kyvos

CASE STUDY

Viewership Analytics

Charter Communications Accelerates Time-to-Insights on 15-month Viewership Data on AWS

WHY BUSINESS CHOSE KYVOS

- Ability to connect viewership with demographics, program, and network data to get a broader picture
- Deeper understanding of engagement levels, program/channel performance, and viewership patterns
- Self-serve, interactive analytics on 15-month data with the option to change filters and drill down to specific metrics

BACKGROUND

To improve offerings and grow its business, Charter Communications, one of the largest telecommunications and mass media companies in the US, wanted to deepen analytics on their viewership data. With more than 15 million video subscribers, they were collecting almost 10 billion records each month.

Their data was rich, and to strengthen their business, they wanted to analyze it across a variety of dimensions, such as viewer demographics, network information, program details, and more, for insights.

However, they were facing several analytical challenges.

- **Time-to-insights was too long**
  For ad hoc analysis, they first had to write, tune, and optimize their queries and then run them to get the required reports. As massive datasets were joined at runtime, queries would take anywhere between 10 to 30 minutes to return, and complex ones would take even longer. As the business grew, it became difficult for Charter to meet the aggressive timelines of their users.

- **Inability to leverage complete data**
  Their data platform allowed them to retain 15-months of data but analyzing this data across multiple months was taxing for Charter analysts due to its sheer volume and complexity.

WHY ANALYSTS CHOSE KYVOS

- Queries returning in seconds on 15-month data vs. minutes and hours earlier, even on single-day data
- Reduced coding effort
- Ease of building cross-tabular reports
- No need to create separate reports for each module
- Easy to manage changes

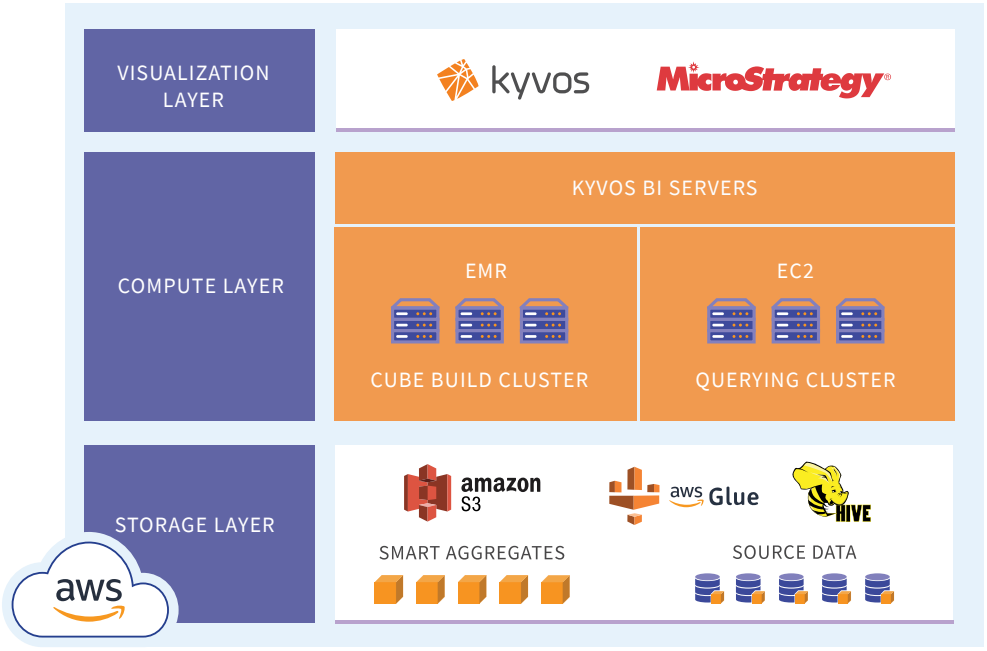
SOLUTION

To overcome the constraints of performance and scale, Charter deployed Kyvos on their AWS platform. Kyvos' revolutionary Smart OLAP™ technology helped them aggregate 15 months of data on the cloud. Smart Recommendation Engine enabled the creation of optimized OLAP models on complex data.

Kyvos builds an OLAP-based BI acceleration layer directly on AWS (Amazon Web Services). It reads the data from Amazon S3 and processes it using the EMR cluster. Amazon EMR service is used for elastic cube building. Once the cubes are built, they are stored in Amazon S3 for persistent storage. It uses AWS Glue to read the table structure and EC2 for deploying querying cluster.

This was transformational for Charter as time-to-insight went down considerably. They can now slice and dice across multiple dimensions, deep dive into any metric they need, and still get instant query responses. Another key advantage was that Kyvos integrated seamlessly with its MicroStrategy environment while providing its own native visualization tool to support multiple business users and teams.

ELASTIC ARCHITECTURE ENABLES DEEP INTEGRATION WITH AWS



WHY I.T. CHOSE KYVOS

- Pre-aggregation relieved the cluster from exhaustion during query overloads
- No need to free up resources in the production environment to run queries
- Optimal utilization of AWS resources with the ability to scale BI up and down to deal with varying loads

RESULT

Kyvos enabled interactive analytics on 150 billion transactions, giving Charter the ability to understand their viewership data by household patterns, time of the day views, programs watched, devices or platforms used, playback mode, and other useful metrics.

Faster and more in-depth insights helped them to:

- Evaluate the performance of broadcasters and service networks
- Analyze program performance and compare it with originals
- Make business decisions based on the origin of content
- Identify ways to improve their content, products, and offers

THE BOTTOM LINE

Kyvos helped Charter Communications build a scalable, self-service analytical environment on AWS that enabled deep analytics on as much data as needed. Not only could their business users respond quickly to network and content changes, but Kyvos also reduced the workloads of their analysts and engineering teams.

Kyvos is the world's fastest and most scalable BI acceleration platform that revolutionizes modern day analytics. The company's cloud-native Smart OLAP™ technology builds a Smart Semantic Layer™ and enables enterprises scale their BI to trillions of rows of data while saving costs and without compromising on performance. Headquartered in Los Gatos, California, Kyvos Insights was formed by a team of veterans from Yahoo!, Impetus, and Intellicus Technologies.

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