Citrix Cloud helps Autodesk further digitization

Autodesk helps employees, partners and customers imagine, design and make a better world. Its digital technology and cloud-based apps are a mechanism to design skyscrapers, bridges, movies, consumer products and much more.

Autodesk, Inc., is a global company that provides software and services for many different industries, including education, architecture, engineering and construction, media and entertainment and manufacturing, to name a few. Prakash Kota, CIO at Autodesk, passionately imagines the company's software as an enabler for opening up a world of possibilities. For Kota and his team, it doesn't matter what it is that a customer has envisioned or how far out of reach it may seem. "With Autodesk software, our customers can make anything," he explains. The company's software offerings run the gamut from 3D and CAD – from apps that facilitate product design and manufacturing to integrated engineering building information management (BIM) tools and more.

Moving to the cloud with Citrix

"We started our association with Citrix when we wanted to spin up virtual desktops. At that time, employees used this technology as secondary machines. Now, we have embarked on the cloud journey," explains Kota. "We looked at all the primary locations in which our engineers are located," Kota notes. "We had many data centers that hosted Citrix."

Today, Kota and his team have moved to Citrix solutions, and they are also leveraging public cloud providers for the core infrastructure. "We are truly stitching together the public cloud infrastructure and Citrix Cloud as the management plane so we can spin up virtual desktop and app instances wherever employees are working," Kota shares.

Industry
Software

Location
USA

Citrix products
- Citrix Virtual Apps and Desktops
- Citrix Cloud
- Citrix ADC

Key Benefits
- Citrix Virtual Apps and Desktops securely delivers access to users' apps and data regardless of time, network, device or work location
- Citrix Cloud serves as the management plane
- Citrix ADC load balances network traffic

For Autodesk, its cloud computing capability is crucial. Cloud computing in public clouds involves hosting services and delivering them over the internet. Remote, rented servers store and manage data, thus alleviating the need for private maintenance. Cloud computing also allows individuals and organizations to rent server space in order to decrease the organization's investment in onsite servers. Full applications, development environments and websites can now be hosted in the cloud.

Citrix digital technology is foundational

Kota and his team are invested in using digital technology and cloud computing as the means to ensure a great employee experience (EX) for the team and a great customer experience (CX) for partners and clients. "One of our first corporate goals was to digitize Autodesk – to convert what previously was paper-based graphical information into a digital format that can easily be used. Digitization removes friction from the user experience," he explains.

Removing friction, or making the work experience less tedious for users, isn't as simple as it sounds. The company has been working for several years to create an employee experience that is similar to what consumers find when they interact with their everyday devices. Using Autodesk technology should be just as easy to navigate as a mobile phone; it should be intuitive and secure.

Citrix Virtual Apps and Desktops contributes to a better EX

Citrix Virtual Apps and Desktops delivers a number of key benefits to Autodesk and its employees, among them an easy-to-navigate solution that remote employees can embrace on any device, anytime, anywhere, over any network. Intelligent capabilities in Citrix Virtual Apps and Desktops enable employees and supervisors to save time and concentrate on core competencies. For IT, Citrix Virtual Apps and Desktops enables quick automated onboarding, seamless scalability and financial benefits: Autodesk does not have to invest in expensive hardware to support more virtual machines because the Citrix solution is cloud-based. And the built-in security that is inherent in all Citrix solutions provides layers of protection for IP and sensitive data.

While easy-to-navigate technology is only one component of EX, it's an important one. What's more, digital technology significantly contributes to a great employee experience. Studies show that there is a definite tie between employee experience and employee engagement. Better engagement leads to better productivity. That translates into the delivery of better customer service. In fact, according to Gallup, employee engagement directly impacts productivity. Companies with high employee engagement report 20 percent higher productivity and 21 percent higher profitability.

"We started our association in the past when we wanted to spin up virtual desktops. At that time, employees used this technology as secondary machines. Now, we have embarked on the cloud journey with Citrix."

Prakash Kota
CIO
Autodesk

Load balancing with Citrix Application Delivery Controller (ADC)

Citrix ADC, another component of the solution, enables the Autodesk team to manage network traffic to the virtual desktop infrastructure. ADC provides load balancing and a single screen dashboard that gives IT visibility into how the virtual desktop and apps environment as a whole is functioning.

Stringent zero trust security is key

Ease-of-use is only one of many factors to consider. By delivering stringent security as a part of the technology equation, the work tools employees use should protect the organization's data and IP, and in addition, employees' sensitive information. Effective security not only must protect data, but also it needs to be transparent to users so that it does not cause friction in getting the job done.

This is exactly what Kota means as he describes the optimal environment for enabling employees to get their best work done. He says, "Security is a critical focus for us, and Citrix helps a great deal."

With Citrix technology, his IT team can dynamically apply security policies for the virtual desktop infrastructure that detect anomalies in user behavior. These anomalies might signal internal threats. Also, because data lives in the data center rather than on the actual devices themselves, sensitive information is always protected. That is the case even if a device is lost or stolen.

The Citrix zero trust security model is integrated into all of the company's technology. Zero trust is a strategy in which organizations do not automatically trust anything inside or outside organizational perimeters. Zero trust relies on contextual awareness to adaptively grant access to authorized users. It capitalizes on patterns based on identity, time and device posture. With Citrix, all of this goes on in the background and is transparent to the user, so they have a productive, frictionless experience with technology.

Cost versus value

"People talk a lot about cost when they discuss cloud technology," Kota explains. "I have a philosophy about that: cost is what you pay, but value is what you get. As long as we get a high degree of value from the technology we implement, it's worth the investment.

"For us, our engineers' time, engagement and productivity are what is most critical. We cannot expect engineers to work in one particular location. Today's workforce is remote and on-the-move," Kota continues. "Working with Citrix Cloud, we are able to provide a (Software as a Service) SaaS-like experience for our users regardless of their physical location."

A SaaS business model transformation at Autodesk

Recently, Autodesk went through a business model transformation. Kota muses, "I remember the days when we shipped DVDs to our customers. Now we provide cloud access to our products," he says. With a SaaS model, high availability, reliability, security and resilience are all key attributes that customers have come to expect. At the same time, Kota believes that Autodesk needs to have its systems set up in such a way so as to continually add value. "We release things on demand now," he says. "With some applications, it's almost hourly."

Systems cannot be taken down for maintenance. That is because at any point in time, Autodesk has customers logging in and consuming those services. Tapping into the cloud helps Autodesk deliver on superior uptime.

Autodesk was prepared for the COVID-19 pandemic and beyond

Autodesk was in a great position to support remote work when COVID-19 took the world by surprise. "We were able to quickly give existing employees and new hires what we call Cloud PC. Citrix Virtual Apps and Desktops is the underlying backbone of this. Users get access to all the apps they need to be onboarded into our work environment," he summarizes.

"Over the last eight months, we have proven that we can quickly scale with all of our Citrix solutions. The strong partnership we share is also a critical contributor to this," he continues.

"For us, the pandemic validated our vision of where we should be headed in the future. Now we are doubling down and executing on that vision," Kota says.

"Ultimately, every company will be a technology company. For those who have not invested enough in cloud or digitization, the pandemic was a wake-up call," he says. "Companies that are going to succeed in the future will have to accelerate the journey to cloud computing. Citrix is a great way to get there," concludes Kota.

citrix