



The Transformative Role of AI in Mainframe Application Management

Introducing Ensono's AI-Powered Approach to Mainframe Application Managed Services

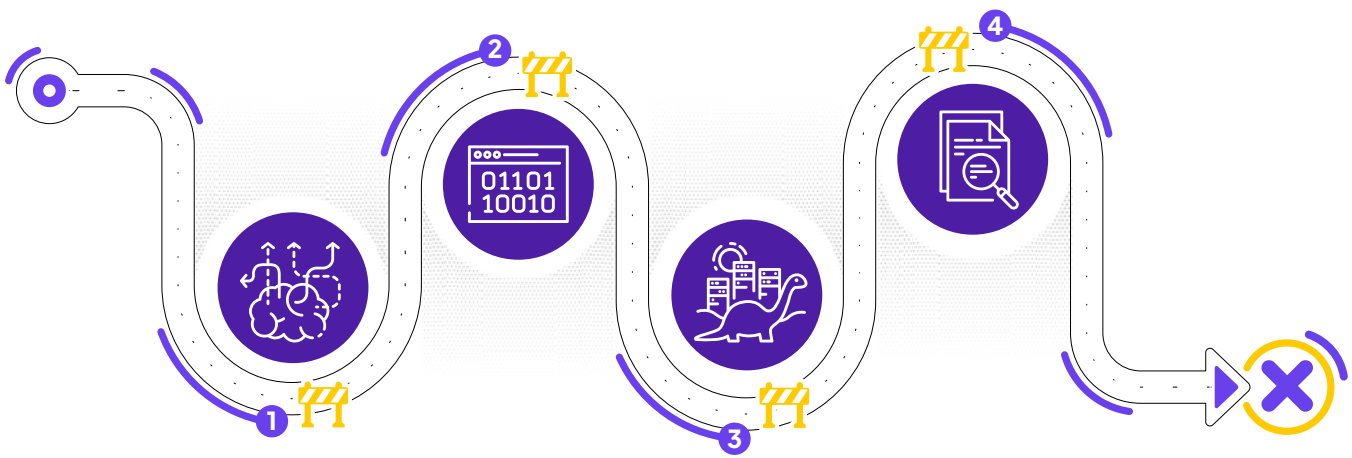


Make better happen

ensono.com

Table of Contents

Mainframe without a map	3
A developer deterrent	3
Slow and siloed development cycles	3
Limited observability	3
Introducing AI-powered mainframe application managed services	4
Application explainability	4
Impact analysis	4
Observability and AIOps	4
Your ally in AI-powered mainframe application managed services	5
Ready to future-proof your mainframe applications?	5



Mainframe without a map

Mainframes remain a cornerstone of enterprise IT. Trusted for their reliability, scalability, and security, they continue to run mission-critical workloads across industries like banking, insurance, healthcare, and government. But while the infrastructure has stood the test of time, the applications running on it are [showing signs of strain](#) as the developers who built them approach retirement, leaving younger generations without a map.

1 A dangerous knowledge gap

Many mainframe applications were built decades ago by developers who are now retiring or have already left. Their deep understanding of the codebase—how it works, why certain decisions were made, what dependencies exist—was never fully documented. When they go, that knowledge goes with them. Without clear documentation or visibility into how applications work, organizations face slower incident resolution, stalled innovation, and increased vulnerability to change.

Most mainframe applications lack clear, up-to-date documentation. Business logic is often buried in thousands of lines of COBOL or PL/I, making it difficult to onboard new developers, troubleshoot issues, or plan for change. Without visibility, even small updates can be risky.

2 A developer deterrent

Modern developers are used to working in cloud-native environments with intuitive tools, fast feedback loops, and modern languages. The green screens and rigid workflows of traditional mainframe development can be a major deterrent to them. This makes it harder to attract and retain the talent needed to maintain and modernize these applications, whether you plan to leave them on the mainframe or migrate them off.

3 Slow and siloed development cycles

Development and testing typically happen on the mainframe itself, creating bottlenecks and limiting agility. This is often a slow and frustrating process that hinders innovation and increases time to market for new features and updates.

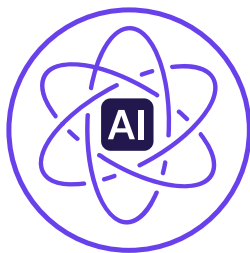
4 Limited observability

Without modern observability tools, it's difficult to proactively monitor mainframe application performance or to resolve incidents quickly. Teams often rely on manual processes and reactive troubleshooting, which increases downtime and impacts service quality.

Introducing AI-powered mainframe application managed services

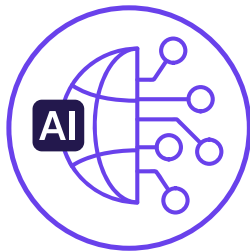
AI is redefining what's possible in mainframe application management. By applying AI to our mainframe application managed services, Ensono helps its clients realize measurable improvements in risk, agility, and operational performance. We combine generative AI, agentic tools and cloud-native development practices for the mainframe to help clients reduce risk, accelerate change, and future-proof their application estates.

Here's how:



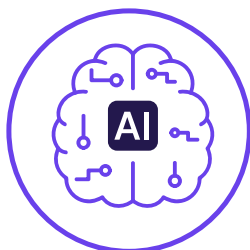
Application explainability

Ensono's AI-powered solutions can analyze legacy code and translate it into clear, natural language documentation-making business logic accessible to both technical and non-technical stakeholders. This isn't static documentation, it's continuously updated, ensuring that knowledge stays current even as applications evolve. The result is a living knowledge base that reduces dependency on individual SMEs and accelerates onboarding for new developers.



Impact analysis

Beyond documentation, Ensono's agentic AI tools provide interactive interfaces that allow teams to explore application logic, trace dependencies, and assess the impact of proposed changes. This empowers developers and architects to make informed decisions quickly, with confidence-reducing the risk of unintended consequences.



Observability and AIOps

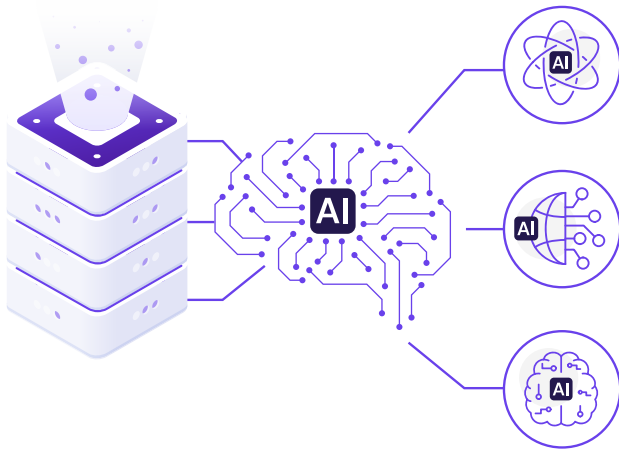
AI-powered observability, delivered through Ensono's AIOps (Artificial Intelligence for IT Operations) capabilities, provides real-time visibility into application behavior, performance, and anomalies. By continuously analyzing telemetry data, we can detect issues before they impact users, automate root cause analysis, and even trigger self-healing workflows.

The shift from reactive to proactive operations reduces downtime, accelerates incident resolution, and ensures a more stable application environment. As part of Ensono's approach, AIOps is integrated into the broader application management strategy—helping clients move from firefighting to foresight.

Your ally in mainframe application management

We know that mainframe applications aren't just lines of code, they're the operational heart of your business. That's why [Ensono's Mainframe Application Managed Services](#) offering (AMS) goes beyond maintenance, using AI to reduce risk, unlock agility, and help you prepare for the future.

AMS combines deep mainframe expertise with cutting-edge AI capabilities to deliver:



- **Application explainability** powered by generative and agentic AI, so your teams always understand what your mainframe applications do, how they work, and how to evolve them.
- **Cloud-native DevOps** that empowers modern developers to build and test mainframe applications in the cloud-native environments they know and love.
- **AI-driven observability** that delivers real-time insight and enables proactive control over application performance and stability.

We can also help you strengthen your foundations with robust infrastructure management and modernization services.

Whether your goal is to modernize in place or eventually move off the mainframe, AI-powered mainframe application managed services can help you build the stable, well-documented foundation needed to make informed decisions about the future of your application estate.

Ready to future-proof your mainframe applications?

You're in good hands with Ensono. We're uniquely placed to bring legacy systems into the future. To find out more, [visit our website](#), or get in touch.

Let's connect

