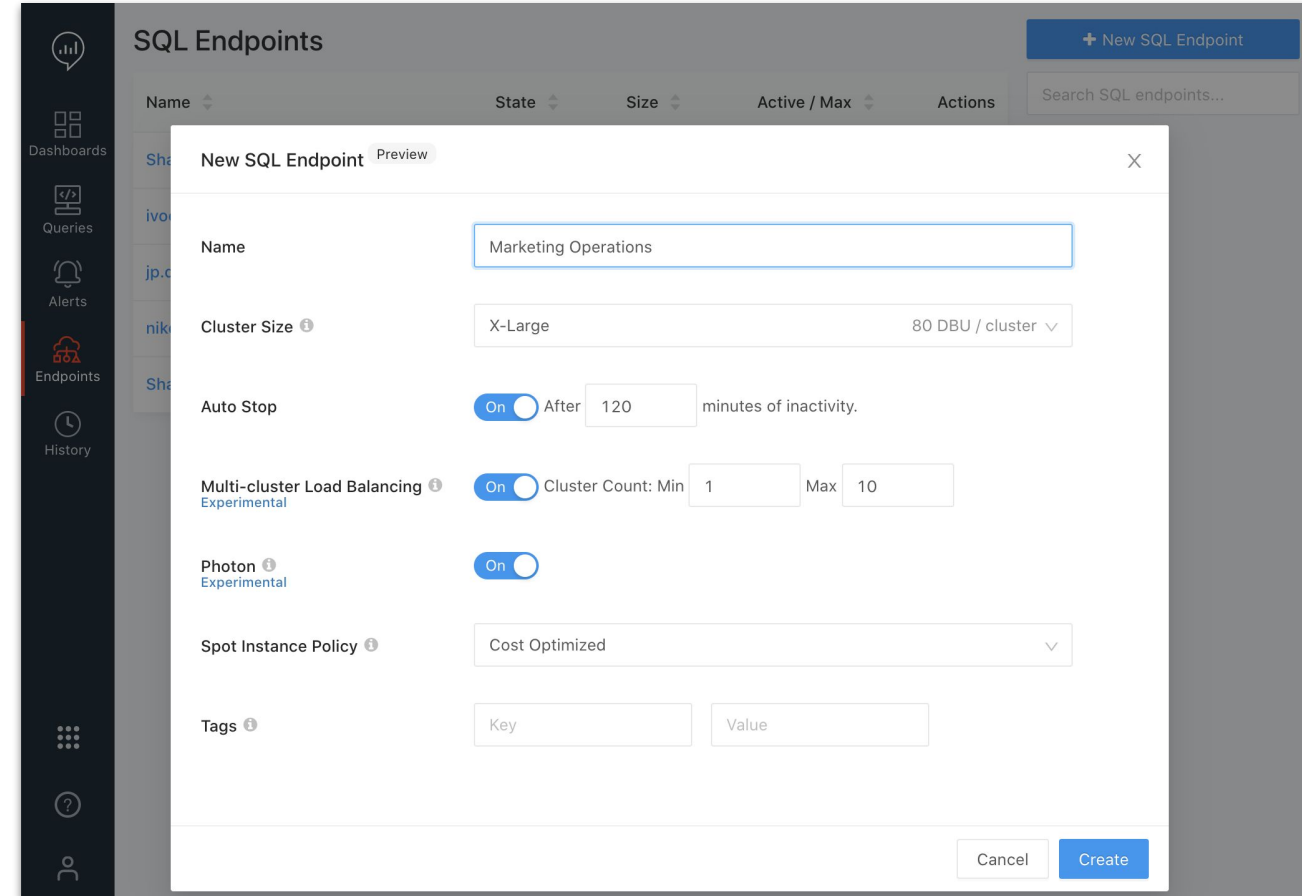


Easily setup and monitor scalable resources for SQL and BI workloads

Simple Administration

Get started in seconds

- Simple t-shirt sizes of clusters
- Auto-scaling for concurrency
- Tuned (VMs, configs) for SQL workloads



The screenshot displays the Azure Databricks SQL Endpoints management interface. A 'New SQL Endpoint' dialog box is open, showing the following configuration options:

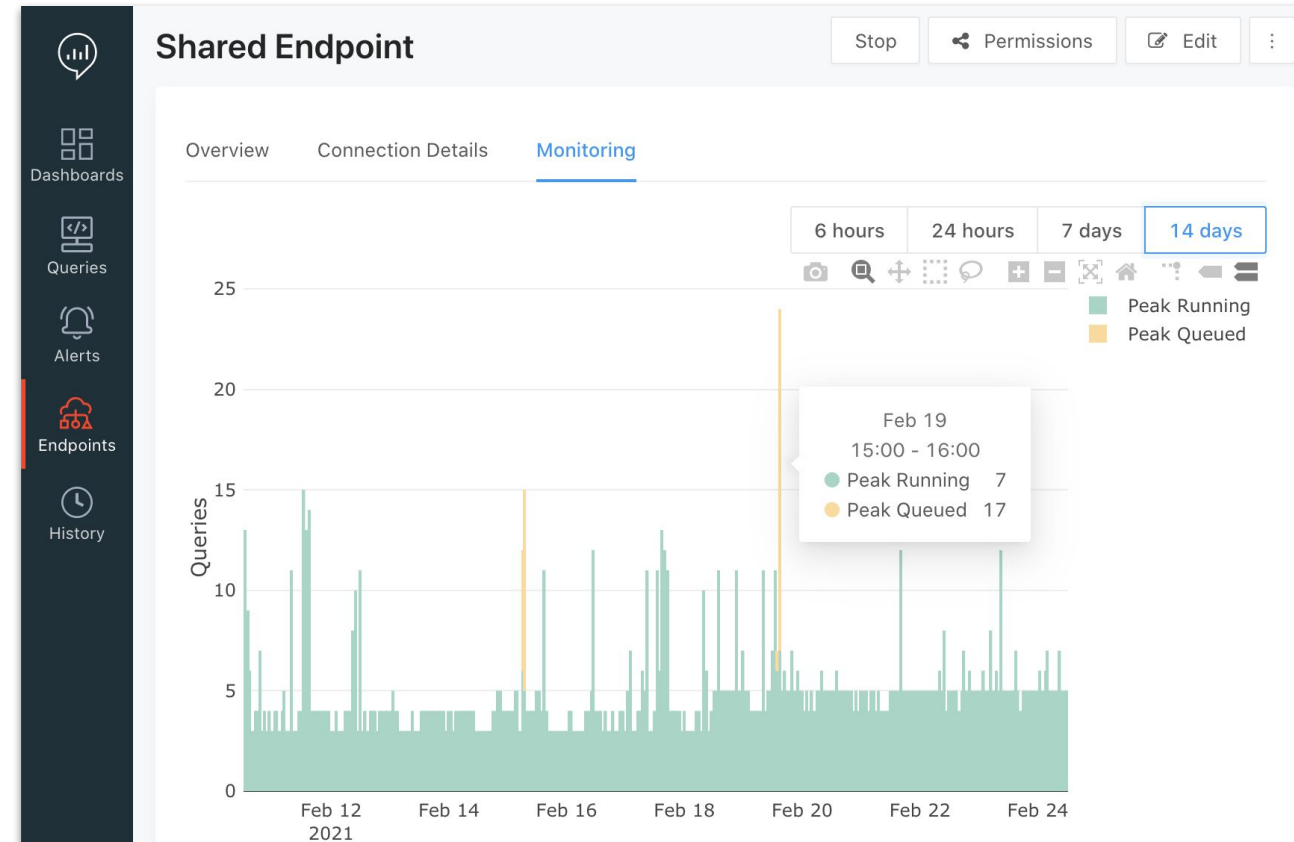
- Name:** Marketing Operations
- Cluster Size:** X-Large (80 DBU / cluster)
- Auto Stop:** On (After 120 minutes of inactivity)
- Multi-cluster Load Balancing (Experimental):** On (Cluster Count: Min 1, Max 10)
- Photon (Experimental):** On
- Spot Instance Policy:** Cost Optimized
- Tags:** Key and Value fields for tagging the endpoint.

The background shows the 'SQL Endpoints' table with columns for Name, State, Size, Active / Max, and Actions. A '+ New SQL Endpoint' button is visible in the top right corner of the console.

Simple Administration

Understand workloads & usage

- Built-in endpoint load monitoring
- Drill down to specific time periods



Simple Administration

Spend less time troubleshooting

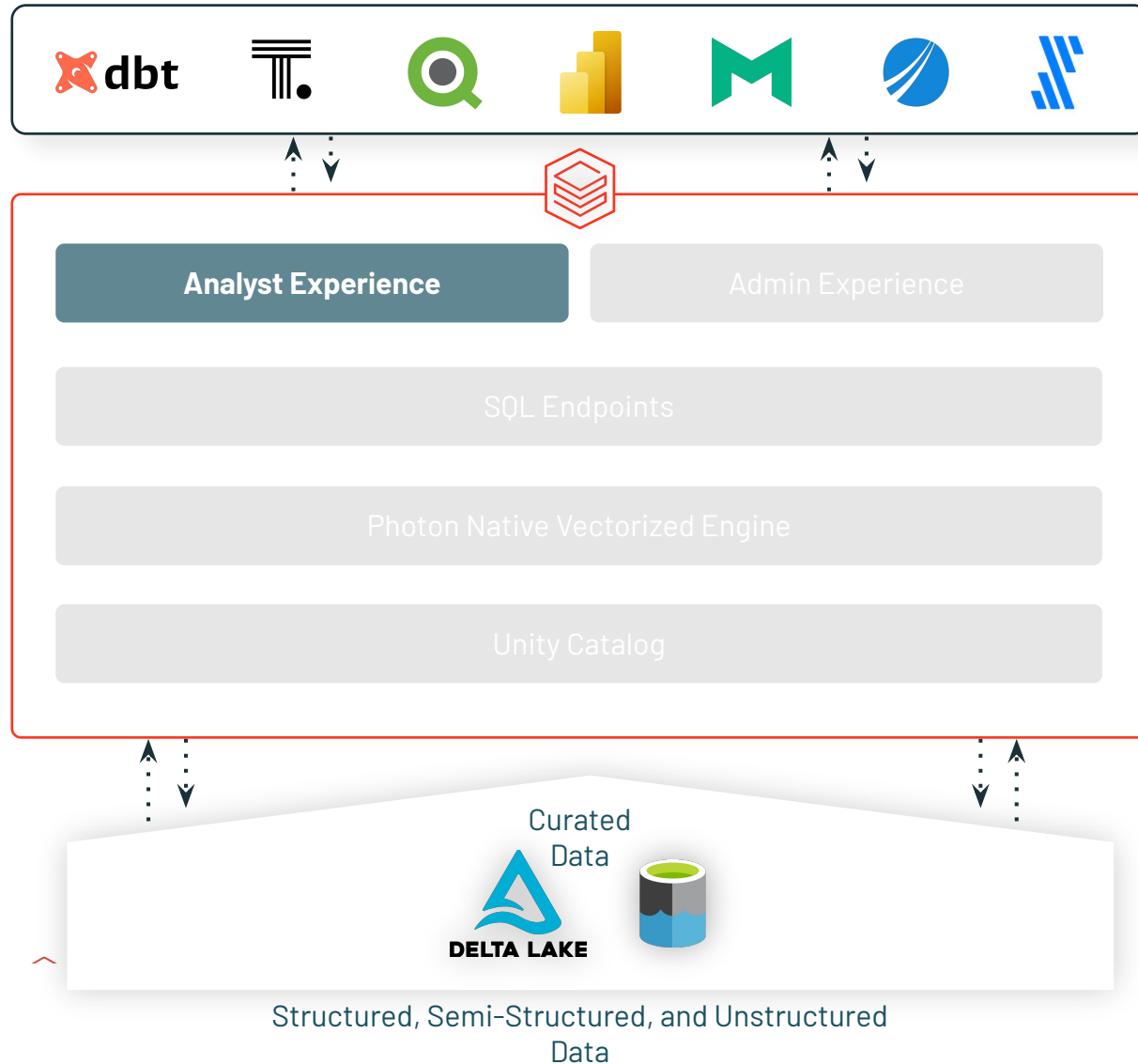
- Central query history
- Query duration breakdown
- Query execution details

The screenshot displays the Azure Databricks user interface. On the left is a dark sidebar with navigation icons for 'Create', 'Queries', 'Dashboards', 'Alerts', 'Endpoints', and 'History'. The main area is titled 'Query History' and includes a dropdown for the user 'Me (fuatcan.efeoglu@databricks.com)' and a filter for 'Last 14 days'. Below this is a table of queries. The first query is selected, and a 'Query Details' panel is open on the right, showing a breakdown of the query's execution time and IO statistics.

Query	SQL Endpoint	Started At
WITH top_exposure AS (SELECT concept_name AS drug_name , drug_conce...	Shared Endpoint	2021-04-2
SELECT count(1) as exposure_occurrence_count , d.drug_type_concept_i...	Shared Endpoint	2021-04-2
USE omop600 -- user_id: 5724191577397205	Shared Endpoint	2021-04-2
USE omop600 -- user_id: 5724191577397205	Shared Endpoint	2021-04-2
SHOW DATABASES -- user_id: {}	Shared Endpoint	2021-04-2
select * from chocolate.reviews	Shared Endpoint	2021-04-2
select avg(Rating), Company_Location from chocolate.reviews where Sp...	Shared Endpoint	2021-04-2
select * from chocolate.reviews	Shared Endpoint	2021-04-2

Query Details		
Overview		
Execution Details		
Duration	4.03 s	100%
Compilation	1.14 s	28%
Execution	2.89 s	72%
Result fetching	3 ms	0%
Rows returned	20	
IO		
Rows read	35,850,380	
Bytes read	195.14 MB	
Bytes read from cache	100 %	
Bytes written	0 bytes	
Files & Partitions		
Files read	2	
Partitions read	0	

Delightful Analyst Experience



SQL analytics and BI on your data lake
with your tools of choice

First-Class SQL Development Experience

Enabling simple, quick ad-hoc exploratory analysis on the Lake with SQL

Develop

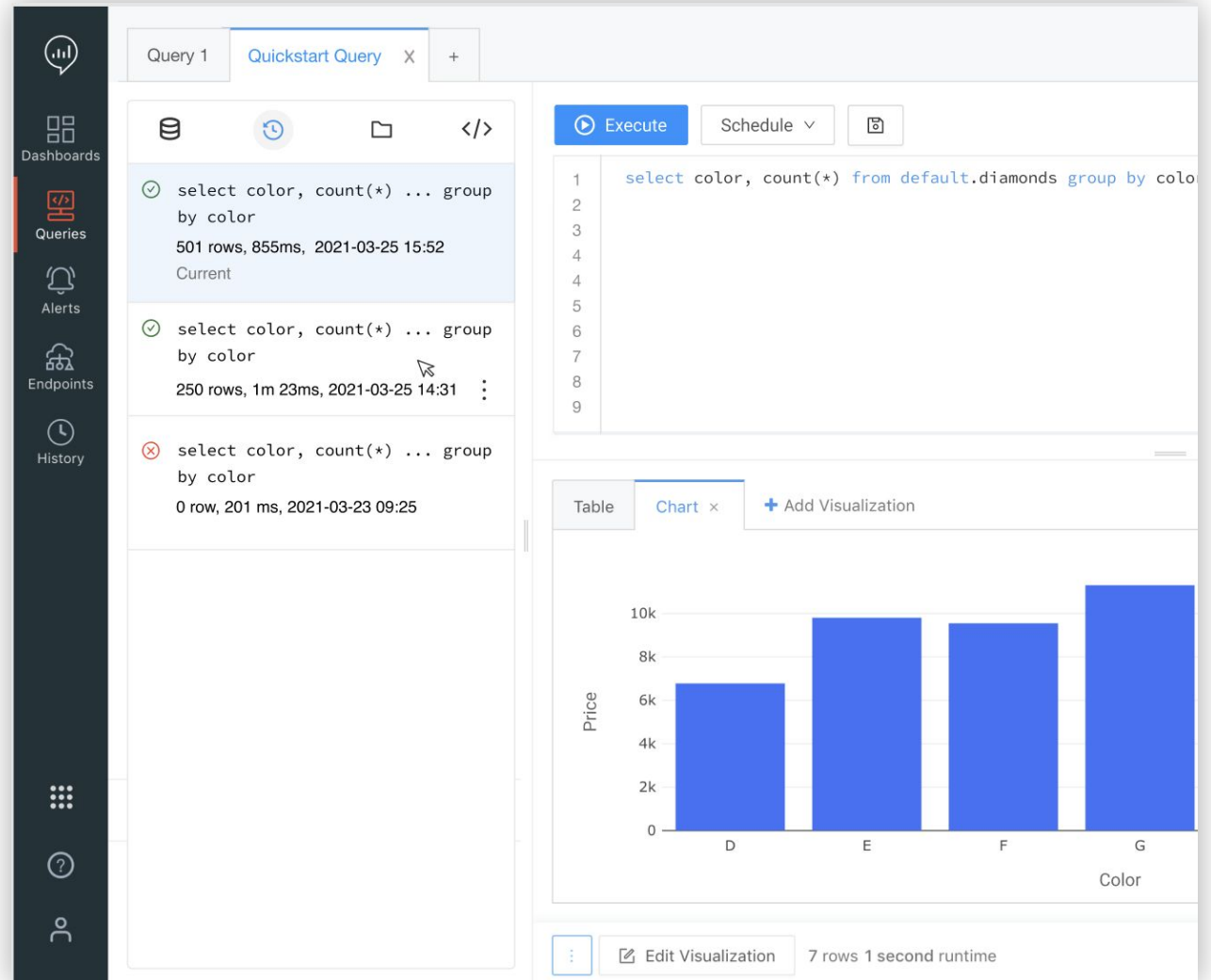
- Query tabs
- Drafts & “pick up where you left off”
- Command history
- Contextual auto-complete

Troubleshoot

- Query progress
- Error highlighting
- Execution time breakdown

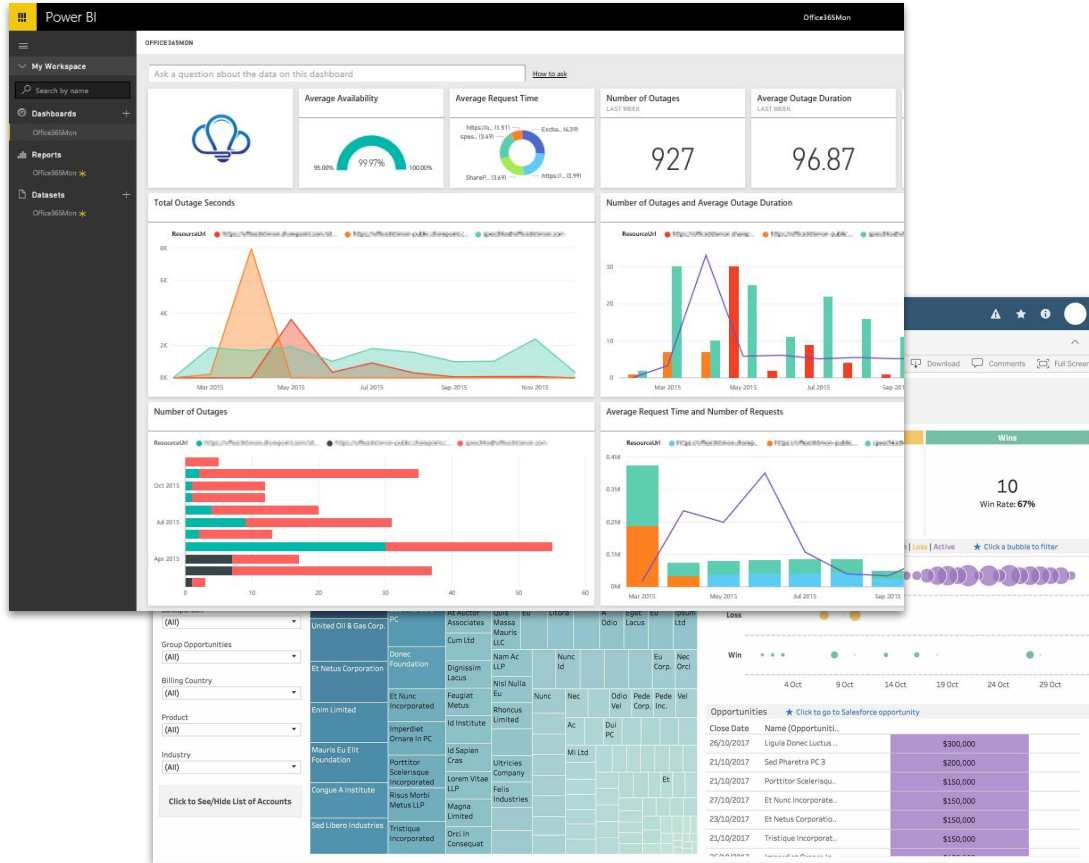
Collaborate

- Scheduled email delivery
- Edit permissions



Expanding Ecosystem – And Many More

Making analysts more productive



& more

Thank You