# How Assurity contributes to 'invisible' payroll for New Zealand's educators

CASE STUDY

Over the course of a multi-year engagement, Assurity Consulting has supported payroll provider Education Payroll Limited (EPL) in the modernisation of its work processes, helping to introduce Agile and DevOps practices and drive an increased focus on efficient testing. The engagement has equipped the organisation for rapid response to change which, for its operations, is a constant. As a result, EPL smoothly, accurately and consistently executes payments for one of the largest payrolls in Australasia every two weeks.

EPL is responsible for paying around 100,000 teachers and support staff in around 2,500 schools every fortnight, distributing approximately $214 million per pay period and $5.6 billion per annum. The organisation has the Ministry of Education as its sole customer. In 2019, EPL started building a fully online payroll service for schools called EdPay – the future of schools' payroll in New Zealand.

ARLENE WHITE
CHIEF EXECUTIVE, EPL
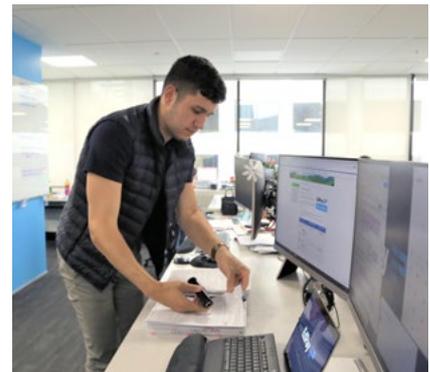
Situation

Aside from the sheer scale involved in delivering accurate pay packets to teachers and support staff every two weeks, EPL faces additional challenges which include the unusual way in which education personnel are remunerated. Rather than the 40-hour work week or 52-weeks-a-year cycle familiar to most of us, teachers are paid on a 365-day basis.

This necessitates a high degree of customisation of the payroll system, explains EPL Chief Executive Arlene White.

"It's not a standard payroll. There are 15 collective agreements (and 16 corresponding individual employment agreements) we must comply with, and no two are the same. There are also term-time only and annualised non-teacher employees to complicate things even further. We must also take into account annual leave and holiday pay, which are pro-rated and calculated against the 365-day calendar, and sick leave."

This results in an estimated 70% customisation to the underlying software. "It's a spaghetti junction and the customisations, while crucial and necessary, make the similarly necessary, crucial and constant changes very challenging," White adds.

The ongoing modernisation of the payroll process, which includes the introduction of the EdPay portal, is necessary for a simple reason. Previously, payroll was largely paper-based and prone to the shortcomings of manual processes – but at vast scale.

"This meant processing change requests and tickets manually to accurately make wage payments. We would receive up to 13,000 hand-written forms every fortnight, and up to 1,000 phone calls a day, with particularly busy times at the start and end of the school year."

In the 21st century, remarks White, this just is not a good way to do business. "We recognised several years ago that there was a better way, and that led to a business case for a digital front end, where administrators and principals submit requests online. What we've built with EdPay will lead to close to 90% of interactions being non-paper based."

She adds that, due to complexities, there will always be exceptions that are better handled using manual processes, though these will see 'lower level' digitisation, rather than the fully automated 'straight through processing'.

assurity

EDUCATION PAYROLL
Rārangi Utu ā-Mātauranga

Solution

Prior to and throughout the creation of EdPay, EPL has looked to Assurity Consulting for support in testing, shifting to Agile and DevOps ways of working, and more. This followed a 2016 agreement from the Ministry of Education to a detailed business case including 21 operational and technology investments which would transform the payroll.

Initially, execution was planned using the traditional waterfall approach. However, recognising the limitations of a 'big bang' approach to change, and in an environment where change is so frequent that the wholesale delivery of large change programmes is highly risky and potentially not even possible, Scaled Agile Framework (SAFe) was chosen.

EPL Quality Assurance Manager Frank Stubbe says that in short (and with the benefit of hindsight), waterfall simply would not have achieved the desired outcomes. "Big bang does not work. As the programme has rolled out, we've had to adjust and refactor what we were doing on a regular basis. We have also responded rapidly to changing priorities and circumstances, with the COVID lockdown as a case in point. Agile and DevOps has provided the flexibility to do just that."

When EPL started with Agile and SAFe, it called on Assurity Consulting for advice, feedback and expertise. "We also adopted a continuous improvement model, and Assurity was involved in multiple aspects, including testing and DevOps early on, and Agile coaching, guidance and quality assurance," he explains.

The work done by Assurity Consulting includes being part of the initial DevOps proof of concept, supporting the establishment of Agile practices, IT quality assurance, testing and test automation.

Subsequently, the focus has turned to continuous improvement and Agile practices, lean testing and automation practices.

Results

For the administrators of probably the most complex payroll system in New Zealand, the biggest measure of success is invisibility. When the job is done well, nobody notices – pay arrives on time, accurately and consistently in employee's bank accounts.

And that signals a step-change in EPL's modern way of working, which has been supported by Assurity Consulting.

"Over the years, Assurity has been a great partner that never misses a beat. They have proven their ability to become part of our teams, share their knowledge and expertise, and deliver the support we needed to create successful outcomes for teachers and education support staff," confirms White.

She singles out functional testing of complex systems as a case in point. This involved not only the smart application of automation, but also a new approach. "It's something that's hard to get your head around because we have to constantly make changes to the core product. Assurity's teams collaborated with our coders to build tools that allow us to do that faster," she explains.

The new approach, adds White, discarded the 'traditionally' adversarial relationship between developers and testers, with the disciplines working together as a team seeking a common outcome. "We see the Assurity and EPL cross-functional team sitting and working together to carry out the planning, testing and orchestration."

The benefits of being able to work faster were huge, adds White. "Because with the relentless fortnightly pay cycle, time is of the essence and there is never enough of it. The tools and expertise we've built with Assurity have given us the confidence to, for example, upload collective agreement changes within six weeks, rather than the 12 it previously took. It is a miracle that we can do that – it's phenomenal and that's thanks to the testing we are able to do."

Assurity's 'knowledge sharing' approach has become particularly apparent as EPL builds internal capability around testing, Agile and DevOps practices – rather than seeking to ring-fence their expertise, White says Assurity has provided support and made itself available with personnel on call as required.

White notes: "It's not only skills that Assurity provides, but also an outstanding attitude. That's why, as we move forward, Assurity is seen as a source of sound advice and input for the maturation of our Agile practices. And in periods of peak demand for testing, we know where to look."

At a glance
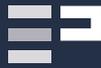
EDUCATION PAYROLL Rārangi Utu ā-Mātauranga	**Company:** Education Payroll Limited	**Industry:** Public Sector

Situation:

EPL needs to smoothly, accurately and consistently execute payments for one of the largest payrolls in Australasia every two weeks and is building a fully online payroll service for schools called EdPay – the future of schools' payroll in New Zealand. EPL has looked to Assurity for support in testing, shifting to Agile and DevOps ways of working prior to and throughout the creation of EdPay.

Services provided:

- Agile coaching and SAFe training tailored to suit EPL's organisational requirements
- Testing and DevOps services in a managed services model
- Quality assurance services
- Development of customised reusable test frameworks to meet the unique requirements of EPL's payroll platform

Outcomes achieved:

- Modernisation of EPL's work processes, including supporting EPL's digital transformation journey, shifting from a highly paper-based payroll process to one that is 90% digital
- Introduction of Agile and DevOps practices to EPL, driving an increased focus on efficient testing
- 50% reduction in time required to upload and put into effect collective agreement changes to the EdPay system (12 weeks reduced to six weeks)