



CUSTOMER SUCCESS STORIES

stc pay Builds a Leading Digital Wallet for the Middle East Market with Postgres[®] and EDB





CUSTOMER: STC PAY

EDB customer since 2020

Ibrahim Kawash
Database Team Lead

CHALLENGE: Migrating a complex digital payment processing application to Postgres to increase scalability, support innovation, and secure payment data

EDB SOLUTIONS: EDB Failover Manager (EFM), EDB Postgres Enterprise Manager (PEM), EDB Backup and Recovery Manager (Barman), EDB Support

RESULTS: EDB backup and recovery solutions and support ensured the integrity of valuable data and improved the performance and stability of stc pay's innovative digital wallet solutions.



OVERVIEW

stc pay chooses Postgres to power mobile innovation

Digital wallets are transforming not only payments but the entire financial services industry, enabling users to send and receive money; make more informed financial decisions; and store identification cards, membership and loyalty cards, event tickets, and other data without needing to carry physical cards or cash.

Due to its contactless nature, wallet adoption surged during the pandemic, and digital wallets are now recognized as the fastest-growing [payment method](#) around the world. Analytics predict that [more than half](#) of the world's population—5.2 billion people—will use e-wallets in 2026, up from 3.4 billion in 2024.



Without reliable access to transaction and payment details and user-friendly features, digital wallets wouldn't be able to sustain this type of growth, and that's why a highly scalable database is the foundation of every successful digital wallet. Given Postgres' reputation for scalability and innovation, the Middle East's top digital wallet, stc pay, made the decision to move its core fintech application to Postgres.



The first enterprise in the region to adopt open source

Founded in 2018 and headquartered in Riyadh, Saudi Arabia, stc pay has a goal of building a digital economy in which all customers' finances are safe, secure, and simply fulfilled. Since its inception, stc pay has been defined by its desire to innovate and its intuitive, agile, and dynamic solutions.

In seeking new ways to expand its market footprint, stc pay management chose to leave Microsoft SQL Server in February 2022 in favor of Postgres. This made stc pay the first enterprise in the region to host its core application on an open source database—a significant landmark.

Choosing Postgres was about far more than achieving market milestones. In addition to a database that would grow with the company and its application, high availability and security were top priorities. As a leading fintech and payment application provider, stc pay continually handles massive amounts of data and hosts a large number of transactions on a daily basis. Being able to ensure that its customers could consistently access the application and that payment information would be kept secure was critical to the company's reputation.

The expense of proprietary databases was also a key factor in the decision to migrate to open source. "Looking at Microsoft or Oracle databases, it just wasn't feasible from a cost perspective," says stc pay Database Team Lead Ibrahim Kawash. With Postgres, the company found a solution that aligned with its needs and ambitions and did not put a financial strain on the enterprise.

“From a database perspective, we’ve seen great performance and stability. This is really what convinced us to use Postgres to host our new fintech application.”

Ibrahim Kawash
Database Team Lead

Making the Postgres move with EDB

stc pay's Postgres journey took place over stages. Rather than abandoning SQL Server completely from the get-go, stc pay began working with EnterpriseDB (EDB) to move specific applications to Postgres one by one.

EDB's expertise proved invaluable when stc pay migrated its core fintech application to Postgres. This intricate process demanded meticulous attention, considering the application's significance to stc pay and its customer base.

Whenever the enterprise experienced hiccups during its journey, EDB support was there to help address the issues and reestablish a solid trajectory. "There were numerous instances when EDB helped us," says Kawash. "During our migration, the support team was crucial to helping us identify the root cause of a given issue."

Building customer trust with backup and recovery

After the successful migration, the company upgraded to EDB's Premium Support to make sure its applications continue to run smoothly on Postgres. The company has also leveraged EDB's Failover Manager (EFM) and Backup and Recovery Manager (Barman) to ensure the constant security and integrity of its customers' data and funds.

Integrated with EDB's Postgres Enterprise Manager (PEM), these solutions have helped stc pay keep its core application running with five-nines high availability and allowed its data to grow without the fear of a crash that might shut down its infrastructure.

"We're the first in the region to be using the Postgres platform. In friendly conversations with other companies here, I tell them about our performance improvements and how I would recommend Postgres."

Ibrahim Kawash
Database Team Lead

Results that speak for themselves

According to Kawash, the benefits of running stc pay's applications via Postgres were immediately apparent. "It was just much faster," he says. The speed and performance improvements were felt across the organization, with all teams supported to achieve their goals and customers able to experience the innovative potential of stc pay's leading application.

Considering that this is precisely what the organization had hoped for—a rapid, reliable, always-on customer experience—the company's enthusiasm for its new database home is contagious. "We're the first in the region to be using the Postgres platform, and we're proud to announce to everyone that we're using Postgres," says Kawash. He adds, "In friendly conversations with other companies here, I tell them about our performance improvements and how I would recommend Postgres."

Supporting a cashless society

After the move to Postgres, stc pay grew from 700,000 active users at the end of 2022 to approximately 12 million in 2024. The company has found Postgres more than capable of supporting the rapid growth of external users as well as the growth of internal teams.

Together, the reputations of both Postgres and stc pay for innovation have made it simple for stc pay to find and hire new team members interested in open source. Postgres' ease of use has also accelerated employee training. "A lot of the people we're hiring come from an Oracle background," Kawash says. "But it's been swift and straightforward to get them started on Postgres."

stc pay is committed to upholding Saudi Vision 2030 of transitioning toward a cashless society, and Postgres has proven to be the ideal partner, demonstrating exceptional agility and consistency. As stc pay advances digital transformation and financial empowerment with its revolutionary mobile-first approach and payment services platform, its future is looking incredibly bright.



EDB provides a data and AI platform that enables organizations to harness the full power of Postgres for transactional, analytical, and AI workloads across any cloud, any time. For more information, visit www.enterprisedb.com.

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