

Globant ▶

Digital transformation for a leader in educational content

Creation of the data & analytics architecture for the new digital platform



Customer Challenge

Our client needed expert help to define and build its data strategy to allow storage and query of historical and analytical data across platforms. New architecture would serve the different stakeholders and business areas across the company as well for clients.

Solution

After defining a strategy, we built a Big Data architecture to fulfill the needs of reporting based on Data Warehousing and a Data Lake consuming data from different apps of the platform. The new architecture is meant to build the basis of the Data Strategy across our client's organization in the future.

The main artifacts built so far:

- **Analyze:** Reporting suite built specifically for Habitat application to generate insights about student performance. The endpoints that send the data to the front-end use MongoDB and Redshift.
- **User Analytics:** Analytics library implemented to capture different events across the platform. The capture of events is done using API Gateway integrated with Kinesis Firehose whose destination is S3 and the Data

Results and Benefits

The new architecture created by Globant has enabled a cost-effective way for our education client leverage cloud-based technology for a more secure, approachable and useful approach to data storage and analysis.

is transformed by ETLs orchestrated in Amazon Managed Workflows for Apache Airflow and transformed data is saved in Redshift.

- **Admin Reports:** CSV reports delivered to internal stakeholders and district admins about student performance. Amazon Data pipeline is used to schedule the reports reading the data from Redshift and store the reports in Amazon S3.
- **Data Warehouse:** Data Warehouse that contains different data marts to provide information for internal users using dashboards and reports for final users. (Teachers and District Administrators). The data is stored in Redshift and the ETLs are orchestrated in Amazon Managed Workflows for Apache Airflow.

About Globant

We are a digitally native company that helps organizations reinvent themselves and unleash their potential. We are the place where innovation, design and engineering meet scale.

- We have more than 26,500 employees and we are present in more than 20 countries working for companies like Google, Electronic Arts and Santander, among others.
- We were named a Worldwide Leader in CX Improvement Services by IDC MarketScape report.
- We were also featured as a business case study at Harvard, MIT, and Stanford.
- We are a member of The Green Software Foundation (GSF) and the Cybersecurity Tech Accord.

For more information, visit www.globant.com

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