Digital Workplace of the Future
Global 2019

Quadrant Report

A research report comparing provider strengths, challenges and competitive differentiators

September 2018
About this Report

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The research and analysis presented in this report includes findings from the ISG Provider Lens™ program and ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that was current as of September 8, 2018. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars ($US) unless noted.

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EXECUTIVE SUMMARY

Digital Workplace of the Future

Personal digital secretaries for everyone: The enterprise workplace environment has seen significant changes and technology evolution in the most recent few years. Adopting digital technologies and corporate cultural change management have become key elements for developing a digital workplace of the future. Enterprises aspire to upgrade and transform the workplace environment to not only equip existing employees, but also to attract new talent.

The rapid growth in disruptive technologies, like cognitive automation, robotics, machine learning, artificial intelligence and virtual reality, has increased their applicability in workplace ecosystems. These technologies have the potential to elevate the digital dexterity of employees by taking over mundane and regular tasks. Employees now often have these newer technologies at their disposal to improve their abilities to work and their overall workplace experience. Newer and innovative technical approaches can provide a personal digital secretary to every employee. Digital secretaries can help employees by automating repetitive tasks and providing data and analytics at the right moment to support decisions and perform more efficiently.

Digital Workplace Consulting

Consulting is an integral part of digital workplace transformation: The majority of workplace transformation initiatives are increasingly beginning with a consultative approach. Digital workplace consulting covers current workplace environment assessment and understanding digital technology gaps. Enterprises prefer vendor-agnostic, independent consulting services. Dedicated consulting should assess the current enterprise environment and advise on the viability of implementing different technologies.

Analytics and automation are used in persona segmentation: A key element in digital workplace consulting and assessment is segregating end users into user personas and defining the requirements specific to each persona. Automation technology is increasingly being used in persona and workplace definition. Automated agents deployed on the end user’s system can collect usage information that can be difficult to obtain through traditional methods like focus group discussions and interviews.

Design thinking is becoming a key approach for consulting: Consulting services with a design-thinking approach define the parameters affecting the end-user experience. Digital workplace transformation initiatives can measure their effectiveness and return on investment based on these parameters.
Executive Summary

The CIO is no longer the primary audience for consulting: The digital workplace consulting services aim not just at cost reduction but also to help align the business vision with end users’ needs. Digital workplace consulting requires interaction with business functions other than enterprise IT. Enterprises are increasingly involving business functions like human resources (HR) in their workplace transformation initiatives.

Technology migrations need consulting expertise: Major transformation initiatives like migration to Windows 10, Office 365 or G-Suite or the adoption of new social collaboration solutions require dedicated consulting and planning. Migration-specific consulting provides assessment, prepares the migration and adoption blueprint and provides a roadmap to implementation.

Managed Digital Workplace Services

Automation and analytics drive “shift-left” initiatives: Managed workplace services are adopting shift-left strategies that are intended to reduce overall incident tickets and associated service desk costs. Proactively monitoring systems, devices and applications enables predictive analytics that can prevent incidents from occurring. Automation also provides self-help and self-service features that let end users resolve their own issues without raising a service desk ticket. Tickets that are routed to the service desk agents now are typically of higher complexity, and agents are better equipped with the information and analysis to handle them. ISG’s experience with enterprise clients indicate that IT spending for end user computing, service desk and collaboration functions is approximately 19 percent of the IT budget. Increasing use of automation and analytics can lead not only to improved cost savings but also significant productivity gains. An automation-enabled service desk can manage 46 percent more end-users than traditional one.

Usage of AI-enabled virtual agents is increasing: AI-based virtual agents are becoming an integral part of managed workplace services. These chatbots aim to provide human-like support to end users. An intelligent chatbot can understand end users’ problems with devices or applications and either self-heal or send an automated request to the help desk on the user’s behalf. Chatbot agents can include sentiment analysis to help them gauge end users’ feelings by their text entry. Sometimes these automated agents are integrated with other business processes and applications to trigger application output or a function based on a user’s suggestion. It is like conversational commerce, where the system directs end users to relevant applications based on the content of the conversation.

AR/VR is being used for onsite and field support: Onsite and field support services have started using augmented reality and virtual reality technologies to enhance end-user experience. AR and VR can produce savings by reducing the need to deploy people for onsite support. Enterprises are also adopting digital lockers and IT vending machines to enhance end-user self-service and the digital experience.
Device-as-a-service model usage is increasing: More enterprises are opting for the device-as-a-service model, where, unlike traditional engagements, hardware is not leased but is paid for as part of a monthly service fee. Service providers can handle the entire procure-to-dispose-and-refresh device lifecycle while also offering associated managed services.

Measurable experience level drives new agreements: Digital workplace engagements are increasingly driven by end-user experience level agreements (XLAs) rather than by traditional service level agreements (SLAs). Continuously monitoring systems, networks, devices and application performance can generate measurable information that can be used to provide overall end-user experience level.

Managed Mobile Enterprise Services

Workflow automation enables mobility: Enterprises are introducing mobility deeply within their workplace ecosystem and are focusing on integrating workflows and backend systems. Mobile enterprise programs continue to be a major contributor to business productivity beyond devices and communication. Enterprise clients are increasingly looking to service providers as partners for workflow automation.

Secured and managed access to devices: Different non-traditional mobile devices like wearable smart IoT devices are permeating the end-user space. Enterprise are looking for ways to securely manage diverse devices through technologies like mobile device management (MDM), enterprise mobility management (EMM) and user experience management (UEM). Device management services include business policy implementation, device configuration and secured application access.

Device- and application-level protection are necessary for security: Managing mobile enterprise services requires device- and application-level protection. Technologies like application refactoring and containerization secure availability and deployment across mobile devices. Service providers are also offering enterprise app stores that provide policy-enabled, secured access to approved applications for mobile devices.

Mobility solutions are increasingly industry-specific: There is an increasing focus on verticalizing mobility solutions. Many service providers are offering managed mobile services for industries and environments with unique requirements like manufacturing shop floors, secured areas and construction sites. Service providers also offer reusable dedicated managed mobility solutions for specific user needs in industries like retail, healthcare and banking, financial services and insurance (BFSI).

Analytics, AI-virtual agents: Analytics for telecom expense management and mobile strategy effectiveness measurement are becoming important aspects of managed services. Service providers are offering virtual agents that can be accessed via any device. Managed mobile enterprise services now also extend to smart IoT devices for predictive analytics, proactive monitoring and secured access.
Unified Communication and Collaboration

UCaaS is preferred model as companies migrate to cloud: The movement towards cloud is inevitable and many enterprises are now in transitioning phase of migrating existing unified communication infrastructure. Employees are demanding similar experience in their unified communications and collaboration (UCC) technologies as with their personal devices and platforms.

Skype for Business and productivity suite usage has increased: Traditional telephony is increasingly being replaced by office productivity applications like Skype for Business and Google Hangouts. Modern communication and collaboration tools provide VoIP, video and chat mediums with consistent experience across channels and devices.

Social collaboration is taking center stage: Enterprises are overwhelmed by growth in the enterprise social collaboration market, where many team and content-centric collaboration tools continue to be introduced. Many social collaboration offerings can provide complete solution packages that would otherwise require disparate UCC elements.

Smart offices and meeting rooms improve productivity: Services oriented to smart offices and meeting rooms can enhance productivity and collaboration among employees. Service providers are investing, and enterprises are increasingly looking for digitalizing their office environment to promote a consistent collaborative experience.

Cloud-Based VDI Services

Cloud-based VDI demand is increasing: Demand has consistently increased for cloud-based desktop virtualization services. Banking and healthcare organizations are increasingly looking for cloud-based VDI services to enable secured access on devices of employees' own choice.

Thin client use is growing: Enterprises are also considering using cost-effective thin clients like Google Chrome to enable anytime, anywhere access with virtual desktops.

Hyperconverged infrastructure eases out VDI hurdles: Growth in hyperconverged infrastructure has also led to increased desktop-as-a-service (DaaS) adoption. Hyperconverged infrastructure attempts to counter the storage cost hurdle in virtual desktop infrastructures. With the growth in hyperconverged infrastructure vendors, cloud VDI is also gaining popularity.

Change management is key to success: A key element for deploying and managing unified communication and collaboration services is enabling change management within enterprise culture. Methodologies like gamification and crowdsourcing aim to promote and enhance new technology adoption.
End user analytics measures and monitor end user performance: Service providers are offering real-time analytics around end users’ usage for virtual desktops and can provision and deploy emergency and transient workloads in case of device failure. Device and app monitoring services can extend to cloud-based virtual desktop infrastructures and can predict downtime situations.

DIY trial versions bring in users: Some service providers are offering trials of their cloud-based desktop virtualization solutions from their websites. These offerings are aimed at increasing adoption and providing do-it-yourself (DIY) functionality for potential users to experience the provider’s service quality.

Cloud Workspaces – WAAS

WaaS is the next wave in cloud workspaces: Cloud-based desktops are gaining traction. However, more comprehensive resources are available in workplace-as-a-service (WaaS) cloud offerings. WaaS provides a complete workspace with associated applications, security provisions and device and application controls with managed services. WaaS implementation can significantly reduce enterprise capital spending because complete desktops, including applications and operating systems, can be managed and upgraded from the cloud.

Productized offerings are more common: Many service providers are moving toward a productized offering in digital workplace services. These cloud-based offerings are offered in a pay-as-you-go or pay-per-user model. Users get cloud-based “workspaces,” which can be a single interface for the end user to access all their workplace data and applications. Other managed services for the workplace form the back-end support system. Many services providers are already offering a mobile version, most of which include a virtual assistant and service desk function at the minimum.

Unified Endpoint Management

Culmination of many technologies necessitates management: With the proliferation of different devices and applications, device management has evolved from being device-centric to encompassing enterprise mobility management. UEM offers a culmination of PC device management, MDM and EMM. Many EMM and MDM solution vendors are focusing on offering a holistic, unified endpoint management solution. Many security service providers are also providing unified solutions to manage the different endpoints used to access the workplace environment.

Unified Device management is now in demand: A unified approach to manage different devices and endpoints is in demand. It requires centralized solutions for all devices, including smartphones, tablets, PCs, MACs and smart IoT devices.
A one-stop shop for enterprise IT, end users and mobility is expected: Because of enterprise IT’s requirement to manage all devices from one solution and end users’ expectations for self-service, UEM solutions are expected to provide end-user self-service, desktop and PC lifecycle management and endpoint mobility management.

Machine learning and AI usage has increased: Technologies like artificial intelligence and machine learning can monitor traffic at each endpoint and recognize threats in the device ecosystem. Only issues that are not being automatically resolved will be escalated to human agents.
Introduction

Definition

Digital workplace is the defining model for how end users access and collaborate on their work-related data and applications. It is the conceptualized view of a connected, always-on, collaborative, secured workplace that is device- and platform-independent and built on cognitive, digital and smart technologies. Digital workplace services cover consulting and managed services related to mobility, service desk, unified communication, collaboration, cloud-based desktop virtualization and workplace-as-a-service.
Our research studies the investigation efforts and buying decisions of typical enterprise clients. When contemplating a significant strategy transformation, such as implementing agile practices or incorporating automation into its environment, an enterprise client will benefit from a study that examines an entire ecosystem for an individual service line. Each focus area is typically made up of four key areas: consulting and advisory services, system integration, development and support. Therefore, the ISG studies are comprised of an analysis of multiple quadrants that cover a variety of services. Vendors are classified into one of four areas, but there are multiple quadrant areas included in this report.

This study on digital workplace services includes eight quadrants that represent key services in this space. It includes one quadrant on consulting services and three quadrants on managed services, covering managed workplace services, managed mobile services and combined services for midmarket clients. There are also quadrants for unified communication and collaboration services and VDI on cloud. The WaaS quadrant compares solutions and productized cloud workspace offerings. The unified endpoint management (UEM) quadrant compares software solution vendors. These quadrants are further defined as follows:

**Digital Workplace Consulting:** This quadrant assesses firms that provide consulting services for analyzing the workplace environment and defining a roadmap to transform it.

**Managed Workplace Services – Large Market:** This quadrant assesses providers that deliver managed services for install, move and change (IMAC), service desk and desktop management operations.

**Managed Mobile Enterprise Services – Large Market:** This quadrant evaluates providers that deliver managed services for mobile device management, enterprise mobility and related activities.

**Managed Digital Workplace and Mobile Enterprise Services – Midmarket:** This quadrant assesses providers that deliver managed mobility services to midmarket clients with a user base of less than 5,000.

**Unified Communication and Collaboration Services:** This quadrant assess providers that deliver managed UCC services. It includes collaboration, enterprise telephony and communication, social media-style community building, enterprise content management, crowdsourcing and productivity suites.
Definition (cont.)

- **Cloud-based VDI Services**: This quadrant assesses service providers offering managed services around private and hybrid cloud-based virtual desktops. It involves hosting clients' desktops in the providers' data centers or in a public cloud.

- **Cloud Workspaces – WaaS**: This quadrant assesses providers and vendors that offer a complete public cloud-based software solution or offering that provides virtual desktops along with device and application management.

- **Unified Endpoint Management**: This quadrant assesses key solution vendors offering a unified solution to manage different endpoints in the workplace environment.
Provider Classifications

The ISG Provider Lens™ quadrants were created using an evaluation matrix containing four segments, where the providers are positioned accordingly.

**Leader**

The “leaders” among the vendors/providers have a highly attractive product and service offering and a very strong market and competitive position; they fulfill all requirements for successful market cultivation. They can be regarded as opinion leaders, providing strategic impulses to the market. They also ensure innovative strength and stability.

**Product Challenger**

The “product challengers” offer a product and service portfolio that provides an above-average coverage of corporate requirements, but are not able to provide the same resources and strengths as the leaders regarding the individual market cultivation categories. Often, this is due to the respective vendor’s size or their weak footprint within the respective target segment.

**Market Challenger**

“Market challengers” are also very competitive, but there is still significant portfolio potential and they clearly lag behind the “leaders”. Often, the market challengers are established vendors that are somewhat slow to address new trends, due to their size and company structure, and have therefore still some potential to optimize their portfolio and increase their attractiveness.

**Contender**

“Contenders” are still lacking mature products and services or sufficient depth and breadth of their offering, while also showing some strengths and improvement potentials in their market cultivation efforts. These vendors are often generalists or niche players.
Rising Star

Rising Stars are mostly product challengers with high future potential. When receiving the “Rising Star” award, such companies have a promising portfolio, including the required roadmap and an adequate focus on key market trends and customer requirements. Also, the “Rising Star” has an excellent management and understanding of the local market. This award is only given to vendors or service providers that have made extreme progress towards their goals within the last 12 months and are on a good way to reach the leader quadrant within the next 12-24 months, due to their above-average impact and innovative strength.

Not In

This service provider or vendor was not included in this quadrant as ISG could not obtain enough information to position them. This omission does not imply that the service provider or vendor does not provide this service.
## Digital Workplace of the Future Cross-Quadrant Provider Listing 1 of 4

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- **L** – Leader
- **PC** – Product Challenger
- **C** – Contender
- **MC** – Market Challenger
- **RS** – Rising Star
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- **L** – Leader / **PC** – Product Challenger / **C** – Contender / **MC** – Market Challenger / **RS** – Rising Star
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Digital Workplace of the Future Quadrants
Digital workplace consulting centers on workplace optimization strategies. Modules include support for defining a workplace strategy, designing the architecture and creating the roadmap and for validating the business case for transformation. These advisory services are specific to workplace digital transformation. The service typically includes assessing the current workplace environment, designing end user-focused workplace transformation, defining the business case and return on investment (ROI) and providing a roadmap for implementation.
Digital workplace consulting has gained prominence in recent years. Previously, workplace transformation targeted cost reduction in end-user computing as its main goal, and consulting was confined to fit end users into uniform, enterprise-defined personas. The advent and popularity of digital technologies is affecting end users' personal preferences, behaviors and expectations in the workplace. Digital workplace consulting services aim to assess the latest cutting-edge technologies and their impact on end users. It also includes assessing the viability of adopting smart automation and analytics technologies and segmenting end users' needs according to their effect on productivity and experience enhancement.

- Accenture leads this market with its strong expertise and experience in business management consulting and strategy development.
- DXC benefits from its strong Microsoft alliance and dedicated consulting framework for Microsoft technology-based transformation initiatives.
- IBM differentiates by using cognitive automation for user persona segmentation and its wide coverage in digital workplace-related transformation.
- Atos offers consultative services for digital workplace transformation that focus on change management and the employee happiness quotient.
- TCS takes a consultative and participative approach to clients through its Reimagination Studio. Its consulting services also cover measurable parameters for end-user experience level.
DIGITAL WORKPLACE CONSULTING SERVICES

Observations

- NTT DATA offers digital workplace consulting services that leverage knowledge through its strong partner ecosystem and UCC focus.

- HCL’s Kaleidoscope™ approach aims at segmenting end users by hardware software requirements. It also utilizes gamification and change management as part of its consulting services.

- Wipro recently enhanced its consulting capabilities through its wAssess™ methodology and design-thinking approach.

- Infosys, with its strong heritage in taking a consulting-led approach with clients, is identified as the Rising Star for this quadrant.
Definition

Managed digital workplace services are comprised of all managed services related to the digital workplace. The quadrant includes operational services such as service desk, install, move and change (IMAC), break-fix, self-help, device support, onsite and field services.

Digital Workplace of the Future
Managed Digital Workplace Services - Large Accounts

Source: ISG Research 2018
Observations

While “shift-left” strategies for managing incidents are still gaining momentum, the managed services focus is shifting towards cognitive automation and machine learning. Service providers are offering automation-enabled workplace support services to eliminate the need for human intervention for many tasks. The more tasks a provider can automate with managed services, the greater it can differentiate itself from its competitors.

Service providers are usually branding their managed service offering under a single IP set or name. Augmented and virtual reality services are disrupting onsite field support and redefining the end-user experience. Service providers are partnering with leading OEM vendors to offer procure-to-retire device lifecycle management services in pay-as-you-go models, which may include offering device-as-a-service. Service providers are also focusing on delivering measurable KPIs on end-user experience management.

Large enterprises often have complex workplace environments. Many are looking to reduce IT support costs and enhance the end-user experience via automation. Because of the complexity of their end-user personas and workplace environment, scale-based parameters like device management and onsite presence also remain important criteria. Large enterprises form the next-generation sourcing clients that need to align their workplace services with their business objectives to create a cost advantage and improve productivity.

- DXC offers a strong managed services portfolio focused on automation, partnerships and the end-user experience. It also leverages its scale and size to serve large enterprise clients.
- IBM brings with it years of experience and unparalleled automation capabilities through Watson.
- Atos has a strategic focus around digital workplace services. It offers intelligent automation and employee experience metrics.
## Observations

- **Unisys** provides strong managed workplace services centered around analytics, automation and field support.

- **Wipro**'s solid expertise in workplace engineering, HOLMES™ automation capabilities and digital focus make it a leader.

- **HCL** provides an effective suite of solutions targeted at digital workplace transformation and managed services through automation and its LUCY superbot.

- **Cognizant** offers strong, newly-branded managed workplace services powered by analytics and automation.

- **TCS** has consolidated its application and infrastructure services. It also provides experience level agreements and takes a machine-first approach.

- **Fujitsu** offers managed workplace services backed by digital automation, RPA and intelligent engineering.

- **NTT DATA** offers automation and analytics with its managed workplace services and has a strong global presence.

- **Accenture**, through its partnership with Microsoft, offers managed workplace services, device-as-a-service and applied intelligence services. It is the Rising Star in the category.
Unisys offers managed digital workplace and field services powered by analytics, intelligent automation and AR/VR focused on end-user experience management (EUEM). It manages 4.1 million devices and 5.3 million users globally.

### Strengths

**Strong managed and onsite field services portfolio:** Unisys provides global support through its service desk services from major geographies. It handles more than 12 million contacts and supports 25 languages. Its field services coordinate more than 300 global locations and includes Digital Tech Cafe™, IT vending machines, strategically located support experts and mobile pop-up cafes for branch offices. Unisys also provides device-as-a-service in partnership with Dell, in which Unisys's managed services are delivered over Dell devices.

**InteliServe™ platform, AR/VR and automation and analytics:** Unisys's global managed service desk is branded as InteliServe™. It uses automation, analytics and robotic process automation for problem resolution. Unisys uses NextIT virtual agents for gen-1 clients that are starting the digital transformation journey and IPsoft's virtual agents for gen-2 clients that are more mature. Unisys reports achieving 30 percent incident resolution through automation, and its virtual agent has an 83 NPS score. Unisys's field services and onsite support use augmented and virtual reality technology to cut down on travel cost.

**End-user experience management:** Unisys conducts EUEM by continuously monitoring systems and applications and providing analytics services. It provides insights into users' motivating and demotivating factors.

### Caution

Unisys reports moderate growth in managed workplace services clients over the last two years.
Managed mobile enterprise services include, at the minimum, mobile device management (MDM), policy configuration, device configuration, device kitting, device lifecycle and telecom expense management. It also includes larger aspects of enterprise mobility management like mobile application management (MAM), mobile security, digital user experience management and cloud-based services.
Managed Mobile Enterprise Services – Large Market

Observations

Managed enterprise mobility revolves around enabling mobile users with single sign-on features to securely access productivity apps and data anytime, from anywhere. With the introduction of smart wearable devices, the scope of these services has extended to include elements of IoT.

Large enterprises have complex workplace environments with globally distributed workforces, including field workers that carry multiple mobile devices. It is imperative for large enterprises to adopt a secure, unified approach to manage diverse devices and platforms. Industry-specific requirements drive the differentiation in managed mobile enterprise services.

- Accenture leads the market with its mobility-centric consulting and implementation services. It has partnerships with key technology vendors to enable a mobile enterprise.
- TCS has a strong focus on managed mobility services. It also offers Mobitio, its own productized mobile app, and proactive monitoring services.
- DXC provides complete enterprise mobility management services by leveraging its software partnerships. It also offers industry-specific solutions and analytics about mobility usage.
- Unisys has strong credentials and experience managing multiple devices in a mobile enterprise. It has a mobile center of excellence (CoE) and offers industry-specific mobility solutions.
MANAGED MOBILE ENTERPRISE SERVICES – LARGE MARKET

Observations

- IBM provides strong managed mobility services through its partnerships and its own enterprise mobility management solution, MaaS360.

- Wipro has expertise and experience in managing diverse device ecosystems through its partnerships and has industry-specific solutions.

- HCL, through its LibreSpace™ and MyWorkplace™ service offerings, provides strong and competitive managed mobile enterprise services.

- Atos provides services for the complete mobility service value chain. It also offers unified endpoint management and industry solutions for the manufacturing sector.

- Cognizant (the Rising Star) offers managed mobility services through SymphonyWorks and has strong endpoint device engineering and proactive monitoring services.
UNISYS

Overview

Unisys offers a strong device management and mobility management services suite encompassing mobile-based consulting, partnerships with leading vendors and unified endpoint management. Unisys provided managed mobility services to 285,300 end users last year. Unisys also provides unified endpoint management services to 875,000 end users.

Strengths

UEM: Unisys recently combined its advisory and delivery services for PC and mobile management into a single UEM offering. It has 262 FTEs for UEM services globally. Unisys has also been investing in multiple lab environments and a mobile CoE to develop solutions and services related to managing PCs as mobile devices. Its partnerships with VMware, Microsoft and Cylance help clients manage the diverse devices used by end users in a unified manner, with advanced security and end-user policy implementation.

Service suite: Unisys’ Mobile Enterprise Management (MEM) services cover the complete managed mobility services stack, including enterprise application integration, asset management, expense management and application containerization.

Industry-specific mobility solutions: Unisys has business-oriented mobility management offerings for many industries, including banking, healthcare, media and the public sector.

Caution

Unisys's mobility services cover mobile devices and secure access management. To stay competitive, Unisys should also include elements of digital experience design and mobility effectiveness monitoring in its solution stack.

2019 ISG Provider Lens™ Leader

Unisys has a strong security and endpoint management services portfolio. It offers comprehensive managed services for enterprise clients, irrespective of where they are in mobility adoption journey.
Managed digital workplace services are comprised of all managed services around the digital workplace. It includes operational services such as service desk, install, move-and-change (IMAC), break-fix, self-help, device support and onsite and field services. Managed mobile enterprise services include, at the minimum, mobile device management (MDM), policy configuration, device configuration, device kitting, device lifecycle management and telecom expense management. It also includes larger aspects of enterprise mobility management, like mobile application management (MAM), mobile security, digital user experience management and cloud-based services.
Observations

The midmarket is cost sensitive but is also looking for innovative approaches with a quantifiable business impact. Ideally, managed mobile enterprise services for this segment should be highly standardized and provide innovative components. The midmarket client is willing to adopt a 100-percent BYOD strategy and would encourage end users towards a BYOx environment (where x includes applications, data and services). These clients are interested in embracing completely digital and automated solutions for workplace services. Service providers that combine collaborative workplace services with cognitive- and AI-enabled automation will lead this market. Clients in this segment look for a single vendor to provide workplace services strategy, design and deployment services.

- Zensar offers business-centric, KPI-focused services with strong automation and analytics.

- Hexaware, with its “automate-first” approach and risk-taking appetite, is also leading this market.

- LTI offers strong managed workplace services and the Mosaic platform to provide machine-learning-based intelligent IT services.

- Dimension Data offers consulting services for digital workplace services and mobility strategy. It offers enterprise mobility management and industry-specific mobility solutions.

- Mphasis, the Rising Star, has its award-winning InfraGenie automation platform focused on IT operations. The company also has a solid services portfolio and is strongly emerging as a player in this space.
Definition

Unified communication and collaboration services are an integral part of the digitized workplace. UCC services include managed services for collaboration, enterprise telephony and communication, social media-style community building, enterprise content management, crowdsourcing and productivity suites. It includes telephony services like calling and conferencing, desktop video and custom third-party PBX integration.
Observations

Collaboration services increasingly are seen as the face of the connected and automated future workplace. Enterprise social collaboration has transformed from just being a company intranet-centric service to becoming a connected, engaging, device-independent, cloud-enabled, productivity-oriented service. In an end-user-defined environment, a user should be able to access his or her complete workspace in one place and be able to engage with peers and support services from any device, anywhere. This collaborative workplace should provide platforms for idea generation, crowdsourcing and gamification, all of which should enhance productivity.

Intelligent and smart physical workplaces, including meeting rooms, are part of collaboration services. The services contribute to enhancing the end users’ experience and provide a digital medium for collaboration.

- Atos leads the market with its Unify subsidiary’s Circuit and OpenScape offerings and also benefits from other strong partnerships in the collaboration space.

- IBM has its own product portfolio that includes Connections, its social collaboration solution. IBM also provides Watson-enabled cognitive intelligence for the collaboration ecosystem.

- DXC offers smart campus connectivity and has partnerships with Microsoft, Google and other collaboration vendors, which has helped make it a strong leader.

- Accenture provides consulting and managed services for the unified communication and collaboration ecosystem through its Avanade joint venture.
Observations

- TCS offers its Knome collaboration platform along with gamification, change management and a strong Skype for Business practice.

- HCL takes a gamification and crowdsourcing approach to change management and collaboration technology adoption. It also offers productized IP-based solutions for smart meeting rooms and chatbot services.

- Wipro offers cloud-based unified communication services along with a strong portfolio of services for technology assessment and adoption.

- Dimension Data is the Rising Star. It provides strong and specialized unified communication and collaboration services that leverage its strong network of sister companies.
CLOUD-BASED VDI SERVICES

Definition

Cloud-based virtual desktop infrastructure services include managed services for desktop virtualization in the service providers’ own data centers or via hybrid cloud. Service providers offer managed services in a user-based license model. They can provide additional services like analytics to ascertain optimum usage of the virtual desktop services. Service providers generally partner with leading desktop virtualization vendors. These services are usually part of a larger overall package. Service providers offer cloud-based VDI based on end-user personas, which involves segmenting end users based on their requirements for desktop computing resources.
CLOUD-BASED VDI SERVICES

Observations

- IBM has a strong offering with its own desktop-as-a-service solution and bare metal support.

- NTT Group subsidiaries NTT DATA and Dimension Data both provide strong cloud-based desktop virtualization services and access to trial versions of their solutions to enable DIY activities.

- DXC has solid experience in delivering VDI services both on-premise and on-cloud. It has massive scale and a strong partner ecosystem.

- Wipro has its own VirtuaDesk solution for cloud-based VDI services. It also provides predictive analytics and transient workload support.

- HCL provides its own LibreSpace solution for complete workspace-as-a-service. It leverages strong partnerships and can support rapid provisioning.

- Cognizant's VDIaaS offering provides persona-based virtual desktop services, and the company has experience with a wide variety of clients.

- Tech Mahindra is the Rising Star in this segment. It complements its VDI services with enterprise mobility management and related services.
CLOUD WORKSPACES - WAAS

Definition

The cloud workspace, or workplace-as-a-service (WaaS), is a highly standardized and productized offering that is delivered through the public cloud and provided on a pay-as-you-go or pay-per-user basis. It constitutes delivering a complete desktop as a single interface along with required applications, security mechanisms and identity management. With a WaaS solution, end users can access their workplace profile, contacts and applications.
CLOUD WORKSPACES - WaaS

Observations

A transparent, flexible, user-centric pay-as-you-go model with standardized packages is essential to be included for evaluation in this quadrant. Many service providers provide a productized WaaS offering. Cloud-based desktop delivery (DaaS) is a primary requirement for a WaaS offering. The product solution vendors do provide WaaS based on their own desktop virtualization, enterprise mobility and application security services. Some managed service providers have productized standalone offerings which provide a framework that can work in any environment.

- Citrix offers Workspace, its cloud app that provides strong desktop virtualization service, VDI monitoring tools and analytics for applications and devices.
- VMware's Workspace One suite offers strong desktop virtualization through its Horizon solution, plus mobility management and identity management services.
- Amazon WorkSpaces is one of the earliest solutions in the desktop-as-a-service space. It provides virtualized instances of Windows desktops and containerized applications.
- NTT DATA is a leader in this space because of its strong service portfolio, end-user analytics and seamless experience for delivering access to legacy Windows operating systems.
UNIFIED ENDPOINT MANAGEMENT SOLUTIONS

Definition

Unified endpoint management solutions are converging to encompass smartphones, tablets, laptops, and PCs. At a minimum, a UEM solution must provide complete enterprise mobility management, which includes mobile application management (MAM), mobile device management (MDM), and mobile content management (MCM). UEM provides a unified approach to managing desktops, PCs, and mobile and smart devices using a single console.

A UEM solution should support both on-premise or cloud deployment, remotely manage and configure devices and provide application and device analytics. It should also provide mobile security, endpoint security, and PC/desktop management integration.

Source: ISG Research 2018
Social Enterprise Networking Suites

Observations

UEM is a new, emerging but important technology area. Enterprise are already realizing their need for a unified solution to manage diverse devices and platforms instead of having separate solutions for desktops and mobile device management. Major EMM and security services companies are investing heavily in endpoint management and are developing solutions in this space.

- VMware leads the market with recent acquisitions and its strong Workspace ONE offering. It provides app analytics, configuration manager integration and support for popular operating systems and browsers.
- Citrix, with its XenMobile-based UEM offering, is also a leader and supports diverse platforms with strong policy controls.
- Microsoft is a strong player in unified endpoint management because of its Intune, MSNCCM and Office 365 offerings.
- MobileIron's strengths include authentication, threat protection and multi-platform support.
- Blackberry has added to its profile and is a leader in securing IoT environments.
- IBM is identified as a strong Rising Star because of its comprehensive offering that includes MaaS360 and Watson-based cognitive intelligence.
Methodology
The research study “ISG Provider Lens™ 2019 – Digital Workplace of the Future” analyzes the relevant software vendors/service providers in the Global market, based on a multi-phased research and analysis process and positions these providers based on the ISG Research methodology. The study was divided into the following steps:

1. Define the “Digital Workplace of the Future” market
2. Conduct questionnaire-based surveys with service providers/vendor across all trend topics
3. Hold interactive discussions with service providers/vendors on capabilities and use cases
4. Leverage ISG’s internal databases and advisor knowledge and experience (wherever applicable)
5. Analyze and evaluate services and service documentation based on the facts and figures received from providers and other sources.
6. Evaluate based on the following key criteria:
   - Strategy and vision
   - Innovation
   - Brand awareness and presence in the market
   - Sales and partner landscape
   - Breadth and depth of portfolio of services offered
   - Technology advancements
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