



PROFESSIONAL CLOUD ARCHITECT

Altostrat Media Case Study

Company Overview

Altostrat is a prominent player in the media industry, with an extensive collection of audio and video content that comprises podcasts, interviews, news broadcasts, and documentaries. Their success in delivering premium content to a diverse audience requires a content management system that can keep pace with the dynamic media landscape.

Solution Concept

Altostrat seeks to modernize its content management and user engagement strategies using Google Cloud's generative AI. They want a platform that empowers customers with personalized recommendations, natural language interactions, and seamless self-service support. Simultaneously, they want to drive revenue growth through dynamic pricing, targeted marketing, and personalized product suggestions.

The seamless integration of AI-powered tools into their existing Google Cloud environment will enable Altostrat to efficiently manage their vast media library, enhance user experiences, and unlock new revenue streams. Google Cloud's generative AI will solidify their leadership in the media industry.

Existing Technical Environment

Altostrat's content management and delivery platform leverages GKE for scalability and high availability, essential for handling their vast media library. Their extensive media library, spanning various documents, audio and video formats, is stored in Cloud Storage. To gain valuable insights into user behavior, content consumption patterns, and audience demographics, Altostrat leverages BigQuery as their primary data warehouse. Additionally, they use Cloud Run functions for serverless execution of event-driven tasks such as video transcoding, metadata extraction, and personalized content recommendations.

Google Cloud

While Altostrat has made significant strides in cloud adoption, they also maintain some legacy on-premises systems for specific workflows like content ingestion and archival. These systems are slated for modernization and migration to Google Cloud in the near future. User management and authentication are currently handled through a combination of Google Identity and third-party identity providers. For monitoring and observability, Altostrat relies on a mix of native Google Cloud tools like Cloud Monitoring and open-source solutions like Prometheus, with alerts primarily delivered via email notifications.

Business Requirements

- Accelerate and enhance the reliability of operational workflows across all environments. [Google Cloud + On-premises]
- Simplify infrastructure management for rapid application deployment.
- Optimize cloud storage costs while maintaining high availability and scalability for media content.
- Enable natural language interaction with the platform with 24/7 user support.
- Automatically generate concise summaries of media content.
- Extract rich metadata from media assets using NLP and computer vision.
- Detect and filter inappropriate content.
- Analyze media content to identify trends and extract insights.
- Inform content strategy and decision-making with data.

Technical Requirements

- Modernize CI/CD for containerized deployments with a centralized management platform.
- Secure, high-performance hybrid cloud connectivity for data ingestion.

Google Cloud

- Provide scalable, performant kubernetes environments both on-premises and in the cloud.
- Optimize cloud storage costs for growing media volumes.
- Design AI-powered detection of harmful content.
- Ensure that AI systems are auditable and their decisions can be explained
- Leverage LLMs and conversational AI for personalized experiences and content virality.
- Develop advanced chatbots with natural language understanding to provide personalized assistance.
- Automated summarization for diverse media.

Executive Statement

At Altostrat, we are embracing the next frontier of artificial intelligence to revolutionize our content strategy. By harnessing the power of generative AI, we will create an unparalleled user experience by empowering our audience with intelligent tools for content discovery, personalized recommendations, and seamless interaction. Reliability and cost management are our top priorities. This strategic initiative will deepen engagement, foster customer loyalty, and unlock new revenue streams through targeted marketing and tailored content offerings. We see a future where AI-driven innovation is central to our business, leading to greater success for our company and delivering exceptional value to our customers.