



Unlock business excellence with Virtusa's mainframe modernization

Experience enhanced agility, sustainability, and accelerated time to market on AWS

In today's dynamic business landscape, organizations relying on mainframe systems often grapple with challenges that impede operational efficiency and innovation. These hurdles, such as limited agility, escalating operational costs, and a scarcity of specialized skills, pose formidable obstacles to progress. Within this context, Mainframe Modernization emerges as a strategic imperative, offering organizations the opportunity to revitalize their core systems and drive innovation, cost-efficiency, and enhanced agility, especially when integrated with AWS Cloud services. As a trusted partner with a proven track record of over two and a half decades in mainframe modernization, Virtusa provides a clear path to modernization.

Our expertise and capabilities align your mainframe infrastructure with the evolving demands of the digital era, ensuring that you not only keep pace but stay ahead of the curve in the AWS cloud environment.

Why choose Virtusa?

Clients partner with Virtusa for their **mainframe modernization** needs because of the significant benefits and capabilities we deliver:

Key benefits



Improved efficiency

Enhanced operational performance, reduced downtime, and increased productivity



Innovation and agility

Empowering rapid innovation and adaptability to market changes



Risk mitigation

Expertise that ensures a smooth and secure modernization journey



Faster time to market

Accelerated delivery of new solutions and capabilities

Core capabilities



Proven expertise

25+ years of experience in modernizing mainframe and legacy systems.



Automation practices

Streamlined processes leveraging automation to reduce effort and boost efficiency.



Innovative frameworks

Tools for minimizing migration windows, canary deployments, and phased cutovers.



Multiple pathways

Tailored strategies to suit unique client needs, including re-platforming and retirement.



Strategic partnerships

Utilizing partnerships, accelerators, and proprietary assets for optimized outcomes.



GenAI solutions

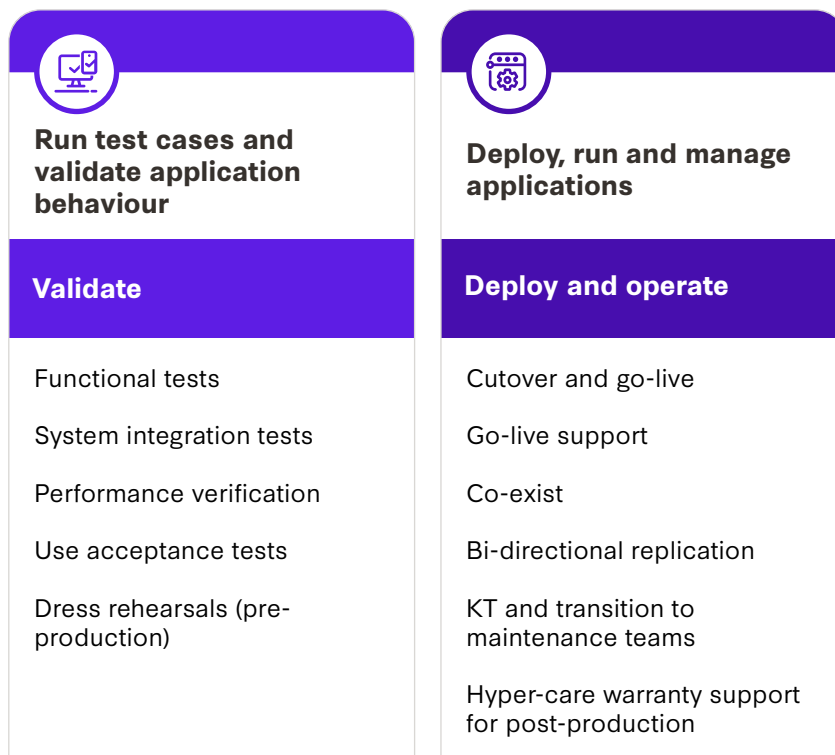
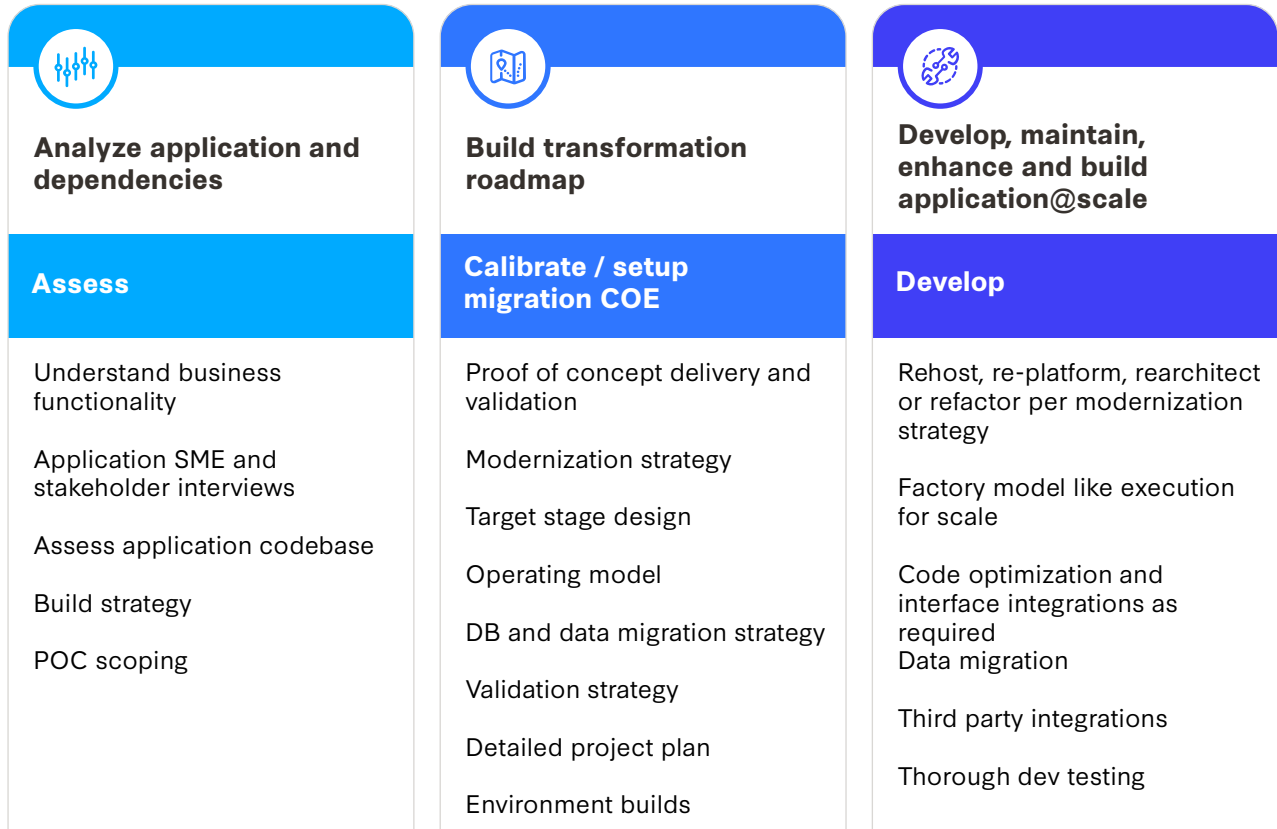
AI-driven tools for ideation, refactoring, and continuous modernization, delivering agility and cost efficiency.

By combining these strengths, Virtusa ensures transformative outcomes for our clients' modernization initiatives.

Our approach to mainframe modernization

Virtusa's approach to mainframe modernization combines precision with strategic expertise. We employ **data-first strategies, reverse engineering, tool-based discovery,** and **expert deployment** to achieve **near-zero downtime**. By blending modern tools with proven methodologies, we guide clients through their modernization journey with clarity, confidence, and efficiency.

Our solutions are tailored to enhance operational efficiency, foster innovation, and position clients for long-term competitiveness.



GenAI-powered modernization with Helio Enhance



One of the key challenges our clients face is migrating mainframe applications, like those built in COBOL, to Java—a process often hampered by slow reverse engineering (taking 20+ days per COBOL file) and a shortage of mainframe expertise

Virtusa addresses this with **Helio Enhance**, leveraging advanced genAI tools to accelerate and streamline modernization:

Code analysis with Helio CodeAnalyzer

Analyze the COBOL codebase to generate English documentation for stakeholders like Business Analysts, System Architects, and Developers

Evaluate migration feasibility and generate a tailored migration plan

Validate and update business rules before migration

Large Language Model (LLM) integration

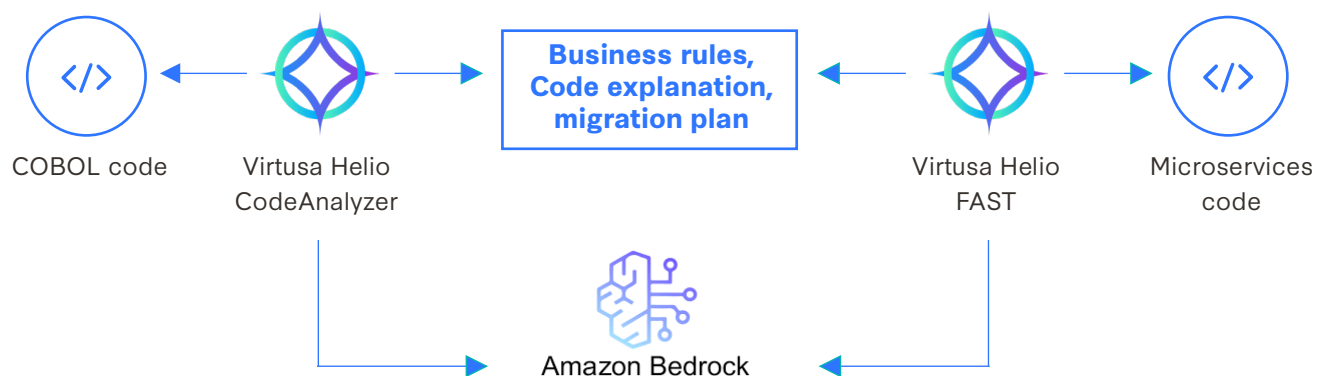
Powered by Amazon Bedrock, the LLM parses COBOL code into manageable sections, extracting variables, functions, and control structures

Automated code generation with Helio FAST

Uses a Low Code No Code (LCNC) platform with generative AI to transform business rules and code modules into REST services or microservices in Java (e.g., Spring Boot framework)

Supports business logic updates via built-in code suggestions

This end-to-end modernization approach significantly reduces manual effort, ensures accuracy, and empowers clients to modernize at scale with speed and agility.



A decade of innovation: Virtusa's strategic partnership with AWS

For over **12 years**, Virtusa has been at the forefront of delivering transformative mainframe modernization projects through a deep and strategic partnership with AWS. Leveraging **AWS Blu Age** and collaborating closely with **AWS ProServe**, we bring unparalleled expertise to modernization initiatives

As an **AWS Premier Services Partner** since 2017, Virtusa has achieved:

08

AWS competencies

06

Partner program

03

Service validations

300+

AWS customer projects delivered

Our **AWS ProServe Strategic Partner** role highlights our commitment to driving innovation and delivering measurable value, making Virtusa a trusted ally in achieving modernization and cloud transformation goals.

Success stories:

Mainframe data modernization:

Migrated a DB2 database and claims applications to AWS Cloud for an American multinational finance and insurance corporation, reducing mainframe licensing and maintenance costs by 40%

Digital transformation:

Transformed PF-related applications for an APAC client by migrating their mainframe platform to Java, achieving 60% effort savings, faster project execution, and quick deployment with Agile methodology

Legacy modernization and cloud transformation:

Reverse-engineered mainframe code for a global U.S. bank using Intellect Application Manager, hosting products on the cloud and cutting effort costs by nearly 50%

Core payment modernization:

Eliminated a legacy mainframe application for a leading North American bank by reverse-engineering and documenting business logic, achieving 50% cost savings with an exclusive tool

virtusa
Engineering First

Get in touch
Transform your business with Virtusa's expertise
Contact us at marketing@virtusa.com