IDC

White Paper

Device-as-a-Service: Maximizing the Value Realized from your Future Workspace

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IDC OPINION

The COVID-19 outbreak and the disruption wrought in its aftermath have fundamentally changed the way businesses operate and how work gets done. IDC's Future Enterprise Resilience Surveys (March–April 2021) suggest that about half the respondents surveyed believe "*remote and hybrid work models will be an embedded part of accepted work practices going forward.*" These findings corroborate IDC's own assessment about the future of the workplace that *by 2023, 75% of the G2000 will commit to providing technical parity to a workforce that is hybrid by design rather than by circumstance, enabling them to work together separately and in real time.* Indeed, the future of work is going to be radically different from the past, and how effectively enterprises enable and empower their workforces to operate optimally in any work environment is going to determine their success in this new hybrid future.

Realizing the vision of future of work demands not only an agile, experience-centric, customizable, and secure workspace environment, but also the delivery of all these capabilities in a manner that provides tangible and significant financial benefits to the adopting enterprise. This is a mandate that the Device-as-a-Service (DaaS) model is uniquely well-equipped to deliver. This whitepaper explores the value proposition of the DaaS model in the evolving enterprise workplace construct. Specifically, the paper delves into the distinct constituent elements that drive value in a DaaS engagement, and help enterprises not just maximize the returns they derive from a DaaS engagement, but also identify the key levers that can truly transform their workplace experience in the process.

SITUATION OVERVIEW

The Future of Work

IDC defines the Future of Work (FoW) as "a fundamental shift in the work model to one that fosters human-machine collaboration, enables new skills and worker experiences, and supports a work environment unbounded by time or physical space." IDC's FoW framework, presented in Figure 1, is comprised of three key pillars – workspace (a connected and secure work environment), workforce augmentation (seamless collaboration between humans and technology in the workplace), and work culture (organizational culture that fosters engagement and empowerment, leveraging transformation digital technologies).

FIGURE 1

IDC Future of Work Framework
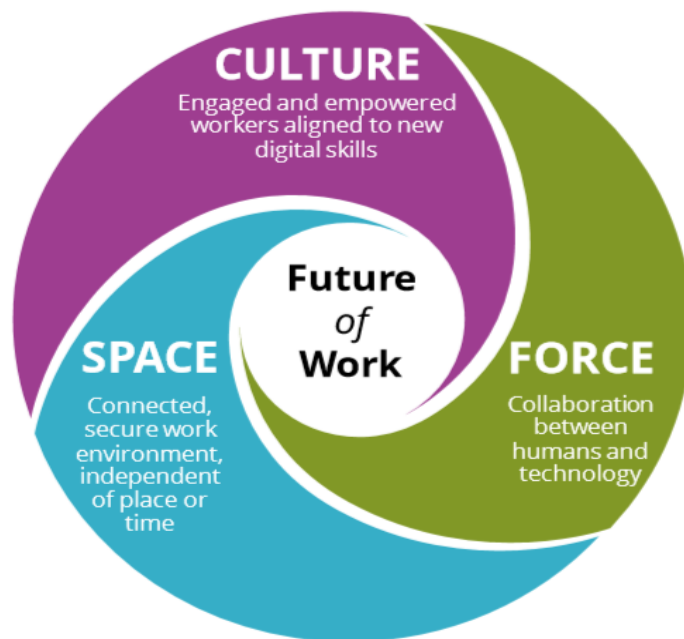
Source: IDC, 2021

IDC estimates that worldwide FoW spending in 2021 is likely to be US$252 billion, which is an increase of 17.4% over 2020, and is expected to exceed US$1 trillion by 2025. This explosive growth is a testament to how important workplace enablement is to success in the next normal. One significant driver of this spend is the expansion of the workplace context to a diversity of remote work environments as the COVID-19 crisis has forced organizations the world over to pivot from a centralized workplace model to a hybrid work model. IDC's surveys reveal that enterprises, on average, expect less than 20% of their workforce to operate in an "onsite-only" mode by 2022! This suggests that organizations need to aggressively invest in operational models and logistics structures that adequately support and enable this amorphous, highly-distributed work environment very soon.

The Road to the Future of Work

COVID-19 has fundamentally and permanently changed the way enterprises need to operate to succeed in this new reality. To adequately prepare for this future, enterprises will need to address some key challenges across the workplace, workforce, and work culture dimensions of the Future of Work. Some of these challenges that enterprises need to grapple with include:

- How to enable effective communication, collaboration, and productivity across a workforce with a constantly changing profile regarding device, location, and connectivity etc.?
- How to effectively orchestrate end-user device updates and refresh for a workforce that is highly distributed in the evolving work-from-anywhere environment?
- How can the day-to-day operations relating to the management and security of the workplace be managed effectively in an environment in which access to end-user devices is challenging?

- How can technology be leveraged to assure the physical health and wellness of the workforce?
- How can the organization create strong employee engagement and a vibrant organizational culture so essential to success in a disaggregated workplace model?
- What can be done to enhance the experience and productivity of employees that might be struggling with sub-optimal connectivity options?

Findings from the IDC Wave Surveys (2H20) suggest that enterprises plan to enhance their technology spending to address these specific challenges over the course of 2021. Figure 2 lists the top workplace-related technology investments that enterprises intend to make over the course of 2021 to transform their workplace operations in preparation for the unfolding future.

FIGURE 2

Top Workplace Investment Areas for 2021

Source: IDC's Covid-19 Wave Survey 10 (2H20)

DaaS: A Model that Realizes the Future of Work

What is DaaS?

IDC defines DaaS as a long-term engagement between an enterprise and a single provider that involves hardware, software, and full lifecycle services of end-user computing devices offered in an as-a-service model. DaaS engagements can involve a diversity of end-user equipment (e.g., PCs, desktops, tablets, mobile phones, printers, and edge devices), unified endpoint management and security solutions, business applications and infrastructure middleware, maintenance and support, full lifecycle services (from workspace design and planning to device refresh), and a variety of financing models.

IDC's taxonomy identifies the following services as comprising the DaaS market: asset management, device lifecycle management, device procurement, end-user support for devices, mobile application management, mobile device management, as well as connectivity services

procurement and management. DaaS is a highly customizable engagement model that can be granularly tailored to suit the needs of the contracting organization.

Key Benefits of DaaS

The DaaS model offers customers some significant business, financial and operational benefits regarding their workplace operations. These benefits can broadly be grouped into five categories – Operational Benefits, Functional Benefits, Employee Productivity and Experience, Security Posture as well as Preparedness and Environmental, Social and Governance (ESG) objectives – as illustrated in Figure 3.

FIGURE 3

Key Benefits of DaaS

Employee Productivity & Experience
Through increased workplace environment automation, faster resource provisioning and enablement, enhanced support

Financial Benefits
Predictable, subscription-based pricing with attractive, cost-effective service bundling options

Security Posture and Preparedness
Integrated managed device and data security and compliance services, automated security and policy updates fleet-wide, stolen/lost device services

Operational Benefits
Accelerated device refresh cadence, optimized IT ops management and support

ESG Objectives
Environmentally responsible device procurement and disposal. Resource efficient asset lifecycle services delivery.

Source: IDC, 2021

Unpacking the DaaS Value Proposition

The DaaS offering is uniquely positioned to address the plethora of challenges that enterprises face as they pivot to a new model of work that focuses on optimally enabling employees wherever they are, creating a better workforce experience that translates into a stronger organizational culture, strengthening the organizational security posture to secure an increased organizational surface area, and demonstrating unwavering commitment to aspirational environmental and sustainability goals. However, where DaaS truly differentiates itself is in its ability to deliver tangible financial value and return on investment (RoI) as it helps enterprises achieve a broad spectrum of objectives.

Indeed, the value provided by the DaaS model is reflected in its strong uptake over the last few years. Findings from IDC's Enterprise Mobility Survey 2020 revealed that 35% of enterprises surveyed had DaaS agreements in place for a portion of their end-user notebook/laptop estate, and this number was expected to increase to over 41% in just 12 months. Additionally, respondents indicated that the average amount that they spent on their DaaS engagements per user was likely to more than double over the 12-month period. This indicates that DaaS engagements are broadening in scope to cover a greater portion of the enterprise workplace

context – a true testament to the enormous value that the DaaS model helps unlock. Some of the ways DaaS helps enterprises unlock significant value are highlighted below.

Financial Benefits

Several of the biggest and most tangible benefits to enterprises from a DaaS engagement are financial. DaaS can have a direct impact on enterprise costs and finances by:

- **Optimizing cash flow deployment**: The subscription-based nature of DaaS engagements converts enterprise capital expenditure on physical assets into an operational expense, freeing up valuable cash to invest on innovation and customer experience that in turn drives additional value creation. Several DaaS vendors also offer attractive financing options to further increase the appeal of the DaaS value proposition. Additionally, the DaaS model offers enterprises greater visibility into and predictability of expenses relating to building and operating an engaging and modern workplace environment.

- **Lowering cost to serve**: A DaaS vendor can typically generate significant economies of scale across the entire spectrum of device lifecycle services – device deployment, device-related services, and device recovery/refresh – and is able to pass on some of the efficiencies to its customers. A few ways these economies of scale are generated include larger and longer-term contracts with device vendors, optimized warehousing/stock-keeping, better inventory management and just-in-time logistics (including reverse logistics). The benefits from a DaaS model vis-à-vis in-house asset lifecycle management quickly add up as the dimensions of the workplace scale and complexity increases:

  - Number of end-user devices supported
  - Types of end-user devices supported
  - Geographic spread of enterprise operations
  - Workforce characteristics (as in-office vs. remote workers mix)
  - Number of personas supported and persona-specific requirements

Operational Benefits

DaaS helps achieve operational benefits across device deployment and ongoing support, and maximizes the value realized from the enterprise IT department itself.

- **Faster device deployment**: The DaaS model streamlines device provisioning, configuration, and deployment through a combination of technology, processes, and dedicated capacity. Faster deployments translate directly into lower costs, higher productivity, and increased satisfaction.

- **Optimized operations management**: DaaS vendors often rely on a high degree of platform-driven environment management, operational automation, device analytics, and service chaining to ensure that operational and service issues can be pre-empted, or at least proactively dealt with to reduce the cost of downtime and improve employee experience.

- **Better support for home users**: The superior logistics ability of DaaS vendors to deploy devices efficiently or service the remote workforce at their place of operation is particularly valuable in the current, highly-disrupted state of enterprise workplace operations. This support enables remote workers to stay optimally operational without compromising their safety or convenience.

- **Maximizing the value of IT**: With end-to-end device lifecycle services taken care of by the DaaS vendor, the enterprise IT team is freed from operational responsibilities to focus on enterprise transformation and technology-led business innovation to drive greater value for the organization.

Employee Productivity and Experience

The optimized asset deployment and operations enabled by DaaS allow enterprises to maintain a shorter device refresh cadence. This "evergreening" constantly keeps newer, more powerful, and feature-rich devices in the hands of the workforce, enhancing their productivity, reducing the incidence of issues, improving security and compliance, and creating a much better workplace experience all around. Furthermore, DaaS vendors often provide additional environment automation capabilities that reduce operational friction in the optimal use of the workplace, improving the user experience in numerous subtle ways, all of which add to tangible gains in employee productivity, wellness, and satisfaction.

Security Posture and Preparedness

The last few years have seen widespread cybersecurity breaches, theft of valuable intellectual property and sophisticated ransomware attacks, all of which have had a material impact on the financial health and business prospects of the targeted enterprises. So significant is the challenge that cybersecurity considerations routinely top enterprise technology priorities and challenges. The explosion of remote work since the outbreak of the COVID-19 pandemic has vastly increased the surface area available to attackers and enterprises are scrambling to secure their distributed workplace assets. This is reflected in worldwide enterprise spending on corporate endpoint security, which IDC estimates will grow to over US$13.3 billion by 2025, at a CAGR of over 10.1%.

The DaaS model improves organizational security posture and preparedness in different ways:

- Shorter refresh cycles help ensure that end-user devices are evergreened. A modern enterprise asset estate significantly improves compliance and security.

- License compliance and management services offered by DaaS providers ensure timely license renewal and the enhanced security that comes from staying compliant, with access to the latest patches and updates. Additionally, efficient license management can optimize license usage and unlock additional value.

- DaaS vendors often provide a range of security and resilience services – security assessment and advisory support, managed security services, and backup/recovery/resilience services etc. to name a few. This practice allows an enterprise to access a comprehensive portfolio of security services to effectively complement the device lifecycle services sourced from the DaaS provider.

Environmental, Social and Governance (ESG) goals

As enterprises grow increasingly conscious of the impact of their business operations on the environment and the sustainability of their business practices, the focus is turning to how they can reduce their environmental footprint and demonstrate their commitment to sustainable practices. This is especially important as an increasing number of socially aware and environmentally conscious millennials enter the workforce. This digital-native demographic represents a critically important part of the enterprise talent landscape. Enterprises that are not sufficiently committed to specific ESG goals will find it increasingly hard to attract this talent pool to join their workforces and will soon find themselves at a competitive disadvantage.

End-user devices represent one of the most significant categories of assets that form part of the enterprise ecosystem, and as such, environmentally responsible and sustainable treatment of the end-user device asset lifecycle offers enterprises the opportunity to make a material contribution to their ESG objectives. The DaaS operating model does just that by restructuring the traditional linear asset procurement economy (procurement, use, and disposal) into a sustainable circular economy.

As part of this model, the DaaS vendor deploys assets across the enterprises, manages the devices over the course of the refresh cycle and collects the devices at the end of the cycle as new devices are deployed in their place. However, while the traditional asset lifecycle ends with the collected devices being disposed of (and typically destroyed), a responsible DaaS vendor refurbishes the collected devices for further redeployment in a different context. The DaaS model allows enterprises to be socially and environmentally responsible corporate citizens without getting mired in the operational specifics of activities that are clearly outside their core competencies.

Data from IDC's interactions with end-users suggests that the benefits from DaaS engagements listed above are indeed quantifiable and lead to tangible business benefits to customers. Findings from IDC's Enterprise Mobility Survey 2020 reveal that a whopping 55% of enterprises that utilized DaaS engagements generated savings of 25% or more over their previous engagement models. These benefits appear to hold across different industry verticals and are strongest in mature business markets like Western Europe.

THE HCL-HP APPROACH TO DAAS

The HCL-HP FlexSpace Offering

HCL-HP FlexSpace is a full-featured DaaS offering that brings together the breadth of hardware offerings across various form factors – desktops, laptops and point-of-sales devices from HP and a comprehensive portfolio of IT services from HCL to deliver a future-ready managed workspace experience (see Figure 4).

FIGURE 4

The HCL-HP FlexSpace
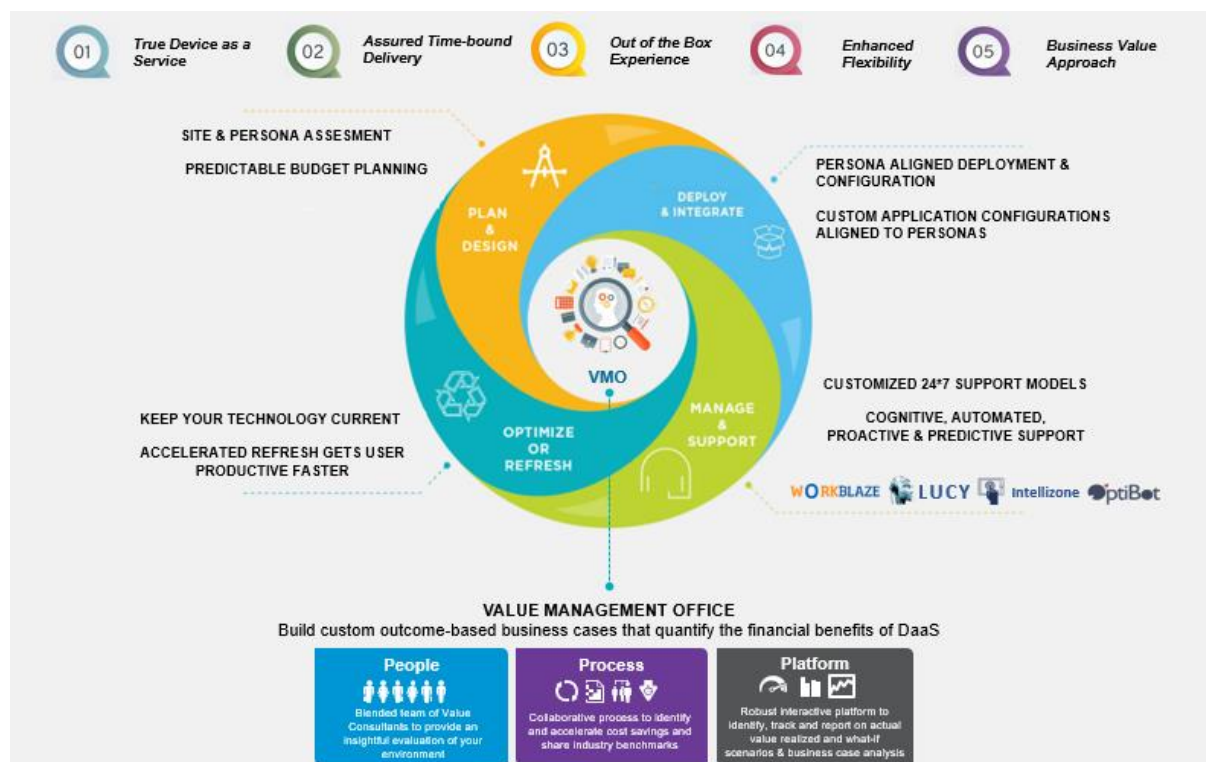
Source: HCL, 2021

The HCL-HP FlexSpace features full-lifecycle workspace services spanning planning and design, deployment and integration, management and support as well as optimization and refresh, coupled with a Value Management Office (VMO). The service is provisioned on a subscription model and is a cataloged offering, with in-built flexibility to scale up or down according to the needs of the business. It takes into consideration both the existent enterprise user personas and prevalent site support models.

The HCL-HP FlexSpace offering is differentiated by unique capabilities and the productized IP from both partners. Some of the distinctive features are as follows:

- **True DaaS:** Any device (laptop, desktop, mobile, VDI, retail point-of-sales device) with full lifecycle management at a single, predictable price per month.
- **Assured time-bound delivery**: Bespoke stock express service to deliver ready-to-use devices in 4-7 working days in the European Union and North America from the moment of order.
- **Out-of-the-box Experience (OOBE)**: OOBE provisioning to deliver ready-to-use devices for end-users.
- **Enhanced flexibility:** Fleet flexibility to scale up or down by 5-15% and with terms of 36-48 months.
- **Business value approach:** The VMO platform helps build a detailed business case on the benefits of DaaS – cost savings, quantification of risks avoided, and opportunities availed – using empirical data before implementation. This can be used to communicate the tangible benefits to all concerned stakeholders to create genuine buy-in.

HCL-HP FlexSpace provides a host of capabilities around advanced analytics, intelligent remediation, workspace automation, cognitive assistance, and cloud-delivered workspaces, among others. It delivers a modern service model that simplifies how enterprises equip users with the persona-sensitive devices, support, and end-to-end lifecycle services to get the job done – improving end user productivity, IT efficiency, and cost predictability. Yet one challenge is proving the true value of all this service – to get the buy-in – before it is implemented. The VMO plays a crucial role in achieving this.

The VMO helps enterprises provide a detailed business analysis that can be easily communicated to all stakeholders. It can calculate exactly how improved device management will impact the customer's bottom line and enables enterprises to gauge the real cost of efficient hardware, reduced IT support burdens, and the impact of improved productivity. The VMO helps build a business case and a DaaS value proposition considering enterprise-specific attributes such as:

- Number of employees in the organization
- Industry vertical of the organization
- Average cost per device of existing devices
- Typical refresh cycle for enterprise devices
- Organization's average end-user salary
- Organization's average IT staff salary
- Average current cost to service a help desk ticket
- Average number of help desk tickets per user per month
- Average number of applications installed per device

With this the VMO can calculate true cost savings, as well as put a number against the kinds of risks and opportunities that are usually hard to quantify. The VMO assessment provides value breakdown in four major categories:

1. **Improved employee productivity**: FlexSpace enables employees to stay productive with a variety of hardware choices to match the appropriate device to users based on their needs, from Windows and Apple devices to Chromebooks based on personas as identified by a detailed assessment using HCL's Profile Kaleidoscope. Additionally, with the HCL WorkBlaze analytics & AIOPS solution, issues are proactively identified and can be mitigated for optimal uptime.

2. **Reduced IT workload:** FlexSpace lightens the load on IT through reduced help desk ticket volume, improved device, application, and patch management. With an end-to-end device lifecycle management service, IT can spend less time managing devices and more time on strategic enterprise transformation imperatives.

3. **Stronger security:** FlexSpace helps enterprises secure and manage multi-OS devices, and proactively identifies and mitigates issues with HCL WorkBlaze analytics insights. Additionally, the HCL Fluid Adaptive Security solution provides real-time malware protection for endpoints, security and threat analytics, and expertise to strengthen enterprise security posture.

4. **Optimized IT spend:** FlexSpace's simple and predictable construct can help organizations optimize spend, cash flow, and refresh cycles. Enterprises can tailor FlexSpace plans to include services for the entire device lifecycle and flex their plans to suit the changing IT needs and workforce. The service maintains an appropriately-sized device inventory — enterprises pay only for what they use with one price per device, inclusive of the lifecycle support and services needed — and reduces accidental damage costs for devices.

Using "what-if" scenarios, enterprises can use data from the VMO to calculate future cost savings, improve end-user satisfaction and generate positive outcomes for customers, as Figure 5 shows.

FIGURE 5

VMO Benefits

	BENEFITS OF DAAS (EXAMPLE)			☰
IMPROVE END-USER PRODUCTIVITY WITH A PROPERLY-SIZED FLEET			**$1.35M**	>

DaaS can help strengthen employee satisfaction by ensuring users get newer hardware into their hands at a faster cadence and are correctly matched with the right performance threshold based on their own persona

A	The total number of device users	» 7800 «		
B	The estimated percentage of devices that impact productivity due to improper sizing	5%		
C	The estimated net productivity impact daily per device	10 Minutes		
D	The number of work days annually	260		
E	End-user labor rate	» $43.75 per Hour «		
F	Reduction due to FlexSpace	61%		
		Year 1	**Year 2**	**Year 3**
G	Expected DaaS deployment	100%	100%	100%
	Annual benefit	$451,000	$451,000	$451,000

Source: HCL, 2021. All figures are for illustrative purposes only.

IT has become more crucial to the success of business in future of work. Yet IT is often stretched thinly across essential initiatives like digital transformation, remote work enablement, and security. HCL-HP FlexSpace is designed to bridge the gap. Enterprises get persona-aligned devices and support services, and AI-driven analytics in a predictable payment model with flexible terms to optimize cost and enhance user experience.

CHALLENGES/OPPORTUNITIES

The ongoing uncertainty caused by the COVID-19 outbreak has severely disrupted, and possibly even broken, the traditional construct of the enterprise workplace. In many ways, the current situation amplifies the value delivered by the DaaS model. While the benefits offered by DaaS are clear and tangible, enterprises will need to think through and overcome specific challenges to transform their workplace sourcing, delivery, and consumption models.

The opportunities for HCL-HP FlexSpace lie in:

- Overcoming an established culture and legacy of asset procurement, ownership, and lifecycle management
- Evolving financial metrics and treatment of assets to maximize the benefits from as-a-service consumption models
- Rationalizing fragmented and misaligned workplace assets, solutions and services sourcing centers, mechanisms, and possibly long-term contracts
- Integrating workplace transformation into broader enterprise digital transformation initiatives

CONCLUSION

As the enterprise workplace undergoes a structural metamorphosis in the wake of the COVID-19 pandemic, DaaS has emerged as a delivery and consumption model uniquely suited to deliver an agile, experience-centric, customizable, and secure workspace environment for the unfolding future. In doing so, DaaS helps enterprises build a modern, inclusive organizational culture and demonstrate unwavering commitment to aspirational environmental and sustainability goals. Most importantly, however, DaaS achieves all this while delivering significant and unambiguous financial value.

IDC's findings reveal that enterprises adopting DaaS report significant cost savings in addition to a host of business and operational benefits associated with workplace transformation. This, in turn, is incentivizing enterprises to move an ever-increasing proportion of their workplace estate to the DaaS model. For enterprises looking to reimagine their workplace operations and capabilities for the next normal, DaaS merits serious consideration.

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