



# How BPOs Leverage VDI and NoTouch To Succeed in a Competitive Marketplace

**Stratodesk Whitepaper**

During the pandemic, business process outsourcing companies saw a surge in demand for their products and services. Although primarily a good thing, rapid increase in demand coupled with a need to shift resources out of office meant business leaders had to face several tough decisions.

This whitepaper seeks to explore the challenges posed by current work trends, the pandemic, and how VDI and Linux Thin Client operating systems can solve the challenges of remote work post pandemic.

# Major Challenges Posed by the Covid-19 Outbreak for BPOs Worldwide

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## Shifting from Central Offices to Remote Friendly and Collaborative Environments

Prior to the pandemic, BPOs were **able to leverage in office knowledge and leadership** to ensure they were meeting and exceeding business critical activities. With the pandemic in full swing, BPO leaders have had to rethink their strategies. Namely, they've had to ensure that their entire workforce is able to collaborate effectively while also working remotely.

## Offices in Different Places Around the World Intensify the Challenge

Building from this last point, many leading BPO companies have operations overseas, meaning that during the pandemic, organizations needed to respond to the unique, oftentimes confusing, requirements put in place by multiple different countries.

Take the Philippines, for example. Many BPOs have large call center offices built up in the Philippines. The offices were previously physical locations, run by trusted individuals. Workers would come to the office, do their work (often through the night in order to work on North America Time) and then go home to enjoy the rest of their day.

The lockdown in response to Covid-19 in the Philippines is almost legendary at this point for its swiftness in rollout and its harshness – and it is still ongoing. BPOs with offices in this country were faced with an ultimatum – shift your workers to remote work OR ELSE.

BPOs with operations in the Philippines were tasked with switching their traditionally **in office workers to remote work on the tightest of deadlines** or risk the well being of their businesses.

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## Traditional Communication Channels were Disrupted

For an industry with a strong, office based culture, how do BPOs ensure countless workers still have the means necessary to them for communicating effectively across the organization? With agents, employees and management spaced out in different home based work environments around the globe, BPOs faced a serious challenge in enabling twenty-first century collaboration methods.

## Accessing Vital Work Data

Additionally, IT had to rethink how workers would get their jobs done. Before, employees would simply use their full desktops in the office, allowing them access to all the apps and data they needed in order to get their varied work tasks done.

With the dramatic shift to remote work, IT had to decide how to provision remote desktops without opening up potential security risks.

Ultimately, COVID-19 has had a massive impact on the BPO industry as a whole, modernizing its workforce and forcing industry leaders to adopt remote work as not a contingency plan – but as a business model to enable the future of work.

## BPOs See Demand for Desktops Fluctuate

During peak seasons, as in during the steady ramp up seen from increased demand from suppliers during the pandemic, contractors and agents will need to be added. Once that spike in demand is over, **demand for provisioned desktops decreases.**

## Better Access to Talent – Anywhere in the World

In 2021, there is a talent crisis the likes of which have not been seen in **over two decades.** A major proponent of this crisis is that employees who have grown accustomed to working remotely around flexible schedules during the time of the pandemic **would rather quit their jobs** than return to their pre-pandemic office routines.

Having already made the shift to remote work, BPOs would be wise to incentivise their best talent to remain in their employ by continuing a policy that allows for remote work.

Additionally, in the hyper competitive world that BPOs must thrive in, enabling work from home **broadens their talent pool** making it easier to acquire better talent anywhere in the world.

# In the Time of the Pandemic and Beyond, BPOs Turn to VDI

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The pandemic might have helped spur BPO growth onwards – but that growth will only continue to flourish post pandemic. In fact, BPO market growth is expected to register an annual compound growth rate of 8.5 percent from 2021 to 2028.

In short, the increase in demand BPOs have experienced is not likely to end any time soon. For this reason, it is more important than ever for BPO companies to reassess their digital strategies.

The future of remote work for BPO poses additional challenges that can be better helped through technological innovation. Better access to talent long term, and a new standard of security-centric remote work can be further bolstered thanks to VDI technology.

- VDI makes remote work from anywhere possible.
- Enable scaling for both in office and remote workers.
- VDI makes it possible to collaborate securely.

## How VDI Helps BPO Companies Enable Remote Work and Retain Employees Post Pandemic

VDI is one of the premier methods BPOs are deploying in order to make remote work productive in 2021. One of the immediate benefits of VDI can be seen in removing the potential security threat of local desktops, as well as the IT management hassle involved in maintaining different and outdated operating systems. With VDI, end users can access virtual desktops that are preconfigured, managed and secured by IT before being accessed by end users.

VDI ensures that confidential information is **kept securely in the cloud or corporate network**. In case devices are lost or stolen, corporate data is not compromised. Additionally, VDI makes it easier for IT to manage devices, licenses and users, and effectively cuts down technical support time.

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## VDI Solves Problems BPOs Face in Scaling Endpoint Deployments

As mentioned above, needs change all the time in the BPO world. Take the pandemic again as an example. Demand soared, and workers needed to be added quickly to help meet that demand. Not only that, but remote desktops also needed to be scaled quickly. Post pandemic, some of those devices may need to return once again to an in office situation.

VDI unlocks several options to solve this challenge. For starters, VDI makes it easy to repurpose devices, so new devices won't always need to be added.

Secondly, VDI can work with personal devices. This is ideal when working with many contractors across your work deployment. Contractors often expect to do work from their own devices. **Giving them secure access to a virtual desktop** provisioned in a data center or in the Cloud makes it easy for IT to retain and configure those desktops being consumed on personal devices.

## VDI in the Cloud Offers Added Flexibility

VDI as a service in the Cloud (called Desktop as a Service) is also a great boon to flexibility and scalability. **BPOs can leverage desktops when they need them**, then dial them down when they no longer need them. An additional benefit is the fact that BPOs that leverage DaaS don't need to do the heavy lifting in house.

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## VDI Makes Configuring Virtual Desktops and Managing Licenses Easy

Deploying VDI is a fundamental step towards simplifying IT management in BPO deployments. Things like managing Helpdesk requests, and ensuring access to the things workers need to get their jobs done are much easier once VDI is in place. Additionally, lower cost thin clients (x86 or ARM) can be leveraged by remote workers, alongside personal devices. This not only reduces endpoint complexity but saves on costs. Lastly, configuring desktops is much easier when those desktops are housed in a centralized server, and **making sure licences are current and up to date** is no longer a problem as the software is also housed centrally, not on each and every endpoint.

## VDI Introduces Security Best Practices to BPO Networks

Saving the best for last – security is one of the primary reasons BPOs choose VDI. Why? Well, security ranks high consistently on any organizations list. In a BPO setting, however, the need for security is amplified. After all, BPOs consistently handle confidential corporate data not only for themselves, but for their customers. And yet, they also leverage a remote workforce spread out around the world. Without VDI, this would be an impossible task. How can you ensure the safety and security of vital information on endpoint devices not only for full time workers but seasonal or part time contractors and agents? It's enough to make even the most seasoned IT leader's head spin.

Thanks to VDI, however, secure information is kept within the corporate network, and IT can decide what end users have access to, and what they don't.

However, to ensure a truly streamlined endpoint deployment, IT leaders need to take things a step further. They need to partner with not only a powerful VDI/DaaS solution provider – they need a solution for their endpoints, as well.

# Once Invested in VDI, BPOs are Still Faced with A Major Question – What Do They Run on the Endpoint?

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As shown above, VDI offers incredible benefits to BPOs. But once a Cloud or on premises VDI infrastructure is deployed, BPOs still have an endpoint problem. VDI may ease the burden of things like security and lay the groundwork for remote work. However, organizations will still be burdened with maintaining Windows endpoints. .

On top of the investment made into VDI, more money will be reallocated towards providing malware protection. Additionally, IT will still need an effective tool for managing each and every endpoint in their deployment. Achieving this is a challenge as the alternatives out there for managing endpoint **devices are slim**.

As if this weren't enough, modern work trends pose additional challenges. Many organizations today leverage a mix of different devices – spanning from legacy x86 devices to ARM based ones.

Additionally, with many BPOs turning to the Cloud for their VDI needs, just as many BPO organizations are looking to solutions that are Cloud native, or at least Cloud friendly.

Ultimately, the question must arise and be answered: what are the alternative endpoint operating systems available?

## Linux Operating Systems – the New VDI Endpoint Standard

**The continued popularity of VDI technology** has many wondering about the alternatives to Windows based endpoints. What are the alternatives? For many, a Linux Thin Client is the right approach. This is for several reasons.

For starters, Windows endpoints create management challenges for organizations. Linux endpoints, on the other hand, create solutions. Secondly, Linux Thin Clients **prevent common security exploits**. Additionally, important information does not need to be stored on the endpoint device. Lastly, Linux Thin Client management is easier than managing Windows endpoints.

## The Windows Endpoint Nightmare

Housing Windows on endpoints is a problem. Enterprises find that too many resources are directed towards managing and maintaining Windows endpoints. It's hard, for example, to make sure that every endpoint is running the same version of Windows. What's more, Windows needs additional malware/virus protection. IT overhead quickly grows as resources are directed to supporting each and every remote endpoint. IT spends time traveling to and updating each device manually.

## Linux Offers a Higher Degree of Security

Although allowing end users access to virtual desktops in the data center or in the Cloud does prevent some security concerns, these virtualization efforts pose only a minor hurdle to determined cyber-criminals. An employee using a thin client to connect to a remote VDI environment running Windows is not better off security-wise than any other Windows laptop user. The remote Windows desktop is still exposed to a variety of standard malware and attack vectors, including email, web, external media, user-installed applications, and many others. **These attacks have increased in 2020**, as hackers take advantage of so many workers being moved quickly to a work from home model.

In 2021, **BPOs are looking for alternatives to Windows** in their VDI deployment. They are looking for a fully secure operating system that does not store anything on the local device, while delivering an excellent user experience.

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## Centralized Management for Linux Thin Clients

Perhaps the defining benefit of using Linux is centralized management. It's a major differentiator between Linux based solutions and Windows endpoints. Managing Linux endpoints with a tailor-made, Linux endpoint management solution reduces costs, headache and improves your overall secure digital perimeter.

## PC Conversion Made Easy

A massive bonus for Linux based Thin Clients is PC Conversion. With PC Conversion, enterprises no longer need to replace every single device in their network. Instead, IT can **deploy a Linux-based OS onto their existing devices**, converting them into Linux endpoints.

By repurposing devices, BPOs can **extend the life cycle** of their existing hardware and effectively save millions of dollars.

When all is said and done, a solid Linux OS is the way of the future. And that future is not limited to just VDI Thin Clients. Truly advanced, Linux-based operating systems, like the one available from Stratodesk, can be deployed on any endpoint device, including IoT devices like the Raspberry Pi. With the right Linux OS, the possibilities are virtually endless.

# Stratodesk Software Enables BPOs to Leverage the Full Advantage of their VDI Deployment

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It's clear that the operating system BPOs leverage on their endpoints has a disproportionate impact on the productivity of their operations.

This is why BPO leaders not only partner with leading VDI solutions, they also deploy Linux based operating systems to compound the effectiveness of their endpoint fleet.

Take iQor, for example. The BPO leader has over 25,000 distributed globally. According to John O'Malley, VP at iQor, leveraging Stratodesk NoTouch software, the Linux based minimal footprint operating system for VDI and Cloud deployments, enabled iQor **to extend the life cycle for these hardware devices** by providing a secure, modern operating system that is fully supported by VMware View Horizon infrastructure. "We are now able to effectively manage these devices providing near real-time reporting and updating capabilities. In addition this solution was extended to our work at home users, providing an equivalent experience for both on-premises and work at home user base" said O'Malley.

Today, leading BPOs rely on Stratodesk NoTouch software to run on, secure, and manage endpoints around the world. NoTouch compounds the benefits of VDI by creating a more secure, hyper user friendly endpoint deployment. It also supports integrations with third party collaboration tools to make remote work easy. Not to mention it comes ready to use directly out of the box.

Additionally, NoTouch works with legacy PCs, and cutting edge new devices, including the Raspberry Pi, to solve pandemic critical challenges. By converting devices with NoTouch, enterprises are able to extend the hardware refresh times of their devices and save millions.

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## Staying Relevant to Prospective Talent

Even before the widespread shift to remote work, there has been a flight away from urban dwelling in recent years. Due partly to the massive increase in cost of living, professionals are looking for jobs that **enable them to live wherever they want** – even rural areas. Call center agents also expect to work remotely. However, this is especially helpful in recruiting employees with highly specialized skills. Opening up your workforce to beyond the direct, local perimeter, enables BPOs to attract talent. VDI is a great way to enable secure, reliable remote access to critical apps and data.

## Managing Endpoints is Easier with NoTouch

Handling maintenance, managing, and monitoring thousands of disunified endpoints beyond the perimeter, however, is not only a hassle – it's costly. To be effective in production, IT must be able to enable work from home agents access to their virtual desktops quickly and succinctly. However, this is incredibly difficult to do. VDI and Stratodesk software can help. Stratodesk **NoTouch OS**, for example, can be deployed across all endpoints, and then managed via NoTouch Center. IT managers can update, configure, and automatically connect endpoints to NoTouch Center in a matter of minutes, and make changes in real time.

## Deploying Cutting Edge Work Stations to End Users Instantly

Scaling your infrastructure can be a challenge. It's frustrating to IT when a worker is set up and ready to connect to a virtual desktop only to find something wrong. They aren't using the right hardware – or maybe their operating system is out of date, or they don't have the right VDI client version.

Using Stratodesk in tandem with your preferred VDI solution streamlines this. All endpoints are configured to your specifications AUTOMATICALLY. No hassle with endpoints once they are deployed.

Stratodesk includes the clients from all the major VDI/DaaS providers including Citrix, Microsoft AVD, Nutanix VMware and more making it easy for enterprises to enable remote work directly out of the box.

## Enabling BYOD with NoTouch Go

BYOD, or bring your own device, might be necessary for your workers simply because **they like to access their work on different devices** throughout the day. Indeed, the acceleration in flexible work solutions have only made employees more expectant of this kind of it. However, enabling workers to access critical and even confidential information from personal devices still remains a contentious challenge. VDI and NoTouch, however, make it easy.

NoTouch GO, the lightweight, epically small endpoint device can be temporarily deployed on endpoints – whenever users need to get their work done. NoTouch GO allows your agents to access their virtual desktops even from personal devices, without harming their underlying operating system. It comes with all the latest major VDI clients and top VPN solutions directly out of the box. Getting your new workers onboard is as easy as shipping them their **NoTouch GO device!**

## Bolstering Security and Collaboration with NoTouch

Lastly, NoTouch solves the security hurdle presented by the shift to remote work by adding a protective security layer to any deployment. Not only does it offer a minimal footprint OS, and prevents unwanted, third party applications, it is impervious to common security exploits. It also enables **Role Based Access Controls (RBAC)** and **Multi Factor Authentication (MFA)**. IT can also take advantage of **NoTouch Cloud** and **Cloud Xtension** to ensure secure connection for remote endpoints, and can also add **Full Disk Encryption** for even more hardened security measures.

NoTouch also enables workers to collaborate effectively no matter where they are in the world. It does this by enabling business critical applications including Skype for Business, **Microsoft Office Teams, Zoom, Slack** and more.

# In Conclusion

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The challenge BPOs face in securing their deployment while streamlining endpoint management and reducing costs might have been made more dire by the pandemic, but it is not over. Luckily, through a combination of VDI and DaaS technologies and Linux based operating systems, BPO companies have a real way forward to solve the challenge of remote and dispersed workforces, enabling them to boost productivity and reduce costs by millions of dollars.

# About Stratodesk

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Stratodesk is the world's leading endpoint OS and management solution. It is used by government and healthcare organizations, banks, SMBs and large enterprises to eliminate cost and scalability obstacles facing their complex network of devices. By delivering the only management software for mixed environments of x86, ARM and Raspberry Pi devices, Stratodesk is reinventing endpoint computing for enterprise IoT and VDI. Our cutting edge, linux-based solution, NoTouch, is hardware-agnostic and runs on the Raspberry Pi.

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