Federal Budget 19-20 analysis:

Digital Skills

The Government intends to invest $525 million to upgrade and modernise the VET sector, in response to the Expert review of Australia's vocational education and training system. It is part of our plan for a stronger economy and securing a better Australia.

Who's responsible ?

Senator Michaelia Cash – Senator for Western Australia and Federal Minister for Small and Family Business, Skills and Vocational Education, Department of Education and Training.

'Delivering Skills for Today and Tomorrow'

The Government intends to provide additional incentive payments to boost existing incentives for areas of identified *traditional* skills needs to support up to 80,000 new apprentices over five years.

But What about Digital Skills?

$41.7 million will be provided for two **pilot Skills Organisations**, in the areas of **digital technologies, cyber security**, and human services care. The pilot Skills Organisations will trial new approaches to expand the role of industry across the national training system.

The full remit of Skills Organisations will be co-designed with industry and stakeholders. The Skills Organisations are intended to trial new, industry led methods of qualifications development and assessment, and develop standards for industry to accredit Registered Training Organisations.

According to Senator Cash's office industry groups such as the Australian Information Industry Association will be critical to the success of this new skills provider model.

This statement supports the AIIA Pre-budget Submission recommendation of 'ensuring continued Government support of Industry-led digital skill development, training and job placement initiatives.

VET Implementation

The Government intends to establish the **National Skills Commission** to oversee the $2.8 billion annual investment in VET.

The National Skills Commission will drive long-term reform in the VET sector by implementing a nationally consistent approach to VET qualifications funding, and through identifying future skills priorities across industry, including those arising from technology such as automation and AI.

The National Skills Commission will also oversee pilot Skills Organisations that embed industry in the development of training products and ensure training meets industry needs.

The extent to which the role of the Commission supports the AIIA Pre-budget Submission recommendation of, "to invest in the timely development and provision of nationally accredited VET qualifications", will need to be determined post-election.

Other VET funding for Digital Skills

$62.4 million has been allocated to increase support for the foundational education needs of Australians in literacy, numeracy and **digital literacy**.

$20.1 million has been earmarked for identifying emerging skills needs in the Australian economy through phase three of the Jobs and Education Data Infrastructure Project.

The Government will invest $42.4 million to establish a **National Careers Institute** and appoint a **National Careers Ambassador** to improve career

advice to young Australians and workers transitioning careers.

The creation of a National Careers Institute aligns in part with the AIIA's Pre-budget Submission recommendation, "to implement a national education campaign to provide awareness to students, parents and career advisors on the options and rewards of digital careers".

Is the Government's Skills Pakage digitally focused enough?

The Government's Skills Package in part responds to reforms identified in the Expert review of Australia's vocational education and training system (Joyce Review April 2019), placing industry at the centre and raising the profile of VET as a career pathway of choice, and funds the core "early actions" identified in the Review - to underpin a longer-term VET renewal roadmap intended to deliver relevant workforce skills for Australia's future economy.

However, the Government's budget narrative does not reflect the urgency of current demand for workforce digital skills, nor prime well enough the STEM pipeline for generation digital skills which Australia requires if it is to remain economically competitive.

The $3.4 million over four years earmarked for encouraging women to take up STEM careers, which translates to only $850,000 per year, is disappointing, especially in the budget context of $158 billion (over 10 years) in promised tax cuts.

And $3.6 million over two years to run a national trial of the Innovation Games, while providing an opportunity for school student and industry digital engagement, seems to be more of a random budget initiative rather than part of a long-term Digital Skills initiative.

The alternative to Government investment and growth of a domestic, digital capable, workforce is continued off-shoring of information technology

jobs and growing reliance on imported digital talent by industry.

To meet the current digital skills shortfall AIIA recommended in its Pre-budget Submission "that Government provide necessary policy and efficient processes for bringing in overseas digital talent into Australia".

Digital Workforce Factoids

- Australia's demand for digital skills workers is set to grow by almost 100,000 to 758,700 workers by 2023, including areas such as artificial intelligence, data science, cyber security and blockchain.[1]

- With fewer than 5,000 domestic digital skills graduates a year, the only way Australia will reach workforce targets is by importing labour, which suggests a missed opportunity to provide rewarding employment for the next generation of Australian workers.[2]

- National VET Digital Skills enrolments have trended down from 2014 though to 2017. In 2017 total VET 'Information Technology' enrolment lagged 12th out of 13 other fields of education.[3]

- Australia has to digitally skill-up its workforce and though this workforce has the potential to gain an additional annual GDP through automation technologies of between $170 to $600 billion by 2030.[4]

- Additionally, Australia must continually reskill its workforce as it is estimated that by 2030 between 25% to 46% of existing workforce activities could be disrupted through automation, machine learning, robotics and AI – with between 1.3 and 5 million people needing to reskill in digital technology areas by 2030.[5]

- Workforce educational demand for reskilling, upskilling and training in new digital technologies will double by 2040.[6]

[1] ACS Australia's Digital Pulse 2018
https://www.acs.org.au/content/dam/acs/acs-publications/aadp2018.pdf
[2] ACS ibid
[3] National Centre for Vocational Education Research (NCVER), 2019
https://www.ncver.edu.au/research-and-statistics/data/infographics/total-vet-students-and-courses-2017-infographic

[4] Australia's Automation Opportunity, McKinsey and Company 2019
https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Australias%20automation%20opportunity%20Reigniting%20productivity%20and%20inclusive%20income%20growth/Australia-automation-opportunity-vF.ashx
[5] McKinsey ibid.
[6] Future Skills, Aphabeta 2019 https://www.alphabeta.com/wp-content/uploads/2019/01/google-skills-report.pdf

- Australia's future workforce will require new digital and technical qualifications combined with values such as accountability and honesty, behaviours such as adaptability, collaboration and resilience, and skills.

Budget Links

- [AIIA Pre-Budget Submission to Treasury 2019](#)
- [Australian Government 2019-2020 Budget Papers](#)
- [Treasurer's Budget Address](#)
- [Overview of the Government's 2019-2020 Skills and Training budget.](#)

AIIA focus – Watch this space

- ✓ AIIA works with the Government, industry and research institutes to accelerate government digitisation and advocate for greater and new forms of industry engagement outside the procurement/grants framework to expedite sharing of knowledge and foster innovation.

- ✓ AIIA support a design thinking approach and works to promote agile delivery of government services, through improvements and efficiencies in ICT procurement

- ✓ AIIA works with Government to ensure that data collected through government transactions are secure, private, accurate and afford consumer protection in accordance with legislation.