



# Reinvention starts with cloud migration of your data infrastructure

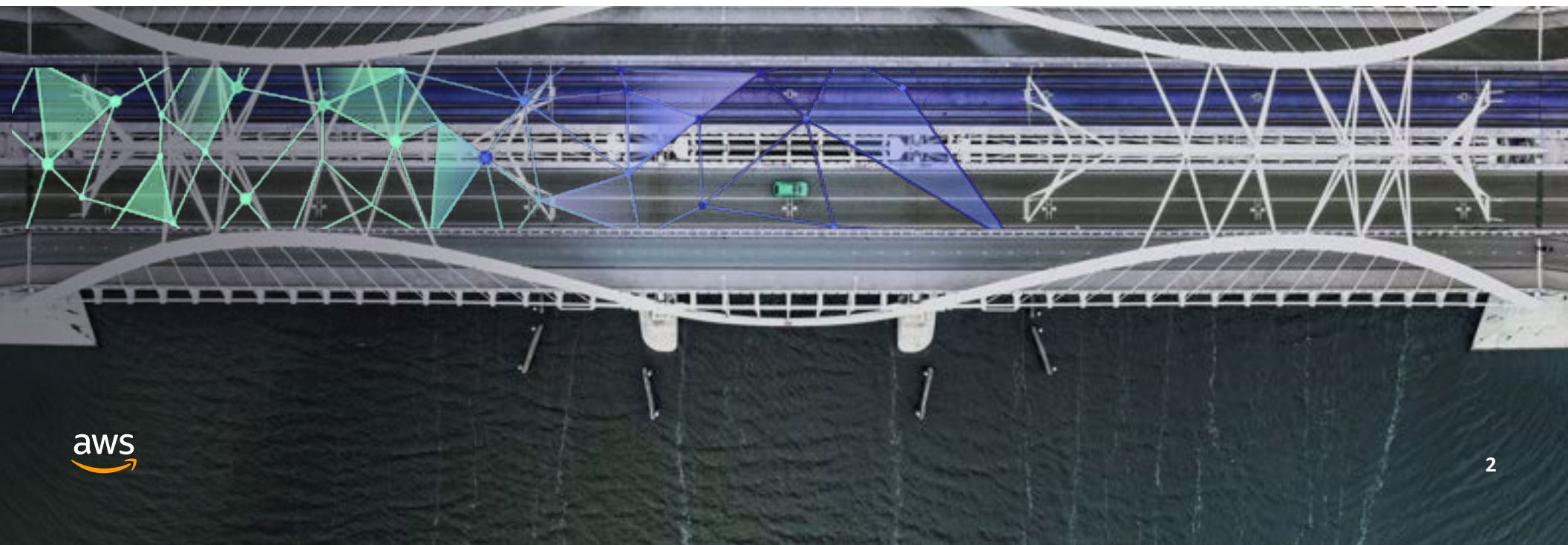
Explore why the most efficient way  
forward is data-driven



## Business reinvention begins with data modernization

Data modernization marks a defining moment for any organization seeking to reinvent itself. With data becoming the new organizing principle—and the beating heart of successful, modern organizations—the individuals tasked with using data to make decisions and solve problems want to leverage it to become more agile, efficient, and innovative. Major market trends influencing technical investments indicate this next-level focus on data will continue for the foreseeable future. IDG's *2021 State of the CIO Executive Summary* lists data and business analytics as the number-one initiative driving technology investments, a clear indication that the ability to collect, process, and understand data defines an organization's capacity to adapt and thrive into the future.

While organizations understand the importance of data, they struggle with their existing on-premises data infrastructure, which has become increasingly complicated, requiring a large staff with additional investments that take time, money, and focus away from innovation and application development. Lowered expectations about data storage, management, and processing capabilities undermine competitiveness as well. Current market dynamics are all the motivation many leaders need to become data-driven; leaders bogged down with time-intensive on-premises administrative work get pushed further and further away from that drive.





Challenges that organizations face maintaining their data and analytics platform on-premises include:

### Operational efficiency and cost

You'll need a dedicated team of experts to manage hardware and software installation, configuration, integration, patching, and backups.

### Performance and availability

Are you sure your system will hold up during peak workload times? If it doesn't, how will the disruption impact the workflow and customer experience of your business?

### Scalability

As data volumes increase, prepare for capacity planning and scaling clusters for storage and the extra costs that come with them.

### Security and compliance

Self-management means you're responsible for the requirements and regulations for security and compliance at every stage of growth. Do you have the right number of staff with that kind of expertise?

These all-consuming challenges bring to light what could be possible if you had the time and money to realize your data's full potential. When you begin to see what you're missing, you'll want to start leveraging your data's possibilities all the more. Given the time to pivot and the proper tools to stay agile, stakeholders in every department could be accessing the data for critical insights. The advantage of quickly and continuously discovering what drives vital business initiatives and produces positive business outcomes cannot be overstated.

In this eBook, we'll explore how fully managed cloud data services can unlock this critical role that data should play at your organization so your teams can capitalize on market trends and achieve other benefits of becoming data-

driven. We'll demonstrate how these services solve on-premises and self-managed data infrastructure challenges and provide lasting business benefits across common use cases: databases, storage, and analytics.

### Your takeaway:

Learn what you can do to leverage fully managed data services to refocus time and resources on innovation while reducing operational burdens and budgets.

## Top six challenges of on-premises and self-managed data infrastructure

On-premises and self-managed data infrastructures like databases, storage, and analytics pose increasingly difficult challenges for organizations lacking highly specialized IT staff. Organizations tied to their on-premises and self-managed data infrastructures struggle with more data than they can manage as data volumes continue to accelerate and new types of data emerge from new sources like log files, clickstream data, voice, and video. The adverse effects, which tend to multiply over time, include but are not limited to:



### 1. Vendor lock-in from legacy databases

Organizations using on-premises databases typically choose commercial-grade providers like Oracle and Microsoft with SQL Server. These legacy vendor solutions are expensive, proprietary, and commonly subject to the adverse effects of lock-in, most notably punitive licensing terms—a key reason many organizations are taking this course transition to open-source databases as fast as they can, even though the performance level provided by open-source offerings is typically inferior.



### 2. Cost

Employing a dedicated team of experts to manage data environments adds up over time. As data and applications scale, many organizations find it necessary to purchase more advanced features or hire additional teams to manage ongoing issues. But what about the cost of issues that don't get managed or that stay unresolved? The increased focus on maintenance takes away from innovation that could be happening elsewhere. Similarly, there are the cost ramifications of the extended time to market caused by delays and disconnects common to maintaining traditional infrastructures.



### 3. Performance concerns

Many organizations experience performance growing pains running on-premises and self-managed data solutions. Agility and adaptation are critical to ensuring seamless performance with no disruptions, especially as data volumes and workloads grow. Without these adaptive capabilities, performance can decline as the demand for data storage and processing increases—at least until more resources can be deployed.

## Top six challenges of on-premises and self-managed data infrastructure (cont'd)



### 4. Lack of scalability

Organizations today require flexible data services to efficiently manage growing workloads and maintain a competitive advantage. The ability to scale storage and compute resources up or down—quickly and independently based on business needs—helps maintain that business momentum. Organizations still tied to traditional, on-premises environments can't adapt as quickly. They require the procurement and installation of physical hardware and software, along with many hours of highly skilled, manual effort to get the infrastructure back up to speed.



### 5. Operational inefficiency

On-premises and self-managed environments are like an older car you have to maintain to keep running continuously. They take extra expenses and attention and must be constantly provisioned to accommodate application and data growth, intermittent spikes, and performance requirements. These tasks can include fixed capital costs, including software licensing and support, hardware capacity and refresh, and resources to install and manage the hardware and software.



### 6. Security and compliance

It's become more difficult for organizations to keep their self-managed data platforms protected and compliant amid the rapidly changing privacy and security landscape. Regulatory violation penalties can be severe, and the costs of a security incident—including possible loss of revenue due to a steep decline in customer trust—are usually even worse. Organizations must work tirelessly to ensure uninterrupted security, conduct rigorous audits, and maintain compliance standards such as PCI, HIPAA, SOC, and more in the U.S. and around the globe.

## Discover a better way forward with AWS Cloud migration

By modernizing the data infrastructure, organizations can get off of on-premises data stores and onto cloud data infrastructure. With AWS, organizations access IT resources—like storage, database, analytics, and machine learning—over the internet instead of buying, owning, and maintaining physical data centers and servers themselves. AWS services take care of all management tasks such as server provisioning, patching, configuration, and backups. For example, Amazon Aurora continuously replicates six copies of the data across three Availability Zones (AZs) and transparently recovers from failures in less than 30 seconds. This lets organizations save time and costs while improving performance, availability, and scale.

When choosing the right cloud provider to trust with their data, organizations want to be confident their choice of technology will deliver value from their data while keeping it secure and compliant across a broad and ever-changing set of regulations. They want a technology provider they can trust, one who understands their use cases and will grow with them as their scale of data grows. AWS has unmatched experience, scalability, reliability, security, and performance.



Amazon Aurora transparently recovers  
from failures in less than

30 seconds





## Discover a better way forward with AWS Cloud migration (cont'd)

Internally, we say that there's no compression algorithm for experience, and that's because you can't learn certain lessons until you get to different milestones at scale. AWS is built for scale. Amazon Simple Storage Service (Amazon S3) provides industry-leading storage scalability, data availability, security, and performance. It is built from the ground up to deliver 99.999999999 percent (11 nines) of durability and stores data for millions of applications for companies all around the world. With hundreds of thousands of customers already using AWS to get value from their data and tens of thousands of partners globally, AWS has the largest and most dynamic customer base that trusts us to run their data and machine learning workloads at scale.

AWS is also architected to be the most secure cloud-computing environment. Our core infrastructure is built to satisfy the security requirements for the military, global banks, and other high-sensitivity organizations. This is backed by a broad set of cloud security tools that includes deep capabilities for compliance and data governance.

# Here's what's possible with AWS

## Solution: Move to fully managed AWS databases

Organizations seeking to manage and maintain their databases at scale while still keeping the same database engine they were using before can now move to fully managed AWS databases with little or no changes required.

### Benefits:

AWS managed databases handle operational tasks and lower total cost of ownership (TCO) with managed services such as Amazon RDS, Amazon ElastiCache, and Amazon DocumentDB. Organizations can stay with the same database engine they're already using, enabling a rapid migration to a fully managed cloud database.

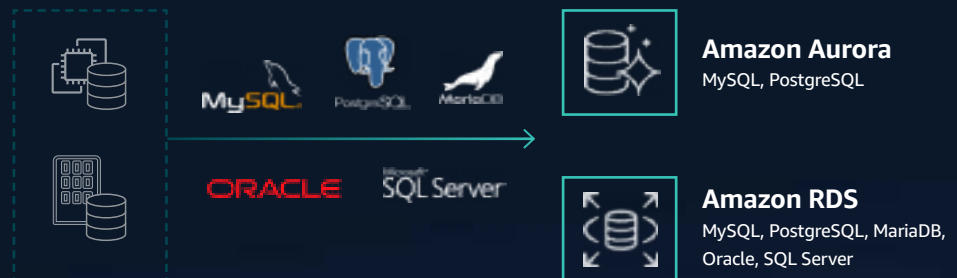
### Details

AWS provides database services that help organizations migrate to a managed environment:

### Commercial relational database →

### Amazon Relational Database Service (Amazon RDS)

This is usually the best choice for organizations running commercial databases like Oracle and Microsoft SQL Server on-premises. It's easy to set up, operate, and scale a relational database in the cloud. Amazon RDS also provides cost-efficient and resizable capacity while automating time-consuming administration tasks such as hardware provisioning, database setup, patching, and backups.





## Open-source relational database → Amazon Aurora or Amazon RDS

Organizations running open-source databases can move their MySQL and PostgreSQL databases to Amazon Aurora or Amazon RDS. Amazon Aurora is a MySQL- and PostgreSQL-compatible relational database built for the cloud. It combines the enterprise-grade performance and availability of commercial-grade databases with the simplicity and cost-effectiveness of open-source databases. At up to five times faster than standard MySQL databases and three times faster than standard PostgreSQL databases, Amazon Aurora provides the security, availability, and reliability of commercial databases at one-tenth of the cost. Organizations with MariaDB can also move to Amazon RDS for MariaDB.

## Modernizing data delivers measurable results

In-depth research by IDC found that customers who moved their databases from on-premises to Amazon RDS could get:



86%

faster deployments  
of new databases



97%

less unplanned  
downtime



264%

ROI over three years and  
39 percent lower cost  
of operations



5

month average  
investment payback  
period

## AWS helps Cathay Pacific transform business by improving booking

### Challenge:

Running its passenger revenue optimization system (PROS) on-premises provided suboptimal compute power and created a heavy maintenance burden on Cathay Pacific, which needed to process bookings with efficiency and stability.

### Solution used:

**Amazon RDS for Oracle**

### Results:

- Improved security posture through automated security patching
- Increased performance by 20 percent
- Enabled a focus on innovation, which led to new features of PROS



*"AWS helps Cathay Pacific to transform the business and stay ahead of the competition."*

**Lawrence Fong**

General Manager of Information Technology, Cathay Pacific



## Instacart offers a new way to order same-day groceries online

### Challenge:

When the COVID-19 pandemic shelter-in-place orders went into effect across the U.S. and Canada, Instacart's demand surged 500 percent. The growth required Instacart's database environment to scale rapidly and exposed the limits of their current architecture.

### Solution used:

**Amazon RDS for PostgreSQL**

### Result:

- Instacart was able to scale to meet a 500 percent increase in order volume and focus on business demand and customer experience, with little to no operational overhead.



## Blackboard drives down costs and saves time with automation

### Challenge:

Blackboard delivers innovative education, technology, and services, including a product called Blackboard Learn, a comprehensive learning management system offered in three configurations: on-premises, hosted, and fully managed software as a service (SaaS). Its managed hosting environment resulted in high licensing costs and significant investments in resources for day-to-day database management.

### Solution used:

**Amazon Relational Database Service (Amazon RDS)**

### Results:

- Eliminated licensing fees
- Reduced management overhead
- Access to real-time data allowed read-only access to customers



## Blackboard

*"Developing innovative educational software is what we do best, and we can spend more time doing that by partnering with AWS and leveraging their broad set of infrastructure services."*

**Tim Tomlinson**

Chief Product Officer, Blackboard





## Open-source non-relational database → Amazon DocumentDB, Amazon ElastiCache, or Amazon Keyspaces

Organizations running open-source non-relational (also known as NoSQL) databases like MongoDB, Cassandra, Redis, or Memcached can move their self-managed databases to Amazon ElastiCache, Amazon DocumentDB, and Amazon Keyspaces (for Apache Cassandra).

- **MongoDB → Amazon DocumentDB**

Amazon DocumentDB is a fast, scalable, highly available, and fully managed document database service that supports MongoDB workloads. It's designed from the ground up to give organizations the performance, scalability, and availability they need when operating mission-critical MongoDB workloads at scale.

- **Redis or Memcached → Amazon ElastiCache**

Amazon ElastiCache quickly deploys, operates, and scales an in-memory data store and cache in the cloud. Amazon ElastiCache offers fully managed Redis and Memcached for demanding applications that require sub-millisecond response times.

- **Apache Cassandra → Amazon Keyspaces (for Apache Cassandra) Service**

Amazon Keyspaces (for Apache Cassandra) is a scalable, highly available, and managed Apache Cassandra-compatible database service. Organizations can run Cassandra workloads on AWS using the same Cassandra application code and developer tools they use today. They don't have to provision, patch, or manage servers—and they don't have to install, maintain, or operate software.





*"We are excited about collaborating with AWS around Amazon DocumentDB, which meets key needs we expressed to AWS in order to simplify our operations and free up our developers to invest in innovative experiences for our customers rather than undifferentiated operations."*

**Ramin Beheshti**

Chief Product & Technology Officer, Dow Jones

## Genesys reduces overhead associated with self-managed infrastructures

As a company that sells customer experience and call-center technology, Genesys wanted to serve more customers themselves. They moved workloads from self-managed Redis Cluster on Amazon EC2 to fully managed and secure Amazon ElastiCache for Redis. The reduced overhead associated with self-managed infrastructures gave them more time to serve customers and provide a secure, resilient, and elastic in-memory system for caching and event distribution.

## Solution:

### Break free from legacy databases

Organizations are doing more than simply moving the same database engine to the cloud. They're looking to break completely free from commercial-grade providers like Oracle and Microsoft with SQL Server, which lock you in, extract punitive licensing terms, and require frequent audits involving vendor practices that border on being hostile. Organizations are moving to open-source-friendly engines, but they find it difficult to attain the same performance as that of commercial-grade databases.

#### Benefits:

AWS provides Amazon Aurora, a fully managed MySQL- and PostgreSQL-compatible database that delivers high performance and availability, with up to 15 low-latency read replicas, point-in-time recovery, continuous backup to Amazon S3, and replication across three Availability Zones (AZs). Get the performance and availability of commercial-grade databases at one-tenth of the cost.

#### Details:

Amazon Aurora is the fastest-growing service at AWS, with over 100,000 customers now using it. These include organizations like Airbnb, AstraZeneca, BP, Capital One, Fannie Mae, Petco, Verizon, and Volkswagen. AWS customer Best Western improved its digital push-platform process to 2.3 billion availability messages—98.2 percent of all the hospitality leader's availability data—in less than 60 seconds. Its migration from Oracle to Amazon Aurora saved the company over half a million dollars in hardware and software costs, as well as additional future savings.



*"The hotel industry is rapidly changing, as more customers expect the ease and convenience of mobile computing. Moving to AWS brings our organization to the forefront of innovation and allows us to give our guests fast, reliable and secure data processing so they can organize their trips, change their reservations, and book their stay with us."*

**David Kong**

President & CEO, Best Western

## Samsung migrates to Amazon Aurora to accommodate growth and savings

### Challenge:

Samsung's monolithic legacy Oracle internet data center solution was expensive and becoming difficult to scale to accommodate growing traffic.

### Solution used:

**Migrated from Oracle to Amazon Aurora**

### Results:

- Migrated 1.1 billion users across three continents
- Completed a global migration of a mission-critical workload in 18 months
- Reduced monthly database costs by 44 percent and another 22 percent in maintenance fees



# SAMSUNG

*"The scalability of Amazon Aurora is the best benefit—especially if we focus on the cost."*

**Salva Jung**

Principal Architect and Engineering Manager, Samsung





## Solution:

### Move to AWS managed analytics

Managing open-source analytics software like Apache Hadoop/Spark, Elasticsearch, and Apache Kafka on-premises or self-managed in the cloud (on Amazon EC2) is complex, time-consuming, and expensive. Organizations face challenges like keeping a dedicated team of experts to manage hardware and software configuration, patching and backups, tuning and optimizations for performance, and capacity planning for future growth. A move to AWS managed analytics can save time, reduce costs, and significantly improve productivity.

#### Benefits:

AWS managed analytics services handle operational tasks and reduce TCO. To do so, they move on-premises Apache Hadoop and Spark implementation to Amazon EMR, on-premises Elasticsearch implementation to Amazon Elasticsearch Service, and on-premises Apache Kafka implementation to Amazon Managed Streaming for Apache Kafka (Amazon MSK). Organizations can move to fully managed services quickly and let AWS take over infrastructure management and operations tasks so they can spend time innovating and building new applications.

## Modernizing data delivers measurable results

In-depth research by IDC found that customers who moved their Apache Hadoop and Spark solutions from on-premises to Amazon EMR could get:



57%

reduced cost of ownership



342%

five-year ROI



99%

reduction in unplanned downtimes

## Details



### Amazon EMR

This industry-leading cloud big data platform processes vast amounts of data using open-source tools such as Apache Spark, Apache Hive, Apache HBase, Apache Flink, Apache Hudi, and Apache Presto. With Amazon EMR, organizations can run petabyte-scale analysis at less than half of the cost of traditional on-premises solutions and over 1.7 times faster than standard Apache Spark.



### Amazon Elasticsearch Service

Organizations can use this fully managed service to easily deploy, manage, and run Elasticsearch cost-effectively with industry-leading performance, reliability, scalability, and security.



### Amazon Managed Streaming for Apache Kafka (Amazon MSK)

Amazon MSK is a fully managed service that makes it easy for you to build and run applications that use Apache Kafka to process streaming data. Apache Kafka is an open-source platform for building real-time streaming data pipelines and applications. With Amazon MSK, you can use native Apache Kafka APIs to populate data lakes, stream changes to and from databases, and power machine learning and analytics applications.

## Autodesk accelerates problem-solving and gains deeper insights with AWS

### Challenge:

Autodesk's application data log solution struggled to keep up with the growing volume of data needing to be analyzed and stored. At stake: a smooth, reliable experience for customers using its 3D design software.

### Solutions used:

[Amazon Elasticsearch Service](#)

[Amazon MSK](#)

### Results:

- Improved visibility into data logs that allows for real-time data collection and measurement
- Faster answers to application problems for more in-depth data analysis
- Better forensic analysis that improves overall mean time to recover



*"Ultimately, we are improving our software products and offering better service to our customers because of the real-time visibility we're getting into log data."*

**Tommy Li**

Senior Software Architect, Autodesk



## Solution:

### Modernize your data warehouse

Data is an invaluable resource in today's world, and it is growing in volume and complexity faster than ever before. Traditional data warehousing systems cannot keep up. With rigid architectures that require significant investment to maintain, update, and secure, they do not give organizations the opportunity to make the most of their data.

Moving to a cloud data warehouse like Amazon Redshift liberates your analytics from these limitations. You can run queries across petabytes of data in your data warehouse and extend into your data lake, what AWS calls a Lake House approach.

Organizations that migrate on-premises data warehouses to the cloud typically do so to address critical business needs, including:

1. A need for higher performance, availability, increased ease of use, lower costs, and lower operational burdens
2. Exponential growth of event data like log files, clickstream data, and machine-generated data from IoT devices
3. The need to break down data silos to get end-to-end insights from data analysis

## Benefits

Organizations are modernizing their on-premises data warehouses by moving it to Amazon Redshift, a fully managed, petabyte-scale data warehouse service that makes it simple and cost-effective for organizations to efficiently analyze all their data using their existing business intelligence tools. It's optimized for datasets ranging from a few hundred gigabytes to a petabyte or more and costs less than \$1,000 per terabyte per year—one-tenth of the cost of most traditional data warehousing solutions.

## Details

### Set up, deploy, and manage with ease

Amazon Redshift is simple to use, enabling you to deploy a new data warehouse in minutes and load virtually any type of data from a range of cloud or on-premises data sources. It automates most of the common administrative tasks to manage, monitor, and scale your data warehouse so you can spend your time on more productive, needle-moving endeavors. It delivers fast query performance, improves I/O efficiency, and scales up or down as your performance and capacity needs change.



*Details (cont'd)***Operate at the lowest cost**

Start small at \$0.25 per hour and scale up to petabytes for under \$1,000 per terabyte per year. Pay only for what you use and know how much you'll spend with predictable monthly costs. Amazon Redshift is at least 50 percent less expensive than all other cloud data warehouses.

Scale and pay for storage and compute separately, and get the optimal amount of storage and compute for diverse workloads. Choose the size of your Amazon Redshift cluster based on your performance requirements. The new managed storage automatically scales your data warehouse storage capacity without you having to add and pay for additional compute instances.

**Maximize performance with Amazon Redshift, the fastest cloud data warehouse available**

Amazon Redshift is the world's fastest cloud data warehouse and gets faster every year. For performance-intensive workloads, you can use the new RA3 instances for up to three times the performance of any cloud data warehouse and achieve insights faster. AQUA is a new distributed and hardware-accelerated cache that allows Amazon Redshift queries to run up to 10 times faster than other cloud data warehouses by automatically boosting certain types of queries.

**Achieve the deepest integration with your data lake and AWS services**

No other data warehouse makes it as easy to gain new insights from all your data. With Amazon Redshift, you can query petabytes of structured and semi-structured data across your data warehouse, operational database, and your data lake using standard SQL. Amazon Redshift lets you easily save the results of your queries back to your Amazon S3 data lake using open formats like Apache Parquet to further analyze from other analytics services such as Amazon EMR, Amazon Athena, and Amazon SageMaker.

**Customer examples**

Currently the most popular data warehouse in the cloud, Amazon Redshift, is used by tens of thousands of organizations like Electronic Arts, Aetna, McDonald's, Yelp, Dow Jones, Pfizer, and Liberty Mutual. AWS adds new features and capabilities based on insights often. Here are just a few.

## Nasdaq uses AWS services for flexibility, scalability, and performance

### Challenge:

With the mission-critical nature of its business, Nasdaq is always looking for new cloud technologies to help it scale to meet the sometimes unpredictable nature of volatility across the capital markets ecosystem. To strengthen the ability to scale with market volumes and improve reporting and customer response times, Nasdaq moved from an on-premises data warehouse to AWS for its U.S. market's transactional data.

### Solution used:

**Migrated from on-premises data warehouse to Amazon S3 and Amazon Redshift**

### Results:

- Jumped from 30 billion to 70 billion records a day with no disruption
- Scaled compute and storage data independently to better support high volumes of transactions
- Improved market data load times leading to up to five hours faster time-to-insight



*"We were able to easily support the jump from 30 billion records to 70 billion records a day because of the flexibility and scalability of Amazon S3 and Amazon Redshift."*

**Robert Hunt**

Vice President of Software Engineering, Nasdaq



## 3M HIS chooses AWS to support digital transformation and growth

3M Health Information Systems (HIS) was processing regulated health-care data for its customers, which required complex and time-consuming efforts to get its data into a useful format for analysis.

### Challenge:

3M HIS wanted to build out a solid foundation that would deliver greater customer value and scale to support its rapidly increasing volume of data and business growth overall. The need to transform its increasingly complex data so that it could be utilized to gain valuable insights leveraging analytics and machine learning also loomed.

### Solution used:

**Migrated from on-premises data warehouse to Amazon Redshift**

### Results:

- Ability to store a larger quantity of data for a longer time
- Ensured accurate and compliant reimbursement
- Improved health system and health plan performance
- Lowered costs for the company and customers



*"Amazon Redshift met our needs by providing a fast, fully managed, petabyte-scale data warehouse solution. Redshift improves our services by using columnar storage to minimize I/O, providing high data-compression rates and offering greater performance."*

**Dhanraj Shriyan,**

Enterprise Data Architect, 3M Health Information Systems



## **Solution:** **Modernize your storage solutions**

On-premises storage can be costly and complex, with expensive hardware refresh cycles and data migrations to support system upgrades. It is also difficult to gain insights because your data is trapped in silos from multiple storage systems. With the cloud consumption model, you adjust on the fly and use whatever storage you need now without being locked into another hardware refresh. You pay for what you actually do with the data instead of paying for unused storage, gaining agility and access to new services to get the most value from your data. Moving to AWS Storage keeps you agile, reduces costs, and provides unlimited scale while also tearing down data silos so you can gain insights from data.

### **Benefits**

With AWS Storage services, resources are only a click away. You reduce the time it takes to make those resources available to your organization from weeks to just minutes. This results in a dramatic increase in agility for your organization. AWS Storage is integrated with the broadest and most complete set of analytics and machine learning tools so you can extract more insights from your data to fuel innovation. By moving storage workloads from on-premises to the cloud, you can reduce TCO. The flexible buying model enables you to eliminate over-provisioning, refresh lifecycles, and reduce the cost of maintaining storage infrastructure. After you move your data to the cloud, AWS offers more ways to help you optimize your costs. They include the industry's lowest-cost storage for your data, elastic volumes, choices of storage classes, and the only storage class in the world that automatically tiers your data to the right storage class based on usage patterns to save you money.



## AWS helps organizations transition to database and analytics

The AWS Database Freedom program assists organizations in migrating to AWS database and analytics services with tools, experts, programs, and financial incentives. It covers the entire migration journey from Assess to Mobilize to Migrate with tools, experts, programs, and incentives.

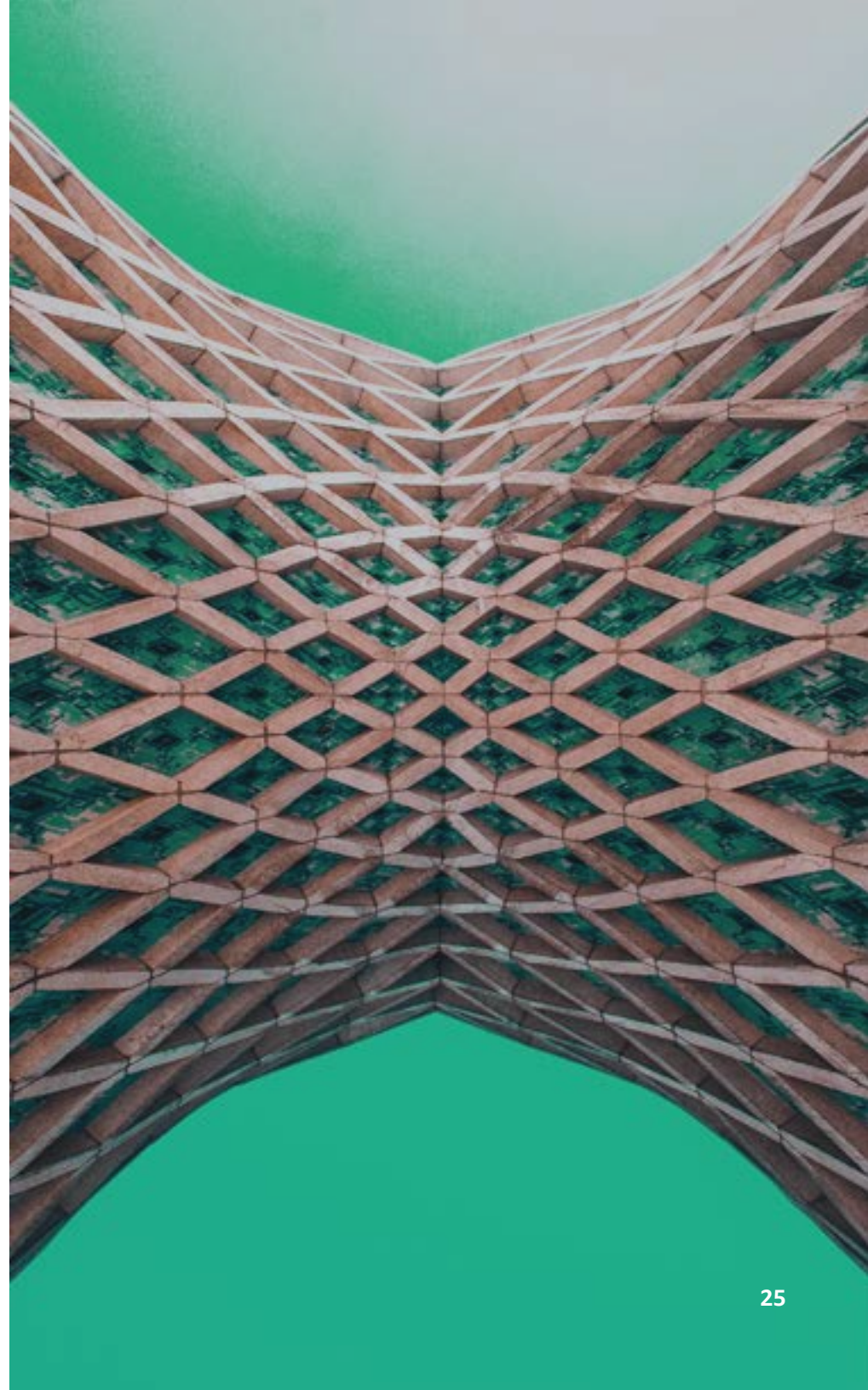
### *Features include:*

#### **Expert advice**

Qualifying organizations receive expert advice on application architecture, migration strategies, program management, and employee training customized for their technology landscape and migration goals. Support for proofs of concept to demonstrate the feasibility of migration is also available.

#### **Migration assistance**

AWS can assist your migration through tools like AWS Database Migration Service, AWS Professional Services, and our network of Database Freedom Partners. These teams and organizations specialize in a range of database and analytics technologies. They also have experience migrating thousands of databases, applications, and data warehouses to AWS. Qualified organizations can receive service credits to fund their migrations.



## Database Freedom Partners

AWS Partners validated through the AWS Service Delivery Program and AWS Service Ready Program have developed the offerings to help you migrate from on-premises to AWS. These AWS Partner offerings have demonstrated technical proficiency and proven customer success.

### Migration



### License Advisory



## Start your data modernization journey

Leveraging data as a strategic asset can help your organization meet customer expectations and remain competitive. But the insights and truth data offers must be accessible to every facet of your business.

If you're committed to reinventing your organization to a data-driven one, you can empower everyone in your organization to unlock data's potential and innovate in new ways. The move from on-premises and self-managed data solutions to fully managed cloud data services is the critical first step. Teams that are now free from managing complex and expensive infrastructures can spend time innovating and building new applications.

With the right cloud partner, you can make this initial move immediately. Organizations want to be confident their choice of technology will deliver value from their data while keeping it secure and compliant across a broad and ever-changing set of regulations. More organizations partner with AWS to do this than anywhere else, with more than 350,000 databases having been migrated from on-premises to the cloud using our database migration service.

We've also completed this data modernization ourselves. Amazon.com migrated 75 petabytes of internal data stored in nearly 7,500 Oracle databases to AWS databases and reduced costs by over 60 percent.

AWS provides you with an easy path to increased access for all, greater visibility of your data, and immediate peace of mind along with it. Migration to fully managed databases, storage, and analytics services on AWS allows you to offload infrastructure management tasks to AWS and focus on building applications. Join the dynamic AWS community of customers and take the first step of your data modernization journey.

**Learn more about advancing your data modernization »**

