Getting To "Yes": Updating Infrastructure for Ease of Use

by Allan Basso

I don't fit easily into the "enterprise" box. I'm a nuts and bolts guy: I like the details. I need to understand every aspect of the technology that runs in my data center, because it's my responsibility to make sure that the technology works.

If something goes wrong, I need to understand what happened because I don't have the time to call support and beg them to drop everything to help me. At the very least, I need to be able to do the initial triage. So when I have the chance to set up a system where I know its inner workings front to back, I seize the opportunity.

Asking Too Much of People, Too Little of Machines

About a year ago, I started at NuCO2, which is a national provider of beverage carbonation solutions in the United States. We distribute CO2 to 172,000 customers, including restaurants, bars, hotels, and stadiums—anywhere that has a fountain soda or beer tap system, we're most likely there. We're a small subsidiary of our parent company, Linde PLC, but we're responsible for our own compliance and financial reporting, as well as anything else that drives the business forward. And I'm the one steering the wheel.

My responsibilities as an IT operations manager is not just about IT operations but IT and operations. There's a lot that fits under that umbrella, and I constantly look for ways to innovate through technology.

Unfortunately, when I arrived at NuCO2, one of the challenges was dealing with some very old technology. Although it was a VMware shop with quite a few virtual machines, they were pretty much just copied from physical machines and left to die on the vine. We even had a few old legacy solutions. In fact, I had two racks of equipment that were out of support but still running solutions here. It was as if we were living in 2008: there was no reporting, no performance, and very little advanced technology.

> **Is your company living in 2008, with no reporting, no performance, and very little advanced technology? #NutanixStories**

Because NuCO2 didn't have the technology to automate or alleviate manual processes, the company's previous solution to every problem was to simply allocate more people to solve it, which wasn't efficient.

Another shortfall was the way we were prioritizing our deliveries. We've all been to a restaurant and gotten flat soda. You take a sip and get a straw full of syrup. It's not a good experience, and it can be a big aspect of the overall customer experience in a restaurant. The last thing an establishment wants is to run out of CO_2.

The problem is, when a restaurant calls our call center to report that they're out of gas, the call center has to reach out to the depot manager, who then figures out which truck is closest, and then tries to get that truck driver on the phone to redirect them to the customer. It's a very manual process, meaning it might take hours to make that single delivery. If you're a customer at a restaurant, you're not going to wait those hours for a new soda.

We also weren't cloud-ready. More than 80% of our parent company's operations are in the cloud. They have very little on-premise infrastructure and they prefer to leverage the cloud for everything, so the fact that our systems were not cloud-ready meant we were out of step with Linde. Even though we had the servers, we lacked the ease of deployment to make any significant changes to the system.

For almost a year, I've been working to put an architecture in place that can give our people the instantaneous knowledge they need and to get us cloud-ready. From the start, I knew we needed Nutanix.

Reconnecting with an Old Friend

This wasn't my first rodeo. My journey with Nutanix started in 2014. I was working at a Siemens company at the time that had pushed us towards a so-called "enterprise solution" that was very complex and difficult to manage. It personally cost me more than 100 hours a year—evenings and weekends—just to keep the firmware up to date, and it was going to cost the company more than $380,000 to renew support for its fourth year.

I did a lot of research, looking at Hitachi, SimpliVity, Nutanix and others. Nutanix made it easy to migrate as a VMware shop, since it wasn't a platform change, just an infrastructure change. I was one of the first people in Florida to purchase Nutanix and put it into production. In fact, I was able to install it all myself, in about 45 minutes. That blew me away.

Six years and several jobs later, when I looked at our situation at NuCO2, choosing Nutanix was a no-brainer for me. Of course, I still did my due diligence and looked at all of the other solutions out there, in part because Nutanix was still very young when I first installed it. Today, there are 15 different solutions

out there, including VxRail and HPE SimpliVity. Nutanix had matured too, though, and it still maintains that top right position, combining "ability to execute" and "completeness of vision" in the [magic quadrant](#).

It helps that I've built good relationships with executives from both Nutanix and our partner, [Alturna-Tech](#). I can call Nutanix CEO Dheeraj Pandey and not only get him on the phone, but feel like he's happy to speak to me. Just try doing that with Michael Dell! And Paul Goldberg, the CEO of [Alturna-Tech](#), has become a trusted advisor of ours. His company not only understands the perspective of a smaller IT department, but they also understand where technology is going. The feeling that both Nutanix and [Alturna-Tech](#) value my business is a big bonus.

> **A good #technology partner understands the inner workings of their clients' business, as well as the future path of technology. #NutanixStories**

The final piece of the puzzle is Nutanix's emphasis on support. They want to be the first port of call, regardless of the hardware running underneath it. If an issue does end up concerning the hardware, for example, they will open a ticket on the company's behalf. Even for someone like me who is hands-on, that order of support matters because it will always make more sense to check the software first. Nutanix's support infrastructure remains a top priority and that's why their NPS sits above 90, which is phenomenal.

Immediate Cost Savings, and Better Customer Service

At the moment, two of our three data centers have been fully migrated to Nutanix. Those are the ones running disaster recovery (DR) and app support. I was able to sunset $40,000 worth of support renewals on those machines alone. It's great to have those savings to validate the subscription fees and get some ROI on this migration rather quickly.

My primary data center, where all of the production solutions run, is about 70% migrated. As with most migrations, our senior management wants to ensure there are no issues before we touch their ERP and their business-critical applications. Rather than telling them, we're showing them that they have nothing to worry about.

The [Nutanix Prism](#) control panel gives me, in one view, all my clusters in one place. I can see how many resources have been utilized, and where I can fit in a new application. If it's a bigger project, like the field service management that we're moving toward, I can go into the Nutanix forecaster and indicate what I'm looking to do. It will tell me where I can put something, or if I need to add another node. It means I don't have to be concerned about the resources I have, because I know I'm always prepared to expand,

contract, or move.

The field service management solution is a rather complex stack of software that interacts with our call center, depots, dispatch, and drivers. Our aim is to automate workflows and build efficiencies. Like the ability to automatically notify the closest driver when a customer runs out of gas. The time savings alone would mark a big improvement in customer experience, which in turn will help keep our customers happy.

Being a distribution company, we employ a lot of truck drivers, depot managers, and other people who are not conventionally considered "tech savvy" users. Regardless of their familiarity with technology, they still have responsibilities within the technology stack. They still have to do reporting, entering their time and their deliveries.

Currently, they have common computer systems in the field that are connected to a terminal server with a couple of apps. It's all rather clunky. Plus, we have 158 depots and a server farm of nine terminal servers in the pool at any given time. If all the managers were working at once, the experience can be poor. I don't even like having terminal services for users, because it's important to mimic the same look and feel as what they use at home. We're trying to make everything easier, faster, and more secure for them, and facilitating a more automated field service solution will do that.

We've already moved away from terminal services for a lot of our work-from-home users due to COVID; we have deployed a lot of laptops and got approval for VDI as part of our WFH solution. We're a team of five, including myself, and VDI is that next natural step in consolidating the help desk, bringing everything under the same ecosystem to ensure the best possible user experience.

Finally Saying "Yes"

When I made the pitch for moving to Nutanix, it was simple: I was tired of telling people I might be able to do something.

IT conversations usually begin with an ask; someone has an idea and wants to know if we can make it a reality. Before, I'd have to say, "Well, let me look at the requirements and I'll get back to you." No company wants to hear their IT team say "no."

I'm done saying "no." No matter the question, the Nutanix infrastructure gives me the ability to say "yes."