

Strategic Modernization Assessment

Your guide to unlocking clarity with a roadmap for application modernization





Your first step toward confident modernization

Legacy applications can quietly hold businesses back by limiting innovation, slowing feature delivery, and consuming valuable resources. Modernizing these legacy applications [has never been more important](#), but the challenge for businesses is knowing where and how to start.

Ensono can help.

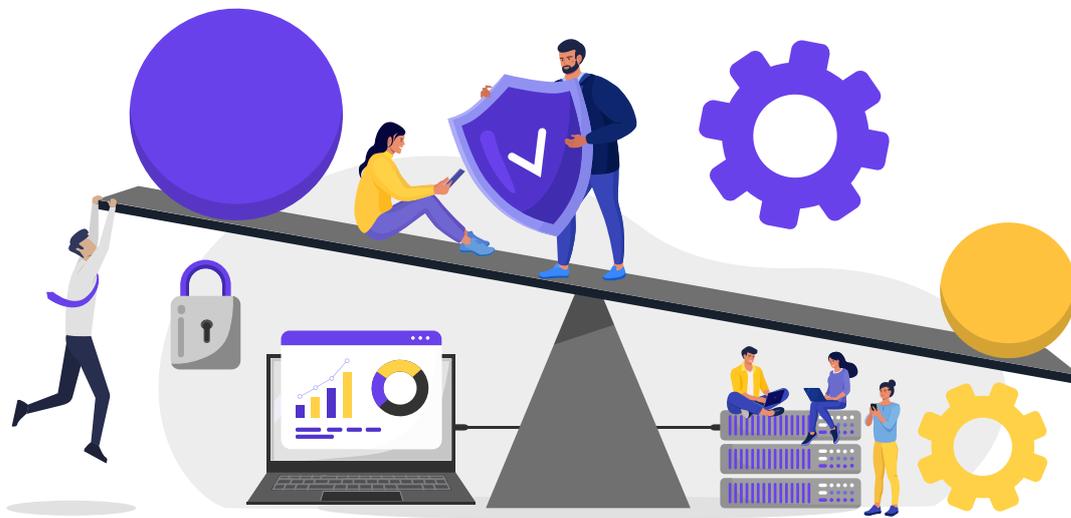
Our **Strategic Modernization Assessment (SMA)** is a high-level, three-week engagement that delivers a prioritized modernization roadmap aligned with your business goals, application value, and technical fit. Through collaborative workshops and structured, AI-driven analysis, the SMA helps organizations take control of their legacy estate with clarity, structure, and confidence.

SMA lays the foundation for success

Modernization isn't a [one-size-fits-all journey](#). Each organization's landscape is unique, shaped by its systems, data, and ambitions. Before investing in transformation, you need visibility: which applications deliver value, which create drag, and which should evolve or retire.

Our assessment establishes this foundation by identifying which applications to modernize, by what strategy, and in what order, so your organization can:

- Accelerate time-to-value for key business initiatives
- Reduce cost and complexity by rationalizing duplicate or low-value systems
- Enable innovation and scalability through cloud-ready architectures
- Strengthen resilience, security, and compliance by identifying risk and technical debt
- Align technology investment directly to measurable business outcomes



Organizations struggle with application modernization

Most organizations don't lack modernization ideas, they lack clarity on how to proceed and which risks to manage. They know change is necessary, but the path forward is often obscured by complexity and competing priorities. Without a clear framework, modernization efforts stall or become fragmented.

Based on real-world assessments, here are the common conditions we see at the start of most modernization journeys:

Challenge	Impact	Consequences without structure
 Large, fragmented portfolios	Often tens or hundreds of applications, each with complex dependencies	Reactive decisions or inertia due to fear of change
 Limited or outdated documentation	Hard to understand what systems do or how they interact	Opinion-driven choices
 Unclear ownership	Responsibility for legacy applications is dispersed or lost over time	Tool- or platform-led approaches
 Legacy technologies with growing risk	Unsupported platforms, security vulnerabilities, and technical debt	Difficult to justify or sequence modernization efforts
 Multiple competing initiatives	No shared priority model to guide sequencing or investment	A lack of prioritization leads to fragmented action

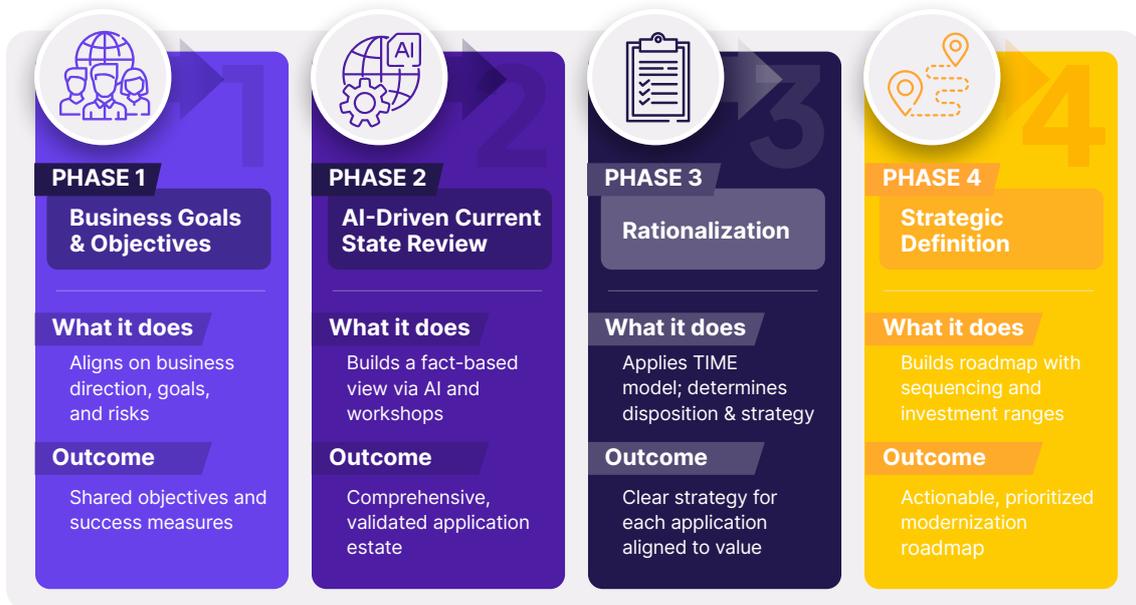
These challenges create uncertainty, making modernization feel risky, hard to justify, and difficult to sequence. Our data-driven SMA replaces ambiguity, opinions, agendas, and emotions with a clear, actionable path that:

- Aligns stakeholders
- Avoids premature modernization decisions
- Focuses effort where it delivers business value

Inside the SMA: A proven approach

The SMA uses a proven four-phase approach to turn complexity into clarity. Each phase is defined by clear boundaries so expectations are clear from the start.

Before the assessment begins, Ensono and client teams align on scope, stakeholders, application inventory access, and workshop scheduling. This ensures the four phases start with a shared foundation and the information needed for effective discovery.



After the four phases are complete, Ensono delivers an executive readout summarizing insights, decisions, modernization strategies, and a prioritized roadmap with next steps.

How AI accelerates the assessment

AI helps the SMA generate a clear, fact-based view of your applications by analyzing code directly to uncover architecture patterns, dependencies, modernization blockers, and risk indicators. This speeds discovery—especially in complex estates with limited documentation—and replaces assumptions with objective insight.

While AI accelerates discovery, the SMA relies on expert judgment and collaboration. Our tooling analyzes documentation, architecture assets, and the codebase itself—often bringing this information together for the first time in years in many organizations. Ensono architects interpret these AI-generated insights using deep modernization experience and proven best practices, supported by structured workshops with client teams. The result is a practical strategy shaped by people and strengthened by objective, portfolio-wide evidence.

Expertise powered by people, cutting-edge tools, and AI



Powerful AI to speed discovery and surface facts about the portfolio



Modernization experts who interpret insight and shape strategy



Proven IP and best practices built from real modernization programs



A collaborative, workshop-driven approach with client teams



A decision process grounded in experience, not automated scoring

What AI analyzes during the assessment

AI examines your application portfolio across several dimensions, including:



Technical complexity: Lines of code, database interactions, internal and external dependencies, architectural patterns, performance hotspots, and accumulated technical debt



Security and compliance posture: Hardcoded credentials, SQL injection risk, weak cryptography, authentication gaps, unprotected sensitive data, insecure configuration patterns, and compliance considerations—such as PCI DSS, HIPAA, ISO 27001, and GDPR



Cloud and architecture readiness: Framework versions, state management, filesystem use, legacy libraries, platform dependencies, architectural constraints, and blockers preventing adoption of cloud services or modernization patterns



Readiness for new value propositions: Where the current architecture enables or limits the ability to add new features, support new channels, improve user experience, or integrate emerging capabilities



Operational and delivery risk: Testing gaps, observability limitations, release and change fragility, unowned components, and dependency exposure that increase delivery risk



Functional insight: Automated extraction of what each application actually does, including business rules and behaviors that are often missing or outdated in documentation

Manual vs. AI-assisted assessment



Manual Assessment

Slow, subjective, incomplete



AI-Assisted Ensono SMA

Fast, deeper, evidence-based, portfolio-wide



How AI improves speed and accuracy

AI helps replace assumptions with objective insight by:

- Reverse-engineering purpose and capabilities directly from code
- Identifying patterns, risks, and modernization blockers faster than manual review
- Providing breadth across large estates where SME knowledge is limited or inconsistent
- Creating consistent scoring across business value, complexity, risk, and cloud readiness

What AI-generated outputs contribute to the roadmap

AI-generated insights help shape the [modernization strategy](#) by providing:

- Portfolio complexity scoring
- Risk and security findings mapped to severity, impact, and compliance requirements
- Cloud and architecture readiness scoring with clear modernization blockers
- Architecture patterns and dependency maps that inform modernization options
- Code-level insights that inform modernization options

What you'll get from your assessment

The SMA brings clarity to the questions that matter most—what your applications do, which deliver the most value, how they should evolve, and in what order change should happen.

Strategic outcomes		
Goal	Description	Success Criteria
Align modernization goals and drivers	Define business objectives, pain points, risks, and desired outcomes through structured workshops	Signed off objectives by the end of week 1
Establish face-based prioritization	Combine business insight with AI-generated technical findings to identify high-impact modernization priorities	Prioritization agreed across business and IT
Define modernization strategies	Recommend approaches (Rehost, Refactor, Rearchitect, Replace, Retire)	Strategy defined for every application
Deliver an executive modernization roadmap	Provide sequencing, transitional states, and high-level investment ranges	Executive-approved roadmap delivered

Operational outcomes		
Goal	Description	Success Criteria
Rationalize the portfolio	Identify duplicative, low-value, or retire-ready applications using the TIME model	Rationalization decisions agreed for 100% of in-scope apps
Establish clear phasing	Create quick wins and phased modernization pathways that minimize disruption	Phasing model validated with stakeholders
Baseline the application estate	Validate and extend inventory capturing purpose, architecture dependencies and risk	≥95% completeness and validated by SMEs

Technical outcomes		
Goal	Description	Success Criteria
Deepen technical understanding	AI-assisted analysis of documentation, architecture, and codebase to uncover complexity, dependencies, performance hotspots, and technical debt	Architecture and dependency views for priority applications
Assess cloud and architecture readiness	Identify modernization blockers, structural constraints, and opportunities for new value propositions	Cloud and architecture readiness scoring completed
Strengthen security and compliance visibility	Identify vulnerabilities and compliance findings (PCI DSS, HIPAA, ISO 27001, GDPR)	Risks and gaps mapped with severity and impact
Provide technical evidence for decisions	Deliver integration maps, architecture views, dependency diagrams, and code-level insights	Technical analysis pack delivered to engineering and architecture teams

Where the SMA fits in your modernization journey

The SMA is the starting point for modernization—providing clarity before committing to design or delivery. It acts as a bridge between where you are today and what you do next, reducing risk and aligning decisions to business priorities.

What the SMA does:

- Establishes business goals and drivers
- Builds a validated application inventory
- Defines dispositions and modernization strategies
- Produces a high-level roadmap with sequencing and cost ranges

The SMA does not include:

- Detailed solution architecture or code-level design
- Full implementation plans or resource estimates
- Execution of modernization activities

After the SMA, organizations typically move into:



Detailed design for priority applications informed by SMA insights



Phased execution aligned to business goals and roadmap sequencing



Portfolio reassessment as needs evolve

Start your modernization journey here

Ready to move from uncertainty to action? Our collaborative approach makes sure our SMA outputs are practical and actionable, giving you a prioritized roadmap that aligns with business goals and sets the stage for successful execution.

Whether your goal is reducing cost, accelerating transformation, or unlocking new capabilities, our SMA delivers the insight and structure to guide confident decisions.

Contact Ensono to learn more and start your assessment.

Let's connect