



# IT Modernization 2025: Businesses Work to Overcome with Legacy Systems with an Eye on AI for Future Growth

At a panel session that I participated in on AI and IT for the 2024 SpiceWorld conference, several IT professionals in the audience said that they were using executive demands to use AI as a justification to carry out more sweeping IT modernizations across their infrastructure. There were some chuckles in the audience and a lot of nodding from other attendees at this perceived strategy of shifting priorities.

But it turns out that this may have not been an example of pulling a fast one on the higher ups. A brand new Aberdeen Strategy & Research survey on IT Modernization shows that the top strategies that many organizations are following to enable their AI initiatives involve boosting other key areas of their infrastructure such as storage and networking capacity.

In this survey, we asked over 200 companies about the drivers pushing them to modernize their IT infrastructure, along with the challenges in the way of successful modernization. We also analyzed top strategies and technologies that companies are using to carry out IT modernization.

Along with this, we asked a number of metrics questions to identify leading organizations who are reaping critical benefits from their modernization initiatives. Because this is a survey we've done over the last few years, we were able to see interesting trends in how businesses are modernizing IT.

**Jim Rapoza**  
Vice President & Principal Analyst  
IT Infrastructure Restructure

**LinkedIn**

**ABERDEEN**  
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## Key Takeaways from the 2025 IT Modernization survey

- 1 62% of businesses today are still challenged by legacy technology issues.
- 2 Since our 2023 IT Modernization survey, AI has seen a 5x increase in usage
- 3 While commitments to sustainability lessened during the initial rush to AI, we are now seeing a 45% increase in businesses focused on sustainability.

Looking at these top level findings, we see two competing trends. One, that many organizations today are still struggling to fully modernize and move beyond legacy infrastructure hardware and software. And two, that the massive rise of AI usage is driving many organizations to accelerate their modernization initiatives.

Also of interest is the return of sustainability commitments. Over the last ten years we had consistently seen growth in businesses focused on sustainability, but in late 2023 it trended downward for the first time.

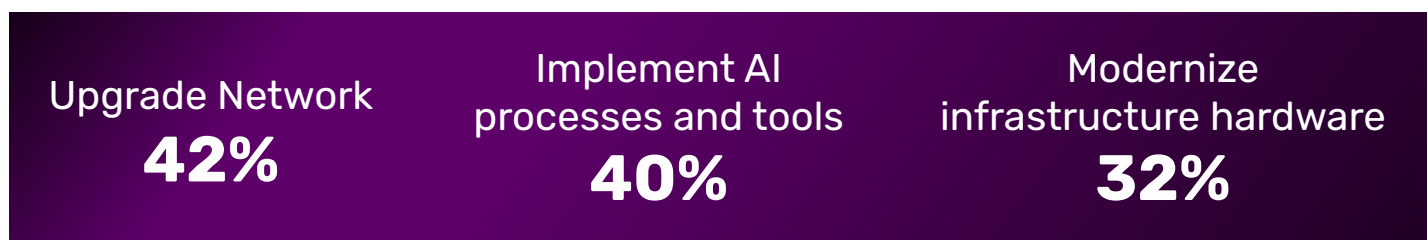
Of course, with businesses focused on power hungry AI strategies, sustainability was tossed to the side. But in our latest survey the trend is back in the positive, with a 45% increase for businesses making sustainability commitments, even exceeding pre-AI levels.

While 62% of businesses state that they are still struggling with legacy systems in their infrastructure, 38% have successfully modernized their IT infrastructure, setting themselves up to optimize adoption of advanced technologies like artificial intelligence.

A big part of modernization for many organizations will be improving computing power capacity (or simply “compute”), as 47% of businesses are planning a server refresh in the next year, a 40% increase from the previous IT modernization survey. These organizations understand the need to update foundational hardware, which is a vital step to increase their ability to use cutting-edge applications and while improving overall operational efficiency.

However, businesses face a number of hurdles on their path to a modernized and sustainable future. Among the top challenges reported by businesses in our survey were security issues, increased costs, and integration complexities. Notably, integration challenges have seen a 2.5x increase, underscoring the difficulties in seamlessly connecting disparate systems and new technologies.

To overcome these barriers, many businesses are following key strategies to improve their IT foundations and set themselves up for future innovations. Looking at the results from our survey, we found that the top three strategies were:

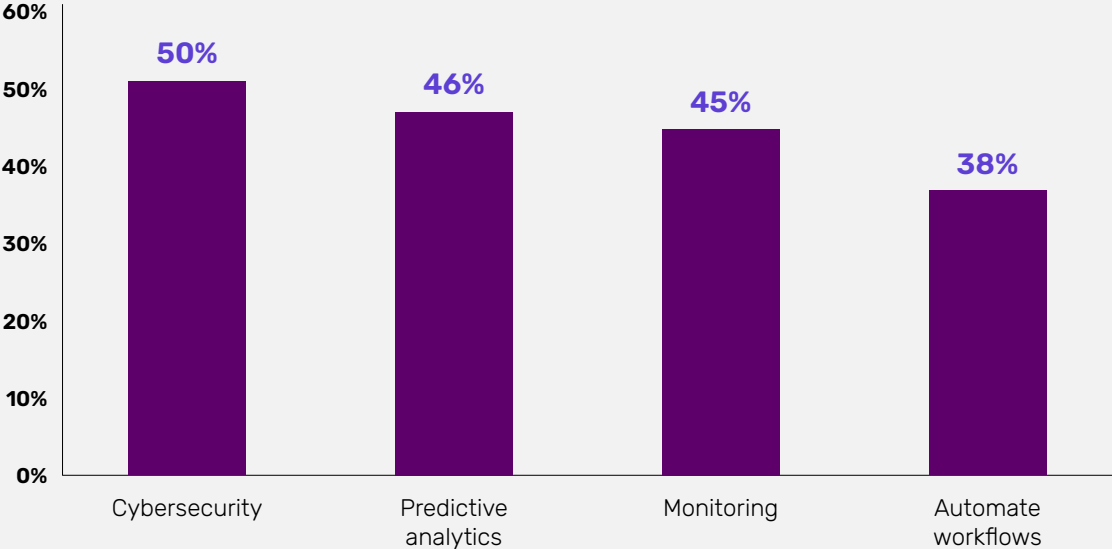


Upgrading networks tops the list, with 42% of businesses making that a priority. This makes sense as network upgrades have actually lagged behind other modernizations in recent years. With the push to leverage AI, many organizations are realizing that the distributed and cloud-reliant environments often used to build AI infrastructures depend on a fast and reliable network.

Along with building faster networks, we see many organizations boosting other areas of their infrastructure to improve their ability to harness AI. For example, 43% of businesses are increasing storage capacity specifically to assist AI initiatives, And 37% of organizations are purchasing AI-ready servers to help them build customizable AI inferences and even build small language models.

Interestingly, when we asked businesses about the top use cases and areas where they intend to utilize AI, the focus was on very practical implementations designed to bring immediate value, as shown below:

### Top IT Use Cases for AI



Percent of respondents, n=211 | Source: Aberdeen Research 2025

Cybersecurity stands out as a top use case, with 50% of businesses planning to leverage AI to enhance their defenses. Predictive analytics (46%) and monitoring (45%) are also high on the agenda, indicating a move towards proactive insights and operational oversight. And 38% of businesses are planning to utilize AI to increase efficiency through automated workflows.

Despite the enthusiasm for AI, businesses acknowledge significant hurdles. A primary concern is storage capacity, cited by 48% of respondents, highlighting the immense data requirements of AI. Integration complexities, mirroring broader IT challenges, remain a significant barrier for 46% of businesses. Finally, cloud capacity, crucial for scalable AI deployments, is a concern for 44% of organizations.

To understand how organizations are overcoming these hurdles and fully realize the potential of AI, we asked what steps they were taking to defeat AI infrastructure challenges. Developing AI skills within their workforce was the top selection, with 44% of companies taking this step to improve in-house skills and reduce gaps in expertise. Improving data management (36%) and ongoing infrastructure modernization (35%) are also top actions taken to improve AI adoption.

Looking at this data we see that businesses are in an almost constant phase of modernization. While legacy systems remain a significant drag, most organizations continue to modernize, often driven by increasing demands to utilize AI.