Acknowledge the Wurrundjeri people of the Kulin nations, the traditional custodians of the land on which we are gathered today. We pay our respects to them for their care of the land.

Ladies and gentlemen. Thank you for inviting me, as a proud patron of ATEM, I am very aware of the important role ATEM plays in our sector and of the significant contribution professional staff make to the success of our tertiary institutions. Indeed today it is a fact that our institutions would grind to a halt without you.

While universities today deploy ever larger pieces of infrastructure – science laboratories, complex layers of ICT infrastructure, complex and technology-rich learning spaces – our universities are first and foremost people places.

Our people are our greatest asset – we say it often and with good reason: institutional excellence, institutional success, comes from the exceptional talent and commitment of the academic and professional staff in our universities working together towards a shared vision.

This evening I’ll be talking about some of the challenges we face today, and how university administrations globally are evolving in response to twenty-first century demands – but our history informs our future so let’s look back a few 100 years.

It’s not hard to recognise the administrative functions of today’s universities in the managerial structure of our twelfth century forebears.

In the middle ages, faculties were called ‘nations’ rather than faculties or colleges: an etymology founded in the Latin word for ‘homeland’ or ‘tribe’, which while it seems a tad quaint today, resonates quite nicely with our current view of learning communities.

Each ‘nation’ was headed by a Proctor or Rector assisted by a Dean. Deans were assisted by a bursar (known as a receptor), a secretary known as a notarius, (very apt), a treasurer and a Beadle. The Dean reported to a Concilia Facultatis – very like our faculty boards or councils today.

The Head Beadle (or Bedullas Major) was the fore runner of today’s Registrars and he (they were always he in those days) was assisted by the Bedullas Minor, the predecessor of our Faculty General Managers. I am sure all staff – academic and professional - have faced the terrifying prospect of a letter or these days, an email from the Head Beadle or the Bedullas Minor. Almost nothing has changed!
The Beadles were responsible for overseeing the university’s finances, keeping staff in order, organising meetings, organising admissions and maintaining a register of graduates … Sound familiar? And they also rang the chapel bell and walked at the head of academic processions. Today’s universities still have an *Esquire Bedell* to carry the mace at graduation ceremonies, a vestige of beadles past informing us through ceremony of where we came from and what we stand for.

Until quite recently it would have been fair to say that the basic building blocks of universities – their administrative structures, their governance, their business model and their instructional design – have changed little since the first European university was established in Bologna in 1088.

We work in a sector that has traditionally been highly resistant to change. There’s an old joke…

Q. How many academics does it take to change a light bulb?
A. Change? Change? Who said anything about CHANGE?

But our universities are changing, because the world itself is changing. The pace of change is extraordinary, the dynamics are complex, ambiguous and highly unpredictable, and the impact on the work we do is profound.

Competition is a key driver of this change; not only are we in an unequivocally global market, the centre of gravity in higher education has shifted perceptibly to Asia, where more than half the world’s population is located.

And thanks to government investment and global connections, Asian universities are leaping up the international university rankings. Asia had five universities in the top 50 in the Times HE ranking and 14 in the top 200 with Singapore’s National University of Singapore leading the way.

Policy is another driver. It’s an interesting paradox, that just as universities in most western countries are experiencing constrained public funding, our Asian neighbours have dramatically increased their expenditure on higher education. Asia now accounts for almost half the world’s economic development and 42% of its expenditure on R&D.

We now all compete in one large and connected global market (around 24,000 universities at last count) publicly funded and privately funded providers, big international players with international campuses, the growing Asian market and of course increasing number of Massive Open Online Courses or MOOCs.

Here in Australia, we’ve been going through an unprecedentedly protracted period of uncertainty and argument around higher education funding and policy – and major cuts to education spending are likely to be a centrepiece of the budget next week.

The world is shrinking, the pace of change is quickening, funding is reducing, and we’re under constant pressure to achieve more with less, while at the same time deliver improved quality. It’s true for education institutions, it’s true for businesses and it’s true for employees who compete for their jobs against the world’s top talent.

Technology has unleashed sweeping changes. Universities are no longer the originators and keepers of knowledge … the internet is now the primary platform for information exchange. The world itself is now both classroom and laboratory. We can all learn at any time, in any setting, and for a multitude of reasons, if we so choose.
Disruptive technologies are redefining products, services and markets, completely transforming how businesses everywhere operate (including our universities).

Just as the Oxford dons of the middle ages had to rethink their role when the invention of the printing press gave easy access to the printed word, digital technologies have transformed the way education is delivered, supported, accessed, assessed and perceived.

The iTunes story gives us an excellent analogy. With the advent of iTunes, good music became synonymous with accessible music – you no longer have to buy the whole album, purchase only the songs you like, where you like and when you like. iTunes changed who made music, who sold music, how many songs we bought and when and where we bought them.

The opportunities of digital change have already begun to deliver both students and employers increased agility, flexibility, and personalization and there is much, much more to come yet.

Changes in student demands and employer expectations is also driving change as society re-evaluates the skills and competencies required for 21st century lives and careers. We know that in a fast evolving technology landscape, the connection between work and learning has become closer and university links with industry and employers are increasingly important.

And in an age when vast quantities of information are available indiscriminately, instantaneously, and outdated almost immediately. The ability to deal nimbly with complex and often ambiguous knowledge will be far more important than an accumulation of facts.

And in this age of cognitive computing and smart machines, when it’s estimated that around 47% of jobs will be computerised within one or two decades...employers are looking for the skills that computers can’t provide ... emergent leadership and teamwork, entrepreneurship, intercultural communication, global citizenship, emotional intelligence ... these were previously denigrated as ‘soft’ skills but they are the key skills our 2030 world will look for.

The consumers of today’s higher education will study what they want to study, not what academics want to teach ... and they will expect to contribute to the content. And just a reminder, this year we enrolled GOOGLE babies for the first time. Few of our current school leaver first years have ever struggled with a huge volume of Encyclopaedia Britannica!

Smart devices give consumers everywhere (and that includes students and employers) a whole new world of choice. If we can’t or won’t give them what they want they can simply take their business elsewhere.

We are in the midst of disruptive change. Richard Branson says that disruptive innovation requires a change of mindset not process – a willingness to discard old business models and deliberately target situations where the competition is complacent. Just trying harder can become part of the problem.

Branson’s advice? ‘Screw business as usual, look at what our customer wants and what the industry needs ... then go in and exceed their expectations’. It’s not the kind of language we use in universities, but the logic is sound. Oh, and you won’t be surprised to know that Branson is eyeing off education as an area of future interest.

There’s no doubt MOOCs have been a disrupter. They offer free tuition for all, and have enrolments counted in the millions. They took online education from poor relation to cutting edge in the blink of one year. A stark contrast to the early days of online learning which were often a feeble imitation
of traditional methods with lecture notes posted as pdfs, boring ppts plonked online and tutorials as asynchronous Bulletin Boards.

How things have changed. Very few students today are solely online or solely on campus, physical campuses are media rich, and quality cloud campuses are sophisticated platforms offering synchronous support and premium learning experiences.

Deakin’s personalised online learning hub enables students to enrol, to create and share documents, to access course material and support, to videoconference with their peers or lecturer … anywhere, any time and from any device. For example Deakin’s partnership with cognitive computer IBM Watson gives students personalised, almost prescient answers to their questions 24/7 – 365 days a year. Disruptive change has forced universities to engage deeply with questions around the purpose and function of institutions that have hitherto remained largely unchanged for centuries.

And just as iTunes unbundled songs from a CD, digital change enables an education qualification to be disaggregated into its component parts – deep discipline knowledge, industry knowledge, cultural knowledge, professional skills, communication skills and leadership skills. To be accessible and immediately relevant to 21st century lives and careers.

We are preparing graduates for lives and careers in a world that is very different politically, economically and socially from the one in which we all began our careers.

The United States Department of Labour reported that 65% of primary-school aged children in America will end up in jobs that have yet to be invented. Certainly many of the careers Deakin prepares graduates for were unheard of a few years ago – app developers, data scientists and social media managers … and remember, Apple’s App store only began in 2008.

So what does this mean for us? To succeed in this brave new world of globally connected digital higher education I think our universities will need a diversity-savvy workforce able to understand and align with the diversity inherent in our international marketplace.

Diversity will be a critical competency for leaders and employees alike. As the Chief Executive of Diversity Australia Nareen Young has said: “see if everyone is like you, and if they are, you’ve got a problem”. How will you learn or innovate if everyone thinks like you and has had a similar experience to you.

The ability to incorporate innovation into a university’s organizational DNA will be a key driver of future competitive advantage. Consider the Kodak story. Founded in 1880 it went from American success story to endangered species in just a few years with its share price plummeting by 90% in 2011. Kodak had ignored the rise of digital despite the fact they built one of the world’s first digital cameras; they believed they would survive on the strength of their reputation.

They were wrong. When Kodak finally did enter the digital world it was faced with competition from smart phone cameras … and extinction. There is a lesson here for universities – to be complacent is to risk the fate of Kodak, the Encyclopaedia Britannica and Borders Books.

We will need a technology savvy workforce, able to capitalise on the power, opportunity and reach of digital change and with the agility to embrace change.

Agility and flexibility are the new black. All staff in universities will need to be prepared to meet the challenges of a complex and often ambiguous future –a world where accelerated change and risks are managed effectively with high performance agility.
As our Prime Minister reminds us, innovation and agility are our most important weapon, but there are some lessons to be learned from history too. The world is a big place, we shouldn't limit ourselves to ideas from within our own sector. Innovation need not be expensive; there are opportunities in frugal innovation, and remember there’s as much to learn from the bottom of the pyramid as the top. We should cultivate leaders who thrive on uncertainty, take the long view, and champion change. And we should view mistakes as portals of discovery. To quote Winston Churchill “success is stumbling from failure to failure without loss of enthusiasm”. But my advice is not to take this too literally!

One of the great requirements of a university career these days is the capacity to learn continuously and to be curious. Perhaps it was ever thus, but it is simply more obvious and more necessary today.

The vast body of research on careers indicates that one of the most valuable attributes we can bring to our roles is resilience. For baby boomers like me, career resilience often meant grabbing on to the right organisational ladder and hanging on for dear life.

Today, a time when job security can sometimes seems like an oxymoron, resilience takes on a new importance. We need to cultivate the ability to bounce back when things don’t go as planned, the ability to anticipate risks and feel comfortable with change – the ability to pay attention to the main game despite the issues – the ability to spot trends and turn them into opportunities – the ability to resist the urge to get bogged down in office politics, the lab dynamic, the way things used to be, and instead keep looking forward to the future. As Mark Zuckerberg, co-founder and CEO of Facebook and one of the world’s youngest billionaires says “The only strategy that is guaranteed to fail is not taking risks.”

Based on what is emerging and what is changing now, we can safely assume that our lives and work lives will be swept by regular waves of change. More and more of our work will involve international connections and increasingly the focus will shift from west to east and from the northern hemisphere to the southern.

The wicked problems of our time - climate change, an aging demographic, escalating income inequality, the refugee crisis – will require global co-operation and multidisciplinary collaboration. Far more jobs will mean working intimately with digital machines and intelligent systems … the second machine age has already arrived and we must face it and harness our place.

These are exciting times. Or as Robert Kennedy once famously said – we live in interesting times – times of opportunity and huge advances if we play pay attention and take a few risks.

Thank you for listening.