Modernizing legacy government IT and managing technical debt

Technology powers nearly every government function but hidden beneath that progress is a growing threat: "Technical Debt". For countries to stay competitive and secure, it is imperative that governments take proactive steps to tackle this silent IT challenge head-on.

What is Technical Debt?

Technical debt is the shadow liability from technology—often legacy or outdated technology—that cannot be patched or operated securely. Unfortunately, to address this, many organizations cut corners with quick, stopgap IT fixes rather than addressing the root cause. While this may save time or money upfront, over time it leads to reliance on End-of-Life (EoL) devices, higher risk of cyber intrusions, increased maintenance costs, reduced efficiency, and growing complexity. And like any debt, the more you ignore it, the more it grows.

Technical Debt Delays Modernization and Increases Cyber Risk

When technical debt piles up, agencies have to spend public funds to prop up outdated legacy systems—holding back innovation and making it harder to adopt emerging technologies like AI. Here's how it hurts operations:

Stifles Innovation

Legacy IT systems may not support modern software, leading to poor performance or the inability to utilize certain functions—even if the government is paying for it.

Drains Resources

IT teams waste time on workaround fixes and patch jobs instead of focusing on mission-critical tasks.

Increases Cyber Risk

Unpatched, end-of-life systems become easy targets for cyber threats—like those exploited in recent attacks.

Smart Policies to Tackle Technical Debt

Modernizing IT takes investment, but strategic actions can help deliver major long-term savings and boost efficiency. Government can lead the way by:

Expanding and Encouraging Subscription-Based Models:

In addition to subscription-based procurement models, governments should provide agencies the flexibility to procure networking as a subscription. This approach can cut costs, strengthen cybersecurity, and improve budget predictability.

Requiring Proactive Planning:

Agencies should be required to track and manage their technical debt—especially aging, EoL systems—and align those efforts with existing budget, management, and governance processes.

Did you know?

Vulnerabilities affecting EoL devices are among **most targeted** network device "common vulnerabilities and exposures" (CVEs).

Unpatched/vulnerable systems were the second **most common security weakness** observed in 2024.[i]

[i] Cisco Talos: 2024 Year in Review

About Cisco

Our Strategy

We securely connect everything to make anything possible

Across the globe, businesses and organizations of every size are leveraging Cisco technology to transform and drive better outcomes and experiences. Our products and technologies are grouped into the following categories: Networking, Security, Collaboration and Observability. Our customers include businesses of all sizes, public institutions, governments, and service providers, including large webscale providers.

In today's dynamic environment, our customers have three key priorities: build modern and resilient infrastructure; protect against the cyber threats of today and tomorrow; and harness the power of AI and data. These customer priorities are central to how we innovate and develop our technology.

First, we provide the underlying network connectivity for our customers. Second, we help protect those network connections and the underlying technology architecture against cyber threats. Third, through the visibility we have into data across the network, connected devices and applications, we provide context and insights to our customers about what is happening in their technology architecture.

Our Differentiation

Innovation

- Global networking and IT leader
- Products and services that power the internet and enterprise networks
- Unmatched, AI-driven insights
- Hundreds of millions of connected devices across our platforms
- $53.8B revenue in FY24

Trust

- Block 20B cyber threats daily
- Data protection and privacy at foundation
- Top-rated supply chain
- #1 on Fortune's Best Workplaces in Technology™ 2024 List

Global Reach

- 1M customers and partner ecosystem
- Support 82,000+ government organizations and 99% of world's largest companies
- 83,000+ employees

Celebrating 40 years of innovation

From connecting the first routers to powering global innovation in the era of AI, we're celebrating four decades of trailblazing technology solutions that power the world's digital transformation.