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Knowledge Nation summit

Putting Knowledge into Action

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The benefits and costs of knowledge

Knowledge is power. This phrase is the great insight of modern times. And it's only about thirteen hundred years old.

It is first attributed to the early Islamic leader Imam Ali, sometime in the mid seventh century.

So it's older than the Old English poem *Beowulf* – from the eighth century. It's older than the university – from the eleventh century.

Ladies and gentlemen – it's older than *algebra*, a spring chicken from the ninth century.

But some lessons of the distant ancestors still stand the test of time. History is made by those who get to the future first.

- How long would the Romans have lasted, without their great leaps forward in civil engineering?
- Who would remember the Vikings, without their longships?
- And what would Little England be today, without the Industrial Revolution?

Look back at those years from Mozart to Mendelssohn, and the change is truly staggering.

Between 1750 and 1860, per capita industrial output in the United Kingdom almost quadrupled. Over the same time, life expectancy rose, infant mortality fell, and on some estimates blue-collar real wages more than doubled.

It was technologies like the power loom, the cotton gin and the steam engine that made it possible. The commercial nous of the new industrialists brought it about.

Of course that progress came at a price.

Machines took the jobs of human craftsmen – not just the original Luddites in Lancashire, but the workers of Bombay and Nanjing as well, displaced by technologies half a world away.

The new factory workers in Britain toiled through their miserable lives in appalling conditions, before slowly life began to improve.

And powered by fossil fuels, we set out on the path to exponential growth. But this increase in prosperity was coupled to carbon dioxide emissions. Today atmospheric carbon dioxide levels are increasing about ten times faster than at any point in the past 66 million years.

To free ourselves of the ramifications of our ancestors' choices... would we choose to hand back the knowledge, and the power?

Would *you* choose to live in a world where one in four children lived to their fifth birthday? That was London in the early eighteenth century: an infant mortality rate at times as high as 74 per cent.

Of course we don't want to step back.

But we do have to recognise that knowledge is a common good, and progress has to be pursued as a common goal.

There's no point in getting to the future first, if it's not the future we want; and we've left half the country behind in order to get there.

The vision for the Knowledge Nation

Hence the title of today's summit, 'Knowledge Nation' – a bold ambition wrapped up in two simple words.

To me, it's a nation:

- Where all children leave school filled with knowledge, and fired to be seekers of knowledge their whole lives long.
- Where every government looks to scientific evidence as a matter of course.
- Where businesses flourish at the frontier of new technologies some developing products that are new-to-world; others working out how to turn new products to Australia's commercial advantage.
- A nation which our economy has the strength to support the needy.

 And most important, a nation in which we trust our citizens to face up to the challenges heading our way – from automation, climate change, population growth pressure, and economic change.

We face these challenges on the scale they demand, because we can see the opportunities on the other side.

Australians already have many runs on the score-board that we don't hear enough about.

Look at Fintech, international education, mining technologies and clinical trials, to name a few.

But there are still too many children in schools today without a properly qualified and supported science teacher.

There are too many ideas with commercial potential that never leave the lab.

There are too many workers in professions highly exposed to automation and global competition, looking to the future with concern. Of course that weighs heavily on all our minds today.

Setting the agenda: knowledge into action

So our challenge today is to imagine a Knowledge Nation big enough for all Australians: imagine it, explain it and achieve it.

The International Monetary Fund said the same thing last month, echoing the OECD, the World Economic Forum and the World Bank. Knowledge-led growth needs evidence-based policy.

That point won't be lost on anyone who remembers the Cold War.

Here were two great powers: the Soviet Union and the United States.

Both of them controlling vast resources and bent on dominance.

The Soviet Union tried to enforce progress by edict. In contrast, the United States supported its people to be entrepreneurs.

We all know the results.

The Soviets watched in pain as the Berlin Wall came down in 1989 – just as the Americans prepared to launch the Hubble Telescope into space, commenced the Human Genome Project and incorporated the first internet service providers.

The tag 'Silicon Valley' turned eighteen. It only got better from there.

So little wonder that we still borrow from the US game-plan in public policy today.

- Invest in the areas where markets cannot like research and education.
- Regulate to allow the markets to flourish.
- And recognise that governments can only enable it's then up to people to take the lead and exercise their imagination to achieve their dreams.

We have the knowledge. We've made the national commitment to harness it. Your task is to convert the know-how into steps we can take today.

In the new, *traditional* message for dreaming of a better future: may the Force be with you, - or should I say, may the Power of Knowledge be with you.

Thank you.