Perspective | Public Sector

Creating a modern digital workplace for large school districts

Applying Gartner® insights for strategic IT transformation

An effective and cutting-edge digital workplace will improve the user experience, increase productivity and ensure seamless IT operations. This comprehensive guide for IT executives outlines the fundamental components large school districts should integrate into their digital workplace services program. Core 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 “must-haves” are integral to creating a dynamic and responsive environment that supports the diverse needs of modern employees.

Content

A comprehensive guide for IT executives

In today's fast-evolving digital landscape, the imperative for large school districts to adopt a modern digital workplace is more pressing than ever. As the guardians of public education, IT executives and administrators within school districts 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 insight 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 document leverages Gartner research insights, particularly from the Reference Architecture Brief: A Digital Workplace Model report[1] and the 2024 Magic Quadrant™ for Outsourced Digital Workplace Services.[2]

We believe the reference architecture delineates a model that large districts 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 district. This architecture, and its components, applications and connections, are ultimately designed to support the end user. In large school districts, these users include students and educators who are learning and teaching in district classrooms, along with district administrators and staff. 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 operational efficiencies within large school districts.

By adhering to the guidelines and insights, school district IT executives and administrators can make informed decisions that align with their strategic goals. Doing so ensures their districts 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 large school district should integrate into their digital workplace and 1:1 services program. These "must-have" services are integral to creating a dynamic and responsive environment that supports the diverse needs of modern public education.

Modern device management

Modern device management, also known as desktop engineering, is paramount for ensuring that school-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's Intune and Autopilot.

Microsoft Intune facilitates remote management, patching and maintenance of devices. IT administrators 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 racking and stacking machines for imaging. This approach streamlines new and replacement device distribution, significantly reducing potential downtime and classroom disruption while boosting overall operational efficiency. Autopilot also reduces the need for IT intervention through a seamless, user-driven setup experience that preconfigures devices for the user.

Tools like Microsoft Intune offer significant advantages for managing bring your own device (BYOD) programs. BYOD allows personal cell phones or tablets to access school applications and data securely. Students and staff have the flexibility to use their own devices for educational purposes while sensitive information remains protected and compliant with district policies.

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 students and educators 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 and optimize the educational environment proactively. DEX tools also minimize the need for and optimize field service visits because the support desk understands the true nature of issues. Software-related problems 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 districts to extend the lifecycle of their assets. Devices that initially may be marked for replacement can remain 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 districts to make informed decisions on discontinuing the purchase of those models going forward. Another significant benefit of these tools is a self-healing capability, which reduces new help desk tickets. When tickets are resolved, DEX tools can identify devices with similar configurations and proactively push fixes to them. This improves overall system reliability and user satisfaction. For educators in the classroom, IT support teams can use real-time device telemetry to diagnose and fix devices remotely. Teachers can then continue with their lessons uninterrupted.

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.[3]

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 streamline operations, improve user satisfaction and reduce support costs. Another key aspect of modern ITSM/CSM tools is integrated self-service options delivered through a comprehensive self-help knowledge library. This library empowers students and staff to resolve common issues independently, decreasing the 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 students and staff 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 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, so students and staff have seamless access to support resources within their daily workflows.

When districts implement these tools alongside DEX tools, the DEX tools must be integrated into the service desk platform. This integration allows agents to monitor device telemetry in real time, providing a more informed and proactive support experience.

Both ITSM and CSM tools should include portals and functionalities for students and staff accessible within collaboration tools like Microsoft Teams for a streamlined and cohesive support experience. By adopting and integrating modern ITSM/CSM tools with DEX tools, school districts 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.

DaaS - 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. Azure Virtual Desktop (AVD) is one of the most popular implementations of DaaS. Amazon Workspace Services is a robust alternative. These cloud-based DaaS solutions provide comprehensive services independently. However, school districts may 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. School districts should consider this approach as part of their solution options. Doing so ensures that all requirements are met in the most efficient manner possible.

DaaS and application streaming may also provide an affordable way for student devices to run the CPU-intensive and memory-heavy STEAM applications that users typically access in computer labs.

Peripheral vending machines and smart lockers

For school districts, implementing peripheral vending machines and smart lockers delivers significant efficiency gains and an enhanced user experience. Because peripherals are tightly integrated into the hardware asset management modules of ITSM tools (such as ServiceNow), districts can issue new or replacement devices seamlessly to students and staff. The process is simple: Users 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. Students and staff place their old or faulty devices into the locker, which then 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 equipment handling, which improves the overall efficiency and effectiveness of IT operations.

Walk-up services

Walk-up services for administrative staff have revolutionized the support experience in many high-traffic locations. Drawing inspiration from the Apple Genius Bar, these services provide educators and staff with convenient, in-person IT support. Users 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 user experience. Lastly, these services are ideally suited for bustling school environments where students and staff often need swift, on-the-spot help with their devices or software.

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

Collaboration suites

Robust collaboration suites, such as Microsoft Office 365, improve organizational efficiency and flexibility. By centralizing all documents in OneDrive or SharePoint, students and staff can replace devices effortlessly and still 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 Office 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 students and staff to focus on higher-value activities.

The comprehensive suite of Microsoft Office 365 tools includes Word, Excel and PowerPoint applications, as well as Teams for communication and collaboration, and Outlook for email. By seamlessly integrating all essential functions, the suite simplifies workflows and fosters a more cohesive and collaborative educational environment. Google Classroom 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 learning, making them indispensable for modern schools from pre-K to grade 12.

Modern telephony

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

The seamless connectivity of these modern replacements is rendering traditional desk phones obsolete. Teachers and staff can make and receive calls from their laptops, tablets or mobile devices. Users no longer miss calls because there's no need to forward desk phones to personal mobile phones or check messages from multiple locations. All communications are centralized within a single platform, providing a cohesive and efficient work environment. Plus, teachers no longer need to be in the classroom or use personal devices to communicate with parents. They can return calls at their convenience from any location.

Modern telephony solutions enable teachers and staff to manage their calls and messages effortlessly, whether they are in the classroom, at home or on the go. This flexibility not only improves productivity but also ensures that users remain accessible and responsive, regardless of their physical location. School districts that replace traditional desk phones with these integrated calling tools can streamline their communication processes while supporting a more dynamic and agile educational environment. This approach frees up valuable IT resources through vendor-provided managed services. Adding advanced telephony solutions to a school's infrastructure, including public address systems, delivers a contemporary and secure communication experience.

Conference room as a service

School district conference rooms can use a managed solution, known as conference room as a service (CRaaS), to handle both hardware and software requirements. CRaaS solutions can include white-glove service during critical district meetings to make sure all technical aspects are meticulously managed. By enabling remote monitoring of collaboration tools, CRaaS ensures that meetings occur without technical interruptions or delays. Seamless support enhances productivity because meeting participants can focus on their discussion topics without worrying about potential technical issues. The comprehensive nature of CRaaS optimizes every meeting environment, 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 support center and IT help desk operations. Districts that use cloud-based solutions like NICE CXone, Genesys or Amazon Connect can significantly enhance their communication capabilities with CCaaS. 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. Unified communications as a service (UCaaS) and CCaaS solutions work in tandem while GenAI capabilities such as Copilot augment them.

Benefits of cloud-based CCaaS

- Scalability: CCaaS solutions allow school districts to scale their communication infrastructure effortlessly. They can adapt to changing needs without substantial capital investments in hardware.
- Cost efficiency: By shifting to a cloud-based CCaaS model, districts can reduce the costs associated with maintaining and upgrading traditional communication systems. This lowers operational expenses using a predictable, subscription-based pricing model.
- Flexibility and mobility: Students and staff can access communication tools from anywhere, using any device. This is particularly helpful for remote and hybrid educational environments. Help desk agents and support personnel also 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. Districts gain valuable insights into their communication operations, and the data can be used to optimize performance, enhance customer experiences and improve strategic decision-making.
- Enhanced user experience: CCaaS platforms integrate various communication channels, such as voice, chat, email and social media, into a single interface. This omnichannel approach ensures that users 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. Communication systems are always operational, and sensitive data is protected.
- Deploying modern CCaaS capabilities as a vendor-managed and monitored service frees up school districts' 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 effectiveness of the support services provided.

Key areas of focus

School districts can enhance the overall user experience significantly by identifying and focusing on a few critical areas:

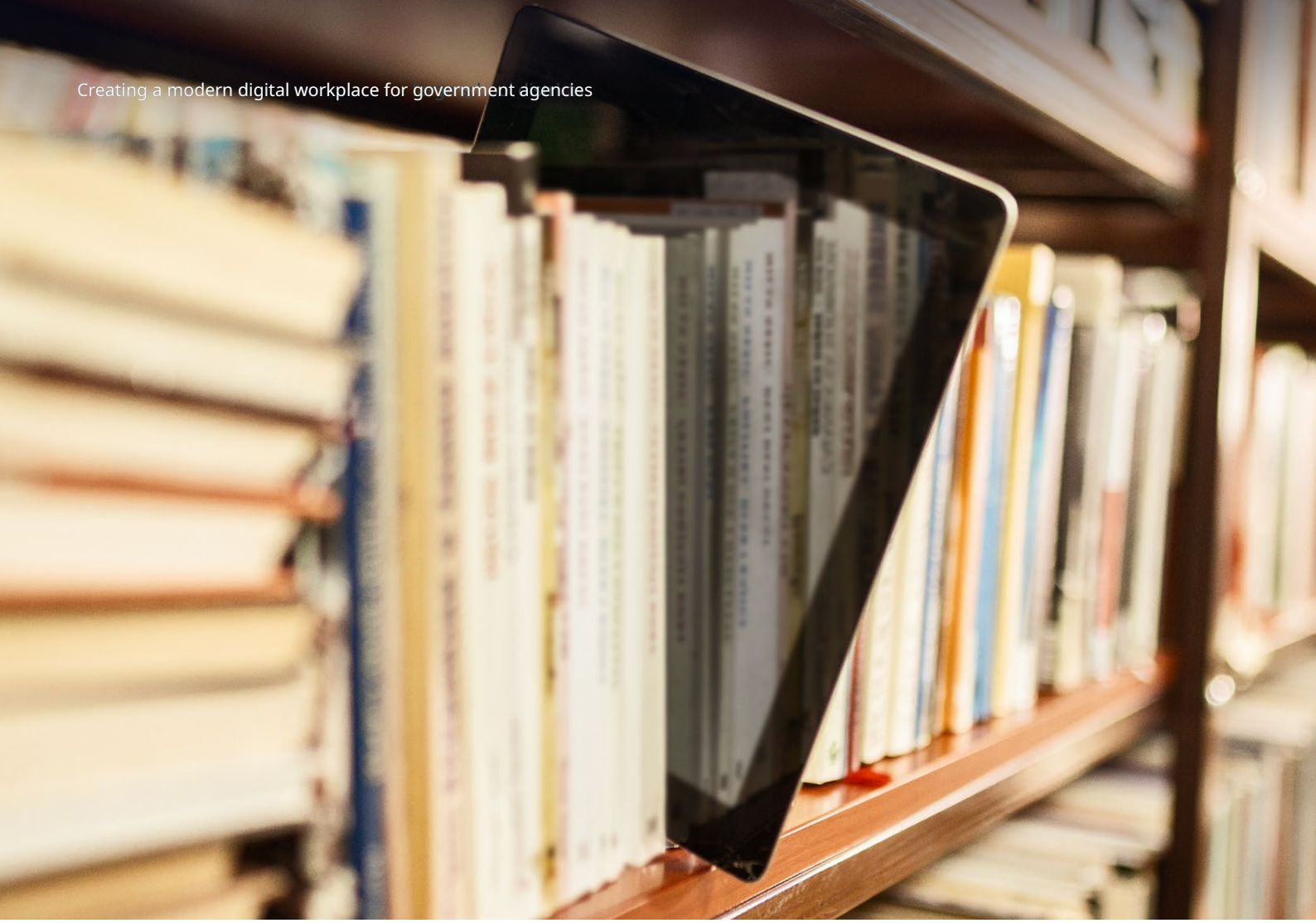
- User feedback: Regularly collecting and analyzing user feedback helps identify pain points and areas for improvement.
- Interaction quality: Ensuring that every interaction is smooth, timely and efficient contributes to positive user experiences.
- Personalization: Tailoring services and support to 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 continuously improve service quality.
- Enhanced loyalty: Satisfied users are more likely to remain loyal and advocate for the services they receive.
- Better alignment with district goals: XLAs help align IT services with broader educational 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, school districts can achieve a more holistic understanding of service quality and inspire continuous improvement.



Buying options for digital workplace and 1:1 services

Many school districts 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 delivers predictable monthly expenses. These include the device and all related services, from initial procurement through an original equipment manufacturer (OEM) 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 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.
- District-wide support for all devices and peripherals, including laptops, desktops, tablets, mobile phones, monitors, smart boards or other displays, and conferencing systems.

Conclusion

Adopting the strategies and tools outlined in this guide will enable large school districts to create a modern digital workplace that aligns with industry best practices. Districts that integrate core services, such as modern device management, DEX tools, leading ITSM solutions, and employee communication and collaboration suites, can deliver seamless IT operations while boosting productivity and user experience. These improvements will not only support the diverse needs of teachers, administrators and students but also keep schools agile, resilient and ahead of the curve in the digital era.

Digital workplace services foster a more dynamic and responsive environment. Integrating these services allows school districts to better meet the needs of administrators, teachers and students. Cutting-edge technologies and best practices enable districts to streamline operations, reduce costs and improve overall efficiency. This transformation will not only enhance the day-to-day experiences of all users but also contribute to the broader goal of delivering high-quality education in a rapidly evolving digital landscape.

Expanding these services to include new AI technologies coming to market will help school districts continue to increase efficiencies and improve the user experience. AI-driven tools such as GenAI provide real-time analytics and insights, streamline workflows and improve self-service. These technologies support 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

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