Bytecode Case Study:

NEW STACK

The New Stack is a tech media company that produces news, analysis, podcasts, videos, interviews, event coverage, and feature stories on the services and infrastructures that impact how people work and live.

The Opportunity: Overcoming Data Complexity

Founded in 2014, The New Stack is a tech media digital publishing platform focused on covering the latest in cloud native computing, DevOps, frontend, and backend software development. Technologists from across the globe rely on The New Stack as their information source of choice to learn about new developments, guide their technical roadmap decisions, and become more informed when exploring where to invest next.

As the site has become more popular, The New Stack struggled to overcome the growing complexity of its marketing analytics. The company's marketing team would regularly have to log into WordPress, Google Analytics, Salesforce, and multiple social media sites to manually collect data. They would then spend hours transforming and standardizing the data before they could create reports to share with editors and to send to their sponsors.

Because of this complexity, the editorial team often struggled to understand which of its articles were gaining traction among readers or if the company was meeting its obligations to sponsors. Key data was stuck in disparate sources and internal spreadsheets, preventing sponsors from being able to access performance data or self-serve analytics.

In order to better understand its article performance across its website and marketing channels, The New Stack knew it needed to collect and harmonize all its data within a single, accessible source.

The Solution: Looker and Bytecode IO

The New Stack decided to replace its legacy data warehouse and reporting process with a self-service analytics capability that would allow its editors to instantly access article performance data. The company also had a vision of being able to monetize its reporting by providing sponsors with self-service analytic dashboards, representing the potential for a new lucrative revenue stream. In order to bring this vision to life, The New Stack engaged Bytecode IO, the #1 Google Cloud Platform data partner.

Bytecode IO worked as an extension of The New Stack's data team to implement a modern marketing analytics stack using Fivetran to extract data from multiple data sources including Wordpress, Google Analytics, Facebook, Twitter, Youtube, Salesforce, Airtable and Google sheets, as well as a custom Cloud Functions connector for Simplecast.

Bytecode IO connected each data source to Google Cloud Platform's BigQuery for ingestion to then be transformed with dbt for consumption, automating and harmonizing the company's manual data management processes.

To make data more accessible, Bytecode IO built a series of dashboards in Looker that allow the publisher to model and present data on an ad hoc basis. The dashboards enabled self-service analytics capabilities, completely replacing the previous manual process of creating and distribution reports.

Bytecode IO also implemented granular data categorization to improve The New Stack's ability to gain deeper insight into performance, implemented a URL structure change to maximize exposure of evergreen content, and helped migrate the publisher from Universal Analytics to Google Analytics 4.

The Results: Mastering Data Processing and Analytics

By implementing a modern data stack solution with BigQuery and enabling self-service analytics with Looker, The New Stack has been able to significantly reduce its time-to-insight while accelerating its ability to serve sponsor requests. Thanks to Bytecode IO:

- The New Stack now has a new data model for their web analytics that empowers the publisher to report website content performance to its external sponsors and internal management team.
- A new Management Team dashboard that editors can use for instant insight into organic and paid media performance.
- In addition, a client-facing dashboard allows sponsors to gain new insight into their marketing spend performance to help measure return on investment.
- Bytecode IO enabled The New Stack to access more advanced metrics, which will allow it to produce advanced analytics it will be able to eventually monetize.
- Bytecode IO helped jumpstart The New Stack's capabilities by taking on all LookML and dbt development, end-to-end data architecture, dashboard development, and LookML training, allowing The New Stack's technical team to remain focused on operations and other technical initiatives.
- Thanks to the initiative, The New Stack was able to eventually reduce its operational headcount costs through natural employee attrition, saving the company the expense and disruption of having to replace the employees.

Results At A Glance:

Improved operational efficiencies and reduced costs

Implemented a faster go-to-market solution with reduced impact to production

Provide analytics-based stories with insightful answers for faster decision-making