WHITEPAPER

The Data Behind The Shift
from Virtual Desktops to Virtual App Delivery

CAMEYO

Here we are, on the cusp of one of the biggest workplace transformations in history. Four out of every ten employees around the world have switched to remote work in the past year, and according to one Global Workplace Analytics survey, as many as three-quarters of them might never return to the office. What we're experiencing now is the kind of seismic workforce shift that's likely to be studied in economics courses for decades to come.

Large-scale changes like this call for new practices and new technologies. For the past 25 years, most organizations have supported remote computing through virtual desktop infrastructure (VDI). And VDI was generally adequate for the small percentage of users who needed or wanted remote access prior to 2020. It provided them with a familiar desktop interface on a standardized client, and that was just enough to stay productive until they were back in the office.

From an IT standpoint, however, VDI is overkill for most scenarios. As its name suggests, VDI requires additional infrastructure. That in turn demands more IT staff, more hardware, more licensing, more resources, more costs. Furthermore, when it comes to the needs of the average user, virtual desktops are a clear case of overprovisioning. It's like handing someone the keys to an 18-wheeler when all they want is a fuel-efficient hybrid sedan.

DaaS: VDI by another name

In recent years, virtual desktop solutions have morphed into desktop-as-a-service (DaaS). DaaS leverages the cloud to deliver some of the same benefits of VDI but with slightly less complexity and lower CapEx budgeting.

Despite these advantages, DaaS still doesn't address the overprovisioning issue. What the majority of users need is secure access to a select pool of business-critical apps. Yet DaaS gives them a full-blown desktop whether they want/need it or not.

The additional problem that remains unsolved by both DaaS and VDI is device agnosticism. Long before COVID-19 hit, organizations were struggling to get to grips with the proliferation of mobile devices. The user that was once content with a Windows desktop now had a Chromebook, an iPhone and an Android tablet. And they wanted to toggle between those devices seamlessly throughout the day.

Of course, that's easier said than done. As organizations attempted to adopt Bring Your Own Device (BYOD) policies, IT wound up saddled with having to find some way to support their variety without having to divert even more staff time to do it. When BYOD employees went remote and began working out of very different home environments, that only multiplied the number of variables that IT had to contend with.

Apps, the new paradigm

The massive uptake of mobile devices has had another important and far-reaching effect. It's changed how users approach computing. Today, the OS is more or less an afterthought. Instead users think almost entirely in terms of apps.

Trends like these have given rise to a robust new paradigm for remote computing: Virtual App Delivery. Departing from the practice of foisting a full desktop experience on users by default, Virtual App Delivery is a strategic solution that gives users convenient access to specific apps on any device in any location. This solves the perennial problems of overprovisioning and device agnosticism in one fell swoop.

Compared to VDI and DaaS, Virtual App Delivery has the following key advantages:

- **Rapid deployment:** A 2020 ESG survey found that nearly half of all VDI/DaaS deployments required third-party implementation services to get off the ground. Whereas organizations have to set aside extra time and resources to deploy virtual desktop solutions, Virtual App Delivery can be rolled out in a matter of hours.
- **Lower costs:** When it comes to the costs of upfront infrastructure and ongoing licensing, Virtual App Delivery platforms can cut them by up to 75%. Over half of the respondents to the ESG survey also reported that their VDI/DaaS deployments required 10+ full-time employees. By contrast, virtual apps can be deployed and administered by one person.
- **Tighter security:** VDI and DaaS introduce new, complex infrastructure that can create security gaps. Virtual app delivery is inherently much more streamlined and maintains a small footprint—with solutions like Cameyo leveraging the native browser to give remote users easy, secure access to Windows and internal web apps.

That's encouraged more and more organizations to migrate away from VDI or DaaS in favor of Virtual App Delivery. In fact, 2021 data from the world's largest independent End User Computing (EUC) survey & report now indicates that Virtual App Delivery is likely to reach parity of adoption with virtual desktops within a few years.

The data behind the shift from virtual desktops to Virtual App Delivery

The annual VDI Like a Pro "End User Computing - State of the Union" report is the largest independent survey & report of its kind, and in 2021 a record number (1,647) of IT practitioners completed the survey.

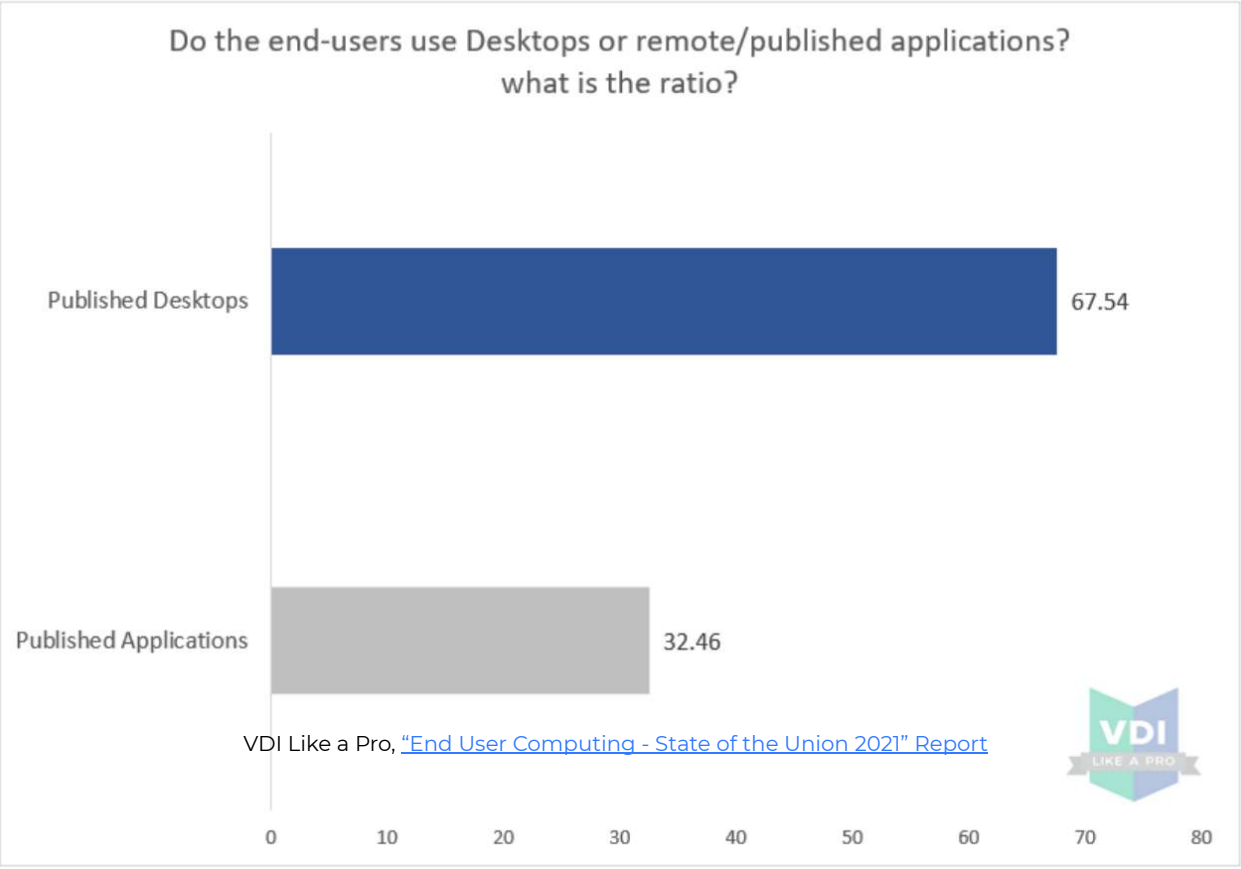
While data supports that adoption of Virtual Desktops has grown in recent years, the 2021 version of the annual VDI Like a Pro State of the Union report illustrates a really interesting counter-trend:

Virtual App Delivery has not just established itself as a strong alternative to Virtual Desktops – the data also shows we're currently in the middle of a shift from Virtual Desktops to Virtual App Delivery.

First, let's start with the current breakdown of usage between Virtual Desktops and Virtual Apps. Here's what the 2021 VDI Like a Pro report shows:

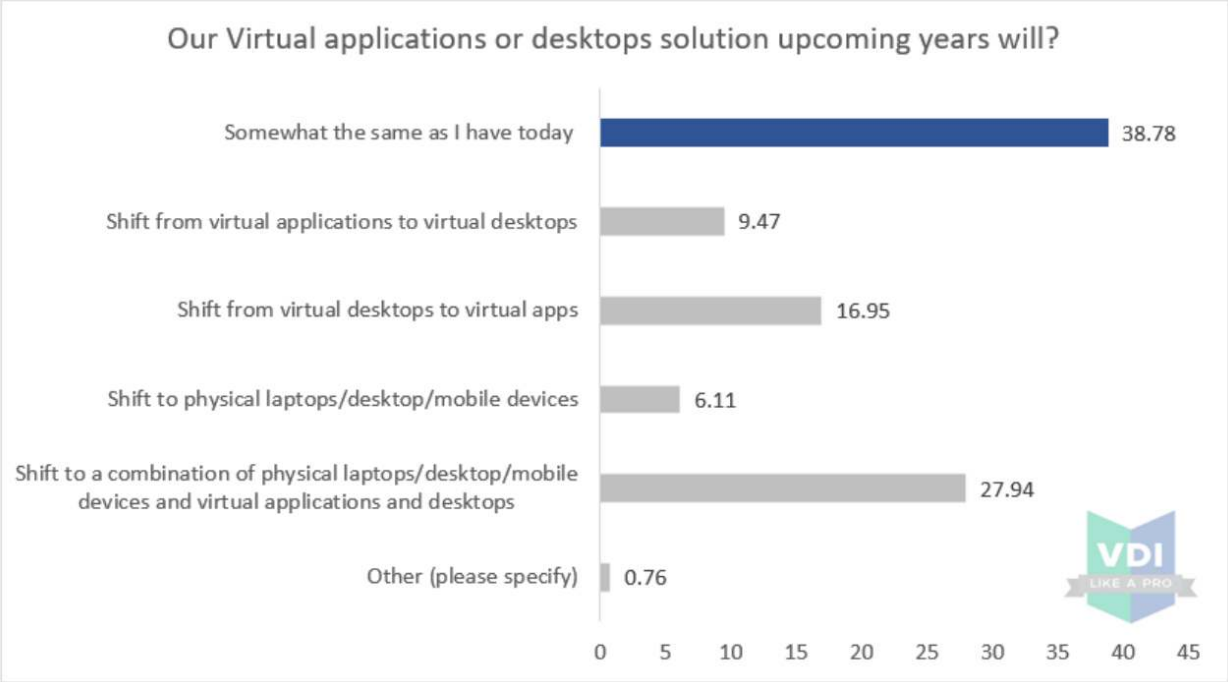
Do the end-users use Desktops or remote/published applications?

Publishing Desktops instead of published applications is the mainstream method for end-users to access their virtual desktops and applications. 67.54% of the total respondent's do use virtual desktops and 32.46% do use virtual / published applications.



VDI Like a Pro, "End User Computing - State of the Union 2021" Report

As you can see, Virtual Desktops are currently still the predominant technology utilized today – but things get really interesting when you look at a later question in the 2021 report that asks about these organizations' future plans:



VDI Like a Pro, "End User Computing - State of the Union 2021" Report

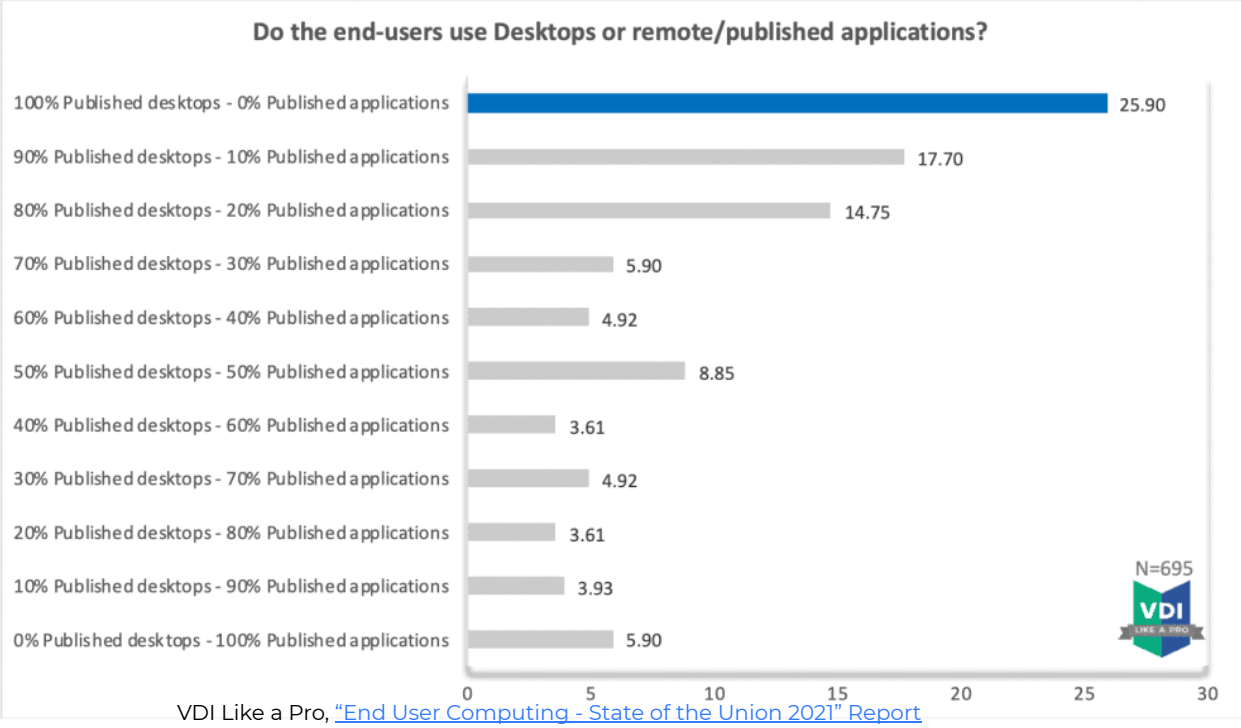
The survey data shows that 16.95% of the organizations that are currently utilizing Virtual Desktops solutions plan to shift from Virtual Desktops to Virtual Apps. When you add that 16.95% to the 32.46% of organizations who've already chosen Virtual Apps over Virtual Desktops, that would bring the percentages to 50.6% for Virtual Desktops and 49.4% for Virtual App Delivery. A nearly 50/50 split.

And for additional context, let's take a look at the 2020 data. In the 2020 report, only 5.9% of organizations were focused solely on Virtual App Delivery:

Do the end-users use Desktops or remote/published applications?

Desktop delivery instead of published applications is the mainstream method for end-users to access their virtual desktops and applications.

With 58.35% of the total respondent's do deliver 80-100% of the desktops virtually and 25.90% do deliver desktops in 100% of the scenarios. 5.90% of the respondents only focus on virtual application delivery only.



VDI Like a Pro, "End User Computing - State of the Union 2021" Report

Granted, in 2021 the report did not include the chart above, and seemed to simplify the question to identify simply whether the org's end users relied on Virtual Desktops or Virtual Apps. One way to look at it is that in 2020 only 5.9% of orgs said that 100% of their users relied on Virtual Apps, whereas 32.46% of orgs said their people rely on Virtual Apps in 2021. That's a nearly 6x increase in just one year.

Even if you add up all of the responses from 2020 that said a "majority" of users relied on Virtual Apps vs. Virtual Desktops, that number was 21.07% in 2020 compared to 32.46% in 2021.

Regardless, the fact that nearly 17% of today's Virtual Desktop users plan to shift to Virtual App Delivery, bringing Virtual Desktops & Virtual Apps to parity at a 50/50 split of the market, is astounding.

Just two years ago, Virtual App Delivery wasn't even its own category – it was rolled into Virtual Desktops, which has been the touted technology for two decades. To see such a rapid market shift from two decades of Virtual Desktop traction to Virtual Apps becoming the focus for 50% of the market in just two years begs the question – why are we now seeing such rapid adoption of Virtual App Delivery?

The simple reality is that Virtual Desktops are and always have been focused on a very specific subset of the market – the 15-20% of power users who have specific workload needs that require a full Virtual Desktop. But for 80% of the market, Virtual Desktops are overkill from both a cost and complexity perspective. That 80% of the market primarily needs secure access to all of the critical apps that they need to productively do their job on any device.

Here's what one of our reseller partners had to say about why they recommended Cameyo's Virtual App Delivery platform over VDI or DaaS for a recent customer:

"Too often there's a misconception that VDI or DaaS are the only options when it comes to enabling remote and hybrid work," said Fredrik Linnander, CEO of Online Partner. "The reality is that most companies simply need a secure, cost-effective way to deliver a handful of business-critical Windows and web applications to any device, from the browser. Cameyo is the simplest, most secure, and most cost-effective Virtual App Delivery solution we've experienced, and we knew this would be a perfect fit for Klarahill."

These are common themes across almost every Cameyo case study we've published to date. Here are some examples from our recent case study with Klarahill, a customer who recently shifted away from utilizing Virtual Desktop products to using Cameyo's Virtual App Delivery:

Simplicity

"To be honest, Cameyo was so simple to set up that I was skeptical at first. After just three hours, when we had it completely set up and our critical apps published, that skepticism quickly turned into a sense of awe," said Adam Nerell, Head of IT for Klarahill.

Security

"With Cameyo you get this very powerful solution, with very low complexity and cost, all while getting greater security than you'll find in other solutions. Complexity is the antithesis of security. The more complexity a solution has, like the many components of virtual desktop solutions, the more potential security issues you will have. Cameyo is built on a zero-trust security model, and it also strips away all of the complexity that could result in security issues down the line," said Nerell.

Cost-Effectiveness

"Just looking at month-to-month cost compared to our previous remote desktop solution, with Cameyo we are paying only 15% of what we used to pay. But then on top of that 85% savings, we also no longer need windows clients, so we save even more money there. In addition, we have far fewer support issues, so we save even more," said Nerell.

Deploying in hours instead of months. Saving 85% over Virtual Desktop products. And benefitting from far greater security in the process. These are just some of the reasons that the organizations are making the shift from Virtual Desktops to Virtual App Delivery.

Conclusion - using the right tool for the job

The evolution of remote computing from VDI to DaaS to Virtual App Delivery doesn't mean that older technologies have to be abandoned altogether. It actually means that organizations have more choice than ever before.

For example, organizations can scale down their existing VDI or DaaS deployments to cater exclusively to the small pool of power users who still need the full desktop experience. Those same organizations can also use Virtual App Delivery alongside virtual desktops to give the majority of users the secure, seamless access they need to all of their business-critical apps.

This more balanced approach creates a rich digital workspace ecosystem that empowers users with the precise tools they need to stay connected and productive—on any device, from any location. And that kind of cost-effective flexibility is exactly what's needed for the hybrid and remote workforces that are taking shape as we speak.

Next steps

If you're interested in learning more about the benefits companies are seeing from Virtual App Delivery, check out all of our case studies here, or book a demo if you'd like us to walk you through some live examples. Prefer to kick the tires yourself? Go ahead and start your free trial of Cameyo now and you can have your first application published in less than 10 minutes.

About Cameyo

Cameyo is a cloud-native Digital Workspace solution that enables the secure delivery of Windows and internal web applications to any device from the browser without the need for VPNs. By enabling organizations to provide their people with access to the business-critical apps they need to stay productive from anywhere, Cameyo helps make Remote Work, work. Hundreds of enterprises and organizations utilize Cameyo's Digital Workspace solution to deliver Windows and internal web applications to hundreds of thousands of users worldwide.