

Becoming CIO

Five steps senior IT leaders can take now
to fast-track their rise to the top

Get Started

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Five steps to CIO success for senior IT leaders

Technology is a key enabler for growth and competitive advantage, and as a result, the role of the CIO is expanding to include developing and refining business strategy. What's more, with non-stop cybersecurity threats and an uncertain economic forecast delivering a double blow to modern enterprises, all eyes are now on CIOs to safeguard people and data, drive operational efficiency, and more recently, help generate revenue.

Around the world, CIOs rely on VMware software to deliver the flexibility and choice they need to build the future. As an industry stalwart, VMware is the partner to help IT leaders help CIOs drive operational efficiency and business agility by

- Modernizing applications to ensure fast, predictable delivery
- Leveraging vigorous automation to do more with less
- Providing tools to enhance developer experience productivity

If you are a senior IT leader who wants to one day become a CIO, read on to learn about **five steps** you can take now to fast-track your rise to the top.



Step 1. Adopt a CIO mindset

The CIO remit has changed. Rather than being evaluated on their ability to manage IT infrastructure and make sure it ran smoothly—as they were for many years—today’s CIOs are expected to help transform the business. They must inspire their fellow executives to think about things differently, while also instilling confidence that they are optimizing current state.

As a result, not all transformational CIOs have followed a traditional technology operations career path. Many of the most successful bring significant line-of-business leadership experience to the role in addition to traditional technology operations expertise. They have high a level of emotional intelligence and understand that only by acting with empathy can they build meaningful relationships, retain hard-to-acquire talent, and create a can-do culture.

For senior IT leaders who want to one day become CIO, now is the time to better understand changing priorities, build relationships with stakeholders across the organization, and bring forth new or better ways to overcome obstacles and realize opportunities.



CIO priorities in 2023

With new technologies that promise to reinvent business processes and disrupt entire industries launching at head-spinning speeds, making sure that IT initiatives remain in lockstep with business initiatives is critical.

IDG’s [2023 State of the CIO Study](#) shows that CIOs are focusing their efforts in areas such as security management, IT operations and performance, and infrastructure and application modernization. Savvy CIOs are also collaborating closely with their fellow executives more than ever before, as well as cultivating relationships with line-of-business leaders to better understand their wants and needs, and find ways to reduce costs, increase productivity, and accelerate innovation.



Q: Which of the following activities best characterizes your focus and how you spend your time in your current role?

Source: State of the CIO, 2023

Figure 1: CIOs are focusing on security management, IT operations and performance, infrastructure, and application modernization in 2023.

CIO investments in 2023

Despite the turbulent state of the economy, IT budgets are largely staying flat or growing, according to the 2023 State of the CIO study. CIOs are making investments in technologies to improve security posture, and deliver on operational efficiency and profitability goals. At the same time, they’re allocating budget to new and emerging artificial intelligence technologies and tools.



Q: In 2023, which of the following technology initiatives will drive the most IT investment at your organization?

Source: State of the CIO, 2023

Figure 2: Tech initiatives driving IT investments in 2023.

Step 2.

Tame IT complexity in core areas

CIOs are aggressively incorporating open-source, multi-cloud, and Kubernetes into their core technology strategies for the unprecedented flexibility and scalability they provide. However, the inherent distribution of these cloud native systems also creates complexity that IT teams must solve for in order to realize the benefits. For example, migrating or re-architecting applications for a cloud native environment often means adopting a complex microservices model built from multiple providers or open-source projects. The result? Delayed software product launches that are difficult to integrate and create even more complexity. What's more, cybersecurity protocols require security and operations testing and validation, which can lead to iterative code changes.

Question: To what extent is complexity associated with managing the following inhibiting your developers' productivity and experience?

Cybersecurity	74%
Kubernetes	71%
Multi-cloud	61%
Open source	61% ¹

In an effort to tame complexity, enterprise architects, platform engineers, and cloud operations teams are turning to vigorous automation to manage and simplify tasks that would otherwise require manual intervention. Doing so helps to improve business processes *and* frees up resources to focus on innovation and revenue-generating initiatives, which are two of the top priorities for CIOs, according to the 2023 State of the CIO study.

1. Forrester Consulting. "Elevating the Developer Experience." March 2022.

How VMware helps

The [VMware Tanzu Application Platform](#), [VMware Tanzu Application Service](#), and [VMware Tanzu Labs](#) help development teams maneuver through the complexities of distributed systems and a sprawling landscape of tools and services, while adopting modern platform operations and application development practices.

By streamlining the process of getting applications to production, simplifying code handoffs between teams with logical separations of concerns, and offering a curated open-source experience, VMware Tanzu allows for consistent policy enforcement without hindering innovation and developer velocity. [VMware Tanzu Mission Control](#) automates management tasks with support for infrastructure as code and cluster configuration. Teams can adopt a [GitOps approach](#), which provides a single consistent model for making changes to applications and the platforms on which they run across clouds.

With powerful tools, automation, and data-driven insights, [VMware Tanzu for Kubernetes Operations](#) offers platform engineering and cloud operations teams a simplified, consistent approach to container deployment and management, while VMware Aria Cost powered by CloudHealth helps application developers determine appropriate requests for Kubernetes containers by recommending a range based on past usage and custom efficiency targets.

More complexity-taming resources



[VMware Aria Continues Momentum with Additional Innovations](#)



[GitOps: Leveraging DevOps for cloud native infrastructure automation](#)

Four reasons to embrace GitOps

1. Simplified infrastructure management
2. Improved reliability and stability
3. Increased productivity
4. Strong security

Step 3. Bridge the AI/ML divide

Nearly every enterprise organization wants to leverage AI/ML across a broad range of applications to drive innovation, enhance customer experiences, improve operational efficiency, and gain competitive advantages. But many struggle to commercialize AI/ML projects because IT and data science teams operate separately, often using different tools, systems and processes. This can create a disconnect between the development of AI/ML models and the IT infrastructure needed to deploy and scale those models in a production environment. As a result, AI/ML projects tend to incur high costs and rarely make it into commercial production.

To overcome these challenges, CIOs need their IT leaders to foster better collaboration and integration between IT and data science teams. This might involve adopting DevOps practices such as continuous CI/CD, and tailoring them for AI/ML, which is known as MLOps.

How VMware helps

With DKube MLOps Platform and Tanzu, the divide between teams can be closed. DKube is a Kubeflow-based, enterprise-grade, end-to-end MLOps platform that enables data scientists to develop, tune, deploy and monitor complex models.

DKube consists of several Kubernetes services including DKube Controller, Data Versioning, Logging & Monitoring, Authentication, and Model Monitoring to enable the definition, execution and tracking of ML workloads. All of this functionality is integrated into a flexible, UI-based workflow that is intuitive enough to allow team members to collaborate on common AI/ML projects within hours of starting the installation.

Using DKube MLOps Platform and Tanzu, data scientists and IT teams can off-load the difficult, time-consuming task of integrating the hardware or infrastructure of a private or public cloud with authentication, storage and data sources to DKube's Helm-based installation and post-install scripts.

DKube is optimized to run on either private or multi-cloud environments, making it a perfect complement for VMware Tanzu Kubernetes Grid, which offers companies a simple and consistent interface for Kubernetes workloads in any public cloud or private on-premises infrastructure.

Advance AI/ML projects from the research stage to commercial adoption and deployment with DKube MLOps Platform and Tanzu.

More bridge-building insights



[Bridge the AI/ML Divide Between Data Science and IT Infrastructure with DKube and VMware Tanzu](#)

Step 4. Take a shift-left approach to security

As the 2023 State of the CIO study revealed, 58 percent of respondents say that increasing cybersecurity protections is a top priority. Many CIOs and IT leaders are exploring solutions and adopting technologies and practices that will allow them to continuously secure their applications—and the platforms on which they run—without hindering developer productivity.

One way to do this is to adopt a shift-left approach to security, which emphasizes incorporating security practices and considerations earlier in the software development lifecycle in order to prevent security vulnerabilities and weaknesses from entering the software codebase.

Other benefits of a shift left approach to security include

- **Reduced costs** – Fixing vulnerabilities in the later stages of development or post-deployment can be expensive, both in terms of actual costs as well as) and potential damage to reputation and customer trust. By shifting security left, vulnerabilities can be addressed when they're less costly to fix.
- **Faster time to market** – When security is integrated into the development process, there's less need for extensive security checks at the end of the process. This can help speed up the time it takes to get a product to market.
- **Tighter collaboration** – By making security a shared responsibility that's integrated into the overall development process, it encourages better collaboration between development, operations, and security teams.

How VMware helps

With the increasing complexity of distributed systems, it is essential to define and implement policies for Kubernetes clusters to ensure the security, reliability and compliance of the environment. [Tanzu Mission Control](#) securely integrates with Kubernetes clusters to support a wide array of operations, including lifecycle management through Cluster API.

With Tanzu Mission Control, organizations and administrators can adjust the Gatekeeper deployment settings to their needs at all levels, such as organization, cluster group, and cluster. It provides built-in security policies and cluster inspection capabilities, which make it possible to apply additional controls on multi-cloud Kubernetes deployments. Tanzu Mission Control offers out-of-the-box strict and baseline security policies and integrates with Open Policy Agent policies for adapting security posture over time.

More on security



[Get More Flexible Kubernetes Security with Policy Improvements in VMware Tanzu Mission Control](#)

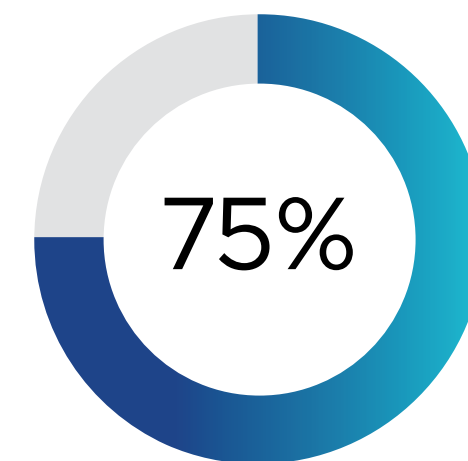
Step 5. Double down on developer experience

Developer experience (DevX) refers to how easy or difficult it is for a developer to perform essential tasks needed to implement a change. Forrester defines it as the skills, tools, frameworks and methodologies aimed at creating, maintaining and enhancing code throughout the entire software delivery lifecycle, as well as improving developer productivity, both individually and collectively.²

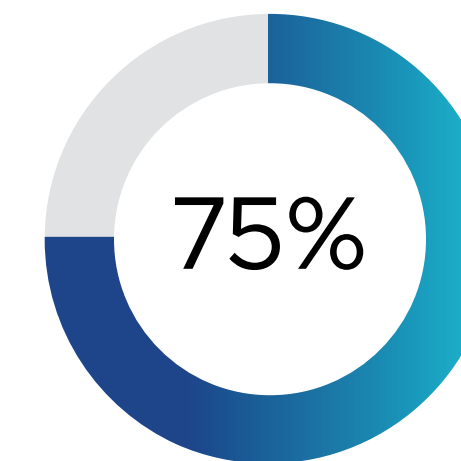
Both IT and line-of-business leaders recognize that developers are critical to strategy execution, and thus are investing in DevX. In a Forrester survey on developer experience, nearly all IT and line of business leaders stated that their organizations had a DevX strategy in place, and most believe that improving DevX positively impacts business objectives such as customer satisfaction metrics, revenue growth, and profitability.

2. Forrester Consulting. "An Executive's Checklist To Fostering A Strong Developer Experience For Business Growth." June 2022.

However, Forrester research also revealed that the majority of executives feel that their organization's DevX strategy is mature enough to deliver measurable value. Now, many are doubling down on their developer experience strategy with higher investments in tools to enhance productivity and improve business value metrics.



"Our ability to compete in our markets is directly related to our **ability to release quality software** more quickly."



"The developer experience is **important/very important to business strategy** execution."

Get more developer experience insights:

[Forrester Consulting: An Executive's Checklist To Fostering A Strong Developer Experience For Business Growth](#)

How VMware helps

A [Forrester Consulting Thought Leadership Checklist](#) commissioned by VMware reveals that developers need an environment that is conducive to their productivity in order to feel engaged.³ And the languages, frameworks and other technologies a developer will work with is a top factor when considering a new position or staying in an existing one.

- [Tanzu Application Platform](#) and [Tanzu Application Service](#) help developers deliver applications quickly and more securely. It streamlines the process of getting applications to production, simplifying code handoffs between teams with logical separations of concerns.
- [Tanzu Application Service 4.0](#) boasts a bevy of new features focused on enhancing developer experience and improving platform engineering, including
 - A developer portal based on the open-source Backstage portal builder
 - Integrated Windows Authentication support for .NET framework
 - Custom application metric rate limiting
 - Expanded developer marketplace offerings

Watch this video for a deep dive into the new Backstage-based Tanzu Application Service portal.



3. Forrester Research, Inc “An Executive’s Checklist To Fostering A Strong Developer Experience For Business Growth,” June 2022.



Fast-track your rise to CIO

VMware is the partner to help IT leaders show their true value by modernizing applications for fast, reliable delivery and freeing up talent and funding for innovation.

For more information, visit [vmware.com/cio](https://www.vmware.com/cio).

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