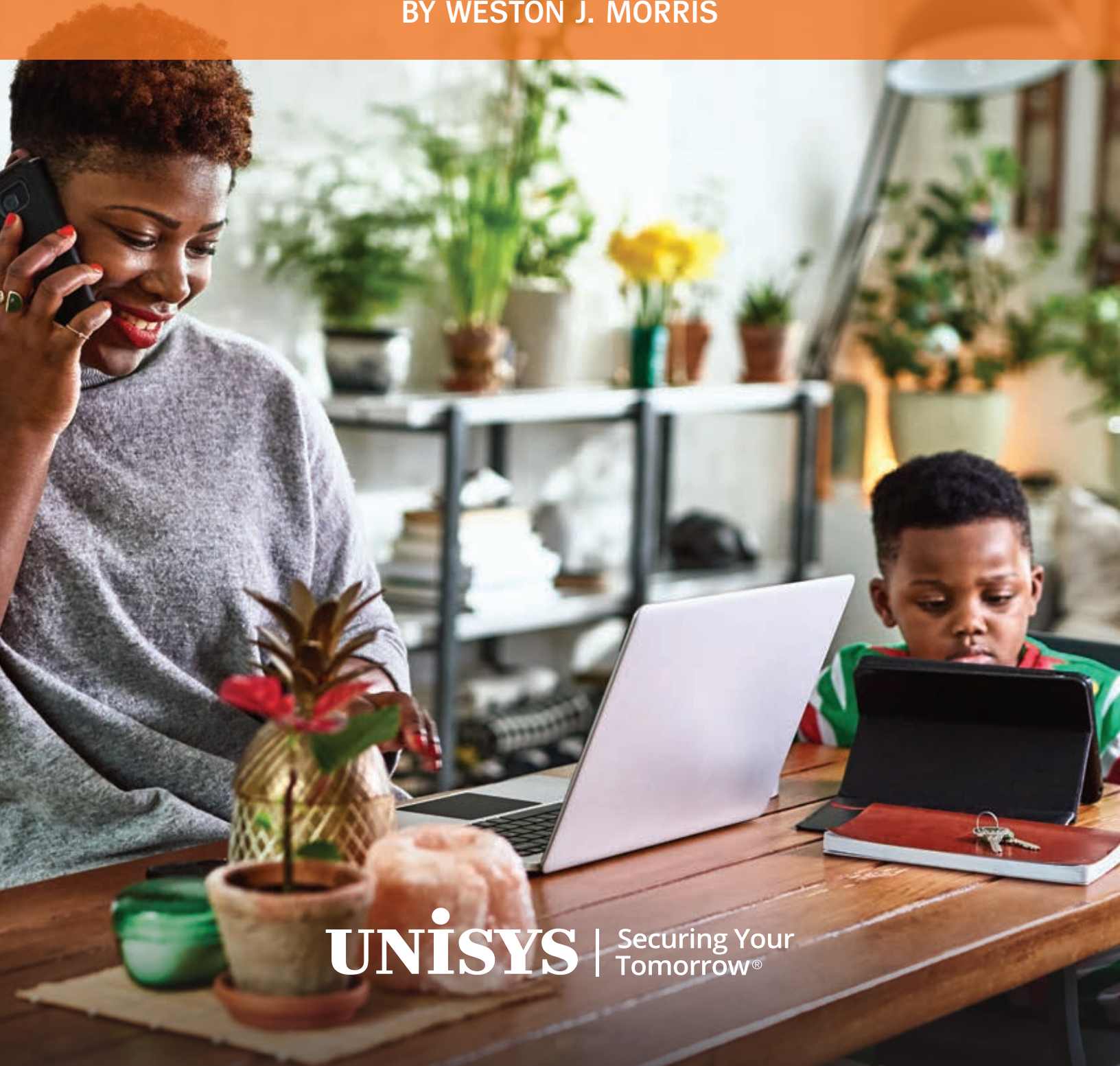


THE PANDEMIC TAUGHT US EIGHT LESSONS ABOUT THE FUTURE OF THE DIGITAL WORKPLACE

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Mark Twain claimed to “know a man who grabbed a cat by the tail and learned 40% more about cats than he knew before.” This year’s cat is named “COVID-19.” By holding onto its tail, we at Unisys have learned more in five months about securely working-from-home than we ever knew before.

Lesson 1 – Intelligent Automation – Before the pandemic, one of our customers invested heavily in automating their IT processes. By the end of 2019, they saw phenomenal reductions in the lead time for complex functions like employee onboarding, application provisioning and employee offboarding. They invested in this automation without anticipating the coronavirus, but were able to quickly put these automations to work for employees having to work from home for the first time. These employees could be quickly and automatically re-onboarded and re-provisioned with the new tools they need to work successfully from home: laptop, video collaboration tools, and so on.

Looking ahead to 2021, this client’s plans include enhancing these automations with artificial intelligence to guide a manager through the onboarding/offboarding/provisioning options. This same AI will also be available on every employee’s laptop, guiding the employee through unfamiliar processes as they learn to work from home.

Recommendation: Mature the digital workplace by first standardizing, then automating, and then adding intelligence to provide the agility needed for unexpected changes.

Lesson 2 – Merged Reality – One of our most fascinating cases during the pandemic came from the healthcare industry, where practitioners were desperate for information and support, but equally anxious to keep their distance. Imagine life-saving equipment at a hospital failing, but repair technicians unable to travel to the site. Merged reality technology enabled remote experts to demonstrate in real time with hands-on assistance how the onsite user of the equipment might make the repairs and remain productive. Imagine a hospice care provider, restricted from visiting patients, showing a hospice patient’s spouse how to clean a port or administer sensitive treatments. Or a surgeon walking a small-town primary care physician through an unfamiliar procedure. Undeniably, there were lifesaving steps taken during the pandemic that would not have been easily accomplished without merged reality.

Recommendation: The pandemic proved the utility of merged reality to reduce travel and speed up support. In a post-pandemic world where there will likely be less traveling, this capability has valuable applications in every industry.

Lesson 3 – Virtual Desktops in the Cloud – Our third example comes from the public sector where a government agency made a heroic transition from working entirely on-prem to extensive remote work. In the office, the state employees used under-the-desk workstations with large monitors – equipment that was not going home with them. One option might have been to procure thousands of laptops to provision and take home, but with supply chains abruptly interrupted, that was not possible. Instead, the agency transferred their physical desktop contents to the cloud, allowing employees to connect to virtual desktops from their personal devices at home. Of course, this technology requires

high connectivity, so it is not for everyone, but it works brilliantly for information workers. Looking beyond the pandemic, enabling virtual desktops in the cloud has the side benefit that the state can “cloud-burst” – quickly expanding from on-prem capacity to the cloud when demand for computing capacity strikes.

Recommendation: Consider cloud-based virtual desktops as one of several tools in the digital workplace. Cloud-bursting enables ready-made disaster preparedness.

Lesson 4 – Personas – Enterprises that put some thought into differentiating their employees’ digital workplace and support requirements by “persona” found it much easier to keep those employees productive during the pandemic. For example, the air cargo industry, which played a vital role during the pandemic, needed highly responsive and personalized support services for such roles as:

1. **Information Workers** in marketing, HR, and accounting roles (who tend to work in a traditional office environment) continue to use standard service desk support – call the desk, report a problem, get a call back – or perhaps use a nearby IT locker where they leave a laptop to be repaired one day and retrieve it the next without undue inconvenience.
2. **Flight Crews**, on the other hand, have entirely different support needs. They are too mobile to get a call back and they might be an ocean away by the time a tablet or smartphone gets repaired. Their support needs are best met with a Tech Café in or near the flight briefing room where they get immediate in-person help. During the pandemic, the Tech Café can be converted to a virtual Tech Café that uses merged reality to enforce social distancing.
3. The third persona is the **Flight Maintenance Crews** who do not have a set physical office and use shared PCs in various locations to do their job. Generally on a tight schedule, they do not want to go to a Tech Café or call the service desk for help. For this persona, a Tech Button on each PC offers the capability to automatically create a ticket to have a technician swap out the defective device as soon as possible.

Recommendation: In each industry, there will be unique personas. Identify personas based on types of devices, work locations, and support modalities. Tailor the digital workplace and support options for each persona to improve productivity and end user satisfaction.

Lesson 5 – Sentiment Analysis – There are multiple studies showing that happy employees are productive employees. Yet, too often leaders have trouble discerning *who* is unhappy and *why* they are unhappy – and, therefore, they are unable to help those employees. Sentiment analysis collects data on the service desk interactions of each user, ascribes an emotion to each interaction, and highlights trends (both positive and negative) that leaders can use to determine where they need to take action. For example, did the switch to Zoom improve user satisfaction or not? How do employees feel about the latest Windows updates? By taking their emotional “temperature” this way, leaders can rapidly correct problems and ensure productivity.

A banking client using sentiment analysis discovered a spike in the worst category – employee disgust – right after the two-week holiday. With a little analysis the culprit was discovered: When employees booted up their laptops after the holiday, all the updates and patches that would normally have taken place incrementally now took place all at once, drastically slowing their laptops. A simple solution was to have the service desk remotely wake up their computers over the holiday, perform the updates/patches, and put them back to sleep.

Recommendation: Don't rely solely on surveys and SLAs to gauge employee satisfaction. Complement them with sentiment analysis based on natural language processing of employees' interactions with IT, whether via the chatbot, calls to the service desk, or communication with field services. Use the insights gained by sentiment analysis to proactively improve IT services.

Lesson 6 – Digital Experience – Just as sentiment analysis measures employee happiness, digital experience measures PC happiness. It does so by evaluating various aspects of device performance: Are PCs running out of memory, crashing, booting slowly, etc. Translating those datapoints to a digital experience score enables the service desk to dig deeper to understand why a score has changed. For example, as employees shifted from the office to working from home, their use of video collaboration tools increased dramatically, and some experienced problems. The digital experience data not only makes it possible to detect the problem, but helps diagnose the cause of the problem. In this case, the problem was not with the PCs themselves, but with network configuration. That discovery allowed for the automatic correction of the issue and advising the users on prevention methods, ultimately increasing employee satisfaction and productivity in their home offices.

Recommendation: Combining sentiment analysis with digital experience provides a holistic view of the entire digital workplace estate – far beyond what traditional SLAs and end user surveys can reveal.

Lesson 7 – Uber-Like Experience – The pandemic changed the perspective of in-person support. How can tech support be performed while conforming to today's social distancing requirements? One way is to adopt the approach of ride-sharing services. Imagine being able to use your smartphone to quickly reschedule a field support ticket, provide a photo of the defective device to ensure that the technician brings the right part on the first visit, track the technician as they drive to the employee's office or home, or submit a quick survey immediately after the visit is completed. The employee knows who is coming, when they will arrive, and that they will arrive with the correct parts for the repair.

Recommendation: Be ready to adopt best practices from the gig economy in your company's IT organization. The Uber-like experience is one of many possible ways to increase efficiency while improving employees' experience.



Lesson 8 – Security – In the rush to mobilize working from home, some enterprises put speed of deployment ahead of security. Security best practices took a back seat and hackers capitalized on the opportunity. Working from home can potentially expose an enterprise to new security risks that did not exist in the office behind the corporate firewall. This is especially true if the company’s security strategy has been to protect the perimeter and use VPN to allow remote user access, rather than the more advanced security that Zero Trust, micro-segmentation and dynamic isolation can provide. When Unisys mobilized our own employees to work from home, our approach was founded on the following:

1. By adopting a Zero Trust model, connections inside the corporate network are viewed with the same level of distrust as random connections coming in from the public internet.
2. By eliminating the VPN, a company avoids an expensive bottleneck that has become a prime target of hackers during the pandemic. A hacker gaining access to the VPN can access much of the corporate network.
3. Using micro-segmentation, all connections are made at the application level and each connection can be dynamically turned on/off within seconds if an intrusion is suspected or detected.
4. Training employees on how to identify a phishing attack and what to do when they see something suspicious is an important part of a holistic security strategy. During the pandemic, we saw COVID-themed attacks increase by 30%. Google detected 240 million COVID spam emails on its platform per *day* during May 2020.

Recommendation: Moving to a Zero Trust model makes it much easier to securely mobilize working from home. It also greatly improves security inside the corporate network and reduces the reliance and vulnerability of VPN. The human element is still the weakest link, so providing frequent up-to-date training to employees on their role is essential in keeping the company safe.

Summary

The coronavirus pandemic changed, perhaps forever, how IT will enable and support workers. It caught many enterprises underprepared without a solid work-from-home plan, forcing them to scramble to “just get it done” and even to neglect security protocols in an effort to maintain some semblance of business operations. If a business continuity plan does not include a proven process for rapidly shifting employees to work remotely, it is now evident that it should.

By embedding these eight lessons in an organization’s operating model and strategy, the digital workplace can be truly secured and delivered to ensure the highest level of satisfaction, productivity, and efficiencies at all levels – inside and outside the or organization.

In just a few days, Unisys enabled 95% of associates to work from home across the globe. At the same time, we helped scores of our global clients to do the same.

After the dust settled, an important truth emerged: enterprises who invested in the digital workplace prior to the pandemic were able to quickly mobilize their employees to work from home during the pandemic. We would like to share with you eight essential lessons that helped our clients to not only survive the pandemic, but to gain a competitive edge after the pandemic.

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