Enterprise Strategy Group™

ECONOMIC VALIDATION

The Economic Benefits of the Starburst Data Platform for Apps and AI

Accelerate Insight and Innovation With Unified Data Access, Simplified Operations, and Better Price-performance at 45% Lower TCO

By Aviv Kaufmann, Practice Director and Principal Validation Analyst
Enterprise Strategy Group

January 2026

Contents

Executive Summary / Key Findings

Enterprise Strategy Group™ **Economic Validation: Key Findings Summary**

Validated Benefits of the Starburst Data Platform for Apps and AI

45% lower TCO and 414% ROI

(based on ESG's 3-year modeled scenario)

- **12% to 88%** faster access to data
- **45% to 65%** less time and effort to manage and maintain data access
- **65% to 85%** lower data processing and storage costs

- **Unified and accessible data:** A single point of access to all enterprise data, helping eliminate technical and organizational roadblocks to unlock the value of data and grow capabilities across the organization.
- **Optimized costs and performance:** Improved price-performance and accelerated time to insight. This improves operational efficiency through automation, orchestration and reduced complexity to increase productivity and lower operational costs.
- **Accelerated innovation:** Reduces complexity and unlocks data capabilities, resulting in faster innovation and modernization, accelerated AI timelines, and flexibility of choice to reduce risk of vendor, technology, and format lock-in.

Introduction

This Economic Validation from Enterprise Strategy Group focused on the quantitative and qualitative benefits organizations can expect by using the Starburst Data Platform for Apps and AI rather than alternative specialized tools and infrastructure to more flexibly and economically power their AI, applications, and analytics workloads.

Challenges

Organizations have long recognized their raw data as a priceless resource for extracting actionable business insights. Enterprise Strategy Group research found that a majority of organizations collect data from 100 to 500 or more sources daily, creating a wealth of potential intelligence. But most organizations use less than half of their data for AI models, and fewer than 5% of organizations use more than 75% of their data.[1] The high volume of data often cannot be efficiently prepared for AI model consumption due to infrastructure limitations, data quality issues or governance constraints. The definition of "data readiness" varies across organizations, with some placing a higher value on data being cleaned and formatted, integrated across systems, accessible, or aligned with business goals, operational requirements, regulatory standards, or future growth. Our research found that the most common definition of "data readiness" is that data is clean, integrated, governed, scalable, and aligned with the business.

Figure 1. The Definition of "Data Readiness" Varies Across Organizations

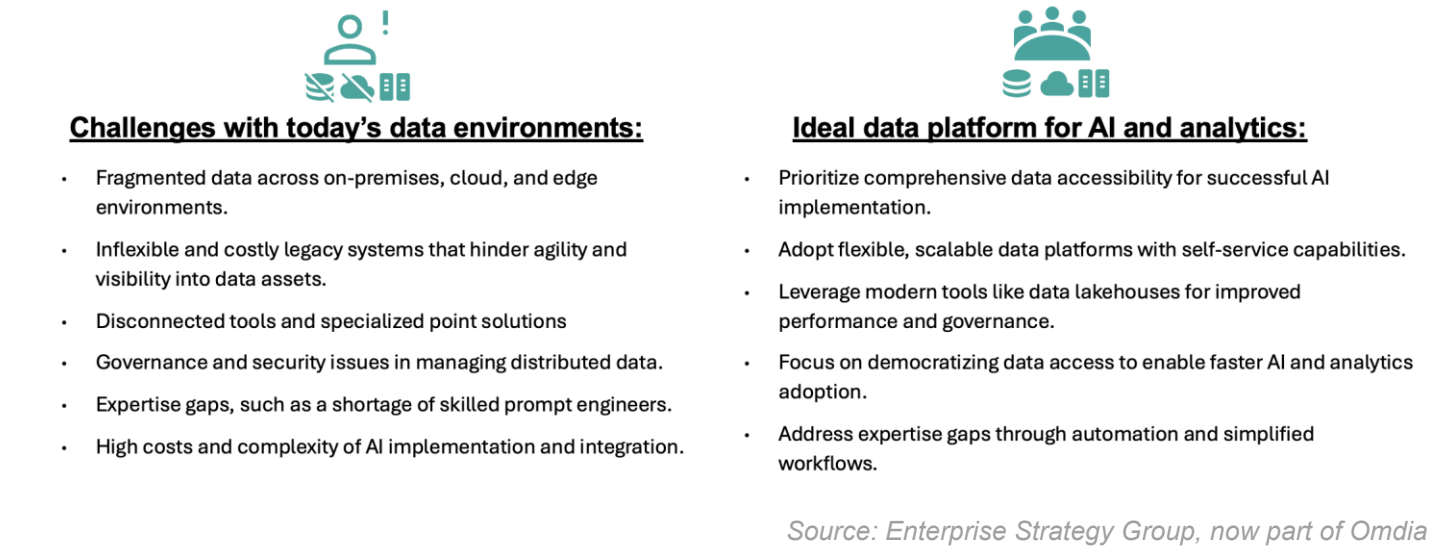
Source: Enterprise Strategy Group, now part of Omdia

There are significant challenges in leveraging data for AI and analytics due to fragmented data environments, legacy systems, and governance complexities. Traditional solutions often fail to meet the demands of modern AI and analytics, which require vast, diverse, and rapidly generated data. To remain competitive, businesses must adopt flexible, future-ready data platforms that ensure comprehensive data access, scalability, and governance

[1] Source: Enterprise Strategy Group Research Report, *Data Readiness for Impactful Generative AI*, April 2024. All Enterprise Strategy Group research references and charts in this Economic Validation have been taken from this research report.

while addressing expertise gaps and integration hurdles. Modern solutions like data lakehouses and self-service platforms can accelerate AI adoption and analytics value by simplifying data access and reducing time to implementation.

Figure 2. Challenges of Leveraging Data for AI and Analytics



Source: Enterprise Strategy Group, now part of Omdia

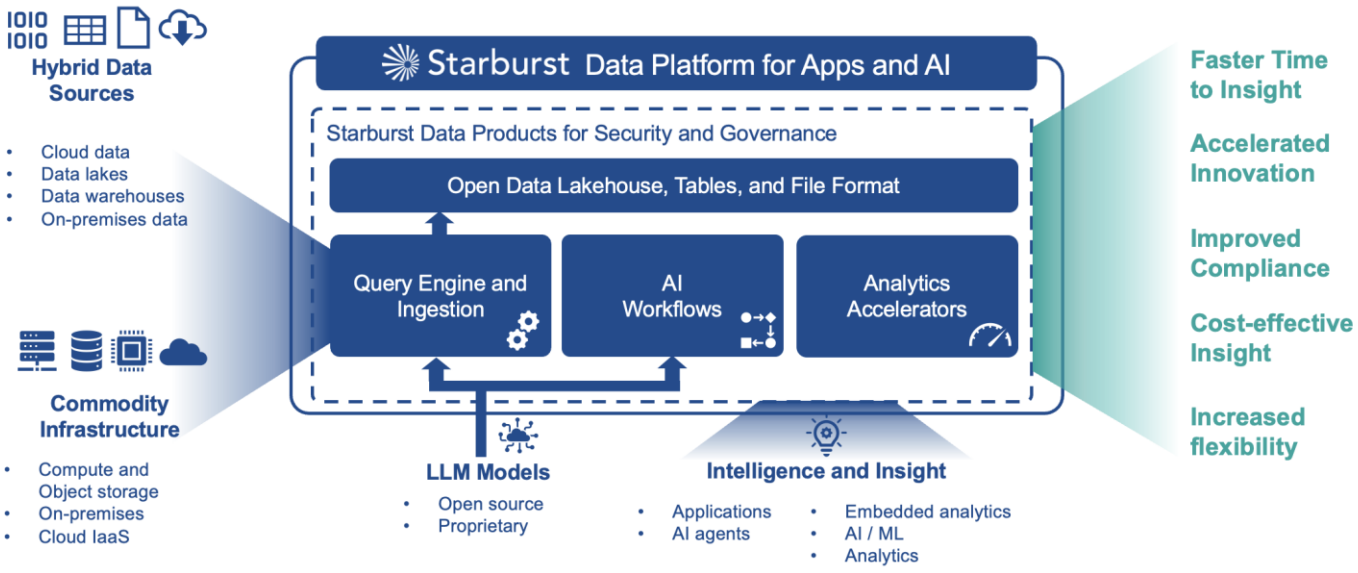
The Solution: The Starburst Data Platform for Apps and AI

The Starburst Data Platform for Apps and AI is a fast, flexible, and secure data platform that provides access to data, regardless of where it resides (stored in warehouses, data lakes, streams, or databases on premises or in the cloud). The platform helps organizations discover, trust, and activate their data faster, making it an ideal solution for teams looking to leverage their existing data assets for analytics and AI applications.

Some key features of the Starburst Data Platform include:

- **Unified data access.** Starburst's query engine and ingestion capabilities enable organizations to connect to and query more than 50 data sources and real-time data streams from cloud, on-premises, and hybrid environments without requiring complex data migrations.
- **Open architecture.** Starburst was built on open source Trino and supports many open data and table formats with advanced support for Apache Iceberg, Delta Lake, and other formats.
- **High-performance analytics.** Starburst's massively parallel processing (MPP) Engine and Analytics Accelerators can deliver up to 10x faster query performance at scale compared to traditional solutions.
- **Accelerated AI.** Starburst AI Workflows and Starburst AI Agent help to accelerate enterprise AI development and deployment initiatives.
- **Built-in data governance and security.** Starburst Data Products provides a built-in governance and security layer across all data with fine-grained access control, auditing, encryption to protect sensitive data, and AI-powered data classification.
- **Deployment flexibility.** The Starburst Data Platform can be deployed as Starburst Galaxy (a fully managed cloud service) or as Starburst Enterprise (a self-hosted, self-managed data platform).

Figure 3. Starburst Data Platform for Apps and AI



Source: Enterprise Strategy Group, now part of Omdia

Enterprise Strategy Group's Economic Validation of the Starburst Data Platform for Apps and AI

Enterprise Strategy Group's economic analysis revealed that implementing the Starburst Data Platform enabled organizations to significantly transform their businesses. Enterprise Strategy Group found that the Starburst Data Platform for Apps and AI provided its customers with significant savings and benefits in the following categories:

- **Unified and accessible data:** Starburst provided a single point of access to all enterprise data, helping to eliminate technical and organizational roadblocks to unlock data and grow capabilities across the organization.
- **Optimized costs and performance:** Starburst provided improved price-performance to accelerate time to insight, improved operational efficiency through automation and orchestration, and reduced complexity to improve productivity and lower operational costs.
- **Accelerated innovation:** Starburst reduced complexity and enhanced data capabilities, resulting in faster innovation and modernization and accelerated AI timelines. Starburst also provided flexibility of choice that reduced the risk of vendor, technology, and format lock-in.

Unified and Accessible Data

Organizations face significant roadblocks when data is fragmented, siloed, and inaccessible. This slows innovation and leads to inefficiencies, delays, and a missed opportunity for higher-quality, insight-driven decision-making. Starburst provides its customers with a secure, scalable, and unified data platform with a single point of access to all federated data sources wherever they reside. By eliminating functional silos and technical constraints on data, organizations can make more effective use of their data across the organization while improving the time and quality of insight, accelerating innovation, and increasing operational efficiency. Starburst customers reported savings and benefits in the following categories:

- **Single point of access to all enterprise data:** Before Starburst, customers struggled with disparate and siloed data access that required complex migrations and transformations. The Starburst Data Platform delivered a federated, single point of access to enterprise data, enabling organizations to connect seamlessly to data wherever it resides (across clouds, regions, and on-premises environments). Customers could then query across data lakes, warehouses, streaming systems, and databases at one unified location using familiar SQL queries, helping to eliminate the traditional need to first transform, copy, or move data into a centralized repository or proprietary platform. This approach delivered significant operational benefits for customers who reported time and cost savings provided by avoiding long data migration projects, reducing egress costs, and minimizing some of the security risks associated with data movement.

> **"We want data where it lives, and we want to access it, if possible, with all the careful measures that we can implement, both from a security and resilience standpoint."**

- **Faster onboarding of new data sources:** The time and complexity of bringing in new data sources is a roadblock to insight and innovation. Starburst dramatically accelerated the onboarding of new data sources for the customers that we spoke with. Over 50 pre-built, plug-and-play connectors that supported most table and data formats helped to eliminate the need for some custom integration development or data migration. Customers reported that Starburst's standardized onboarding processes, combined with real-time data ingestion capabilities and continuous file loading for Iceberg data lakes reduced initial data integration timelines from months or years to just days or weeks. One Starburst customer noted that they were able to connect and begin analyzing data from a newly acquired subsidiary **within two weeks using Starburst's native connectors, compared to their previous experience, where similar integrations required up to six months** of custom development work. This rapid onboarding capability enables organizations to quickly capitalize on new data opportunities and deliver fresh, up-to-date insights to business stakeholders without the traditional bottlenecks of lengthy integration projects.

> **"With our best efforts, it probably took us a month involving functions from several roles to connect data sources for production purposes. Now it's just a few hours with just a ticket to the infrastructure team to create the credentials and catalog in Starburst."**

- **Elimination of data silos within the organization:** Most organizations struggle with technical, functional, and organizational silos that limit access to data. Starburst effectively reduced or eliminated these data silos by creating a unified access layer through its federated query engine that could access data anywhere and make it available in different formats, thus freeing data from being tied to singular use tools or platforms. One customer spent **up to 60% less**

> **"We deleted 15 applications and five cloud services by moving our in-house solution to Starburst. We were able to map our needs to their feature catalog, and that allowed us to drop our own tooling."**

time managing multiple disparate platforms and custom integrations, as Starburst's query-in-place architecture eliminated the complex web of connectors and transformations they previously maintained across their data ecosystem. Customers reported that they could now execute single SQL federated join queries that combine response data from all sources, which made disparate systems appear as one unified source without requiring additional integration work or data movement. Starburst's unified approach helped to reduce the operational burden on data teams, system administrators, and security teams that no longer had to coordinate complex cross-platform data access initiatives, enabling them to focus on higher-value activities rather than managing fragmented data architectures.

- **Reduced infrastructure complexity:** Many organizations manage many disparate pools of compute, network, and storage dedicated to a single function or tool—adding cost and complexity when trying to normalize data access across the organization. Customers reported that Starburst helped them reduce infrastructure complexity by consolidating multiple tools and connection points into a single unified platform that decouples storage and compute and reduces the need for additional hardware and/or cloud resources to facilitate extra data copies and transformations. Customers appreciated the flexibility to choose between self-managed Starburst Enterprise or the fully managed Starburst Galaxy options, enabling them to select their preferred tools, models, CPU, and storage configurations while quickly expanding and reusing capabilities as their business needs evolved. This simplified and flexible infrastructure approach saved time and money and removed many of the technical limitations that had previously constrained their data analytics initiatives. This also enabled faster deployment of new use cases without the bottlenecks and limitations of traditional architectures, tools, and infrastructure. One customer reported that their data engineers now spend **70% less time on infrastructure management** since adopting Starburst Galaxy's fully managed approach, which automatically handles cluster provisioning, maintenance, and security updates.
- **Secure data sharing and improved collaboration:** Starburst provides secure connections to data in place without requiring data copying (even when working with third-party providers). Its comprehensive access control framework includes authentication, data tagging, dynamic policies, and encrypted communication that help ensure that access to data is always approved and secure. A Starburst customer noted that their ability to share sensitive customer data across internal teams and external partners without copying data has dramatically reduced compliance risks while accelerating cross-functional analytics projects that previously required months of security approvals. This secure, federated approach also helped to improve collaboration, with teams now able to work from the same trusted data source in real time without the traditional friction of complex data handoffs or security bottlenecks.

> **"The fact that Starburst can connect to many different sources is a big advantage that is driving a lot of our technology choices. We remain so flexible that we can literally tell our business partners to do pretty much whatever you want, as long as there's a connector somewhere."**

Optimized Costs and Performance

Modern organizations need to provide higher-quality data sources and faster time to insight for analytics and AI workloads to remain competitive while simultaneously making the most of their limited budgets. After moving to Starburst, organizations reported not only improved time to insight but also significant cost savings. Starburst provided much better price-performance for queries compared to previous deployments and simplified infrastructure and tooling to lower cloud, compute, and data access costs. Starburst also greatly reduced complexity and provided AI-powered assistance to improve operational efficiency and free up valuable time for data engineering, IT, and business users to act on insight and get more done. Customers reported savings and benefits in the following categories:

- **Lower cloud, compute, and storage costs:** Customers reported cloud, compute, and storage cost reductions made possible by Starburst's architecture, which separates compute and storage layers, combined with query-in-place capabilities that eliminate the need for multiple data copies and reduce expensive cloud data services and data egress costs. Customers reported other automatic cost savings that required no effort on their part such as Starburst's enhanced autoscaling and auto-suspend features, which dynamically scale compute resources up and down based on actual workload demands and automatically suspend unused clusters to prevent accumulating unnecessary charges. One organization saw a **53% reduction in data analytics costs** by leveraging Starburst's usage-based pricing model with universal compute credits, paying only for actual compute consumption rather than fixed capacity, while also benefiting from the ability to choose the most cost-effective compute and storage options for their specific workloads. The platform's query optimization capabilities and real-time cost monitoring make it possible for organizations to track credits hour by hour, enabling data teams to proactively manage spending and tune compute resources accordingly before exceeding their budget.

> **"It is hard to quantify direct cost savings because we are doing so much more now that we ever would have been able to do. We are spending at least 20% less than we had with [alternative], but we have scaled more than 10x since then."**

- **Improved price-performance:** Starburst provided customers with exceptional query price-performance improvements, resulting in faster job completion times and reduced overall cost per normalized query. The Trino-powered MPP engine, combined with advanced query optimizations like cost-based optimization, dynamic filtering, intelligent joins, and query pushdown capabilities, make it possible for Starburst to consistently outperform standard Trino and alternative offerings by up to 28% based on internal benchmarks. Customers consistently reported dramatic performance gains, with one company achieving **85% faster ad hoc queries** through Starburst's Warp Speed feature and another reporting a **10x improvement in query performance** compared to their previous solution (directly translating to faster time to insight for critical business decisions). In addition, Starburst's multi-layer caching system, which includes materialized views, subquery caching, and result set caching, combined with intelligent autoscaling, helps make queries run more efficiently to lower cloud compute costs. These performance enhancements have proven particularly valuable for complex analytical workloads, where customers consistently report that Starburst's optimized query execution delivered both faster results and lower operational costs compared to traditional data warehouse solutions.

Time to Insight (New Projects):

Previously: Weeks to Months
With Starburst: Hours to Days

Time to Insight (New Batch Reports):

Previously: Hours to Days
With Starburst: Seconds to Minutes

Time to Insight (Individual Queries):

Starburst Improvement:
30% to 85% Faster Queries

- **Improved operational efficiency:** Getting significantly more done using existing resources is the key to faster innovation. Customers reduced the time and effort that was required across several functions by standardizing on a single query engine across all teams and workloads and reducing the complexity of managing complex data operations across infrastructure, network, security, and governance requirements. Starburst's unified data access, automated performance optimizations, intelligent autoscaling, and automated maintenance tasks enabled complex resource scaling and optimization without manual intervention. The platform improved productivity for business users through natural language query (NLQ) capabilities and easy integration with existing dashboards, applications, and agents. Less-experienced analysts and application developers save time through improved collaboration tools, direct access to LLM functions from SQL, and a pre-tested function library (which reduces the dependence on prompt engineering, data engineers, and other technical resources). Starburst customers found it was easier to build, document, and use data products with the Starburst AI Agent (without first having to learn Python, manually create documentation, or prepare and move data), and they now had access to a wider range of data, saving them hours or days of effort to securely access new data sources. Companies that we spoke with estimated that they would need to hire **2.5x to 4x more FTEs if they did not have Starburst** (this might include infrastructure admins, data engineers, developers, data governance, etc.)

> **"We can do probably three to four times what we would do in the same time frame as before. Just because all of the time we spent on transformation, querying data, cleaning data, assembling data, all of this stuff has been taken as far as we can in data mesh and in the automation process with Starburst."**

- **Simplified governance:** Enforcing governance policies around data can be difficult and a barrier to innovation. Often when data is copied or ingested for use in other systems (AI for example), important governance data can be stripped, increasing risk to the organization. Customers reported that Starburst's fine-grained access controls and policy-based governance enforcement, combined with automated data lineage tracking and seamless integration with third-party SSO and governance tools like Apache Ranger and Immuta, reduced the manual effort required to maintain regulatory compliance and security standards. One organization noted that its compliance team now spends up to **60% less time preparing for audits** since implementing Starburst's comprehensive audit logging and automated lineage capabilities, which provide complete visibility into data access patterns and transformations without requiring manual documentation. The platform's continuous security updates and built-in governance controls help to reduce the risk of non-compliance incidents and data exposure, with customers reporting greater peace of mind knowing that governance policies are automatically enforced at query time rather than relying on manual processes.

> **"We don't need to keep our own authorization system because it's manageable through the Starburst API."**

Accelerated Innovation

Today's data-driven organizations must continuously modernize, innovate, and improve products, services, and operations to remain competitive. Starburst provided organizations with a data platform that makes this possible by eliminating technical and organizational roadblocks while optimizing cost and efficiency. Starburst customers were able to accelerate AI and analytics initiatives, speed product and service innovation, and accelerate modernization efforts, ultimately resulting in improved revenue for the company. Going forward, Starburst provides them with a future-proof platform that enables the flexibility to change vendors, technologies, and formats on the fly with minimal impact to operations. Customers reported savings and benefits in the following categories:

- **Accelerated AI and AI-powered analytics:** With a growing set of AI features and data products, Starburst can help organizations accelerate AI initiatives and avoid traditional AI roadblocks that previously required costly proofs of concept and lengthy data preparation cycles. While it is still early, customers are excited that Starburst can make it easier to provide AI models and agents with live, governed access to more comprehensive enterprise datasets powered by Starburst's integrated AI Search and AI Workflows. Customers can speed up AI development timelines using Starburst's AI SQL Functions, which enable direct integration with the LLMs of choice through familiar SQL syntax for tasks like sentiment analysis, classification, and translation. This will enable SQL developers to build AI-powered features without first having to learn Python or waiting for data science teams to integrate datasets. The platform's AI Model Access Management and multi-agent interoperability features are designed to help organizations build, deploy, and manage more comprehensive AI applications faster and more cost-effectively. And Starburst's own AI features built into the product help bring the power of advanced analytics to more users across the organization, as one customer noted that their AI Search capabilities and NLQ interface through the Starburst AI Agent have enabled business users to interact with trusted data conversationally, quickly supplying them with both text insights and visualizations.

> **"Starburst gives us a query editor that is ready to inquire a set of data sources, and it's actually AI-assisted as well, so people that are not too familiar with SQL and want to talk business language can successfully ask their own questions of the data without having to involve anyone else."**

- **Faster product and service innovation and the ability to experiment and iterate faster:** Starburst made it possible to identify new opportunities, bring in new sources of data, maximize the productivity of less-experienced resources, accelerate workflows through automation, and experiment and iterate faster. Starburst's unified approach, flexibility and scalability, and AI-powered analytics capabilities helped customers accelerate product and service innovation and provided real-time insights that directly fueled new business initiatives. Organizations reported that Starburst helped enable faster time to market for data-driven products and services that were made possible through improved collaboration on a single set of tools and services, improved operational efficiencies, removed technical roadblocks, and improved business insight and agility. This ultimately results in improved revenues, gained market share, and improved competitive product differentiation.

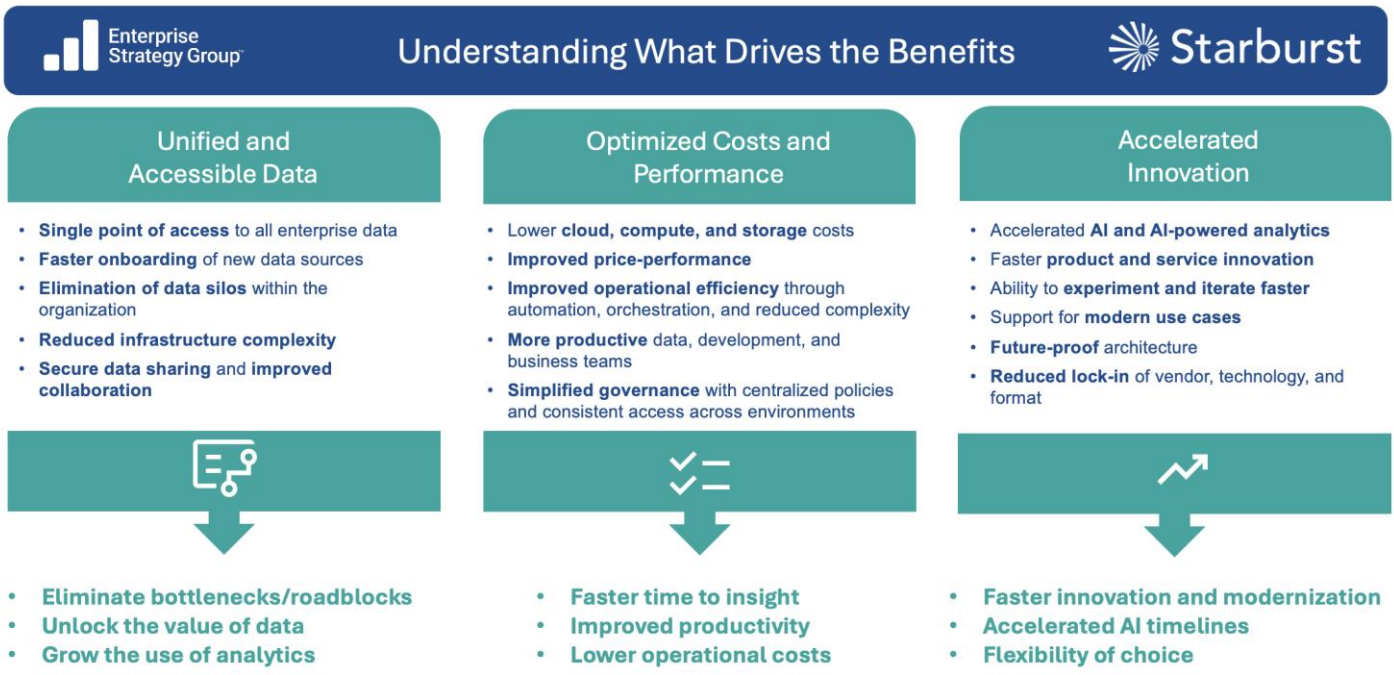
> **"Since the query runs so much faster, we can execute our pipeline way more often, and the business can have fresher data. It's just like, as soon as you start doing this kind of stuff, everybody in the organization wants to do more."**

- **Support for modern use cases:** Starburst customers felt that the platform gave them the ability to better support modern use cases like customer-facing analytics, embedded dashboards, and agentic AI applications, amongst other use cases. By removing the most important technical barriers around quickly and securely accessing all data at scale, organizations were also free to work on modernizing their data strategy. After moving to Starburst, customers found themselves in a better position to work on initiatives like building scalable data applications, modernizing their data lakes, scaling beyond their proprietary data warehouses, and upgrading to enterprise-grade Trino for improved performance, reliability, and feature support. One customer reported that before implementing Starburst they "used to spend way too many cycles babysitting the database and not building new capabilities that are important for the future of the business."

- **Future-proof architecture with no lock-in:** Starburst customers were happy with the agility provided to adapt quicker to new technologies, regulations, and data types. Starburst's Data Platform is built on open source Trino and Iceberg and works with all sources, tables, formats, and LLMs. Combined with the ability to choose to run workloads on any CPU and storage, this gives organizations the flexibility to easily shift to take advantage of the latest innovations in technology for any one layer of the platform to optimize for performance, cost, and functionality without having to substantially change the other layers. In addition, Starburst provides continuous innovation to improve the features of the platform and make sure that everything will continue to work well as new technologies emerge. By decoupling data access from proprietary storage formats, solutions, or cloud services, Starburst reduces the risk of vendor and technology lock-in.

"Our strategy is a modular architecture. We don't need recreate platforms every year and we can change tools at any layer without having to redesign anything. We know with Starburst, pieces of our data lake can grow and adapt to handle whatever the business brings going forward."

Figure 4. Summary of Validated Benefits Provided by the Starburst Data Platform



Source: Enterprise Strategy Group, now part of Omdia

Enterprise Strategy Group Analysis

Enterprise Strategy Group leveraged the information collected through vendor-provided material, public and industry knowledge of economics and technologies, and the results of customer interviews to create a modeled scenario that compares the costs and benefits of providing data services for AI, applications, and analytics workloads with the Starburst Data Platform against the expected costs to continue to run with the alternative specialized tools, infrastructure, and inefficient workflows that they had previously managed. Enterprise Strategy

Group's interviews with customers who have recently made the transition, combined with experience and expertise in economic modeling and technical validation of modern data, workload, and infrastructure offerings, helped to form the basis for our modeled scenario.

Our conservative three-year modeled scenario assumed that a data-driven SaaS organization's products currently contributed $210M in annual revenue, with an expected 10% annual growth in revenue. These products relied on insight derived by querying and processing an average dataset size of about 302TB that was generated, transformed, stored, and accessed across several sources, formats, services, and locations. The baseline case assumed that a dedicated team of five data engineers was responsible for managing data connectivity, governance, access control, and security to supply data-driven services across a number of analytics and development platforms and revenue-generating services. In addition, a team of two full-time developers were responsible for creating and maintaining custom tools, connectors, and integrations for these services as needed.

Based on our own models and assumptions derived from quantitative feedback from dozens of interviews and customer case studies, we modeled the expected baseline costs and improvements provided by Starburst for data platform and software spending, cloud and/or infrastructure spending, storage costs, data processing costs, development and integration of connectors and tools, and operational costs to deploy, manage, maintain, and operate the daily needs of the data platform. Our validated and modeled savings are summarized in Table 1.

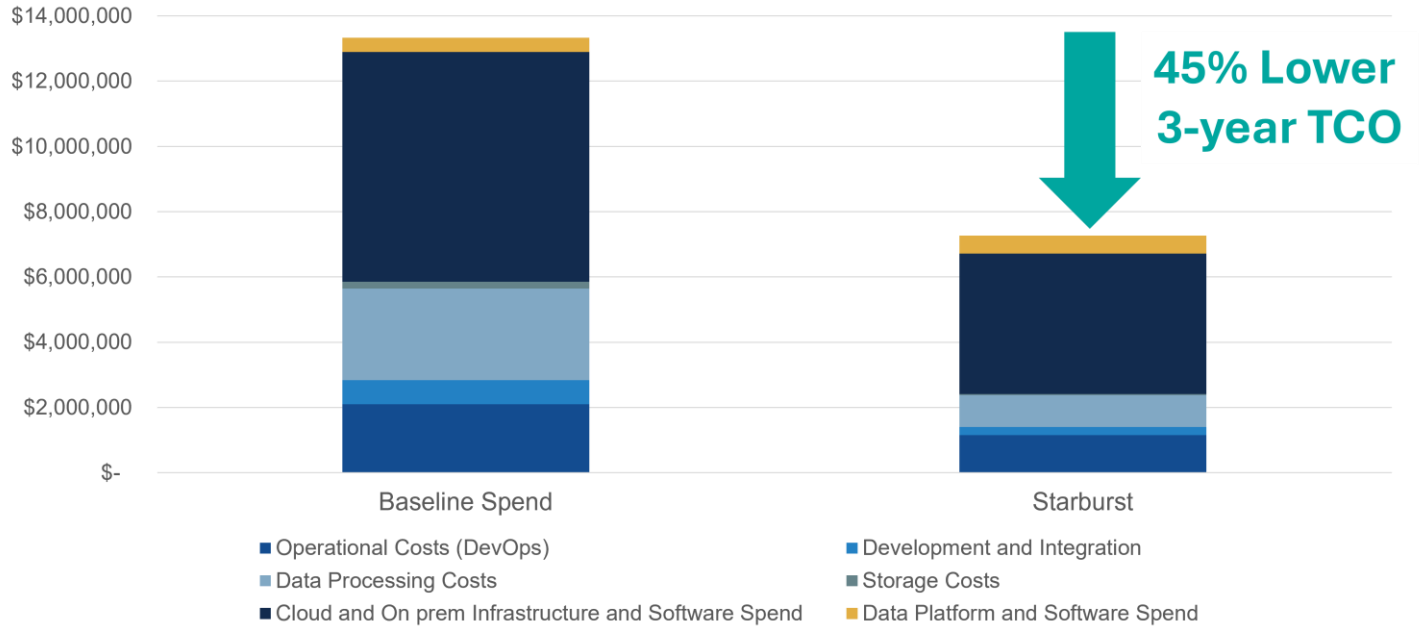
Table 1. Summary of Validated and Modeled Savings

Cost Category	Modeled Savings Versus Baseline	Description
Operational Costs	45%	Starburst's unified tools and processes and simplified the tasks around deploying, building, scaling, and supporting data products across the organization, removing burden on DevOps, infrastructure teams, and data engineers.
Development and Integration	67%	Starburst's federated data, built-in connectors, data products, simple SQL interface and AI tools saved significant time for developers creating, APIs, data integrations, etc. for applications and services.
Data Processing Costs	65%	Because data can be accessed and federated wherever it resides and in whichever format it resides in, Starburst reduces the need to move or copy data, perform ETL, and data transformation. This reduces the volume of data requiring specialized services, lowered egress charges, and reduced spend on data tools, API costs, etc.
Storage Costs	85%	Far less data has to be moved, transformed, or copied to specific locations, resulting in significantly lower total requirement for on-premises and cloud storage capacity.
Cloud/On-premises Infrastructure and Software Spending	39%	Starburst can access data where it resides and does not require additional compute instances to copy, process, and generate insight on local data at each location, reducing redundant spend on cloud instances, cloud services, on-premises servers, hypervisors, etc. at each location.

Source: Enterprise Strategy Group, now part of Omdia

Next, we added in the expected cost of the Starburst Data Platform and a baseline data warehouse platform expected to deliver equivalent levels of baseline performance and modeled all costs over a three-year period. As shown in Figure 5, the Starburst Data Platform provided a 45% lower total cost of ownership.

Figure 5. Enterprise Strategy Group's Three-year Modeled Total Cost of Ownership



Source: Enterprise Strategy Group, now part of Omdia

Avoided Risk

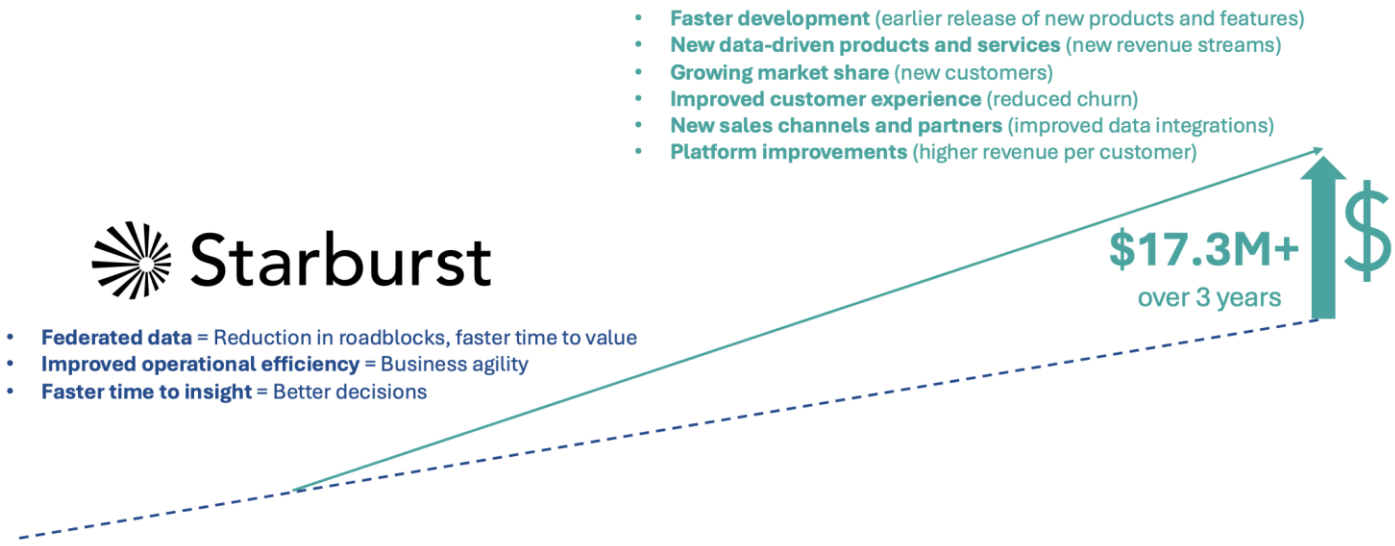
We modeled the cost system downtime, query errors, and lack of support reported by customers on previous solutions before they moved to Starburst against Starburst's reported improvements to quantify potential avoided risk due to downtime of operational and revenue generating services. Customers reported that, with their previous solutions, downtime was a common occurrence due to planned updates and upgrades, manual access issues, as well as unplanned issues requiring troubleshooting and remediation. On average, we estimated that, for the baseline, services might be impacted for a cumulative total of 5.5 days (98.5% uptime), while after moving to Starburst, this was reduced to only a few hours per year (99.8% uptime). Our model assumed that only one-fifth of these events would directly impact revenue and we calculated that Starburst could help the modeled organization avoid up to $570K of revenue impact per year, resulting in **$1.7M of avoided risk of downtime over the three-year period.**

Improved Revenue

While it is difficult to model how the faster time to value, faster time to insight, and improved use and quality of data that Starburst provides directly impacts revenue, we took a very conservative approach to quantifying this. Starburst can help organizations develop and deploy products and features quicker and generate new data-driven products and services, which can help both grow market share and provide customers with improved experiences that help reduce churn. As organizations move to use more AI, improvements to the platform and business insights can help organizations identify and take advantage of new sales channels and partners and increase revenue per

customer. Our model considered that the $210M annual revenue of the organization natively grew at an expected 10% per year but could be accelerated by 0.2% to 2% of additional annual growth after moving to Starburst, **resulting in a modeled $17.3M to $185M of additional revenue over the next three years** (shown in Figure 6). While admittedly not all attributable to Starburst, Enterprise Strategy Group did note that one customer we interviewed had increased their expected revenue trajectory by 36% to 50% after moving to Starburst.

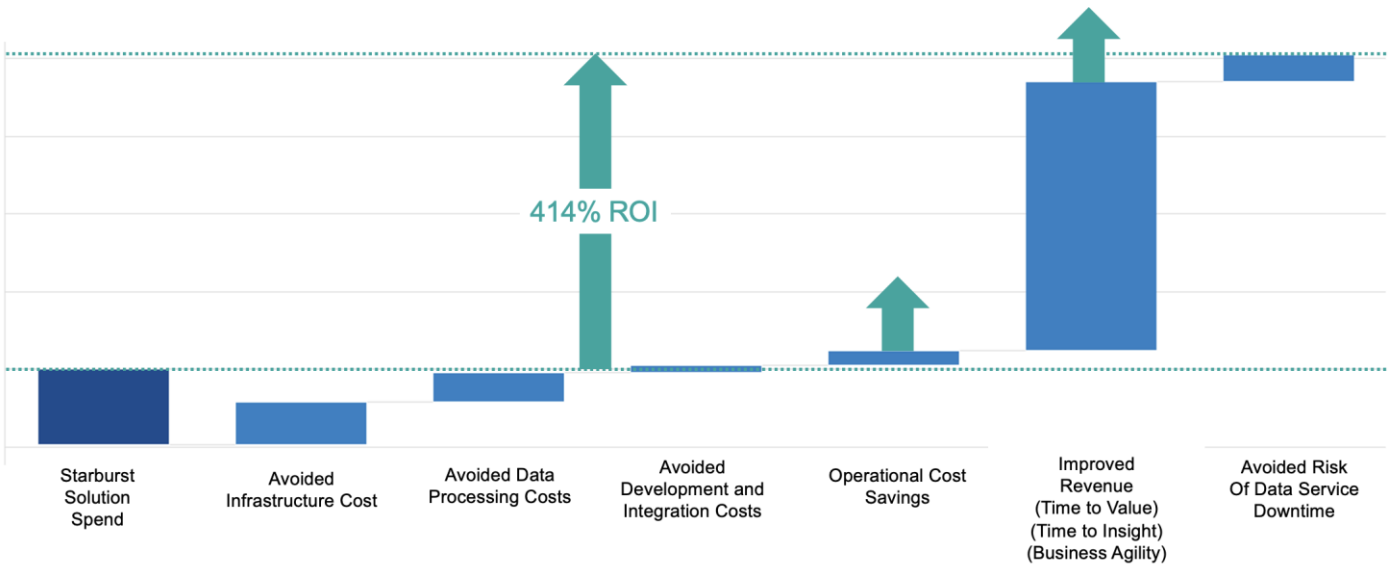
Figure 6. Additional Revenue Provided by Starburst Over Three-year Period (Minimum Assumptions)



Source: Enterprise Strategy Group, now part of Omdia

Taking all of the investment, savings, and benefits into consideration, calculated a **modeled three-year ROI of 414% for Starburst**. We feel this number is quite conservative, and it should be noted that, in the right scenarios, the cost avoidance, operational savings, revenue improvements, and avoided cost of downtime could be substantially higher, resulting in significantly higher ROI.

Figure 7. Three-year ROI of the Starburst Data Platform



Source: Enterprise Strategy Group, now part of Omdia

Considerations

Enterprise Strategy Group's models are built in good faith upon conservative, credible, and validated assumptions; however, no single modeled scenario will ever represent every potential environment. Each organization has a unique set of considerations that will determine how much of an impact the Starburst Data Platform could have for their organization. Enterprise Strategy Group recommends that organizations validate these assumptions against their own workloads and cost structures and then consult with their Starburst representative to understand and discuss the potential benefits that might be achievable for their organization.

AI Readiness and Agentic Enablement

The Starburst Data Platform can be a transformative technology for organizations looking to build or improve upon their existing AI capabilities. While there is no shortage of products promising to deliver improved AI capabilities in one particular area, **the Starburst Data platform serves as the framework to better build, scale, and optimize the critical functions that make successful AI outcomes possible**. This includes:

- **Faster time to AI value:** AI teams can access and query data wherever it resides, federating across multiple sources through pre-built connectors, without first having to move data or create copies. This means new sources of data can be made available to models weeks to months earlier, providing improved model quality and competitive advantage.
- **Reduced friction for AI teams:** AI is not only about the technology, but also the people and processes. Starburst's capabilities help to reduce friction for AI teams by getting around many of the factors that prevent or limit success of AI initiatives. Starburst helps to avoid roadblocks and speedbumps around common problems like planning complexity, dealing with cost and limited resources for AI projects, diverse data sources, performance and scalability issues resulting in higher success, quantity, and quality of AI projects.

- **Democratization of AI model usage:** Starburst's AI SQL helps to democratize AI model usage by providing simplified data access through a familiar SQL interface, a unified view of data through a single query layer for model training and inference, a self-service portal that allows analysts, data scientists, and others to access and collaborate on data and models without relying on IT or data teams.
- **More effective governance of AI data:** Once data is pulled into AI models, it can lose all governance information, increasing risk to the organization. Starburst's federated query engine keeps all of the embedded governance data around lineage, quality scores, access controls, and policies intact.
- **Accelerated AI model performance:** Starburst's high performance distributed query engine and AI pipelines provide improved performance for AI model queries. Starburst's data caching and on the fly data transformations and joins enable real time data queries that can power up to the minute AI insight.
- **Improved AI development capabilities and AI-powered applications:** Added infrastructure, pipeline, governance, and security complexity can slow developer productivity as well as limit AI-powered application functionality and performance. By solving these issues developers become more productive and are free to focus on advanced functionality, can support more complex workflows, and can build in real-time capabilities. AI-powered applications and models become higher performing, more capable, and more cost-effective.

Conclusion

Demand for comprehensive data-driven operations and insights continues to grow. However, the technical capabilities and resources, time and expertise, and fiscal budget that they have available to deliver on this vision are quite finite. The Starburst Data Platform for Apps and AI helps organizations overcome the challenges of fragmented and siloed data environments and helps businesses make more comprehensive and effective use of their data assets. Starburst provides unified access to data across diverse sources and formats, reduces infrastructure and operational complexity, and eliminates technical and organizational roadblocks. This enables modern businesses to operate with greater efficiency and agility to capitalize on emerging opportunities in AI, analytics, and data-driven innovation.

Enterprise Strategy Group validated through a series of interviews with Starburst's customers that Starburst had provided significant cost savings and operational benefits while greatly simplifying and accelerating their data-driven analytics and AI capabilities. Organizations reported reductions in cloud, compute, and storage costs; improved price-performance for queries; and enhanced operational efficiency—all of which contributed to a lower total cost of ownership. Starburst's AI-powered features and tools democratized access to advanced analytics, empowering less-experienced users to derive insights and build AI-powered applications without extensive technical expertise. These advancements not only accelerated time to value but also enabled the businesses to scale their data initiatives more effectively, driving further innovation and competitive differentiation.

By decoupling data access from proprietary storage formats and solutions, Starburst ensured that customers could seamlessly integrate new tools, technologies, and data types while maintaining operational continuity. This adaptability is critical in today's rapidly changing data landscape, where the ability to innovate and modernize quickly results in long-term success. **In our conservative three-year modeled scenario, Starburst lowered the total cost of delivering data for analytics and AI by 45% and delivered a 414% ROI, driven by cost savings, improved revenue potential, and reduced downtime risk.**

The Starburst Data Platform delivers a compelling combination of cost optimization, operational efficiency, and accelerated innovation, making it an ideal choice for organizations aiming to harness the power of their data for strategic advantage, especially those looking for an AI-ready platform that will enable agentic AI and ensure the

success of future AI initiatives. With validated savings, improved revenue potential, and a robust ROI, Starburst empowers businesses to achieve their goals today while remaining agile and future-ready to adapt to tomorrow's technologies. If your organization is looking to improve its data-driven capabilities by reducing the complexity and limitations of its existing data environment, Enterprise Strategy Group recommends that you contact the Starburst team to see what is possible.

About Enterprise Strategy Group
Enterprise Strategy Group, now part of Omdia, provides focused and actionable market intelligence, demand-side research, analyst advisory services, GTM strategy guidance, solution validations, and custom content supporting enterprise technology buying and selling.

contact@esg-global.com
www.esg-global.com