

Mainframe Trends 2026: Actionable Insights from the Arcati User Survey



Amanda Hendley

Amanda Hendley began her career in the technology industry more than 20 years ago as a Georgia Tech student looking for a marketing role—an opportunity that led her to the Technology Association of Georgia and ultimately shaped her professional path. Since then, she has focused on connecting technology professionals, supporting learning and career growth, and helping technical communities tell their stories.

Since 2023, Amanda has served as Managing Editor of Planet Mainframe, where she guides the publication's editorial direction and highlights the people, ideas, and innovations shaping the mainframe ecosystem.

Planet Mainframe is a vendor-neutral online publication and community hub built for and by mainframe professionals. We cover expert insights, technical deep dives, and commentary across mainframes, hybrid infrastructure, AI, AIOps, DevOps, cloud integration, and enterprise modernization.

Mission: Educate, inform, and elevate the global mainframe community.



Mainframe Trends 2026

This session will cover:

- What's shifting
- What's holding steady
- What's actionable for strategy & leadership



Arcati Mainframe User Survey



Respondent Profile

- **92** validated responses
- North America & Europe
- Financial Services, Insurance, Government, Tech
- Operational + leadership roles
- Year-over-year comparison baseline established



The Big Pattern

The Core Is Stable.

The Edges Are Under Pressure.

Stable:

- Revenue concentration
- Platform currency
- Security posture

Under Pressure:

- Hybrid complexity
- Observability
- Workforce bandwidth
- AI integration



Business Dependence & Centrality

Is the Mainframe Still Central?

- 57% say >50% of business revenue depends on mainframe
- 21% say >75%
- Even $\leq 25\%$ workload environments describe systems as mission-essential
- Hybrid diversification \neq erosion



Platform Currency & Upgrade Cadence

Modernization Is Disciplined, Not Reactive

- 34% on current z/OS
- 40% on previous release
- No significant legacy versions reported
- 3.2% plan decommission in 3 years



Application Strategy (Next 3 Years)

What Happens to Core Z Applications?

- 31.6% maintain
- 34.7% replace with COTS
- 11.6% migrate
- 3.2% decommission

Portfolio refinement — not platform withdrawal



Workforce Reality

Mainframe Workforce in 2026

- Mid-career professionals dominate
- Multi-role responsibility common
- Lean teams
- Layered skill development
- Authority remains concentrated



Operational Enablement

Modernization Through Tooling

- Stable staffing spend
 - Measured hardware/software growth
 - Rules-based automation widespread
 - Tool adoption selective & phased
- Priorities:
 - Responsiveness
 - Platform engineering
 - DevOps
 - Cost optimization



Hybrid Architecture

Hybrid Is the Operating Model

- 30% highly integrated
- 39% limited integration
- Very few isolated environments
- Workload placement based on functional fit



Hybrid Pressure Points

Top Hybrid Challenges

- 43% cite observability/performance monitoring
- Integration depth varies
- Governance complexity rising

Complexity lives at integration boundaries.



Security and Risk

Security Is Embedded — and Stable

- 31% report decrease in incidents
- 30% no change
- MFA 20%
- PAM 22%
- SIEM 23%

Risk concentrated at ecosystem boundaries



Economics and Investment

Cost as Constraint, Not Trigger

- Budget share defined
- Spend growth measured
- Cost-effectiveness tied to workload fit
- No sudden economic confidence shift



AI and the Mainframe

AI Expands Integration

- 49% expect minor impact (3–5 years)
- 8% expect major change
- Top use cases:
 - Anomaly detection
 - Security monitoring
 - Public cloud most common execution target

AI depends on mainframe data.



The Five Signals

1. Revenue Still Concentrates on Z
2. Modernization Is Governed
3. Security Is Stable
4. Hybrid Complexity Is the Challenge
5. AI Refines — It Doesn't Replace



What You Can Take Back

Questions for Leadership:

- Does our investment reflect revenue concentration?
- Is our modernization sequenced or reactive?
- Are we investing enough in observability?
- Is AI aligned with integration governance?
- Are we modernizing through tooling — or expecting headcount to absorb complexity?



Closing Perspective

The Platform Isn't Fading.

It's Integrating.

Disciplined modernization inside mature hybrid ecosystems.



Let's Grow the Mainframe Community Together

Contact the Managing Editor, Amanda Hendley, at
ahendley@planetmainframe.com

