Enterprise Strategy Group by TechTarget

SHOWCASE

SEPTEMBER 2024

The Great IT Paradox: Juggling Cost and Innovation in the Age of AI

Jon Brown, Senior Analyst

Abstract: The pressure to manage costs is ever-present in today's enterprise environment. The increasing reliance on technology has made IT a substantial contributor to business expenses. Cloud computing, the de facto deployment destination for many critical workloads, offers some relief, especially with pay-as-you-go pricing models, but to be truly cost-effective, attention needs to be paid to the proper configuration and management of those resources. Now, with artificial intelligence on the rise, there is great promise for productivity gains, but there are also increasing concerns about the potentially high investment costs and time to value. Indeed, TechTarget data shows that interest in reducing costs is growing faster than interest in AI-related topics like generative AI and AI strategy. This paper explores how one technology industry leader addresses the needs of customers with a portfolio of high-performance, adaptive solutions that encompass the cloud, edge, and endpoints while recognizing the business need for cost-efficient IT equipment and infrastructure and aims to deliver highly cost-efficient solutions to customers.

Interest in Cost Management Is Increasing

Businesses are eagerly embracing technology as a means to innovate, operate, and gain a competitive advantage. This strategic investment is reflected in organizations' substantial IT budgets, with sectors like financial services reporting spending on information technology as high as 15% of revenue—and these budgets aren't static.[1] According to research from TechTarget's Enterprise Strategy Group, only 4% of firms expect to reduce their budgets for information technology and services, while 37% plan to increase their budgets.[2]

With increased spending comes a focus on efficiently managing investments to deliver the best "bang for the buck." Data from TechTarget shows that readership and interest in IT cost management increased by 138% in its EMEA media comparison for 2024.[3] In addition, "reducing enterprise [computing] costs" has more than doubled, up 108% worldwide over the most recent period compared to 6 months prior (see Figure 1).[4]

[1] Source: Report: "IT spending as share of company revenue in 2022 and 2023, by industry," Statista.com, November 2023.
[2] Source: Enterprise Strategy Group Research Report, *2024 Technology Spending Intentions Survey*, February 2024.
[3] Source: TechTarget Research, *Q1 2024 Activity Trends: What's Driving Growth Across the TechTarget & BrightTALK Network*, March 2024.
[4] Ibid.

Figure 1. Interest in Reducing Enterprise Costs Is Growing Faster Than Interest in Many AI-related Topics

Region: Worldwide

What's on the rise: Top topics increasing in interest across TechTarget's content network

TechTarget

Editorial & content consumption areas of growth from over the last 6 months

Topic	Percentage Increase
Data management	+295%
AI hardware	+179%
IT project management	+132%
Software implementation	+132%
Virtual reality	+117%
Cyber insurance	+114%
Software development	+112%
Reducing enterprise costs	+108%
Mobile device security	+108%
Server processors	+107%
AI strategy	+101%
Cloud-based AI	+98%

Topic	Percentage Increase
Natural language processing (NLP)	+95%
AI/ML model training	+92%
Social engineering attack	+90%
Environment & ecology	+89%
Cloud based application deployment	+88%
Large language model (LLM)	+87%
Anomaly detection	+82%
Data sharing	+79%
Data centers for cloud computing	+78%
Compliance	+77%
Responsible AI	+72%
Cloud visibility	+70%
Generative AI	+69%

 2 Source: Core Topic Activity Report (WW, TechTarget Only, All Segments, April 2023– Sept 2023 vs. Oct 2023– Mar 2024)

Source: Enterprise Strategy Group, a division of TechTarget, Inc.

Traditional Cost Management Practices

In the Data Center

Data centers and the compute, storage, and networking equipment inside of them are major drivers and recipients of organizational capital investment. Historically, data center leaders have managed Capex costs through:

- **Workload consolidation with server virtualization.** Server virtualization, a precursor to modern cloud infrastructure, enables workload consolidation, cost, and energy savings. This trend continues as advancements in processor technology and the increasing demand for energy efficiency drive further workload consolidation, although many modern workloads increasingly leverage cloud-native and microservices architectures, lessening the need and dependence on server virtualization.
- **Lifecycle and asset management.** Organizations need to carefully plan the replacement and disposal of hardware to maximize its useful life and value. In 2024, when asked about their organization's future infrastructure management technology investments, some 33% of IT decision-makers indicated that they would be investing in IT asset management software, outpaced only by investments in security tools (50%) and automation tools (37%).[5]

[5] Source: Enterprise Strategy Group Research Report, *2024 Technology Spending Intentions Survey*, February 2024.

- **Converting Capex to Opex.**
  - Using 'as a service' usage agreements for hardware to convert what was traditionally an asset purchase into something that resembles cloud computing, requiring no or little capital investment while still maintaining the advantages associated with on-premises infrastructure.
  - Migrating workloads to the cloud, taking advantage of Capex-free pricing models that allow for flexible, right-sized infrastructure.

As organizations prioritize AI initiatives, the computational and energy demands associated with these workloads will further intensify the need for efficient data center management.

In Endpoints

Organizations have employed a number of strategies to maximize value from their endpoint investments. 41% of respondents reported that IT cost reduction initiatives were responsible for a change in their organization's endpoint strategy, leading organizations to deploy less powerful thin client devices,[6] extend hardware refresh cycles, and even implement server-based desktop virtualization in an effort to manage or reduce end-user computing costs. And this remains an active area of change, with 52% of organizations having made the decision to replace their primary vendor of desktops and 38% of organizations having made the decision to replace their primary vendor of laptops over the last two years.[7]

Choosing a Technology Partner to Support Organizational Goals

Against this backdrop of increased IT spending and a desire to manage costs, it's important that IT buyers reframe the conversation when evaluating solution partners and look for partners that understand these challenges and provide greater value and ROI for organizations' IT investments. Failure to do so could result in an organization facing higher costs, outdated hardware, reduced negotiation leverage with an existing supplier, and missed opportunities for innovation.

Anyone who has purchased complex information technology equipment knows that the lowest price isn't always the best choice, and a higher price doesn't always indicate higher quality or a better fit to an intended purpose. When selecting an information technology partner, an organization should evaluate the partner's track record, specifically how well the partner has been able to adapt to meet the demands of evolving technology. This is a key indicator of how the partner's solutions will fit into the organization's goals and should enable the organization to better forecast future costs as it seeks to adopt technologies.

AMD: A Revolutionary Technology Partner Dedicated to IT Cost Management

For more than 50 years, AMD has driven innovation in high-performance computing, graphics, and visualization technologies. Through its comprehensive high-value solution portfolio, AMD provides IT teams with products that help decrease TCO, optimize performance, and enhance efficiencies from complex workloads to the most simple tasks.

Data Center and Cloud

- **AMD EPYC™ CPUs –** This family of processors delivers leadership performance for enterprise, HPC, and AI workloads. With over 300 world records and counting, AMD EPYC processors help enterprises free up space

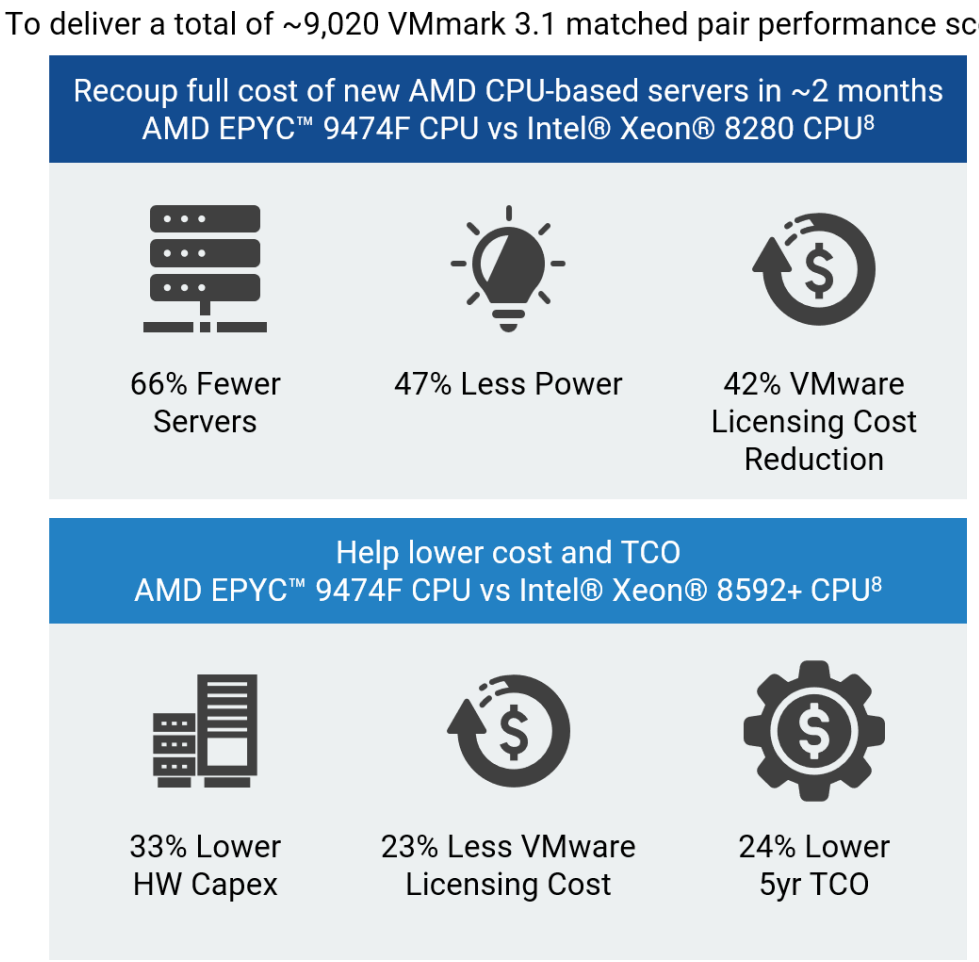
[6] Source: Enterprise Strategy Group Research Report, *Endpoint Device Trends: Evaluating a Shifting Desktop and Laptop Procurement, Management, OS, Feature, Application, and Spending Landscape*, February 2024.
[7] Ibid.

and energy to accommodate AI workloads, reduce Capex and Opex, and enhance security with a robust set of security features built in at the chip level to complement ecosystem partners at the software and system levels.

According to AMD research, AMD CPUs bested Intel Xeon CPUs for greater server consolidation, lower power consumption, and lower software licensing costs (see Figure 2).[8] This combination of lowering costs, Capex, and Opex while increasing performance is at the heart of why organizations choose AMD over Intel.

- **AMD Instinct™ Accelerators –** AMD Instinct accelerators enable leadership performance for the data center, at any scale—from single-server solutions up to the world's largest, exascale-class supercomputers. The AMD Instinct Capital X - MI300X, for instance, delivers greater throughput performance and is the only one that can run inferencing for a 70B parameter model, like Llama2 on a single MI300X GPU. These solutions help simplify enterprise-class LLM deployments and further enable outstanding TCO.
- **AMD ROCm™ –** The AMD ROCm open software stack enables GPU programming and is optimized for GenAI and HPC software. With a comprehensive set of tools to help developers enable application development across a broad range of demanding workloads, ROCm delivers high value that provides researchers with flexible management, quality control, and monitoring capabilities.

Figure 2. AMD EPYC CPUs' Impact on Costs



Source: Enterprise Strategy Group, a division of TechTarget, Inc., and AMD

[8] Source: Report: "Advance Data Center AI with Servers Powered by AMD EPYC Processors," AMD.com, 2024.

Desktops, Laptops, and Workstations

- **AMD Ryzen™ AI –** AMD Ryzen AI-based processors bring the power of personal computing closer to enterprises across desktops, laptops, and mobile workstations. IT teams can optimize AI deployment costs with an upfront investment in AMD Ryzen AI, and, in turn, they have the power to control their own AI processing. This opens the AI revolution to open source software and enables IT teams to envision a future where AI service subscription costs are lower or possibly eliminated.
- **AMD Ryzen™ PRO CPUs –** AMD Ryzen PRO processors power both laptop and mobile workstation solutions. Designed to optimize and increase power efficiency, these processors also include PRO Manageability. AMD designed PRO Manageability features to help reduce maintenance and administrative costs, help efficiently patch emergent vulnerabilities across fleets, bring cutting-edge security features to existing IT ecosystems, and facilitate remote device management. This high-value set of features is designed to help IT teams save time, lower costs, and reduce downtime for employees.
- **AMD Ryzen™ Threadripper™ PRO CPUs –** These high-performance workstation CPUs are specifically designed to tackle demanding workloads in professional applications. Architected with creators, artists, engineers, and producers in mind, these processors enable today's creative visionaries to rethink what's possible, push the boundaries of creativity and get more done, fast, with extreme performance and enhanced security features.
- **AMD Radeon™ PRO Graphics –** AMD Radeon PRO graphics offer accelerated performance and enable increased productivity with advanced AI experiences, delivering the flexibility and productivity creators need to work on multiple tasks simultaneously, saving time and energy.

Conclusion

The relationship between IT cost management and digital transformation is only getting stronger. By carefully evaluating partners who offer technology that will enable them to evolve and expand their workloads and capabilities as innovation continues, organizations can effectively balance these competing demands. The comprehensive technology portfolio from AMD offers a compelling solution for business and IT leaders seeking to address these challenges and achieve both cost-effectiveness and innovation.

For organizations looking to partner with a technology partner that is goal-aligned with its customers and offers innovative and market-leading solutions, Enterprise Strategy Group recommends taking a good look at AMD.

To learn more about AMD products and solutions and how they advance AI, visit https://www.amd.com/en/solutions/ai.html.