

Digital-first organizations have changed the way IT assets are procured and deployed, straining legacy IT asset management tools and processes and forcing organizations to reevaluate their methods and toolsets.

Automated Asset Management: Tools for a Digital-First Infrastructure

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Introduction

As organizations reinvented themselves through digital transformation and have evolved to be digital-first organizations — with technology serving as the foundation for innovation and operations — infrastructure organizations need to support an evolving digital infrastructure and their processes and technologies need to evolve with them.

IT asset management as a discipline gained prominence with the advent of IT service management (ITSM) and configuration management databases, as most organizations have IT asset management processes and tools in place with varying levels of maturity. Unfortunately, many were built for legacy infrastructures and did not grow to support the organization as it changed. A contributing factor is the fact that only 9% of respondents in IDC's *Cost of Downtime Survey* reported that datacenters function as well-oiled machines.

AT A GLANCE

KEY STATS

Only 9% of datacenters function like welloiled machines, while 25% report delays in deployment because of power and space issues and downtime by human error.

KEY TAKEAWAY

Organizations are embracing continuous risk assessments and operations in favor of audits.

Digital-first organizations have changed the way IT infrastructure is purchased and deployed. One by-product of the infrastructure transformation of digital-first organizations is that they have also started to transform the procurement process. Increasingly, the line of business procures IT equipment. Democratizing the procurement of IT equipment allows organizations to move faster, which is a core tenet of digital-first organizations, but it is too often accompanied by a lack of processes and controls. Another by-product of digital-first organizations is where datacenters are deployed. IDC predicts that there will be continued growth in enterprise datacenters with significant growth in edge datacenters, which are often deployed outside of traditional datacenters without IT support staff onsite.

Lines of business are increasingly dictating the terms of how IT equipment is procured and deployed, but the CIO is still held accountable for the support, financial return on assets, and compliance, creating a gap that must be filled. Organizations that are trying have relied on manual processes, which do not scale to modern and dynamic environments and are subject to human error. To effectively achieve IT asset management for digital-first companies, enterprises will need an automated process that accounts for new buying processes and architectures.

Benefits

Digital-first organizations have elevated the business benefits of traditionally IT-centric domains. Important business benefits exist for organizations that successfully deploy automated IT asset management. Leaders may have some or all of the following motivators in mind when undertaking the initiative:

Regulatory compliance failures are becoming significantly more detrimental to organizations. Compliance continues to be a large driver for IT asset management, and it continues to expand with legislation. While data protection laws have existed (with GDPR and HIPAA being the most well known), the landscape of laws continues to expand with many new data privacy laws having data residency requirements in which enterprises are required to know which server the data is stored on and where it physically resides. As sustainability grows in prominence, ewaste laws continue to expand as well. Organizations that do not

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comply with regulatory standards feel the effects primarily in two ways. The first and more immediate way is fines. Regulatory fines have reached record levels with the average sizes of fines increasing over the past several years as courts take a hard line on organizational ineptitude regarding compliance. Regulatory compliance is top among the most critical areas for the perception of organizational trustworthiness, ranking above security and privacy concerns. While the penalties continue to become more pervasive, the damage of noncompliance also affects future revenue, which is the second way that organizations feel the effects of noncompliance.

- Internal compliance pressures can be just as important as external ones. Just as all companies compete for a share of end customers' wallets, internal organizations compete for a share of the corporate budget. As an IT leader, the ability to show compliance with SLAs and the return on investment of company assets increases the reputation and trustworthiness of IT leaders.
- Sustainability is increasingly important to senior executives. Sustainability is rising as a top-of-mind issue for businesses all over the world. Sustainability continues to rank high on the priority list, and being sustainable is the positive inverse of being noncompliant. Trust is vital for building a strong brand for attracting and retaining new customers, building strong partnerships and alliances, and bolstering employee engagement. It is also seen by the public and investors as essential for the long-term viability of an enterprise.
- Cost savings and efficiency are important too. The IT asset management value proposition is rooted in cost savings and efficiency, and it remains a strong value proposition. Ensuring that assets are used effectively and delivering the anticipated return to the organization is fundamental to IT operations. Automated IT asset management has the additional benefit of audit efficiency, allowing enterprises to do audits more frequently at a lower cost and eliminating the use of third-party audits.



Key Trends

The following trends are important for technology buyers to consider:

- » By 2027, 60% of G2000 companies will adopt continuous risk assessments over annual security audits, leveraging service providers to limit the burden of policies, practices, and technical debt.
- » By 2026, 30% of large enterprise organizations will migrate to autonomous security operations centers accessed by distributed teams for faster remediation, incident management, and response.
- » By 2026, 20% of AI servers will be in edge locations, often operating autonomously without IT staff present.
- » By 2027, there will be over 88 million servers in production, averaging a 6% increase per year.
- » More than half, 58%, of U.S. organizations surveyed currently include IT recycling and IT asset disposition (ITAD) within their sustainability policies and initiatives.
- » Reusing or cascading IT assets/technology within an organization is cited as the most common sustainability initiative.
- » Nearly 50% of organizations recycle/reuse assets to improve the useful life metric and obtain value for older gear.

The impact of these trends is driving forward-thinking companies to address the following:

- Set proactive asset management policies that are set for modern digital infrastructures, which are accessible to business subject matter experts and digital infrastructures with current regulatory compliance goals in mind, in addition to adaptability for new regulations.
- Implement IT automated asset management, such as software tools and systems, to automate various tasks and processes related to the management of assets. Automated asset management can include a wide range of activities, such as inventory tracking, asset tracking, maintenance scheduling, and asset disposal.
- » Develop IT asset management architectures and tools that are "plug and play" to easily integrate with IT asset management, ERP, and GRC systems and that are adaptable to the changing architectures.

To succeed in the future, organizations will need to automate IT asset management and create a digital twin of the company's entire digital infrastructure to know which people, systems, and third-party organizations access it.



Considering RF Code

RF Code strives to be an innovator of real-time IT asset management solutions. RF Code's intelligent hardware and software solutions are engineered to eliminate rack-level costs and risks across the IT enterprise. The company provides continuous asset audit that replaces traditional one-time manual audits and barcode solutions and that fills in the gaps left by network discovery tools. RF Code's automated solutions are easy to deploy and redeploy, and they can deliver 100% accurate, trustable data in real time. As a result, datacenters can reduce or even eliminate significant rack-level costs and risks associated with:

- Complete IT asset life-cycle management
- Capacity planning
- IT asset utilization
- IT asset disposition

- Procurement and inventory controls
- Audit efficiency
- Temperature and humidity monitoring
- Power usage

With patented wire-free active RFID sensors, open APIs, and real-time reporting capabilities, RF Code integrates and boosts the performance of existing IT, facility, and business systems.

Challenges

IT asset management has been the standard IT practice with varying degrees of maturity in most IT organizations. Convincing senior IT leaders to make an additional investment in RFID-based asset management when they may already have expensive ITSM and/or DCIM will be difficult.

Cloud is the prevailing trend for enterprise CIOs and the whole market. IDC anticipates that in 2023, 58% of all servers will be shipped to cloud, communications, and digital service providers, with only 28% shipped to enterprises. While enterprise datacenters and retail colocations anticipate growth, they are outpaced by the move to cloud.

Conclusion

Most organizations have some competency and infrastructure for IT asset management. However, too often, these have not evolved with the changing digital infrastructure architecture or purchasing methods of digital-first organizations, thus exposing organizations to the risk of financial penalty in the case of external noncompliance and failing to both maximize the financial return of IT assets and contribute to an organization's sustainability goals, which are increasingly important to executive management.

While it is possible to adapt existing policies and tools for proactive asset management, most organizations do not have the labor resources to accommodate modern, dynamic, digital infrastructures. Organizations looking to reduce risk, improve sustainability, and lower costs will want to consider active RFID and active asset management from RF Code.



About the Analysts



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Jennifer Cooke is a research director within IDC's worldwide cloud and edge infrastructure practice, where she leads IDC's Edge Strategies research. Cooke's research provides insights into the ecosystem of physical infrastructure, software, and services that support secure and resilient operations at the edge.



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