



CASE STUDY

Analytics That Really Bring the Heat: Pepper.com, Percona, and Altinity

When you're the CTO of the world's largest community-shopping site—with 500 million visits a month—it's easy to feel like you're inundated with data.

What you really want though is to skip to the good part: *rapid-fire analytics* that become the basis for personalized customer experiences and, ultimately, for making your business even more successful.



Welcome to Pavel Genov's World.

Pavel is the surprisingly easy-going CTO of [Pepper.com](https://pepper.com), which you can think of as the ultimate deal-seeking community. People post bargains. The community votes. And the “hottest” bargains—you know, *peppery hot*—get featured on the home page.

Pavel's world includes 11 different websites and 70 databases each with 20-30,000 selects a second. In other words, he and Pepper.com have to work at scale.



A MySQL Shop at the Crossroads: ClickHouse vs. BigQuery.

“Initially, we just had general analytics. Then we tried PostgreSQL. But that didn't scale. Then we moved to BigQuery.”

As a Certified Google Engineer, Pavel is definitely not opposed to using Google products. But he was keeping tabs on the development of ClickHouse.

“Like a lot of technology leaders in Europe, I'd heard of ClickHouse. I'd watched the technology evolve for several years. Then we tried it and, frankly, it was amazing... with an ingestion rate close to real-time. We felt it could be directly impactful for our business.”

Though Pepper is a heavy BigQuery user, when it came to analytics, Pavel had certain criteria.

“Cost was super-important. We were using BigQuery's on-demand mode, which, yes, was fast. But very expensive. Very expensive. Plus, we were impressed with ClickHouse's “materialized views,” which were not available from BigQuery at the time.” (ClickHouse materialized views compute aggregates automatically at load time. They can reduce query times from seconds down to milliseconds.)

“Honestly, we had no in-house expertise when it came to either BigQuery or ClickHouse. We wanted to run something on-premises and build our internal knowledge base. We needed data populated very quickly to our dashboards. Given its speed and cost-effectiveness, we chose ClickHouse. That was the right call.”

Altinity: The Enterprise Guide to ClickHouse.

"We knew, from our MySQL partner Percona, with whom we've had a terrific relationship for over 5 years now, that Altinity was the perfect group to guide our use of ClickHouse.

Plus, just watch some of [Altinity CEO Robert Hodges' videos on YouTube](#). You'll know that you're making the right connection."

Altinity provides ClickHouse subject matter expertise for Pepper's very smart in-house team. Pavel depends on Altinity to backup Pepper Media when they get stuck.

Initially, Pepper was focused on using ClickHouse analytics to create personalization models so that site visitors would find something relevant on the site. These require very rapid responses so that pages load quickly.

"We were learning. For the first few months, we'd call Altinity with very basic ClickHouse questions. We'd get an answer, often right there on the call. Lately, though, we've been asking tougher questions," Pavel says with a slight smile.

Pavel and his team have Altinity experts immediately accessible who understand not just ClickHouse but how to build and run analytic applications on it.

Now, Pepper is using ClickHouse for machine-to-machine backend tracking. And they're contemplating even more sophisticated projects.

Their current architecture uses S3 storage to store source data, Amazon Kinesis to load, and ClickHouse for rapid queries. The goal is to make data available for query within 60 seconds. For visualization and reporting, they use Metabase among other tools. Metabase sets up easily and runs well against ClickHouse.

The Bottom Line?

"Deep ClickHouse Knowledge. Service. Fair pricing. Everything we hoped we'd get from Altinity, is exactly what we've gotten. Isn't that the best endorsement anybody can give?"

Altinity was founded in 2017 and has been lucrative since its inception. At Altinity, we focus on empowering any developer to add real-time analytics to any application regardless of where it runs, how much data it needs to answer questions, or how quickly the data arrives. We strive to unleash a wave of innovation at the level of individual analytic apps that will open new economic opportunities for our customers and benefit users worldwide. For more information, visit www.altinity.com.



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