Achieving Digital Transformation through the Cloud

Institutions find themselves at different points on the cloud trajectory, balancing mission-critical priorities and ROI from cloud solutions.

IS DIGITAL TRANSFORMATION IN higher education possible without the cloud? Not likely. When that transformation is viewed as a journey, not a destination, the essential role of cloud-based resources as enabling and empowering infrastructure comes sharply into focus.

A recent survey of *Campus Technology* readers reveals just where some institutions now find themselves on their own cloud journeys, and what objectives remain. Respondents' level of cloud reliance and maturity varied, but when asked in what strategic areas the cloud had yet to be leveraged, "none of these" was the top response (33.8%). Asked to name the one strategic area they've transformed or advanced the ***most*** thanks to cloud capabilities, 31.2% of respondents cited data management; 24.7% referenced hybrid work/learning.

STRATEGIC AREAS IMPROVED THROUGH THE CLOUD

45.5%	Data Management	40.3%	Hybrid Work/Learning
35.1%	Administration Efficiencies	32.5%	Data Analytics/Reporting
26%	Cybersecurity	26%	Student Engagement

How colleges and universities establish their cloud models and use cases varies widely, with R1 institutions leading the way as far as variety and approach, yet the building blocks and foundational principles for cloud use remain largely the same, regardless of an institution's size or cloud maturity. When embarking on any new cloud project the first question IT and higher education leaders must ask themselves is, what do we want to achieve?

Institutional performance, operational efficiencies, student success — the primary goals of digital transformation in higher education today — would not be possible without the agility and scalability available only through cloud-based computing and resources.

Getting There

Without a clear strategy in place, digital transformation and cloud migration can start to look like a game of whack-a-mole, where initiatives are undertaken piecemeal without connection to a broader, holistic mission — or worse, undertaken only in response to an emergency or challenge as outdated infrastructure or solutions fail. One of the main

drivers of higher education's march to the cloud – the need to make sense of massive amounts of data to improve student engagement and outcomes – in many ways remains elusive.

In unveiling **the Top IT Issues for 2023**, Educause acknowledged leaders' ongoing challenges as they undertake the complex, multi-year work of digital transformation:

"Many institutions are working to address such issues as enrollment, affordability, and graduation rates and to improve areas such as decision-making, staff engagement, students' success, and diversity. Ongoing structural challenges can make this work more difficult and expensive. Data is often siloed, but the questions leaders need data to inform transcend the siloes…scaling solutions across the institution, or beyond it, by adopting cloud services could increase efficiency, but many existing processes or locally developed technologies don't easily lend themselves to off-the-shelf solutions."

As part of the ***Campus Technology*** survey, respondents were asked to name the cloud-based capabilities or infrastructure their institutions plan to adopt or roll out in the next two years. "Infrastructure management" topped respondents' list at 35%, followed by "backup and recovery" (32.5%), "data management" (24.7%), and "network monitoring" (22%).

AI/ML Knocking at the Door

Just as COVID-19 and the ongoing global pandemic forced overnight transformation of on- and off-campus computing maturity, the need to leverage artificial intelligence and machine learning capabilities represents the next tsunami crashing over higher education. As teams weigh where cloud solutions will take them next, understanding and articulating the need to include data-intensive computing, security, reporting, and analysis is imperative. That's all the more true as students increasingly demand a level of personalization and engagement that can only be delivered through a robust analytics and data infrastructure.

"Institutional decision-makers can no longer afford to fall back on what they think they know," Educause panelists wrote as part of the association's **Top 10 IT Issues: 2023: Foundation Models.**" This new endemic world is going to be drastically different from the pre-pandemic world, and as a result, higher education needs to continue to evolve. Analytics is one of the more important tools to help leaders and decision-makers understand how well they are operationalizing new strategic initiatives and how effective those initiatives are. Institutions implement a variety of analytics programs that are foundational to both short- and long-term decisions made by institutional leaders. But it's time to grow beyond today's analytics programs and to mature them for endemic management and strategy."

31%

of survey respondents said **DATA MANAGEMENT** is the one strategic area their institution has transformed or **ADVANCED THE MOST** thanks to cloud-based capabilities.

That's only possible through the cloud, and all the latest and greatest computing and analysis power third-party cloud vendors invest in and deliver to their customers.