

The Best Ways to Manage Shadow IT

With the right network, you can choose whether to eliminate, coexist with, or embrace shadow IT.

INSIDE

Shadow IT Is Here

Your users cast a bigger shadow than you think.

Decision Time

It's time to formulate a shadow IT strategy.

The Dark Side of Shadow IT

No doubt about it, shadow IT makes you vulnerable.

The Bright Side of Shadow IT

But shadow IT also has merits.

The Network is Key

Whatever shadow IT strategy you choose, you need the right network to implement it.

Juniper Networks Supports Your Shadow IT Strategy

Whatever path you choose, Juniper provides a simple, secure, and open network that meets your needs.



Executive Overview

Name an organization, large or small, and that organization has experienced the rise of shadow IT. Shadow IT is being driven by the consumerization of technology—the fact that enterprises are being significantly impacted by the consumer technologies that their employees use outside of work.

The fact that nearly everyone has smartphones, and that many have tablets, and that some even have smartwatches affects the way they work as well as the way they play. And their easy access to the latest apps that are designed to make their lives easier and more productive impacts the way they think about their jobs.

No doubt, shadow IT raises challenges, namely security, integration, and operational ones. But it's not necessarily a bad thing that needs to be completely repressed.

In this e-guide, we look at the trends that are driving the rise of shadow IT. We explore the drawbacks and benefits it offers. We also explain how designing and building the right network is essential for your preferred shadow IT strategy.

**Your users cast a bigger shadow
than you think**

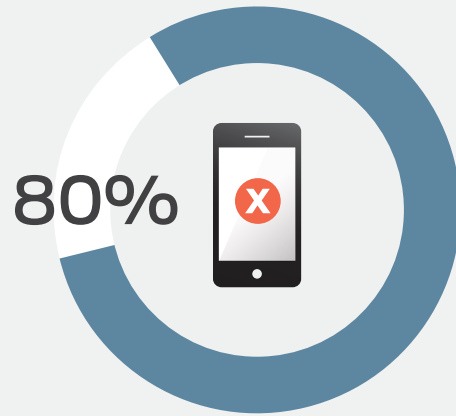
Shadow IT is here. Fueled by bring-your-own-device (BYOD) and bring-your-own-application (BYOA) trends, shadow IT is already impacting your IT budget, IT operations, and IT security.

What is shadow IT? It's the unauthorized IT environment that grows when employees bring technology into your organization without IT's permission—or even knowledge.

Shadow IT has largely been driven by the consumerization of IT. Used to instant—and inexpensive—gratification of technology in their personal lives, users get frustrated by IT's cautiousness and slow response to requests. They take matters into their own hands. Cloud computing has been a huge contributor to shadow IT, as it empowers workers to use their own mobile devices (smartphones, tablets, and laptops) to access software-as-a-service (SaaS) apps from the Internet.

In fact, the combination of cloud and mobile has proven to be the perfect environment for nurturing shadow IT. And not just individual users, but entire line-of-business organizations within the enterprise are deploying technologies that fall outside IT's purview, in search of tools that will help them respond to markets faster.

Do you know how many of your workers are using software-as-a-service (SaaS) applications without IT approval?¹



BYOA



**It's time to make a decision
about shadow IT.**

Your decision about what to do about shadow IT will impact your users, your budget, your operations, and the security of your business.



Eliminate it! The security, compliance, and cost risks are too great. If we BYOD or BYOA, we'll be sorry.



Coexist with it! Shadow IT offers my users—and my organization—sufficient advantage for me to tolerate the risks.



Embrace it! Shadow IT can help my users be more productive, business units be more agile, and customer-facing employees improve service and loyalty.

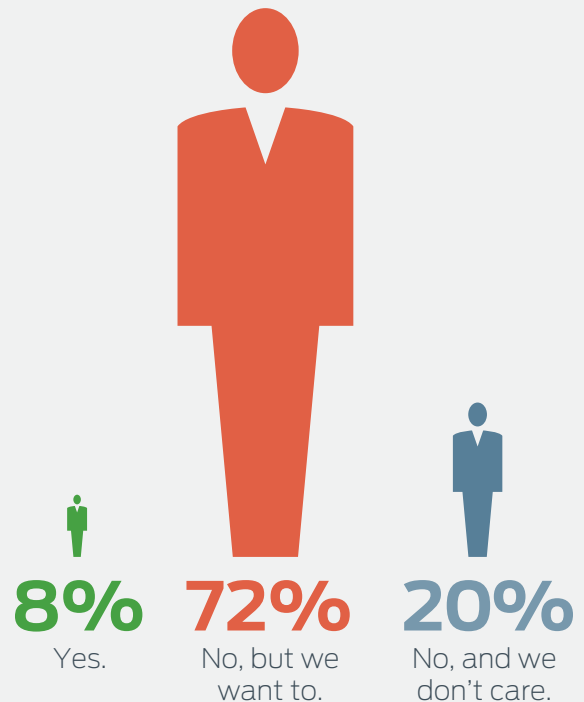
YOU CAN'T AFFORD TO IGNORE SHADOW IT ANY LONGER. TOO MUCH IS AT STAKE.

According to Gartner's Richard Gordon, today 30% of technology spending occurs outside of IT's control. Within the next few years, that will rise to 50%. A lot of those dollars are disappearing into the shadows.³



Today, **30%** of technology spending occurs outside of IT's control?²

Do you know the number of shadow IT apps in use at your company?⁴



The dark side of shadow IT

But no mistake about it, shadow IT makes your organization vulnerable. So not surprisingly, the first reaction of most CIOs is to shut it down.

Still, that can be harder than you might think. There will always be users who go rogue, circumvent the rules, and try to sneak in the technology they believe makes their jobs easier.

ASSESS YOUR SHADOW IT RISK FACTORS



Security: You've got enterprise data scattered through hundreds of unsupervised apps and perhaps thousands of uncontrolled devices.



Integration: With dozens, perhaps hundreds of different clouds, how do you get them to work together?



Compliance: You have no control over what is happening in the shadow IT world.



Cost: Spending can easily get out of control when not monitored from a central point.



85% of CIOs consider Shadow IT to be a risk to their organization's **IT SECURITY**⁵

Do you really know how many cloud apps are in your organization?⁶

88.1% of those cloud apps are not enterprise-ready. IT directors guess, on average, 61.3

10%

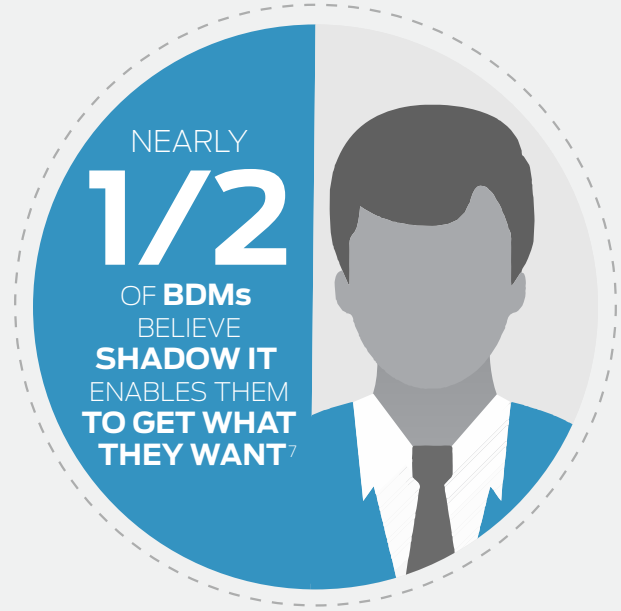
613

cloud apps in use in enterprise, on average

The bright side of shadow IT

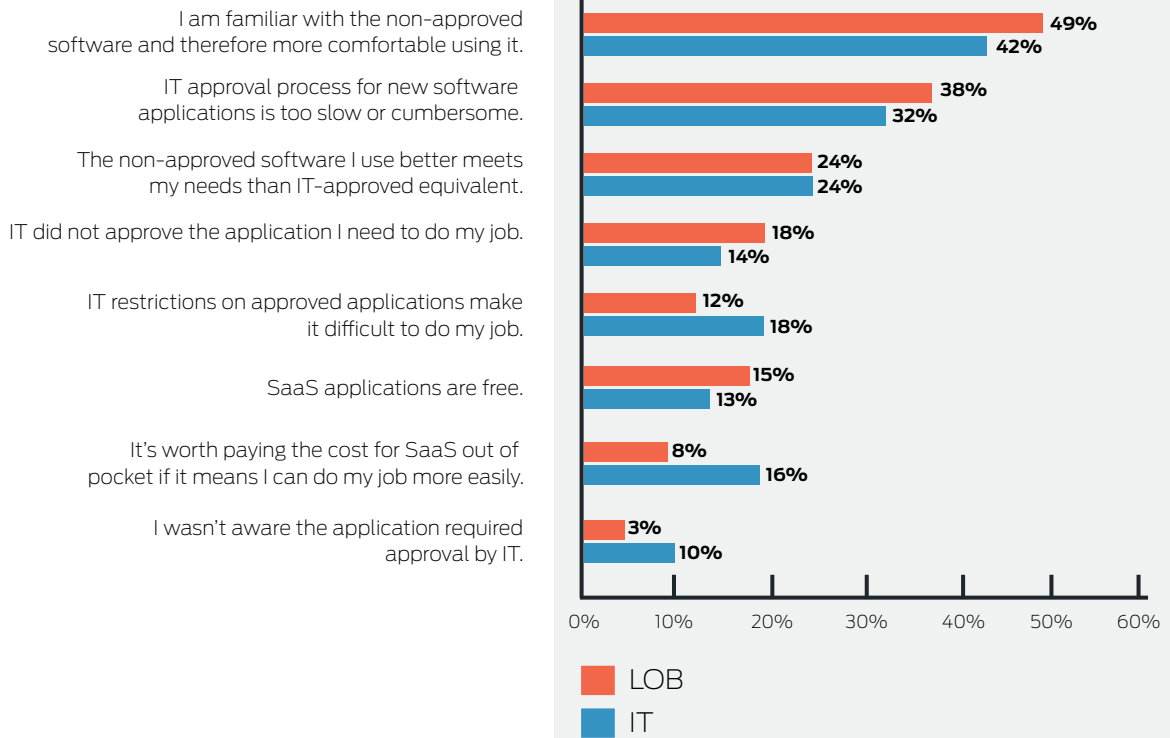
Let's shine a light on what shadow IT has to offer.

On the other hand, shadow IT has a lot of merits. When your users get to choose their devices and their apps, they can be more productive. They adopt the latest technologies faster than IT ever could, and drive innovation from within line-of-business organizations, agilely responding to market shifts. That's why, after initially attempting to shut it down, many CIOs have decided that they—and their organizations—can benefit by coexisting or even embracing shadow IT.



WHY YOUR USERS ARE EMBRACING SHADOW IT

Drivers for Adoption of Non-Approved SaaS⁸
Indicate the reasons why you use non-approved SaaS.



**Whatever shadow IT strategy you choose,
you need the right network to implement it.**



Visibility into the shadows is key

And you need a network that is simple enough, secure enough, and scalable enough to control the shadows.

15 Key Questions to Ask Yourself Right Now:

IS MY NETWORK **SIMPLE** ENOUGH TO SCALE

1. Can I scale as more apps and more devices are brought into the organization?
2. Can I manage bandwidth utilization based on who and what are consuming my bandwidth?
3. How are my already overloaded network managers dealing with all this?

IS MY NETWORK **SECURE**?

4. What kind of endpoint security is on those devices?
5. Can I keep the network secure?
6. Can I identify unauthorized and unapproved apps before they cause network performance to slow?
7. Can I monitor for rogue wireless devices before they drag down SLAs and impact access to mission-critical applications?
8. Can I identify root causes of potential problems before they cause slowdowns or outages?
9. Do I know who is accessing what, when, and through what device?

IS MY NETWORK BUILT ON **OPEN STANDARDS** SO I HAVE COMPLETE VISIBILITY INTO IT?

10. Which apps are running on my network?
11. Which users are using those apps?
12. What impact do these apps have on network performance?
13. What devices are on the network?
14. Can I guarantee satisfactory SLAs?
15. Can I flag and resolve any adverse events before they detract from network availability?

**Juniper Networks is ready to support
your shadow IT strategy—whatever path
you choose.**



With Juniper Unite for the Cloud-Enabled Enterprise, you have the flexibility to

choose your own path—and the agility to change your direction at any time. Whether you slam the door on shadow IT or harness its power for good, Juniper gives you what you need to succeed.



Simplicity that allows you to scale as needed:

A single, easy-to-manage platform ensures network availability and scalability in the face of BYOA and BYOD network-fueled bandwidth demand variability.



Protection for your business from evolving security threats:

Advanced, open, and scalable network security goes well beyond firewalls and perimeter defenses to threat intelligence and the latest detection tools to keep you safe.



Best-in-class solutions:

You get the ability to deploy best-in-class industry solutions to work seamlessly with Juniper solutions to achieve unrivaled ease-of-use and enjoy a centralized management experience. This open framework ensures network edge visibility and protection regardless of whether the environment is physical or virtual, public or private cloud, or traditional on-premise IT.



Juniper Unite is a comprehensive reference architecture that lets users build an agile, secure, and cloud-enabled enterprise using Juniper switching and security solutions—including unified threat management, next-generation firewalls, and threat intelligence services—as well as best-of-breed WLAN, UCC, and network access solutions through an Open Convergence Framework. Juniper Unite offers all the essentials a growing business needs to support its operations today while preparing to embrace the future. One network. One architecture. All up and running on Day One. It's everything you need to bring your offices together as one. Juniper Unite for the cloud-enabled enterprise. From Juniper Networks.

Next Steps

For more information about Juniper Unite Cloud-Enabled Enterprise, please contact your Juniper representative or go to www.juniper.net/unite.

About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at www.juniper.net.

References

¹ Cloud Security Alliance. Cloud Adoption Practices & Priorities Survey. January 2015.

² Stacy Collett (ComputerWorld). Forecast 2015: IT spending on an upswing. November 3, 2014

³ Ibid.

⁴ Cloud Security Alliance. Cloud Adoption Practices & Priorities Survey. January 2015.

⁵ Stratcast and McAfee, "The Hidden Truth Behind Shadow IT." November 2013.

⁶ Netskope. Cloud Report. January 2015.

⁷ Vanson Bourne. Shadow IT: The Headlines. June-July 2014.

⁸ Stratcast and McAfee, "The Hidden Truth Behind Shadow IT." November 2013.

Corporate and Sales Headquarters

Juniper Networks, Inc.
1133 Innovation Way
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or +1.408.745.2000
Fax: +1.408.745.2100
www.juniper.net

APAC and EMEA Headquarters

Juniper Networks International B.V.
Boeing Avenue 240
1119 PZ Schiphol-Rijk
Amsterdam, The Netherlands
Phone: +31.0.207.125.700
Fax: +31.0.207.125.701

