



people knowing software.

REFERENCE | Leading European Development Bank

Leading European development bank uses PKS eXplain

to ensure transparency
and decouple its
legacy core systems

“Our legacy systems are highly functional – but increasingly difficult to maintain from a technical standpoint. With eXplain, we’re creating the transparency we need to systematically reduce technical debt and decouple our systems. For us, this is a real strategic lever.”

Technical Product Manager
Leading European Development Bank



Leading European development bank uses PKS eXplain to ensure transparency and decouple its legacy core systems

Challenge: Technical Modernization in Mature System Environments

As one of the largest national development banks, the organization has always stood for stability, continuity – and, increasingly, a digitized development mandate.

It is committed to continuing to use mainframe systems for its core banking systems.



Against this backdrop, it has launched a program to modernize its mainframe systems, with the following objectives in mind: Against this backdrop, it has launched a program to modernize its mainframe systems, with the following objectives in mind:

- Improving the Developer Experience with a Modern HOST-EAP
- Decoupling of Application Systems
- Provision of Virtual Development and Testing Systems
- Faster and more efficient provision of test data

The challenges were complex, and the company sought modern tools to ensure the mainframe systems would remain viable in the future.

One solution: Tool-assisted decoupling with PKS eXplain

Following a selection and proof-of-concept process, the development bank decided to implement PKS eXplain – a modular solution for source code and impact analyses.

The deciding factor was:

- Transparency down to the last detail
– even with dynamic code, macros, and preprocessors
- Clustering functionality for the structural evaluation of system architecture
- The PKS team's experience and Close Collaboration in supporting complex modernization projects
- Easy integration into the existing IDE and training for the development teams

"It was important to us that an analysis tool like eXplain not only be used on an ad hoc basis, but become an integral part of our day-to-day development work. Our collaboration with PKS was solution-oriented – we were able to create targeted transparency and lay the foundation for many follow-up measures. Today, eXplain helps us make technical decisions more quickly and with greater confidence."

Produkt Owner
Leading European Development Bank



Triple Value Added Through eXplain in Use at a Leading European Development Bank

1. For Developers: Better Understanding & Safer Changes

Developers at the development bank use eXplain for:

- Tracking Variables Across System Boundaries
- Visibility of Call Chains and Database Accesses
- Impact Analyses for Changes and Refactoring

✓ **Results:** Reduction of unwanted side effects, more reliable releases, faster development cycles

2. For Architects: Clustering & Re-Documentation

Architects use eXplain to visualize system structures that have evolved over time:

- Visualization of the Coupling Between Modules and Domains
- Quantification of accesses from outside the subject area (e.g., SQL write accesses across domain boundaries)
- Foundation for decoupling and clear interface definition

✓ **Results:** A solid basis for decision-making regarding renovations, identification of technical debt

3. For the Organization: Leverage for Strategic Renewal

eXplain laid the groundwork for ...

- converting write operations to direct access in APIs
- to continuously implement improvements (Inspect & Adapt)
- to enable better integration into IDEs and developers' daily workflows

✓ **Results:** Gradual rollout of modernization measures without a "Big Bang"

"From the very beginning, our collaboration with the European Development Bank was characterized by clear objectives and mutual trust. Together, we were able to establish eXplain not only as a tool, but as an effective foundation for technical innovation – integrated, practical, and firmly anchored in developers' day-to-day work."

Christian Foran
Project Manager
PKS Software GmbH



“The European Development Bank project demonstrates what eXplain is truly capable of: creating transparency in complex system landscapes where other tools reach their limits. The feedback from this project is incredibly valuable to us – both for the product’s further development and for sharing best practices with other customers.”

Bernd Butscher

Head of eXplain Product Development
PKS Software GmbH



Lessons Learned

■ “A tool alone doesn’t bring about change.”

It was only through training sessions, consultation hours, effective communication, and supporting measures that eXplain was successfully implemented – both technically and culturally.

■ Management support is essential.

The allocation of special budgets and the secondment of technical experts were crucial to the project’s success.

■ Modernization is a process.

“Stay Clean” means integrating analyses into the development process on an ongoing basis – through training, tool implementation, and continuous maintenance of insights.

Benefits for Europe’s leading development bank

✓ **Higher** code quality & reliability of changes

✓ **Transparency** regarding hidden dependencies

✓ **Well-Informed** architectural decisions thanks to clustering

✓ **Less** technical risk in further development

✓ **In-house tools and expertise** – no more black holes

✓ **Sustainable** integration into developers’ daily work

✓ **Increased appeal for the next generation of IT professionals** – through modern tooling and an easier onboarding process into the codebase

Conclusion: Analysis creates room for maneuver – eXplain as a strategic lever

By using PKS eXplain, the leading European Development Bank impressively demonstrates how technical innovation can be achieved not in a disruptive way, but in a targeted, pragmatic, and incremental manner. eXplain is not just an analysis tool, but an enabler – for developers, architects, and strategists alike.

The leading European Development Bank has taken a decisive step toward a future-ready system landscape – with greater transparency, lower risk, and a stronger basis for decision-making.

One of Europe's leading development banks – acting responsibly

The organisation is one of Europe's leading development banks and has been committed to economic, social and environmental development for decades.

In 2024, it made available a total of more than 100 billion euros in funding.

CONTACT

Please feel free to contact me.

Benefit from our experts' many years of experience.
We look forward to working with you!



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