

Case Study

Scalable Video Intelligence & Managed AI Services

How AceCloud powers Arivihan's EdTech platform at scale

CLIENT	INDUSTRY	SERVICE
Arivihan	EdTech / Online Education	Managed Cloud & AI Operations

KEY OUTCOMES AT A GLANCE

↓ 60%	↑ 3x	↓ 40%	99.9%	100%
Faster content availability	Peak processing throughput	Cloud cost reduction YoY	Pipeline uptime	Eng. team on product dev

BUSINESS CHALLENGES

The Operational Hurdles Holding Arivihan Back

Arivihan — India's first personalized online learning platform for JEE and NEET exam preparation — was growing rapidly but struggling to keep pace operationally. The core challenges were:

- Manual content pipeline:** A growing library of raw educational videos had no automated processing workflow. Transcription and content tagging were done manually, creating delays in content availability for students.
- No AI enrichment:** Without intelligent tagging and doubt-resolution capabilities, Arivihan could not deliver the personalized learning experience that defined its product.

- **Infrastructure gaps:** The engineering team lacked the bandwidth to manage cloud infrastructure and AI workloads while simultaneously building product features.
- **Unpredictable traffic:** Exam season peaks created sudden surges in demand that the existing setup could not scale to absorb reliably.
- **Cost visibility:** Cloud spend was growing without structured governance, making budgeting and optimization difficult.

SOLUTION DELIVERED

Solution Delivered Using AceCloud Managed Services

AceCloud took ownership of Arivihan's end-to-end AWS infrastructure and AI pipeline operations, delivering the following managed services:

- **Pipeline operations:** AceCloud manages the full video ingestion and processing pipeline — from S3 uploads and CloudFront distribution through Lambda-triggered processing and SQS-based task queuing into EKS-hosted workloads.
- **AI/ML operations:** AceCloud operates and maintains the Amazon Transcribe and Whisper-based transcription pipeline on EKS, along with the custom SageMaker model for contextual tagging and automated doubt resolution — including retraining schedules, endpoint monitoring, and vocabulary updates for JEE/NEET terminology.
- **Infrastructure management:** The EKS cluster, DynamoDB environment, and supporting AWS services are fully managed by AceCloud, covering scaling, patching, backup, and performance tuning.
- **24x7 monitoring & support:** AceCloud operates CloudWatch-based observability across the platform with defined incident response SLAs — critical pipeline failures are addressed within 15 minutes.
- **FinOps:** Monthly cost reviews, Reserved Instance planning, and automated anomaly detection keep Arivihan's cloud spend optimized and predictable.

OUTCOMES

Measurable Impact Delivered by AceCloud

- **↓ 60% reduction in time-to-availability** for new video content, from upload to enriched, searchable transcript — achieved through full pipeline automation managed by AceCloud.

- **↑ 3x increase in content processing throughput** during exam-season peaks, enabled by AceCloud-managed auto-scaling of the EKS cluster.
- **↓ 40% reduction in cloud infrastructure costs year-over-year** through AceCloud's FinOps practices, Reserved Instance management, and right-sizing.
- **99.9% pipeline uptime** maintained by AceCloud's 24x7 monitoring and proactive incident response, ensuring uninterrupted learning availability for students.
- **100% of the engineering team's time redirected** to product development, with AceCloud taking full ownership of cloud and AI platform operations.

Conclusion

By partnering with AceCloud for managed services, Arivihan eliminated operational overhead from its engineering roadmap entirely. The AceCloud-managed pipeline now processes, transcribes, and enriches educational video content at scale — reliably and intelligently — allowing Arivihan to focus on what matters most: delivering a superior learning experience for JEE and NEET aspirants across India.

About Us

15+	10+	100+
Years of Exp	Data Center	Awards

AceCloud is a leading provider of end-to-end cloud computing solutions to global organizations across industries at scale. It offers a full spectrum of cloud services, including Public Cloud, Application Hosting, AWS Services, Managed Security Services, and Hosted Virtual Desktop Solutions.

AceCloud is a brand of Real Time Data Services (RTDS) group of companies - a leading provider of information technology capabilities specializing in Cloud Computing and Cloud Telephony. RTDS Group has an employee base of 600+ across India, the US, and the UK, supporting over 20,000+ customers and IT infrastructure in 10+ data centers spanning the globe. It offers industry-leading technological solutions that help customers streamline their operations and enhance efficiency.

As an advanced consulting and certified AWS Well-Architected Partner, AceCloud recently achieved the prestigious AWS Storage Competency and is also recognized as an Amazon RDS Service Delivery Partner. These achievements underscore its deep expertise in AWS technologies and commitment to delivering high-quality cloud solutions.



- Public Sector
- Storage Consulting Competency
- Small and Medium Business Services Competency
- Amazon RDS Delivery
- AWS Database Migration Service Delivery
- Amazon CloudFront Delivery
- AWS Well-Architected Partner Program
- Authorized Commercial Reseller



Contact Us

Are you ready to cut down your cloud spending? Contact AceCloud Experts today to get a customized quote.

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