ISG Provider Lens™

Mainframes – Services and Solutions

Mainframe Application Modernization and Transformation Services, U.S.

A research report comparing providers and software vendors strengths, challenges and competitive differentiators

Customized report courtesy of:

DXC TECHNOLOGY

QUADRANT REPORT | FEBRUARY 2023 | U.S.

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Compliance, agility and cost are driving the market

The mainframe market findings for 2023 are in line with client priorities identified in 2022 when ISG interviewed a group of ISG client executives in the U.S. to understand how the macroeconomic climate impacts their spending plans on technology services. The clients represented multiple industries, including insurance, retail, manufacturing and energy. Most clients are reprioritizing their technology budgets to focus on investments that produce results in the short term. At the same time, almost all organizations recognize the importance of technology modernization.

Trends in mainframe modernization are similar across all countries in the Americas because IBM and Unisys, the major suppliers of mainframe technology, support clients seamlessly across the region. In 2022, mainframe clients increased outsourcing and accelerated their mainframe modernization plans. Outsourcing enables clients to assess their spending and find opportunities to optimize operations, replace middleware tools and add automation. When opting for a mainframe-as-a-service (MFaaS) deal, additional savings are from opting for a shared environment and gains of scale that reduce licensing costs.

Modernization can provide additional benefits, and either starts with outsourcing or is set into motion after that. Modernizing applications running on mainframes improves application performance and reduces MIPS requirements, further reducing costs. New data solutions, such as the ones provided by Model9 and Precisely, can facilitate mainframe data access, enabling clients to move data from expensive mainframe storage to low-cost cloud storage, but without the need to replace or modify mainframe applications.

A few enterprises modernize COBOL to insert APIs and DevOps, with percentage utilization under 15 percent – the same trend observed in previous years. The new trend in mainframe

ESG is impacting **mainframe** modernization demand.

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modernization is data integration, with bi-directional integration or ETL to use analytics in the cloud. Data analytics continue to drive demand for mainframe modernizations.

Data analytics continue to drive demand for mainframe modernization. Mainframe migrations to the cloud have accelerated. Hyperscalers continue to invest in marketing and in developing partners' capabilities. AWS and Google are more active in promoting partner capabilities and in incentivizing clients to take modernization initiatives, in comparison with Azure that is not as intense in marketing, but equally relevant as a cloud destination.

Besides data access and cost savings, migrations to the cloud enable enterprises to standardize their application portfolio development workbench. Converted applications use the same DevOps and continuous integration tools, improving the agility and quality of the applications.

ESG is impacting mainframe modernization demand. Mainframe hardware can be energy efficient, but its surrounding technology is not. Also, updating client-owned data centers to comply with changing regulations can have cost implications. By migrating applications to the cloud, enterprises benefit from locations that use clean energy and are certified carbon neutral. Most cloud data centers do not meet this requirement, but all hyperscalers have committed to meeting their ESG targets before 2030. Concerns and regulations around environmental control vary by country; it is more important in the U.S., with a minor impact in Brazil.

The governance aspect of ESG is also pushing modernization. To comply with regulations around data availability, location and sovereignty, auditors may have doubts about the ability of legacy applications to meet privacy, data loss prevention, location and access control requirements. The old answer that mainframes are secure is not adequate for certification; the doubt surrounds the application. Most enterprises do not have the documentation or test cases to prove compliance. In some particular cases, data originating in one country should not be accessed, stored or processed in another. Replicating the mainframe in many locations to comply with regulations would be extremely expensive, but refactoring the applications to run in the cloud can be fast and involve low risk, besides producing the documentation and tests to prove compliance.

The cloud has proven to provide better scalability and performance than mainframes, with the additional benefit that it enables easy replication in different cloud regions, thus ensuring higher availability and business resilience.

Mainframe migration to the cloud involves cost reductions, technology modernization, controlled data access and compliance with increasing ESG regulations. Service providers have accumulated many success cases to predict the time required for modernization, ensure transparency on cost and risk factors, and have the required controls for incremental modernizations.

The providers of mainframe migrations to cloud are experiencing growth beyond their expectations. Any obstacles in expansion arise from the need for training and educating more practitioners to operate the application refactoring tools. Tools are innovative and use high-end technology and sophisticated software engineering methodologies.

The market is characterized by three modernization strategies:

- **Replatforming** adjusts an application code to run on emulators in the cloud or uses compilers to build executable code that runs natively on cloud virtual machines. This approach simplifies the process and can be scaled fast. However, legacy application source codes remain untouched and are not modernized.
- **Rewriting** uses compilers and translators to convert legacy languages to new ones, usually Java, C# or .Net. This approach retains application logic and behavior. Most tools generate readable and maintainable code, allowing clients to maintain applications in the new language. A few solutions do not generate a readable code and all subsequent changes are made in the legacy source code. Rewriting is popular among vendors.

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- **Reengineering** uses automated assessment tools that extract business rules and design the application flow, which is useful for documentation. It creates code requirements that AI-assisted tools interpret to write a new code. The full process is automated but manual intervention is needed to correct the interpretations used to write the new code.

All methods require data extraction from the mainframe databases and for files to be loaded into new databases and cloud storage. Testing automation is fundamental for success and risk control. Vendors run tests multiple times to achieve success. Tests need to include application, performance and database conversion.

Many vendors and service providers compare the cost of mainframe infrastructure with cloud infrastructure. It is noted that mainframe system, database and storage licensing comprise most of the savings from any modernization initiative.

These factors, among other drivers, impact the modernization software market.

Vendors are passionate about their solutions and often tend to overlook their limitations. Clients should always prioritize consulting, project management and risk management to bring projects that do not deliver the desired outcomes to a stop. No single tool can address all legacy languages and modernization options, requiring clients to select a toolset that involves several vendors.

A cloud infrastructure offers high performance and scale to run sophisticated modernization tools, where vendors use cloud capacity to further improve their tools. A major innovation this year is Google Dual Run, a solution developed in partnership with Micro Focus that enables clients to compare a mainframe application in production with the same application running on Google Cloud. It is not a simple setup, but has proven to be valuable to highlight application performance, integration and accuracy before removing the application from the mainframe.

AWS announced its mainframe migration service in 2022. It aims to leverage the AWS Marketplace to deliver Everything as a Service, including modernization tools and consulting services. The company is assessing and certifying partners to ensure usability, capacity and the quality of outcomes and service levels.

The focused activities of the hyperscalers in the mainframe modernization market portends that it will continue to accelerate, with mainframes gradually moving to the cloud. It is too early to say that all mainframes will migrate. At the current pace of migration it would take years, perhaps more than a decade, to migrate all mainframes. However, small modifications in IBM licensing terms and hardware prices could change the game entirely.

Data analytics continue to drive demand for mainframe modernization.

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Provider Positioning

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	Mainframe Modernization Services	Mainframe Application Modernization and Transformation Services, U.S.	Mainframe Application Modernization and Transformation Services, Brazil	Mainframe as a Service (MFaaS)	Mainframe Operations	Mainframe Application Modernization Software
Accenture	Not In	Leader	Leader	Not In	Not In	Not In
Adaptigent	Not In	Not In	Not In	Not In	Not In	Contender
Advanced	Not In	Product Challenger	Not In	Not In	Not In	Leader
Astadia	Not In	Not In	Not In	Not In	Not In	Leader
Avanade (Asysco)	Not In	Product Challenger	Not In	Not In	Not In	Leader
Atos	Product Challenger	Leader	Contender	Product Challenger	Product Challenger	Not In
AveriSource	Not In	Not In	Not In	Not In	Not In	Product Challenger
AWS	Not In	Not In	Not In	Not In	Not In	Leader
BMC	Contender	Not In	Not In	Not In	Not In	Not In
BRQ	Not In	Not In	Contender	Not In	Not In	Not In

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Provider Positioning

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	Mainframe Modernization Services	Mainframe Application Modernization and Transformation Services, U.S.	Mainframe Application Modernization and Transformation Services, Brazil	Mainframe as a Service (MFaaS)	Mainframe Operations	Mainframe Application Modernization Software
Capgemini	Leader	Leader	Product Challenger	Product Challenger	Leader	Not In
CloudFrame	Not In	Not In	Not In	Not In	Not In	Contender
Cognizant	Market Challenger	Product Challenger	Not In	Leader	Product Challenger	Not In
Compass	Not In	Not In	Contender	Not In	Not In	Not In
CPT Global	Product Challenger	Product Challenger	Not In	Not In	Not In	Not In
Deloitte	Not In	Product Challenger	Contender	Not In	Not In	Not In
DXC Technology	Rising Star ★	Leader	Product Challenger	Leader	Leader	Not In
Ensono	Leader	Product Challenger	Not In	Leader	Leader	Not In
FNTS	Not In	Not In	Not In	Rising Star ★	Contender	Not In
FreeSoft	Not In	Not In	Not In	Not In	Not In	Product Challenger

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	Mainframe Modernization Services	Mainframe Application Modernization and Transformation Services, U.S.	Mainframe Application Modernization and Transformation Services, Brazil	Mainframe as a Service (MFaaS)	Mainframe Operations	Mainframe Application Modernization Software
Fujitsu	Not In	Product Challenger	Not In	Not In	Not In	Not In
GFT	Contender	Product Challenger	Leader	Not In	Not In	Not In
Google	Not In	Not In	Not In	Not In	Not In	Leader
HCLTech	Leader	Leader	Not In	Product Challenger	Product Challenger	Contender
Heirloom	Not In	Not In	Not In	Not In	Not In	Leader
Hexaware	Not In	Rising Star ★	Not In	Not In	Not In	Not In
HPE	Not In	Product Challenger	Product Challenger	Not In	Not In	Contender
IBM	Not In	Not In	Not In	Not In	Not In	Contender
IKAN	Not In	Not In	Not In	Not In	Not In	Contender
Infosys	Leader	Leader	Product Challenger	Product Challenger	Leader	Not In

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Provider Positioning

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	Mainframe Modernization Services	Mainframe Application Modernization and Transformation Services, U.S.	Mainframe Application Modernization and Transformation Services, Brazil	Mainframe as a Service (MFaaS)	Mainframe Operations	Mainframe Application Modernization Software
INNOVA	Not In	Contender	Not In	Not In	Not In	Not In
Kyndryl	Leader	Contender	Product Challenger	Leader	Leader	Not In
LRS	Not In	Not In	Not In	Not In	Not In	Contender
LTIMindtree	Product Challenger	Leader	Not In	Product Challenger	Product Challenger	Not In
LzLabs	Not In	Not In	Not In	Not In	Not In	Product Challenger
Maintec	Not In	Not In	Not In	Contender	Contender	Not In
Micro Focus	Not In	Not In	Not In	Not In	Not In	Leader
mLogica	Not In	Not In	Not In	Not In	Not In	Rising Star ★
Model9	Not In	Not In	Not In	Not In	Not In	Contender
MOST	Not In	Contender	Not In	Not In	Not In	Contender

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Provider Positioning

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	Mainframe Modernization Services	Mainframe Application Modernization and Transformation Services, U.S.	Mainframe Application Modernization and Transformation Services, Brazil	Mainframe as a Service (MFaaS)	Mainframe Operations	Mainframe Application Modernization Software
Mphasis	Product Challenger	Leader	Not In	Not In	Contender	Not In
Natsoft	Not In	Not In	Not In	Not In	Not In	Product Challenger
NTT DATA	Not In	Contender	Contender	Not In	Not In	Contender
PSR	Not In	Not In	Not In	Contender	Contender	Not In
Raincode	Not In	Not In	Not In	Not In	Not In	Contender
Sonda	Not In	Not In	Contender	Not In	Not In	Not In
TCS	Leader	Leader	Product Challenger	Not In	Leader	Product Challenger
Tech Mahindra	Product Challenger	Product Challenger	Product Challenger	Not In	Not In	Not In
TmaxSoft	Not In	Not In	Not In	Not In	Not In	Leader
TSRI	Not In	Not In	Not In	Not In	Not In	Leader

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Provider Positioning

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	Mainframe Modernization Services	Mainframe Application Modernization and Transformation Services, U.S.	Mainframe Application Modernization and Transformation Services, Brazil	Mainframe as a Service (MFaaS)	Mainframe Operations	Mainframe Application Modernization Software
TIVIT	Not In	Not In	Contender	Not In	Not In	Not In
T-Systems	Not In	Not In	Contender	Not In	Not In	Not In
Unisys	Product Challenger	Not In	Not In	Not In	Product Challenger	Not In
UST	Contender	Product Challenger	Not In	Not In	Contender	Not In
Verang	Not In	Contender	Not In	Not In	Not In	Contender
Wipro	Leader	Leader	Product Challenger	Product Challenger	Leader	Not In

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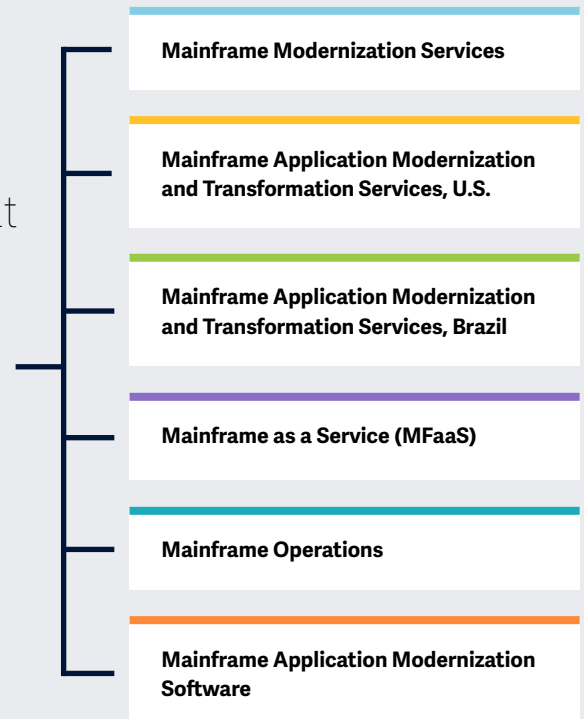
This study focuses on what ISG perceives as most critical in 2023 for **Mainframes Services and Solutions**.

Simplified Illustration Source: ISG 2023



Definition

Digital business transformation has been pushing companies to become more agile in adapting to market changes. The cloud provides the core agility elements, including cloud-native AI, machine learning, serverless computing, database as a service, data services, full automation and many SaaS options to improve business performance.

The more advanced enterprises are prioritizing mainframe modernization. Mainframe systems are complex and slow to change, thus pushing back against agility. These enterprises have two options. They can migrate their legacy applications to the cloud or adapt the old applications with APIs, microservices and DevOps.

Mainframe systems combine high-performance hardware, software tools, and large, individually programmed applications that are complex to replace. Thus, modernization is not a trivial task.

The market offers automation tools to transform legacy applications, without loss in functionality, into new ones in the cloud.

Such solutions enable the standardization of application languages and databases, including open-source tools.

However, many enterprises are not ready for a full exit from mainframes. They may prefer outsourcing or pay-as-you-go (PAYG) models to enable mainframe-as-a-service – thus running their legacy applications on cloud-like mainframe data centers.

This study assesses service providers that modernize mainframe applications or convert applications to run in the cloud, and those that offer mainframe outsourcing and MFaaS. Software vendors of automation tools for refactoring, rehosting, replatforming, rewriting and reengineering applications are also evaluated.

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Scope of the Report

In this ISG Provider Lens™ quadrant study, ISG includes the following five quadrants: Mainframe Modernization Services; Mainframe Application Modernization and Transformation Services; Mainframe as a Service (MFaaS); Mainframe Operations; and Mainframe Application Modernization Software.
The trends identified and other findings largely apply across the region. However, ISG did add a national quadrant analysis on Mainframe Application Modernization and Transformation Services for Brazil because of specific market conditions there.

This ISG Provider Lens™ study offers IT-decision makers:

- Transparency on the strengths and weaknesses of relevant providers and software vendors
- A differentiated positioning of providers by segments
- Focus on regional markets

ISG studies serve as the basis for important decision-making in terms of positioning, key relationships and go-to-market considerations. ISG advisors and enterprise clients also use information from these reports to evaluate their existing vendor relationships and potential engagements.

Provider Classifications

The provider position reflects the suitability of IT providers and software vendors for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries.
In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions IT providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between $20 million and $999 million with central headquarters in the respective country, usually privately owned.
- **Large Accounts:** Multinational companies with 5,000 or more employees or revenue above US$1 billion, with activities worldwide and globally distributed decision-making structures.

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product Challenger, Market Challenger and Contender), and the providers are positioned accordingly. Each ISG Provider Lens quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star.

Number of providers in each quadrant: ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

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Provider Classifications: Quadrant Key

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/ services and a follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

★ **Rising Stars** have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not in means the service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.

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Mainframe Application Modernization and Transformation Services, U.S.

Mainframe Application Modernization and Transformation Services, U.S.

Who Should Read This Section

This report is relevant to enterprises in the U.S. for evaluating providers that offer services for transforming and modernizing mainframe applications to a contemporary environment.

In this quadrant report, ISG assesses the current market positioning of providers of mainframe application modernization and transformation services.

Enterprises in the U.S. typically are looking for mainframe modernization that can deliver cost savings with flexibility and can adapt to dynamic demands such as capacity change and MIPS consumption. Most enterprises are facing the challenge of deciding on modernization strategy that is suitable for their business needs. Mainframe modernization projects in the U.S. are faced with the challenge of hiring the right professionals along with the required infrastructure.

Enterprises are on the lookout for providers with proprietary integrated toolsets for supporting the transformation of core applications and to integrate automation capabilities through the use of analytics and machine learning for testing. Providers in this space have the ability to rewrite legacy programming language applications written in languages such as COBOL, RPG and Fortran that typically run on mainframes. Enterprises wish to hasten the process of transforming and modernizing current technologies, processes and infrastructure, and expect providers to accelerate delivery for core business systems.

CIOs should read this report to understand the strengths and weaknesses of providers, including the way they employ the latest technologies to deliver reliable offerings.

CTOs should read this report to understand the mainframe modernization capabilities of providers to ensure suitable technology integration into products, services and business administration.

Tech leaders should read this report to understand the competing providers in the mainframe market, in terms of their offerings, innovations and talent.

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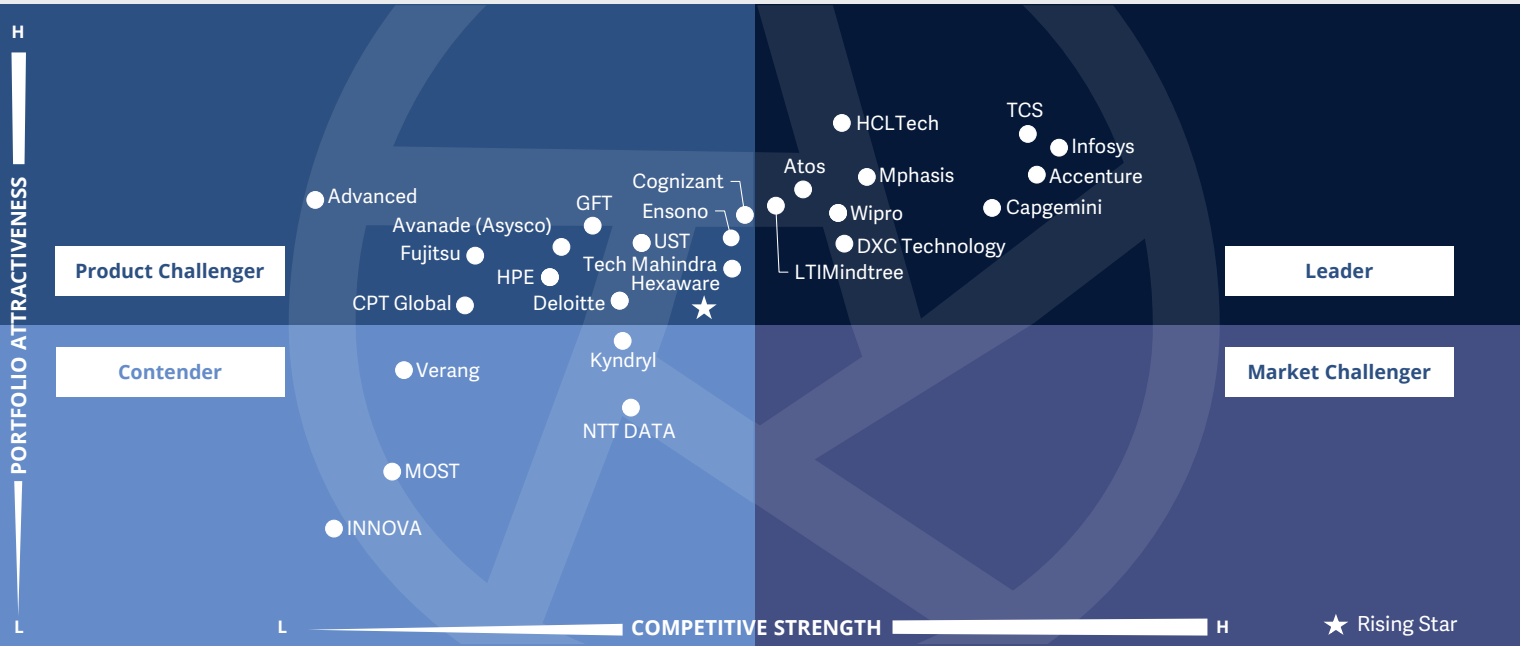
ISG Provider Lens™

Source: ISG RESEARCH

Mainframes – Services and Solutions
Mainframe Application Modernization and Transformation Services

U.S. 2023



This quadrant assesses the providers of **application modernization services** that transform applications and databases to **migrate mainframes to the cloud** in the U.S.

Pedro L Bicudo Maschio

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Definition

This quadrant evaluates providers of application services that use advanced application modernization methodologies to assess and rewrite legacy programming language applications. These providers partner with tool vendors to automate code writing, data conversion, database migration and cloud migration.

Typical legacy applications use COBOL, RPG, Fortran, PL/1, Natural and other languages that typically run on mainframes. The capacity of covering a large number of legacy languages contributes to the service provider rating. Thus, providers that use more vendor tools may have better appraisals.

The main target programming languages may include Java, .Net, C# and Python, among others. The number of destination languages does not impact a provider's rating because past studies show a prevalence of Java and .Net, which most providers can address. Providers may also use emulators and compilers to replatform rather than rewrite (not converting the source code), and this does not impact their rating.

The service provider can offer refactor, rehost, encapsulate, replatform, rewrite or reengineer strategies. More options provide a better rating. A complete transformation should include user interface (UI) translation services that can eliminate green screens while introducing a modern graphic UI for a better user experience (UX).

Eligibility Criteria

1. The service provider should be able to reverse engineer legacy applications to provide application logic **documentation.**
2. It must be able to **automate code conversion** with tools to reduce the time required to transform the applications.
3. Optionally, it may offer emulation systems to run legacy applications on other platforms without refactoring code. However, the provider should offer convincing case studies that **demonstrate the viability** of the emulation to be considered.
4. Services must include application **assessment,** application **decoupling**, system **architecture, API development** and future-state application governance.
5. The provider should offer phased transformation with **robust project management, testing** and quality assurance.
6. The transformation should enable the enterprise client to operate **agile development and maintenance** with CI/CD automation.
7. Legacy platforms can include IBM Z, AS/400, HP, Cray, Fujitsu and Unisys mainframes.

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Observations

The mainframe application modernization market accelerated in 2022 with an increasing number of service providers competing in the space. AWS and Google are pushing more partners to participate in their mainframe migration programs, with Azure less focused on establishing new partnerships. However, most mainframe migrations target AWS and Azure.

More companies now wish to adhere to ESG principles, requiring them to reduce their IT carbon footprint. Some are, therefore, opting to migrate their mainframes from on-premises data centers to colocation facilities that offer clean energy or have carbon neutrality programs, while others are choosing to migrate their applications to the cloud and decommissioning their mainframes.

Privacy and data location regulations are also impacting mainframes that centralize data from many countries. To decentralize operations, companies would need to replicate their mainframes, which would be counterproductive. Companies can replatform to the cloud to decentralize and meet new compliance requirements. For instance, Google Dual Run, launched in 2022, enables concurrent operations on the mainframe and in the cloud, enabling auditing companies to attest security and compliance.

Large service providers are responding rapidly to market demand. In 2022, Kyndryl announced a new partnership with Google and developed data pipes with Microsoft, enabling mainframe data to be accessed from those clouds. Also in 2022, Avanade acquired mainframe modernization tools vendor Asysco, and AWS completed the acquisition of Blue Age, a reengineering toolset. Asysco was a service provider in this quadrant last year. For this reason, for the first time, we have Accenture and Avanade positioned on the same quadrant.

From the 56 companies assessed for this study, 27 have qualified for this quadrant with 10 being Leaders and one a Rising Star.

accenture

Accenture has improved its position with strong partnerships with hyperscalers and tool modernization vendors. Its mainframe migration go-to-market policies are a part of its cloud-first strategy. Its large scale of operations and strong presence among large accounts in the U.S. places it at the forefront of the largest and most demanding modernization opportunities in the market.

Atos

Atos has a robust toolset, including proprietary and commercial tools to migrate mainframes to the cloud. It works with all hyperscalers but has stronger cases with AWS in the U.S. Its services do not cease when application conversions are completed. The company commits to project outcomes in three-year transformation deals that deliver stable operations in the cloud.

Capgemini

Capgemini leverages a vast partner ecosystem to accelerate mainframe migrations. With more than 100 completed mainframe decommissioning projects, it demonstrates both experience and capacity, which attracts hyperscalers' interest in sharing client references. It also has strong partnerships with IBM and Micro Focus.

DXC TECHNOLOGY

DXC Technology has entered the Leaders' quadrant because of its strong partnership with hyperscalers, which, in turn, is driving new leads. It has long been delivering mainframe modernization services to midrange platforms and has increased the number of cases in the cloud. It has a proprietary toolset to automate transformations and can integrate vendor tools when necessary.

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HCLTech

HCLTech offers comprehensive transformations with its FENIX 2.0 frameworks and Advantage Modernize. Its heavy use of automation ensures consistent delivery of quality outcomes. Its toolset integrates with leading modernization tools to cover all legacy languages and complex transformations. The company runs detailed assessments to align modernization and business priorities.

Infosys

Infosys' legacy application modernization services are a part of a broader portfolio of application services. It generates a complete overview of an application portfolio to prioritize a modernization program. Advanced project and risk management tools ensure zero-disruption modernizations, using the best-fit solution of rehosting, refactoring or reengineering.

LTIMindtree

LTIMindtree uses more than 30 accelerators and vendor tools to provide options and cover all legacy clients' requirements. It has many success cases and showcases experience in migrating mainframes to the cloud. It is an agile organization and can support large accounts, but has more cases in the midmarket.

Mphasis

Mphasis offers three-year application portfolio modernization engagements and commits to quality improvements and cost reductions. It plans several project releases that enable its self-funding modernization approach. Mphasis uses proven modernization tools and has an experienced delivery team to ensure client satisfaction.

TCS TATA CONSULTANCY SERVICES

TCS leverages MasterCraft for automating a modernization program. It also uses many partner tools, enabling a best-fit approach to each application. TCS is a certified mainframe migration partner of AWS, Azure and Google, providing it priority access to innovation and best practices. The company focuses on large accounts.

wipro

Wipro uses the proprietary tools, ModerniZ, devNXT and AssureNXT, to automate its migration program. It has partnerships with leading tool vendors to provide clients with many modernization options. After the acquisition of Capco, in 2021, Wipro has elevated its business consulting capabilities and offers modernizations with a focus on business outcomes.

HEXAWARE

Hexaware is a Rising Star. It has refurbished its application services portfolio to create a dedicated organization for mainframe modernizations. It is focused and nimble and offers a pragmatic approach with its Amaze for Legacy automation toolset. Hexaware differentiates itself in this space by creating a data catalog before deciding on modernization priorities.

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Leader

"DXC Technology has comprehensive modernization offerings with clear roadmaps to migrate mainframes to the cloud."

Pedro L Bicudo Maschio

DXC Technology

Overview

DXC Technology is headquartered in Virginia, U.S., and operates in 70 countries. It has more than 130,000 employees across 130 global offices. In FY22, the company generated $16.3 billion in revenue. DXC Technology is a new Leader in this quadrant. In a renovated go-to-market strategy, it is using experienced experts and a full-scope portfolio to boost joint market development with AWS, Google and Azure, which is contributing to its success in this market.

Strengths

High execution capacity: DXC has more than 5,600 experts managing mainframe infrastructure and applications, exhibiting a deep understanding of clients' challenges and concerns. It handles more than 65,000 workload transformations annually and has completed mainframe migrations of nearly 400,000 MIPS.

Top cloud partnerships: DXC Technology is a long-time partner of Microsoft and holds top accreditations on Azure. It is a launch partner of the AWS Mainframe Modernization competency and the Google Dual-Run modernization solution. The company collaborates with mainframe migration programs and participates in hyperscalers' innovations.

Robust toolset: DXC's Technology's tools include Quick Transformation Engine (QTE), DXC Modernization Studio and a customized GNU COBOL compiler for rapid and detailed application assessment and code conversions. It delivers rehosting with partners, Micro Focus, TmaxSoft, Raincode and LzLabs, and refactoring with AWS Blu Age, Heirloom, Google G4 and its own QTE. DXC Technology enhances quality with manual rewrites and rigorous testing to ensure functional equivalence.

Caution

DXC Technology needs to improve its market influence to be recognized as a top provider of mainframe application modernization services. Increased participation in events and demonstration of new case studies could help the company make it to the shortlist of providers for mainframe-to-cloud migrations.

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Appendix

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The ISG Provider Lens™ 2023 Mainframes – Services and Solutions analyzes the relevant software vendors/service providers in the Americas, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

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The research and analysis presented in this report includes research from the ISG Provider Lens program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of December 2022, for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars ($US) unless noted.

The study was divided into the following steps:

1. Definition of Mainframes – Services and Solutions market
2. Use of questionnaire-based surveys of service providers/ vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities & use cases
4. Leverage ISG's internal databases & advisor knowledge & experience (wherever applicable)
5. Use of Star of Excellence CX-Data
6. Detailed analysis & evaluation of services & service documentation based on the facts & figures received from providers & other sources.
7. Use of the following key evaluation criteria:
   * Strategy & vision
   * Tech Innovation
   * Brand awareness and presence in the market
   * Sales and partner landscape
   * Breadth and depth of portfolio of services offered
   * CX and Recommendation

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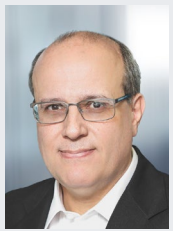

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Distinguished analyst and author, Pedro Maschio brings extensive experience in the research of the SEMEA (Southern Europe Middle East and Africa) and Latin America service markets. With more than 30 years of experience in sourcing, he has developed vendor assessments plus contract restructuring, services scope and IT benchmarking programs for diverse vertical markets in the Americas and APAC.

Before joining ISG, Pedro was a partner of TGT Consult and managing vice president at Gartner Inc., responsible for the consulting business in APAC and Latin America.

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Manoj is a research analyst at ISG and supports ISG Provider Lens™ studies on Mainframes Services & Solutions, Cloud Native Services & Solutions and Public Cloud Data Center Solution and Services. He also supports the lead analysts of multiple regions in the research process. Prior to this role, he supported the ROI process in the sales intelligence platform and was an individual contributor in handling research requirements for advanced technologies in different sectors. He has considerable expertise in predicting the automation impact by considering certain parameters such as productivity, efficiency and time reduction. During his tenure, he has supported research authors and authored Enterprise Context and Global Summary reports with market trends and insights.

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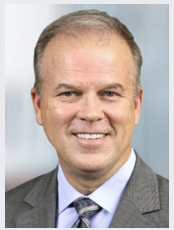

Jan Erik Aase

Partner and Global Head – ISG Provider Lens™

Mr. Aase brings extensive experience in the implementation and research of service integration and management of both IT and business processes. With over 35 years of experience, he is highly skilled at analyzing vendor governance trends and methodologies, identifying inefficiencies in current processes, and advising the industry. Jan Erik has experience on all four sides of the sourcing and vendor governance lifecycle - as a client, an industry analyst, a service provider and an advisor.

Now as a research director, principal analyst and global head of ISG Provider Lens™, he is very well positioned to assess and report on the state of the industry and make recommendations for both enterprises and service provider clients.

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ISG Provider Lens™

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