



Microsoft Fast Study – Zero Touch Deployment



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Case Study 2

Zero Touch Deployment

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Foreword

Over 100 years ago, Henry Ford changed the world of manufacturing and ushered in the era of mass production. Personified by his apocryphal quote “A customer can have a car painted any colour he wants as long as it’s black”, mass production was all about ensuring the process of creating a product was focused on getting a working product into the hands of customers as quickly as possible.

When the PC era arrived about 75 years later, IT departments were faced with a similar challenge – how do they get a new PC into the hands of users, with all the right software and configuration as quickly as possible. And so was born the quest to achieve Zero Touch Deployment.

The tools used by IT teams over the years have evolved but one part of the equation was always challenging. The computers users wanted on their desks, in their laptop bags and at their homes were so diverse that deploying software to them was challenging. And each time a manufacturer updated their hardware the deployment tools, software images and configuration processes needed to be revised. With several different computer models in use at any one time and a burgeoning number of different applications to install and configure, IT departments struggled to keep up.

To some degree, the process was simplified over the last decade as more and more cloud-based applications, like Microsoft 365, and cloud platforms such as Microsoft Azure made it possible to avoid software deployment completely by giving users access to the software tools they need from any computer. But security settings and other applications still required some form of manual action for deployment.

In January 2020 the move towards Zero Touch Deployment was injected with a powerful catalyst. The global COVID pandemic created a huge number of challenges. Logistics were turned upside down. In the past, IT departments would receive a shipment of computers that they set up, using a combination of automated tools and manual procedures and then hand to the computers personnel in the same office.

The rapid acceleration towards work from home made that model untenable. PCs had to be shipped directly to users at their homes and had to be ready to use without hands-on intervention from the IT team.

Zero Touch Deployment delivers a device to a user so they can start working the moment it’s turned on. Instead of looking at what’s easiest for the IT department to deploy the focus is on what’s best to get the user working. A user-centred approach puts new equipment in the hands of users so they can be productive as quickly as possible.

The value-add opportunities for savvy resellers and distributors, like Data#3 and Ingram Micro, are significant. Instead of simply selling hardware, they can value add by offering Desktop as a Service so computer procurement and deployment can be simplified. They can offer support and other services, allowing them to move from being hardware suppliers to trusted partners.

For more information on the New Next: <https://www.microsoft.com/en-au/newnext>



Zero Touch Deployment

Data#3

Welcome to the new SOE

While needs vary across industries, every organisation is ultimately seeking similar outcomes from their technology investments. Simply, the technology needs to work as quickly as possible, with the least possible interruption at the lowest possible cost. While these needs are not new, they have been brought into sharp focus through the new environment COVID-19 has created and the ensuing, rapid changes that businesses have faced.

The post-pandemic world will bring significant changes. Antiquated work practices, where workers needed to be seen in order to be managed, have given way to hybrid workforces. The modern workplace now spans the home office, co-working spaces, and anywhere with a reliable internet connection. In line with this, the tools required to support this new era of the hybrid workforce are also of a different breed.

While 2020 saw businesses rapidly adapt to changing conditions, Data#3's Practice Manager for the education sector, David Wain says, "A number of foundational technology elements that have rapidly evolved over recent years, have helped businesses weather the storm."

¹ https://idc-cema.com/dwn/SF_234377/infografika.pdf

² <https://www.delltechnologies.com/en-us/work-at-full-speed/index.htm#section=next-decade&overlay=/en-us/collaterals/unauth/briefs-handouts/solutions/workforce-experience-report.pdf>

"Cloud applications such as Microsoft 365, backed with services such as Microsoft Azure, have enabled employees to work productively from anywhere - on almost any device," Wain says. "And internet connectivity over fixed and cellular networks means the office network is no longer critical."

These advancements have been supported by remote deployment and management tools, ensuring workers can retain full productivity capacity, even when working remotely and separated from the office and traditional IT support services.

With 50% of IT managers saying they spend too much time **managing devices**¹ and over a quarter of workers indicating they would leave their current job because of poor **workplace technology**,² the benefits of smarter technology deployment and management are clear.

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More than ever, it is about the technology lifecycle

Data#3's National Practice Manager - HP, Paula Fountain, says almost every IT manager, whether they are coming into a new team or have been in their role for some time, faces the issue of the technology lifecycle.

"While technology has moved ahead in leaps and bounds, many IT managers are still dealing with unclear or ad hoc procurement processes. This makes controlling costs and budgeting for fleets a significant challenge for IT teams. Support is usually dependent on local access to computers and there's no plan for equipment disposal at end of life," Fountain explains.

This challenge is a key driver for Data#3's commitment and investment in its advanced Device as a Service (DaaS) offering. Enabling IT teams to unburden their device lifecycle management challenges, DaaS utilises a lifecycle approach: from the point of selection of vendor and partner through to device selection and procurement, deployment, support (regardless of user and device location), and end of life asset disposal. DaaS provides customers with a truly digital procurement process and a Zero Touch Device Deployment model.

"Savvy IT managers have been trying to do this themselves for some time," says Fountain. "They have sourced financing, leased equipment purchased and deployed their own onboarding and deployment used their own asset

management platforms."

The modern device procurement and management process offered through DaaS creates a compelling offering for organisations. Working with an experienced partner like Data#3, who can take the pain of device lifecycle management away, allows IT managers to focus on higher value activities across the business.

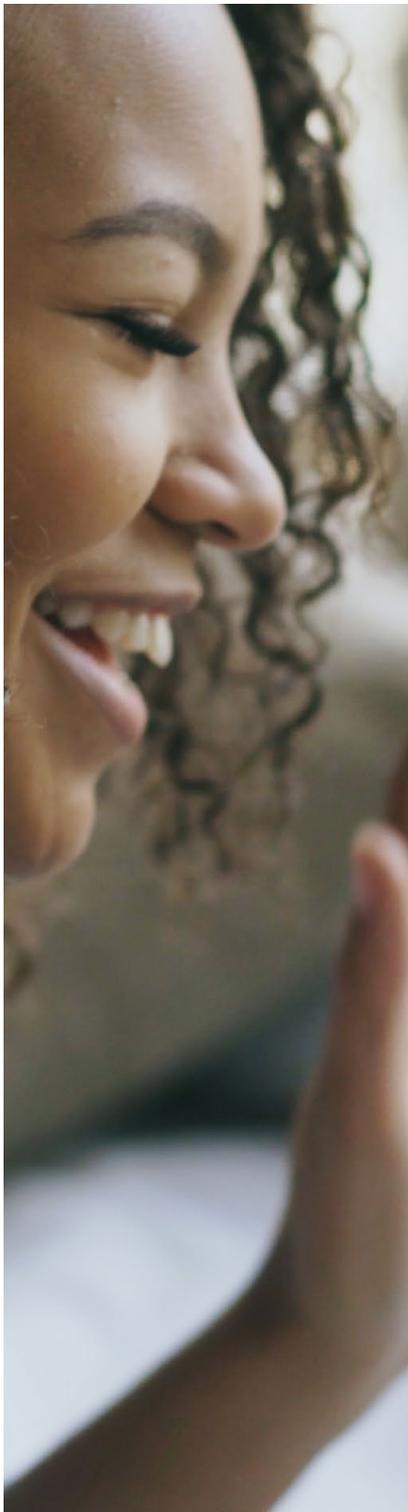
The slow death of BYOD

With the advent of powerful new consumer devices featuring attractive new form factors, a push towards the Bring Your Own Device (BYOD) model occurred. Particularly within the education sector, BYOD became very popular.

"BYOD was a response to users seeking devices they felt comfortable using. However, it created new challenges for IT teams when it came to software deployment and support. Security was also a key issue," explains Wain.

The challenges of BYOD are part of what make DaaS an attractive alternative, Wain continues. Zero Touch Deployment – one of the key elements of Data#3's DaaS offering- alleviates many of the issues inherent in BYOD scenarios. With a DaaS model, users can continue to access the devices they prefer, but with the controls needed to

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deploy and manage devices securely, and with the essential tools needed to maintain productivity.

"Users get access to great hardware," says Wain. "And IT departments can be assured the devices are deployed securely, with all of the user applications loaded onto the device. Workers can hit the ground running as soon as they receive their device, and still enjoy the experience of unboxing a brand-new computer."

The new SOE

"DaaS offerings in the Australian market range from very basic, essentially device financing, to end-to-end, cradle-to-grave, outsourced device services," explains Fountain. "However, what businesses are seeking is a high degree of competency throughout their device management lifecycles, and new ways to improve their end user compute experience. This comprehensive servicing is what Data#3's DaaS offering provides to our customers."

Fountain says that a Software Operating Environment is the new SOE (Standard Operating Environment). When a device is procured and deployed to a user, Zero Touch Deployment ensures that the user receives a device ready for use, with software installed, configured and ready to work.

The focus is on the outcome: a ready-to-use computer that supports user productivity from the onset of provision. Data#3's DaaS formula delivers and manages the hardware, and a suite of services matched to the customer's needs. The DaaS managed service model generally includes a new device, deployment, management, support and end of life handling for a simple, predictable monthly fee.

"Data#3's DaaS solution puts a device in the user's hands quickly, without significant back and forth with the IT team to get the device up to speed. IT teams can easily deploy software remotely with assurance that security is given appropriate attention," Fountain adds.

Another significant DaaS benefit is the reduced business dependency on specific device models. In the past, a SOE was deployed using software images tied to specific device models. Now that software deployment is a primary focus, procurement is easier and ensures further flexibility.

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Businesses can choose the hardware they want, transition from their current arrangements smoothly and enjoy the benefits of Zero Touch Deployment and management across the entire device lifecycle.

Best practice is part of the next normal

The disruption businesses faced in 2020 caused many IT teams to realise their complex procurement processes were no longer fit for purpose. With employees and students working and learning from home, the need to utilise tools that support remote deployment and support became crucial. While many technology leaders have long understood the value of these best practice tools and processes, they lacked the strong business case and time to put these solutions in place.

"Many of the building blocks have been available, but few organisations have been able to bring all of them together," says Fountain. "Through DaaS, Data#3 has deciphered the complexity of procurement and financing, deployment management, support and ultimately, disposal and replacement."

Outside of a DaaS model, businesses have been able to lease devices over three-year periods, amortising the cost rather than outlaying capital funds. However, this arrangement

requires negotiating the financing through third parties and organising payment arrangements directly with suppliers.

Remote deployment solutions aren't new, but the impetus for utilising them was diminished when most users and devices were based in a traditional office. Following the significant upheaval of 2020, the tools have evolved. Remote deployment, management and support have all taken on heightened levels of importance as COVID-19 forced organisations to rethink how technology is best provided to users.

"This is why Device as a Service, backed by partners with robust systems to support business, is so important," says Fountain. "DaaS enables the SOE to become hardware-agnostic. Tools like Windows Autopilot make it possible for a user to unbox a device and have their personalised configuration automatically loaded- they can be up and running faster than ever before."

Zero Touch Deployment, backed by a strong and secure Device as a Service offering delivered by a partner that understands your needs, enables any organisation to get the best return on investment and fastest time to value on new assets.

Data#3's full DaaS lifecycle approach is designed to support businesses as they transition.

"Zero Touch Deployment enables any organisation to get the best return on investment and fastest time to value on new assets."



Microsoft



Zero Touch Deployment

Ingram Micro

User-centric deployment is the new normal

Technology deployment has always been challenging. Back in the early days of PCs being deployed to users, IT departments learned that having a standardised hardware and software stack made things easier. This gave rise to the Standard Operating Environment, or SOE, that has persisted as the backbone of technology deployment for the last two decades.

Over that time, however, things changed. The range of available hardware expanded, the types of software grew, and users were no longer confined to an office where access to devices was relatively straightforward for deployment and support teams. That shift accelerated in 2020. The COVID-19 pandemic created a massive surge in notebook sales as well as desktop computers and accessories such as monitors, webcams and headsets. Businesses scrambled to ensure their previously office-bound staff were enabled to productively work from home.

That change meant everything from procurement to deployment and support needed a new approach. Robin Yeo, a Business Manager at Ingram Micro explains.

"The old process was very touch-heavy. In order to deploy, it had to be delivered to the IT team, unboxed and powered up and connected to the LAN. Then there was the installation of SOE image, manual configuration of end-user customisation and finally delivery to the end user for a user to be productive with new equipment there was a long lead time and lots of human intervention. However, the massive workplace changes that were seen through 2020, with increased work from home, forced business to reconsider their approach.

"End users are typically not IT experts. They aren't experienced in installing software, particularly complex enterprise applications. Just as a carpenter doesn't expect to have to configure a drill, users expect to turn their PCs on and get straight to work."



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The journey started, then accelerated

The idea of Zero Touch Deployment is not new. IT departments have been looking for ways to automate and streamline the deployment process.

"Over the years we've seen numerous tools automate parts of the deployment process," explains Yeo. "We've worked with clients using everything from disk imaging software, to Microsoft System Center Configuration Manager and Microsoft Intune."

These tools, he says, made inroads into simplifying the deployment process. However, they still required significant intervention to fully deploy a device to a user so they could be productive from the moment they turn their new PC on. Every touchpoint slowed the process down and added expense.

The pandemic created an accelerated need for complete Zero Touch Deployment. With users working remotely the need to deliver ready-to-use computers became critical. Fortunately, many of the tools that are needed for Zero Touch Deployment were already in development. Like the COVID-19 vaccines which took less than a year to create and approve (the previous fastest vaccine development was for mumps and that took four years), necessity created the conditions for a rapid shift to Zero Touch Deployment.

What does Zero Touch Deployment look like?

In order to understand what Zero Touch Deployment should look like, you need to think like an end user explains Yeo.

"End users are typically not IT experts. They aren't experienced in installing software, particularly complex enterprise applications. Just as a carpenter doesn't expect to have to configure a drill, users expect to turn their PCs on and get straight to work."

Zero Touch Deployment aims to deliver a device, whether that is a smartphone, tablet or PC, to a user in a state where they can start working as soon as it's turned on. The best Zero Touch Deployment systems and processes are created from the perspective of the user and not the IT department. By taking a user-centred design approach, businesses can rethink how they put new equipment in the hands of users so they can be productive as quickly as possible.

"Workers see their computer as a work appliance – it needs to be usable from the moment it's unboxed and switched on," Yeo adds.

Why now is the time for Zero Touch Deployment

There is no doubt 2020 was a year of great disruption. Everyone became acutely aware of the importance of logistics as some everyday supplies were in short supply. COVID-19 made logistics much more complex. In the past, IT departments would arrange for new computers to be shipped to a central office where they would be setup and then handed directly to users. But the rapid shift to work from home meant new devices had to be shipped to homes in metropolitan and rural areas.

"Each time a device is handled costs time and money. The rapid shift to work from home meant the time to value ratio for a new device needed to be drastically abbreviated in order to get people working as quickly as possible," says Yeo.

The good news, adds Yeo, is that while the necessity for Zero Touch Deployment created by the rapid transition to work from home caused significant disruption, the technology needed for Zero Touch Deployment has evolved to a point where it is possible to deliver a ready-to-use computer into the hands of users no matter where they are.

"Tools like Microsoft Autopilot have rapidly evolved to support businesses through the pandemic and lockdown periods. It's a significant factor in why we've been able to launch Ingram Micro's IMDeploy."

IMDeploy allows partners to provision Windows Autopilot services from the Ingram Micro Cloud Marketplace. Devices are shipped directly to end users. The software they need, and user profiles are remotely deployed using Windows Autopilot. This results in rapid delivery and deployment of fully configured devices. For customers who use BYOD, partners can use IMDeploy with users spread over wide areas or with contractors who don't often visit the central office.

IMDeploy lets partners take full advantage of Modern Deployment. The program educates and enables partners by offering webinars, training and support from Ingram Micro's deployment consultants.

"This is a new way of selling and deploying Windows devices," says Yeo. "As well as getting devices in users' hands in a ready-to-use state, it offers cost certainty which is important during this challenging business period."

Zero Touch is a powerful enabler for DaaS

Businesses are always looking for ways to better optimise their budgets and allocation of funds. This has led them to explore procurement models that support opex for commoditised services and activities so that capital funds can be reserved for projects of high value to the business. Device as a Service (DaaS) lets businesses move the cost of purchasing and deploying computers away from the capital side of their budgets into a recurring, monthly fee.

"Zero Touch Deployment takes advantage of automation for routine tasks such as software installation, device management and configuration," explains Yeo. "By working with a trusted partner with procurement and using a platform like Ingram Micro IMDeploy, it's possible to supply the hardware in a state that is ready for Zero Touch Deployment."

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The user or company chooses the hardware and it is shipped directly to the user. They unbox it, power it on and, once connected to a network, all required software is remotely installed and configured.

"The total cost of this is bundled into the hardware cost and it is all amortised over a longer period, three years is typical, so businesses pay a monthly fee per-user per-device instead of upfront costs," says Yeo.

This also means tech teams are freed up to work on higher value activities rather than installing and configuring software.

It's also a winner for resellers

Resellers and service providers can use IMDeploy to shift away from simply selling commodity hardware and offer higher-value services by bundling Zero Touch Deployment and support for customers. Tools like the Ingram Micro platform allow MSPs, CSPs and resellers to manage these offerings for their customers.

Zero Touch Deployment of IT devices and services has been a goal for businesses ever since the first computers were given to end users. By simplifying the process for end users, they can be productive faster when receiving a new device and better supported when they need assistance.

With the workplaces of the 2020s likely to be a mixture of central offices, homes, smaller distributed offices and complete mobile workers it will be more complex than ever to get equipment into the hands of workers in a state where they can be 100% effective within moments of opening the box. We now have the tools to make this possible delivered in a way that makes operational and financial sense.