

### **BACKGROUND: AN INDUSTRY IN TRANSITION**

Obtaining a college degree remains an important differentiator in the workplace—and an important personal endeavor for social and cultural enrichment. However, given the rising cost of a college education, some students wonder if the effort will pay off. In many cases, a four-year-degree program represents one of the biggest investments that students—and their families—can make.

"How can we make higher education affordable, accessible—and relevant for students at a time when information is everywhere?" asks an executive vice president of Finance Administration at a state university, who preferred to remain nameless due to an institutional policy. "How do we minimize the subsidy that is necessary to conduct research and deliver quality, efficient healthcare through our teaching hospital and clinical care units? Costs continue to go up, in conjunction with flat or diminishing state support. Yet tuition is no longer elastic—we can't raise it to the same degree that we used to, or middle-class families fill have a harder and harder time sending their kids to college."

This multi-campus institution, located in the United States, enrolls thousands of students and employs thousands of faculty and staff. The university offers a variety of educational programs, in conjunction with health care and research facilities. To remain relevant to students—and financially solvent for the many people who depend on this popular university for their livelihood—this institution has embarked on a technology journey that involves placing key business applications in the cloud. So far, the university has adopted cloud-based systems for human capital management (HCM) and finance, and it will soon embrace a cloud-based student information system (SIS) as well.

# **MARSHALING THE DATA**

Like many institutions of higher education, this university was motivated to transform its institutional applications due to a fundamental realization: learning models are changing, and colleges must adapt to survive. Today's students can readily obtain information and discover answers to every conceivable question, but they still need higher education to help them synthesize that information, apply it to specific domains, and attain progressive academic and career goals. "It's less about the expert in the front of the room, and more about meeting student needs in a variety of settings," the finance executive explains.

For example, rather than scheduling classes around a professor's preferences, colleges need to hold them at times and locations that will maximize student potential and help them complete the required curricula. "We must look to technology to offer better instruction and reach more students—not just through online learning, but through other mechanisms as well," he adds.

For this state university, one of those mechanisms involves optimizing operational tasks. In particular, they want to do a better job of sharing data among departments, so that employees across administration, academia, research, and IT can make better decisions—and properly allocate tuition, alumni donations, and other sources of funding. "We must continually ask ourselves: what are the real costs of running each program, and what are the revenues associated with these programs," the finance executive says.

Answering these questions requires integrated data—and that was the starting point for the institution's cloud journey. Until recently, the university had separate business applications for recruiting, talent management, financial aid management, financial planning, budgeting, and other core functions. With no integration—and no single system of record—it was difficult to share insights or obtain a complete view of cross-functional activities.



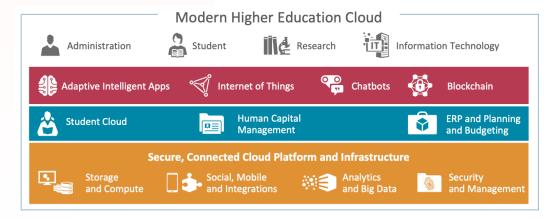
65 percent of senior IT officials think that assessing the benefits of campus investments in computing and technology resources is an important endeavor, vet only 16 percent have a formal program in place to assess the impact of IT on service and learning outcomes.

**Campus Computing Project** 2018 Survey<sup>1</sup>

https://www.campuscomputing.net/content/2018/10/31/the-2018-campus-computing-survey

For example, the finance team must be able to share insights with the HCM team—especially as the traditionally passive HR function begins to take on responsibility for managing the performance of the organization. A new faculty position should be maintained in the HCM system and reflected in the planning and budget system in order to enable knowledgeable financial planning and modeling. Since labor constitutes 65 percent of this university's expense base, constantly monitoring open positions within the workforce is critical.

To that end, the finance team is using a cloud-based enterprise performance management (EPM) system, budget system, cost accounting system, and financial reporting system—in conjunction with a cloud-based HCM system. Already, these cloud-based tools have yielded significant time-savings as hundreds of business planners establish budgets for the upcoming fiscal year. Finance and HR often pair up when moving to the cloud, due to their joint stakes in areas like budgeting and workforce planning, and these new applications make that union possible. "We are now moving to a model where we plan positions, we budget positions, we model positions and their costs, and we understand how they fit into program delivery or program support," the finance exec notes. "Integrated cloud applications are helping us to achieve this goal."



# OUT WITH THE OLD, IN WITH THE NEW

Previously, this college used an on-premises Oracle E-Business Suite ERP system, in conjunction with an Ellucian Banner ERP system. As IT leaders evaluated the ongoing costs of these applications and the associated IT infrastructure, they decided to stop focusing on maintaining the applications and pay more attention to the processes that drive the institution forward. According to the finance exec, the university was drawn to Oracle's integrated Higher Education Cloud suite not only because it simplifies data integration, but also because it allows the faculty and staff to transform fundamental institutional activities. Within that suite, the university has now standardized on two industry-leading software as a service (SaaS) applications: Oracle Financials Cloud and Oracle EPM Cloud. These nimble information systems enhance planning and budgeting while assisting with financial consolidation, close processes, account reconciliation, cost analysis, and profitability analysis.

The institution is simultaneously pursuing a staged migration from an Ellucian HR system to the Oracle HCM Cloud as well as migrating to Oracle's Student Cloud.

Unified cloud services power a productive and engaging user experience that is inherently social, mobile, and data-driven. Automated workflows and embedded intelligence allow these applications to recommend likely responses based on previous interactions. For example, the Talent Management modules within HCM Cloud application can analyze thousands of data points to match candidates to roles, streamlining recruiting and making it easier to fill open positions.

### The Old: On-Premises and Hosted Apps

- Fragmented, aging solutions
- Not built for the future
- Static user interfaces that yield disjointed experiences
- Multiple information sources that require manual integration
- Inefficient and difficult to scale
- Costly to upgrade and manage

#### The New: Integrated Cloud Apps

- A complete platform that delivers unified experiences based on a single source of truth
- Personal, intuitive, modern interfaces that drive engagement and adoption
- Contextual, prescriptive, real-time insights that enable better, faster decisions
- Flexible, configurable solutions that ensure agility and control
- Continual SaaS innovation that lowers TCO and boosts productivity
- Digital functionality for data integration, application development, security, mobility, AI, predictive analytics, blockchain, and many other emerging technologies

#### **ESTABLISHING A MORE ECONOMICAL IT FOOTPRINT**

There are many technical advantages to having a unified cloud platform. For example, cloud applications have virtually no scalability limitations, and the vendor can add new capabilities all the time—from the latest mobile-computing extensions to artificial intelligence (AI), blockchain, and machine learning (ML) functions. Unlike the tedious on-premises application upgrade cycles of the past—where major software updates were required to stay current with the latest advancements cloud solutions are continually updated with new technology and capabilities, all handled and maintained by the same SaaS vendor.

"We don't need to keep spending money on servers and database administrators and IT security—or bother with all the costs and complexities of running data centers," the finance exec notes. "We realized there are technology organizations that can do that better than we can, and that they can scale our systems better than we can."

While some institutions opt to simply migrate their existing on-premises information systems into a cloud environment, perhaps hosted by Amazon or Microsoft, these simple "lift and shift" strategies rarely deliver the complete benefits of an integrated suite of applications that has been designed first and foremost for the cloud. While the migration may reduce IT infrastructure costs, it does not typically lead to greater innovation, or transform the institution's core processes.

Thus, along with this decision to embrace cloud technology, this State University made another strategic decision: They selected integrated SaaS applications that have been designed first and foremost for the cloud—and that are hosted by the same vendor that created the applications. Oracle's complete cloud platform includes pervasive intelligence that spans the SaaS, PaaS, and laaS layers. Artificial intelligence is embedded into all the applications. Security spans the entire technology stack—from the servers and storage devices to the applications and database. And machine learning algorithms augment the knowledge and capabilities of users.

This strategy has proven to yield consistently higher innovation. For example, the State University's new cloud apps use AI technology to transform the quarterly close process from a linear, eventtriggered routine to a continuous activity. The finance system can automatically report exceptions as they occur, learn from those exceptions, and make recommendations to resolve similar issues in the future. Most importantly, these integrated applications make data accessible not only to faculty members and student advisors, but also to personnel in human resources, finance, and every other department that plays a role in student success.

# THE BENEFITS OF AUTOMATION

This university's automated cloud systems do more than merely simplify financial reporting and accelerate accounting close processes. They also supply integrated data to help the university meet its long-term academic and administrative goals. For example, with respect to institutional costs, the objective is not to eliminate programs that don't make money, but to better understand the economics of certain activities.

"We need to know the real cost of educational programs, research activities, and clinical activities, and that is very difficult to do in higher education," the finance executive admits. "However, it's getting easier now that we have aligned our chart of accounts, financial system, budget planning tools, and cost accounting tools around the ultimate goal of being able to understand where are we making money and where are we subsidizing programs."

In some cases, the payback from these cloud systems has been almost immediate. For example, the new financial planning system allows the finance team to report quarterly financial results along with detailed variance analyses. "This wasn't possible in the old environment," the executive continues.

#### **ORACLE SOLUTIONS FOR** HIGHER ED

Built natively for the cloud to support the entire institution and student lifecycle, Oracle Higher Education solutions include:

- Student Cloud Enterprise Resource Planning (ERP)
- Enterprise Performance Management (EPM)
- **Human Capital** Management (HCM)

All modules work together as part of a shared cloud platform.

#### **TECHNOLOGY OPTIMIZED FOR TODAY'S NEEDS**

Oracle Student Cloud is a complete suite of higher education cloud solutions that includes:

- Student Financial Planning
- Student Management
- Student Recruiting
- Student Engagement
- Student Support
- Student Advancement

These cloud modules drive student success and institutional innovation while maximizing operational efficiency.

"We could not close the books fast enough, we could not analyze accounting data fast enough, nor did we have one cohesive system for financial reporting."

Having a more complete data set and analytics tools helps the finance team determine whether each program fully supports the university's charter, and whether they need to implement new business models or refine existing models. Cloud-based business processes and workflows will soon simplify and automate many other important activities as well, from dispersing financial aid to recruiting top talent.

"In the short term, all higher education institutions want to streamline business processes so they can pay people faster and close the books faster and create more comprehensive reports," the executive adds. "But the long-term goal is to be able to better analyze the business, and project these insights forward."





According to a 2018 study by Nucleus Research, the total cost of ownership for cloud deployments is an average of 52 percent lower than it is for on-premises application deployments.<sup>2</sup>

### **CONCLUSION: EQUIPPED FOR THE FUTURE**

To remain competitive with others college institutions and continually relevant to students, today's institutions of higher education must intelligently optimize their operations, boost their institutional standings, and improve student outcomes. As this state university has demonstrated, having a unified cloud platform—supporting unified cloud applications—is the starting point for success. With integrated data and interlinked business functions, faculty and staff members in HR, finance, and many student-focused offices can work together to keep the institution on track.

"Higher education is critical to society, and to the economy at large," the finance executive concludes. "By learning to properly use data to their advantage, colleges can free up IT resources to focus on innovation, simplify operational processes, and empower faculty and staff members to improve student outcomes. If we don't figure out how to deliver an accessible and affordable education to students, society will suffer. Making all these things work is important not just for the people at this university, but for the entire world."

<sup>&</sup>lt;sup>2</sup> Nucleus Research, "Separating the Walk from the Talk" (July 2018)

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# Integrated Cloud Applications & Platform Services

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