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Five Reasons Not to Move to the Cloud

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Today's cloud providers and data centers continue to push technology to new heights. Without the demand to manage rows and rows of servers and the demand to host millions of Twitter or Instagram accounts, such amazing technology simply would not be available for our on-prem data centers. In a small basement room next to a small pool at On Lok, we house six racks of servers and networking gear that incorporate the latest technology available. In addition to server virtualization and hyper-converged systems, we may add containers for our dev and testing environment. Are we planning to move this beautiful display of technology to the cloud? Absolutely not, and here are five reasons why:

Reason 1:

Cloud tech is just not there. I expect salespeople will throw tomatoes at my next conference, but let's put all cards on the table. I'm excited about the future of cloud tech. However, today's opportunities benefit early adopters. Though I have dabbled with Amazon cloud storage and other online backup solutions, I'm not ready to let go of my offsite tape storage. I've looked into several cloud accounting systems and ERP's, but I'm still upgrading my on-prem system. There are a few vendors offering cloud electronic health records, but their customers tend to be smaller practices and I haven't seen the customization to match workflows. There are a couple of cloud technologies that we have adopted successfully. Deciding to put our fundraising system on Salesforce was a no-brainer. I was also happy to move our payroll plus time and attendance system to the cloud. After all, who wants to print and deliver hundreds of checks every two weeks? I will probably move our Exchange system to Microsoft's 365 soon, but I may be the last person on the block to make that move.

Reason 2:

Interfaces are not there. In the absence of a healthcare-ready ERP, we continue to use "best of breed" applications and manage the interfaces between them. I am still waiting for cloud providers to work out the interface challenge. Today, those interfaces would need to run though my shop. For example, we interface our cloud payroll system with our on-prem accounting system. If we migrate to a cloud accounting system, would that cloud vendor offer an interface directly with our payroll vendor? Likely not. Start-ups like Mulesoft and OpenStack are tackling this problem for early-adopters, but I'm waiting for these solutions to become mainstream. The need to maintain all the infrastructure and staff to interface two systems (and many others) takes some of the wind out of the sails that are taking us to the cloud.

“While we wait for cloud solutions to cross the tipping point, on-prem solutions will continue getting better”

Reason 3:

Data use is increasing faster, while the cost of Internet bandwidth is dropping. I am mixing several factors into this reason, so let's tie them together. One sales pitch of a cloud provider is the reduction in on-prem storage. However, to take advantage of cloud storage, we need bandwidth. At the same time, data usage is increasing significantly. Of On Lok's 900 employees, approximately a third use a PC throughout the day. When we removed throttling between our sites, those 300 users thoroughly saturated our 100 M Internet pipe. We are quickly moving to a 500 M Internet service, but how long will that last us? With the increasing use of videos for compliance trainings, video conferencing, and even Helpdesk replies, we are seeing an significant increase in demand for bandwidth. Internally, we have plenty of bandwidth. If we moved these systems to the cloud, we could easily saturate a 1 G Internet pipe. We need the cost of that Internet service to drop significantly before considering that option. Finally, with the prices of hardware storage dropping exponentially, we see another example of the wind dropping from the sails that would drive us to the cloud.

Reason 4:

Hyper-converged systems in my data center. Now, let's talk about the amazing technology driven by cloud vendors and hosting providers. We are in the process of moving our phone and communication systems to Cisco's Hyper-flex system. If all goes as planned, our VMware admin will no longer worry about how much storage and CPU is available in each server blade. Managing our virtual platform just got much easier. Spinning up new servers takes much less planning. This was one of the reasons to move to the cloud, and now it's one of the new reasons to stay on-prem.

Reason 5:

Containers and more. My last reason is new and future technology. It just keeps getting better for on-prem solutions. If we implement container technology, suddenly our team will spend less time managing Windows servers and all the updates and configurations. Spinning up an application in a test environment will take minutes instead of hours. What else is coming? Will artificial intelligence improve our on-prem security? Will data analytics improve the efficiency of our networks? Will mobile tech improve access to our on-prem systems while offsite? While we wait for cloud solutions to cross the tipping point, on-prem solutions will continue getting better. I look forward to taking advantage of the opportunities to continue investing in and improving our on-prem systems.