

## **Lenovo Software and Stoneware Technologies**

**(Ghostwritten by Jeb Harrison)**

### **Title: Checking In With Carl Seaver, Our CTO**

If there's one industry where time seems unusually compressed, it's information technology. Over the course of my career, I've seen changes that may take decades in other industries happen over the course of a year. The technology evolves so quickly that sometimes my colleagues and I experience an odd sense of vertigo, as if the ground is sliding into the future so fast we can feel it under our feet.

I got that sense again today when I sat down to write this blog, thinking about some of the challenges we faced back in the mid-nineties and how far we've come. Back then, directory services – the hierarchical file structures we all take for granted now – were a novel concept. We spent a tremendous amount of time educating companies like Novell and Microsoft about the benefits of a unified, centralized directory that provided a consolidated view of users.

Eventually, we were successful, so that by the end of the nineties IT departments had adopted directories across the board. This was great for IT, but nothing had really changed for the end user. It was exactly this challenge – the challenge to bring the benefits of directory services to the end user – that led to the creation of Stoneware in 2000.

### **Enter Lenovo**

Fast forward to 2016. It's been almost 4 years since our company was acquired by Lenovo to become Lenovo Software. Innovative Stoneware technologies are expanding Lenovo Software's capabilities to provide secure cloud content across multiple devices, starting with education and the public sector, in a unified web desktop environment.

In essence, what we've done is leveraged the power of the directory for the end user and extended it across multiple devices, all enabled by single sign on. As a result, the secure access technologies Stoneware has been working on all these years has kept us at the forefront and put us in a perfect position to help Lenovo jump start our entire PC Plus (ie the desktop, plus the smartphone, plus the tablet, plus IOT) strategy, which has already got significant traction in education and the public sector.

### **One Industry at a Time**

Some industries are better positioned to take immediate advantage of Lenovo Software solutions than others. Stoneware built a strong presence in education with innovative cloud technologies like Airclass just as the transition to hosted solutions and lower cost alternatives, due to ever-present budget challenges, was taking hold. Lenovo Software has been able to grow that base in education.

So, what's next? From Lenovo's perspective, no industry is better suited for the unified web desktop, single-sign on, and secure access across multiple devices than healthcare. Of course, convincing the healthcare industry of their suitability is another story. But where there are the greatest obstacles often lay the greatest opportunities. The complexity of integrating legacy healthcare systems and data with newer cloud-based applications, ensuring compliance with regulations like HIPAA, and providing secure access is significant.

At the same time, the IT departments that hold the keys to the legacy systems in healthcare and other industries are, in a sense, under siege. Patients, customers, administrators, suppliers, and healthcare professionals are experiencing the benefits of 21<sup>st</sup> century technologies just about everywhere but the hospital and the doctor's office. End users are informing if not driving IT strategies and portfolios like never before. Lenovo believes that the healthcare industry, once it begins to take the incremental steps toward transformation, will be a great fit for the innovative technologies Stoneware has brought to the table.

## **Enabling Lenovo's PC Plus Strategy**

To date, Lenovo has described our PC Plus strategy in the context of hardware, which is no surprise given the fact that we are the world's second largest PC company. But without the unified web desktop environment facilitated by Lenovo Software, the integrated multi-device strategy isn't nearly as compelling.

Take Chromebooks as an example. All the PC vendors have their own versions out there. Still, at the enterprise level, providing secure access falls into the hands of the overworked, underpaid IT department, and is hardly considered low hanging fruit in the project portfolio. Lenovo believes it can make Chromebooks palatable to enterprises by solving the security issue through a combination of software and Chromebook's 2-D camera, enabling the device to recognize the user. If an imposter tries to log on, the Chromebook locks. And that's just one way Stoneware technology, now as part of Lenovo software, is enabling the PC-maker to go the industry one better.

## **Curing Innovation Phobia**

A couple of paragraphs back I referenced the healthcare industry's technology challenge. As with any monumental problem, it can be overwhelmingly daunting if not downright depressing to even think about how to solve it. It's just too big. Too complex. Somebody is bound to get hurt.

Well, just to use a hackneyed old worn out cliché: Rome wasn't built in a day. On top of that, the warp-speed transformations in the way we manage information have spoiled IT professionals, as well as end users. It's been my experience that, even though the creation of Universal Health Records and other complex projects may look impossible, taking the first step in the intended direction is often relatively easy. Not only that, but each step along the way can yield incremental and useful benefits. Get started with the low hanging fruit, like single sign on and consistent interfaces. Just like climbing Kilimanjaro, once you get your rhythm you'll get more

comfortable walking than you are standing still. Next thing you know, you'll be at the summit looking down.

As I've mentioned, Lenovo Software has a huge opportunity to have a significant impact on the healthcare industry, as well as many others, and I'm excited about it. Acquisitions are never easy, but I think we've made it past some of the expected choppy waters at the outset and are now in for some relatively smooth sailing. The strategy sound, so now it's time to execute, execute and execute, as they say. I encourage you to email me at [Carl's email address] with any questions, comments, or just to make conversation. I look forward to hearing from you.

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#### Interview transcript

As you take a look at the unified web desktop product, that's what it really is – it exposes the power of the directory for the end user. I can now enable an end user to leverage this huge investment that IT built and to get some real benefit out of it: SSO, appropriate presentation on the different devices. Then the industry started to explode and grow and the number of devices started to grow so the story just got stronger every time we turned around. Eventually the tablet market came and it really got crazy: I've got all these devices – how do I get my access and how does my access follow me? That was a driving factor in keeping us at the forefront with our customers and kept our technology relevant.

That was a great story five to seven years ago. Now it's trickier, crazier, because now we have things like Chromebooks and it just gets more chaotic in the industry, so that need still exists. Carl's big question: how is our software a "must-have" in an organization vs. a "nice to have." We've always been a nice add on, making it wonderful for your users to use any device and be able to manage from any device, but it's become less of a "must-have" as we've gone forward in the world, and it's now considered in some cases a luxury.

IT has lost their flavor. No longer the authoritative figure that determines what end user gets. People have phones now and people are used to managing their own experience. Users can dictate what they want rather than being told what they can have. We have a whole generation of users that don't want to work in that same old mode – come into an office and sit in front of a computer that was provided by the company. I still believe we have a huge opportunity, and companies should not treat it as a luxury. It should almost be a mandatory thing that they give, but IT organizations haven't really relinquished control. They need to wake up and smell the coffee or we're going to get left behind. Should "they" be selling into IT departments or to end users? Carl is a technology enabler who gives end users and IT folks the tools to achieve things that hadn't been thought of before we came along.

Back in the mid nineties MS and Novell were trying to educate IT community on why having a directory is important. Stoneware had the same problem at the outset of 2000 – constantly having to educate: why would you want to enable this, why would you want ubiquitous access from anywhere? Then tablets came along, Chromebooks came along, and it was like a scripted story because everything we had set the foundation for came true.

I believe we have a huge opportunity in healthcare. We're extremely valuable to healthcare. The way we get in there is we help them solve these business critical things that are on their plate today, so that they can breathe and then flourish and go forward. I feel like they're drowning today with HIPAA and compliance. How do we help them get a life preserver and then help them build a raft so they can thrive in this environment.

Healthcare is strapped with so much legacy stuff that they're bringing with them. It was easy for Google to go play in this new world because it didn't exist so whatever they defined that's the way it is. If you go back to healthcare, they're living this legacy – this is the way we've done it for fifty years. This is how we've done billing, accounting. We have an opportunity to bring healthcare forward while connecting their past and present, as well as preparing them for the future.

Education morphed a few years ago. As a result of budget crisis they had to innovate, while connecting old world to new – new low cost devices and legacy systems. Healthcare has yet to go through that transformation. There's no reason for them to get rid of all the old systems so how do we help them in that environment. Primary Lenovo focus, where are we must have vs. nice to have, plus what do partners offer.

Future of Lenovo and Stoneware

As a small company I loved being able to do what we wanted and innovate quickly, I was nervous about the acquisition. But now we have more opportunity. The greater Lenovo sees the value of the sw brand. Having the extra resources and extra sales interface. Can get an appointment with anyone. Now coming from a reputable company.

Lenovo technology – Chromebook group. Adding ID technology to Chromebooks to differentiate from regular Chrombooks. System knows if you are sitting in front of the screen. Locks if it isn't you. We have the opportunity to shape the way Chromebooks are used in the marketplace. Make secure for enterprise – makes for better tablet alternative.

Emotion insights. Enable presenters to get feedback from audience by reading their faces. Airclass product does analytics of facial expressions.

Yes you have some few challenges, like universal health record. Can almost be daunting to point of depressions. But you have to take these projects at a step of a time. Things will work out once started down the path. Industry is scared to begin. Get started, pick off low hanging fruit and get going.

Send me an email.