



Architecting a Bright Future for Higher Ed With Managed Services

Educational institutions have historically embraced technology that improves the student experience and learning outcomes. From the blackboard to the smartboard, the latest tools of the age that students and teachers could engage with and “see” were included in budgets and added to classrooms.

This trend continued with the COVID-19 pandemic. Colleges and universities that suddenly had to pivot overnight and offer classes online made the shift, utilizing technology to support effective remote learning. Institutions were so successful that 70 percent of college students polled in a recent survey said they would take online courses in the future.¹

Investing in Infrastructure

Investing in the tools that directly support student learning in the classroom is necessary. What

is often overlooked in higher education is the investment in the back-end infrastructure and cloud technology to support day-to-day business operations.

Like Federal agencies, colleges and universities across the country face significant challenges associated with legacy infrastructure.²

- Large amounts of siloed data
- Custom-designed, antiquated databases and applications
- Satellite offices and partner schools working on different platforms
- Shortage of skilled technology team members to support the enterprise

These issues not only lead to a poor user experience, but significant security vulnerabilities. Ransomware attacks on colleges and universities

¹ How Do College Students Feel About Remote Learning?. University Business Magazine

² What It Takes: Modernizing Government IT to Meet 21st Century Challenges, Progressive Policy

doubled between 2019 and 2020 with at least 26 ransomware attacks reported in higher education in 2020.³

Failing to Modernize

Administrators point to budget constraints, procurement cycles, and bureaucratic red tape as major hurdles to IT modernization. But in the long run, failure to modernize will cost them in potential security breaches and lost revenue from students, staff, and faculty who choose other, more modern institutions. Consider this – failure to modernize affects:

- **The student experience.** Students touch more than just classes. They schedule classes, access school email servers, check on their financial aid, request transcripts, and much more, all through applications typically run by the college or university that are sitting on aging infrastructure. Applications need to perform well at the time the students need to access them, especially during high-demand times, such as semester enrollment periods
- **Research.** Higher education institutions are heavily invested in supporting research and attracting top researchers to their programs. Researchers demand access to the latest technology tools, including those that offer artificial intelligence capabilities. Researchers also produce massive amounts of data that needs to be stored, accessed on demand from various locations, and shared with those that have the proper permissions
- **Collaboration with network schools.** Many state institutions belong to a wider system of colleges and universities that need to seamlessly – and securely – share data

IT modernization takes time, budget, and knowledge. With operational budget cycles set far in advance, stretched technology teams often struggle to determine where and how to begin.

Opportunities in the Cloud and Managed Services

Colleges and universities have embraced cloud technology for student-facing needs, especially with the shift to virtual classes in the wake of the pandemic. On-premises, hybrid, or public cloud solutions offer numerous other benefits outside of the classroom:

- **Scalable storage.** Space is limitless in the cloud, and institutions can use as much – or as little – as they need, provisioning more storage during high use times and giving back storage that isn't needed during down times
- **Improved security.** Cloud technology offers colleges and universities the ability to secure and monitor applications that sit in the cloud, giving visibility to traffic flowing in and out, and building barriers through permissions to minimize threats



³ Colleges a "Juicy Target" for Cyberextortion, Inside Higher Ed

- **Better user experience.** Legacy applications sitting on aging infrastructure don't offer the experience today's students demand. Upgrading applications to the cloud improves functionality and performance

Using managed cloud services with a trusted advisor can help institutions go from legacy to modern technology, realizing cost savings, offering a better, more engaging user experience, and fortifying networks against breaches. Managed cloud services include:

- Architecture guidance
- System administration and operations
- System monitoring, alerting, and reporting
- Performance testing
- Application migration services

As-a-Service Partner

WebHouse, Inc., is a service-disabled, veteran-owned technology organization that helps colleges and universities modernize their infrastructure to realize the benefits of on-premises, public, or hybrid integrated cloud solutions.

Its team of engineers partners with institutions to analyze the current state, then design an infrastructure solution that automates, simplifies, and integrates the overall network architecture

to improve performance and productivity, vastly improving the user experience. WebHouse also works with institutions to protect critical assets and securely manage their data based on policies and permissions. This allows researchers to store and share their work with those who need it, when they need it.

WebHouse then provides ongoing support through hyperscale managed cloud services that adapt and scale cloud capabilities based on the institution's specific requirements and data needs. This improves performance when demand is high, and ensures schools aren't paying for resources they don't need when demand is low.

WebHouse understands the unique constraints in higher education. Recently, it partnered with a 250,000+ -student institution with 20+ campuses in the northeast United States, helping it to migrate out of an aging, legacy data center into a modern data center. The project took two months, from architecture design to migration. The institution had estimated the project would take two years without a trusted technology partner.

Leveraging a partner that has the expertise not found within the institution can save a tremendous amount of time in a school's modernization efforts. With competition increasing in higher education, making the investment now will lead to a brighter future.

Learn more at www.webhse.com.

