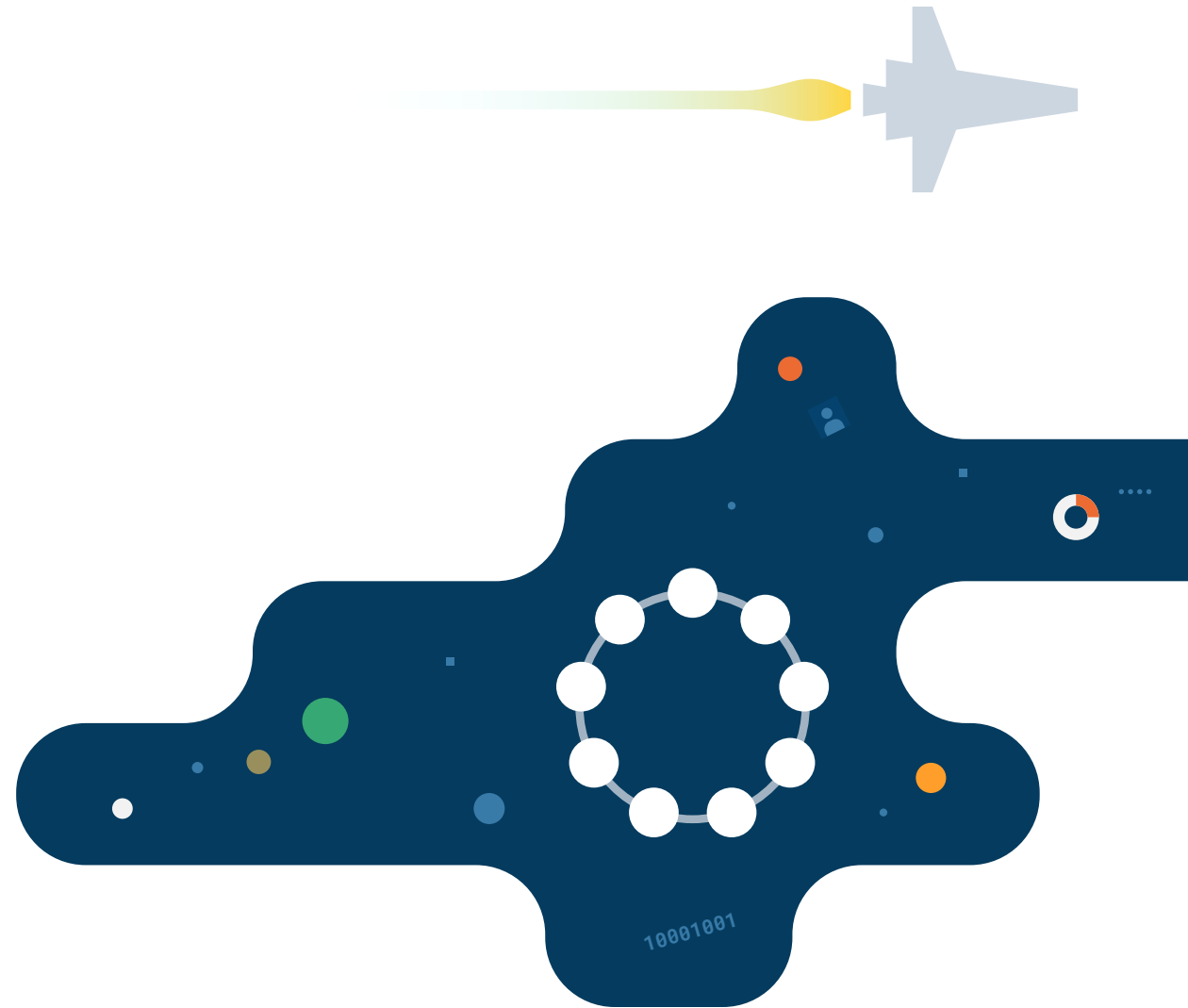


DataStax

How Fast Growing Companies Compete and Win with All Their Data

Five customers fuel their growth with an open data stack for real-time apps.





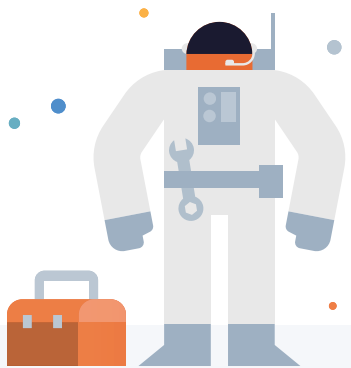
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How can we fuel faster growth?

This question is top of mind for every executive charged with developing high-growth applications that drive business forward. As technologists, we can build products that are truly limitless. In a world full of constraints, it's a magical thing when there are no bounds to growth.



DataStax

Most executives today realize that their data is a key asset¹ which when leveraged with cloud technologies has the potential to propel their businesses forward. However, while data is the fuel for growth, it can also be a constraint for companies still struggling with data silos that continue to hamper their key development initiatives².

This e-book explores the problems data silos create and illustrates how five different companies are breaking down the silos with DataStax Astra DB to unify and manage their data. With Astra DB, these organizations are meeting and exceeding their expectations with new initiatives that are delivering more value, faster.

Companies that want to develop modern data applications to transform their businesses need a way to break down the data silos so they can accelerate their development. DataStax opens up a fast lane for accelerated development with an open data stack that unifies both real-time data and data at rest³. The defining features of an open data stack are also its biggest benefits:

- **Globally available and highly scalable**
- Kubernetes-based for cloud-native **agility**
- Developer-ready with data APIs to **reduce time to market**
- Cloud-delivered to **simplify operations and reduce TCO**
- **Built around open-source technologies** that support data at rest and data in motion



Data trapped is power untapped

Data silos exist in almost every company in diverse and divergent platforms, on premises and in different clouds and they impose enormous direct and indirect costs to businesses.

Working with data stored in different databases across several platforms is an inherently expensive way to operate. Given the sheer volume and complexity of the data businesses collect today, the management and governance of that data requires significant time and resources. The high direct costs associated with such operational models combined with the frustration associated with knowing there must be a better way is an exquisite pain point for many businesses today.

There's also the issue of technical debt, which further exacerbates that pain. Data trapped in different silos makes it difficult to deliver relevant and complete information to data-dependent stakeholders within the business, leading to fragmented data for decision making and the inability to access and act on real-time data to provide the kinds of experiences today's business customers and consumers alike demand.



DataStax



Bolstering growth and activating data in real time

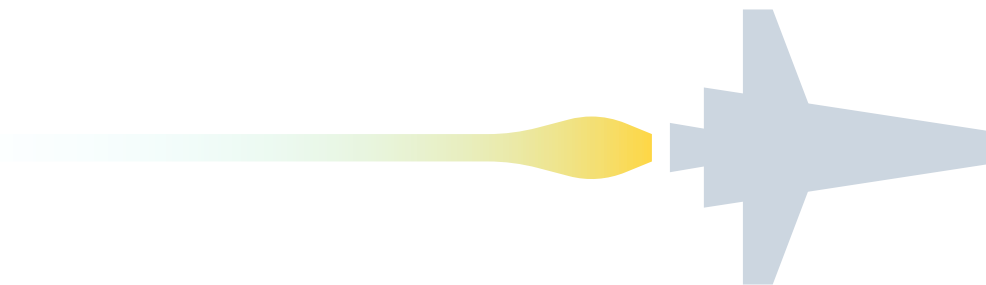
Almost 90% of businesses operating in the cloud today employ a multi-cloud architecture⁴, which provides benefits such as competitive pricing, flexibility and scalability, and greater resilience against downtimes.

However, a multi-cloud architecture can also create unexpected data silos⁵. With data spread across different cloud providers, many companies still struggle to access and combine it in ways that can drive business growth.

Gartner's December 2021 report on the critical capabilities for cloud DBMS for operational use cases envisions "the emergence of data ecosystems as the basis for competition" where products are evaluated as an ensemble of cloud services that are integrated to work together⁶.

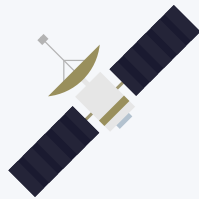
Datastax Astra DB helps businesses build this kind of ecosystem with a cloud-native database and modern data management model that can integrate data on multiple clouds. Astra provides an open stack for real-time data applications that unifies both data at rest and in motion, enabling enterprises and developers to:

- **Mobilize all real-time data on a single, unified stack.** Astra DB reduces complexity to unleash the power of real-time data, while reducing risk and cost, to create immediate intelligence and fuel machine learning.
- **Build smarter applications,** faster with developer-ready tools, APIs, and a pay-as-you-go serverless architecture. Astra DB empowers developers to connect real-time data to other data initiatives such as AI or analytics.
- **Scale without limits on an open, cloud-native architecture.** Deploy on any cloud, hybrid cloud, or Kubernetes, at massive scale, anywhere in the world. With Astra DB, data is always available, anywhere, instantly.





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The biggest DBMS market story continues to be the enormous impact of revenue shifting to the cloud. **In 2021, revenue for managed cloud services (dbPaaS) rose to \$39.2B—it now represents over 49% of all DBMS revenue.** The growth has been stunning...⁷

Gartner, 2022

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How Astra DB helps companies break down their data silos to power real-time data apps



DataStax

Many of the leading digital services we use every day, such as e-commerce, gaming, and finance, are built on DataStax.

Companies partner with DataStax to improve and reinvent their digital experiences to deliver innovative, real-time applications that will fuel their growth and accelerate time to market.

Let's take a look at some examples of how DataStax is helping companies to unleash their data with transformational results.



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FINN



INDUSTRY

Transportation
& Logistics

ABOUT

Ankeri is a cloud-based platform that provides services, software, and data for the global commercial shipping industry.

[Read full case study](#)

DataStax

Ankeri Improves Decision Making with Real-Time Data on Ship Performance

Challenges

Cargo ships use a variety of applications that provide commercial, operational and technical ship data. Combining data from so many different systems made it difficult for shipping companies to compare vessels before chartering them. Ankeri needed to scale up to ingest, normalize, and manage data from thousands of commercial vessels to help shipowners and operators make better decisions.

Solution

Full-stack Astra DB serverless implementation with Storage Attached Indexing (SAI), for automated management, search, and scaling based on application demands.

Impact

- Astra DB provides **simplified app development** with an easy on-ramp for Ankeri's developers.
- Ankeri is now able to **achieve real-time data at scale with Astra DB**.
- With Astra DB, Ankeri enjoys **improved performance** and **can scale its clusters easily and efficiently**.
- Ankeri is able to **grow cost-effectively** and **innovate** with Astra DB's pay-as-you-go model.



Astra serverless provides that simple, scalable platform for us to build on, supporting real-time data from thousands of ships, and providing trusted data to both ship owners and operators for them to understand their performance.

Kristinn Aspelund, Ankeri CEO

INDUSTRY

Financial Services

ABOUT

Endowus is a financial technology company offering access to superior investment products, personalized advice, and lower costs with a seamless digital investment platform.

[Read full case study](#)

Endowus Invests for High Growth with DataStax Astra DB

Challenges

Endowus built its cloud-native platform with a microservices architecture (MSA) to leverage its data to understand its customers more holistically. Initially, Endowus hosted its own Apache Cassandra environment, but as the business grew, the IT team needed additional support — a good problem to have, especially when there is a solution like Astra DB available to make things easier.

Solution

Astra DB with Stargate Data API Gateway for:

- Enterprise-grade features of Cassandra with the efficiency and flexibility of a cloud-agnostic managed database service.
- Streamlined application development.

Impact

- With **accelerated data collection and analysis** Endowus can now generate **actionable operational insights in real time**.
- Removing the burden of infrastructure support has freed its developers to focus on developing **customer-centric applications**.
- With Astra DB, Endowus enjoys the **high performance and availability** that financial regulators require and customers expect.



With the high performance of Astra DB, we can rapidly mine our voluminous data to deliver tremendous insights about our customers to business managers across our organization, which helps further propel our mission and our growth.

Joo Lee, Endowus CTO and Partner



INDUSTRY

Media and
Entertainment / Gaming

ABOUT

ESL Gaming is the world's largest eSports network, serving 11 million members with high-profile, branded international leagues and tournaments, and grassroots-level events.

[Read full case study](#)

DataStax

ESL Gaming Levels Up the Fan Experience with Real-Time Data

Challenges

Real-time data is crucial to ESL's success. Most of ESL's applications relied on a self-hosted Apache Cassandra® database. To capitalize on the explosive growth in the gaming industry, ESL needed to migrate all its applications to the cloud, including its Cassandra database, which is critical to providing real-time support for its services.

Solution

Astra DB for:

- Storage Attached Indexing (SAI), which provides advanced functionality such as Time To Live (TTL) and Materialized Views.
- The full version of Cassandra it provides, unlike other providers that use different backends and use APIs to deliver their services.

Impact

- DataStax's support and consulting **expertise in all things Cassandra** helped ensure a **smooth cloud migration** of ESL's **business-critical services**.
- Astra DB provides **reliable, high performance at scale for fast processing** of event registrations and registrant authentications, especially for event traffic peaks.
- In addition to **significantly reducing operational overhead**, Astra DB gives ESL the ability to optimize direct costs to **buy only what they need**, instead of paying based on estimates of data growth.



The sun never sets when it comes to gaming. Our services have to be available and they have to perform, so our approach to data has to be fast and reliable at a massive scale...Astra DB means that we have the best possible managed service for our use cases, so that we are able to maintain availability, and focus on providing the best possible experience for players.

**Ben Burns, Vice President,
Technology, ESL Gaming**



INDUSTRY

Technology

ABOUT

Alpha Ori Technologies offers digital solutions to maritime shipping enterprises to provide intelligent analytics, alerts, and insights to vessel stakeholders both aboard and on shore.

[Read full case study](#)

DataStax

Alpha Ori Technologies Fuels Dynamic Growth with Managed Cassandra

Challenges

Alpha Ori built its platform with open source Apache Cassandra® and decided to migrate its data to DataStax Enterprise (DSE) as the company's growth accelerated. While DSE provided the reliability and performance needed to store and retrieve its fast-growing volume of ship data, the company found managing the system was stretching its team pretty thin.

Solution

DataStax Enterprise followed by Astra DB for:

- Managing a rapidly growing data set without sacrificing any of the benefits of Cassandra.
- A significant reduction in operational overhead and the ability to optimize costs.

Impact

- The seamless, serverless scalability of Astra DB has also helped Alpha Ori **double its business** and combined with Astra's flexible pricing model, resulted in a **ten-fold reduction in operational costs**.
- Astra has enabled fast, reliable collection and analysis of 5,000 data points from each ship every 30 seconds, providing the insights needed to unlock **\$5M in fuel and maintenance cost savings** for its clients.
- Reducing fuel consumption for Alpha Ori clients has achieved a combined **30,000 metric ton reduction in emissions annually**.



With Astra DB, we get high read and write throughput for large volumes of data, allowing us to rapidly deliver analytics and alerts for predictive maintenance, fuel savings, enhanced asset utilization, and more.

Praveen Viswanath, Co-Founder and Enterprise Architect, Alpha Ori Technologies



INDUSTRY

Retail / eCommerce

ABOUT

FINN, a member of the Schibsted Group family, is a classified advertising company with a website that receives more than 50 million monthly visitors. And that number continues to grow.

[Read full case study](#)

DataStax

FINN Provides Data-Driven, Personalized Recommendations to Users in Real Time

Challenges

When FINN decided to focus more on strategic priorities, the company decided to move its entire IT infrastructure to the cloud to reduce the operational overhead of managing its infrastructure. With its mission-critical personalization engine supported by an open source Apache Cassandra® database, FINN sought advice from the Cassandra community. And the community responded.

Solution

Astra DB with its native support for Google Cloud Platform (GCP):

- Recommended by the community for quickly deploying massive applications in the cloud.
- Ability for FINN to seamlessly migrate its personalization engine to GCP.

Impact

- FINN now has the **support and expertise** needed to manage its Cassandra clusters giving its teams **more time to focus on strategic priorities** to drive the business forward.
- With the **performance and speed** that Astra DB provides, FINN is able to offer **data-driven, personalized recommendations to users in real time** based on machine learning models.
- Astra DB also **improved accessibility** of the data FINN collects, making it more **readily available** to other organizations within the Schibsted Group to use in personalization and data science activities.



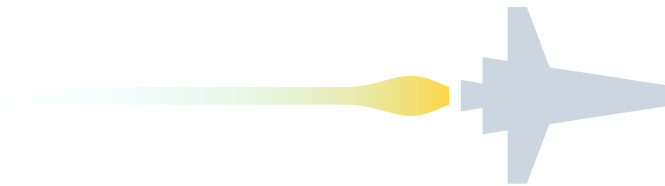
Personalization can be hard, but it is essential for our team and for our business. Getting it right takes a mix of data science, infrastructure, and customer value. DataStax Astra DB supports our performance and availability needs from our Cassandra clusters, and helps us deliver recommendations that our customers think are valuable.

Technical Domain Expert,
Data Intelligence, FINN



Astra DB – the open stack for real-time data apps

At DataStax, we believe in the transformative power of real-time applications across all industries. Any enterprise can mobilize real-time data and quickly build the smart, high-scale applications required to become a true data-driven business.

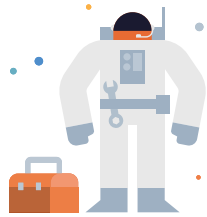


The Astra DB uniquely delivers the power of Apache Cassandra® — the world’s most **scalable database** — with the advanced Apache Pulsar™ **streaming technology** in a unified stack, available on any cloud.

By eliminating the need to buy, install, and maintain hardware and software, Astra significantly lowers the total cost of ownership (TCO) and frees up IT staff to focus on developing new, high-growth applications faster. And with Astra’s dynamic pricing model, you can infinitely scale your business in a predictable way.

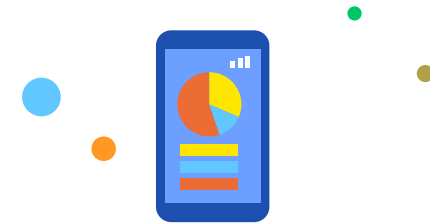
Hundreds of the world’s leading enterprises rely on DataStax to unleash the power of real-time data to create the in-the-moment digital experiences that can win new markets and change industries.

The power of open data is the power to move markets. Are you ready to move yours?



Learn more about Astra DB and register for your free account to get up to 80 GB monthly at no cost!

[Learn More](#)



Calculate your TCO savings with our Pricing Calculator

[Pricing Calculator](#)

Appendix

Sources Cited

- ¹ The Journey to Becoming Data-Driven: A Progress Report in the State of Corporate Data Initiatives (New Vantage Partners, 2021)
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- ³ *ibid.*
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- ⁵ The CIO's Guide to Shattering Data Silos: Why standardizing on an open stack is the key to unlocking your data's value (DataStax, 2022)
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About DataStax

DataStax is the real-time data company. With DataStax, any enterprise can mobilize real-time data and quickly build the smart, highly scalable applications required to be a data-driven business. The DataStax Astra cloud service delivers the power of Apache Cassandra™—the world's most scalable database—with the advanced Apache Pulsar™ streaming technology in a unified stack, available on any cloud. Learn more at DataStax.com.

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