



Make The World Your Workspace

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Abstract

Imagine, it's another day at the office. You enter the workplace, punch in your attendance, and log in to your workstation to access your daily tasks and applications. Your system is connected to the LAN, and local IT support is just around the corner. The large IT support team works tirelessly to maintain the digital infrastructure of your enterprise, including a small proportion of your remote workforce. But, all this has become a thing of the past. The reality of workplaces has changed dramatically in the last few months due to the uncertainty caused by the pandemic.

COVID-19 Has Changed the Way We Look at "Workforce Operations"

The COVID-19 crisis has changed the dynamics of workplaces and corporate culture. This unprecedented pandemic compelled organizations all over the globe to evolve quickly and ensure business continuity for the entire workforce from multiple remote locations. It's been tough for many businesses to adapt and scale their businesses due to the new demands and challenges with their current platforms. This paper focuses on the impact and explores possible solutions for impacted organizations to move to a productive "Anywhere Office" model.

Most of the organizations are still running their workloads in on-premise platform, or partially on cloud and, thereby, are highly impacted by the current pandemic. Introduction of cloud-centric digital workplaces can improve productivity. On the flip side, the enforced tendency of teleworking on a massive scale will demonstrate the importance of social interaction and workplace culture for an innovative and creative workspace. With the growing needs of an organization to perform, sustain, and increase profitability, it is equally important for its employees to be more productive and enhance the customer service experience. A modern workplace and empowered workforce will transform the organizations of tomorrow and make them personalized, and decentralized—yet connected. These workplaces will ensure employees continuously learn, collaborate in teams, and work securely across any device. The future modern workplaces would be flexible, employee-centric, innovative, agile, and transparent. Such an environment would attract talent, increase productivity and employee satisfaction. At the same time, it will decrease employee attrition and minimize spendings.

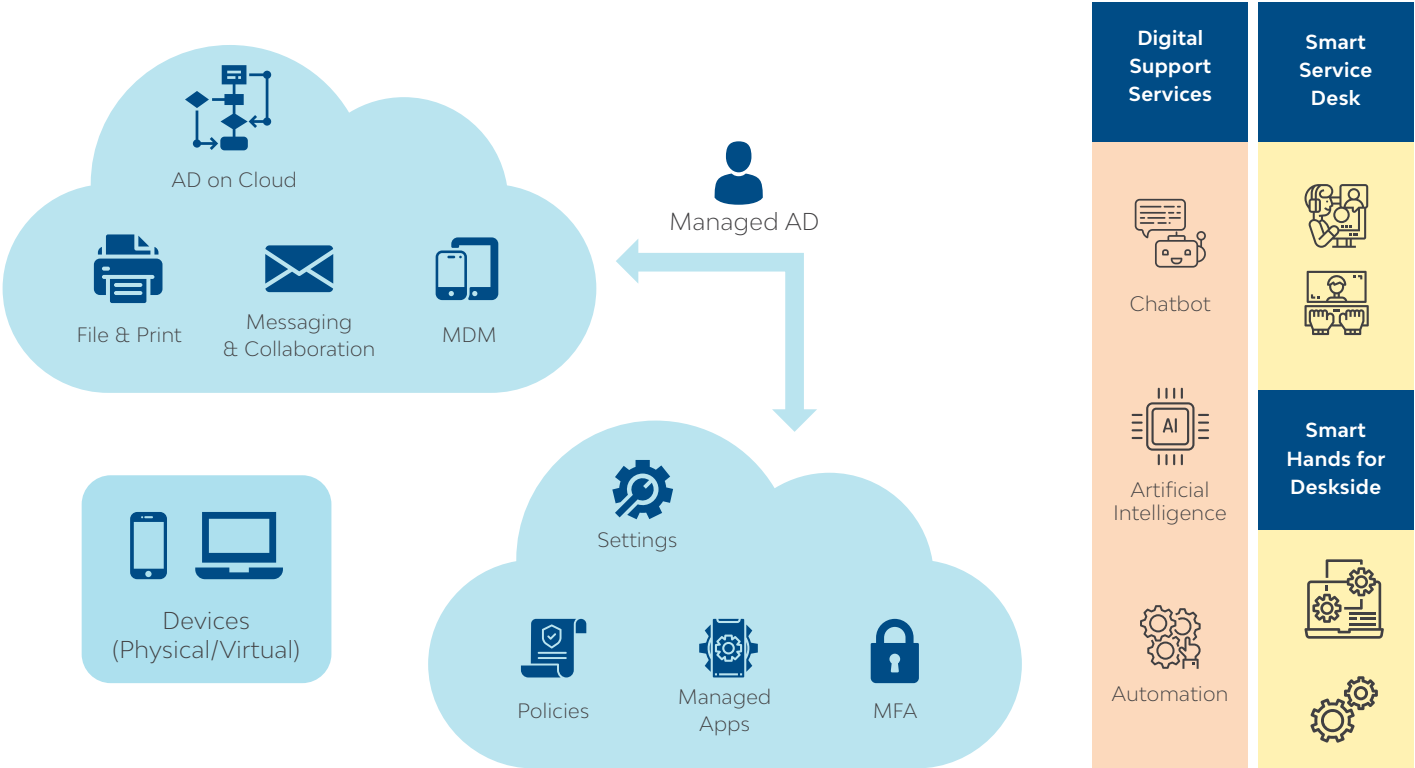
“Anywhere Office” Model – An Adaptable Solution

To overcome the crisis caused by the COVID-19 outbreak, it is recommended to transform all the workforce, devices, and services into an “Anywhere Office” model. This can easily be achieved by combining various technology stacks into a bundle to form a modern workplace platform. A modern workplace (a.k.a. digital workplace) can best be considered as the natural evolution of the conventional workplace environment.

The digital workplace encompasses all technologies that are needed to get the work done. Both, in operations as well as the ones that need to be implemented. It ranges from HR and core business applications to e-mail, instant messaging, enterprise social media tools, and virtual meeting platforms. Because most of these components are already in use, the modern workplace does not need to be built from scratch or ground up. In fact, if your staff respond to e-mails from smartphones, check their pay stubs online, or digitally enter a sales opportunity, you might be a lot closer to operating a digital workplace than what you think.

In this paper, I have articulated an approach with key services and components to easily transform most organizations to an “Anywhere Office” model. This will ensure end-users can work from **“anywhere, any device, and at any time”**.

“Anywhere Office” Framework



The above diagram explains the core elements that will help organizations to enable “Anywhere Office” model. This model brings to life “Anywhere, Anytime, Any Device” workplace experience to end-users with maximum security outlined by organizational

policies. By adopting this solution, organizations can redefine the workplace culture by transforming it from a business-centric to an employee-centric model. The right set of applications and tools ensures the connectivity and support to end-users. “Anywhere Office” encourages productivity, flexibility, greater emphasis on employee work-life balance, engagement, and collaboration.

Below are the traits and benefits of this model:

- Centralized and Cloud-managed workplace platform (VDI on cloud/laptop with cloud AD joined).
- High data security on end-user devices by enabling drive encryption, OS hardening, etc. Persona-based user management and enriched user experience to increase productivity.
- Remove on-premise dependency, which in turn reduces OpEx and management costs.
- Optimizes use of the public, private, and hybrid cloud to minimize upgrade costs and towards an Evergreen platform.
- Contextually intelligent platform (AI & ML integration).
- More social, mobile, always-on, and data-driven.
- Control devices anytime anywhere.
- Self-enablement of services.

How to enable “Anywhere Office”?

- Technology Stack

The elements discussed in this section describe the building blocks for an effective, efficient, and secure “Anywhere Office” model.



Cloud-Ready Operating System (CROS)-

A CROS is an operating system that supports various on-premise and cloud-based features and technology. It allows users to authenticate through cloud and internet-based identity and access management. Most modern-day enterprises have migrated their applications to the SaaS model, which allows authentication through cloud-ready OS. The MS Windows 10 OS is completely cloud-ready, which enables an enterprise to adopt the

“Anywhere Office” model. Though, MAC OS integration with cloud authentication mechanism needs some modifications in the IaaS platform. MAC OS won’t work with Azure Active Directory, but can be integrated with AD on cloud or Azure AD Domain Services.

Examples of cloud-ready/ supported operating system: Microsoft Windows 10, Apple MAC OS and Apple's iOS, Linux, Android, etc.



Modern Authentication:

This system ensures that authentications happen based on requests (tokens) sent to the authentication provider, like Azure AD. It means users don’t have to send their credentials over the network to the resource (Exchange Online, Skype, etc.) and cache credentials locally. For example, modern authentication protocols will Single Sign On (SSO) the user to access Office 365 without entering credentials into Office 2013 and 2016. This offers a better, safer, and seamless experience.

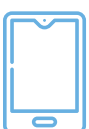
Examples of protocols that support Modern Authentication: MAPI, SAML, OAuth2, OpenID Connect, WS-Federation, etc.



Collaboration and Productivity Tools:

Three aspects of collaboration are communication, coordination, and cooperation. A collaboration tool supports a group of two or more individuals to accomplish a common goal or objective. These tools can either be non-technological or software-based tools and applications. Non-tech tools include paper, flipcharts, post-it notes, or whiteboards, which are seen in physical or conventional workplaces. On the other hand, tech-based collaborative tools like MS Teams or Slack applications are far more effective in a remote office model. These collaborative tools help in decentralizing processes, decisions, and tasks by improving communication, coordination, and cooperation among employees and teams in an enterprise.

Examples of Collaboration tools are: Microsoft Office, Microsoft Teams, Microsoft SharePoint, OneDrive, Google Hangout, Google Drive, Cisco WebEx, Slack, etc.



Mobility Solution

With mobile devices (smartphones and tablets) being omnipresent around the globe, mobility solutions can power transformation of enterprises. Mobile devices are the new channel of engagement to deliver apps, smart solutions, and real-time workflows of customers, partners, and employees.

It is important for the IT team of an enterprise to get the right user engagement, effectiveness, and usage. An enterprise should define a winning mobile strategy, **which includes:**

- BYOD policies
- Mobile device management
- Identity and security systems
- Application development
- Usage to design, develop, and support their mobile applications

The desired mobility solution should be a combination of:

- Mobile Device Management (MDM)
- Mobile Application Management (MAM)
- Mobile Content Management (MCM)
- Identity And Access Management (IAM)

Though, these four technologies started off as individual products, they are now part of Enterprise Mobility Management (EMM) software suites.

Examples of Enterprise Mobility Management solutions are: Microsoft Intune, VMware AirWatch, Citrix XenMobile, ManageEngine Mobile Device Manager Plus, etc.



Security & Compliance

Security is a system of tools and processes to protect, detect, and defend the information and technology assets of an enterprise. Compliance focuses on data management and protection by a company within the regulatory frameworks, guidelines, and specifications. Compliance helps to manage and oversee policies, regulations, and laws that cover physical, financial, legal, or other types of risks. It means ensuring an organization is complying to all security-related requirements.

In a real-life scenario, organizations should think of cloud-based security and compliance tools to ensure their remote working platform is highly secured. Microsoft provides a complete security and compliance suite as part of their subscription. M365 E5 has a restructured portal, which handles security and compliance for all O365 SaaS applications such as DLP, ATP, Anti-Phishing, etc. Microsoft also manages Windows Defender, which runs on every end-user device and centrally controls all antivirus definitions, malware, and threats.



Operating System & Application Deployment Solution

An organization also requires tools to deploy an operating system, applications, security settings, and configuration. Software deployment takes care of all that and also provides regular and easy updates. The best tools work with a variety of platforms and IT infrastructure to streamline workflows in a preferred environment.

Installation and maintenance of applications on a large number of workstations is difficult. That's where software deployment tools can be very handy, as they help to release, install, and manage software from a central server or computer automatically. Choosing the right software deployment tools can enhance productivity, efficiency, and profitability.

Organizations can make use of the Windows 10 autopilot feature in MS Intune to easily customize the OS remotely. In addition to this, you can apply company policies, software deployment, and patching through these tools remotely over the internet. These will give complete control on end-user devices. Examples of tools that can be used to deploy operating system and application solutions are Microsoft Endpoint Manager (a.k.a. SCCM), Microsoft Intune, Quest KACE, Acronis, Ivanti Unified Endpoint Manager, etc.



Workspace Virtualization

Workspace virtualization tools separate the user's working environment from the OS or any applications on the PC on which it executes. This allows users to run a corporate-managed workspace on an enterprise or user-owned PC or Mac. Organizations can decide on the platform like on-premise or complete cloud. A cloud-based VDI platform is ideal to enable the "Anywhere Office" model. This platform ensures complete control of data and security of company resources on personal devices or terminals. This will help enterprises to adopt BYOD strategy for devices used by employees. The benefits include complete access and control of devices and their usage, connectivity, data, and authentication.

Examples of tools and technology that offer workspace virtualization are: Windows Virtual Desktop, Amazon WorkSpaces, Citrix Virtual Apps & Desktops, etc.

“Anywhere Office” – Key considerations for deployment

The first step to implement an “Anywhere Office” model is to define the technological needs of employees and the organization. Technology is a central component of a digital workplace. Though, the organization also requires upfront planning, implementation, and functionality of business processes and software, which will provide the right user experience for employees.

Once goals for the digital workplace are defined, it is important to choose technology that is intuitive to employees. For example, software should mimic the functionality of familiar applications, such as social media, etc. IT staff should be trained to keep all new initiatives updated and as agile as possible. Lastly, digital workplaces need to be aware of evolving practices and emerging smart technology.

How to Do “Anywhere Office” Transformation Remotely?

Due to travel restrictions and the WFH (Work From Home) model after the COVID-19 pandemic, many organizations are looking for a remote transformation to “Anywhere Office” model. This can be easily achieved by combining the technology stack mentioned above. Below are some of the key factors, that need to be considered for remote workplace transformation:

- **Adoption strategy**

Organizations need to define the migration strategy based on their needs and finalize the approach.

- **Effective communication and collaboration**

- Organizations need to effectively communicate with their end-users about the changes which are going to be introduced and enable effective and secure work from home model.
- Companies have to create collaboration channels for various departments and IT for clarifying all the queries related to the new changes and deployment of tools.
- IT needs to be very conscious about clarifying the queries of remote workers, as the transformation is mostly self-driven by end-users.

● **Trainings and Webinars**

- Detailed user guides need to be created and shared well in advance with employees to migrate their devices or usage of new VDIs.
- User training modules/webinars need to be conducted to introduce new tools and updates on applications.

● **Support channel**

- Set up a dedicated support model to handle remote transformation issues.
- Assign dedicated engineers to user batches and communicate the same in advance.

Benefits from a Well Thought Anywhere Deployment

● **Enables workforce to communicate & collaborate efficiently**

Allows to integrate all communication channels for employees to make phone calls, chat, and meet online on the same user interface. This makes it very easy for them to switch from one communication channel to another. For example, someone having a phone conversation with a colleague can then also invite others for a videoconference where they work together on a document.

● **Mobility & multi-device accessibility**

Make data and applications accessible on any device, any time, in a secure, user-friendly, and well-managed way, while making sure the personal data of employees remains private.

● **Data is central, secure, recoverable**

By storing data centrally and making it available through the cloud, this model enables quicker interaction between colleagues and customers. It also ensures digital and automated workflows can be set so that documents are approved faster and projects are completed more efficiently.

- **Secured work environment**

Employees can access their own digital work environment seamlessly based on their secure credentials. To ensure security is not compromised, it is important to secure the central infrastructure like a reliable cloud partner. On the other hand, it's vital to protect information through access control by user or user group.

- **SaaS model for enterprise applications**

Modern workplace transformation is changing the way companies work, communicate, create products/services, and deliver it to their customers. The Software as a Service (SaaS) allows organizations to create frictionless ways of providing their products and services to the customers. Organizations need to make decisions on moving their on-premise application stacks to cloud-based applications for a seamless transformation journey.

- **Smart Service Desk and user experience monitoring**

Smart Service Desk (SSD) is one of the key functions to build a complete "Anywhere Office" model. SSD analyzes data patterns to speed up the service delivery. This includes automated ticket routing, voice call logging, and bots to provide quick support and sentiment analysis.

User experience monitoring is a vital element in a remote workforce. There are various tools available in the market which help to achieve this. This is used to discover, track, and optimize web-based resources and the end-user experience.

Conclusion

We need to adapt and evolve to a new way of working and the "Anywhere Office" framework can help us in this regard. "Anywhere Office" binds all the technology in the digital workplace to make it successful for any enterprise to keep moving and evolving regardless of time and space.

The future of work is remote which can be from anywhere. Remote work is a reality today and is happening now. Global workplace analytics reported that 90% of employees work remotely (in some way) at least once a week. You might already

be working remotely without even realizing it. Companies encourage employees to have conference calls and collaborate via screen sharing. All this because few of the teams are already distributed across different regions.

The remote workforce is growing at an astonishing rate. We are waltzing into a new era of hyper-mobility. There are abundant resources available to help companies to manage and grow a remote workforce.

Author



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Jino works as a Lead Technical Architect with LTIMindtree, providing consultancy and design solutions for Microsoft/VMware technologies. With more than 19 years of overall IT experience in design, consulting, implementation, maintenance, and management of IT infrastructure, he is responsible for driving RFP/RFQ/RFI to build comprehensive Modern Workplace Solution response and leading large projects in workplace transformation (Cloud, Hybrid, On-premise).