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Submission to the Senate Inquiry:  **Future of Work and Workers.**

My name is Chris Drake. I am a computer security professional and expert with 35 years' experience, graduate of several international accelerator programs, grant recipient, owner/operator of multiple online businesses, employer, and participant in numerous Australian State and Federal Government Information and Communications Technology (ICT) related programs.

I respond to term "d" only:

 d.   the adequacy of Australia's laws, including industrial relations laws and regulations, policies and institutions to prepare Australians for that change;

Small business employs the most Australians (source: ABS), while small and medium business combined (SME) employ almost 70% of our total workforce.

The digitisation of roles performed by Australian SMEs will create large numbers of new roles for the digitisation organisation; however, more often than not in Australia nowadays, this organisation is not Australian: those jobs lost locally are replaced by jobs in foreign countries.

Government policy has a major detrimental effect on SME growth, which is rapidly worsening in our increasingly digitised world as follows:
1. Government procurement of products and services (excluding employment of contractors, see next) from the SME market is limited.
2. Government in-house development of bespoke products and services is destroying valuable opportunities, income, and international market prospects for Australian SME's.
3. The opportunity for SME's to sell to government is extremely limited, overly complex, and "backwards" (i.e. Government should buy what it needs from Australian SME's **more often** than SME's should be expected to know who in government wants to buy from them and look/wait for related tender opportunities)

Today's digital world moves quickly.  It is not uncommon for "start ups" (a small business) to become "Unicorns" (billion dollar employers of vast numbers of workers), but to do this, adoption (and usually mass adoption) of the product or service on offer is *always* required.  Australian government is in the unique position to provide mass adoption, and thus catapult Australian businesses to large scale (and usually international) success.  In my considerable experience in this area, Government typically always fails us.

Every ICT project built by or for Australian Government (e.g. Identity, Health, etc) represents a destroyed SME opportunity.  Because Government is not a business, they do not plan to build re-useable and re-sellable products or services, and they typically have no concern for international markets, and often also no consideration for local, state or commercial markets either.  Government ICT projects (which regularly fail at spectacular expense) are typically never sold to other customers, and never earn sustainable revenue, and never produce sustainable employment.  Worst of all, had government sourced their project from Industry or an SME instead of building their own, this would have provided the key "mass adoption" event that often results in a globally dominating or "unicorn" business for the Australian provider, and almost certainly creating a range of new opportunities for other Australian SMEs to capitalise on this success.

The Australian Security Intelligence Organisation (ASIO) reported in October 2018 that it is unable to investigate all "harmful espionage" and "foreign interference" against Australia due to the large scale of "malicious" activity directed against Australian government and business.  In short; foreign nation-state cyber-attacks against Australia are endemic and out of control.  Australia needs improved on-shore ICT trade for many reasons, not least security.

My recommendations are as follows:

1.  Government departments be trained to:

    A.  Understand the benefits that their procurement decisions have on the Australian workforce, and be encouraged to seek out and use local products and services.
    B.  Understand the positive national-security implications of procurements made from Australian suppliers, and the negative espionage risks from foreign suppliers, and that free-trade or other agreements do not force them to buy foreign solutions.
    C.  **Seek out** local products and services (as opposed to tenders etc).  It is far easier for a government who needs something to find it, than it is for the SME who provides it somehow know that the department is looking.

2.  Commonwealth ICT development rules be updated to ensure all activities comply with Commonwealth Procurement Rules (value for money, risk, etc), which themselves must take into account the value to Australian business, society, and employment, of ICT build and procurement decisions, and the risk of foreign espionage and attack.

3.  Innovation in government be fostered more heavily, but be required to partner with industry suppliers since this earns those suppliers the valuable adoption they need for rapid commercial growth.  The QLD Government "TWiG" (Testing Within Government) program is an example, although there also needs to be the opportunity for SME's to propose new projects to government, and not just government think up their own projects.

If Australia would like the Future of Work to include workers based in Australia, it needs to take steps NOW to ensure that those new future jobs are in Australian-based companies.  The world is being digitized, and digital is global.  Our future jobs will go overseas if we don't do more now to foster local suppliers of the digitized future.

Yours sincerely
Chris Drake