



Factors.AI Accelerates Query Response by 30X and Reduces Analytics Effort from Days to Minutes with SingleStore

30x

Faster Query Response:
From 2-5 Minutes to
20 Seconds

50 Million

Records Queried in
20 Seconds

30-40x

Faster Time to Value for
Factors.AI Customers

“We have a lot of incoming data, and all of it is now available in real time for analysis. We went from taking 2-5 minutes to run a query on 50 million records to 20 seconds. That's on average a 30X faster query response.”



Praveen Das,
Co-Founder & Chief Product Officer,
Factors.AI

Business Goals

Factors.AI provides the entire analytics stack for marketers so teams can spend less time wrestling with how to obtain the data they need and focus instead on making sense of diverse customer data to drive better results.

Factors.AI initially used PostgreSQL, hosted on Google Cloud, to power its solution. However, it hit a wall trying to scale its application with PostgreSQL, as it's a single-instance database. Performance also fell short, which impacted its ability to support its customers.

Factors.AI's business goals for its application included:

- Enabling marketers to ask questions of their data in real time to help teams make smarter, faster, data-driven decisions
- Delivering fast, interactive analytics to CMOs with AI-powered marketing intelligence to accelerate time to value

Technology Requirements

Factors.AI needed to run analytical queries fast and manage a lot of incoming data and updates. To support a real-time, interactive marketing analytics solution, Factors.AI needed to find the right distributed data store that also supported SQL and JSON so it could minimize rewrites of the application.

The ideal solution would be run flawlessly in Google Cloud to ensure cloud continuity – Factors.AI wanted to change its data engine, not its cloud provider – while also offering multi-cloud capability to future-proof its solution. It also had to offer a seamless, fast, non-disruptive migration process to ensure operational and business continuity.

Why SingleStore?

Factors.AI did not want a complex architecture with two different data stores, one for transactions and one for analytics. To address this and all of its other requirements, the team selected **SingleStore Managed Service** to sit at the heart of its automated marketing analytics solution.

“With SingleStore, we get just that: a single data store for both analytical and transactional loads, and that makes the architecture quite simplified,” said Praveen Das, Co-Founder and Chief Product Officer (CPO), Factors.AI.



Solution

With SingleStore Managed Service, Factors.AI gained a modern, distributed relational cloud data platform built for speed, scale, and agility, designed to deliver maximum performance for both transactional (OLTP) and analytical (OLAP) workloads in a single unified engine to power modern data-intensive applications. Factors.AI can now ingest millions of events per second with immediate availability, deliver millisecond query latencies, and handle concurrencies across tens of thousands of users to accommodate its largest customers. With 10-100X the performance at one third the cost of legacy databases, SingleStore Managed Service gives Factors.AI limitless scalability and fast analytics on dynamic data for complex analytical queries.

Factors.AI achieved the last goal in its cloud data strategy when it easily deployed SingleStore on Google Cloud.

Why SingleStore?

Factors.AI and its customers need data to help them stay a step ahead of fast-moving markets, and SingleStore delivers.

All data available for real-time analysis plus 30X faster query response

“The performance improvement of a distributed data store like SingleStore is quite high compared to what we had earlier,” said Das. “We have a lot of incoming data, and all of it is now available in real time for analysis. We went from taking 2-5 minutes to run a query on 50 million records to 20 seconds. That’s on average a 30X faster query response.”

Easy Migration Process

SingleStore’s SQL Wire Compatibility meant that Factors.AI had to rewrite very little of its application to migrate from PostgreSQL to SingleStore. This, along with the onboarding and support experience, made it easy to get started on SingleStore.

Factors.AI customers can achieve time to value 30-40X sooner

Self-serve access by Factors.AI customers to underlying data has replaced the earlier tedious process of working with IT and Engineering teams to get dashboards set up. Analysis that used to take 3-4 days to collate now happens in a matter of hours, making the marketing team more agile and efficient, and continuously optimizing their marketing initiatives.

As a result, Factors.AI customers benefit from radically enhanced business agility, greater confidence in marketing execution, and dramatically improved productivity.

“Thanks to SingleStore, our clients can plan out a campaign, generate an analytics report, create a user segment, send it to their targeting system, and take it live in one hour. That’s about 32X faster than before, and it’s the sort of competitively-differentiating agility we bring to marketing,” said Das.



Watch an interview with Factors.AI by Technology Correspondent Lisa Martin, Host of The Know Show, theCUBE, and SilconANGLE

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To learn more about Factors.AI’s innovative implementation of SingleStore, watch an on-demand webinar on turbocharging your open-source DB by 100x.

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SingleStore is helping companies compete and win across every vertical.

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