

# The Future of the Workstation is in the **Cloud**.

Top 5 Reasons Manufacturing Firms Should Adopt SaaS Cloud PCs and Workstations.





## INTRODUCTION

# Physical workstation provisioning has run its course

### The public cloud changes everything. Are you ready?

Provisioning and managing physical workstations is painful – especially for today's highly distributed organizations. Procurement, provisioning, and the logistics of shipping hardware are costly and time-consuming – and then there's the security risk of sensitive or proprietary data floating around on workstations or laptops. This is the reason many organizations moved to virtual desktop infrastructure (VDI) in the first place. However, while legacy VDI, whether on-premises or cloud-hosted, may help with security, it constrains your ability to respond to changing business conditions quickly, at a time when enterprises need flexibility most. VDI is complex, hard to scale beyond one location, and users typically dislike the performance.

Many organizations are feeling the strain of supporting employees who are working from home and need to transition from the stopgap measures that saw them through the pandemic to long-term solutions that are operationally and financially sound.

The public cloud offers a global infrastructure that product design and manufacturing firms can use to outsource traditional datacenter-management functions, freeing IT personnel to contribute in more strategic ways specifically aimed at business growth. Furthermore, moving desktop or workstation-class workloads onto public cloud infrastructure can be a high-return way to better address the needs of your demanding product designers and engineers. The opportunity is to improve the overall user experience, strengthen security, and boost productivity, by giving people the ability to work and collaborate from anywhere. But there are multiple approaches to deploying Cloud PCs and workstations— from “do-it-yourself” (DIY) VDI tools to Software-as-a-Service (SaaS) platforms.

IT experts need to understand the capabilities of each approach when choosing the best solutions for their organizations.





## Why Product Design and Manufacturing Firms Should Consider Cloud Workstations:

- Employees can work from anywhere, on any device with full productivity
- Users are more productive because cloud networks are substantially faster
- Better team collaboration by centralizing data and virtual workstations in the cloud
- Fewer errors can reduce rework costs
- Centralizing desktops in the cloud is more secure, and no data resides on endpoints
- No infrastructure investment and reduced hardware costs/refresh cycles is more sustainable
- Add compute resources quickly when and where they are needed
- Securely support subcontractors and joint ventures
- Hire the best people, wherever they live
- With the right solution, you can get performance that is equal to or better than a physical PC – and it doesn't degrade over time.

## Cloud Workstation ROI

Product design and manufacturing firms should also consider cost. Liquid cooled GPU workstations are expensive, and the logistics of tuning, shipping and repairing them gets even more complex when people are working remotely. If a workstation breaks and an employee can't work, critical billable hours are lost for the firm. When a workstation is in the cloud, users can access it from any device – allowing you to reduce hardware investments and even securely support BYOD. Cloud-based workstations offer an OpEx model that allows you to pay as you go, which can be a preferable and more predictable option. Because Cloud workstations allow users to work from anywhere, many firms also see productivity gains. If you consider CAD managers or engineers who can bill at rates of \$150-\$200 per hour, a gain of just 3 hours a month can result in a 200+% ROI for a Cloud workstation.



# 5 top ways SaaS Cloud PCs and workstations can improve and simplify end-user computing

Cloud technology has never been more relevant to the design, engineering, and manufacturing industry. Whether you're still managing physical PCs or considering on-prem VDI systems, Workspot Cloud PCs and workstations on Microsoft Azure can open the door to new use cases, offering operational simplicity, great end user performance, and agility that is unprecedented. Workspot is a 100% cloud-native, enterprise-proven SaaS platform that runs on Microsoft Azure and allows IT organizations to provision tens, hundreds or thousands of Cloud PCs and workstations in any Azure region, in just a few minutes. IT managers access the Workspot Control console, which gives them web-based access to their entire Cloud PC infrastructure. Workspot's intelligent client can easily be deployed on a variety of endpoint operating systems, including Windows, Android, iOS, and more, giving end users access to their Cloud PCs and workstations from any device. Here are the top ways Workspot Cloud workstations on Azure can make life easier for IT teams in manufacturing firms.



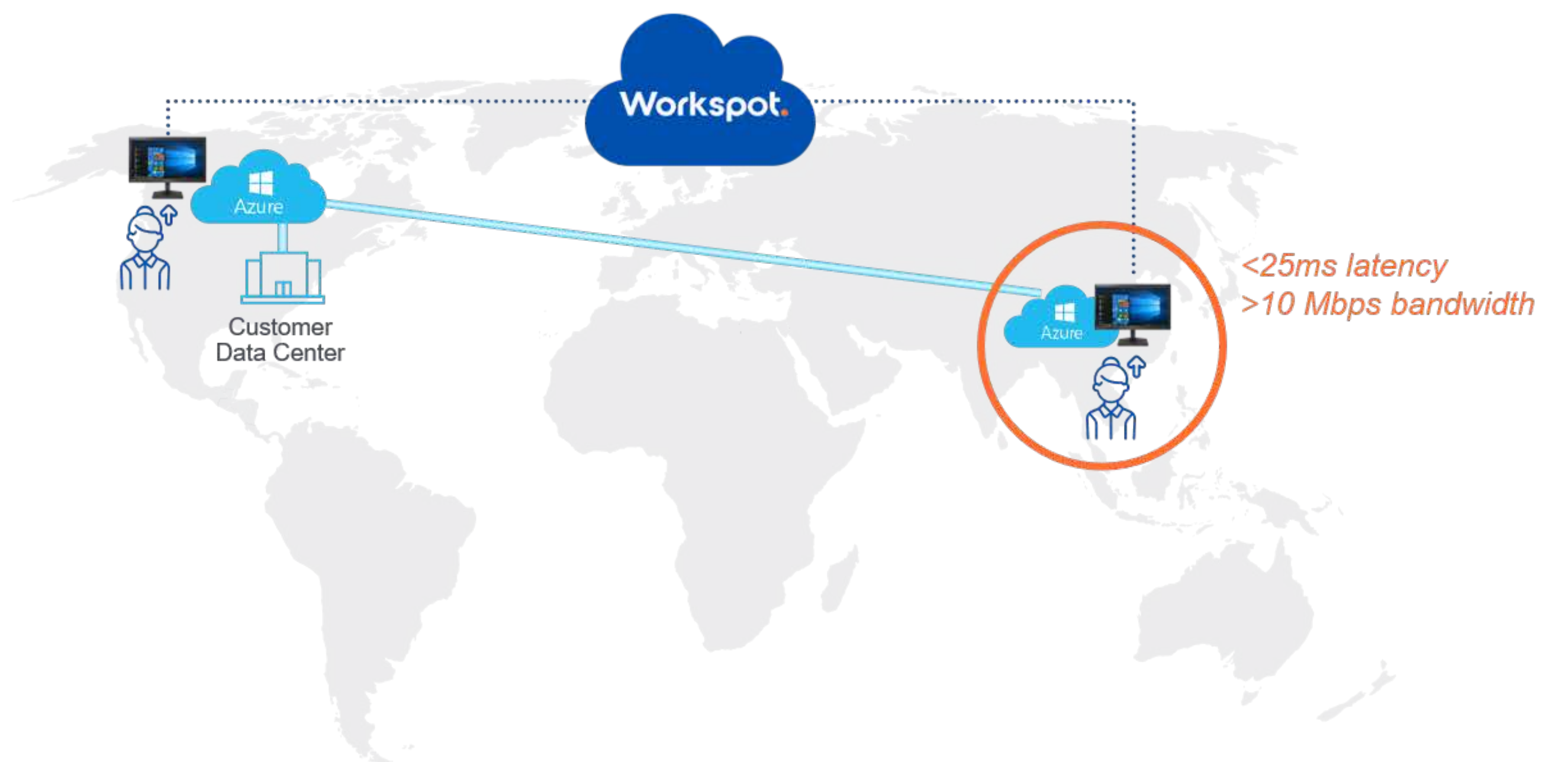


# 1. Better **business agility**— workstations in minutes, not months

A growing business needs employees, and employees need access to relevant applications and systems to do their jobs. Most product design and manufacturing organizations have employees and contractors in many different regions. With physical PCs, it can take IT weeks to source, provision, and distribute these desktops. That means it can be weeks before users achieve full productivity on their new systems, and that is a substantial cost to the business. Even greater costs—both for equipment and end-user downtime—accrue during hardware refresh cycles, or when equipment fails. If you're considering do-it-yourself (DIY) VDI, it can take months and substantial investment in both hardware and IT specialists before you have a system to support your first end user. Plus, when business requirements change, it's difficult and time consuming to scale up to meet those needs on-demand. These traditional approaches to end-user computing actually limit agility at a time when firms need to be more nimble than ever. All of these examples can cost you money. For instance, highly valuable product design engineers are expensive, and when they sit idle waiting for IT to distribute or fix desktops, the cost to the business adds up quickly.

The Workspot Enterprise Desktop Cloud™ platform on Azure is a SaaS platform for delivering fully-custom Cloud PCs and GPU Cloud workstations to any user, anywhere in the world, allowing you to have new employees and contractors productive in minutes or hours, not months. This gives you the ability to respond to changing business needs faster, while substantially reducing the cost of opening new offices or job sites. All you need is a device and an internet connection!

Because Workspot leverages Azure's evergreen, enterprise-class hardware in cloud regions globally, IT organizations now have the flexibility to provide end users with less costly endpoints, while giving them the power to access their fully-provisioned Cloud PCs from anywhere.



**Workspot is a SaaS platform that delivers fully custom Windows 10/11 Cloud PCs and workstations to any user, anywhere in the world.**



## 2. Exceptional performance that rivals physical workstations



Remote desktops have developed a reputation for poor performance. Sometimes this occurs because the system is being run from a datacenter in a single location, with end users located many thousands of miles away, which results in latency. In other cases, poor performance is caused by the challenges of over-provisioning too many users on a shared hardware infrastructure. For call-center employees working with basic applications, this might be OK, but for CAD designers or power users who need access to high-performance graphics and compute, any noticeable latency can be unacceptable.

Workspot's platform makes it possible for IT to provision each user's Cloud workstation in the Azure region closest to them, thus reducing latency and ensuring unparalleled performance. Many Workspot customers have further supercharged their Cloud PCs by placing shared data—like CAD/CAM design files—in the cloud as well. With Azure's high-speed backbone, many Workspot users have reported performance that's even faster than their physical GPU-accelerated workstations!

Design software providers are recognizing the need to provide customers with cloud-based capabilities for their CAD/CAM/CAE applications. As a result, Workspot on Microsoft Azure can deliver Cloud workstation options which are fully certified and supported by these vendors to deliver the same reliability and performance CAD managers and design engineers expect from traditional workstation towers. These certifications include:



### This new level of performance enables Workspot customers to solve business challenges that were previously not well supported:

- Quickly and securely enabling design engineers while maintaining centralized control over intellectual property.
- Enabling secure access with the supply chain to control and monitor contractor access to data.
- Improving collaboration between remote teams or contractors by centralizing large files and data sets in Azure and providing fast access with Workspot Cloud workstations over Azure's high-speed backbone.

These use cases and many others that require high-performance computing can now be successfully addressed. When power users love the performance, they are more productive, which creates a competitive edge for the business.



### 3. Easy to deploy, easy to operate

Many IT organizations struggle to stay on top of a constant stream of end user requirements. For each new user or contractor, IT must provision workstations with a corporate image, applications, and security components, and then get these devices to the end user, wherever they are located. Patching and maintaining these applications is also complex and time consuming, and a single unpatched machine can open up the firm to serious security vulnerabilities.

Backup, business continuity and disaster recovery are additional considerations with physical workstations – complicated further with remote workers working with large files.

With Workspot, we take responsibility for your Cloud PC and Cloud workstation SLA, managing all the underlying cloud infrastructure and ensuring your users



Workspot's customer success and product teams work with you to ensure fast time to value and continuous optimization.

can access their apps and data with the highest reliability. An easy to use web-based console gives IT admins the ability to add Cloud PCs and workstations in the optimal configuration for each user, in minutes. Workspot's customer success team will work with you to optimize the system for your image, security stack and authentication tools and ensure rapid time to value. Even if your team is new to Microsoft Azure, they don't have to become Azure experts to use Workspot. We take out the risk of adopting new technologies and ensure you are successful.

#### Workspot's powerful cloud-native platform uniquely supports:

**Horizontal scalability across all Azure regions**, making it possible for IT to provision and manage Windows 10/11 Cloud PCs and workstations in any region from a single management console. So, an IT admin in California can provision 20 Cloud workstations in New York, 15 in London, 50 in Sao Paulo, and anywhere else they are needed – in minutes. New employees and contractors can be productive immediately.

**Flexible pricing models**, to suit each use case and improve cost predictability. Our flat-rate pricing option prevents cloud-cost surprises and a single Workspot bill that includes cloud compute costs for Cloud PCs and workstations simplifies IT processes.

**Workspot Watch**,™ a powerful big data collection and analysis platform, captures millions of data points about Cloud PC operations across cloud regions and feeds it into our Network Operations Center (NOC). The NOC is used by our operations team to proactively alert customers about network issues and user experience problems before they result in user downtime. A customer's operational data may also be exported to Splunk and other data analysis and SIEM tools as an added line of defense against downtime and security risks. The NOC is just one element of the innovation that supports Workspot's ability to deliver a 99.95% desktop SLA.



## 4. Leverage Azure to reduce desktop TCO by 30% or more

Most manufacturing and design firms have a combination of end-user computing solutions to address different business needs. These include traditional VDI, laptops for mobile knowledge workers, desktops, workstations for power users, and so on. Managing this diverse infrastructure requires sophisticated, expensive skill sets and a dedicated IT organization.

Innovative IT organizations recognize that moving infrastructure to the cloud can reduce capital expense and energy costs as well as the operational expenses associated with the human resources required to maintain on-prem datacenters. Further, because all compute is handled in the cloud, IT can provision lower cost endpoints, such as a Microsoft Surface Go, without impacting user productivity. In fact, users now gain the flexibility to work from anywhere with as good or superior performance, which typically results in improved employee satisfaction and higher productivity.

In conjunction with Workspot customer and industry analyst data, a detailed analysis of the costs associated with a well-managed desktop—whether physical PCs or legacy VDI desktops—has been developed, and it demonstrates that organizations can reduce desktop TCO by 30%—often by more—with Workspot on Azure. The soft benefits of improved productivity, business agility, and more can also be considered in addition to this hard-cost analysis.

Some Cloud PC solutions provide a “Windows-like” experience – in other words, a server-based, shared, hosted desktop – which may work fine for a small- to medium-size business. However, many of the applications that enterprise-scale businesses require may not work properly.

## 5. Improved security and compliance

Ensuring secure access to applications and resources for remote workers, contractors, or temporary employees is challenging for many distributed enterprises. A single unpatched PC can open up your organization to serious security breaches. Workspot on Azure centralizes desktops and workstations in the cloud so they are easily managed and patched, while the secure Workspot Client turns each physical endpoint into a zero-trust, stateless device. Corporate data no longer resides on employee laptops or workstations but stays safe in the cloud. Unlike other Cloud PC solutions, Workspot’s innovative architecture separates the control plane from the data plane, and that means your application data never flows through Workspot Control. We apply the Principle of Least Privilege (POLP) which is crucial for the security of your Cloud PC implementation.

Because it is built on the Azure cloud, you benefit from Azure’s \$1B investment in security. Microsoft employs more than 3,500 security experts completely dedicated to Azure data security and privacy. It’s no wonder that 95% of Fortune 500 companies trust Azure’s secure platform—it has the most comprehensive compliance portfolio of any cloud provider, with over 70 compliance certifications.

Together, Workspot and Azure offer a multi-layered approach to security, resulting in the most comprehensive defenses for your Cloud PC implementation. IT leaders and CISOs can be confident that by choosing this joint solution they have augmented their overall security posture.





CASE STUDY: FROM MONTHS TO DAYS

# Southland Industries

## Company:

At \$1 billion+ in revenue and growing, Southland is one of the largest mechanical, electrical, and plumbing (MEP) companies in the nation.

## Challenge:

With 17 locations handling massive and growing amounts of CAD and BIM data, Southland Industries had a choice: invest more in datacenter infrastructure or completely change their approach.

## Solution:

They chose Workspot Cloud PCs and workstations on Azure to:

- Replace physical GPU workstations with cloud GPU workstations.
- Introduce Cloud workstations into joint venture projects—across partner firms—for simplicity and scalability.
- Replicate Cloud workstations in alternative Azure regions for disaster recovery.

## Results:

Three months into the rollout, Southland had 200 “very demanding” users up and running on Workspot’s solution with:

- Complete Cloud PCs and workstations set up in hours.
- “Anywhere productivity” with outstanding performance.
- Collaboration in real time on complex designs, which boosted productivity, accelerated project deliverables, and reduced errors and rework costs.
- Ability to hire talent in any geography, and instant and cost-effective onboarding of new hires.
- Rapid response to changing business and project dynamics.
- A comprehensive backup, disaster recovery, and business continuity platform.

Following the success of their initial rollout, the firm went “all-in” on Cloud PCs and workstations and added hundreds more CAD and BIM experts, as well as task and knowledge workers, to Workspot.





## Trusted by Design and Engineering Firms Worldwide



And many more!

