Improving Staff and Student Experiences on AWS

Executive Summary

To increase security and resilience and to stay abreast of the latest technology upgrades, Xavier University is migrating its Ellucian Banner enterprise resource planning (ERP) solution from an on-premises data center to the cloud. Ellucian focuses exclusively on higher education, helping organizations deliver high-quality experiences for students, faculty and staff. The solution uses more than 40 AWS services, including Amazon CloudWatch, Amazon GuardDuty and CloudEndure Disaster Recovery.

Supporting Educational Excellence

Ellucian is an AWS Advanced Technology Partner and holds an AWS Competency in Education. The company specializes in software solutions for higher education and helps clients become more innovative, resilient and secure, while providing high-quality experiences for students, faculty and staff. That's why it has developed a robust software-as-a-service (SaaS) version of its Ellucian Banner ERP solution on AWS. "Over the years, Ellucian has made a major investment to level up our certifications with AWS and take advantage of security and architecture best practices," says Michael Poole, Senior Vice President of Cloud Services at Ellucian. "We believe that AWS has the infrastructure and the technology toolsets to allow us to deliver the best service to the customer."

Xavier University in Cincinnati, Ohio, serves more than 7,100 students, including over 5,300 undergraduates. The institution has used Ellucian Banner for nearly 15 years to manage critical institutional data so that Xavier has insight into its admissions, registration, curriculum management, advising, assessment and financial aid.

Xavier was one of the earliest adopters of the Ellucian Cloud Acceleration Program (CAP), a collaboration between Ellucian and AWS to enable the rapid adoption of cloud services, including expert guidance, specialized tools and diverse pricing options. By moving to the cloud, Xavier will be able to increase institutional nimbleness, performance and financial adaptability. These benefits are enabled by foundational capabilities such as Amazon Elastic Compute Cloud (Amazon EC2) for computing and Amazon Simple Storage Service (Amazon S3) for storage, as well as Amazon GuardDuty for intelligent threat detection, and Amazon Kinesis for data ingestion. It also uses Amazon CloudWatch for application and infrastructure monitoring, and it relies on AWS CloudTrail for governance, compliance and auditing. CloudEndure Disaster Recovery provides additional peace of mind by continuously replicating operating system, system state configuration, databases, applications and files into a low-cost staging area in the target AWS account and preferred region.

Leading with Innovation

Cloud-based ERP helps the institution keep pace with the latest improvements and innovations. "Strategically, migrating to AWS puts Xavier in an excellent position," says Jeff Edwards, Associate Provost and Chief Information Officer at Xavier. "In the cloud, our Banner application will upgrade much faster to the latest version, which helps our end users to be successful."

Mark Brockman, Executive Director for IT at Xavier, adds, "We don't have the resources to handle the updates and upgrades that come out on a regular basis. On premises, we're lucky to do one big upgrade a year. Using the SaaS approach enables us to deliver the latest self-service applications to our users sooner."

Increasing Trust and Resilience

Enterprise-grade data backup, disaster recovery, failover and support will improve system availability. "On the backend, built-in encryption at rest will allow us to meet cybersecurity needs without having to invest our team's time and money into building and managing an encryption solution," notes Brockman. "From a disaster recovery standpoint, by using regionally mirrored environments we will be able to get up and running faster than we could with our current backup strategy."

Xavier will also take advantage of the ability to scale services up and down to meet demand. "With AWS, resources can be added and dropped instantly as needed, which is something we can't do on premises," says Edwards. The migration will significantly reduce the day-to-day challenges of managing infrastructure, eliminating more than 50 servers and the need to manage a relationship with a database vendor.

Using Data to Help Students Succeed

Xavier University also looks forward to making better use of data across the organization. "From a strategic perspective, it puts us in a better position to take advantage of cloud integration techniques that help share data between systems in the cloud," says Edwards. "That will, for example, allow retention counselors to view multiple facets of data about each student in one place, which will help them improve student success rates. Rather than seeing updates on a daily basis, data will be refreshed in real time."

Ultimately, migrating to the cloud will enhance the experience of Xavier's students, faculty and staff. "Our leadership was attracted to the long-term business benefit of moving to the cloud, especially putting the security of our most valuable system in the hands of people who do that for a living," says Brockman. "We're not a database company or an ERP company or a cloud services company. The best place for us to put our data is with AWS, because it's what AWS specializes in."