

IT Key Metrics Data 2023: End-User Services Measures — Digital Workplace Services Framework Definitions

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Initiatives: [Technology Finance, Risk and Value Management](#); [I&O Operations Management](#); [I&O Organizational Strategy](#)

This research outlines the Gartner End-User Services — Digital Workplace Services consensus model and framework definitions for IT cost management.

Analysis

Overview

This document elaborates on the framework used by Gartner to compile the IT Key Metrics Data End-User Services Measures — Digital Workplace Services and the data structure a user should align to in order to accurately benchmark using either the published research or the self-service IT Key Metrics Data Comparison Tools.

Recommendations

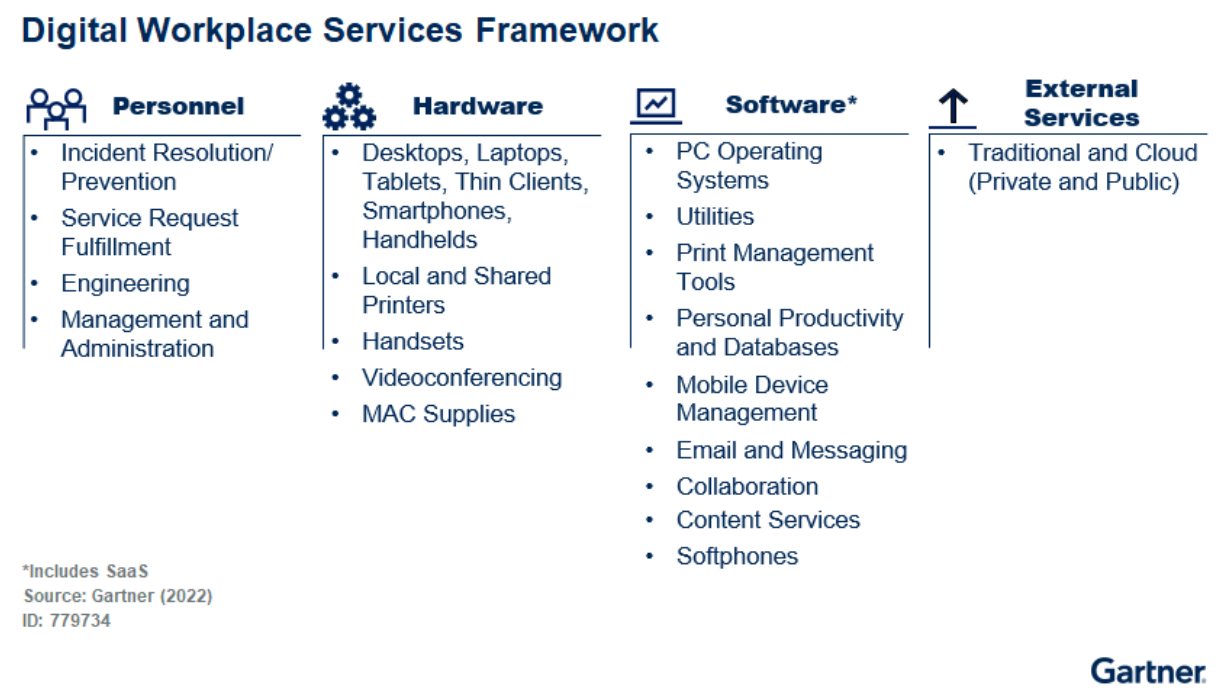
- Ensure you understand the metrics before referring to the published research or using any of the available self-service comparison tools.
- Evaluate your organization by leveraging the available published content or receive a report tailored to your organization by completing the [End-User Services & Enterprise Application Portfolio Budget & Efficiency Tool](#)
- Follow the [Practitioners Guide](#) to best prepare your data for comparison.
- Schedule an [inquiry](#) with a Gartner Expert to address alignment questions or to review your results and gain valuable insight based on your submission.

Scope

Digital Workplace Services includes provisioning of the full life cycle management of personal computing devices, peripheral assets and fixed telephones including acquisition, deployment, maintenance, change management and disposal. Digital Workplace does not include IT Service Desk activities as they are described in the [IT Service Desk framework](#).

Annual Digital Workplace Services spending includes the annual capital and operational expense, installation and taxes, as appropriate, for all of Personnel, Hardware, Software and External Services. The below figure outlines the Gartner Benchmark Analytics consensus cost model for the Digital Workplace Services environment which has been leveraged for the [Digital Workplace Services Analysis](#).

Figure 1: Digital Workplace Services Framework



General Information

Business Metrics

Spending related metrics should be answered based on the latest 12-month actuals available.

Company Employees

The count of employees (i.e. headcount excluding contractors or consultants) on a full-time equivalent basis, regardless of whether these employees are frequent users of the technology supported by the IT organization. This includes full-time and part-time employees, or as reported in the public record.

Definitions for Total IT Spending and Staff, Revenue, Operating Expenses, and Company Employees can be found in [IT Key Metrics Data 2023: Industry Measures – Framework Definitions](#).

Digital Workplace Services Staff

Staff should be reported as full-time equivalents (FTEs). FTEs should be measured in calendar time. For example, an individual who works full-time on an assignment for one full year would be reported as 1 FTE while an individual who was employed for six months of the study period would be reported as 0.5 FTE. Do not subtract such activities as vacation time, sick days and administration time. Do not count any one physical person as more than one FTE (for example, due to overtime). FTEs are assigned to services based on the functional definitions provided. If an individual or group performs more than one function, FTEs may be prorated between services and/or functions based on client estimates of time spent in each area.

Insourced IT FTEs are defined as FTEs who are employed by the IT organization (excluding contractors).

Contractor IT FTEs are defined as FTEs who are supplemental to your staff and are “operationally” managed by the in-house staff.

Service Definitions

Personnel

Annual spending for Digital Workplace Services internal staff and contractors includes salary, overtime pay, benefits and “other” employee costs such as job-related travel and IT training. The “benefit load” should include costs for bonuses, paid holidays, vacations, medical/dental coverage, life and accident insurance, retirement plans, stock plans, disability, Social Security, unemployment compensation, dependent care, tuition reimbursements and employee assistance programs (for example, physical exams, exercise programs and similar).

For contractors and consultants, include all compensation that was paid directly to the individual or agency.

Do not include the spending related to human resource department staff allocations, early retirement incentive bonuses and internal “cross-charges” for corporate overhead such as for the chairperson’s salary.

Only individuals whose responsibilities are primarily focused on operational tasks of running Digital Workplace operations should be included in this section. This can include “project” work such as moves/adds/changes or rollouts of new technologies. Individuals whose primary responsibility is Project Management, Architecture, Product Management, or Service Management as defined in [IT Key Metrics Data 2023: Industry Measures – Framework Definitions](#) are excluded from this category

Functions include:

- **Incident Resolution/Prevention:** staff/costs directly involved in resolving or preventing incidents related to the desktop and print environments. An incident is any event which is not part of the standard operation of a service and which causes, or may cause, an interruption to, or a reduction in, the quality of that service. An incident is related to a failure in the IT services provided. Typical activities include repairing malfunctioning client hardware and software. Preventative activities such as applying patches are also included.
- **Service Request Fulfillment:** staff/costs related to fulfilling service requests around client equipment. These include but are not limited to software deployment (electronic or manual), installation of new computers and printers and moves/ adds/ changes/ deinstalls/ removals of existing computers and printers.
- **Digital Workplace Engineering:** staff/costs related to the technical design, and modification of the desktop environment, inclusive of hosted virtual desktop (HVD) enablement. Typical activities include desktop software application packaging, scripting, testing, debugging, and implementation of change and production support. This category also includes image development and management, patch management, test lab activities, monitoring health and troubleshooting of non-working installations, and approving requests for change.
- **Management and Administration:**

Management includes time spent by personnel on supervisory, departmental administration, or strategy related tasks. These tasks include but are not limited to setting strategic direction, communications activities, hiring and firing of staff, personnel performance reviews, expense management, approving relevant documents, planning day to day personnel workload etc. Time spent by managerial personnel on non-supervisory or departmental administration tasks (for example a data center supervisor who spends half his time managing servers) should be represented in the relevant category.

Administration provides direct administrative and clerical support to all organizations related to the service being studied. Typical positions include secretary, receptionist and administrative assistant. These individuals often work for high-level executives in the organization.

When determining how high in the organization to represent management use the following guidelines to determine materiality. When analyzing a single service, it is not necessary to include IT Administration time for any associate if the total time contribution of the individual represents less than 15% of the individual's total hours. If multiple services are being analyzed, it is not necessary to include any IT Administration time for any associate if the total time contribution of the individual represents less than 30% of the individual's total hours.

Hardware

Annual capital and operational expense, maintenance, installation and taxes, as appropriate, for all hardware assets including desktops, laptops, tablets, thin clients, blade PCs, smartphones, fixed handsets, and office print infrastructure. For "bring your own device" assets (BYOD), only include any subsidized funding by the organization. Include costs for blade PCs but exclude costs of the server and storage capacities used to support VDI.

Hardware includes,

- **Desktops:** desktop computers supported in either the traditional office setting or in another fixed location such as satellite office suites and employee homes.
- **Laptops:** fully functioning laptop, notebook and Ultrabook computers.

- **Tablets:** devices based on a touchscreen display, typically multitouch, that facilitates content entry via an on-screen keyboard. The device has a screen with a diagonal dimension of at least 5 inches. Media tablets feature connectivity via Wi-Fi or via cellular networks. Tablets typically offer daylong battery life and lengthy standby times, with instant-on access from a suspended state.
- **Thin clients:** small terminals designed to connect a user to a server-hosted virtual desktop, PC blade workstation or set of applications hosted in a server-based computing environment.
- **Smartphones/ Mobile Devices:** mobile devices supplied and supported by the enterprise for business use including smartphones (iOS, Android, Windows etc.) and other handheld devices (BlackBerrys etc.) typically used in addition to primary PC devices.
- **Blade PCs:** individual PCs in blade form within racks, typically hosted and managed in the Data Center, and allocated to users on demand when the individual's image is loaded onto a blade PC for remote use via an agent or desk monitor/ keyboard/ mouse setup.
- **Personal Printers:** office print device directly connected to a single user.
- **Shared Printers:** office print device connected to multiple users through a local/enterprise network.
- **Multifunction Printers (MFP):** office print device that can fax, copy and scan paper documents. An MFP can also be programmed by a third party, the user or the technology provider to perform custom functions; easily integrates with office and enterprise applications; is management-friendly, with consistent architecture and user interface; works well on the network; and is based largely on open industry standards. They can perform usage tracking and other functions that help organizations actively manage their office printer/MFP fleet.
- **Fixed Handsets:** premise-based fixed voice handsets and other endpoints based on IP Technology (IPT, VoIP) or analog (PABX switch) technology.
- **Videoconferencing Suites:** any annual hardware costs associated with fixed on-premises videoconferencing facilities such as dedicated suites or mobile units. This does not include presentation technology that isn't specifically geared to video conferencing such as stand-alone conference room projectors, speakers, pull down screens etc. Do not include the facilities costs for suites, only the cost of the equipment hardware & software and its associated support.

Software

Digital Workplace Software includes Traditional and Software as a Service (SaaS) licenses, and Software Maintenance Agreements. It covers applications related to PC operating systems, utilities, print management tools, End-User Device management tools, End-User Personal Productivity, E-mail/messaging, Unified Communications and Collaboration, Mobility Management, Enterprise Content Management, and other personal applications.

- **Personal Productivity:** On-premises and cloud-based software (PC client or server) that offers non-business-specific standard functionality to workplace users, such as:

Word processing, spreadsheet, presentation graphics, notes, desktop publishing, personal database, statistical analysis, forecasting/ trending data, advanced graphics & reporting, business intelligence management

Example products: MS Office, MS Access, MS Office365 Enterprise.

- **Email/ Messaging:** On-premises and cloud-based software (PC client or server) that offers non-business-specific standard functionality to workplace users, such as:

Email messaging and archiving, calendar, diary, scheduling

Example products: MS Exchange, MS Exchange Online, MS Outlook.

- **Unified Communications & Collaboration:** On-premises and cloud based software (PC client or server) that offers non-business-specific standard functionality to workplace users, such as: softphone voice capability, instant messaging (IM), audio conferencing, videoconferencing (telepresence), virtual meeting place, secure drop-zone for data sharing/ personal storage, chat, document workflow/ sharing, video/ audio streaming, work schedule management, collaborative working, content discovery and behavioral insights/ trending, social media links

Example products: Microsoft Teams, Webex, SharePoint, SharePoint Online.

- **Mobility Management:** The Enterprise Mobility Management toolset comprises on-premise platform-based software (PC client and/or server) that offers a set of functional services to assist mobility management, including:

Mobile Device Management (MDM), Mobile Application Management (MAM), Mobile Content Management (MCM), mobile identity, and the containerization of mobile data and applications

Example products: XenMobile, Intune, MaaS360, AirWatch.

Note that the costs of server OS platforms that host this software are not included here but should be collected in the appropriate Data Center service.

- **Content Services:** Include here the costs of any enterprise content management software and systems designed to handle output and other content and present back to users in a digital form rather than printed form to reduce the printing volumes of the enterprise. This means an integrated product suite or set of separate applications, which share common APIs and repositories, to exploit diverse content types and to serve multiple user types and numerous use cases across an organization, hence it is beyond pure workflow collaboration and document sharing as delivered by personal productivity software like SharePoint, and into advanced content management capabilities.

Example products: Box, Alfresco, Documentum, WebCenter.

- **Other Personal Applications:** Software running on End-User devices that is not covered by any of the above.

External Services

- **Digital Workplace Traditional Outsourcing:** Include all traditional outsourcing related to Digital Workplace Services. Outsourcing is defined as any situation in which the full operational responsibility for IT services is completely handed over to an external service provider.

NOTE: Volume print services delivered through a “print shop,” and specialist print services (reports, posters, laminates, non-standard paper sizes, mailshots (enclosure & mailing) are not included in this model

- **Desktop as a Service (DaaS):** This is a cloud service delivering an entire desktop environment to the user as an off-premises service from a third party provider. It is often and most typically based on VDI delivered by a cloud service provider. The service is generally delivered in one of two ways:
 - As a single vendor service whereby all services, hosting, and management tooling is provided by the same supplier e.g., Amazon Workspaces, VMware Horizon Air.
 - As a broker plus host contract whereby the service broker will contract with the customer, but sub-contract the hosting typically to a hyperscale public cloud service provider like AWS, Google or MS Azure. The broker provides the services — image/OS management, apps packaging & management, backup, migration, patching, IDAM/SSO etc. — and may or may not provide the underlying management tooling e.g., Citrix XenDesktop, VMware Deskton, Ericom, Listed, Leostream etc.

In the latter case, customers typically also need to provide the OS licenses under a “bring your own license” (BYOL) arrangement, since it is difficult to procure a suitable MS service provider licensing agreement (SPLA) in anything other than a single vendor solution. In this case, please remember to include the internal annual cost of BYOL licenses for the DaaS service.

NOTE: If DaaS is procured as a “hybrid” service where the virtual desktops are hosted on a dedicated on-premise platform, but managed by a service broker, please include the DaaS charges from the broker under Outsourced Service Costs for VDI above.

Workload

Personal Computing Device (PCD) Workload refers only to company provided devices (not BYOD) and it is measured with and without smartphones/mobile devices. It includes the following:

- Desktops
- Laptops/Notebooks
- Tablets
- Thin Clients
- Mobile Devices

Printer workload includes:

- Personal Printers
- Shared Printers
- Multifunction Devices and multifunction printers (MFD/MFP)

Virtual workload includes:

- Blade PCs
- Virtual PCs — Virtual Desktop Infrastructure comprises a centralized premise-based infrastructure (often HCIS based) that delivers an entire desktop environment remotely. Users must be online to use the service and they load and run their saved desktop image onto a virtual PC hosted on a server or HCIS appliance in the data center. They require some sort of desktop hardware to run it on, comprising as a minimum an intelligent GUI monitor, keyboard and mouse, possibly provided through a “hot desk” environment in the office, or loaded onto a BYOD PC.
- DaaS Equivalents — This is a cloud service delivering an entire desktop environment to the user as an off-premises service from a third-party provider. It is often and most typically based on VDI delivered by a cloud service provider.

User workload includes:

- The average number of individuals accessing Digital Workplace Services services during the year. This can be estimated by calculating the average number of active directory accounts for individuals in use during the past year (make sure to exclude conference rooms and similar items). A user includes someone with access to basic workplace services like a corporate email account and intranet access. It can include the following:
 - Individuals who are assigned their own personal computing device (Desktop, Laptop, Tablet, Thin Client, Smartphone)
 - Individuals who are not assigned their own personal computing device of any type but share at least one type of End User Device. Sharing may be done through the presence of shared standard computers, or thin clients using Blade PC, VDI, DaaS or similar technologies.
 - Individuals who access basic workplace services such as a corporate email account and intranet access through their own BYOD devices. In addition to employees these may include contractors or students in an academic setting.

Recommended by the Authors

["IT Key Metrics Data 2023: Working with IT Budget and Comparison Tools"](#)

["IT Key Metrics Data 2023: End-User Services Measures — Digital Workplace Services Analysis"](#)

["IT Key Metrics Data 2023: Frequently Asked Questions"](#)

["Important Emerging Technologies for the Digital Workplace"](#)

["Toolkit: Assess Hybrid Working Readiness to Advance Digital Workplace Maturity"](#)

Evidence

This research contains the standard consensus model and IT performance measurement framework as defined by Gartner Benchmark Analytics. To learn more about [Gartner Benchmark Analytics](#) contact your account executive or [email](#) us.

Document Revision History

[IT Key Metrics Data 2022: End-User Services Measures — Digital Workplace Services Framework Definitions - 16 December 2021](#)

IT Key Metrics Data 2021: End-User Support Measures – End-User Device & Print Management Framework Definitions - 18 December 2020

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