TOP MAINFRAME PRIORITIES FOR BANKING, FINANCIAL SERVICES, AND INSURANCE FIRMS



Banking, financial services, and insurance (BFSI) organizations face increased pressure to deliver secure, reliable, and efficient services at scale. For decades, these organizations have relied on the power of the mainframe as a core system to manage and process enormous volumes of transactions with unparalleled stability and scalability. The mainframe's ability to handle large-scale data workloads with high levels of security and uptime makes it a backbone technology in the financial services industry, supporting everything from real-time transaction processing to compliance monitoring and risk management. All this while consumers have shifted from in-person to web to mobile transactions, and now to artificial intelligence (AI).

With the rise of AI and new customer expectations comes a new balancing act: financial services (FinServ) organizations are embracing new challenges and once again looking to ensure that their core systems stay cutting-edge while the "face" they present to their customers continues to change. Wall Street has always been an early adopter of technology and a large spender, and today is no different. Regulatory requirements are tightening, operational costs are under scrutiny, and a retiring mainframe workforce poses staffing challenges. Many organizations are also working to modernize core, business-critical applications, but they often lack the modern tooling specifically designed for the mainframe.

This gap in tooling can slow modernization efforts and hinder integration with newer digital environments, making it difficult for FinServ firms to keep pace with the demands of a digitally

transformed industry. These challenges underscore the importance of having a clear set of priorities to guide mainframe strategy.

Strategic Insights: Investment in the mainframe platform and MIPS growth expectations

According to data from the ***2025 BMC Mainframe Survey***, FinServ organizations show varied approaches in their mainframe investment strategies:

- **Increased investment (42 percent)**: A substantial portion of FinServ firms have increased their investment in mainframe platforms, demonstrating a commitment to leveraging its capabilities in handling critical functions and confidence in its ability to support the complex requirements of modern BFSI operations.
- **Maintained investment (47 percent)**: Nearly half of organizations in the financial sector have chosen to maintain their mainframe investment levels. This trend suggests a focus on optimizing current resources rather than expansion, indicating that many organizations see the mainframe as a stable, necessary asset in their infrastructure.

Additionally, when examining million instructions per second (MIPS) growth expectations—a key indicator of mainframe processing demand—leaders in the financial services industry are cautiously optimistic:

- **Growth (46 percent)**: Close to half of survey respondents from FinServ firms anticipate an increase in MIPS usage over the next 12 months. This expected growth highlights the ongoing reliance on mainframes for high-volume processing and critical application support.
- **Flat expectations (23 percent)**: Some organizations expect MIPS usage to remain steady, reflecting a more conservative approach to capacity planning. These organizations may be focused on enhancing efficiency within current capacity limits rather than expanding.

These investment and growth insights underscore the mainframe's critical role in the FinServ industry, with many organizations viewing it as an essential, stable platform while seeking ways to maximize its value.

Top mainframe priorities for the financial services industry in 2024

The 2024 data reveal several strategic priorities specific to how BFSI organizations are investing in the mainframe. When adjusting to review only those organizations' responses, the following key priorities come into focus:

- **Compliance and security (63 percent)**: Compliance and security lead the list of priorities, reflecting the critical role of mainframes in protecting sensitive financial data and ensuring regulatory adherence. As FinServ organizations face increasing scrutiny and evolving cyber threats, enhancing security measures and ensuring compliance is essential.
- **Cost optimization (50 percent)**: Managing costs remains a high priority. FinServ firms are focused on balancing IT business as usual costs with the need to support growth of system usage and innovation in new workloads. Cost-optimization strategies may include improving efficiency and implementing cost-saving technologies to ensure the mainframe remains a viable asset.

- **Application modernization (48 percent)**: Modernizing core applications is a top priority for the financial services industry. Updating these applications allows firms to enhance functionality, improve integration with newer technologies, and support digital transformation efforts. This modernization process is crucial for maintaining relevance in a rapidly changing financial landscape.
- **Staffing and skills (45 percent)**: Nearly half of BFSI organizations cite staffing and skills as a priority, underscoring the industry's talent gap. With an aging mainframe workforce, there's a pressing need to develop and recruit talent with mainframe expertise. Ensuring continuity and knowledge transfer is essential to sustaining mainframe operations and supporting future modernization efforts.
- **Enhancing automation (38 percent)**: Automation remains a significant focus, suggesting that organizations are looking to streamline operations and reduce manual interventions in their mainframe environments. Automation can improve efficiency, reduce errors, and allow staff to focus on higher-value tasks.
- **AIOps/operational analytics (35 percent)**: Interest in AIOps and operational analytics indicates a trend towards using AI-driven insights to monitor and optimize mainframe performance. This can help FinServ firms improve uptime, preemptively address issues, and optimize operational workflows.

AIOps: Bridging the skills gap but facing complexity

AIOps has emerged as a vital solution for BFSI organizations to address the mainframe skills gap, with twice as many BFSI respondents indicating that AIOps allowed them to reduce the skill level of staff year over year compared to 2023. By automating routine tasks and operational processes, AIOps helps teams with lower skill levels effectively manage mainframe operations, a critical advantage for organizations grappling with a retiring workforce and challenges in attracting new talent. However, 35 percent cite complexity as the biggest challenge of implementing AIOps for the mainframe as highly integrated systems and hybrid environments often make it difficult to interpret and act on insights generated by AIOps platforms.

To tackle this complexity, BFSI organizations are increasingly turning to generative AI (GenAI), with 37 percent planning to implement it alongside AIOps. GenAI complements AIOps by interpreting complex data insights, providing actionable recommendations, and reducing the cognitive load on IT teams. It transforms AIOps outcomes into easily understandable insights, enabling faster and more informed decision-making. Together, AIOps and GenAI form a powerful hybrid AI strategy, addressing both operational efficiency and interpretability, allowing financial organizations to unlock the full potential of their investments in automation and stay competitive in an evolving market.

The push toward cloud integration

The survey also found that data transformation is reshaping how BFSI organizations manage and protect their mainframe data, with 46 percent of those prioritizing cloud technologies also considering connecting their mainframe to cloud-based workloads. In comparison, only 30 percent of organizations in other industries share this focus, highlighting the BFSI sector's leadership in hybrid cloud adoption.

This shift reflects a growing trend of integrating mainframes with cloud-based workloads to retain the reliability and security of the mainframe while leveraging the scalability and flexibility of the

cloud. By bridging these two environments, BFSI organizations are positioning themselves to unlock greater agility and responsiveness to changing market demands.

Benefits of cloud-enabled mainframe data management

The transition to cloud-enabled mainframe data management offers FinServ firms a range of strategic benefits:

- **Cost efficiency**: Moving data from tapes and virtual tape libraries (VTL) to the cloud reduces high storage and maintenance costs.
- **Agility and scalability**: Cloud storage enables faster data recovery, better access to archived data, and the ability to scale storage as business needs grow.
- **Enhanced data protection**: Cloud data solutions provide advanced encryption and replication, improving data security and compliance in the highly regulated financial sector.

Cloud-enabled data management not only reduces reliance on outdated storage systems but also supports innovation by integrating seamlessly with modern applications. This strategic shift provides BFSI firms with the flexibility they need to address evolving regulatory and market demands while reducing costs and increasing operational agility.

Implications for financial services organizations

The trends in mainframe priorities highlight a careful balance BFSI groups are striking between maintaining the reliability of core systems and preparing for the future. The sustained investment in compliance, security, and application modernization shows a clear understanding of the mainframe's critical role in meeting regulatory requirements and supporting innovation. At the same time, the focus on cost optimization reflects an awareness of the need to manage operational expenses carefully in an unpredictable economic climate.

The emphasis on staffing and skills development reveals an urgent need to address the workforce challenges posed by an aging mainframe workforce. FinServ organizations that invest in training programs and succession planning will be better positioned to retain expertise and ensure continuity as experienced professionals retire.

Additionally, the growing interest in automation and AIOps demonstrates that BFSI organizations are looking to technology to enhance efficiency and performance. By leveraging automation and AI-driven insights, these organizations can optimize mainframe operations, reduce costs, and preemptively address performance issues. This approach improves operational resilience while also aligning with the broader digital transformation goals that many BFSI organizations are pursuing.

In conclusion, the mainframe remains a vital component of operations in the BFSI sector, providing the reliability, security, and processing power that modern financial services demand. Whether through integrating cloud-based workloads or modernizing core applications, FinServ leaders are embracing innovation to ensure their organizations remain competitive, resilient, and future-ready. To support this transformation, BMC AMI solutions offer powerful tools to help BFSI organizations simplify mainframe management optimize operations, enhance efficiency, and confidently navigate their modernization journey.

To see the complete results of the 2024 BMC Mainframe Survey, visit bmc.com/mainframesurvey.