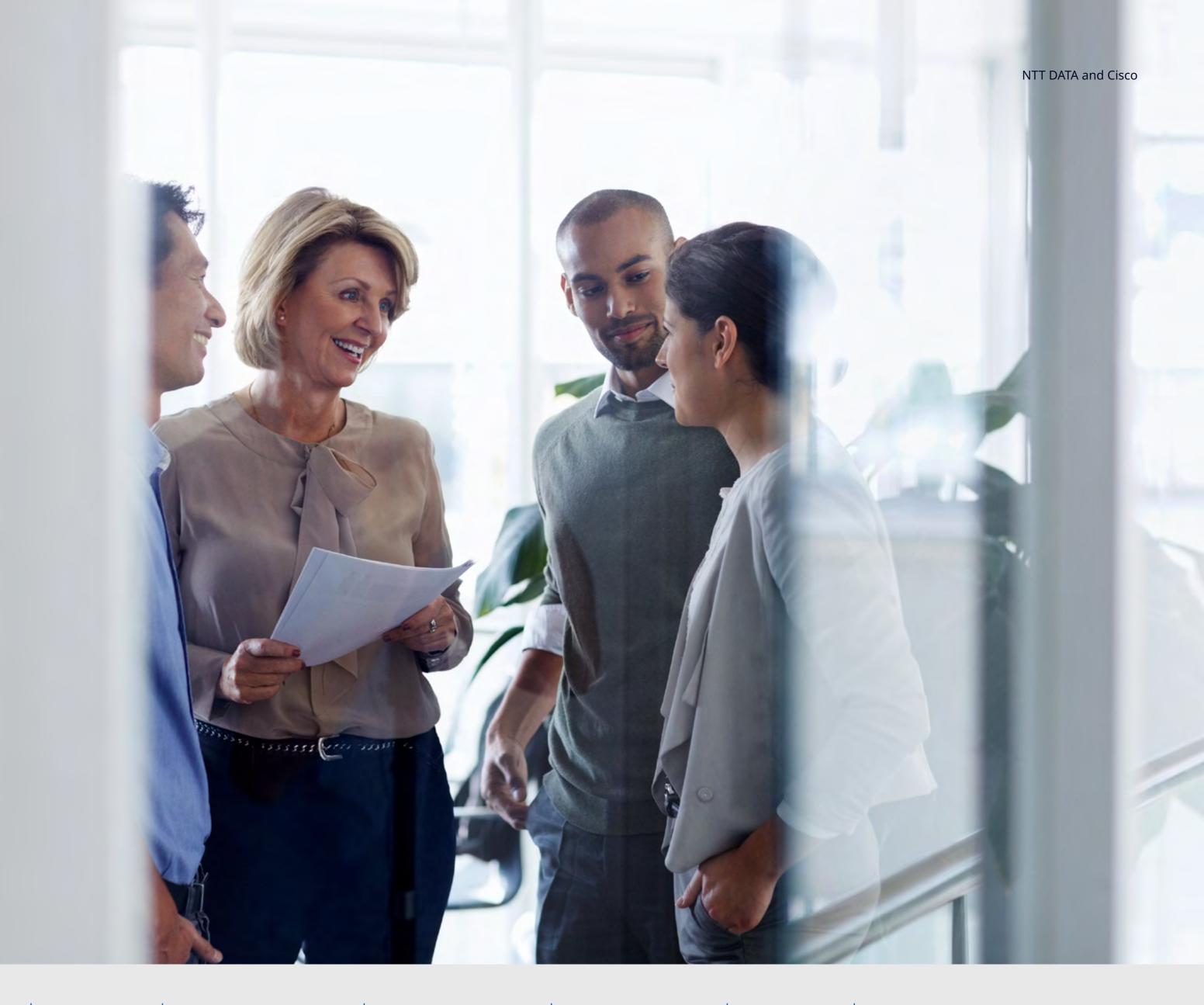


Why read this guide?

This practical guide aims to help your organization navigate today's complex lifecycle management landscape with clarity and confidence. We have unpacked how effective management of software and hardware assets is not just a necessity, but a strategic advantage.

From understanding the evolving trends in IT procurement to exploring the transformative impact of partnerships like NTT DATA and Cisco, this perspective offers actionable insights tailored for modern businesses.



Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI

Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

Content

01	Redefining the infrastructure blueprint	06	Navigating the multivendor challenge in IT asset management
02	New strategies needed to manage assets effectively	07	Gearing IT environments for innovation and the digital future
03	Lifecycle management: an evolving and complex landscape	80	Effective lifecycle management practice
04	Understanding ROI in lifecycle management	09	Conclusion
05	Taking back control	10	List of abbreviations



Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion



Introduction

How to optimize your hardware and software assets, from procurement to retirement:

Effective hardware and software lifecycle management delivers significant business outcomes such as cost savings, enhanced operational efficiency and optimized performance, while also reducing risk.

By implementing strategic lifecycle management, organizations gain visibility into their assets, enabling informed decision-making, streamlined processes, and improved resource utilization.

This approach ensures accountability and supports the planning and execution of a technology roadmap, ultimately driving innovation, agility and sustainability. In this guide, we outline how to make lifecycle management a strategic advantage in your organization.

Redefining the infrastructure blueprint

New strategies needed

Lifecycle management

Understanding ROI Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

Redefining the infrastructure blueprint

Hardware and software have always played a crucial role in organizations – to deliver services to customers, empower employees and drive business growth.

In the digital age every business is a technology business.

Forward-thinking organizations are embracing this reality and adapting the way they operate accordingly.

'However, it is estimated that more than 8 in 10 organizations agree that inadequate or outdated technology is holding back their innovation efforts¹.

Adaptable and up-to-date software solutions are becoming more important, and there is a growing preference for flexible acquisition models such as subscriptions, Enterprise Agreements and multiarchitecture bundles.



NTT DATA's 2024 Infrastructure Lifecycle Management Report highlights these shifts, showing

- an average year-on-year increase in expenditure of **133%** for software-as-a-service (SaaS) subscriptions.
- 115% increase in term-and-content (T&C) subscriptions since 2018.
- Expenditure on hardware, on the other hand, has decreased by 15% since 2020.

1.https://services.global.ntt/en-us/campaigns/2024-infrastructure-lifecycle-management-report



Redefining the infrastructure blueprint New strategies

Lifecycle management

Understanding ROI

Taking back control

Navigating the multivendor challenge Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

List of



Better lifecycle management for better business outcomes

With digitalization and innovation now being top priorities for CIOs and CTOs, the ongoing management of infrastructure assets will be increasingly important to achieving business outcomes.

Effective infrastructure lifecycle management is crucial for ensuring the reliability, performance and security of hardware and software so that the organization can meet its business objectives.

With visibility of and control over these assets, you can facilitate seamless integration across diverse vendor environments and get secure access to the cutting-edge technology that drives business value. Effective lifecycle management also optimizes total cost of ownership by reducing expenditures on outdated or underutilized resources and contributes to the organization's sustainability goals.

Conversely, poor asset management comes at a significant cost: inappropriate coverage, labor-intensive renewals, failed standardization efforts, extended incident times and license violations have financial and other implications for the business.

Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI

Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

Strategic lifecycle management can advance digitalization efforts

The shift from traditional hardware-centric models to complex software configurations and subscriptions has created a critical need for robust lifecycle management strategies. But the rapid adoption of software-defined solutions for networking, data centers and security has created new challenges when it comes to managing these assets effectively.

Lifecycle management has become more complex and costly because of technological advancements, customization demands, diversified product and service offerings and stricter regulations.

Our research shows that only 45% of C-suite executives believe their digitalization efforts are at an advanced level.

By ensuring that technology investments align with business goals, optimizing performance and scalability, and managing costs and risks throughout the lifecycle of every asset, strategic lifecycle management can play a key role in furthering these efforts.



Redefining the infrastructure blueprint

New strategies needed

Lifecycle management

Understanding ROI Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

Spotlight on software-defined infrastructure lifecycle management

Software-defined infrastructure (SDI) is crucial for modern organizations. It enables computing, networking and data center resources to be managed as software, ensuring the rapid delivery of IT services tailored to business needs. While many organizations manage SDI configurations, few have comprehensive service platforms to track and optimize their software lifecycle management activities.

NTT DATA's **Software Lifecycle Services** consolidate multiple data sources into one Services Portal to provide key insights for increased visibility and control, and give clients access to tools, personnel and processes for unifying the management of software-defined technologies.

Features and benefits of SDI

Features	Benefits
Enhanced visibility	Reduce costs
Compliance automation	Improve return on investment
Governance standardization	Mitigate risk
Vendor management	Increase efficiency
Expert support	Optimize performance

3 areas where lifecycle management has a big impact

Managing different asset types

Each type of asset has unique management, maintenance, integration and compliance considerations. Lifecycle management helps organizations to find the best solutions while managing costs, maintenance and licensing.

Technology adoption and strategy

Different purchasing options for hardware and software – such as subscription-based licenses, cloud services, hybrid models and pay-per-use – vary in functionality, scalability, security and cost. A unified strategy for lifecycle management helps organizations understand how these factors affect integration with existing systems so they can take the necessary steps to a smooth adoption.

Licensing

Changes in licensing types have forced organizations to rethink their business and technology strategies. Lifecycle management helps to align technology strategies with business objectives so the organization can identify where to adjust their purchasing and operational approaches.

By integrating their approaches across both hardware and software lifecycles to ensure these align with business goals, organizations will be able to successfully navigate the

challenges posed

by different asset types and

acquisition models.

Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI

Taking back control

Navigating the multivendor challenge Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

How to map your return on investment in lifecycle management

The interplay of technological advancements and diverse ecosystems means understanding ROI in lifecycle management is not always a straightforward exercise.

No matter how complex your IT landscape is, you need to ensure that your technology investments are yielding the desired business outcomes.

This involves mapping technology investments directly to measurable business results in four key areas:

ROI measure		Key question to ask	Action points	
98p 0/6 	License count A fundamental measure of utilization and spending.	Are you using the licenses you have purchased effectively?	 Align current and projected consumption with commercial agreements (such as EAs) to maximize their value. Manage budgets to avoid overconsumption and underutilization. This is crucial for maintaining control during vendor audits, contract renewals and ongoing software maintenance. 	
	Feature count Maximizing feature utilization is crucial for extracting maximum value from investments.	How extensively have you evaluated, deployed and used the features of your technology investments?	 Procure specific feature sets that will support business transformation. Implement programs to deploy these feature sets for specific use cases. 	
	Justifying investment The financial view – essential to justifying ongoing and future investments.	How much have you saved or gained through your technology investments, including products and Enterprise Agreements?	 Use visibility to measure the utilization of software agreements and offer executives real-time views of ROI allows for input into future budget cycles and strategic planning, supporting vendor renewal negotiations. 	
	Proactive strategy Fostering a more efficient and ROI-driven approach.	Are you avoiding overpayment for underused services and getting the most value overall from your assets?	 Maximize asset-value proactively rather than simply reacting to broken assets. Align technology use with business needs. 	

Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI

Taking back control Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

Taking back control

The majority of organizations agree that old systems are a roadblock, with a call for comprehensive, agile solutions to embrace virtualization.

Over 80% of organizations believe outdated technology hinders progress.

90% agree that software-defined network virtualization necessitates a holistic, agile infrastructure.

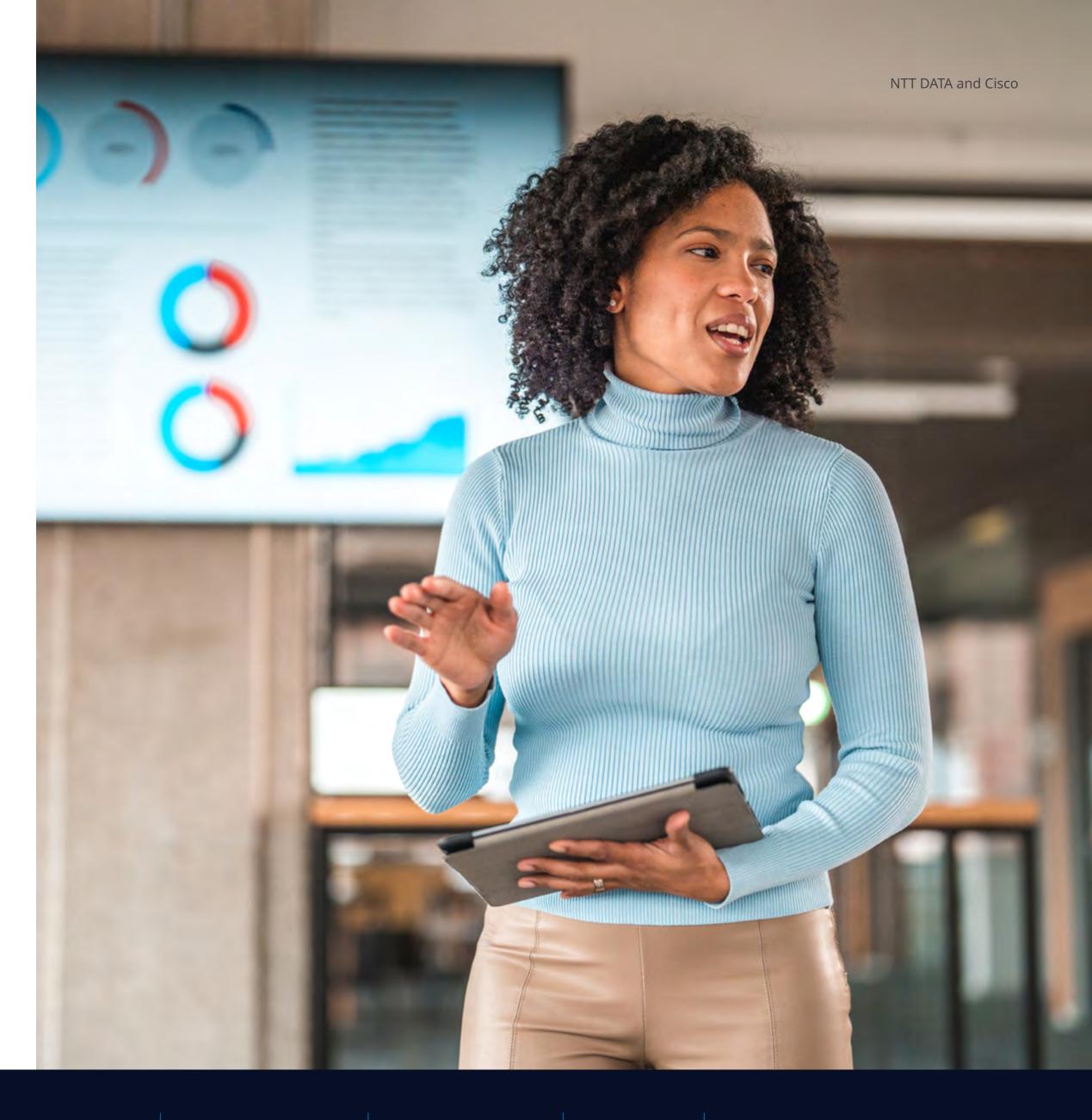
Over 80% of organizations report that lack of visibility restricts insights and results in reactive management.

89% agree that a service provider portal is crucial for enabling infrastructure visibility.

Source: NTT DATA 2024 Lifecycle Management Report



The best way to regain control of ROI in lifecycle management is with a single, centralized view of your entire technology ecosystem to enhance both decisionmaking and operational efficiency.



Redefining the infrastructure blueprint

New strategies

Lifecycle management

Understanding ROI

Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

The benefits of lifecycle services and proactive management

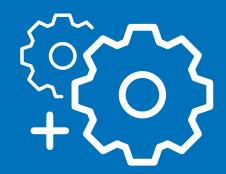
Outcome-based, software lifecycle services give you an in-depth understanding of your technology ecosystem so you can manage it proactively to drive business outcomes. These include:

Agility and continuity

- Enable greater service availability and agile infrastructure, ensuring uptime and rapid recovery.
- Address the challenges of managing subscriptions and licenses. Lifecycle management facilitates upgrades, provides visibility and minimizes operational downtime.
- Enhance infrastructure with AI/ML-powered operations, providing insights for proactively managing legacy and disconnected systems.

Productivity and efficiency

- Improve user experiences, increase productivity and maximize business value through real-time visibility across systems and assets.
- Achieve significant cost savings and better resource utilization by consolidating technology services, enabling seamless integration and improving accuracy through automation.
- Reduce risks and increase compliance by simplifying risk-related operations with enhanced data management, role-based access control, embedded security and end-to-end service integration.



What is Software lifecycle management?

Software-enabled lifecycle management refers to the comprehensive control and optimization of software assets throughout their entire lifespan, from acquisition to retirement.

It involves:

Using specialized tools and processes to streamline procurement, deployment, utilization, maintenance and decommissioning of software applications.

It ensures:

Efficient resource allocation, compliance with licensing agreements, and maximization of software investments, ultimately supporting organizational goals such as cost savings, risk management and enhanced operational efficiency.

Navigating the multivendor challenge in IT asset management

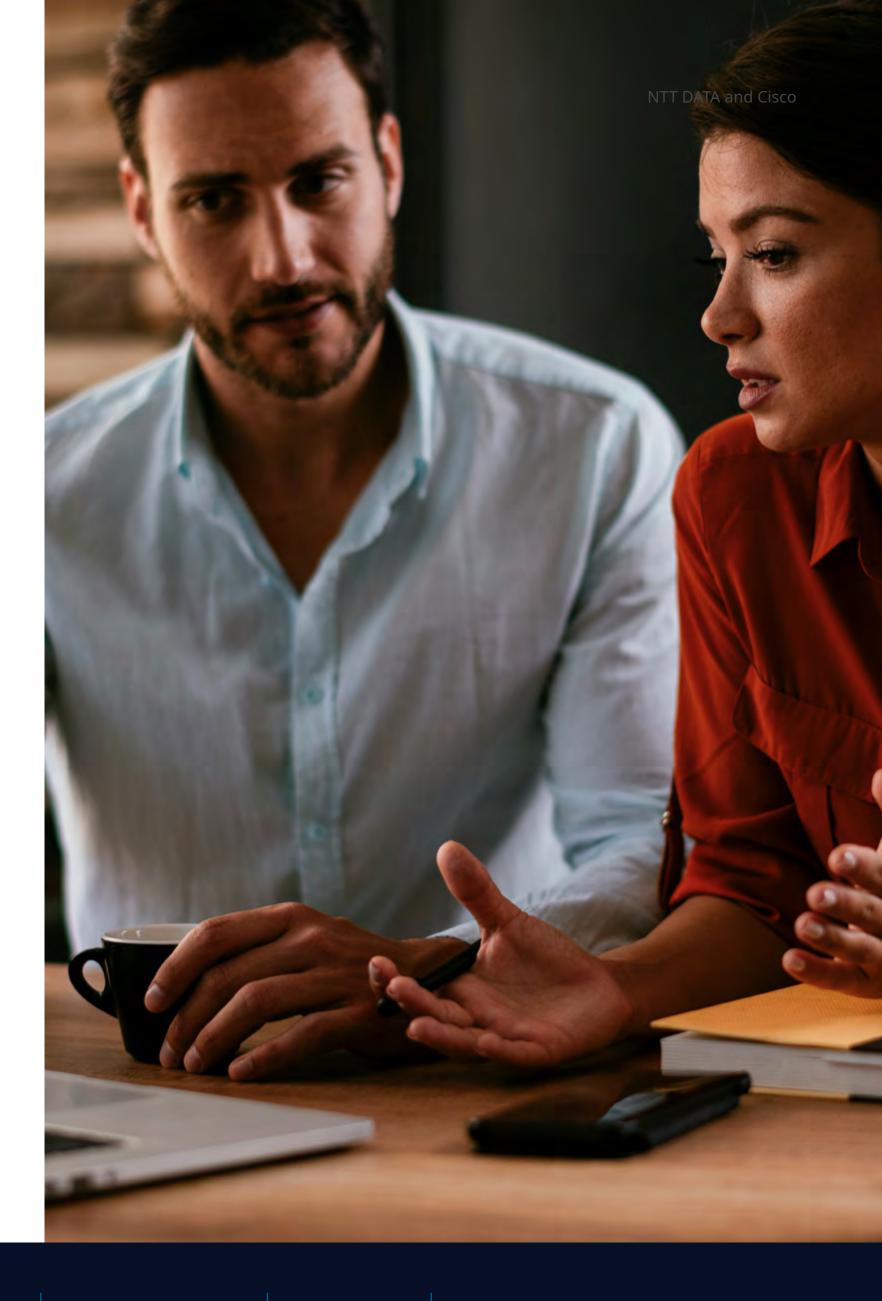
Managing IT assets across multiple vendors can be a formidable challenge and often requires careful navigation by the business. Each vendor introduced to the IT ecosystem has unique compatibility requirements that must be met to ensure operational efficiency and productivity.

Handling multiple contracts and service level agreements also demands rigorous oversight. You need to track performance across vendors to determine whether you're getting the service quality and cost efficiencies you were promised, in line with your business goals.

Using service-partner portals is an effective way to overcome vendor-management complexities. These platforms are designed to centralize contract management, facilitate communication and enhance collaboration with vendors. They can also provide a much-needed unified approach to monitoring performance, resolving issues and optimizing IT asset utilization.

3 areas where lifecycle services assist with multivendor IT asset management

- 1. Contract negotiation and management: Managing varied contractual terms across vendors requires meticulous attention to detail and negotiation skills. Let the professionals help you manage relationships and resolve technical issues across diverse vendor environments.
- **2. Interoperability for continuity:** With seamless integration between technologies from different vendors, operational continuity is assured and your IT investments are optimized.
- **3. Software version control:** Robust monitoring and management systems help to maintaining consistency and security across multiple software versions.



Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI

Taking back control

Navigating the multivendor challenge

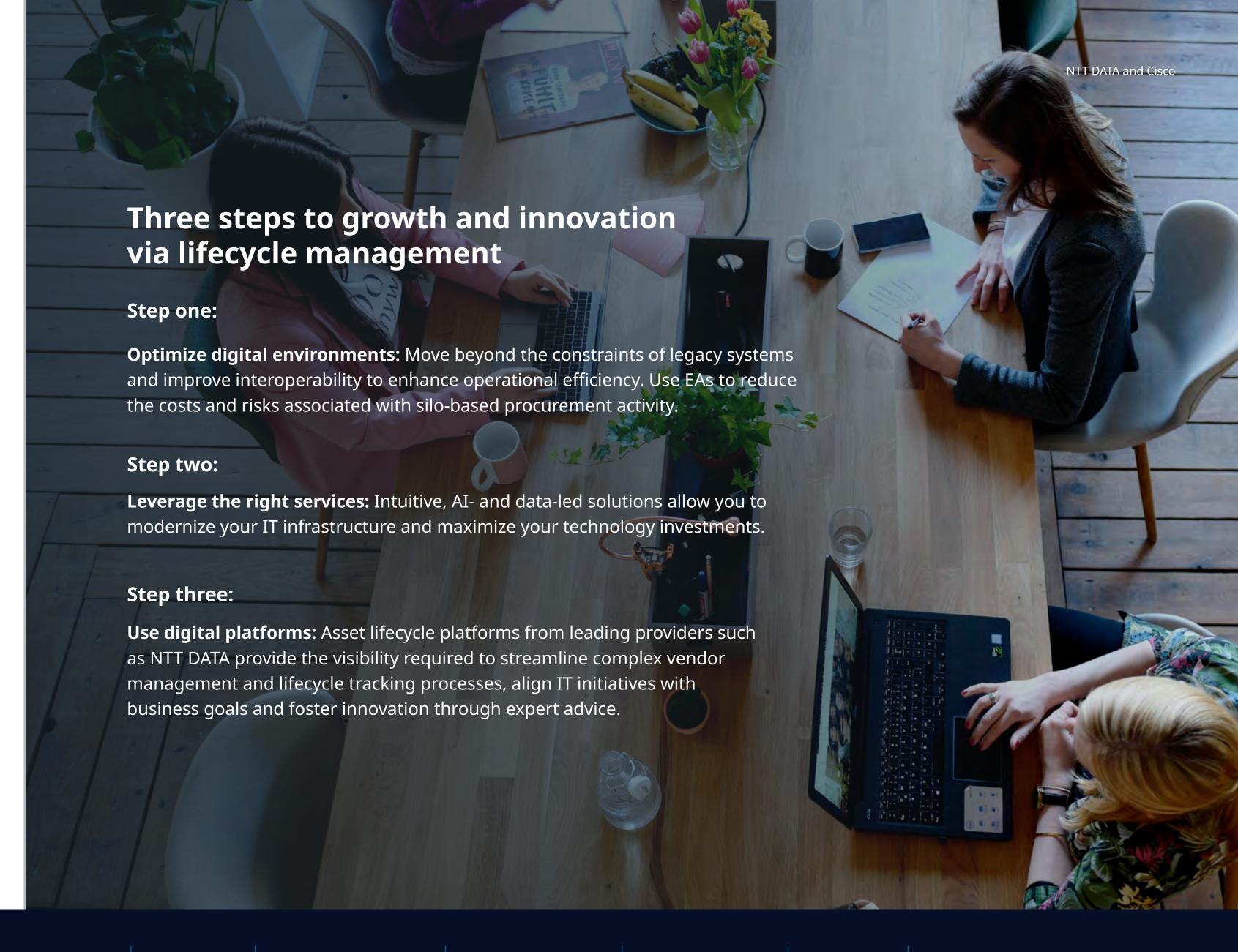
Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

Gearing IT environments for innovation and the digital future

The road to growth and innovation in IT lifecycle management is not always a smooth one. A lack of interoperability with legacy systems and limited control over IT lifecycles can make it difficult for organizations to fully leverage new technologies.



Redefining the infrastructure blueprint

New strategies needed

Lifecycle management

Understanding ROI Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

Effective lifecycle management in practice

NTT DATA and Cisco facilitate the adoption of comprehensive lifecycle management strategies for clients across the globe, in any industry.

We simplify the complexities involved in managing technology assets and support our clients with strategic frameworks, planning and execution. This collaborative approach ensures that businesses can effectively leverage Cisco technologies and NTT DATA expertise in ways that best meet their operational and strategic goals.



Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

Case studies:

NTT DATA and Cisco solution

Financial services giant drives down costs by converting 236 software contracts to one Enterprise Agreement.

A financial services giant based in the US needed a way to manage diverse software applications efficiently to avoid the underutilization of software features and reduce the high maintenance costs associated with their legacy systems.

With operations and offices spread over 18 countries and 20 different businesses, our client offers financial services that handle the complexities of local legislation and changing financial markets. The scope of their operations was reflected in the 236 software licensing contracts associated with their corporate infrastructure. And each contract had a different end date.



The process

- **Strategic assessment:** We conducted a thorough assessment of the client's existing software assets and lifecycle stages.
- **Optimized licensing:** Using Cisco's expertise in software licensing, we were able to right-size and optimize license counts, reducing unnecessary costs.
- **Feature utilization:** NTT DATA's analytics capabilities enabled us to analyze feature utilization across applications and identify opportunities for enhancement.
- **Risk mitigation:** We implemented robust security measures and compliance frameworks to ensure data integrity and regulatory compliance throughout the lifecycle.
- **Digital transformation:** Facilitated digitalization initiatives, integrating legacy systems with modern technologies to enhance operational efficiency and innovation.



The results

- **Cost savings:** Our client achieved significant cost savings through optimized licensing and reduced maintenance expenses. The Enterprise Agreement reduced direct costs by US\$1.7 million a year by using consumption-based billing.
- Improved efficiency: We helped the client to streamline software deployment and management processes. The analytics provided enabled the client to accurately charge back to individual businesses based on actual consumption and to gain usage insights for increased efficiency.
- Innovation enablement: Enabled innovation by aligning software capabilities with business objectives, fostering agility and competitive advantage. Managing the software license lifecycle with flexibility and efficiency facilitates rapid deployment of new features and resources, supporting a dynamic environment that fosters continuous innovation and quick adaptation to changing business needs.

Read the full case study

Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI

Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion



NTT DATA and Cisco solution

European rail agency gets license management on track

Our client, a European rail agency, needed a solution to manage their Cisco licenses, optimize license utilization and improve their procurement processes.



The process

- Comprehensive assessment: Conducted a thorough Software License Management Assessment (SLMA) to audit existing licenses and recommend optimizations.
- **Optimization strategy:** Streamlined license management to eliminate duplication, renew licenses as needed and optimize procurement processes.
- **Centralized management:** Implemented Cisco's Smart Licensing model for centralized license management, enhancing visibility and control.
- **Digital transformation:** Deployed NTT DATA's Softwaredefined Infrastructure Services to ensure continuous optimization and control over the license lifecycle.



The results

- Cost savings: Achieved cost savings by eliminating unnecessary licenses and optimizing procurement.
 Leveraged Cisco partnership to maximize cost savings through Enterprise Agreements and specific licensing programs.
- Operational efficiency: Streamlined administration through centralized management, reducing risks of license expiration and shortages. Enabled accurate budgeting and planning for future licensing needs, ensuring scalability and efficiency.







Ready to transform your IT landscape?



Schedule an obligation-free demo of NTT DATA's digital platform and see how lifecycle management solutions can benefit your organization.



Download the full NTT DATA 2024
Lifecycle Management Report for an in-depth look at the strategies and best practices to drive efficiency, innovation and ROI in your IT operations.

© NTT Data

About NTT DATA

As part of NTT DATA, a USD 30 billion IT services provider, NTT Ltd. is a leading IT infrastructure and services company serving 65% of the Fortune Global 500 and over 75% of the Fortune Global 100.

We lay the foundation for organizations' edge-to-cloud networking ecosystem, simplify the complexity of their workloads across multicloud environments and innovate at the edge of their IT environments where networks, cloud and applications converge. We offer tailored infrastructure and ensure consistent best practices in design and operations across all of our secure, scalable and customizable data centers.

On the journey toward a software-defined future, we support organizations with our platform-delivered infrastructure services. We enable a connected future.

Find out more services.global.ntt/en-us/about-us/our-partners/cisco



About Cisco

Cisco (NASDAQ: CSCO) is the worldwide technology leader that securely connects everything to make anything possible. Our purpose is to power an inclusive future for all by helping our customers reimagine their applications, power hybrid work, secure their enterprise, transform their infrastructure, and meet their sustainability goals.

Find out more cisco.com/go/ntt

List of abbreviations

Abbreviation	Meaning
AI	Artificial Intelligence
EA	Enterprise Agreement
IT	Information Technology
ML	Machine Learning
ROI	Return on Investment
SaaS	Software as a Service
SDI	Software-defined Infrastructure
SLMA	Software License Management Assessment
T&C	Term and Content

Redefining the infrastructure blueprint

New strategies needed

Lifecycle management Understanding ROI Taking back control

Navigating the multivendor challenge

Gearing IT lifecycle environments

Effective lifecycle management

Conclusion

© NTT Data | Illinion cisco