UWA
PERTH·AUSTRALIA

A holistic and inclusive student experience at The University of Western Australia (UWA)

Bold vision statements such as "Every student should have the same digital experience, access and opportunities regardless of their background, location or circumstances" are often ideals to aspire to and work towards. Not at UWA. Over the last three years, the University has completely revolutionised the way students and staff engage with their work, removing barriers to a seamless digital experience, and levelling the playing field for digital access.

Driven by equity and powered by technology, UWA took a holistic and inclusive approach to the student experience to create a sustainable, collaborative and creative environment for students and staff. Over the course of three years, the University realised its bold vision through three key projects: Lab Compute Modernisation, Connected Campus and Teaching Spaces Upgrade.
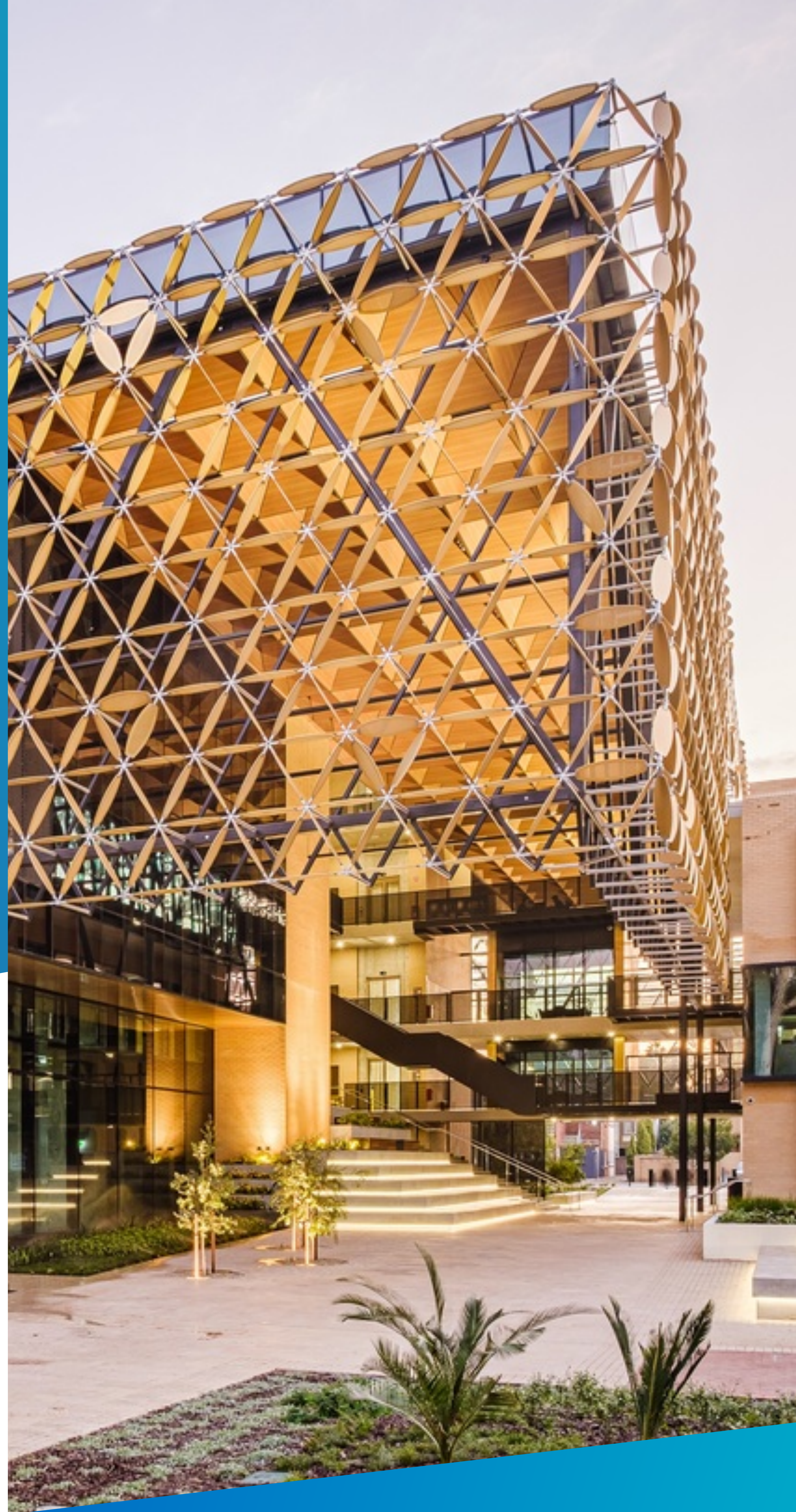
Snapshot

Client: University of Western Australia

Location: Perth, Western Australia, Australia

Students: 28,000 FTE

AppsAnywhere Adoption: 2023

AppsAnywhere, together with a few key technology partners, played a central role in shaping and executing UWA's cloud vision of delivering virtualised applications in separate containers, to reduce workload and improve user experience and cybersecurity. With the pandemic as a catalyst for change, and the support of its technology partners, the UWA IT team achieved incredible results. Jamie Graham, Associate Director Infrastructure and Platforms shares their story:

Flexible and seamless access to course software from any location and any device

Students no longer need to be in specific computer labs to get access to specific software - they can do that from the comfort of their homes, the library, or the café. This means that students on the more remote Albany campus have the same experience and access as those in Perth, or as international students who can't be on site. This is enabled by AppsAnywhere in combination with VMware Horizon. The experience students have on their own devices is an important aspect of supporting different styles of learning, different personal circumstances, and particularly those students with reduced mobility. At UWA, the classroom is no longer just a physical construct, and having a digital environment to complement it has been well received by students and staff.

Student equity and a sense of belonging

Digital equity is multi-faceted at UWA. It starts with offering all students the opportunity to have the same digital experience, no matter the power of their device, or the lack thereof. By accessing course applications from a virtual portal, they behave as if running on a powerful computer, even if that's not the case. If students' laptops break or no longer work, the University has a free loan program, so any student can borrow a laptop for a semester or until they get themselves a new one.

Students experiencing financial hardship are provided with a voucher to select a laptop of their choice that they can keep. This has been innovatively funded by the income from recycling old computers.

Another key aspect of student equity is supporting students to work while they study. Many UWA students have a job alongside their studies, which enables them to practice the skills and knowledge they learn in their course and support themselves financially. Before this transformation, students would spend long hours in the library or the computers labs on campus, often well into the night, putting themselves in vulnerable positions driving or walking back home.

BYOD and a more agile and versatile managed fleet

By replacing under-utilised desktop computers with laptops and enabling bring your own device (BYOD), students were able to access the full university experience on their device of choice. Since students were only using about a quarter of the overall fleet of desktops at peak times, and about 10% of library computers at any time, they welcomed the ability to launch their applications from a virtual environment and do their work on their own devices. The University provided loan laptops in libraries on campus, sourced from HP and Dell, available 24/7 in LapSafe lockers, either for short (day) or long (week) term use. In addition to this, semester long loan laptops are also available.

Flexibility of teaching, with over 200 hybrid teaching spaces

By removing static computer labs, these spaces could be transformed into additional student or teaching spaces. This freed up around 3,000sqm of floor space that students could access to collaborate and create together. Over 200 teaching rooms are equipped with video cameras connected to Teams for hybrid capabilities so students could attend classes from anywhere.

Enhanced connectivity with powerful wifi across the campus

Through the Connected Campus project, UWA is on track to renew and expand its wifi network, tripling the ~1,500 wireless access points across campuses to over 4,500 by the end of 2025. Students will enjoy high speed internet across all personal and managed devices in outdoor areas and high-density spaces across all campuses. This was instrumental in implementing a successful BYOD program.

In addition to wifi connectivity, students are also able to print from their devices, including BYOD, through AirPrint, on the campus printers connected in the virtual environment. Everything is connected to their OneDrive, so they can save their work on their personal device and continue it on any campus device, from any application they use.

All devices at their peak performance

To further remove friction and frustration related to technology performance, UWA replaces its devices every four years. Staff (both teaching and professional) receive a new laptop and so do students who need to borrow them for short or medium term. Each year during the summer, devices are checked and optimised, but with most applications being delivered virtually now, it's a much easier job than previously. This shorter lifecycle may seem unsustainable, but the University operates a successful e-waste recycling program where older devices are given a new lease of life, something that resonates well with students, and provides funding for the financial hardship programs.

Re-building a sustainable infrastructure that can stand the test of time

A lot of hard work has gone into this technology and experience uplift, most of which students and schools are unaware of — as it should be. To 'make life easier', the IT team has had to upgrade all its back-end IT infrastructure. Building a solid 'back bone' was key to providing an effective and efficient solution to realise the student experience vision and sustain future growth. The digital infrastructure is now housed in outsourced data centres, which has removed a lot of the previous systems' complexity, especially the quick 'make-shift' solutions implemented during COVID.

Bold vision, innovation and perseverance

This 'big bang' transformation is a bold approach, one that not many institutions can pull off. While things are running smoothly now, it has been quite a journey for the team. Starting with a pivot half-way through deploying one solution, to incorporate the newly discovered AppsAnywhere technology, re-writing the script and the vision of what is possible, to managing a large scale and very complex change.

This has not always been a smooth process, and the success it is today can only be attributed to the hard working and innovative team of IT professionals at UWA. Replacing the hardware, introducing a new virtual application system, moving its whole IT infrastructure to the cloud, introducing BYOD and upgrading teaching technology all in one go may not be everyone's preferred approach, but UWA made it work.

A strategic investment that delivered results

If you are wondering how much this whole transformation cost, you're in for a surprise. We are talking about three major projects crossing over, each with its own budget. But the foundational initiative of modernising and virtualising the IT infrastructure and device fleet cost just as much as maintaining the status quo.

So, to only replace its managed devices would have cost the university as much as:

- Introducing AppsAnywhere, a central portal for all applications for students and staff.
- Restructuring its virtual desktop infrastructure.
- Outsourcing data storage to data centres.
- Introducing and supporting BYOD, allowing students to run course software on personal devices.
- Replacing desktops with monitors and docking stations.
- Providing laptop lockers with free loan laptops for short and medium term.
- Free laptops for students in financial hardship.
- Additional human resources involved in the project, including business analysts, project managers and software packagers.

Additional sustainability and efficiency gains

Some of the benefits gained from this transformation include:

- **Sustainability:** Enhanced energy efficiency and savings, less e-waste and carbon emissions associated with commuting.
- **Productivity and efficiency:** Students can access software immediately, and they can do their work anytime and anywhere, with less commute, distractions and frustrations. IT staff reduced their workload associated with maintaining the physical computer labs and have more capacity to focus on less repetitive tasks.
- **Cyber Security:** The new system is by design more secure as it operates in a virtual environment with less footprint on devices. This protects both the student and managed devices, and any vulnerabilities can be immediately isolated at source.
- **Data informed decision making:** Through AppsAnywhere analytics, UWA IT removed 40-50 applications no longer in use, saving money from cancelled licences and time from packaging and supporting them. Licences are also easier to reallocate, allowing students and staff immediate access to software for determined periods as needed.

- **More flexibility for schools:** In addition to the hybrid teaching spaces and improving timetabling challenges, the new system allows more flexibility to use different versions of software at the same time. Teaching staff can choose which package of software is needed as they can easily co-exist in the containerised virtual environment without conflicting.

When considering the cost of transforming the student experience and adding the quantifiable and unquantifiable benefits, the sustainability and efficiency gains for the institution, students and staff, can universities really afford to maintain the status quo? What is the real cost of not acting now?

Whatever comes their way, the team at UWA is ready for the future, with scalable technology that can meet the changing needs of today's and tomorrow's students.

Book a demo today!

**Find out more at:
www.appsanywhere.com**

✉ **sales@appsanywhere.com**

AppsAnywhere is a global software delivery provider that revolutionised how students and higher education faculty and staff access applications on campus computers or on personal devices. Since 2009, AppsAnywhere has been at the forefront of app management innovation, providing equitable, consistent and seamless digital experiences for more than 3 million students, in 300 institutions, across 22 countries.

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