

# Creating a modern digital workplace for government agencies

## Applying Gartner® insights for strategic IT transformation

An effective and modern digital workplace will improve the user experience, increase productivity and ensure seamless IT operations. This comprehensive guide for government outlines the fundamental components government agencies should integrate into their digital workplace services program. Services include modern device management, DEX — digital employee experience, ITSM/CSM tools, desktop as a service, peripheral vending machines and smart lockers, walk-up services, managed video conference rooms and modern telephony. These services are integral to creating a dynamic and responsive environment that supports the diverse needs of modern public-sector employees.

# Content

03 Introduction

07 Modern telephony

---

04 Modern device management

07 Conference room as a service

---

04 DEX — digital employee experience

08 Contact center as a service

---

05 Benefits of implementing modern and robust  
ITSM/CSM tools

09 Improving user experience with an XLA framework

---

05 Desktop as a service

10 Buying options for digital workplace services

---

06 Peripheral vending machines and smart lockers

11 Conclusion

---

06 Walk-up services

12 List of abbreviations

---

06 Collaboration suites

12 About the author / Sources

## Introduction

In today's fast-evolving digital landscape, the imperative for government agencies to adopt a modern digital workplace is more pressing than ever. As the guardians of public services and national security, IT executives within government institutions must navigate the complexities of digital transformation with precision and foresight. To aid in this critical mission, this guide distills insights from recent Gartner research, providing a comprehensive guide on the core tools and services essential for establishing a state-of-the-art digital workplace.

Gartner delivers actionable, objective insights to executives and their teams. Gartner expert guidance and tools enable faster, smarter decisions and stronger performance on an organization's mission-critical priorities. This guide uses Gartner research insights, particularly from the Reference Architecture Brief: A Digital

Workplace Model report<sup>1</sup> and the 2024 Magic Quadrant™ for Outsourced Digital Workplace Services.<sup>2</sup>

We believe the reference architecture delineates a model that government agencies should aspire to when implementing best-in-class IT services. The digital workplace reference architecture defines and shows the relationships between the components required to deliver a comprehensive digital workplace. This architecture, and its components, applications and connections, are ultimately designed to support the end user. In tandem, the Magic Quadrant provides a graphical competitive positioning of four types of technology providers in markets where growth is high and provider differentiation is distinct.

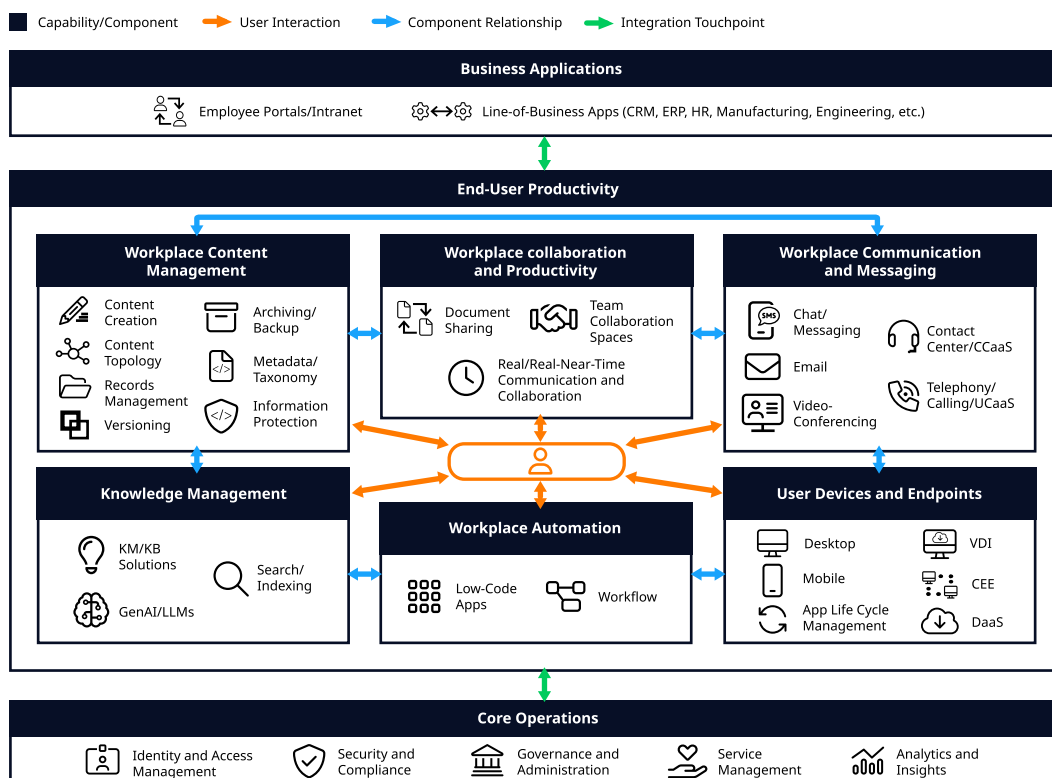
Within this guide, we will delve into leading solution offerings that are indispensable for delivering premier digital workplace services. We will also suggest optional services that top

vendors can add to improve the user experience and government agency efficiency.

By adhering to these guidelines and insights, government IT executives can make informed decisions that align with their strategic goals. Doing so ensures their agencies remain agile, resilient and ahead of the curve in the digital era.

To establish an effective and cutting-edge digital workplace, it is essential to incorporate a suite of core services that increases productivity, improves user experience and ensures seamless IT operations. This guide will outline the fundamental components that every government agency should integrate into their digital workplace services program. These services are integral to creating a dynamic and responsive environment that supports the diverse needs of modern public-sector employees.

## Digital Workplace Reference Architecture



Source: Gartner

## Modern device management

Modern device management, also known as desktop engineering, is paramount for ensuring that agency-issued devices are imaged with approved gold images tailored to user profiles and equipped with essential productivity applications. Key to the success of contemporary programs is the deployment of tools such as Microsoft Intune and Autopilot.

Microsoft Intune facilitates remote management, patching and maintenance of devices. This allows IT administrators to enforce security policies, manage applications and ensure compliance from a centralized console. This capability significantly reduces the time and effort required for device management, ensuring that devices remain secure and up to date.

Microsoft Autopilot enables over-the-air provisioning of devices, eliminating the outdated practice of shipping devices to a depot for manual imaging. Instead, original equipment manufacturers (OEMs) can deliver devices directly to users' homes or workplaces. This approach streamlines the process of distributing new and replacement devices. It significantly reduces potential downtime and work disruption while improving overall operational efficiency. Autopilot also delivers a seamless, user-driven setup experience, preconfiguring devices for the user to reduce the need for IT intervention.

Tools like Microsoft Intune offer significant advantages for managing bring your own device (BYOD) programs. BYOD allows personal cell phones or tablets to access agency applications and data securely. This ensures that sensitive information remains protected and compliant



with agency policies. It also provides employees with the flexibility to use their own devices for work purposes.

Workspace ONE®'s Unified Endpoint Management is an alternative to Microsoft Intune. It offers similar benefits and capabilities for managing and securing a diverse range of devices.

## DEX — digital employee experience

DEX is a critical aspect of modern device management. It focuses on improving the overall experience of public sector employees through advanced tools and solutions. DEX tools provide real-time analytics and insights into device performance, application usage and user sentiment. They enable IT departments to address issues proactively and optimize the work environment. These tools also minimize the need for and optimize field service visits, as they allow the support desk to understand the true nature of issues. When problems are software-related, they can be resolved over the air through modern device management tools. This limits the need for field service visits or device replacements to hardware-identified issues only.

Additionally, DEX tools enable agencies to extend the lifecycle of their assets. Devices that initially may be marked for replacement can be retained in the field longer if they are performing at near optimal levels. DEX tools can identify device models that deteriorate faster or experience more frequent issues. This allows agencies to make informed decisions on discontinuing the purchase of those models going forward. Another significant benefit of DEX tools is their ability to self-heal, which reduces the number of new tickets opened with the help desk. When tickets are resolved, DEX tools can identify devices with similar configurations and proactively push fixes to them, improving overall system reliability and user satisfaction.

According to the recently published first-ever Gartner Magic Quadrant for Digital Employee Experience Management Tools, DEX tools help IT leaders improve the digital employee experience and empower IT workers to shift focus from technology management to more business-value-added work.<sup>3</sup>



## Benefits of implementing modern and robust ITSM/CSM tools

Implementing modern and robust IT service management (ITSM) or customer service management (CSM) tools improves service desk efficiency and effectiveness. These tools provide numerous advantages, including streamlined operations, improved user satisfaction and reduced support costs. A key aspect of modern ITSM/CSM tools is the integration of self-service options through a comprehensive self-help knowledge library. This library empowers employees to resolve common issues independently, decreasing the volume of tickets submitted to the support desk.

Adding modern generative AI (GenAI) tools to the self-help knowledge library improves accessibility and ease of use. GenAI tools enable employees to find relevant information quickly, encouraging them to choose self-service over opening tickets. This approach not only enhances the user experience but also significantly lowers support costs by reducing the burden on the service desk.

ServiceNow is the industry leader in this space, offering a robust platform that integrates ITSM and CSM capabilities. Its many benefits, including automated workflows, real-time analytics and comprehensive

service catalogs, contribute to a more efficient and responsive service desk. ServiceNow also integrates with collaboration tools such as Microsoft Teams, giving employees seamless access to support resources within their daily workflows.

When implementing these tools alongside DEX tools, it is crucial to ensure that the DEX tools are integrated into the service desk platform. This integration allows agents to monitor real-time telemetry of the devices they are supporting, providing a more informed and proactive support experience.

These tools should include both employee portals and functionalities accessible within collaboration tools like Microsoft Teams for a streamlined and cohesive support experience. By adopting modern ITSM/CSM tools and integrating them with DEX tools, agencies can create a more responsive, efficient and user-friendly digital workplace.

Ivanti is an alternative to ServiceNow that offers many of the same core features and functionality.

## Desktop as a service

Desktop as a service (DaaS) is emerging as a modern replacement for traditional on-premises virtual desktop infrastructure (VDI) tools.

DaaS offers the benefits and flexibility of the cloud. One of the most popular implementations of DaaS is Azure Virtual Desktop (AVD). Amazon Workspace Services is a robust alternative. These cloud-based DaaS solutions provide comprehensive services independently. However, many agencies choose to add industry-leading VDI tools, such as Citrix or Horizon (formerly known as VMware Horizon), to their cloud infrastructure to improve their capabilities. This combination results in a more powerful and versatile desktop solution.

While DaaS is an excellent tool for desktop replacement, application streaming over the cloud may be more cost-effective for some use cases. Agencies should consider this as part of their solution options. Doing so ensures that all requirements are met in the most efficient manner possible.

DaaS is particularly popular among agencies for enabling access to applications for various user groups. It is an ideal solution for contractors to whom agencies may not want to issue devices. It is also suitable for employees and partner agency employees who prefer to use their own devices (BYOD). By providing a secure and flexible way to access applications, DaaS supports a diverse and dynamic workforce. It enhances productivity and collaboration across different entities.

## Peripheral vending machines and smart lockers

For many agencies, implementing peripheral vending machines and smart lockers delivers significant efficiency gains and an enhanced employee experience. Because these devices are tightly integrated into the hardware asset management modules of ITSM tools (such as ServiceNow), organizations can issue peripherals or new/replacement devices to users seamlessly. The process is simple: Employees can request the hardware they need within the ITSM tool. Then, at their convenience, they simply walk up to the locker, input a code or swipe a badge, and retrieve their device. This experience mirrors the convenience of the Amazon locker systems many are familiar with in their personal lives.

Smart lockers also facilitate the secure and timely collection of old devices. Employees place their old or faulty devices into the locker, which automatically records the return in the ITSM system and stores the device until it is picked up. This dual functionality streamlines the hardware issuance and return process. It also ensures accurate asset tracking and secure handling of equipment. Both improve the overall efficiency and effectiveness of IT operations.

## Walk-up services

Walk-up services have revolutionized the support experience in many high-traffic work locations. Drawing inspiration from the Apple Genius Bar, these services provide employees with convenient, in-person IT support. Employees can simply walk up to a designated service desk, describe their issue and receive immediate assistance from knowledgeable staff.

The benefits of walk-up services are multifaceted. Firstly, they significantly reduce downtime by offering prompt resolutions to IT issues, improving productivity. Secondly, they provide a personal touch that can be lacking in remote support channels, contributing to a positive employee experience. Lastly, these services are ideally suited for bustling work environments where employees often need swift, on-the-spot help with their devices or software.

Implementing walk-up services in busy workplaces not only improves efficiency but also fosters a supportive and responsive IT culture. This adds to users' overall satisfaction and engagement with the organization's support infrastructure.

## Collaboration suites

Implementing a robust collaboration suite, such as Microsoft 365, improves organizational efficiency and flexibility. By centralizing all documents in OneDrive or SharePoint, employees can effortlessly replace devices and access their files on any approved and managed device at any time. This seamless access allows users to move between a laptop, mobile phone, tablet or even a home PC, using DaaS

to maintain productivity regardless of their location.

One of the standout features of Microsoft 365 is the integration of Copilot for Microsoft 365. This advanced AI assistant improves productivity by providing intelligent suggestions and automating repetitive tasks. Copilot significantly boosts efficiency, enabling employees to focus on higher-value activities.

The comprehensive suite of tools within Microsoft 365 includes the Word, Excel and PowerPoint applications, as well as Teams for communication and collaboration, and Outlook for email. The suite ensures that all essential functions are seamlessly integrated. This integration simplifies workflows and fosters a more cohesive and collaborative work environment.

Google Workspace offers similar functionalities with Google Drive for file storage, Google Meet for communication, and the suite of Google Docs, Sheets and Slides for productivity. Both platforms provide extensive support for collaboration and remote work, making them indispensable for modern workplaces.



## Modern telephony

In the evolving landscape of the modern workplace, especially in a modern hybrid environment, efficient communication remains pivotal. Tools like Teams Voice with Operator Connect have revolutionized the way organizations handle telephony. By integrating calling capabilities within collaboration tools such as Microsoft Teams or Zoom, these solutions improve the employee experience and boost productivity while significantly reducing agency costs.

Traditional desk phones are becoming obsolete as these modern replacements offer seamless connectivity. Employees can make and receive calls from their laptops, tablets or mobile devices. Because they no longer need to forward desk phones to personal mobile phones or check messages from multiple locations, they no longer miss critical calls. Instead, all communications are centralized within a single platform, providing a cohesive and efficient work environment.

Modern telephony solutions are particularly beneficial for hybrid work models. Employees can manage their calls and messages effortlessly, whether they are in the office, at home or on the go. This flexibility not only

improves productivity but also ensures that employees remain accessible and responsive, no matter where they are. By replacing traditional desk phones with these integrated calling tools, organizations can streamline their communication processes and support a more dynamic and agile workforce while freeing up valuable IT resources with vendor-provided managed services.

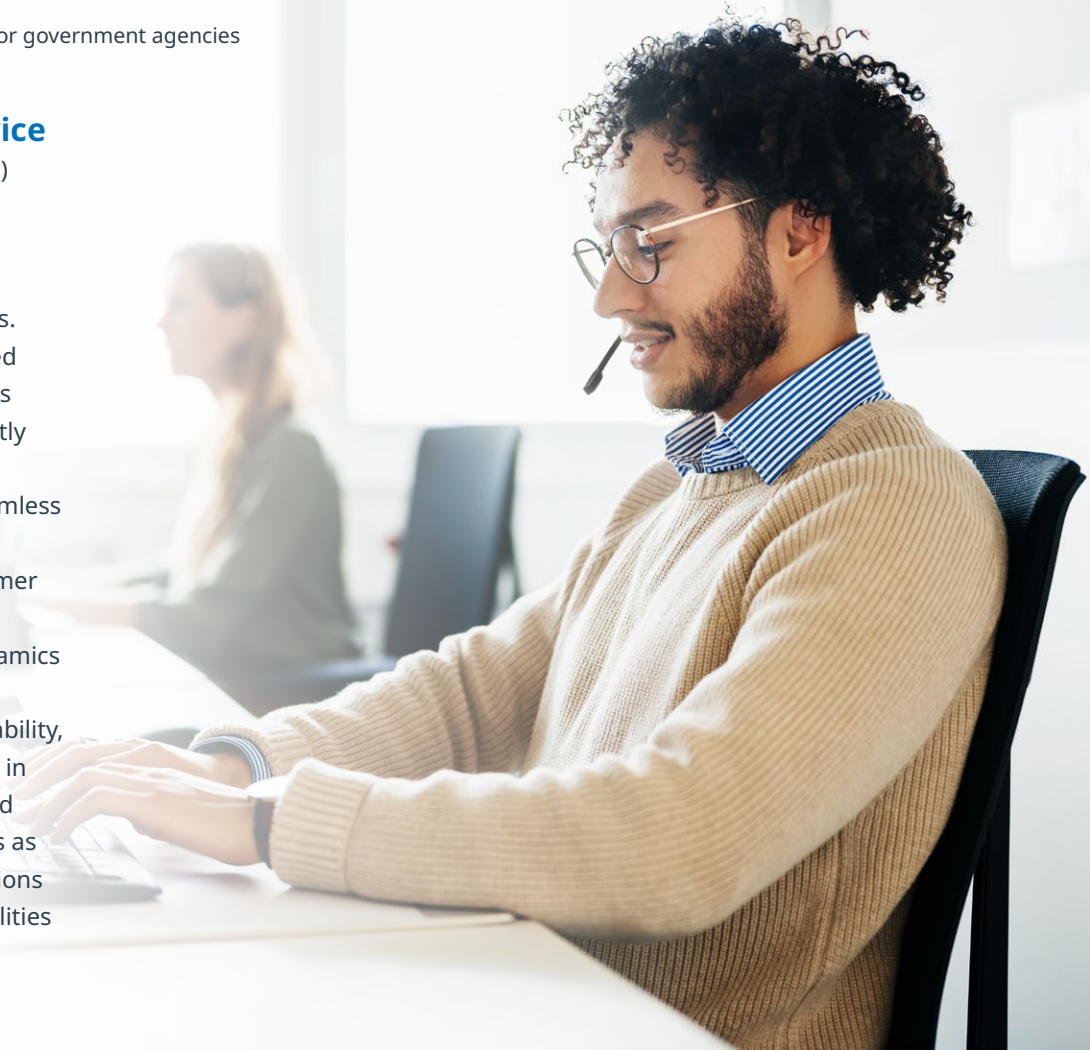
## Conference room as a service

A managed solution for agency conference rooms, known as conference room as a service (CRaaS), offers a transformative approach to handling both hardware and software requirements of meeting spaces. This solution can include white-glove service during critical agency meetings, ensuring that all technical aspects are managed meticulously. By enabling remote monitoring of collaboration tools, CRaaS ensures that meetings occur without technical interruptions or delays. This seamless support enhances productivity and allows participants to focus on their discussion topics without worrying about potential technical issues. The comprehensive nature of CRaaS ensures that every meeting environment is consistently optimized, fostering a professional and efficient atmosphere.



## Contact center as a service

Contact center as a service (CCaaS) offers a transformative approach to modern communication needs, especially in the context of call center and service desk operations. Organizations that use cloud-based solutions like NICE CXone, Genesys or Amazon Connect can significantly enhance their communication capabilities. Doing so ensures seamless and efficient interactions, both internally and for their own customer experience. Exploring emerging solutions, such as Microsoft's Dynamics 365 Contact Center alongside the Microsoft Teams Queues app capability, can tackle simple CCaaS scenarios in a cost-effective and fully integrated way. Both unified communications as a service (UCaaS) and CCaaS solutions work in tandem and GenAI capabilities such as Copilot augment them.



### Benefits of cloud-based CCaaS

- **Scalability:** CCaaS solutions allow organizations to scale their communication infrastructure effortlessly. They can adapt to changing business needs without substantial capital investments in hardware.
- **Cost efficiency:** By shifting to a cloud-based CCaaS model, agencies can reduce the costs associated with maintaining and upgrading traditional communication systems. This results in lower operational expenses and a predictable subscription-based pricing model.
- **Flexibility and mobility:** Employees can access communication tools from anywhere, using any device. This is particularly helpful for remote and hybrid work environments. Call center agents and service desk personnel can remain connected and productive, regardless of their physical location.
- **Advanced analytics and reporting:** Tools like NICE CXone, Genesys and Amazon Connect provide robust analytics and reporting capabilities. With them, organizations gain valuable insights into their communication operations. This data can be used to optimize performance, enhance customer experiences and improve strategic decision-making.
- **Enhanced customer experience:** CCaaS platforms integrate various communication channels, such as voice, chat, email and social media, into a single interface. This omnichannel approach ensures that customers can reach support through their preferred method, improving satisfaction and loyalty.
- **Integration with other systems:** CCaaS solutions work well with other business applications, such as CSM systems, providing a comprehensive view of customer interactions. This integration helps support agents deliver more personalized and efficient service.
- **Reliability and security:** Cloud-based CCaaS providers typically offer high availability and robust security measures. This ensures that communication systems are always operational and that sensitive data is protected.
- **Deploying a modern CCaaS as a vendor-managed and monitored service** offers agencies the ability to free up internal IT resources.



## Improving user experience with an XLA framework

Traditional service level agreements (SLAs) have long been the standard for measuring the performance of IT services. Experience level agreements (XLAs) offer a forward-thinking approach that focuses on the user's overall experience during interactions. XLAs are not meant to replace SLAs but to complement them. They shift the focus from purely technical metrics to the quality of the user experience.

### Understanding XLAs

XLAs emphasize the importance of user satisfaction and engagement. Instead of only measuring uptime or response times, XLAs seek to understand how users feel about the services they receive. This involves identifying key areas that impact the user experience, such as ease of use, accessibility and the effectiveness of support provided.

### Key areas of focus

By identifying and focusing on a few critical areas, organizations can enhance the overall user experience significantly:

- **User feedback:** Regularly collecting and analyzing user feedback helps to identify pain points and areas for improvement.
- **Interaction quality:** Ensuring that every interaction is smooth, timely and efficient contributes to positive user experiences.

- **Personalization:** Tailoring services and support to individual user needs can lead to higher satisfaction levels.
- **Support accessibility:** Providing multiple channels for support, such as chat, phone and email, ensures that users can reach help when they need it.

### Benefits of implementing XLAs

Integrating an XLA framework alongside traditional SLAs offers several benefits:

- **Increased user satisfaction:** Focusing on user experience leads to higher overall satisfaction with services and support.
- **Improved service quality:** Regularly assessing and addressing user feedback helps to continuously improve service quality.
- **Enhanced loyalty:** Satisfied users are more likely to remain loyal and advocate for the services they receive.
- **Better alignment with business goals:** XLAs help ensure that IT services are aligned with broader business objectives, ultimately driving better outcomes.

Implementing an XLA framework can be a transformative strategy that significantly enhances the user experience. By focusing on key areas that impact user satisfaction, organizations can achieve a more holistic understanding of service quality and inspire continuous improvement.





## Buying options for digital workplace services

Many agencies still use traditional procurement models and purchase items independently. In recent years, many buyers have shifted from a capital expenditure (CapEx) model to an operational expenditure (OpEx) model. They are choosing to procure and maintain devices as a service.

### Benefits of the device as a service OpEx model

- Cost efficiency: Instead of a large upfront investment, the OpEx model allows for predictable monthly expenses. These include the device and all related services,

from initial OEM procurement to the eventual replacement and recycling of the device.

- Comprehensive support: Services partners can offer integrated packages that include all necessary hardware and software, such as ITSM tools and hardware and software management tools.
- Single portal for all client procurement needs.
- Complete ownership of asset allocation and refresh management with zero business disruption.
- Per user pricing across all device types.
- Stock and depot management to cater to either device fulfillment according to agreed timelines or spurts in demand, leading to cost avoidance for depot storage and staging efforts.
- Choice of direct shipment, assisted or hybrid deployments for new hires, project ramp-up and refresh.
- Disposal alternatives, including remarketing or recycling of parts.
- Support for all device types, including laptops, desktops, tablets and mobile phones, along with peripherals such as monitors, smart boards or other displays across the campus.

## Conclusion

Adopting the strategies and tools outlined in this guide will enable government agencies to create a modern digital workplace that is aligned with industry best practices. By integrating core services such as modern device management, DEX tools, leading ITSM solutions, and employee communication and collaboration suites, agencies can significantly enhance productivity, improve user experience, and ensure seamless IT operations. These advancements will not only support the diverse needs of public-sector employees but also ensure that agencies remain agile, resilient, and ahead of the curve in the digital era.

The implementation of these digital workplace services will foster a more dynamic and responsive environment, enabling government agencies to better serve their

constituents. Using cutting-edge technologies and best practices enables agencies to streamline their operations, reduce costs, and improve overall efficiency. This transformation will not only enhance the day-to-day experiences of public-sector employees but also contribute to the broader goal of delivering high-quality public services in a rapidly evolving digital landscape.

By expanding on these services to include new AI technologies that are coming to market, agencies can continue to increase efficiencies and improve user experience. New workplace tools such as GenAI can enhance self-service options, streamline workflows, and provide real-time analytics and insights. These technologies enable proactive issue resolution, optimize resource allocation, and deliver personalized support, elevating the overall effectiveness of the digital workplace.



## List of abbreviations

OEM	original equipment manufacturer
BYOD	bring your own device
DEX	digital employee experience
ITSM	IT service management
CSM	customer service management
GenAI	generative AI
DaaS	desktop as a service
VDI	virtual desktop infrastructure
AVD	Azure Virtual Desktop
CRaaS	conference room as a service
CCaaS	contact center as a service
UCaaS	unified communications as a service
SLA	service level agreement
XLA	experience level agreement
CapEx	capital expenditure
OpEx	operational expenditure

## About the author



**Noel Hara**, VP & Chief Technology Officer,  
Public Sector, NTT DATA

## Sources

1. Gartner, Reference Architecture Brief: A Digital Workplace Model, Chris Jackson, Larry Cannell, Timon Watson, Darin Stewart, 2 November 2023
2. Gartner, Magic Quadrant for Outsourced Digital Workplace Services, Karl Rosander, Biswajit Maity, 11 March 2024
3. Gartner, Magic Quadrant for Digital Employee Experience Management Tools, Dan Wilson, Tom Cipolla, et al., 26 August 2024

GARTNER is a registered trademark and service mark of Gartner, Inc. and/or its affiliates in the U.S. and internationally, and MAGIC QUADRANT is a registered trademark of Gartner, Inc. and/or its affiliates and are used herein with permission. All rights reserved.

Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request from NTT DATA.

**Visit [us.nttdata.com](https://us.nttdata.com) to learn more.**

NTT DATA is a trusted global innovator of business and technology services, helping clients innovate, optimize and transform for success. As a Global Top Employer, we have diverse experts in more than 50 countries and a robust partner ecosystem. NTT DATA is part of NTT Group.

