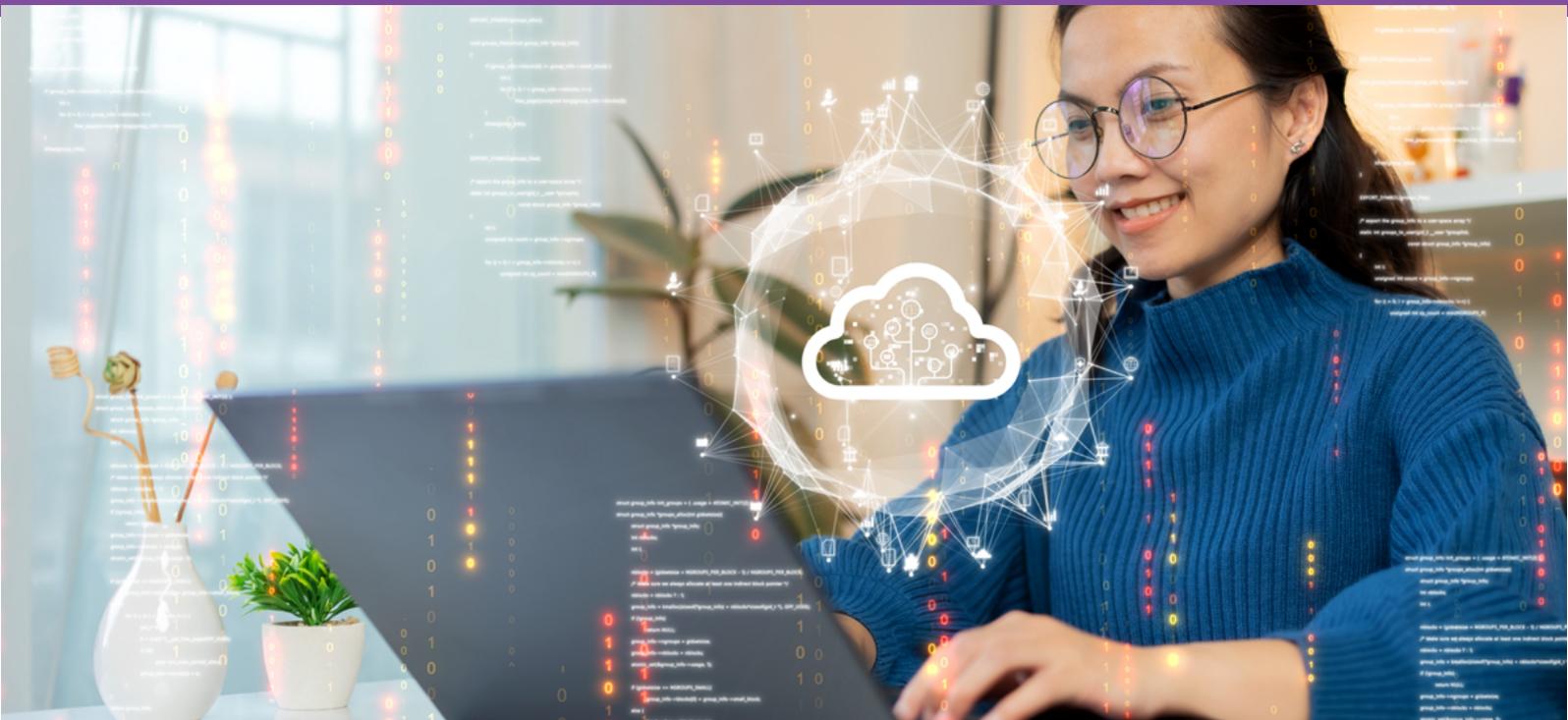




How our **Trio-Migration Strategy** helped one of the largest learning companies save over \$35 million



“

The acumen and skill with which the cloud experts at Aspire worked on our cloud migration project can be equated to changing the flight's engine while it is up and running.

– IT Head | Pearson

”



*attention.
always.*





Project delivered in
less than **11 months**

Savings of
\$35+ million due to
quick turnaround

40+ applications
migrated to AWS
Cloud using different
methods



Introduction

Today, organizations are leveraging the cloud as a potent tool for revitalizing their IT infrastructure. Cloud adoption represents a continuous journey, requiring a comprehensive assessment of the current IT framework to unlock the cloud's innate advantages, including enhanced agility, scalability, and cost-efficiency. A well-planned roadmap and expert guidance tailored to the organization's IT landscape are essential for a successful cloud journey. Cloud partners offer a spectrum of strategies, spanning from straightforward lift and shift migrations to intricate re-engineering. Choosing the right cloud service providers and partners is critical for a seamless transition.

About the Customer

Pearson is the world's leading learning company, providing customers in 200 countries with digital content, assessments, qualifications, and data. The client is a leading provider of K-12 education curriculum and digital learning solutions for students and educators, serving over 40 million students. They combine new ideas, new ways of thinking, and new ways of interacting to create innovative learning solutions.



Bottlenecks

When an organization embarks on a strategic initiative, it finds itself at a critical juncture, balancing the demands of its existing infrastructure with the imperative to meet new, evolving requirements stemming from this move. In parallel, as businesses venture into new sectors and markets, the ambition to expand and excel becomes paramount. It's in this context that the limitations of an organization's infrastructure can significantly impact its brand value and competitive position.

Consider this story of a future-focused organization that recognized the burgeoning demand for edtech during the pandemic. Despite many of their critical applications residing in on-premise datacenters with upfront costs, capacity challenges, and resource-intensive maintenance, they made a pivotal decision to migrate to a cloud-based datacenter. This strategic move was driven by the anticipation of substantial and far-reaching business benefits, positioning them for success in a dynamic environment.

Pain Points

- Scalability
- High license Cost
- Cost of operations
- Wait time for infrastructure procurement
- Required higher performance
- Resource utilization
- Lower economies of scale
- Less availability of servers and machine up-time





Load spike during Covid

Since the COVID-19 pandemic, demand for e-learning has grown manifold. This surge in demand for edtech platforms resulted in our customer, a leader in edutech, recording a 200% increase in the number of users. Servers had to be prepared to handle this massive load spike.

Challenges faced



Tightly Coupled applications



Lack of clear documentation



High volume of data





Cloud Migration - DevOps-Led Application & Database Migration Strategy

How we helped our customer saved more than \$35 million over three years

1. Reducing data center operation costs:

- 15+ apps migrated using lift and shift method
- 10+ apps were re-architected
- In total 40+ apps were migrated using different methods (lift & shift, refactor, re-architect)
- Eliminating data center maintenance and support cost

2. Database migration to Aurora PostgreSQL eliminated 67% of licensing cost

- 2,233 DB objects migrated
- 150+ TB content and 12+ TB of data migrated

The customer partnered with Aspire Systems to figure out the right cloud adoption methodologies and devise a comprehensive roadmap. Aspire's cloud architects came up with cloud re-engineering solutions based on the 6Rs (Refactor, Re-platform, Rehost, Repurchase, Retire and Retain).

Aspire Cloud Migration Enabler or ACME, a tried-and-tested holistic approach the cloud migration, was at the heart of the solutions offered to the customer. This five-step framework reduced dependencies and helped fast-track cloud adoption.

1

Program Management & Stakeholder Management

2

Processes & Policies Migration - Steering Committee, Reports & Communication, Risks & Mitigation, Vendor Management

3

Technology Migration - Data Center, Cloud, Application, Database, Users, Network & Security, NOC/SO

4

Tools & Technologies - ITMS, ITOM, Admin Tools, Reports, Collaboration

5

Training Users on New Platform



Success Story In Detail

Cloud Architects at Aspire had an in-depth understanding of the existing environment which helped them assess better. The solution was rooted in reducing the business impacts and for this they have framed a road-map that was a precursor for a successful migration. Aspire decided to migrate to AWS, which was powered by the use of technologies Amazon EKS, MySQL, Jenkins, and Amazon Aurora PostgreSQL. Solution Architects at Aspire adopted a pragmatic approach to ensure smooth migration to AWS cloud.

- 1. Application migration:** 47 microservices were containerized. End-to-end Infrastructure and CI/CD were automated. Changes were made so all applications were ready for cloud deployment/enablement. Internally built publish/subscribe systems were re-architected based on AWS Kafka. Other cloud-related enhancements like log changes, queue-related changes and Java development kit changes were in place. WebLogic was replaced. Oracle to Aurora PostgreSQL related query changes were done. Nine applications were re-architected to a cloud-first architecture.
- 2. DB migration:** Oracle was re-platformed to Aurora PostgreSQL where Stored Procedures were migrated. Further, data migration services was used to synchronize data from datacenter to AWS.
- 3. Testing approach:** Automated Regression, Performance Testing, Data Migration Testing were done to ensure error-free migration to AWS cloud.





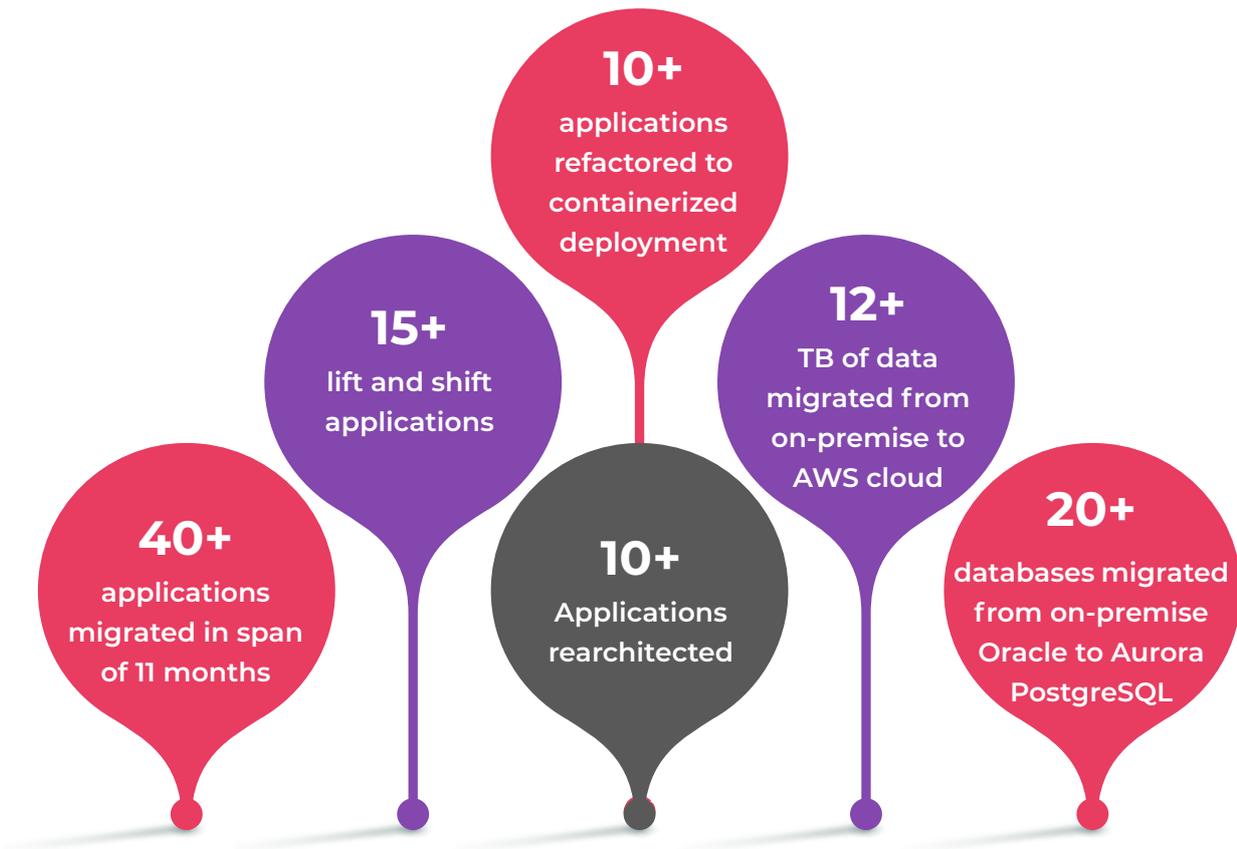
The mammoth from Ice Age made it to the 21st century!

Thank God we migrated in time! The COVID-19 impact increased online sessions

- Vice President | Pearson



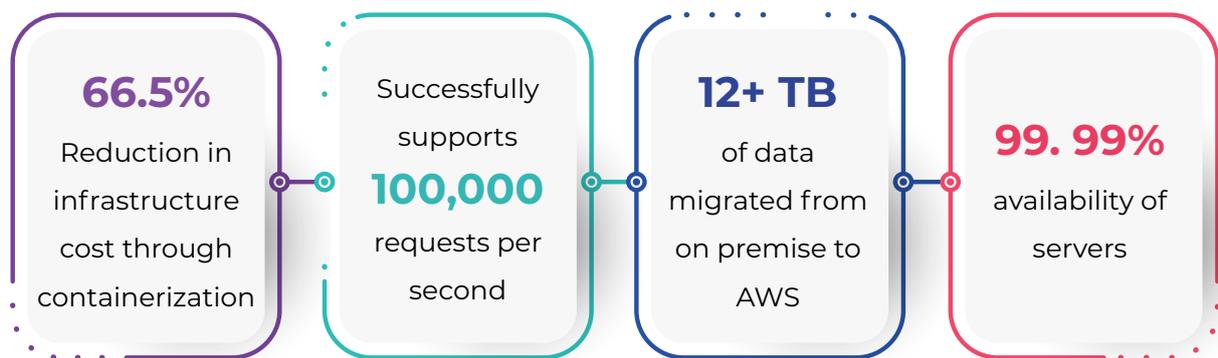
Highlights





Business Benefits

With ACME at the core of this mammoth task, we helped the customer achieve better scalability support up to 10x, portability, cost efficiency, CI/CD through containerization and ensured 99.99% availability. Moreover, the release cycle was reduced from 4 weeks to 1 week.



Faster adoption

Quick cloud adoption with ACME helped the customer save a total of over \$55 million dollars (including licensing cost savings). In addition, migrating to AWS improved speed and agility as resources were better utilized to match business goals. Dynamic scaling brought about a macro reduction in operational cost. The new cloud environment could support 100,000 requests/second for certain microservices and had the capability to support data volume of 3 billion records. Despite accessing the application from different geographical locations, performance remained optimal. The customer also greatly reduced business and operational risks by migrating to a more resilient and secured IT environment.





Aspire Systems is a global technology services firm serving as a trusted technology partner for our customers. We work with some of the world's most innovative enterprises and independent software vendors, helping them leverage technology and outsourcing in our specific areas of expertise. Our core philosophy of "Attention. Always." communicates our belief in lavishing care and attention on our customer and employees.

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