



Optimize Power BI with AtScale

Many enterprises rely on Power BI for business reporting. As these enterprises move their data to cloud platforms like Snowflake, Databricks, and Google BigQuery, Power BI presents performance, scalability, and governance challenges.

Slow queries, stale data, and complex refresh cycles limit traditional modes like Import and DirectQuery. With AtScale's semantic layer, enterprises overcome these challenges, enabling real-time insights, consistent metrics, and optimized performance for Power BI.

Key Challenges in Power BI

- **Performance Bottlenecks:** Power BI's native language is DAX, and its DirectQuery mode has trouble translating DAX into SQL inefficiently.
- **Inability to Handle Large Datasets:**
 - Import Mode requires data to be imported and stored locally in Power BI servers' memory, leading to data size constraints.
 - Power BI's Direct Lake option also struggles with scalability, defaulting to the slower DirectQuery mode for datasets that exceed modest data size thresholds.
- **Inconsistent Metrics:** End users can create semantic models at the Power BI workbook level, leading to conflicting and inconsistent KPIs.
- **High Costs:** Inefficient cloud usage for Direct Query mode increases data platform costs, while Direct Lake and Import mode leads to data duplication, additional processing and storage costs.
- **Security and Governance:** Ensures compliance with data access policies through row- and column-level governance and integrates with LDAP/Active Directory for secure, role-based access control.

AtScale: The Semantic Layer Advantage

AtScale bridges Power BI with cloud data platforms (e.g., Snowflake, Databricks), providing:



Live Query Access

Eliminates data imports and ensures real-time insights.



Optimized Performance

Native DAX support avoids query translation delays, delivering 4x faster queries.



Consistent Metrics

Standardizes business definitions in centrally managed semantic models, ensuring accuracy across tools and teams.



Enhanced Governance

Enforces row and column-level security with enterprise directory integrations.

Power BI Use Cases Powered by AtScale

- **Enterprise-Scale Analytics:** Analyze billions of rows without pre-aggregation.
- **Self-Service BI:** Empower non-technical users with intuitive, consistent, business-friendly models through self-service BI, eliminating the need to model data at the workbook level.
- **Cost Optimization:** Reduce cloud computing and storage costs by over 3x.

ROI of AtScale for Power BI

- **Millions in Annual Savings:** Reduced project timelines and optimized cloud usage.
- **4x Faster Insights:** Accelerate query performance for complex datasets.
- **Trusted Results:** Consistent, governance-compliant reporting.

Why AtScale?



Seamless Power BI Integration:

Full functionality with native DAX support.



Scalability: Consistent performance for large datasets and high concurrency.



Business-User Focused:

Simplifies access to data with intuitive models.



Cost-Effective: Eliminates vendor lock-in and optimizes resource utilization.

Related Resources

- [Practical Guide to a Semantic Layer](#)
- [TPC-DS Benchmark Result Report - "How Does Power BI / Direct Lake Perform & Scale on Microsoft Fabric"](#)
- [Buyer's Guide to a Semantic Layer](#)

ABOUT ATSCALE

AtScale bridges the gap between data and analytics, enabling smarter, faster decision-making. With its **Universal Semantic Layer**, AtScale empowers insurance companies to build trusted data models that drive consistency and accuracy across analytics tools. Backed by over a decade of innovation, AtScale helps insurers optimize performance, reduce costs, and improve customer satisfaction.

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