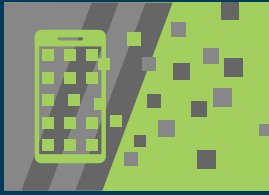


A Forrester Consulting
Thought Leadership Spotlight
Commissioned By Dell

February 2019

PC-as-a-Service: Unlocking New IT Capabilities To Improve Employee Experience

Introduction



Today's IT leaders don't have the time nor the resources to effectively respond to the needs of their ever-demanding workforce. It's time for CIOs to stop running the IT department and start transforming the business; only through transforming the way in which they deploy and service the workforce can CIOs accomplish this paramount task.

Organizations must now embrace a future that improves the workforce experience in order to offload cumbersome and time-intensive tasks. With IT becoming more integrated and a strategic partner to the lines of business (LOBs), offloading and embracing new technologies that enable employee experience is a logical step.

In September 2018, Dell commissioned Forrester Consulting to evaluate the effectiveness of PC-as-a-service (PCaaS) and the appetite of organizations to use PCaaS. Forrester conducted five interviews with IT decision makers, with knowledge of desktop infrastructure, or those who had responsibility with PC life cycle services to explore this topic. Forrester also leveraged the data from two Total Economic Impact™ reports, conducted in 2017 and 2018, respectively, as well as a custom study around PC lifecycle management.

KEY FINDINGS

- › **PCaaS improves employee experience.** Today's approach to PC lifecycle management (PCLM) is siloed across the organization and inflexible for employees. PCaaS unlocks opportunities to improve employee experience whilst freeing up resources to focus on value-added tasks. The PCaaS model enables firms to deliver preconfigured devices faster and offers flexibility for employees to choose the device that will make them most productive.
- › **PCaaS spawn's new PC lifecycle management opportunities.** The typical three-to-four-year refresh rate compounds this complexity, as it involves additional and often hard-to-quantify costs such as time spent on procurement, deployment, support, recovery, management, and the retirement of devices. PCaaS is a completely new financing model. Be sure to assess how it affects all the aspects of PCLM, not just the devices themselves.
- › **Align business and IT priorities to better understand how PCaaS can work.** Collaboration through alignment ensures that both business and IT objectives are centered around the employee's experience — a critical need, especially since only 25% strongly agree that they actively engage with business stakeholders to help shape the workforce enablement strategy.



PC-as-a-Service: A Modern Platform For Enabling Next-Generation Workforce Experience

The world of work has fundamentally shifted. Long gone are the days when IT departments were the sole purveyors of the latest, high-performing devices and applications. In today's hyperconnected world, employees increasingly expect the experience they have at work to live up to what they experience in their personal lives. That means immediate access to work information on whatever device, wherever they are, at any moment.

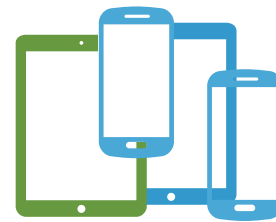
Unfortunately, this rarely happens. Mired in the decades-old PC lifecycle management technologies and processes, IT leaders responsible for deploying devices to their employees simply do not have the time nor the resources to effectively respond to the needs of their ever-demanding workforces. It's time for CIOs to stop running the IT department and start transforming the business, but this can only be achieved if: 1) they change the way they deploy technology services to their end users and 2) they transition their focus away from IT management and toward workforce experience.

Enabling better workforce experience is one of the fundamental ways CIOs will help their companies digitally transform in order to better win, serve, and retain customers. Additionally, providing a better workforce experience directly impacts the bottom line and the customer's experience. In conducting our interviews we asked IT and business leaders who were responsible for PC lifecycle management what workforce experience means to them. One IT director based in the UK said: "Workforce experience is about running the business smarter in order to increase productivity and efficiency. This means better communication, collaboration, and engagement — so, in other words, it's about providing your employees the tools they need to improve the overall experience customers have with us." Whilst a CIO of a hotel and leisure company in the US said, "Workforce experience is about providing the right tools to employees, wherever they're located."

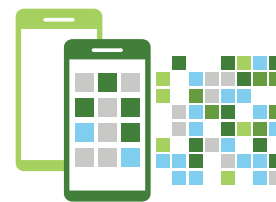
How can IT organizations begin to improve workforce experience? One of the ways is a new model, known as PC-as-a-service (PCaaS) or alternatively known as device-as-a-service (DaaS).

PC-AS-A-SERVICE IS A CATALYST FOR DIGITAL TRANSFORMATION

- › PCaaS has emerged as a way to unlock new opportunities to improve workforce experience (see Figure 1). Forrester defines PCaaS as an approach to workforce enablement that bundles device procurement, software licensing, financing, and device life cycle services into a single, predictable price per month. When IT departments lease PCs or mobile devices under a PCaaS model, they're able to deliver devices to employees faster, resolve break-fix issues quicker, and offer more flexibility for employees to choose the devices that make them most productive. As one VP director of retail told us: "PCaaS comes with flexibility, where people can work from anywhere and not have to work with challenging, clunky laptops where they have to rely on IT to fix an issue. This means employees can focus on their jobs and more importantly, their clients."



Interviewed respondents agree that 'workforce experience' means increasing employee productivity, providing the right tools, and ensuring equipment is reliable, efficient and fast.



PCaaS simplifies PC lifecycle management by combining hardware, software, lifecycle services, and financing into one all-encompassing solution.

Figure 1
Traditional Operating Model Versus PCaaS Model

Traditional operating model



PCaaS operating model



In addition to improving workforce experience, PCaaS can help CIOs free up time to focus on higher value-added activities that drive the business forward. According to our custom study of 732 respondents, CIOs will use this additional time to (see Figure 2):

- › **Break down silos by increasing operational efficiency.** To remain competitive in today’s business environment, companies must boost operational efficiency (86%) wherever possible. In the past, that’s meant making sure employees have secure, consistent access to information, but increasingly, it means enabling collaboration and knowledge sharing between the IT department and other parts of the business (79%). A VP director of a US-based retail firm said, “Business and IT need to have a good working relationship where they collaborate, if they don’t, it’s harder to become operationally efficient because everyone does their own thing.” PCaaS can help make room for this change by simplifying the PCLM processes or outsourcing them to service providers.
- › **Prioritize employee productivity.** IT workplace decision makers highlight the need to not only improve employee productivity (83%) but to also boost employee experience (75%). When employees feel they can get their work done, it means that organizations are doing a good job of facilitating their success, leading to a stronger personal connection between employees and their work, better customer



experience outcomes, and faster revenue growth. One respondent said, “To me, providing the right tools to employees, wherever they’re located, is extremely important and positively effects productivity.” PCaaS is a platform that allows employees to take advantage of the latest and greatest devices as soon as they’re available.

› **Improve customers’ experience when interacting with the brand.**

Using PCaaS to improve workforce experience has a trickle-down effect on customer experience (81%). If employees feel their organizations are investing in technology that enables them to serve customers better, faster, and more efficiently, they’re more likely to deliver a differentiated CX. As one CXO of a beauty and cosmetics firm said: “If we can’t deliver a good experience to our customers, it means we’re failing to provide our employees with the right tools. If employees have a bad experience, they’re going to deliver mediocre customer experiences.”



› **Invest in new technology whilst reducing technology-related costs.** Eighty percent of firms said they will invest in new, emerging technology over the next 12 months whilst reducing technology related costs (70%). Device-as-a-service can help reduce costs for everyday devices like laptops and mobile devices, while leaving room for CIOs to invest in disruptive technologies in areas like AI and automation.

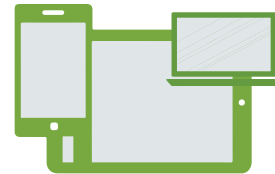


Figure 2

“Which of the following technology-related initiatives is your department or division prioritizing over the next 12 months?”



Base: 732 workplace technology decision makers

Source: A commissioned study conducted by Forrester Consulting on behalf of Dell, September 2018

IT Teams Must Overcome Many Traditional Challenges With PC Lifecycle Management To Improve Workforce Experience

Today's approach to the PC lifecycle management is siloed across the organization, manually intensive for PC administrators, and inflexible for employees. The approach is: 1) siloed — because procurement often happens in a department separate from management, application deployment, and retirement; 2) manually intensive — because it requires PC administrators to use complex management techniques that take time and don't drive much value; and 3) inflexible — because employees rarely use a device that's specifically suited for their role or job function, instead suffering under a one-sized-fits-all approach that only benefits IT management. Our study confirmed these challenges and found that:

- › **Business and IT leaders are not well-aligned to drive experience improvements.** As one CXO put it: *"The problem is that IT often becomes a law unto itself. Even though it's not supposed to, it operates in a very siloed way. They're not aligned that well. I think the old school IT power play is slowly dying out, and it'll take time before they do become fully aligned."* Only 25% strongly agree they actively engage with business stakeholders to help shape the workforce enablement strategy (see Figure 3). A VP director of a retail firm also reinforced this notion, stating: *"We're working toward being aligned, but it is a constant struggle. Any part of the business that is heavily reliant on technology or digital and eCommerce groups, the alignment is much better and stronger — but overall, it's still developing."*
- › **Overly cumbersome technology management practices are costly and complex.** Only 22% of the IT managers strongly agree that everything from PC provisioning to device management is self-service and automated. As one director of IT in retail told us: *"We have a traditional way of managing our PCs which consists of planning, buying, managing, and supporting (and retiring) the devices. It's a lot of work."* This causes IT teams to spend too much time and money on provisioning, managing, and retiring devices, instead of focusing on driving the business forward (See Figure 4).
- › **Employees rarely have devices designed to help them be productive in their particular roles.** Only 22% of IT managers said that employees have a lot of freedom to choose the devices and apps they use. Traditionally, IT has purchased technology using a one-size-fits-all model in which employees use one device for all their business needs. Because employees are increasingly working from various locations, have varied roles, and use multiple devices, this model stifles productivity (see Figure 5).

Figure 3

"We actively engage with business stakeholders to help us shape our workforce enablement strategy."

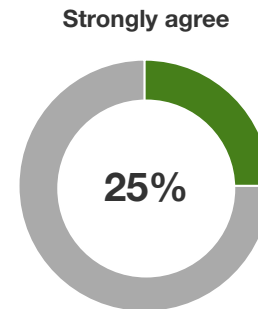


Figure 4

"Everything from PC provisioning to device management is self-service and fully automated."

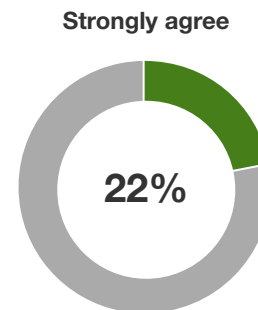
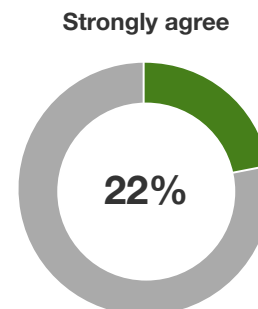


Figure 5

"Employees have a lot of freedom to choose the devices and apps they use."



Base: 364 IT manager or above with knowledge of desktop infrastructure environment, the provisioning of laptops and computers and other devices
Source: A commissioned study conducted by Forrester Consulting on behalf of Dell

The Business Benefits Of PCaaS

In order to overcome the above-listed challenges and embrace a future that improves workforce experience, CIOs and their teams need to embrace a model that enables them to accomplish two priorities: 1) to offload cumbersome and time-intensive tasks and 2) to embrace new technologies that fundamentally improve the employee experience. Device-as-a-service is a model that can help CIOs achieve both of these goals. The new PCaaS rests on five fundamental pillars (see Figure 6):



› **Devices and software.** IT teams choose devices (laptops, mobile devices, etc.) and software that they'd like to procure.



› **Configuration services.** IT teams are free to configure devices themselves, but can also shed this responsibility to service providers. Typical configuration services include: imaging, tagging, software packaging, enrollment, profiling, etc.



› **Remote management services.** Typically these services are focused mostly on break/fix types of issues, but can also directly manage devices, security, or network configuration settings.



› **Asset recovery.** This involves the retirement of devices, switching the machine out for another machine, and any associated tasks.



› **Fixed financing.** All of these elements combine together in a single per month subscription charge.

What business benefits does PCaaS provide? First, it mitigates costs by bundling devices, software, and services together at a fixed monthly subscription rate. Secondly, IT teams abdicate management responsibility to the PCaaS provider, enabling IT teams to focus on core business objectives. In fact, in a previously conducted Total Economic Impact (TEI) report, we found that changing your PC lifecycle management process to a model such as PCaaS enabled two organizations to free up internal resources for other tasks. Forrester found the following benefits with PCaaS:

- › **Better employee experiences.** According a CIO of a hotel and leisure company: *“PCaaS can help run the business smarter so employees can maximize productivity and efficiency. This means better communication, collaboration, and employee engagement.”* Psychological research shows that employees who have an excellent technology experience are more motivated, engaged, and drive higher customer outcomes. A PCaaS provider can help improve engagement by providing a multitude of fast, up-to-date devices and apps, more flexible management, and quick service resolution in the event of a broken device.

“Everyone wants to be agile — and that means lightweight solutions. PCaaS is one of those lightweight solutions. That means the less they have on a balance sheet the better for IT. The days of spending \$40 million on a big implementation are numbered. I see PCaaS becoming more prevalent over the next three years.”

CXO, beauty and cosmetics firm based in the US



- › **More predictable PCLM financing.** Device and application proliferation increases complexity for IT departments and makes it difficult to predict the long-term cost of hardware purchasing decisions. The typical three-to-four year refresh rate compounds this complexity, as it involves additional and often hard-to-quantify costs such as time spent on procurement, deployment, support, recovery, management and retirement of devices. An IT director of a technology services firm said: “The piece of hardware isn’t as important as it once was, so you can move from one device to another with relative ease. Most companies, especially mine want to move from a capex model to an opex model — PCaaS is scalable, traditional firms are not.” The PCaaS model simplifies the PCLM process significantly and provides a predictable cost structure for IT organizations.
- › **Better ability to scale up and down on demand.** Typically, organizations are required to incur upfront capital expenditures when refreshing their devices. But today’s organizations simply do not have those resources to spend on non-revenue-driving activities. PCaaS enables organizations to shift a large portion of their IT budgets to a more manageable cash flow over a planned period of time. A CXO of a beauty and cosmetics firm said: “The flexibility PCaaS provides is immense. You can scale up and down when you need more employees on any given task. You have peak seasons where you need more hands on deck. When the season ends, you’re left over with so many devices and not many employees using them.” A CIO of a hotel and leisure firm simply said, “PCaaS means better control of refresh rates of devices that we don’t physically own — so less hardware on site (and headache).”
- › **Simplified IT management through cloud provisioning.** A new model of PC management known as unified endpoint management (UEM) enables IT teams to remove the heavy overhead associated with staging, imaging, and deploying an operating system to a machine. Instead, IT teams use the power of the cloud to configure devices with all their required settings and applications, very similar to the way that organizations manage mobile devices today. UEM is often a service unlocked through PCaaS and can help IT teams streamline their management practices and unlock new employee experience use cases, such as better remote access. Another Forrester TEI study showed that deploying UEM decreased employee onboarding time from 1 hour to just 10 minutes.
- › **Remote management frees up IT resources.** Onsite personnel or remote administrators can completely remove the need to manage employee devices, ensure robust security across devices and apps, and address break-fix issues. Another Forrester TEI reported significant cost savings from engaging in managed services for PCaaS.

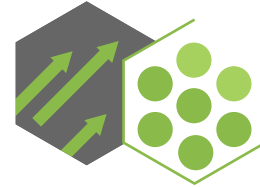
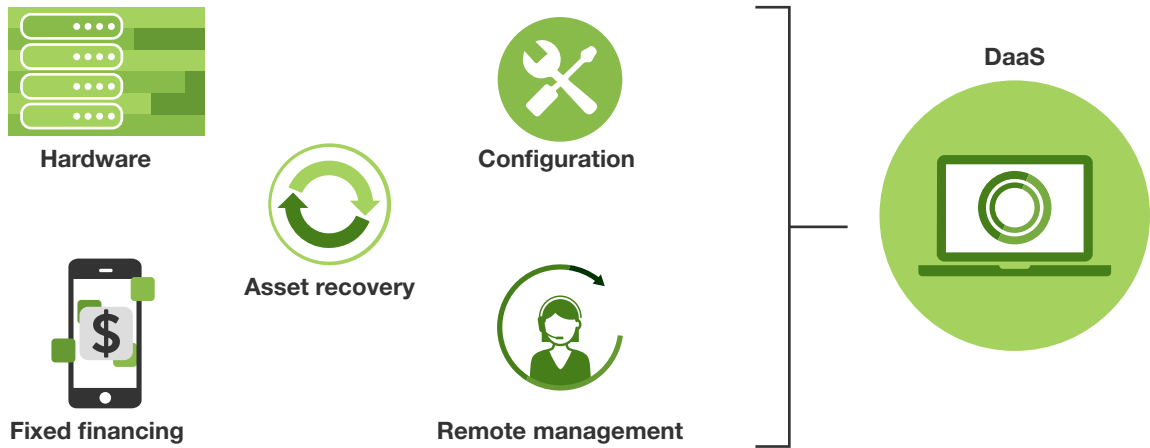


Figure 6
What Is PCaaS?



Source: A commissioned study conducted by Forrester Consulting on behalf of Dell, February 2019

Key Recommendations

The stakes are high for organizations undergoing digital transformations, and now is the time to start investing in workforce experience to differentiate your company from the competition. Your company simply can't afford to waste time and money managing your IT environment with outdated platforms and processes. Device-as-a-service (DaaS) offers a pathway to help you offload cumbersome practices of the past while embracing new technologies for the future by offering predictable financing, improved access to the latest devices and apps, decreased IT management complexity, and an improved experience for employees.

Forrester's in-depth survey of IT decision makers about device-as-a-service yielded several important recommendations:



Do a rigorous ROI assessment to determine pricing. A CIO of a hotel and leisure company told us: "Consider the entire ecosystem. Figure out what the pricing model looks like, because more devices lead to increased expenditure. New devices also lead to higher costs. Just make sure you read the fine print." PCaaS is a completely new financing model. Be sure to assess how it affects all the aspects of PCLM, not just the devices themselves.



Align business and IT priorities so that business leaders understand the value of PCaaS. As one IT director told us: "People are traditionally comfortable with the device they have. They get used to it so changing may be disruptive. Because PCaaS directly addresses the devices employees use on a daily basis, it's important to clearly communicate the value proposition of PCaaS to end users in business functions: faster access to devices and apps, better onboarding, increased support."



Focus on business value to avoid overpaying. One of the interviewees, an IT director in retail, told us: "Do your research. Understand every single cost implication. If you already have an iPad but Apple releases an iPad Pro, don't get it because it's new and shiny, get it because it adds business value — new devices means more costs." IT organizations should leverage PCaaS to add business value when it makes sense, not with every release of every new device.

Appendix A: Methodology

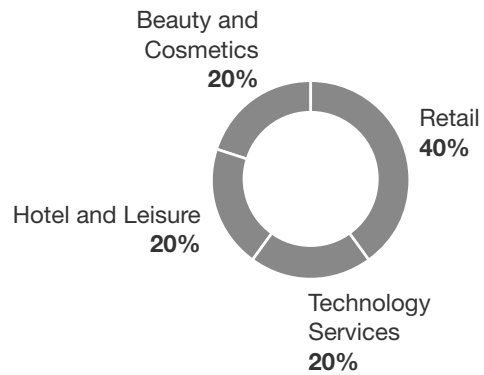
In this study, Forrester interviewed five organizations in the UK and the US in retail, IT, hotel and leisure, and beauty to evaluate what workforce experience means to them, how important of a priority it is, and their appetite for PC-as-a-service (PCaaS). Interviewed participants included decision makers in IT with knowledge of desktop infrastructure and the provisioning of devices for their organization. Questions provided to the participants asked what they thought about workforce experience and how important it is to them, what PCaaS means to them as well as the challenges and the benefits experienced. The study began in September 2018 and was completed in February 2019.

Appendix B: Demographics/Data

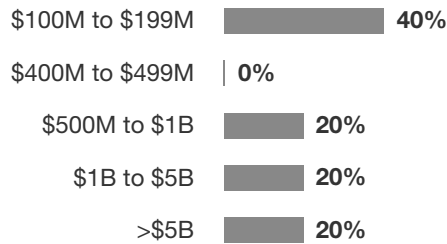
“In which country are you located?”



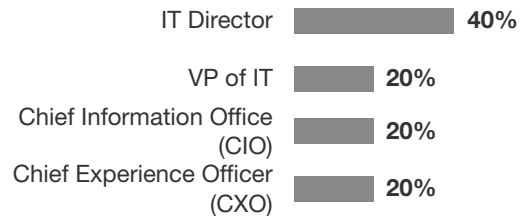
“How would you describe your industry?”



“Using your best estimate, what is your organization’s annual revenue?”



“What is your best job title?”



Base: 5 IT manager or above with knowledge of desktop infrastructure environment, the provisioning of laptops and computers and other devices

Source: A commissioned study conducted by Forrester Consulting on behalf of Dell

To read the full results of this study, please refer to the A Forrester Total Economic Impact™ Study commissioned by Dell and Intel titled “The Total Economic Impact™ Of Dell’s PC Lifecycle Services” and Forrester Opportunity Snapshot: A Custom Study Commissioned By Dell titled “Digital Controllers Optimize, Digital Transformers Innovate”

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