2025 Mainframe User Survey

Profile of Respondents

The 2025 Mainframe User Survey, conducted from November 2024 to January 2025, received double the number of respondents compared to the previous year. Most participants responded via individual email invitations from Planet Mainframe and the Mainframe Virtual User Groups for CICS, Db2, and IMS. Duplicate IP addresses were removed, and incomplete but quality-reviewed submissions were included.

North America accounted for the largest share of respondents (44%), followed by Europe (35%). The Asia/Pacific region slightly decreased (12%), while South America (7%) and the Middle East/Africa (3%) saw slight increases.

Technology companies (Software Vendors and Systems Integrators) led responses at over 45%, followed by Finance and Banking (24%), Insurance (7%), and Government (6%). Other industries collectively accounted for 15%.

Multi-Purpose Mainframers

Intending to capture seniority in technical roles, we also allowed respondents to select multiple roles. While the data didn't strongly indicate seniority levels within technical roles, it highlighted the versatility required of mainframe professionals:

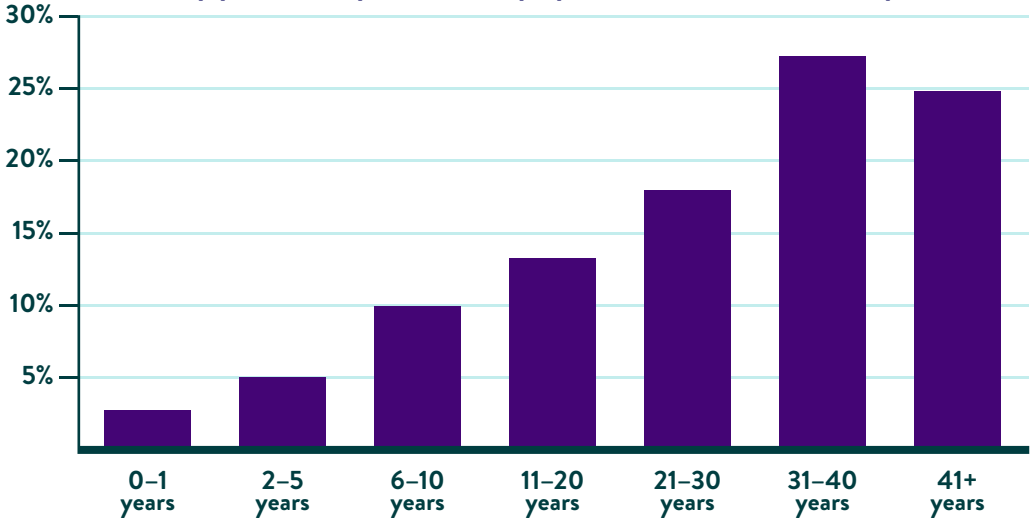
- 30% of respondents hold at least two technical roles.
- 14% balance three or more roles.
- Systems Administrators frequently serve as System Programmers and, in 30% of cases, also as Security Specialists.

This data reinforces what we often hear in the industry—mainframe professionals are not just specialists; they are multi-skilled technologists managing complex, interwoven responsibilities within their organizations.

Sticking Around for Decades

The survey confirms the stability and longevity of a mainframe career. An impressive 70% have worked in the field for 20+ years, and 27% have been in mainframe roles for 31-40 years. That kind of career duration is rare in technology, where rapid shifts and short tenures are more common.

How many years have you been employed in mainframe-related positions?



Several factors contribute to the remarkable longevity in our field:

- Demand Outpacing Supply – Companies rely on experienced professionals to keep their systems running smoothly, yet the talent pipeline—while improving—still isn't keeping pace with demand. Companies are offering strong incentives for employees to stay on past retirement.
- Generational Shifts – Many younger IT professionals are drawn to newer technologies, which raises the average age and tenure of mainframe specialists.
- A Strong Professional Network – The tight-knit mainframe ecosystem fosters a sense of loyalty and belonging, making it more than just a job—it's a community people want to stay in.

The Mainframe's Role in Business Operations

The Arcati Mainframe Survey tracks the mainframe's role in business operations and revenue production across industries. To do this, respondents estimate what percentage of their organization's business revenue is generated by mainframe applications.

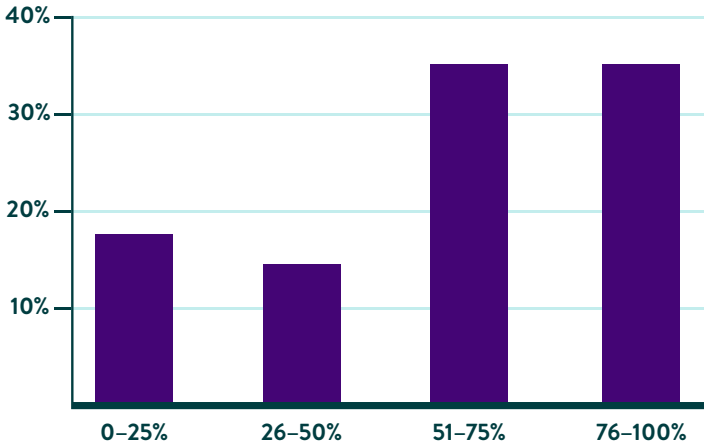
Over 67% reported that over half of their organization's revenue is tied to mainframe applications. A noticeable 30% declined to answer, likely due to a lack of visibility or company policies.

The mainframe's continued dominance in high-volume transactions and core business processes remains evident. Even in organizations where the mainframe isn't perceived as the central system, it remains deeply embedded in operations, reinforcing its strategic importance.

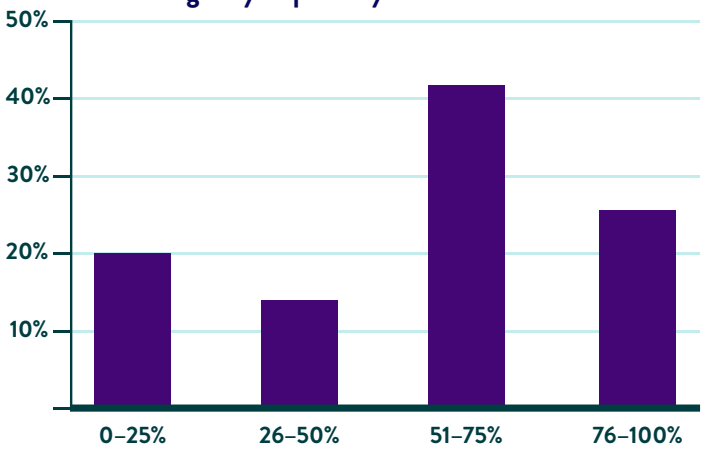
Beyond revenue, we also explored how extensively organizations rely on mainframes for running applications. As shown to the right, 67% of respondents reported that most of their organization's applications still run on mainframe systems.

Even among organizations where mainframe applications account for 25% or less of total workloads, the technology still plays a critical role in mission-essential functions. This suggests that despite ongoing modernization efforts, the mainframe remains indispensable, especially in hybrid IT environments. As businesses continue integrating cloud and distributed solutions, the challenge will be striking the right balance between modernization and maintaining the reliability of mainframe systems.

What percentage of your business revenue (transaction if government) is handled by mainframe applications?



What percentage of your revenue-generating applications are running fully or partially on the mainframe?



www.pivotor.com

Excellence in z/OS Performance Reporting

Your Mainframe Specs

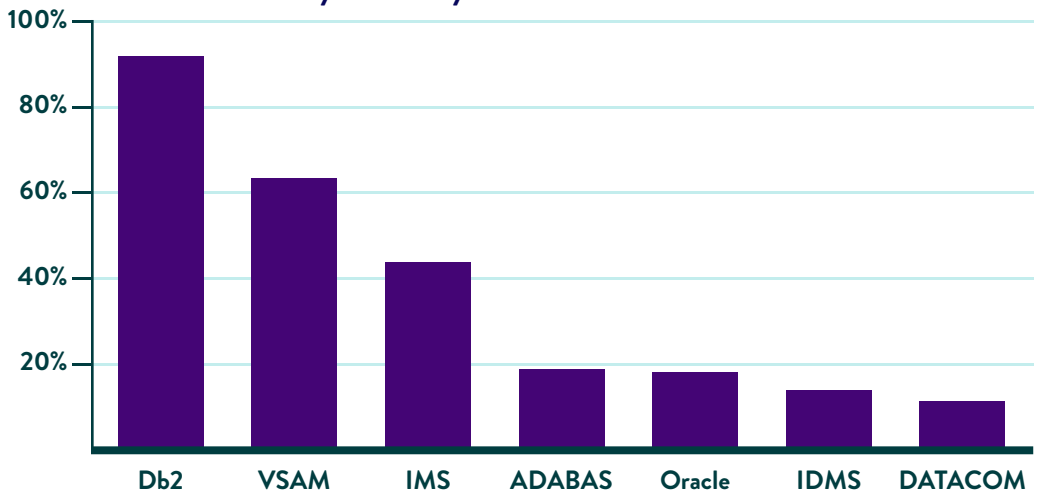
Note: The survey question referenced z/OS 2.5 as the "Current" release, though z/OS 3.1 is now the latest version. For this report, we assume that respondents who selected "Current (2.5)" referred to z/OS 3.1, though their responses may include users of both versions.

Survey results show that 69% of respondents are running either z/OS 3.1 or z/OS 2.5, highlighting the widespread adoption of IBM's most recent mainframe operating systems. However, 20% of users are still on z/OS 2.4, suggesting that a portion of organizations have yet to upgrade. Much older versions are in use - even OS/390 (2%), a legacy operating system phased out over two decades ago—underscoring the incredible longevity of mainframe environments.

Db2 Reigns Supreme

Db2, IBM's relational database, continues to be a popular choice for enterprises requiring strong transactional integrity, SQL support, and integration with modern analytics and AI workloads. It's not surprising that over 92% of our respondents reported using it.

What database do you use in your mainframe environment?



Db2 compatibility with VSAM (Virtual Storage Access Method), the second-most selected database, makes it a great choice for businesses modernizing legacy applications while maintaining data consistency. In fact, 67% of companies using Db2 also use VSAM.

IMS often works in tandem with Db2, but where IMS handles high-speed transactions, Db2 manages complex queries and reporting. Just under half of those Db2 users are also utilizing IMS.

The following table provides a comparative overview of the most widely used databases among our respondents:

DATABASE	TYPE	STRENGTHS	BEST USE CASES	WORKS WELL WITH
Db2	Relational (RDBMS)	SQL support, high performance, analytics integration	Complex queries, reporting, modern applications	VSAM, IMS
IMS	Hierarchical	Ultra-fast transactions, high-volume processing	Banking, insurance, real-time transactions	Db2, VSAM
IDMS	Network	Strong data relationships, high efficiency	Legacy applications, performance-critical workloads	DATACOM
VSAM	File Storage	Fast data retrieval, efficient indexing	Data storage for Db2, IMS, and other databases	Db2, IMS
DATACOM	Network	High-volume transaction processing, reliable	Mission-critical workloads, large-scale systems	IDMS
ADABAS	Inverted List	Fast access, scalable	Legacy applications, paired with Natural language	Natural
Oracle	Relational (RDBMS)	Enterprise-level SQL support, cloud compatibility	Hybrid architectures, cloud integration	Distributed & cloud systems

When it comes to Db2 versions, the majority of respondents (56%) are currently running Db2 13, the latest version released on May 31, 2022. Meanwhile, 35% are still operating on Db2 12, indicating a gradual but steady transition to the newer release.

Notably, shortly after our survey launched, IBM introduced Db2 12.1 (often informally referred to as Db2 14) on November 14, 2024. Given this, adoption trends may shift in the coming months as organizations evaluate their upgrade plans.

Looking ahead, 54% of respondents with insight into their organization's strategy reported plans to upgrade their Db2 environment, while 46% had no immediate plans. These findings suggest that while many organizations are actively modernizing, a significant portion remains cautious, likely balancing upgrade costs, stability, and integration with existing workloads.

The Growth and Decline of Mainframe Usage

MIPS remains the primary measure of mainframe capacity, though it doesn't always reflect actual workload performance. This year's survey reveals shifting MIPS distribution, with organizations scaling up or optimizing efficiency.

Smaller mainframe deployments (1-500 MIPS) more than doubled from 10% in 2024 to 24% in 2025, possibly due to new adopters, workload modernization, or companies downsizing while maintaining critical functions. Meanwhile, mid-sized shops (501-1,000 MIPS) dropped sharply from 20% to just 5%, suggesting organizations in this range either expand into higher MIPS tiers or consolidate operations through hybrid solutions.

MEGACRYPTION

z/OS Encryption
and Cryptography Toolkit

Crypto^z

z/OS Cryptography
Diagnostic Tool

ERQ
RACF to the Power of Easy

RACF Administration, Reporting
and Custom Programming

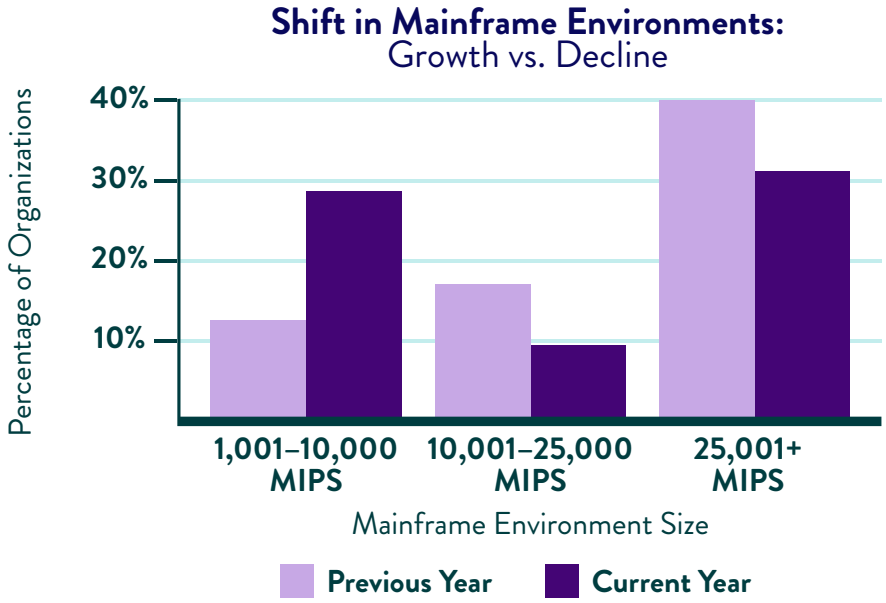
ERA
Event. Report. Audit.

RACF Security Assessment
and Reporting

ReACT

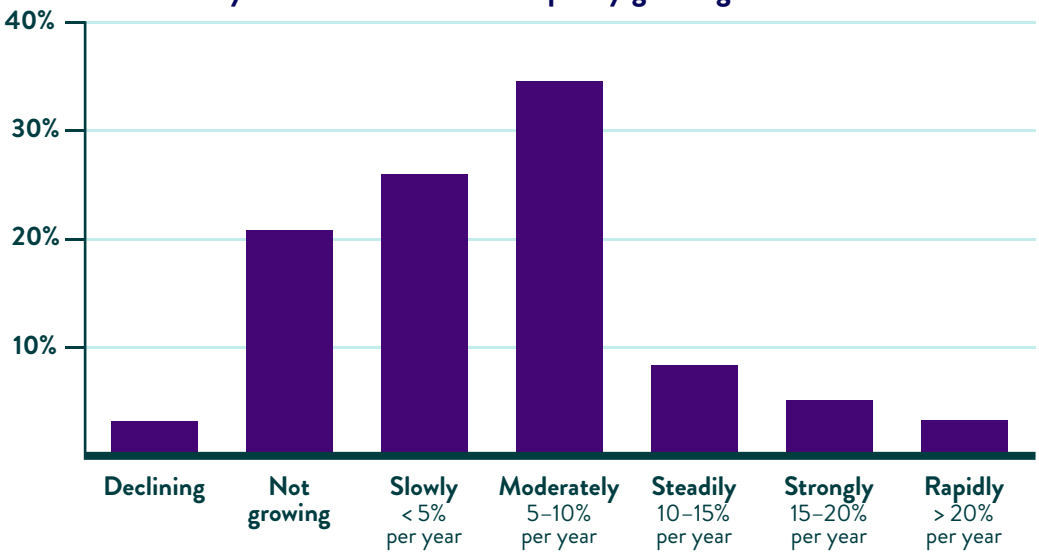
Self-Service Password Reset
and Synchronization

Outstanding US-Based Technical Support
Free 30-Day Evaluations Available
800-662-6090 | www.ASPG.com



The 1,001-10,000 MIPS category grew significantly, more than doubling from 13% to 28%, indicating substantial investment in transaction-heavy workloads and modernization. At the high end, 10,001-25,000 MIPS declined from 17% to 9%, and the 25,001+ category shrank from 40% to 30%, suggesting large enterprises are restructuring rather than simply reducing capacity. Instead of outright downsizing, they are likely optimizing workloads, leveraging cloud-based extensions, or integrating specialty engines like zIIP and IFLs.

How fast is your mainframe MIPS capacity growing?



Regarding MIPS growth, most organizations are expanding gradually rather than scaling aggressively. Nearly 7% reported a decline, while 21% saw no growth, meaning 28% are maintaining or reducing capacity, often for cost or efficiency reasons. The majority (57%) are growing cautiously, with 24% increasing under 5% per year and 33% growing at 5-10% annually. Only 8% are expanding at 10-15% per year, with even fewer exceeding that rate.

The continued growth in the 1,001-10,000 MIPS range reinforces that mainframes remain essential for enterprise computing, even as companies work to balance performance, cost, and scalability.

What Do These Trends Mean for the Mainframe Landscape?

This year's data show a split in mainframe strategies—some organizations are expanding to support growing workloads, while others are restructuring, optimizing, or shifting to hybrid models. The continued growth of the 1,001-10,000 MIPS category reinforces the mainframe's ongoing role in enterprise computing, even as companies work to balance performance, cost, and scalability.

When asked what's driving mainframe growth, respondents pointed to organic business expansion (61%), new applications and workloads (43%), and mergers and acquisitions. Digital transformation continues to fuel demand for high-throughput computing, making the mainframe essential for transactions, e-commerce, and large-scale operations.

Organizations aren't just scaling existing workloads—many are introducing new services that leverage mainframe infrastructure. Of those citing business expansion, 39% also pointed to new applications, showing that modernization is a key driver.

However, not all organizations are growing their mainframe environments. More than 50% of those selecting "Other" reported no growth or declines, with some migrating workloads to distributed and open systems. This trend plays out in multiple ways:

- **Migration & Optimization**: Some organizations shift workloads to cloud or hybrid environments, often as part of real-time processing modernization.
- **Digital Transformation Variance**: While many companies are expanding, some reallocate digital workloads off the mainframe, contributing to stagnation in certain areas.
- **Workload Redistribution**: The decline in 10,001-25,000 and 25,001+ MIPS categories suggests organizations are optimizing rather than simply growing their mainframe footprint.

When asked how workloads are divided across platforms, responses confirmed that core, high-volume, transaction-heavy processes remain on the mainframe. At the same time, UI, analytics, and newer business applications are increasingly offloaded to distributed or cloud platforms.

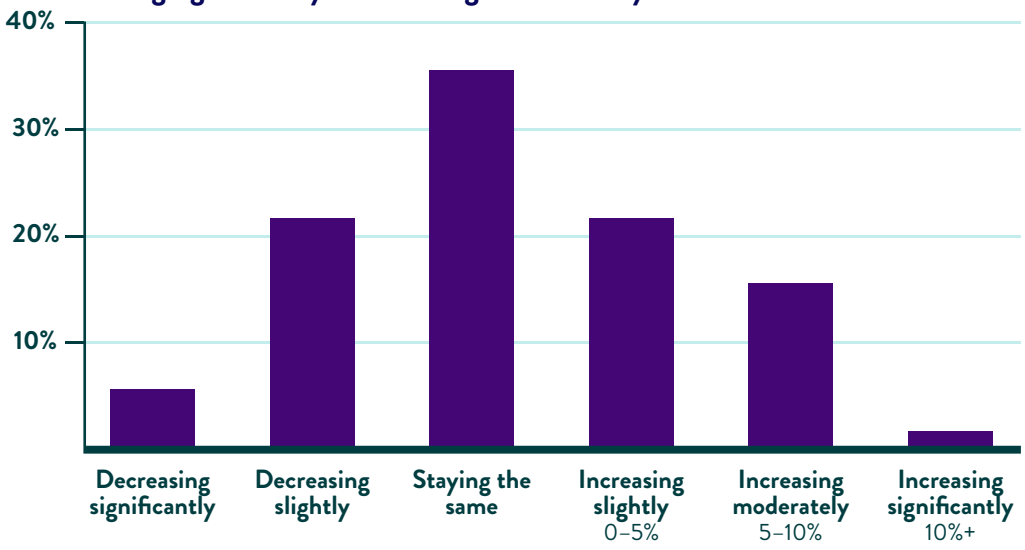
Budgeting for the Mainframe

Mainframe-related costs remain a significant part of IT budgets, but organizations are taking a measured approach to spending across infrastructure, software, and staffing. While investments in IBM Z hardware and software are increasing, workforce budgets remain stable or cautiously rising, reflecting a balance between modernization and cost control.

Spending on IBM Z hardware and software is up for 52% of organizations, with most seeing modest growth (0-10%) and only 5% reporting increases over 10%. Despite modernization efforts, mainframes remain a significant cost, with 51% of organizations dedicating at least 26% of their IT budget to mainframe-related expenses. However, 11% allocate just 0-5%, suggesting a reduced reliance on mainframes or that mainframe costs are just a tiny part of a larger enterprise IT strategy.

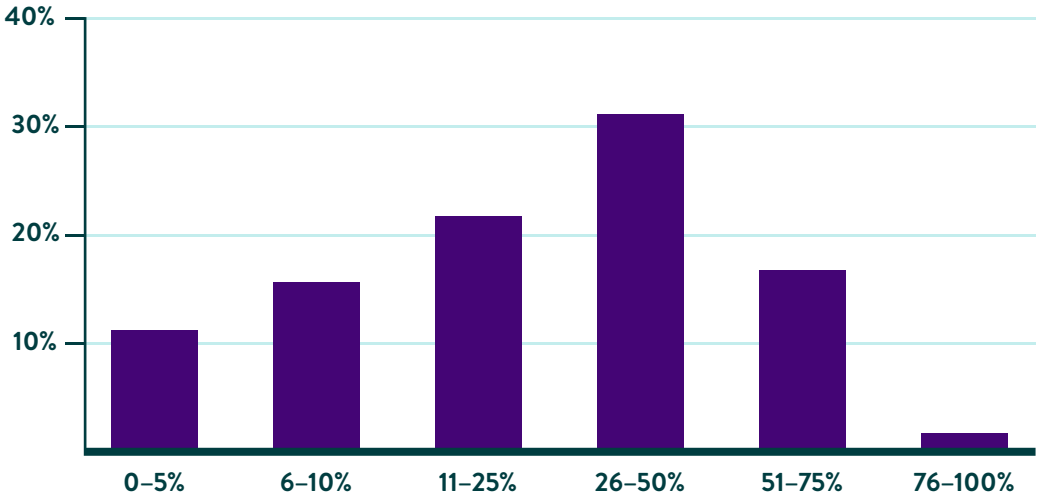
While infrastructure spending is rising, staffing budgets tell a different story. 26% of respondents reported cuts to workforce spending, likely due to automation, outsourcing, or hybrid IT strategies. Meanwhile, 35% kept staffing budgets steady, and 39% reported slight to moderate increases (0-10%), with only 1% expanding by more than 10%.

How has your organization's spending on staffing and resources for managing IBM Z systems changed in recent years?



Economic challenges in 2024 affected IT hiring across North America and Europe, with slow growth, hiring freezes, and rising competition for skilled roles. The tech industry saw a 30% decline in software development job postings, leading companies to prioritize essential roles.

What proportion of your total IT budget is spent on mainframe-related costs?

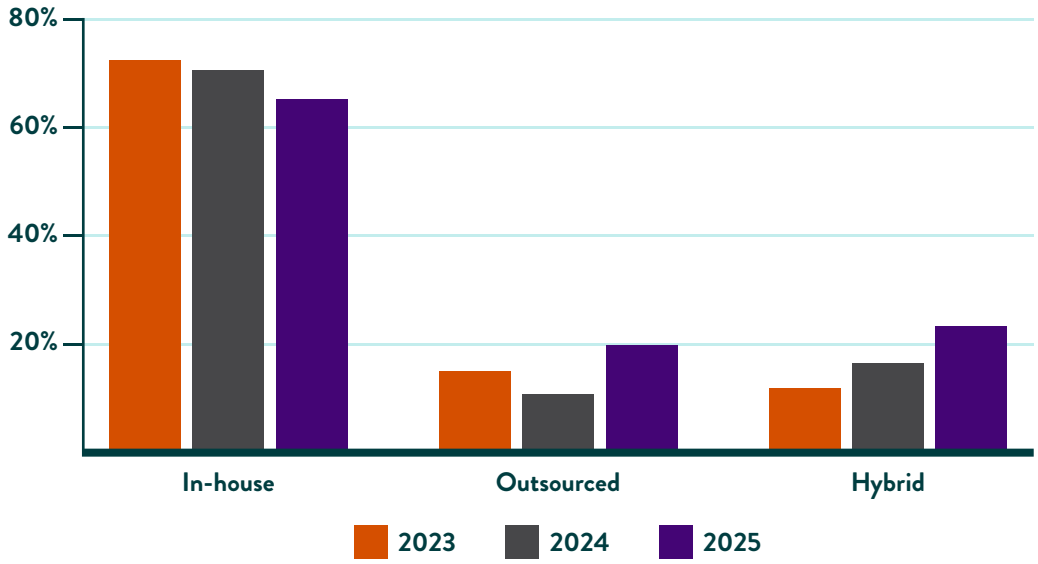


Despite these challenges, mainframe spending remains resilient, with organizations modernizing IBM Z environments while carefully managing workforce costs. Companies focus on efficiency and long-term sustainability, ensuring that mainframes remain critical to their IT strategy without unnecessary budget expansion.

Who's Managing the Mainframe

Responses reveal a slight decline in entirely in-house mainframe management, dropping from 70% in 2024 to 66% in 2025. While most organizations still manage their mainframe data centers, the trend suggests a gradual shift toward outsourcing and hybrid approaches.

Are your mainframe data center systems managed in-house or outsourced?



Outsourcing doubled from 9% in 2024 to 20% in 2025, indicating organizations increasingly use third-party providers for mainframe operations to cut costs, address skill gaps, or integrate cloud services. Hybrid models rose the last three years to 24% in 2025. This reflects a trend towards combining in-house management with outsourcing for cost savings and control over critical workloads.

The Forrester Mainframe Developer Study confirms the shift toward hybrid IT models, with 56% of mainframe developers having experience in cloud or distributed platforms and increasing demand for modern IDEs, DevOps toolchains, and test automation.

The Reliable and Critical mainframe

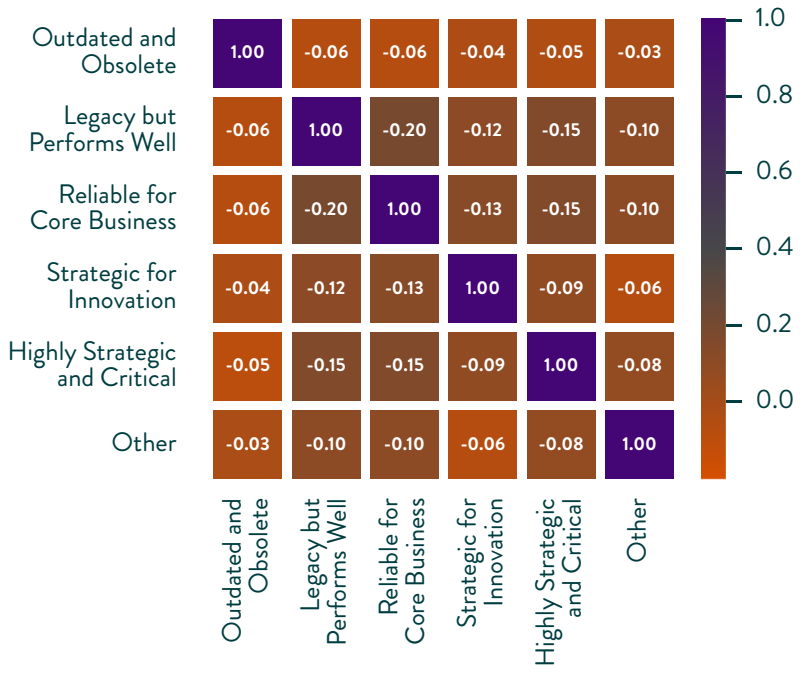
Even among users, mainframe perceptions are divided. While many organizations recognize the mainframe as reliable and essential for core business operations, **it is also associated with legacy systems rather than innovation. As the matrix correlation shows**, organizations that view the mainframe as highly strategic are more likley to see it as an enabler of business innovation, suggesting that modernization efforts play a key role in shaping sentiment. However, fewer organizations make this connection, indicating that while the mainframe remains a critical asset, it is not always perceived as future-ready.

The "Outdated and Obsolete" sentiment is relatively isolated, with weak correlations to other perspectives. This suggests that while skepticism exists, it is not the prevailing view. Instead, the challenge lies in overcoming the "legacy" label. Without modernization and integration with AI, cloud, and automation, organizations may struggle to shift perceptions.

The opportunity lies in repositioning the mainframe as an adaptable, future-proof technology. Companies investing in talent, innovation, and modernization will sustain their infrastructure – and change the narrative from legacy maintenance to strategic evolution. The future of the mainframe depends not just on its capabilities but on how well organizations communicate its value.

The Future of Mainframe Strategy

Correlation Matrix of Mainframe Perceptions



Survey results show a divided approach to mainframe strategy. While some organizations plan to maintain or modernize, others are migrating workloads or reducing reliance.

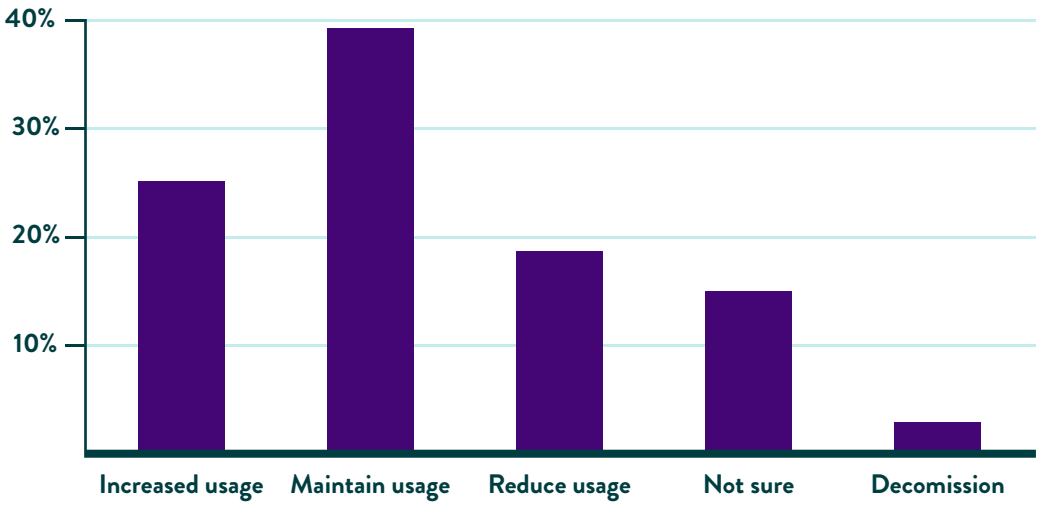
It's a near 50/50 split on workload migration—52% keeping workloads on the mainframe, 48% planning to migrate. Key drivers include shifting to SAP HANA, modern ERP platforms, and cloud services like AWS, Azure, and OpenShift, often in phases. Rising hardware/software costs and talent shortages push some toward Linux and distributed systems. Migration is often leadership-driven, with mixed success—one respondent noted a fixed annual migration target for 20 years.

However, modernization-in-place remains strong. 59% expect to modernize core applications on the mainframe, while 51% plan to maintain existing applications. Repatriation is rare—only 24% move workloads back to the mainframe, while 60% report no returns, indicating that once workloads leave, they rarely come back.

New development on IBM Z is limited—67% do not plan new applications. However, almost one-third continue investing, particularly in API integrations, AI, Java conversions, and industry-specific applications (mainly banking and finance).

The long-term future of mainframes depends on how well modernization efforts keep pace with evolving cost, performance, and IT flexibility demands.

What are your organization's plans for mainframe usage in the next 5 years?



Linux

Linux adoption and Java-based applications continue to grow. 32% of respondents use IBM LinuxOne, primarily for development/testing (48%), web/app servers (48%), containerized applications (44%), and database management (40%). Over 50% use LinuxOne for at least three of these cases.

Top Workloads on LinuxOne

Development and testing environments	48%
Web and application servers	48%
Containerized applications (e.g., Kubernetes, OpenShift)	44%
Database management	40%
Core transaction processing	28%
Data analytics or AI workloads	20%
Security and compliance-focused applications	16%
IDAA	8%
Monitoring and Deployment Tools	4%

Hybrid deployments dominate: 54% use LinuxOne in hybrid setups (on-prem/cloud), and another 54% integrate it with IBM Z, reinforcing its role in mission-critical workloads.

Meanwhile, 30% run LinuxOne as a standalone system, and 25% use it for minimal-integration cross-platform applications, showcasing flexibility.

Most organizations use LinuxOne as part of a hybrid or IBM Z strategy, while fewer deploy it independently or for niche workloads.

Analytics in Mainframe Environments

The 2025 survey highlights widespread analytics adoption, focusing on performance, capacity planning, and security.

Performance monitoring (76%) remains the top use case, reinforcing its role in system efficiency. Capacity planning (58%) reflects a growing emphasis on resource management. Security monitoring (27%) and anomaly detection (24%) show increased focus on risk mitigation.

Incident response (28%) demonstrates rising reliance on analytics-driven intelligence, while AI/ML adoption (6%) remains niche. Chargeback and cross-platform comparisons remain underutilized. However, growth in security, forecasting, and optimization signals a maturing analytics strategy.

Top 10 Uses for Analytics


Performance monitoring & optimization


Cost optimization & resource management


Capacity planning & forecasting


Security and compliance monitoring


Real-time operational intelligence


Business intelligence & reporting


Incident response & troubleshooting


Storage and workload management


Anomaly detection & predictive maintenance


Application performance management

The most selected analytics tools align closely with the top use cases, showing strong industry trends in performance optimization, capacity planning, and security monitoring.

Use Case	Top Tools Used & Percentage
Performance Monitoring & Optimization	IBM ZPCA (22%), IDAA (26%) IntelliMagic Vision (15%)
Capacity Planning & Forecasting	IBM ZPCA (22%), SAS on z/OS (26%)
Real-Time Operational Intelligence	IDAA (26%), Splunk for Mainframe (18%)
Incident Response & Troubleshooting	Splunk for Mainframe (18%) BMC AMI Ops Insight (19%)
Security & Compliance Monitoring	BMC AMI Ops Insight (19%) Syncsort Ironstream (9%)
Cost Optimization & Resource Management	Broadcom MICS (4%), Easytrieve (18%)
Anomaly Detection & Predictive Maintenance	IBM Watson ML (9%), SAS on z/OS (26%)
Application Performance Management	IBM z/OS Data Gatherer (15%) Rocket Analytics (10%)
Business Intelligence & Reporting	Easytrieve (18%), SAS on z/OS (26%)
Storage & Workload Management	IBM IntelliMagic Vision (15%) Broadcom MICS (4%)

Providing Real Time System Management Tools for z/OS Systems

actionsoftware.com/

Organizations prioritize performance, capacity, and security analytics, with IBM ZPCA, IDAA, and Splunk leading adoption. Predictive analytics and AI tools remain low but have future potential.

Emerging Technologies

Organizations prioritize modernization, AI, and security while integrating open-source frameworks like Zowe and DevOps.

Top Trends in Mainframe Technology Adoption

- Modernization & Integration (61%)
- AI & Machine Learning (48%)
- Security Enhancements (45%)
- Open Source & Zowe (41%)
- DevOps & CI/CD (31%)
- Quantum-Safe Cryptography (23%)
- Observability & Cloud-Native Development (10-14%)
- Blockchain Integration (6%)

Currently, 39% have modernization tools in production, and 35% have implemented security enhancements like encryption and zero trust. AI/ML adoption is in early stages, with only 13% in production, while 32% are planning and 22% are testing. AI's impact on IBM Z is unclear—53% don't know, and opinions are split on whether workloads will move on (19%) or off (17%) IBM Z.

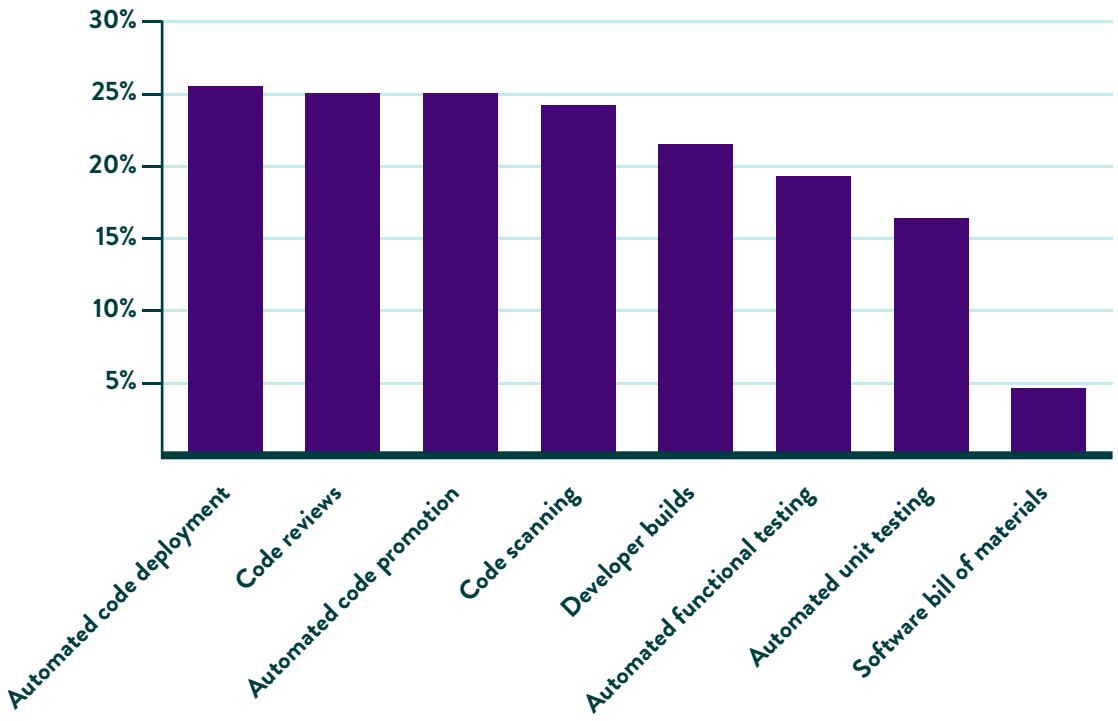
AI's IMPACT on IBM Z

Tendency to pull workload onto IBM Z	19%
Tendency to pull workload off IBM Z	17%
No plans to adopt AI	11%
Don't know	53%

DevOps on the Mainframe

DevOps is gaining traction but remains a work in progress. While code scanning (28%) and code reviews (27%) are adopted, only 25% classify their DevOps maturity as high. Automated testing and deployment are still developing, with unit testing (37%), functional testing (35%), and code deployment (27%) progressing slowly.

Notably, Software Bill of Materials (SBOM) adoption lags, with 63% having no plans, raising concerns about supply chain security.



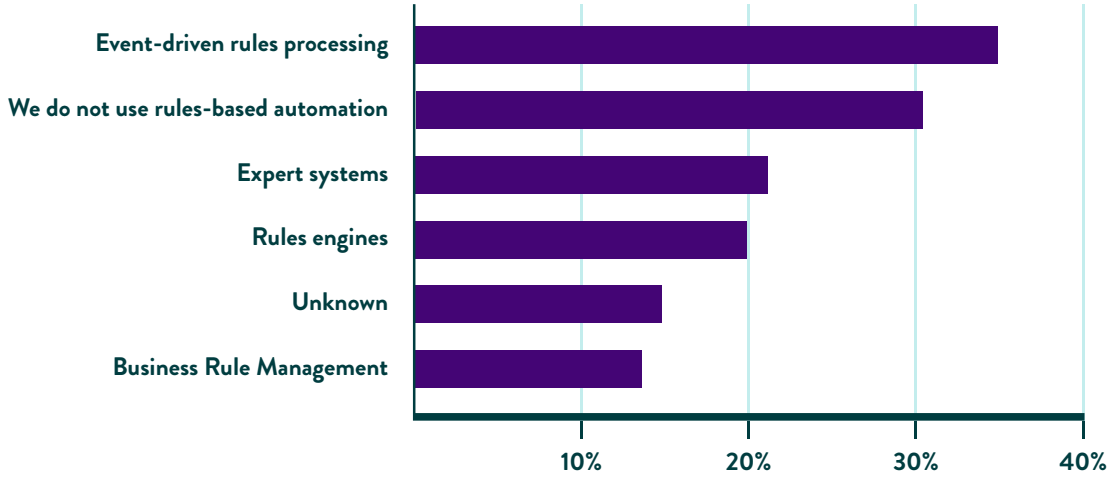
Rules-Based Automation & AI

Adoption of rules-based processing is uneven—Almost half (45%) don't use it or are unsure. Meanwhile 34% use event-driven rules, and 23% leverage expert systems, but advanced AI-driven automation (3%) remains rare. Policy-based management (15%) and rule engines (19%) indicate some movement toward structured automation.

As modernization and AI adoption grow, intelligent automation will likely streamline operations and strengthen compliance.

The Forrester Mainframe Developer Study highlights automation as the top priority for accelerating development, with AI-assisted coding and chatbot-based code explanation emerging but still in early adoption.

What are the main techniques your organization uses for rules-based automation on mainframe systems?



Security in the Mainframe Environment

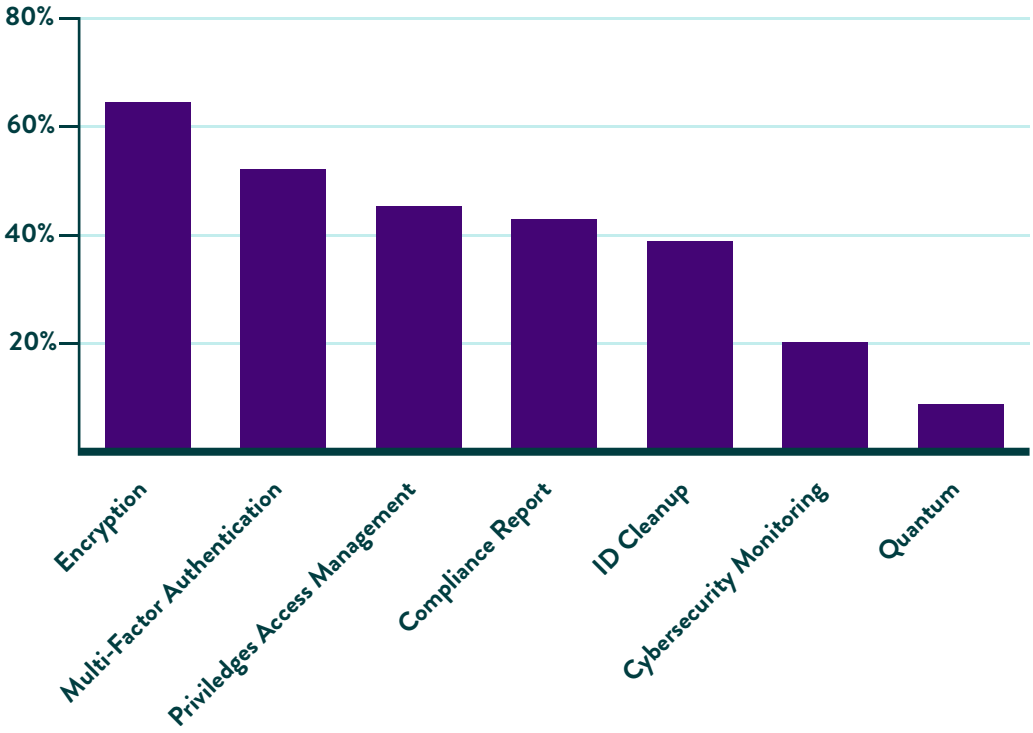
Despite the general belief that mainframes are highly secure, 53% of users express concern, though only 5% are "apprehensive." Evolving threats continue to drive security improvements.

Top 5 Respondent Risk Areas

- Data breaches
- Unplanned downtime on mainframe systems
- Ransomware attacks on mainframe systems
- Compromised Credentials
- Insider threats

Security and availability go hand in hand, as 53% also worry about downtime.

Which Mainframe Security Tools and Capabilities are you using?



However, gaps remain—21% report insufficient cybersecurity monitoring. Quantum-safe security adoption is low (7%), suggesting organizations are slow to adopt next-gen security measures.

Organizations must proactively strengthen mainframe security as cyber threats evolve and regulations tighten.

The "2024 Mainframe Market Pulse: Cybersecurity and Compliance Insights Study" found that government and financial services sectors, which heavily rely on mainframes, reported 4.7 times more security vulnerabilities (lacking proper controls) due to the integration of external technologies with the mainframe.

In the whitepaper, "Mainframe Cybersecurity and Compliance Demands Continuous Vigilance", we learn that 89% of middle managers found cyber security compliance somewhat (57%) to extremely (32%) challenging.

VERTALI®

NEW FOR 2025

HOW CYBER RESILIENT ARE YOU?

CAN YOU PREVENT, WITHSTAND AND RECOVER?

Non-invasive Cyber Resiliency Reviews by world-class security experts

- Review data backup, protection and restoration, data ownership, and more
- Risk-rate your systems and assess mainframe security policy and procedures
- Cyber Resiliency Roadmap recommends areas for improvement
- Connect critical business outcomes to targeted strategies and action

www.vertali.com | info@vertali.com

FIND OUT MORE: https://vertali.com/security/cyber-resiliency/

linkedin.com/company/vertali/
facebook.com/VertaliMF
twitter.com/vert_MF
instagram.com/vertali_mf
youtube.com/@Vertali_Mainframe

VERTALI®

Talent and Training

Organizations must upskill employees while attracting new talent to meet growing modernization needs. This year's survey highlights the most in-demand skills and strategies for workforce development.

The most in-demand mainframe skills are:

- System administration and performance tuning (62%) — critical for infrastructure management
- Advanced programming (55%) and mainframe basics (52%)
- Security skills (49%) — slightly lower, possibly due to reliance on external security teams

Organizations use multiple strategies, with internal training (77%) leading, followed by external training (46%), hiring (38%), and vendor partnerships (38%).

When it comes to practical training methods, online courses (55%) and in-house training programs (54%) lead the way, while vendor-led training (35%) and certifications (29%) play a secondary role.

Hiring remains active but measured.

- 50% plan to hire for mainframe roles in the next year; 20% within 1-2 years
- 23% have no hiring plans, 17% are uncertain
- Non-mainframe hiring is slightly lower (48% active, 34% uncertain)

The data emphasize the importance of internal upskilling, with organizations prioritizing flexible learning solutions and vendor collaborations to develop and retain mainframe talent.

Non-mainframe hiring

Hiring for non-mainframe IT roles is slightly lower, with 48% actively recruiting and 34% uncertain about future needs.

The data highlights the importance of upskilling mainframe teams. While hiring continues, internal development remains the priority, with organizations investing in training, online education, and vendor collaborations to build and retain talent.

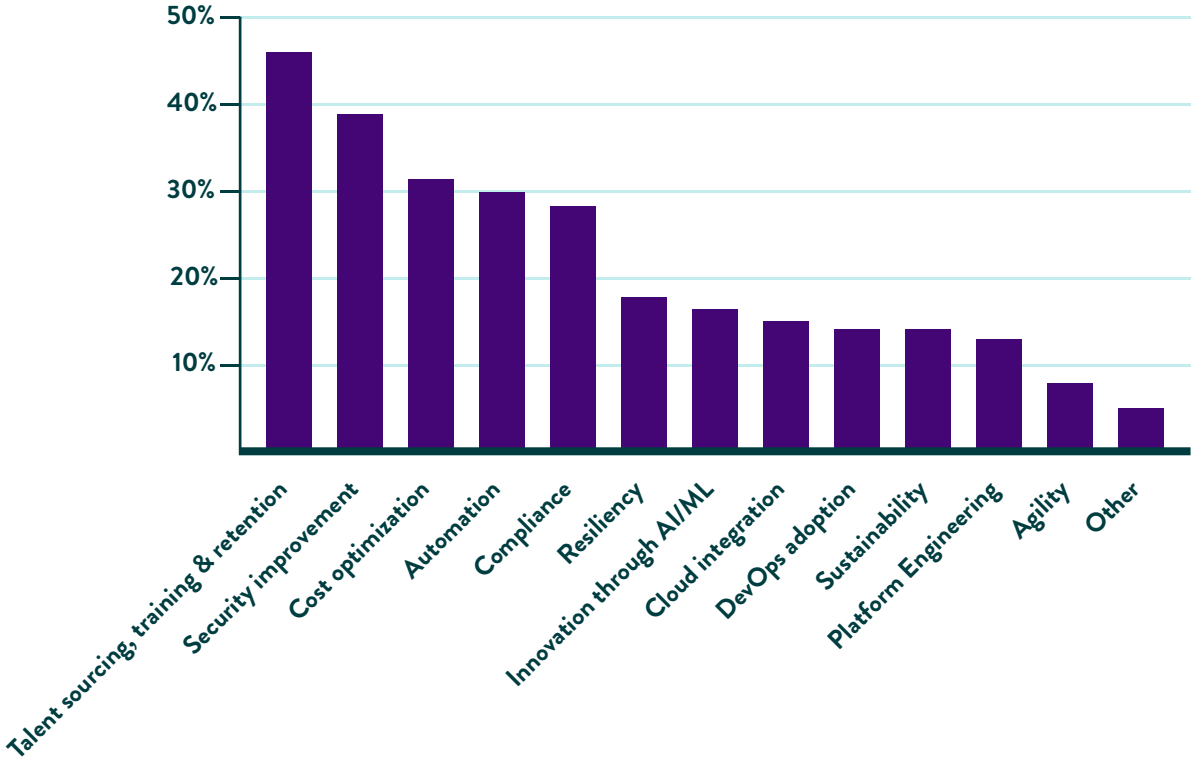
Priorities and Hurdles to Success

While organizations prioritize modernization, security, and talent retention, challenges like skills gaps, costs, and misconceptions hinder progress. Addressing these barriers is key to maximizing mainframe investments.

- Talent sourcing and retention (46%) are the top priorities, yet 62% cite a skills gap. Internal training, partnerships, and certifications are essential to closing this gap.
- Security (39%) remains a focus, but concerns over legacy vulnerabilities and insider threats persist. Organizations must modernize security postures and address misconceptions about mainframe resilience.
- Cost optimization (31%) is a key goal, yet 48% cite high maintenance costs. True savings come from better coding, resource optimization, and automation, not just cost-cutting.
- Automation (30%) and compliance (28%) are priorities, but integration challenges (18%) slow progress. Hybrid cloud strategies and DevOps adoption can improve agility.

Organizations must rethink how mainframes fit into enterprise strategy to meet modern IT objectives. Those that address skills gaps, improve cost efficiency, and strengthen security will be better positioned for long-term success.

What are your top 3 priorities for next year related to IT and mainframe?



Why Mainframe?

We also asked respondents to provide open-ended responses about the main benefits of the mainframe for their organizations. Here is a weighted breakdown of themes based on frequency:

- Reliability & Stability (50%) – The top-cited benefit, with 99.9% uptime and minimal outages. Many contrasted this with frequent cloud and distributed platform downtimes.
- Scalability & Performance (30%) – Mainframes excel in batch processing and high-speed transactions, handling large-scale workloads efficiently.
- Security (20%) – Strong encryption, centralized administration, and controlled access make mainframes more secure than other platforms.
- Cost-Effectiveness & TCO (10%) – Despite high initial costs, mainframes offer long-term efficiency, longevity, and lower per-transaction costs.
- Longevity & Proven Technology (10%) – With over 50 years of evolution, mainframes maintain consistent tools, processes, and skills, unlike constantly shifting distributed platforms.

Bonus Insights — Some respondents noted that mainframes are easier to manage than distributed environments, citing centralized administration and streamlined deployment examples. Others praised the mainframe ability to adapt to modern workloads while excelling in traditional transactions.


Baer Consulting
INCORPORATED
BCL
BAER CONSULTING LLC
We're excited to continue serving customers in the IBM Mainframe industry with exceptional service, reliability, and expertise as a part of IT Service Alliance (ITSA).
www.baer-consulting.com/

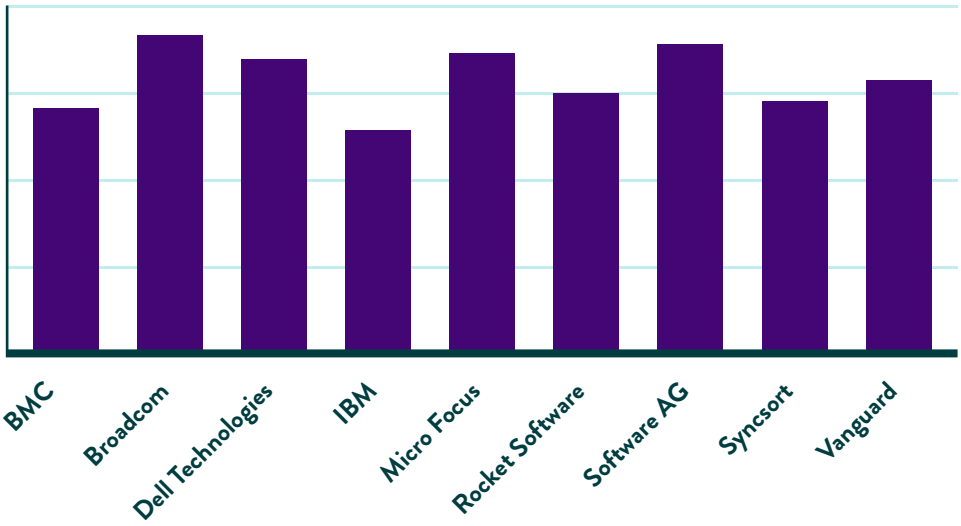
Vendor and Service Provider Engagement

A strong mainframe ecosystem depends on vendors and service providers for reliability, modernization, and efficiency. Satisfaction levels vary, with IBM leading among software vendors, followed by BMC, Broadcom, Rocket Software, and Syncsort.

On the services side, Kyndryl received the highest satisfaction, with Ensono and HCL also rated highly. However, many respondents indicated that external service providers are irrelevant to their operations, reflecting a preference for in-house management.

As modernization efforts expand, vendor partnerships will be critical in aligning mainframe operations with long-term IT goals. Organizations seeking modernization may benefit from highly rated vendors to drive value.

Which vendors are you currently engaged with for your mainframe operations?



Conclusion

This year's survey reaffirms a central truth: the mainframe remains indispensable in enterprise IT, even as organizations modernize and diversify. From high-reliability transaction processing to security, scalability, and cost-effectiveness, the mainframe continues outperforming other platforms. While hybrid cloud adoption and distributed systems expand, mainframe investments remain strong, with most organizations prioritizing modernization-in-place over large-scale migrations.

At the same time, organizations face critical challenges in ensuring long-term sustainability. Talent shortages persist, making internal training and vendor partnerships essential for skills development. Security concerns remain despite efforts to strengthen defenses with encryption, multi-factor authentication, and privileged access management, though gaps in cybersecurity monitoring highlight ongoing risks.

Automation and AI will likely play a more significant role, with organizations exploring rules-based processing, policy-driven automation, and intelligent workload management to boost efficiency and reduce costs. DevOps, AI, observability, and security enhancements will be pivotal in bridging legacy systems with modern architectures.

The thriving enterprises of the near future will embrace the mainframe as a foundation for innovation—leveraging its resilience, reliability, and scalability while integrating new models for agility and automation. As companies refine their hybrid IT strategies, one thing is clear: the mainframe isn't fading into the background—it's evolving alongside the future of enterprise computing.

BROADCOM®
MAINFRAME SOFTWARE

Mainframe Like You Mean It

Amplify the value of your mainframe investments

Embrace Open
for enterprise grade agility and speed

Enhance Your Cloud
with mainframe strength at its core

Partner for Success
and a world of new potential

Broadcom will help you get there

SEE HOW