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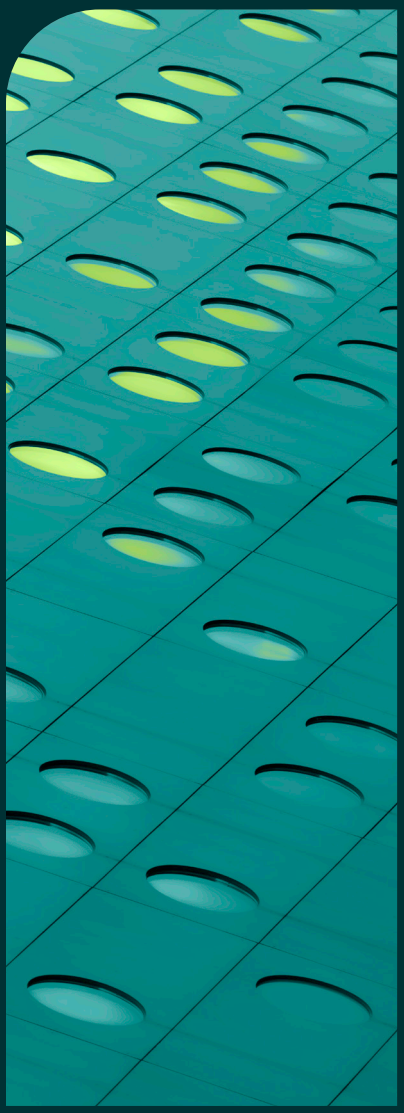
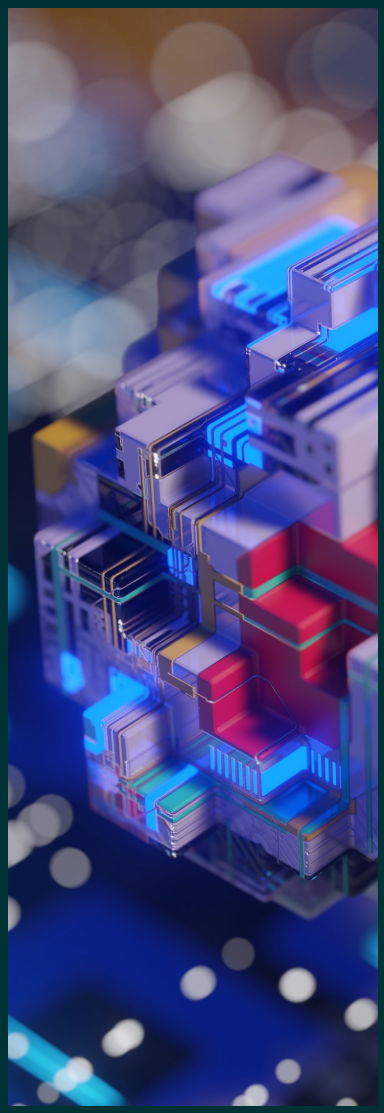
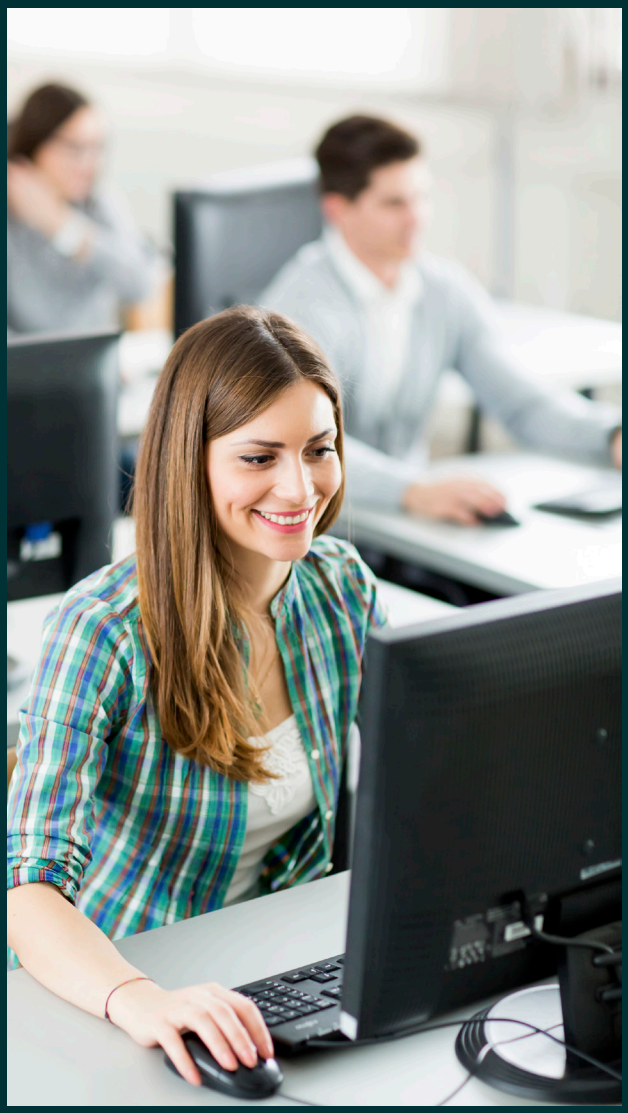
Universities cut costs without cutting corners

How three tech advances are helping higher education reverse its financial losses







COVID-19's powerful impact on higher education is accomplishing action that many university CIOs and CTOs have long urged sometimes skeptical or reluctant leaders to take: it has propelled the sector along its digital transformation journey. When COVID-19 caused more than half of in-person education programs to be postponed or canceled around the world, it exacerbated the financial difficulties that many universities already faced, finally driving adoption of technologies to support the spike in remote learning.

The revenue impact can be attributed to decreases in international student tuition fees, lost room and board income. In 2020, U.S. universities reported a staggering 72% decrease in international students, accounting for $38.7 billion and supporting 416,000 jobs in the 2019-2020 school year. With the loss of the traditional on-campus experience, students and their parents demanded tuition reductions for online classes and even sued universities for refunds while some have decided to take time off rather than attend classes online.

Universities are under pressure to adapt to current conditions through remote teaching and to be more efficient and productive. Experts predict that some universities could jettison degree programs, some may be forced to close and others seek merger partners.

Fortunately, powerful, proven advances in technology hold tremendous promise for that purpose. For example, in our work with one of the world's largest university systems, our secure, analytics-driven hybrid cloud technology and services produced a 33% reduction in IT infrastructure costs in concert with a 90% improvement in data delivery and data access performance to the campuses while supporting student enrolment rate increases of more than 40%. These outcomes help the client integrate hybrid cloud information resources to deliver more innovative educational and administrative services across more than 20 campuses. It provides a better user experience to more than 440,000 students and 52,000 faculty while enhancing operational efficiencies and reducing costs. In other words, when we talk about efficiency and productivity, we are definitely not talking about cutting corners, reducing services, or sacrificing quality. We are talking about expanding universities' ability to deliver value and a better student/faculty experience while reducing operating costs.

How? Cloud optimization, operational intelligence, and application modernization – three technology advances that have already created tremendous improvements in businesses of all kinds and are now being adapted to higher education's specific needs. These technologies have been driving financial successes for years; COVID-19 simply made them urgent priorities for universities.

Operational intelligence

One of the most frustrating impediments to efficiency and productivity in any organization is leaders' lack of instant access to all the information that should inform their business decisions. Delays in gathering such data means they can't make decisions in real time to avert problems, take advantage of opportunities, mitigate risks, or develop effective strategies. Universities are especially prone to siloed stores of vital information because of their federated structure. Each of their many departments or functions tends to have its own way of operating and assembling data.

When leaders are hindered from taking quick action, the organization suffers in a myriad of ways. University leaders might, for example, be unable to identify or predict service failure, detect and isolate cyber intrusions before damage occurs, or compete for grants in a timely manner. With their heavy compliance obligations, mistakes in regulatory reporting might go unnoticed. Unnecessary costs can mount steadily and go unmanaged for long periods.

The solution to this impediment is Operational Intelligence (OI), a wide-ranging analytics approach that enables prompt decisions and actions by using real-time data. OI relies on automated data gathering, artificial intelligence, and machine learning to deliver information in real time so that leaders can be proactive rather than reactive. It focuses on repeated processes and incidents so that by maintaining continuous observation and analysis of massive amounts of relevant data, it can reveal opportunities for better decisions and performance. Microsoft's AI solutions for higher education are a prime example.

For the university seeking to make the momentous changes that today's turbulent environment requires, OI is an essential management tool. With OI, administrators can provide the kind of detailed, reliable, real-time information that helps overcome individuals' natural resistance to change. They can quickly see when something is working or what remedial action is needed. They can quickly identify new needs that are going unmet or safety issues that are endangering students. IT can detect indicators of a potential outage or intrusion and take steps to prevent it. It's not an exaggeration to say that without OI, leaders are forced to either delay decisions or make them blindly and suffer financial and other losses as a result.

Cloud optimization

Cloud adoption, whether public, private, hybrid, or a combination, has enabled universities to realize welcome benefits for students, faculty, researchers, and staff: easy access to the resources they need, better collaboration among all parties, and learning opportunities for students no matter their location or device. It has also been a major gain to university finances, with predictable monthly expenses instead of capital expenditures, less hardware to purchase and maintain, and lower data center storage and maintenance costs.

However, adoption is not a one-and-done event. Adding, upgrading, integrating, and removing applications and components can introduce lag time and friction into the cloud environment. Costs can escalate, vendor pricing can change, peak usage can fluctuate unexpectedly, performance can degrade, and security vulnerabilities can creep into the environment. Moreover, cloud technology changes rapidly. The cloud you deployed last year may not have the timesaving, performance-enhancing features for your business you could benefit from today or the new technical designs and configurations that would streamline management. Lapses in governance create risks.

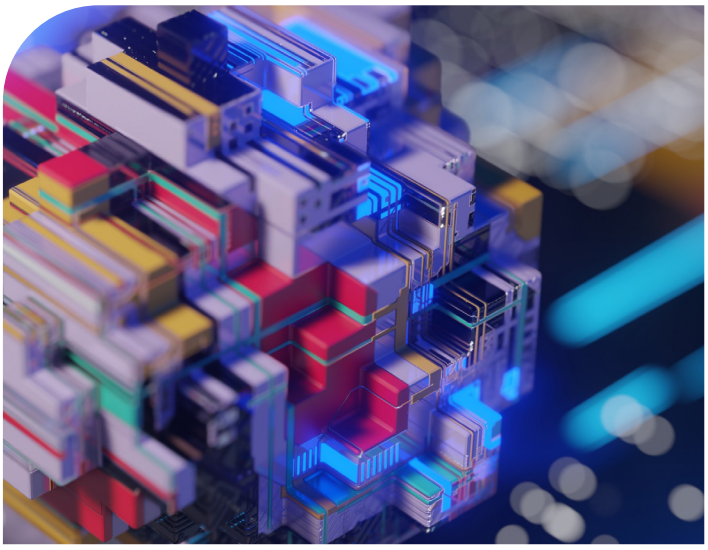
So, regular reviewing and fine-tuning are necessary to optimize the cloud environment and ensure it operates at peak efficiency. This allows administrators to discover overprovisioned or abandoned resources as well as opportunities to automate manual efforts, improve governance, and minimize risk. In other words, they can continue capturing cost savings while improving overall performance.

Application modernization

COVID-19 exposed many university legacy applications that are not digitally ready to support a long-term, high-volume virtual education experience. Aging applications don't just prevent organizations from making the most of new opportunities and meeting the demands of the new digital environment and the surge in distance learning. They are also expensive to maintain, demand skills that are aging out of the workplace, and hinder recruiting top-notch new IT workers who spurn them in favor of modern technologies.

But despite being a key feature of higher education IT strategy, application modernization lags intentions, largely because of fears that the major changes they require will lead to service interruptions and security vulnerabilities. Moreover, many such efforts have failed for various reasons, including a lack of alignment of the parties involved. The developers who see the solution clearly may not fully understand the business processes it must serve. The processes themselves may need to be improved before the application is made cloud ready. The system owners may not see the value of the proposed solution and resist large-scale change. The different ways end users actually use the system have not been taken into account. Critical dependencies may be overlooked. The cost of the effort is easily underestimated and under budgeted, especially when these challenges draw out the project timeline.

These challenges require a concerted approach if universities are to meet the ever-expanding needs of the current environment. To do so, you have to operate swiftly, with a targeted plan that ensures you choose your modernization priorities according to your strategic needs.



This will determine whether the business process itself needs to change before the application is modernized. With that knowledge, you are ready to adopt a lean, fast, agile delivery model that builds in security at every stage. This model can prevent those problems of cost overruns and delays along with worries about disruptions and intrusions.

Above all, this rapid execution enables universities to reap the value of application modernization quickly, namely cost savings, improved performance, faster market responsiveness and innovation, and IT talent availability for priority business needs.

Conclusion

In summary, to cut costs without cutting corners, universities can:

- Leverage operational intelligence to make data-driven decisions
- Adopt cloud optimization as a continuous process, not a one-time event
- Take a phased approach by focusing on small projects that can deliver faster returns and enhanced experience for users

By doing so, universities will be able to fast-track cost reduction and performance improvements and enhance ways to deliver services to students and faculty.

For cloud evangelists who have long commended the cloud's vast potential to university administrators, the pandemic has provided the impetus they need to accelerate the realization of the cloud's benefits to support the spike in remote online learning. With cloud optimization, operational intelligence, and application modernization, universities can turn the challenging new environment to their competitive and financial advantage.

To explore how Unisys Cloud, Applications and Infrastructure solutions can help you turn your cloud plans into reality, visit us online or contact us.

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