

# University of Wollongong

Industry: Education | Process Focus: Digital Transformation

## Digital Transformation mobilises and automates the staff and student experience at the University of Wollongong.

The University of Wollongong (UOW) has become a benchmark for Australia's new generation of universities. According to the federal government's 2018 Quality Indicators for Learning and Teaching (QILT), UOW is the #1 university in NSW, and it is ranked in the top 2% globally by the Times Higher Education World University Rankings 2019, and others. UOW has built an international reputation for world-class research and exceptional teaching quality.

With five faculties — Business; Engineering and Information Sciences; Law, Humanities and the Arts; Science, Medicine and Health; and Social Sciences — UOW currently offers more than 300 degree programs across both undergraduate and postgraduate levels to more than 32,000 students around the world.

### The Goal

UOW is committed to preparing all students for modern life and work, and part of this is providing modern ways of studying. To deliver on this, the University decided to undergo a digital transformation that would mobilise and automate the staff and student experience, as well as provide operational efficiencies throughout the university.

However, with the high demand for automated apps, it was not realistic for the IT department to manage this alone. Instead, UOW needed an enterprise low-code Business Process Management (BPM) platform that was capable of accelerating app delivery while making it possible for various faculties and departments to manage their own app development and deployment in a centrally-governed manner.

### The Solution

Using Appian's enterprise low-code development platform in the cloud, UOW deployed 32 applications in 18 months. These BPM and Case Management oriented applications span many faculties and departments.

The first app deployed, which was the Feedback@UOW case management app, was a big success. It led to easier student/University engagement and provided the University with improved capabilities for managing and acting upon student feedback, as well as better insight into the student experience.

Subsequently deployed applications include overseas help application & management, student subject management, inbound and outbound

student exchange and short course applications, student mobility assessment and processing, homestay programs and digital herbarium management, cost centre management forms, contractor induction, staff study leave, and more.

“To date, UOW has processed more than 6,000 student cases through applications on the Appian Platform, and this number will continue to increase as we add more apps to manage more aspects for the student journey,” said Fiona Rankin, CIO at the University of Wollongong. “Appian’s simplicity lends itself to development speed, and we have attained high velocity delivery through a ‘partner developer’ model where students, faculties and other university departments can create apps themselves.”

### Staff and Students Creating the Solutions

To support its “partner developer” model of work, Appian worked closely with UOW to equip staff in various departments and business units to move away from manual processes and develop their own BPM Apps projects.

“Appian has been a big supporter of UOW enabling its own staff to take ownership of and lead the development of apps that directly support the work they do,” said Karen Astley, Appian’s Vice President Asia-Pacific. “This has allowed for the rapid development of apps that immediately make the day to day work of staff more efficient and productive. And because staff own the app, they can take charge and reshape or enhance it with new elements at any time, to create continued improvement.”

UOW has been able to take its unique “partner developer” approach following an extensive nine-month Appian mentoring program, including training with key university staff members. While the goal is to make UOW self-sufficient, Appian is also on hand for the university to advise on best practice for the architecture and development of apps.

“We have a very strong pipeline of apps we want to build in the coming years,” said Rankin “and visibility of the BPM program has increased across UOW, so we are now making it easier for business units to engage with us on their ideas. We have developed a landing page to help staff and students navigate through their BPM projects.”

UOW has also worked with Appian to develop a comprehensive skills training program to prepare students for careers in the emerging world of low-code application development. The program uses the Appian Platform and Appian Trainers and resources.

“The technology used in work, and IT jobs in particular, is constantly shifting,” said Astley. “Low-code development technologies and techniques are becoming an important part of the digital transformations that are happening in countless organisations. As a result, UOW is working closely with Appian to ensure its students and staff are ready for the future of work.”

The Appian student boot camp program is offered to UOW undergraduate and graduate students, at no cost. The workshops, which are run by Appian in conjunction with UOW IT staff, provide training in the technical aspects of low-code platforms and the Agile methodology of low-code development. Students are then supported to build new IT applications on the platform.

To date, UOW has run annual student boot camps for classrooms of fifteen participants and more are planned for the future. Seven of the initial boot camp participants are now working on the program as developers and app testers.

## Student Mobility Application

One highlight app UOW built on Appian was designed to automate and digitise the application journey for international students.

UOW's International Online Student Mobility Application streamlines application processes for international students wanting to study abroad, undertake an exchange or take part in the Visiting Research Program. It also provides onshore students the opportunity to study with a partner University overseas.

Previously, applications were submitted, evaluated and completed using a manual paper-based process. With Appian's enterprise low-code development platform in the cloud, UOW rapidly switched to an online application submission, evaluation and approval process, all within one app.

"The application process is the first interaction international students have with the University," said Rankin. "It was important during this first interaction that we presented ourselves as modern and efficient by making the application process completely online and as simple and fast as possible. With the support of Appian, we can now offer inbound international students one simple mobile experience to quickly apply for and fully manage their study abroad or exchange program."

Within UOW's International Online Student Mobility Application, inbound international students can complete online applications, submit course preferences, view student transcripts, receive notifications of actions such as faculty approvals, add new subjects, keep track of their study plan, and manage fees, payments and grants.

In the first six months, the app was used to process more than 200 outbound exchange and study abroad applications, more than 200 outbound short course

applications, 150 inbound exchange applications, in excess of 200 inbound study abroad applications, and roughly 50 inbound research applications.

The app has also significantly enhanced the international student application process for UOW's staff. Managing applications online from end-to-end has streamlined processes and increased the speed with which they can accept and process applications.

Additionally, UOW has now extended the Student Mobility App by adding a 'Homestay App' to assist international students in finding accommodations in the community close to the University.

## Transformation into the Future

Now that the Appian platform and UOW systems — including the student system, HR and Finance — have been fully integrated, UOW is better positioned to move information to its data warehouse to provide further business analytics and to meet reporting requirements.

As the University's digital transformation program evolved and matured, UOW established a BPM Centre of Excellence (CoE) team to work closely with business units to guide them in best practice and their app development. They manage app development across three core streams: simple forms processing, case management for complex processing, and new applications for automating processes. The CoE allows UOW to expand its BPM program into the future with standardised governance, processes and guidelines for each of the streams. By standardising the look and feel of apps across the board, UOW will reduce the amount of training required for repeat users of multiple apps. The CoE is also ensuring greater involvement of stakeholders during test drives and showcases in order to reduce last minute changes to apps.

Into the future, UOW plans to further integrate its BPM platform into its EDRMS and CRM systems, add new elements such as chatbot to the BPM, as well as expand into its offshore campuses. Other apps in the pipeline include a psychology asset loan form, commercial research, UOW staff and student Honorary Clinical Academics database, assignment submission forms and a Simulated Patient Expression of Interest for use by its Science, Medicine and Health faculty.

### The Recommended Approach to Digital Transformation

UOW's digital transformation and use of Appian's low-code BPM platform has facilitated a big change in the way the university creates a modern workplace and learning environment for its staff and students. UOW is now a more agile organisation that better collaborates, has a flexible approach and is adaptable to constant change.

The university has moved away from the traditional approach to app development in order to drastically increase the delivery speed of new apps, through the use of the Appian Platform and internal "partner developers." The University sees the transformation as a huge success and has recommended this approach to other higher education organisations.

"Appian is focused on helping Australian organisations, including several universities, deliver on their digital transformation goals," said Astley. "Universities operate in an increasingly competitive global market and we encourage them to adapt an Agile approach to deliver solutions in a rapid manner. We empower customers like UOW to streamline their operations, maximise their resources, and perform faster and more efficiently than ever before."



Appian provides a low-code automation platform that accelerates the creation of high-impact business applications. Many of the world's largest organisations use Appian applications to improve customer experience, achieve operational excellence, and simplify global risk management and compliance.

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