

# **WithYouWithMe submission – Australia’s 2020 Cyber Strategy**

*November 2019*

## Executive summary

This document outlines WithYouWithMe's (WYWM) submission to Australia's 2020 Cyber Strategy call for views. The document outlines WYWM's views on the direction Australia should be heading to solve one of the globe's biggest cyber challenges – the cyber security skills gap.

For close to three years WYWM has been working with some of Australia's largest companies and government departments to help build new cyber security talent, most of which had no previous tech experience. Our role in the cyber ecosystem has seen us uncover interesting insights and data on what aptitude and personality characteristics which make successful cyber talent.

WYWM will outline two key observations and recommendations as part of this submission, which are:

1. Australia's current model for training cyber talent must change in order to succeed at the pace required; and
2. Australian military veterans are the solution to overcoming Australia's cyber security talent issues.

## About WithYouWithMe

In the military 'with me, with you' is a term used in room to room combat. Before you venture through a doorway, you say 'with me'. Without any further discussion, or even eye contact, someone will come up behind and say 'with you' and together you will go through into whatever danger lies on the other side.

*WithYouWithMe exists because Australian workers are standing at a doorway.*

Back in 2015, WithYouWithMe founder, Tom Moore, set out to fix the nation's problem with veteran unemployment. Tom had both witnessed and lived the struggle of transitioning from service to civilian life. He knew countless veterans, people with highly developed hard and soft skills, in part time work that didn't match their abilities, or who couldn't find work at all. Something in the system was broken.

He took a long hard look at the traditional recruitment model and found it was primarily motivated by speed and a 'hire and fire' mentality. The mandate was clear: find new jobs, move candidates, and fill vacancies as quickly as possible. These rapid decisions were based almost entirely on whether you had performed an exact criteria in a previous role. It left no room for growth, aptitude or human potential.

He took action, designing a workforce technology platform that could reinvent the recruitment model and bring all the disconnected parts of the journey (training, searching, interviewing) together.

WithYouWithMe identifies industries with high growth and job potential, like cyber security and robotics. Regardless of background, candidates are then tested for aptitude, trained for any additional skills needed, and connected with employers actively searching for roles in these industries.

It worked. WithYouWithMe's platform has now facilitated the training and transition of hundreds of veterans into new roles. They come from diverse backgrounds with a variety of former skills, but have all found meaningful, full time employment in technology.

*That's when the team realised this problem and potential was a lot bigger than veterans.*

Technology is rapidly changing what jobs will be on offer in years to come, companies are already making mass redundancies to 'restructure' for the future, and Australia's underemployment rate is climbing. Too many of the so called 'future of work' jobs have been overcomplicated by industry.

At the start of the funnel universities are providing courses to hundreds of thousands of young people in sectors where there are very few job prospects. Students are coming out of four year degrees in \$40,000 debt, and not getting a job in their field for on average, [4.7 years](#).

Instead of training, retraining and redeploying our workforce, we're firing large numbers, pushing up salaries of a few candidates with 'experience' and burying our heads in the sand about an impending skills gap that could cripple our economy.

The system is broken for everyone.

WithYouWithMe is fiercely committed to helping the Australian workforce — those about to enter it, or those already in it — realise its aptitude and skill-up for what's ahead. If we want a 'future of work', it has to start today.

## **WithYouWithMe in cyber security**

In 2017, WithYouWithMe launched WYWM Cyber – a dedicated program focused on upskilling and deploying Australian military veterans into cyber security roles. With WYWM's mission to solve veteran unemployment and underemployment, WYWM Cyber was established to capitalise on the opportunities in the industry for long-term, purposeful careers for military veterans. Given the shortage of talent in the market, WYWM's veteran talent quickly became in-demand.

Where WYWM's approach differed was our focus on taking non-technical veterans and training them in entry-level cyber roles. WYWM invested in developing world-class education courses via the WYWM Academy which are designed to upskill individuals in around 100 hours.

WYWM's unique model includes the following steps:

- **Discover** – WYWM has developed a proprietary testing system which tests an individual's aptitude, psychometrics, behavioural style and learning style. This test helps us identify individuals who have a propensity to be a success in a new cyber career, matching them to a number of different cyber roles.

- **Train** – the WYWM Academy trains individuals in around 100 hours for a number of cyber pathway courses, including Cyber Analyst, Pen-Tester, Threat Hunter, Threat Intel and Systems Admin.
- **Deploy** – via partnerships with more than 100 Australian and US employers, WYWM deploys its trained talent into roles, filling vital skills gaps in these organisations.
- **Grow** – WYWM’s model encourages continuous learning, with individuals continuing to train and upskill over the life of their cyber careers.

WYWM’s courses have been internationally accredited and recognised, with certification from GCHQ for WYWM’s flagship Cyber Analyst and Penetration Testing training. All of WYWM’s courses have also been accredited by the American National Standards Institute (ANSI), the pre-eminent education certification.

In addition to the work WYWM does training cyber talent for industry, the company has also delivered a number of major capacity building projects for the Australian Government. This includes:

- Building and maintaining a cyber security operations centre in Papua New Guinea on behalf of the Department of Foreign Affairs and Trade. This project was delivered in record time in time for the APEC Leaders Conference, and is now managed exclusively by former military personnel.
- Delivering a bespoke program to the Department of Human Services to provide 33 Australian military veterans over the next three years to work in the department’s SOC.
- Working with the Department of Industry and Innovation as part of AustCyber grants program to train 75 Australian undergraduate university students as cyber analysts via the WYWM Academy. We successfully train close to 100 individuals, with more than 20 securing employment in the industry post-graduation. This included a significant investment from WYWM to prove the model of Discover, Train, Deploy and Grow to individuals outside the veteran community.
- Helping upskill internal staff at a number of other major government departments via the WYWM Academy.

Since the WYWM Cyber program began, WYWM has helped train more than 500 individuals into cyber careers, significantly increasing Australia’s cyber capability and helping build new types of talent for the market.

Over the last 12 months WYWM has expanded its program into the United States, working with some of the country’s largest cyber teams including the US State Department, Lockheed Martin and the Washington Post.

# WithYouWithMe recommendations

## How does Australia adjust to the changing market demands for cyber talent to win?

From WYWM's experience in the market, we believe that Australia must take the following actions to ensure the country maintains its cyber security capability and keeps pace with other nations:

### Build a different model for cyber training

Industry must look past traditional pathways and certifications, and instead focus on skills and aptitude to get non-technical individuals into the industry faster.

The current typical pathway for an individual who is looking to enter the cyber security industry would be a three-year Bachelor degree, where they will study Computer Science or a similar discipline. This would be followed often by a number of years working in entry-level roles in areas such as systems administration whilst they obtain cyber certifications, before moving into an analyst or specialist pathway. It can take up to five years for an individual to enter into their desired role, with almost all an individual's learning taking place in their formative years.

WYWM argues that the current model is not successful in solving Australia's capability issues on the scale required. While WYWM works with a number of universities partners and values the deep skills learnt as part of a Bachelor or Master's Degree, often these skills are not required to enter the industry. This model sees the demand for roles growing at a far faster rate than the current supply systems can manage.

WYWM believes that cyber vocational training needs a paradigm shift towards skills and closer links to employment. This will help deliver the skills that industry needs at a quicker rate, with the ability to adjust and realign the workforce as the industry continues to rapidly evolve.

WYWM believes that a model of 'continuous journeyman', whereby an individual upskills for a new cyber career via competency-based foundation training, but continues to upskill through the life of their career via other tertiary and vocational education courses will allow Australia to better align to the changing needs of the market. The industry should adopt a similar educational mindset to the medical or legal industry, where individuals continue to build experience and capability through hours worked, rather than an engineering or business approach of education predominantly coming from a large number of hours of 'up-front' learning.

In order for this model to be successful, it is essential that we are able to identify individuals who will be successful in cyber careers, without turning to traditional talent methods. WYWM's success with an

aptitude and skills testing model shows the ability to match individuals to cyber careers based on their potential, not past experience. This is essential to reach new, diverse talent pools in order to fulfil the demand.

The final point which is required to ensure a shift of this nature is successful, will be closer links between the government and industry. Having been a part of the cyber start-up community for a number of years, WYWM has seen the impact entrepreneurs can have on the development of policy and the community. More should be done to develop and foster relationships between entrepreneurs, government and the industry to help deliver the outcomes required for the country to be successful.

## **Develop dedicated programs to deploy Australian military veterans into the cyber security industry**

Over the past four years, WYWM has helped more than 12,000 Australian military veterans' transition into new careers. In that time, we have learnt a lot about the skill sets, both soft and hard, Australian military veterans have developed from their time in the ADF. We have discovered that these skills are highly-transferrable to careers in cyber security.

The WYWM Academy has trained more than 500 Australian military veterans in new cyber careers. 62 per cent of these individuals had no tech experience prior to completing the WYWM course, however were matched via aptitude and skills to the career pathway.

The data WYWM has collected over the years helps validate these observations. WYWM has tested more than 10,000 former military veterans for aptitude and behavioural style. WYWM has also tested more than 3,000 non-military personnel.

These testing results has shown that military veterans are on average more suited to careers in cyber security, scoring higher in abstract reasoning and logical reasoning – all indicators of successful cyber analysts.

While WYWM's program has allowed us to tap into a new and unique talent pool, this is talent which the Australian Government should be nurturing and maintaining to help build the country's cyber capability, inside and outside the military.

WYWM recommends the following:

- Introduction of a formalised program of internal upskill within the Australian military, training non-technical military personnel to shift roles within the military
- Establishing a formalised cyber reserve force, allowing military veterans to transition out of the military into new cyber careers, however remain retained as part of a cyber reserve force
- Formalise a program to encourage transitioning veterans to pursue a career in cyber security, establishing partnerships with employers and educators to help fund their transition directly into employment

## **Conclusion**

WYWM believes that the above actions will greatly improve Australia's ability to respond to the global threats and pace of the cyber industry, and help address some of the critical issues associated with the current capability and skills gaps.

Priority must be given to the speed of change, with the country unable to afford the luxury of resting on its laurels – this issue needs to be addressed now in order to be successful and avoid the country falling behind.