

# DATA MIGRATION & MODERNIZATION

Modernize before you are left  
in the dust



# What's in this ebook:

**1. The reality behind cloud migration**

you've moved to the cloud - but have you really modernized?

**2. Five steps to modernization**

a practical playbook to turn your data chaos into business clarity.

**3. Why Databricks?**

To democratize and unify data + AI across organisation.

**4. Why Polestar Analytics on Databricks?**

Modernization is complex - we make it simple, fast, and measurable.

**5. Customer success stories**

from pilots to profits - see how we modernization drives real outcomes.

**6. How to do business with us!**

Let's help you modernization your data to outcomes journey!

# Cloud migration isn't what you think

## Let's understand the critical gap between migration and modernization

We work with enterprise clients every day who've declared victory on their cloud migrations, only to face cost overruns that would make you weep. [IDC's research shows that 50% of cloud buyers spent more than expected, with 59% anticipating similar overruns in 2024.](#) The infrastructure actually moved, but the intelligence didn't.

Making it important to understand the differences between migration and modernization.

### Migration

- One-time project
- Lift and shift approach
- "We'll optimize later"
- Focus on technical specs
- Relocate the problem
- Higher costs, same limitations

### Modernization

- Continuous transformation
- Redesign for cloud-native architecture
- Built right from day one
- Focus on business outcomes
- Solve the problem
- Efficient operations with real value





Migration moves current systems to cloud infrastructure while maintaining the same legacy limitations- elevated maintenance expenses, restricted scalability, performance issues, and data isolation.

You're essentially moving your problems to a potentially more expensive real estate. Legacy design principles don't magically translate to cloud-native paradigms just because you changed the zip code of your data.

Modernization rethinks design principles from the ground up, focusing on business outcomes and building platforms architected specifically for cloud-native operations. Organizations that confuse migration with modernization end up with expensive infrastructure producing zero economic value. Your workloads are migrated but not intelligent. Your data is stored but not actionable.



When people talk about **modernization**, they're almost always comparing it to a **lift and shift alternative**. That's where they miss the mark.

-Lead Solution Architect, Databricks



# Why cloud migration fails without modernization



## Four critical barriers that keep you stuck

### Storage without intelligence

Approximately 60% of cloud workloads represent passive storage producing zero economic value. Without unified platforms designed for intelligence-driven operations, your data sits idle regardless of infrastructure location.

### The legacy tax follows you to the cloud

Hardware costs become cloud costs, scalability issues turn into over-provisioning, bottlenecks remain with inefficient pipelines, and silos relocate. You've created an expensive version of existing failures-old paradigms collapsing in cloud environments.

### Complexity of hybrid multi-cloud

Only 45% of large enterprises actually run data and AI workloads in cloud due to complex legacy system inertia. Each cloud becomes isolated, preventing the data integration required for advanced analytics. Without unified governance frameworks, you're stuck managing siloed environments that can't talk to each other.

### Fragmented systems block intelligence

Without unified governance layers, you migrate inefficiently-moving everything without understanding what delivers value versus what consumes resources. Integration across different sources becomes complex within legacy environments, leading to fragmented data and limited visibility.

Want to turn these challenges into opportunities? Discover how Polestar Analytics uses Databricks-centric architecture to eliminate technical debt and unlock AI capabilities. **Read the full blog here.**



# Why Databricks?

Modernization demands more than migration; it requires an architecture-first approach. As Databricks' vision states, **"models may be commodities, but the architecture is where value is created"**.

Polestar Analytics has built its modernization offerings on the Databricks Data Intelligence Platform. It's an open, united data platform which democratizes data + AI across the entire organization.



## Key benefits include:

### Unified data + AI foundation

- A single, governance-first architecture that merges data engineering, analytics, and AI.
- Eliminates silos - teams work on a single source of truth.
- Provided RBAC easy to operate

### Open source, connected, and flexible

- Unify data across clouds & platforms
- Open-source interoperability for scalability
- No need to move the data for integrating storage, compute, and AI for actionable outcomes.

### Intelligent architecture

- Automated pipelines and remove integration complexity.
- Combines with GenAI to provide deeper natural language insights
- Optimizes compute performance, reducing workload costs to improve speed.

# Databricks modernization features that drive value



## **Delta lake:**

Foundation for ensuring accurate analytics and real-time decisions.

## **Unity catalog**

Centralized governance, lineage, & access control. It is essential for data democratization.



## **Lakehouse federation**

Unified data access across clouds, enterprises and databases

## **MosaicML**

Accelerates AI/ML development faster, reducing time-to-value.



## **AI/BI genie**

Brings natural language analytics and Gen AI to business users, making insights accessible.

Together, these capabilities deliver architectural efficiency, open interoperability, enterprise grade security and actionable intelligence. It is for organizations aiming to modernize and be ready for the next frontier (i.e. Agentic AI and everything else to come...), without disruption!

Want to know more about these features?

**Check out insights from our experts!**

# 5 steps to modernization

Modernization requires a shift away from simple lift-and-shift methods. Following is the 5 step approach that involves planning, cleanup, integration, and adoption of advanced features:

“ **Modernization** is a mindset, ”  
not a **one-time event!**

David LeGrand  
Sr VP, Polestar Analytics



1

## Preparation for modernization

**Lay the foundation with a clear, outcome-focused roadmap.**

- **Define business use cases:** Identify high-impact objectives and measurable success criteria before allocating resources
- **Establish benchmarks:** Capture baseline performance metrics to quantify improvements post-modernization. (if you cannot measure performance today, advanced analytics cannot demonstrate improvement tomorrow)
- **Focus on business value:** Focus on initiatives that balance cost, risk, and tangible returns.

2

## Clean up the data estate

**Address technical debt and governance gaps before scaling.**

- **Identify inefficiencies:** detect redundant pipelines, unmanaged data, and costly compute operations.
- **Implement observability:** use observability tools to map current assets and dependencies.
- **Standardize pipelines:** implement delta live tables (DLT) and lakeflow for standardize and automate declarative pipelines.

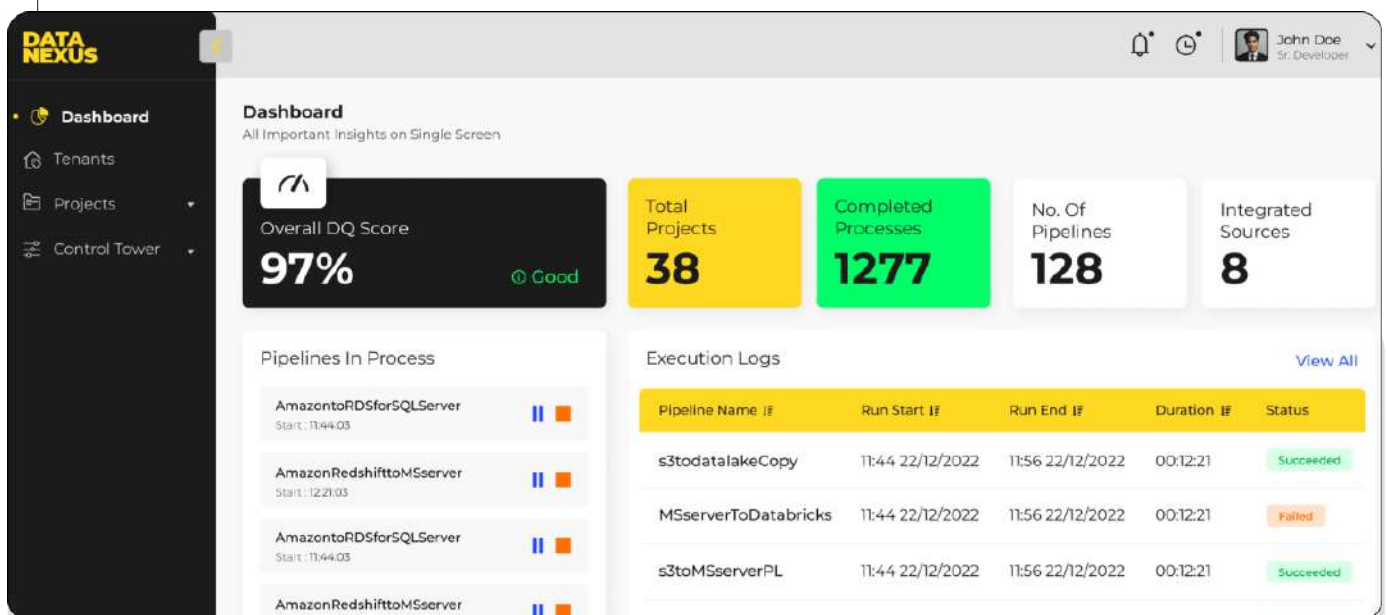


3

## Streamline data pipelines

Unify data sources into a single, governed ecosystem.

- **Integrate disparate systems:** Connect hybrid and multi-cloud environments seamlessly.
- **Eliminate silos:** Deploy lakehouse federation and delta share for unified, real-time data access.
- **Create “digital thread”:** Use **Unity Catalog** to maintain lineage, security, and governance across business domains.  
->this thread can extend beyond specific areas (like a smart factory) to cover the entire enterprise across manufacturing, warranty, supply chain, and customer platforms



For Do-It-Yourself organisations, Polestar Analytics' **Data Nexus**, is a low-code/no-code platform that augments DLT to design and orchestrate data pipelines easily!

4

## Integrate and govern data seamlessly

**Build consistent, secure governance to enable enterprise-wide trust and scalability.**

- **Centralize oversight:** Manage metadata, permissions, and lineage through unity catalog.
- **Enable secure sharing:** Share governed data across departments and partners without replication.
- **Enable enterprise-wide sharing**
  1. Deploy Delta Share as universal, open-source sharing protocol without duplication or movement
  2. Can be used internally or externally with row and column-level security

5

## Build advanced analytics and agentic intelligence

**Transform insights into intelligent, autonomous actions.**

- **Democratize insights:** Empower users with AI/BI genie for natural-language analytics.
- **Operationalize AI models:** Use MosaicML to train and deploy llms with low latency.
- **Agentic automation:** Integrate Polestar Analytics' Agenthoo AI for multi-agent workflows that deliver measurable outcomes through contextual decision-making.

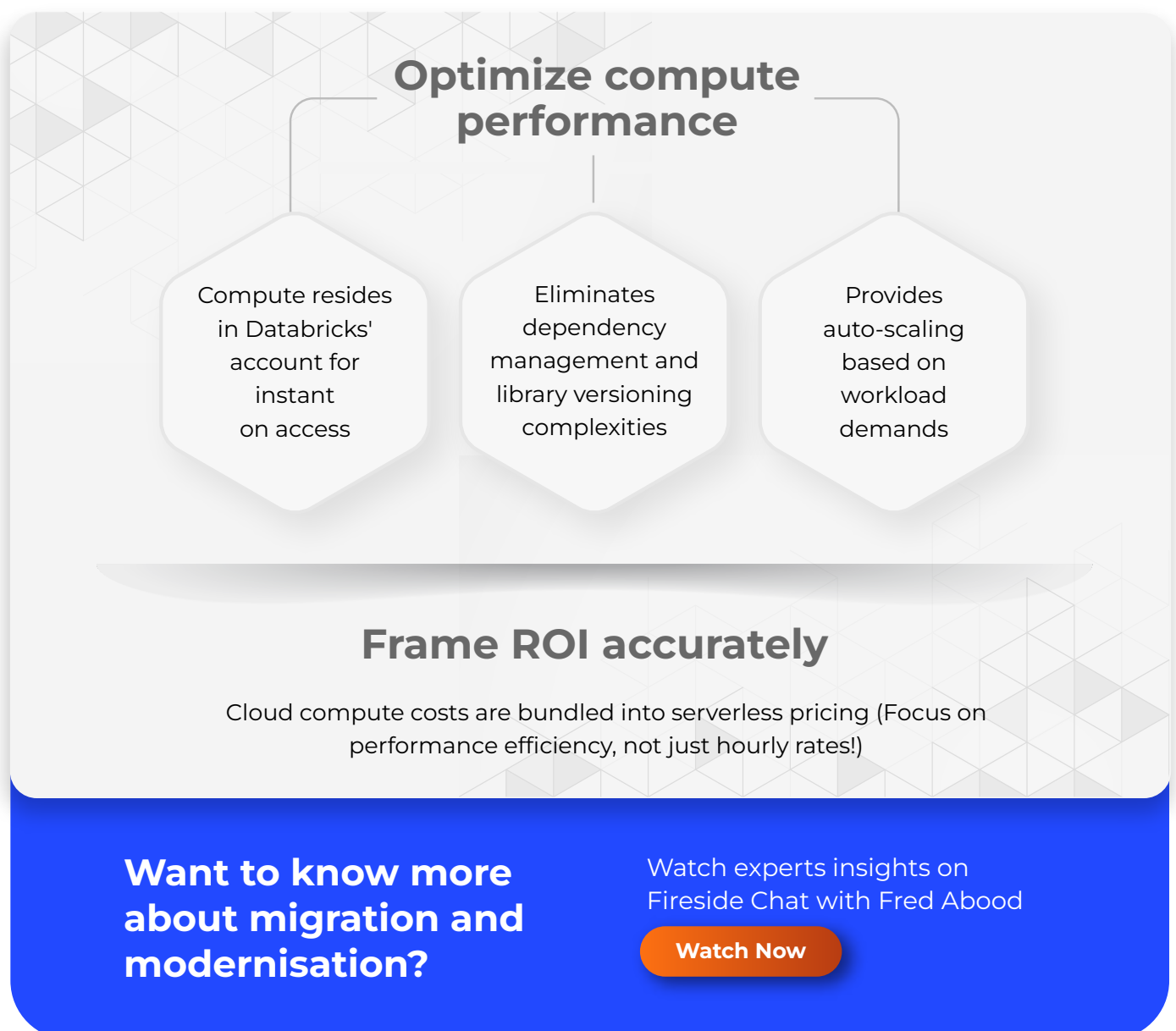
Know how  
**Agenthood AI**

a data science solution leveraging Agentbricks for drag & drop creation & orchestration of agents

# Bonus tips from partner solution architect, Databricks

## Understand serverless architecture

It's a fully managed compute model that automatically scales with workload demand, eliminates infrastructure management, and optimizes performance and cost efficiency in a modernized data estate.



Modernization is not a single event but a continuous, outcome-driven mindset—where Databricks and Polestar Analytics together make data intelligence scalable, secure, and actionable!

# Polestar Analytics | Databricks

## Data to outcomes, simplified!

Polestar Analytics delivers data to outcomes by providing value and focussing on the end goal



### Personalized insight delivery

Our domain specific knowledge speeds insights by focusing on value added motions



### Proven frameworks and methodologies

With 10 years of delivery experience we leverage our historical success



(Certified partner,  
Trusted execution,  
Proven Value.)



### Industry and domain knowledge

We employ specialists in industry, data science and engineering to deliver tailored solutions



### Partnerships

We have built an ecosystem of partners to help build holistic solutions. We trust others with their expertise

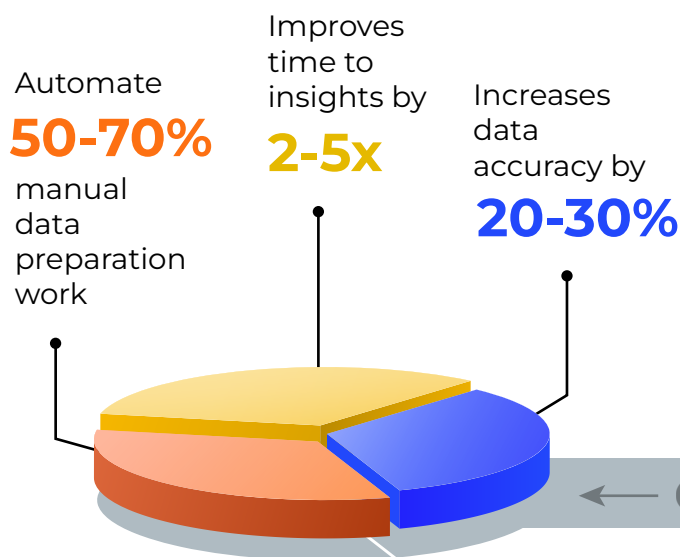
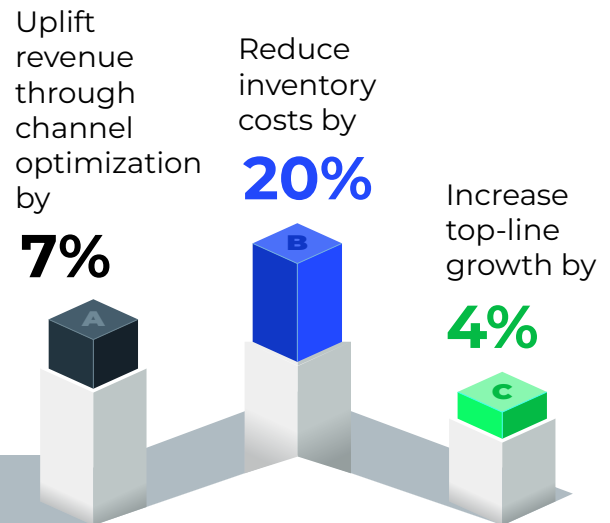
We achieve this by providing innovative proprietary tools and comprehensive services aimed at helping enterprises modernize their data estates and effectively leverage the Databricks Data Intelligence Platform for advanced AI and data solutions!



# Polestar Analytics' Databricks native solutions:

## Profit Pulse:

This integrated suite utilizes ML and visualization solutions to address critical business areas like pricing, It has predictive and prescriptive solutions like trade spend/promotion, and assortment optimization.

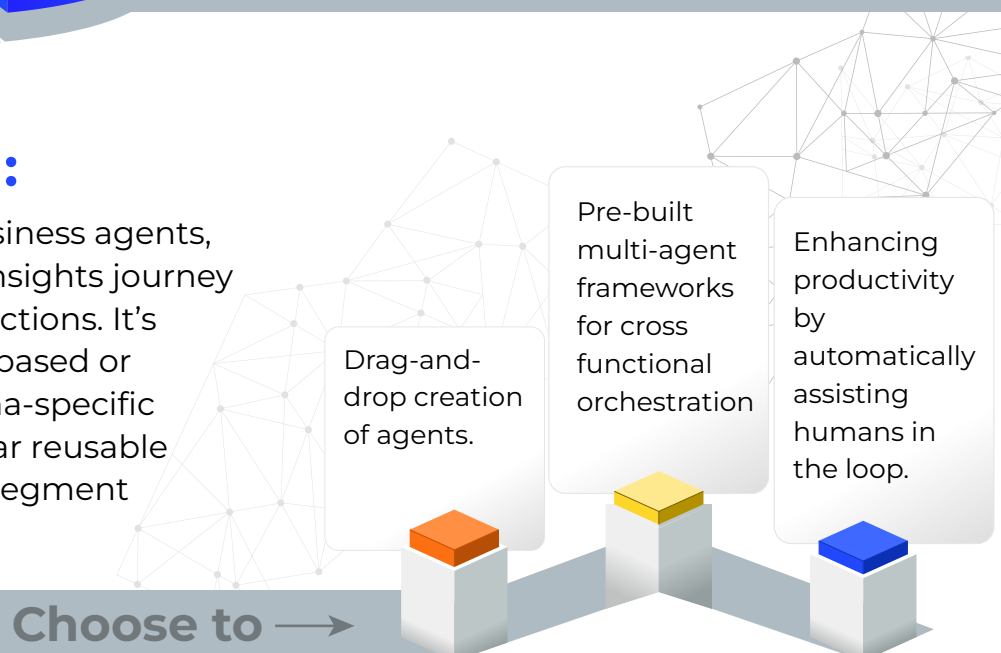


## Data Nexus:

Low-code/no-code, modular data engineering orchestration engine simplifying data pipeline creation, data model management, transformation, MDM, data modelling, lineage, and monitoring in complex data ecosystems.

## Agenthood AI:

It is an ecosystem of business agents, you can enhance your insights journey with personalized interactions. It's designed to create rule based or reasoning driven persona-specific agents enabling modular reusable automation tailored to segment specific needs.



# Polestar Analytics' Databricks native services:

## Data engineering

We optimize your data estate by reducing costs, create simplicity and governance

- Improve pipeline and ETL performance
- Optimize compute resources
- Lower costs through serverless implementations

## Data migration & modernization

We have full capabilities for on-premise to Cloud migrations Improve pipeline and

- Hadoop, Teradata and Netezza migrations
- Data Nexus speeds composable data model creation
- Migration capabilities that reap the benefits of Unity Catalog

## Data science

We provide predictive and prescriptive insight through the Mosaic Platform

- Improve MLOps and governance capabilities
- Advanced Industry-specific ML models
- Deliver persona-specific Agentic frameworks and solutions

## AI, ML & agentic AI

We deliver enterprise-ready AI solutions

- End-to-end ML lifecycle management with MLflow and Feature Store
- Generative AI experimentation and fine-tuning
- Production-grade deployment with scalable inference pipelines

## Areas where we excel!



**Across Industries**

Consumer Goods

Alcoholic Beverages

Retail & Ecommerce

Pharmaceutical & Lifesciences

Manufacturing

IT/ITES

Not Exhaustive\*


## In summary, why you should choose us?

- We make insights accessible through natural language.
- We remove the complexity to get to insight quicker and deeper.
- We deliver solutions in a flexible manner - chose what and how you need to solve your insight challenges.

If you like Databricks, you'll love Polestar Analytics - makes it simpler while leveraging all the Data Intelligence Platform strengths!

**Talk our experts to  
know more!**

# How we made data reconciliation 98% faster for an alcoholic beverage gaint

Overview	The beverage giant wanted to shift from hub and spoke model of data warehouse to a harmonized Data Hub with a consistent data structure on Databricks for a standardized and collaborative approach to analytics especially for AI	
Problem Statement	<b>Lack of unified view</b> Their existing model gave way for independent use cases but didn't promote a unified approach to data	<b>Data translation loss</b> With the tables and structures different for different value chains resulting in meta data inconsistencies
	<b>Opportunity costs</b> Hidden costs identified due to lack of data integration across functions. Eg: tail spend in procurement	<b>Being AI-ready</b> With agentic & generative AI pocs, the need for a comprehensive and connected data system
<b>Solution highlights</b> <ul style="list-style-type: none"> <li>● <b>Change management</b> Change managers to educate users about data sharing and requirements in creating the data hub.</li> <li>● <b>Data ingestion protocols</b> Implemented their ingestion, processing and transformation process (with their it team).</li> <li>● <b>Data quality checks</b> Auditing, data hub quality checks, data observability, lakehouse monitoring , and more on unity catalog.</li> <li>● <b>Low-code/no-code</b> Low code framework for automated testing and standardization.</li> </ul>		<b>Impact</b> <p><b>98%</b> reduction in data reconciliation</p> <hr/> <p><b>Tiered</b> data visibility &amp; accessibility norms</p> <hr/> <p><b>40+</b> man-months of savings by automating data prep</p> 



# One down, plenty more to see...

See how **Polestar Analytics** and **Databricks** are solving real problems across different industries

## Healthcare Industry

Healthcare Industry Implemented a Databricks Lakehouse with ETL pipelines for data transformation and scheduling. Utilized Unity Catalog for table-level monitoring and governance, and Delta Tables for unified, scalable storage.



## CPG Industry

Built analytical models by integrating data pipelines from One Click Retail, social media, SFDC, Retail Velocity, and Sizmek. The modeled product group data powered an E- Business Unit Cube for advanced analytics.



See more [→](#)  
**Success stories** across industries

## Related articles and videos

**POLESTAR**  
ANALYTICS

### Migrate and modernize your data estate:

Modernize before you are left in the dust

**POLESTAR** x **databricks**

**POLESTAR** x **databricks**

Fireside Chat

### Migration & Modernization

Modernize before you are left in the dust

**David LeGrand**  
Alliances Lead  
Polestar Analytics

**Fred Abood**  
Lead Solutions Architect  
Databricks

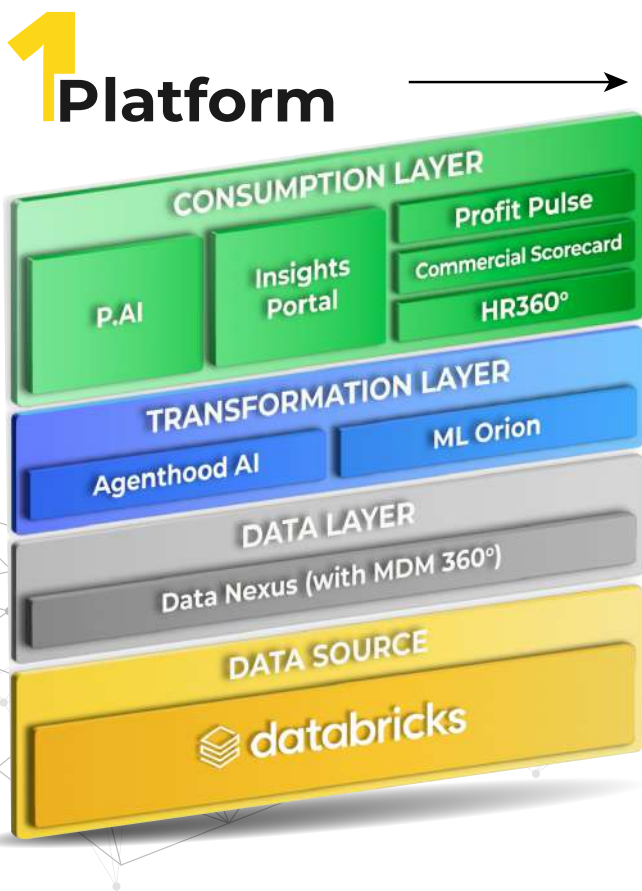
Host

Guest

# How Polestar Analytics x Databricks make data to outcomes , simplified!

As a Databricks Select Partner, we see two types of modernization challenges. The first needs deep expertise- untangling decades of technical debt, navigating compliance, building the right foundation. The second needs acceleration- competent teams who want proven tools to move faster.

**We've built a collaborative model that addresses both and lets you shift between them as your needs evolve.**



From Unity Catalog implementation to an AI foundation with your lakehouse

**Let's discuss modernization with**

 **databricks**

## About Polestar Analytics

With products, accelerators, and services rooted in real-world success, and knowledge backed by deep industry expertise - Polestar Analytics is a leading data, analytics, AI, and planning service provider for Fortune 500 companies.