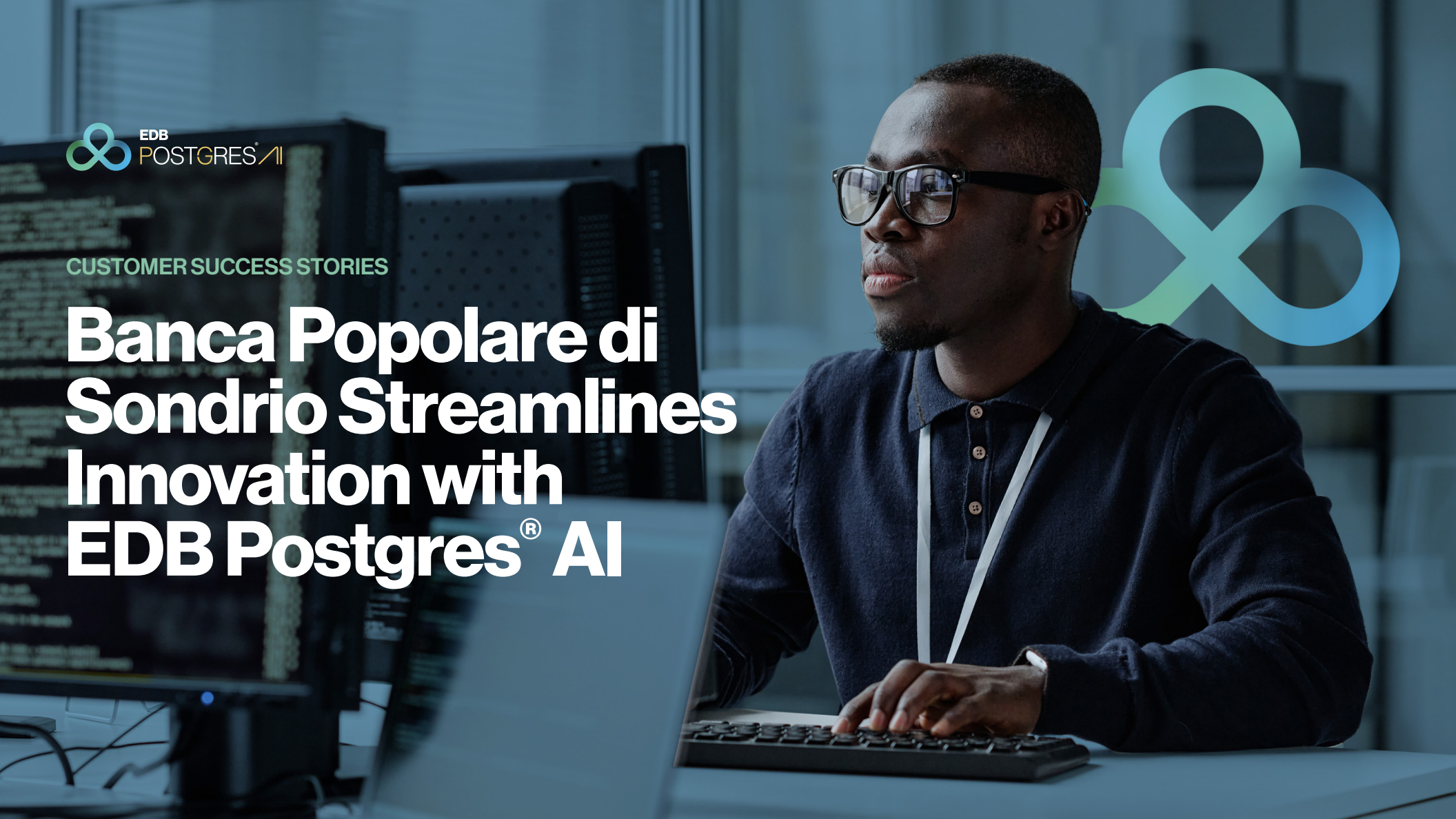
EDB POSTGRES AI

CUSTOMER SUCCESS STORIES

Banca Popolare di Sondrio Streamlines Innovation with EDB Postgres® AI



Banca Popolare di Sondrio FONDATA NEL 1871

CUSTOMER: BANCA POPOLARE DI SONDRIO

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Piergiorgio Spagnolatti
Head of Infrastructure,
Banca Popolare di Sondrio (BPS)

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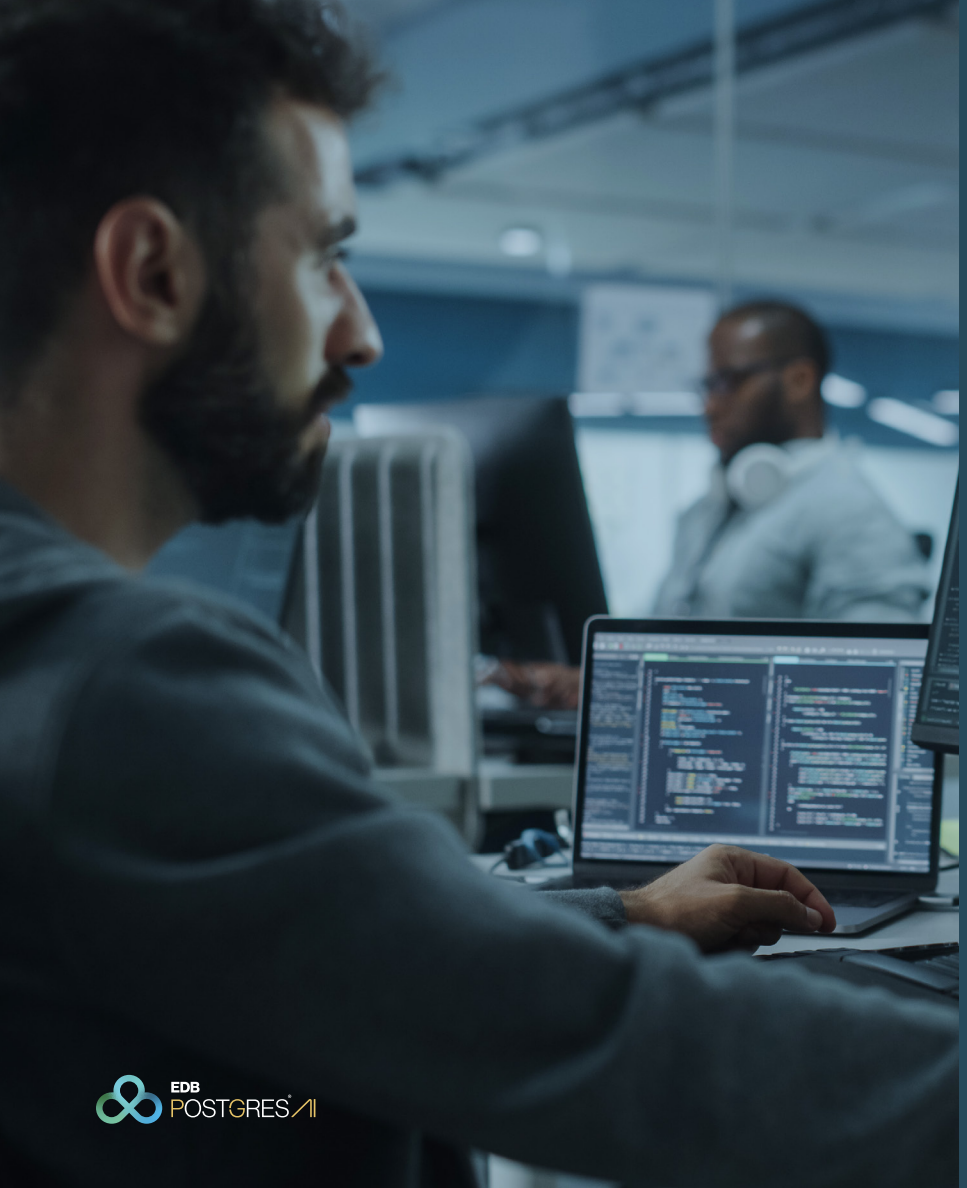
OVERVIEW

How BPS is accelerating app development with open source Postgres and EDB support

As Head of Infrastructure at Banca Popolare di Sondrio (BPS), Piergiorgio Spagnolatti (PJ) has observed a steady growth in adoption of Postgres over 25 years, with a noticeable rapid increase in the last five years.

"It's an excellent RDBMS system for system administrators who are required to make sure that things run smoothly from an availability and performance standpoint," he notes. "But over time, the way I've seen things evolve, is that more and more developers are considering Postgres as the primary go-to solution when it comes to developing modern applications."

Traditional developers relying on the conventional RDBMs SQL approaches have long been seen as the most typical Postgres users. But this group also has evolved to include teams that need vectors, REST APIs, the ability to use JSON as a back end store, as well as other Postgres capabilities.



One database with infinite possibilities

PJ started with BPS as a system administrator in 1995 and worked his way up the ladder, transitioning through roles in IT operations management and overseeing all the teams involved with networking, and ultimately landing in a position with the DevOps management team. PJ appreciates Postgres' flexibility and how his team can easily extend Postgres to meet a variety of needs.

"I've tried to find where the limit with Postgres is, and from a systems management standpoint, I don't see any specific boundary or constraint for our deployments," says PJ. "And from a functionality perspective, Postgres continues to evolve. So I really don't see the end to its potential," he says.

With other more traditional database engines that aren't as extensible or scalable, developers have to retrofit new functions and new applications and redesign everything from scratch, which requires a lot of work from a developer's perspective and from an operational standpoint. This isn't the case with Postgres, and as PJ affirms, it's why Postgres is here to stay.

Cloud-native architecture: another huge win

The CloudNativePG operator for Kubernetes has revolutionized the way PJ and his team manage Postgres workloads on Kubernetes clusters. This open source operator streamlines the transition from a traditional physical server or virtual machine–based database to a containerized model that seamlessly aligns with their cloud-native applications. And it's capable of running in private, public, hybrid, or multi-cloud environments.

"Cloud-native architecture is a game changer," PJ says. "Basically nobody is doing anything like that, in my experience."

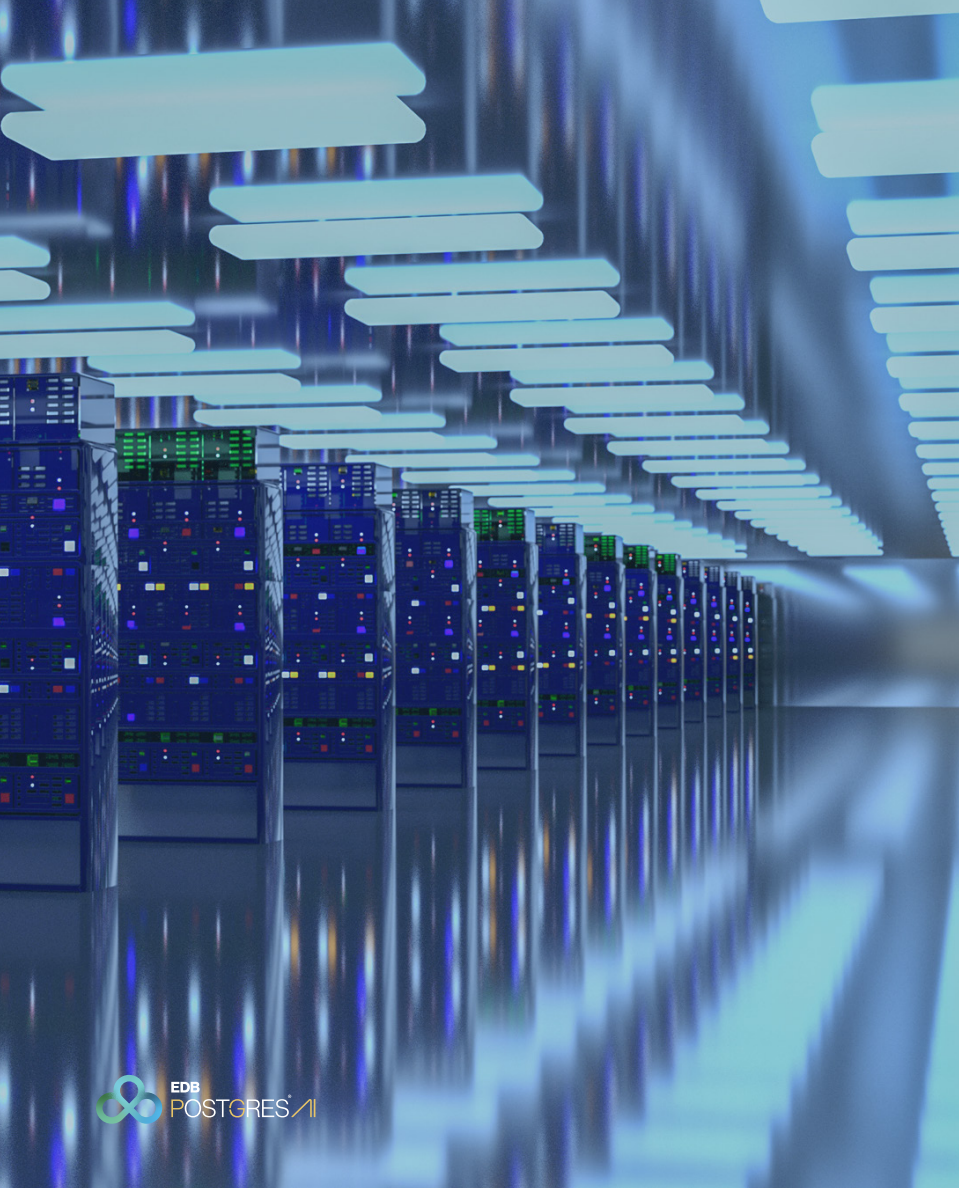
Why the cloud is the future

Today, one out of two banks and insurers have moved their core business applications to the cloud, according to Capgemini Research. What does it take for an IT operations manager to decide to migrate their database to the cloud? PJ tells us the evolution comes from understanding the advantages that you get out of a cloud-native architecture as a whole.

"Our industry is used to identifying database systems as something quite immutable, or if you do make changes, it's a slow transition over time, mainly targeted at a specific issue like scalability or availability," says PJ. "So everything revolves around, 'how do I make this highly available?' and 'how do I do backups or disaster recovery?'"

With the cloud, resources can be scaled up or down quickly to match demand. New dev and test and load testing environments can be easily created. Databases and workloads don't have to be consolidated due to restrictive data requirements and pricing concerns with legacy on-premises providers.

"Using an operator that allows the provisioning and execution of a database, by delivering the functionality that you need in terms of replication, availability and more, really makes a lot of sense," says PJ. "It's the logical next step in terms of the evolution of the data architecture."



Unleashing AI possibilities

Nearly two in three financial service firms have started using AI, and like these organizations, PJ and his team are also looking to utilize the benefits of AI. They plan on adopting large language models and generative AI for potential use cases inside their bank, which would involve leveraging their existing knowledge bases, internal rules, policies, and documentation for end users.

As PJ and app architecture team members discussed how they could get started with document embedding and vectorization, Postgres came up as one of the potential candidates for storing this type of data. Even though their generative machine learning data would be stored differently from their existing data structures, PJ sees this use case as a good fit for Postgres.

"The fact that Postgres' name always comes up, even if the use cases are different from each other, is really telling about the quality of the underlying engine," says PJ.

By combining the synergy of AI and cloud-based data storage and management, financial institutions can open the door to enhanced data analysis and a number of other future-focused solutions.

Accelerating innovation with Postgres

PJ notes that there's a lot of pressure to shorten time to market for products for internal and external banking customers. In order to meet these expectations, dev teams need features that enable them to develop quickly, add new features to their applications seamlessly, and troubleshoot performance issues efficiently.

The software development cycle as a whole needs to be optimized, emphasizes PJ, along with every single component inside that pipeline. "Data engines are left out of this evolution," he says, "because people think databases are just databases. Unless we're talking about Postgres." PostgreSQL's flexibility and ease of use can accelerate development time and streamline the entire application lifecycle, making it a favorite among developers.

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About EDB Postgres AI
EDB Postgres AI is the first open, enterprise-grade sovereign data and AI platform, with a secure, compliant, and fully scalable environment, on premises and across clouds. Supported by a global partner network, EDB Postgres AI unifies transactional, analytical, and AI workloads, enabling organizations to operationalize their data and LLMs where, when, and how they need it.
For more information, visit www.enterprisedb.com.

Blazing a trail for the industry to follow

The enterprise support that PJ receives from EDB is a constant factor in enabling his team to meet and exceed their development goals. PJ acknowledges, "The level of expertise that I saw in recent years when interacting with EDB is something that's generally missing from the enterprise landscape."

He also values EDB's long-standing commitment to open source. "I'm extremely passionate about open source in general," he says, "and the fact that EDB is still so much involved in open source is another game changer… It's a whole different story when you are deeply involved with the community itself, and you don't interfere with the way the community is evolving."

While PJ says he's seen that quality has decreased from legacy providers in our industry over the years, the notable exception is EDB.

"EDB is on the right track when it comes to the pace of innovation that the current market needs," PJ tells us. "Because in general, you're way ahead of the market and pretty much ready, in terms of features and functions and stability and performance when it's needed."

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> Head of Infrastructure,
> Banca Popolare di Sondrio (BPS)