



# Evaluation Report

## **MEGT Australia Ltd**

Economic and Social Study of the Microsoft Traineeship Program

7 December 2020



# Disclaimer

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This report has been prepared as outlined in the Scope Section of the Engagement Letter dated 2 November 2020. The services provided in connection with this engagement comprise an advisory engagement, which is not subject to assurance or other standards issued by the Australian Auditing and Assurance Standards Board and, consequently no opinions or conclusions intended to convey assurance have been expressed.

The findings in this report are based on a qualitative study and the reported results reflect the perceptions of MEGT host employers and trainees but only to the extent of the sample interviewed, being MEGT's approved representative sample of host employers and trainees. Any projection to the wider group of host employers and trainees is subject to the level of bias in the sample selection.

The findings in this report are also based on a survey designed and carried out by MEGT, and provided to KPMG. The reported results reflect the information provided by, and the perceptions of, the sample of Microsoft Trainees and Host Employers surveyed, as approved and surveyed by MEGT. Any projection to a wider group or to the future is subject to the level of bias in the method of sample.

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# Acronyms

Term	Definition
ABS	Australian Bureau of Statistics
AISC	Australian Industry and Skills Committee
ANP	Apprenticeship Network Provider
BCR	Benefit to Cost Ratio
CBA	Cost Benefit Analysis
CIT	Canberra Institute of Technology
DESE	Department of Education, Skills and Employment
HR	Human Resources
ICT	Information and Communications Technology
IT	Information Technology
KEQ	Key Evaluation Question
MTP	Microsoft Traineeship Program
NCVER	National Centre for Vocational Education Research
NPV	Net Present Value
NSW	New South Wales
PaTH	Prepare Trial Hire
QLD	Queensland
RMIT	Royal Melbourne Institute of Technology
RTO	Registered Training Organisation
SA	South Australia
TAFE	Technical and Further Education
VET	Vocational Education and Training
VIC	Victoria
WA	Western Australia
WH&S	Workplace Health and Safety

# 1 Introduction

This document is an evaluation report to measure the social and economic impacts of the Microsoft Traineeship Program (MTP) delivered by MEGT Australia Ltd (MEGT). This Section introduces the evaluation report. It outlines the scope and purpose of the work KPMG has been engaged to do for MEGT, and the purpose and structure of this document. The Section concludes with an overview of the approach taken to the evaluation.

## 1.1 Engagement Purpose and Scope

KPMG was engaged by MEGT to provide an economic and social study of the MTP, which has been operational for two years, to inform the future growth of the MTP.

The engagement purpose is to design a full evaluation framework to guide future evaluations and to undertake a preliminary evaluation based on information that is currently available. The preliminary evaluation will assist MEGT to evaluate the outcomes of the Microsoft Traineeship Program and support continuous improvements being made as the program grows. It will also contribute to mapping MEGT's role and value in the context of the Information Technology (IT) traineeship ecosystem.

The scope of the engagement is agreed as follows:

- Develop a full evaluation framework to guide future data collection and measurement of the impact of the Microsoft Traineeship program over time. The evaluation framework is complete and covers all aspects of the Program to measure in a full evaluation. However, only some of the data is currently available due to the preliminary nature of the Program. Therefore, the preliminary outcomes and economic evaluation are based on a sub-section of the evaluation framework and are preliminary in nature;
- Review publicly available data and existing MEGT data, including:
  - Quantitative and qualitative Trainee data, including number of placements, age, diversity, host partner organisations, resignation and dismissals;
  - Qualitative survey feedback from program Trainees; and
  - Qualitative survey feedback from program host organisations.
- Identify data gaps to inform future data collection by MEGT as an input to a future detailed evaluation;
- Undertake a preliminary evaluation, appropriate for the existing data and the early stage of the program, based on relevant sub-sections of the evaluation framework;
- Undertake preliminary stakeholder consultation as an input into the analysis; and
- Quantify the initial social and economic benefits of the program, as identified by the preliminary evaluation.

## 1.2 Limitations

As outlined, the engagement includes the development of a full evaluation framework. At the present time it is not possible to implement all aspects of that framework due to the relatively early stage of the program and small cohort size to date. The implementation of the full evaluation framework is also limited by the nature and coverage of existing data.

The primary data collection approach was based on seeking input from a sample stakeholder groups, and as such the evidence does not necessarily represent the diverse views or experiences of all who

have an interest in, or interaction with the Microsoft Traineeship Program. Further, the representatives of the stakeholder groups who participated in interviews or responded to the survey may not have views which reflect the perspectives of that group as a whole.

Any primary data collection exercise may have limitations. To help to overcome this, KPMG sought to interview a broadly representative range of Host Employers and Trainees. KPMG did not design or implement the survey of Host Employers or Trainees, but instead analysed data collected by MEGT directly. Primary data collection was used to verify, test and triangulate the findings of analysis of other evidence and the limitations identified above will not undermine the credibility of the evaluation.

There are several key limitations associated with adopting a CBA approach to analyse benefits from the Microsoft Traineeship Program, namely:

- While the preliminary CBA is able to quantify some benefits, such as higher wage earnings for Microsoft Trainees as a consequence of their participation in the program, other important benefits cannot be quantified. This may include improved self-esteem, leadership potential, additional returns to human capital for Trainees, enhanced productivity of the IT workforce and job satisfaction. For these reasons, the quantitative part of this analysis represents only a partial view of the overall benefits derived from the Microsoft Traineeship Program.
- The preliminary CBA derives costs and benefits based on assumptions about the pathways and outcomes of Microsoft Trainees. Due to the early stage of the program, Trainee pathways have not yet been observed.
- The preliminary CBA compares the outcomes of Microsoft Trainees to a base case of other Australians without post-school qualifications. It is possible that there are systematic differences between the Microsoft Trainees and this base case due to the rigor of the selection process.

Data gathered to support this analysis has been drawn from a number of different sources. The available information has varying degrees of quality and precision. The analysis provides an estimate of benefits and costs underpinned by a range of assumptions.

**The evaluation was undertaken with an understanding of the limitations as a tool to test the progress and impact of the program at early stages and refine it as it grows.**

## 1.3 Structure

The structure of the evaluation report is as follows:

- **Section 2:** provides a **background** to the IT industry in Australia, MEGT, the policy context and describes the Microsoft Traineeship Program, including Trainee and Host Employer characteristics;
- **Section 3:** describes the **Theory of Change** for the Microsoft Traineeship Program that links inputs and activities to outputs and outcomes;
- **Section 4:** provides the overarching evaluation approach;
- **Section 5:** outlines the approach adopted for the preliminary evaluation;
- **Section 6:** presents the **findings of the preliminary outcomes evaluation** relating to pathways into IT, diversity, skills and knowledge, capability and productivity of the IT workforce and other impacts;
- **Section 7:** describes the **findings of the preliminary Cost Benefit Analysis (CBA)** including costs and benefits identified and their quantification; and
- **Section 8:** sets out **next steps**, including considerations for future data collection.

The evaluation is supported by a series of appendices, namely:

- **Appendix A:** outlines the Key Evaluation Questions (KEQs);
- **Appendix B:** includes further detail regarding MEGT services and policy context; and
- **Appendix C:** provides the guides used to conduct consultations with Trainees and Host Employers.

## 2 Microsoft Traineeship Program

This Section provides background to the Australian IT industry, MEGT and the Microsoft Traineeship Program (MTP).

### 2.1 Background to the IT Industry in Australia

The Australian Industry and Skills Committee (AISC) defines the IT industry as comprising three key areas including:

1. Information technology – activities related to processing, manipulating and managing information;
2. Telecommunications technology – cabling, wireless, switching, transmission, radio frequency, and optical communications media and internet protocol networks; and
3. Digital media – design and production of multimedia and games for various platforms.<sup>1</sup>

Australia has a large and fast-growing IT sector, with 772,100 technology workers in 2019, an increase of 6.8 per cent from 2018.<sup>2</sup> This growth rate is 1.5 times faster than the growth of professional occupations in the same period.<sup>3</sup> The sector is forecast to grow at an average rate of 3.1 per cent per annum over the next five years, which would result in over one million technology workers by 2027.<sup>4</sup> Despite this significant growth, Australia is ranked seventh out of 16 nations in international competitiveness due to Information and Communication Technology (ICT)<sup>5</sup> improvements being made by other nations.<sup>6</sup>

While enrolments in undergraduate and post-graduate ICT degrees have increased since 2018, enrolments in Vocational Education and Training (VET) ICT subjects continue to decline, including for Certificate IV courses, which decreased by 10.9 per cent in the period 2015-2018.<sup>7</sup>

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<sup>1</sup> Australian Industry and Skills Committee, 2020, 'Information and Communications Technology', available at: <https://nationalindustryinsights.aisc.net.au/industries/information-and-communications-technology>.

<sup>2</sup> Deloitte Access Economics, 2020, *ACS Australia's Digital Pulse: Unlocking the potential of Australia's technology workforce*.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> ICT is an extension of IT, as it includes connective communications technologies and is more expansive than IT. Techwalla, 2018, 'The Difference Between IT and ICT' available at: <https://www.techwalla.com/articles/the-difference-between-it-ict>.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.



## Characteristics of the IT workforce<sup>8</sup>

Approximately **half** of the **workforce** are employed in **ICT specific industries** and **half** are employed in **other industries** including **professional, scientific and technical services**;



Individuals aged **35 to 44 years old** make up the largest portion of the industry, followed by people aged **25 to 34** and **45 to 54 years old**;



Older workers aged **55 years** and over are **underrepresented** in the **IT industry** at **13 per cent in 2019**, compared to **15.6 per cent** of the total professional workforce;



Women comprise **29 per cent** of **Australia's IT industry**, compared to **44 per cent** of women in professional industries and **47 per cent** of women in the total workforce. The proportion of women in IT did not increase between **2018** and **2019**; and



The workforce is highly concentrated in **capital cities**, with **87.4 per cent** of the workforce employed in **Australia's capital cities**, which reflects the **digital divide** between **cities** and **regional areas**.



<sup>8</sup> Ibid.

## 2.2 Pathways into IT

There are a range of pathways into the Australia's IT workforce as summarised in Table 1 below.

Table 1: Characteristics of pathways into the IT Industry

	No post-school qualification	Vocational education	University education	Post graduate education
<b>Proportion of workforce<sup>9</sup></b>	N/A	37.4% <sup>10</sup>	42.4%	20.2%
<b>Access to the workforce</b>	<p>Some entry level roles can be accessed by people with no post-school qualifications.</p> <p>Traineeships are a means for people to access work experience while undertaking vocational education.</p> <p>Upon completion of vocational education some candidates may be eligible for graduate or other entry programs.</p>		University graduates can access graduate programs which are specifically designed for people with tertiary qualifications and limited work experience.	Graduates of further tertiary education can access senior roles. Some larger firms have specific recruitment pathways for post-graduates.
<b>Opportunities for progression</b>	Some opportunities for progression based on training and on-the-job experience		Supports access to more senior roles	

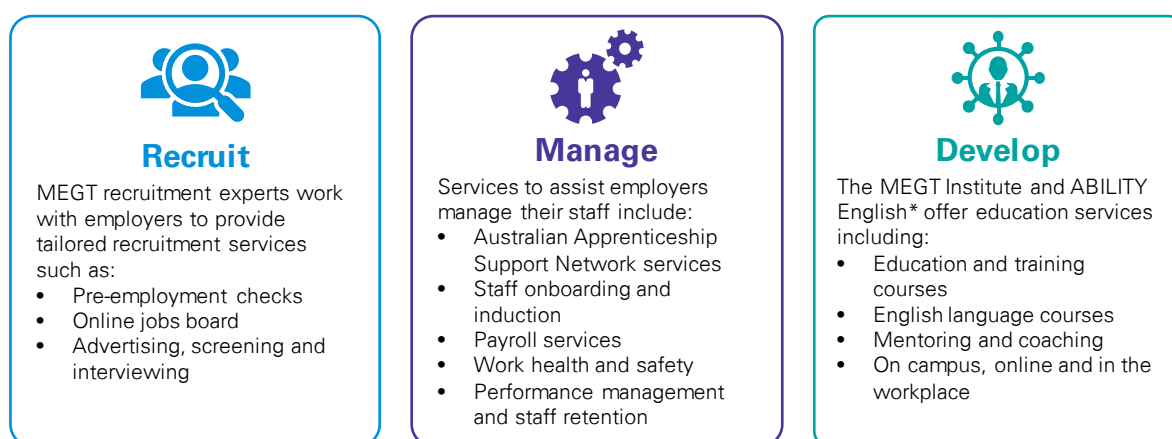
## 2.3 Background to MEGT

MEGT is an Australian not-for-profit organisation which works to deliver employment, training and education solutions to employers, students and job seekers. MEGT was founded in Melbourne in 1982 and currently operates across all states and territories except the Northern Territory. MEGT offers three key services as summarised in Figure 2-1.

<sup>9</sup> Deloitte Access Economics, 2020, *ACS Australia's Digital Pulse: Unlocking the potential of Australia's technology workforce*.

<sup>10</sup> This includes Advanced Diploma/ Diploma, Certificate I and II and Certificate III and IV.

Figure 2-1: MEGT service offerings



Source: MEGT

One of the Traineeships offered by MEGT is the Microsoft Traineeship Program (MTP). Further information regarding the Program is included in the following sub-section.

## 2.4 Microsoft Traineeship Program

*By 2024, Australia will face a shortfall of 100,000 workers in the ICT sector. As industry leaders, playing a more direct role in growing and nurturing talent will be one of the ways to solve this problem*

– Steven Worrall, Microsoft Australia Managing Director.<sup>11</sup>

The Microsoft Traineeship Program aims to provide Trainees with the skills and knowledge they need to embark upon a career in IT through a combination of vocational education, on-the-job experience and industry specific training.

Over a two-year period, Trainees undertake paid work experience with their Host Employer, a Certificate IV in Information Technology delivered by RTO's, and online Microsoft certifications delivered by Prodigy Learning as part of the Azure Administrator Certification Track.<sup>12</sup>

The key activities and support offered by MEGT to Host Employers and Trainees is included in the below table:

Table 2: Key activities of MTP

MEGT activities unique to the MTP
Support offered to Host Employers
Strategic candidate attraction, including enhanced diversity engagement
Pre employment attitude and aptitude testing, including customised digital literacy and psychometric assessment
Placement of high-quality candidates
Access to Microsoft and industry-certified program graduates

\*ABILITY English is an English school with campuses in Sydney and Melbourne.

<sup>11</sup> Microsoft Australia, Microsoft Traineeship Program. Viewed 4 November 2020 at:

<https://www.microsoft.com/en-au/microsoft-Traineeship-program>

<sup>12</sup> Microsoft Australia, Microsoft Traineeship Program Trainee Guide. Viewed 4 November 2020 at:

<https://www.microsoft.com/cms/api/am/binary/RE2Gsq5>

MEGT activities unique to the MTP
Traineeship registration and TAFE enrolment
Work ready induction program including business/workplace etiquette training
Arrilla cultural awareness digital training and education
Workplace mentoring for supervisors and support staff
Access to HR/IR/WHS management and advice
Payroll/Accounts facilitation
Additional supervisor events and seminars (e.g. Unconscious bias workshops for hiring managers)
Assistance with the development of a reconciliation action plan
Rotation of trainees where required (flexible workforce arrangements)
Graduation/Celebration Events
Support offered to Trainees
Real job opportunities that lead to real employment outcomes
Nationally recognised qualification at no cost
Microsoft Certifications and in-demand industry skills at no cost
MEGT Induction which includes TAFE enrolment, traineeship registration and introduction to the vocational pathways
Tailored induction programs including Microsoft specific content (LinkedIn, Growth mindset, EAP etc)
Arrilla cultural awareness digital training and education
Regular on-site engagement via MEGT's structured site visit program.
Access to a peer2peer buddy program
Cultural awareness support and mentoring
Help to transition into ongoing employment at the completion of the traineeship
Female specific industry networking opportunities
Graduation/Celebration Events

Source: MEGT Program documents, 2020

The Program is delivered by MEGT in collaboration with Microsoft Australia, RTOs (such as TAFE NSW, Canberra Institute of Technology (CIT) and Royal Melbourne Institute of Technology (RMIT)), and Prodigy Learning<sup>13</sup>:

<sup>13</sup> MEGT and Microsoft, Memorandum of Understanding.

- Microsoft Australia provides support to Trainees, by creating a LinkedIn community for Trainees and hosting events where Trainees can learn more about Microsoft technology and meet key members of staff;
- RTOs such as TAFE NSW, RMIT and CIT are the registered training providers and are responsible for developing and delivering the Certificate IV in Information Technology which has been integrated with Microsoft certifications and learning pathways; and
- Prodigy Learning is responsible for the selection of Microsoft certifications and learning pathways.

MEGT, the legal employer of each Trainee, is responsible for recruiting, screening and supporting (including mentoring) Trainees for the duration of the Program. By doing so, MEGT minimises the administrative burden, complexities and risks placed on Host Employers who are responsible for providing day to day work, on-the-job training and Trainee development.

All Host Employers are part of the Microsoft Australia partner network or a Microsoft customer. Businesses within the network range from small, specialised IT companies to global organisations. Some examples of Host Organisations include Infront Systems, Datacom, ANZ, KPMG and the Department of Health South Australia. Benefits to Host Employers of participating in the Program are outlined in Figure 2-2 and 2-3 below.

The Program was launched in Sydney and Canberra in 2019 as a pilot and has been expanded to operate in the Gold Coast, Perth, Adelaide and Brisbane.

Microsoft and MEGT work in collaboration to produce student recruitment materials so that the Traineeship can be advertised at events and on Facebook, Instagram and LinkedIn.

The key aims of the Program are to:

1. Increase the diversity of IT professionals;
2. Increase pathways into IT; and
3. Increase certifications and the industry relevance of vocational education.

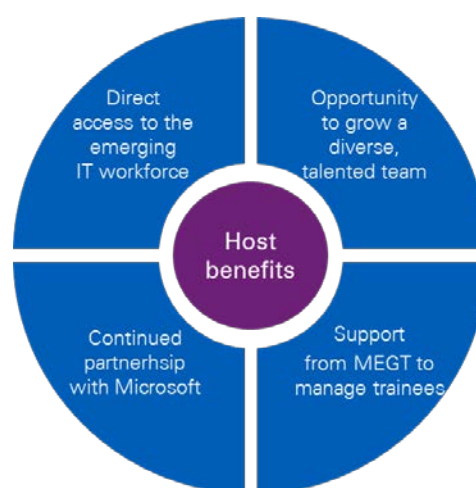
The desired benefits for Host Employees and Trainees are outlined in the figures below.

*Figure 2-3: Benefits to Trainees of participating in the Program*



Source: MEGT

*Figure 2-2: Benefits to Host Partners of participating in the Program*



Source: MEGT

## 2.5 Trainee Selection and Characteristics

To be eligible for the Program, Trainees must:

- Be an Australian Citizenship or permanent resident;
- Commit to a full-time employment contract;
- Not have previously completed the same level qualification or higher; and
- Not received state funding prior to the Program (i.e. previously completed a traineeship).

Once Trainees have been short-listed, the recruitment process involves:

- Conducting face to face interviews with all shortlisted candidates;
- Conducting IT Aptitude Assessments;
- Performing reference checks, and police/ criminal checks;
- Providing a shortlist of a minimum of two candidates to the Host Employer for selection of successful candidate;
- Notifying successful candidates with a letter of job offer; and
- Working with Registered Training Organisations (RTOs) to ensure all successful candidates are enrolled in courses within the appropriate deadline.

*“The structure of the Program is an advantage, including the selection of candidates and formal Program which gives organisations some confidence that there is mutual obligation of all parties to come out with the intended outcome. This is important because Trainees are quite raw compared to graduates from university who are entering the workforce after fulfilling a 3 to 4 year commitment to study”*

Host Employer

In addition to the eligibility requirements outlined above, successful candidates must:

- Achieve a digital skills test score of 90% or higher;
- Pass psychometric testing;
- At minimum, have 12 months unbroken previous employment history with sound references;<sup>14</sup> and
- Receive a high interview and phone screening score (behavioural based interviews assessing selection criteria specific to the role).

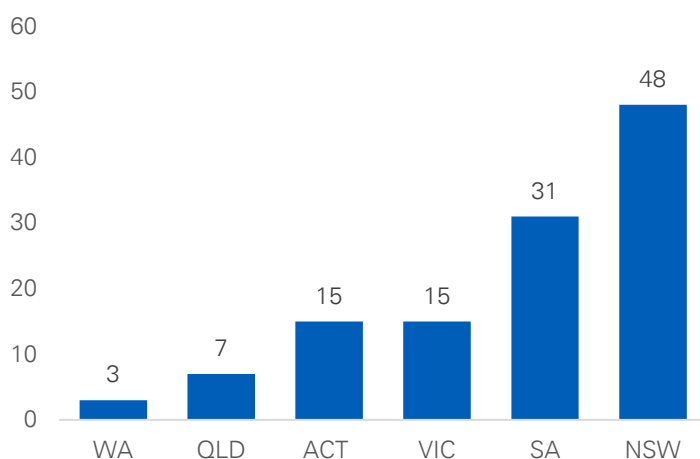
MEGT and Microsoft also notify unsuccessful candidates, including outlining a response and pathway for further education and promoting other training and development opportunities in conjunction with RTOs.

In total, there have been 140 MTP placements since the Program began in 2019, of which 119 Trainees remain active in the MTP (i.e. have not resigned or been dismissed). As shown in Figure 2-4, the largest proportion (40 per cent) of active Trainees are located in NSW, where the MTP commenced, followed by 26 per cent in South Australia. Western Australia and Queensland have the lowest number of Trainees however we note the MTP only recently commenced in these states.

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<sup>14</sup> School leavers are also eligible for the program and may not necessarily meet this requirement.

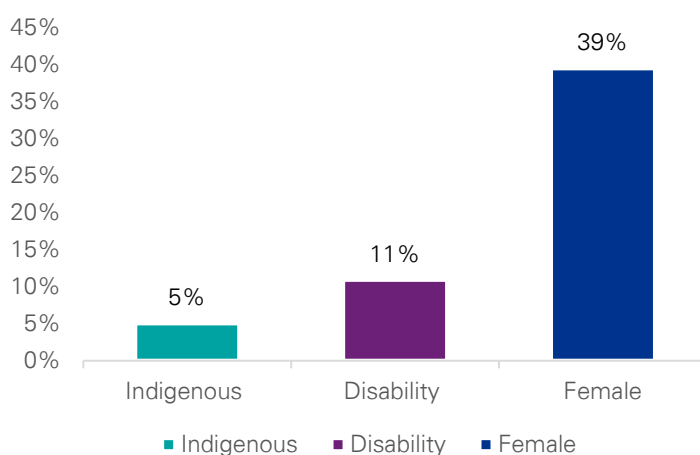
Figure 2-4: Trainees by state - October 2020 (n=119)



Source: KPMG analysis of MEGT Program data, 2020

As shown in Figure 2-5, a large proportion (39 per cent) of Trainees identify as female, a smaller proportion have a disability and approximately six Trainees identify as being Indigenous. It is important to note that some Trainees may identify as being diverse for multiple reasons listed.

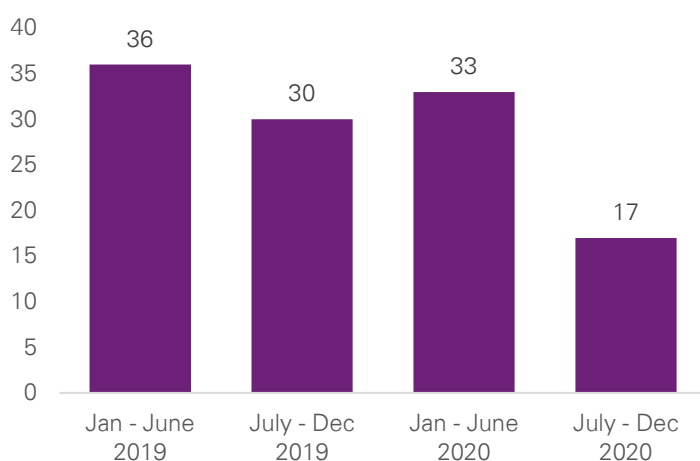
Figure 2-5: Active Trainees by diversity type (n=119)



Source: KPMG analysis of MEGT Program data, 2020

Of the active Trainees, the largest proportion started the Program between January and June 2019 and are in their final months of the Program.

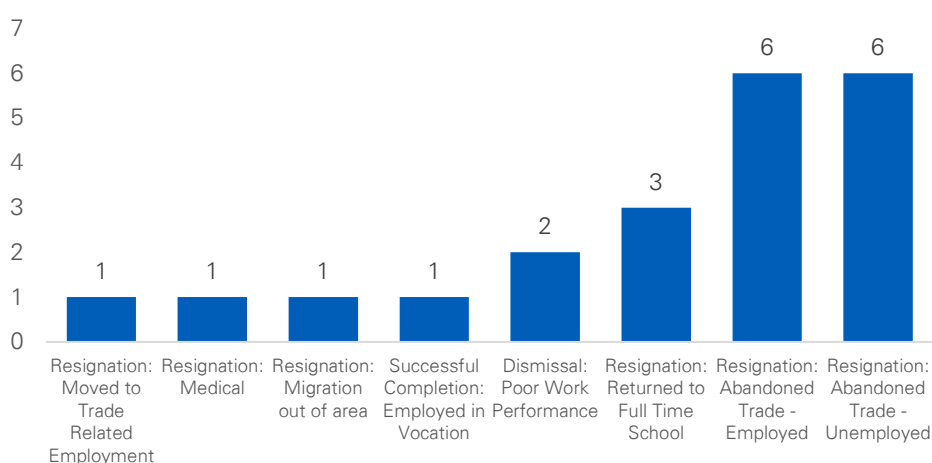
Figure 2-6: Commencement period of active Trainees (n=119)



Source: KPMG analysis of MEGT Program data, 2020

Since Program launch, there have been 21 resignations and dismissals due to a range of reasons, as outlined in Figure 2-7.

Figure 2-7: Reasons for resignations and dismissals (n=21)

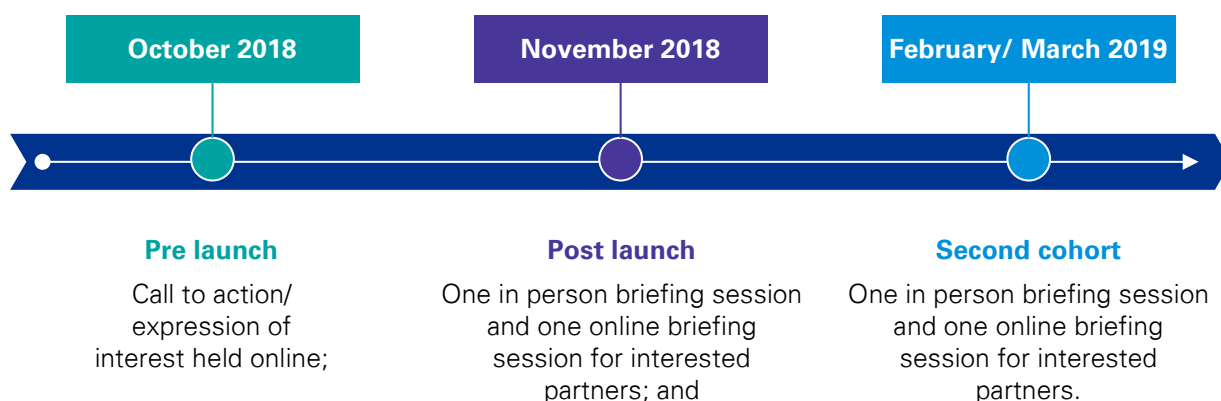


Source: KPMG analysis of MEGT Program data, 2020

## 2.6 Host Employer Recruitment and Characteristics

In 2018 and 2019, MEGT and Microsoft worked together to run five information sessions about the Traineeship with Microsoft Partner organisations:





For Host Employers to be eligible for the Program, MEGT and Microsoft conduct a series of checks and assessments to ensure they are suitable hosts including:

- Credit check;
- Employer Resource Assessment to check that the supervisor has adequate qualifications and experience, the workplace has relevant scope and exposure to the fundamental learning requirements and that the job description is appropriate; and
- Workplace Health and Safety (WH&S) site and corporate assessment.

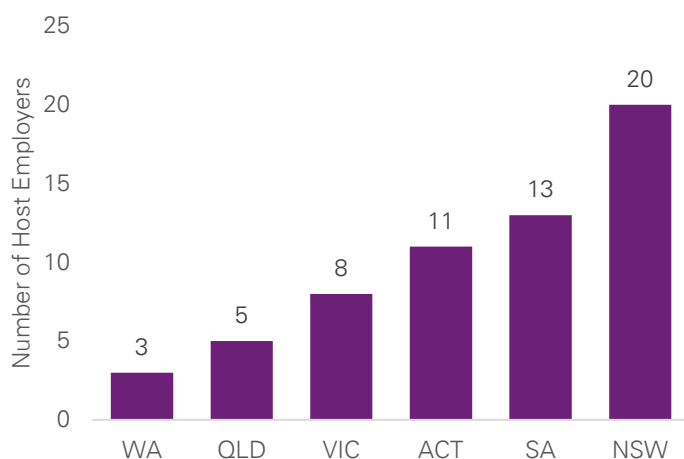
Once selected, MEGT conducts an induction session with Host Employers to provide information about the program, including:

- Microsoft expectations;
- Employment conditions;
- Course content and training delivery;
- Career planning;
- MEGT employment requirements; and
- WH&S.

MEGT maintains a regular site visitation schedule to each Host Employers. This ensures that all Trainees are visited at the start of the Program and every eight weeks during their Traineeship. At the end of the Program, Host Employers decide whether they would like to make a formal job offer to their Trainees. If offers are made, employment transfers from MEGT to Host Employer.

There are currently 55 active Host Employers ranging from large to small organisations. Host Employers are located across Australia, as shown in Figure 2-8. One third of Host Employers are based in NSW. Western Australia and Queensland have the lowest number of Host Employers however we note the MTP only recently commenced in these states.

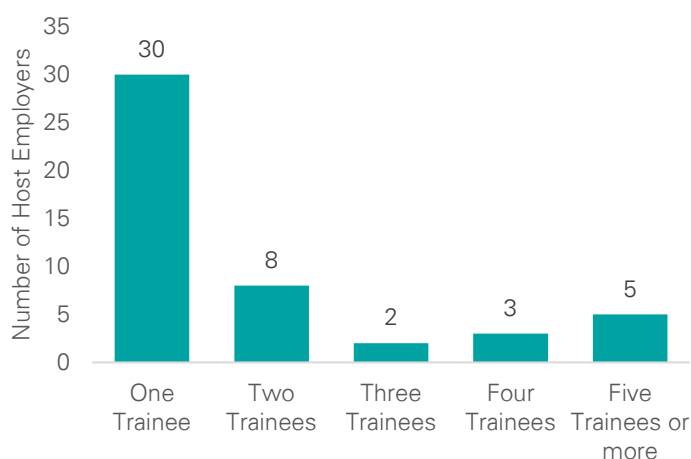
Figure 2-8: Number of Host Employers by state (n= 60)



Source: KPMG analysis of MEGT Program data, 2020. Note that some Host Employers operate in more than one state. The number of unique Host Employers is 48.

Host Employers can recruit multiple Trainees. As shown in the below figure, the largest majority of Host Employers (62.5 per cent) currently have one Microsoft Trainee and nine per cent have five or more Trainees.<sup>15</sup>

Figure 2-9: Number of Trainees taken on by Host Employers (n = 48)



Source: KPMG analysis of MEGT Program data, 2020.

The potential barriers that Host Employers might face in joining the MTP are outlined in Table 3 below. The findings of this evaluation have demonstrated the ways in which these barriers can be overcome, which are also outlined in the below table.

<sup>15</sup> Note that these organisations may have Trainees in multiple states in Australia. For example, Datacom systems has Trainees in NSW, SA, VIC and QLD.

Table 3: Potential barriers Host Employers might face

Potential barrier	Evidence from evaluation of MEGT Traineeship
It may be challenging to find suitable trainee and they will not be ready for work	MEGT provides a short list of potential Trainees to Host Employers. Host Employers are able to select their Trainee based on the individual who they feel will fit best within their organisations. Through consultations, Host Employers highlighted that the attitude of Trainees is most important, and that Trainees have been enthusiastic and ready to learn.
It may be challenging to undertake the administration associated with having a Trainee	MEGT provides support with all aspects of the process. Host Employers and Trainees can raise issues throughout the Program through regular site visits conducted by MEGT.
Perception that vocational training is not suitable for the requirements of the workplace	Vocational training is building a good skills base, complemented by on-the-job learning and Microsoft credentials. Trainees bring their TAFE education to work and there have been instances where Trainees have improved business processes as a result. Additionally, the updated ICT Training Package (implemented in 2020) will better reflect the latest technology advancements.
Perception that trainees are too different to the rest of the workforce	The diversity of Trainees was highlighted by Host Employers as an asset, as Trainees bring fresh perspectives on business processes and tasks.
Perception that employers will spend time training a Trainee and that investment will not be realised	100 per cent of Trainees interviewed (n= 5/5) responded that they would like to remain in employment with their current employer in two years' time. 100 per cent of Host Employers (n= 4/4) also responded that they would like to offer their Trainee employment following Program completion. Of the 29 Trainees graduating in December 2020, 55 per cent had been offered further employment by their Host Employer by early December.
Perception that need for younger talent is already met through graduate pathways	Some Host Employers highlighted that their organisation did not have graduate programs, and therefore were only looking to fill the position with a Trainee. In cases where organisations did have graduate programs, Host Employers expressed a view that Trainees are complements to graduate recruitment and that the position would not have been filled by a graduate, as they are separate roles.
Perception that Trainees are a cost to business and will not generate revenue	Trainees generate economic benefits for employers and support the delivery of billable work for clients.

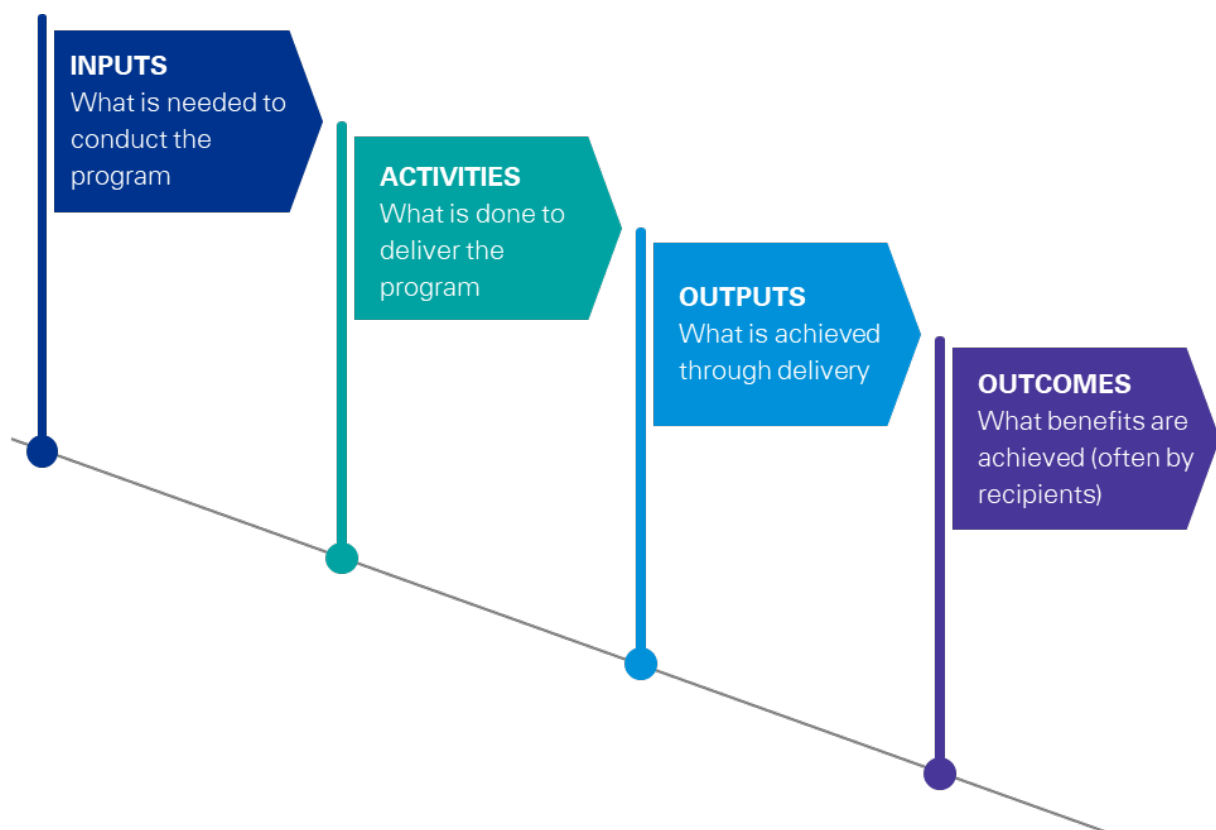
## 3 Theory of Change

This Section explains the purpose of a Theory of Change and how a Theory of Change informs the broader evaluation framework and approach. It also outlines a Theory of Change for the Microsoft Traineeship Program.

### 3.1 Theory of Change Development

The Theory of Change is a picture of how a program is intended to work and links input, activities, outputs and outcomes. This evaluation is focused on program outcomes, that is, the intended benefits that are achieved by those who participate in the Microsoft Traineeship Program (Trainees and Host Employers). Figure 3-1 summarises the key elements of a Theory of Change.

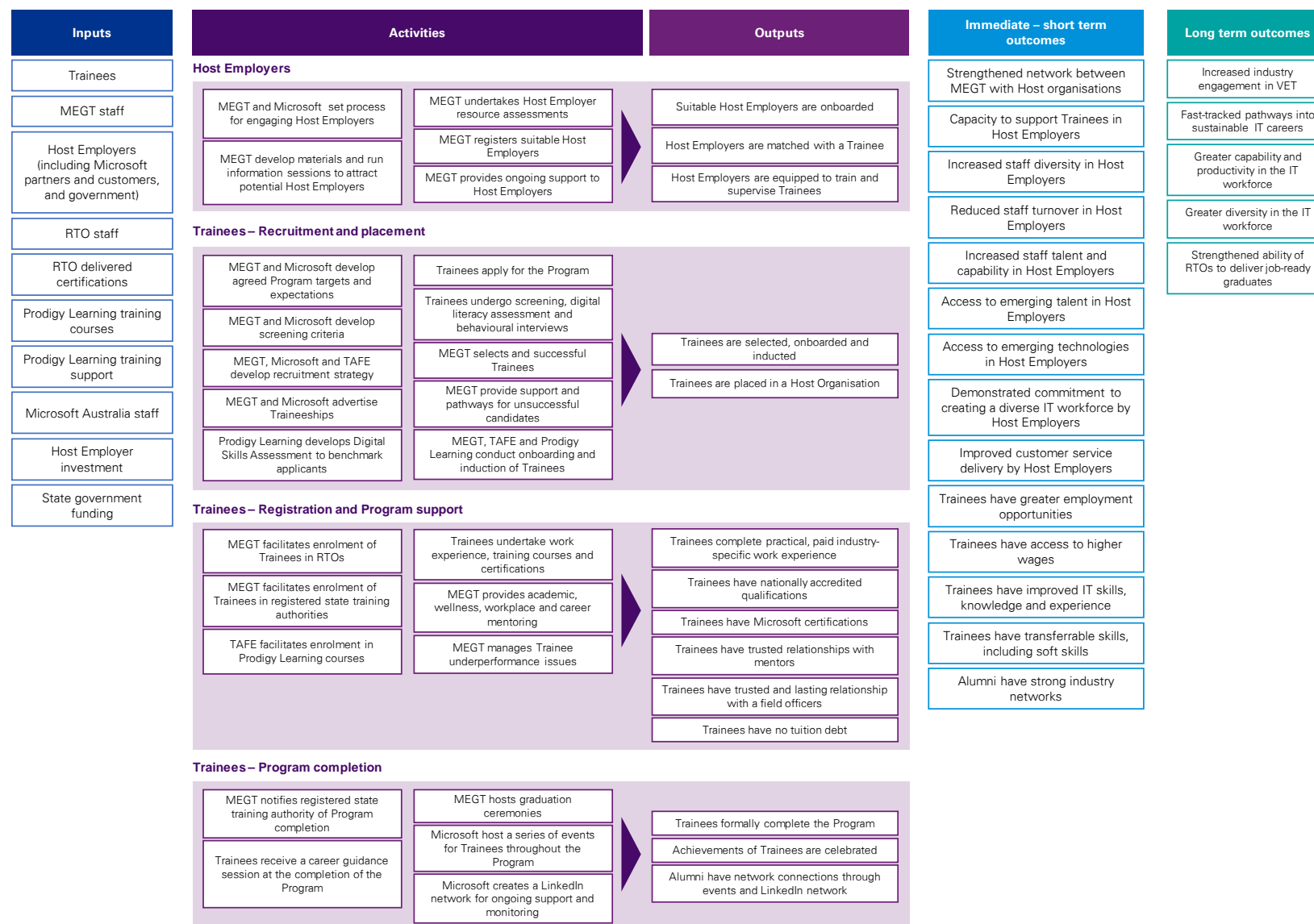
Figure 3-1: Key elements of a Theory of Change



Source: KPMG

A Theory of Change was developed to support a consistent understanding of the Microsoft Traineeship Program and was tested with MEGT staff during a workshop on 10 November 2020. It is a tool to clarify the expected outcomes of activities undertaken by MEGT and other participants including Microsoft, TAFE, Prodigy Learning and Trainees. This understanding also underpins the evaluation approach outlined in Section 4.

Figure 3-2: The Theory of Change depicts how the **inputs** and **activities** of the Microsoft Traineeship Program are linked to its **outputs** and **outcomes**.

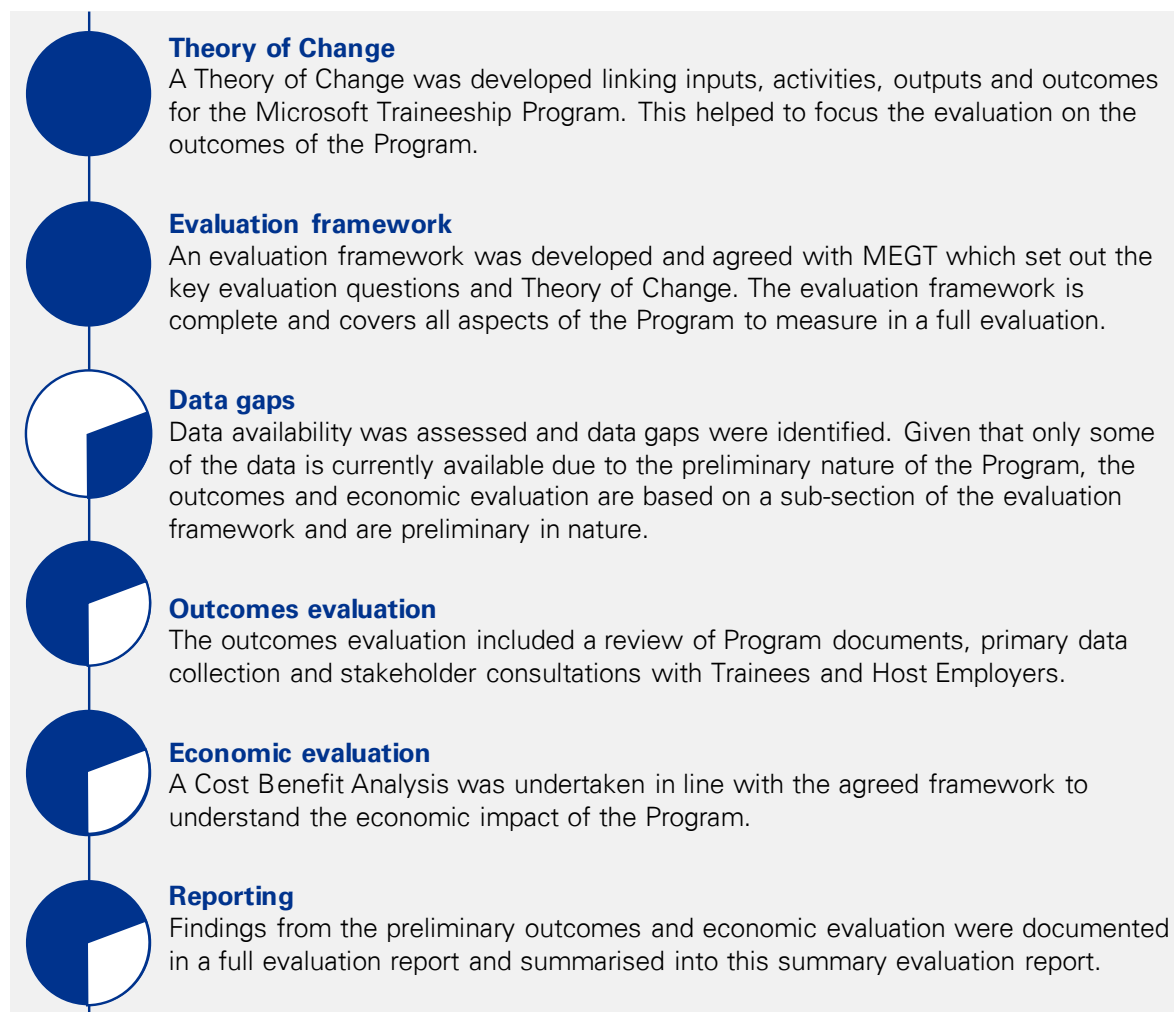


## 4 Overarching Approach

This Section provides an overview of the approach taken to develop the full evaluation framework, including the evaluation questions to guide data collection and analysis in the future.

### 4.1 Overarching Approach

The approach taken to the preliminary outcomes and preliminary economic evaluation of the Microsoft Traineeship Program is detailed below.







### 4.2 Evaluation Questions

A set of evaluation questions were developed as part of the complete evaluation framework. The evaluation framework seeks to set out an approach for measuring all aspects of the Program against the theory of change. However, noting that there are currently data gaps due to the preliminary nature of the program, the preliminary outcomes and preliminary economic evaluation is based on a sub-section of the following evaluation questions.

The full set of evaluation questions will be used to guide data collection and analysis into the future. The key evaluation questions and the availability of data is included in Table 4, with further detail included in Appendix A. The preliminary evaluation has used the methods and data sources that are available now. It is suggested that the additional methods and data sources listed are used for future

evaluations. Further information regarding data gaps and availability is included in the following sub-sections, and suggestions for data collection in the future is included in Section 8.

Table 4: Key evaluation questions and data availability

Key evaluation question	Methods / data sources	Current data availability
To what extent does the Microsoft Traineeship Program enable pathways into IT careers?	<p><b>Available now:</b></p> <ul style="list-style-type: none"> <li>• MEGT Program data</li> <li>• Trainee feedback survey</li> <li>• Host Employer feedback survey</li> <li>• Consultations with Trainees and Host Employers</li> <li>• Site Visit questionnaires - Trainee answers regarding what could be done by MEGT and Host Employers to improve the experience and satisfaction rating</li> </ul> <p><b>To be collected:</b></p> <ul style="list-style-type: none"> <li>• Survey of unsuccessful applicants</li> <li>• Alumni survey</li> <li>• Survey of former Host Employers</li> <li>• Consultations with recruitment/ HR staff at Host Employers</li> </ul>	
To what extent have participants increased their IT skills and knowledge?	<p><b>Available now:</b></p> <ul style="list-style-type: none"> <li>• MEGT Program data</li> <li>• Trainee and Host Employer surveys</li> <li>• Consultations with Trainees and Host Employers</li> <li>• Site Visit questionnaires – Trainee answers to questions relating to course progression and goals</li> </ul> <p><b>To be collected:</b></p> <ul style="list-style-type: none"> <li>• Pre-post results of Digital Literacy Assessments</li> <li>• Alumni survey</li> <li>• Survey of former Host Employers</li> </ul>	
To what extent does the Microsoft Traineeship Program increase the diversity of the IT workforce?	<p><b>Available now:</b></p> <ul style="list-style-type: none"> <li>• MEGT Program data</li> <li>• Consultations with Host Employers</li> </ul> <p><b>To be collected</b></p> <ul style="list-style-type: none"> <li>• Alumni surveys</li> <li>• Survey of former Host Employers</li> <li>• Consultations with recruitment/ HR staff</li> </ul>	
To what extent is the productivity of the workforce increased	<p><b>Available now:</b></p> <ul style="list-style-type: none"> <li>• Consultations with Host Employers</li> <li>• Host Employer surveys</li> </ul>	

as a result of the Program?	<b>To be collected:</b> <ul style="list-style-type: none"> <li>• Alumni survey</li> <li>• Survey of former Host Employers</li> <li>• Focus groups with RTOs</li> </ul>	
Have there been any other impacts of the Program for Trainees, Host Employers or MEGT?	<b>Available now:</b> <ul style="list-style-type: none"> <li>• Consultations with Trainees, Host Employers and MEGT</li> <li>• Survey of Trainees and Host Employers</li> </ul> <b>To be collected:</b> <ul style="list-style-type: none"> <li>• Alumni survey</li> <li>• Survey of former Host Employers</li> <li>• Consultations with recruitment/ HR staff</li> <li>• Focus groups with RTOs</li> </ul>	●
What is the economic impact of the Program?	See Table 10 in Section 5.3.5	●



## 5 Preliminary Evaluation Approach

This Section provides an overview of the approach taken to develop the preliminary outcomes and preliminary economic evaluation, including the data sources that were used.

### 5.1 Data Availability

Given that the Program is in early stages of implementation, a number of data gaps have been identified which are outlined in Table 5.

**The consequence of the data gaps is that we are completing a preliminary evaluation based on a sub-set of the evaluation questions.**

Table 5: Current data gaps

Data	Purpose
Alumni survey	To track outcomes of Program participants, including employment and education outcomes
Pre-post skills testing	To test uplift in skills and knowledge over the course of the Program
Survey of former employers/ employers over time	To understand the impact of alumni on Host Employers and the ways in which the Program has changed over time
Interviews with RTOs	To understand the impact of the Program on RTOs and the sector more broadly. Understand the links between RTOs and Host Employers as a result of the Program
Consultations with recruitment staff at Host Employers	To validate assumptions around retention, recruitment and administration costs
Real employment outcomes	To validate assumptions around employment pathways including the proportion of people who remain in the industry and with their Host Employer
Real wages	To validate assumptions around future earnings of Trainees
Survey of unsuccessful applicants	To collect stronger comparison data on outcomes of a cohort that is closer to the Trainees
Productivity improvements in the workplace	To build an evidence base about the uplift in productivity that Trainees can deliver

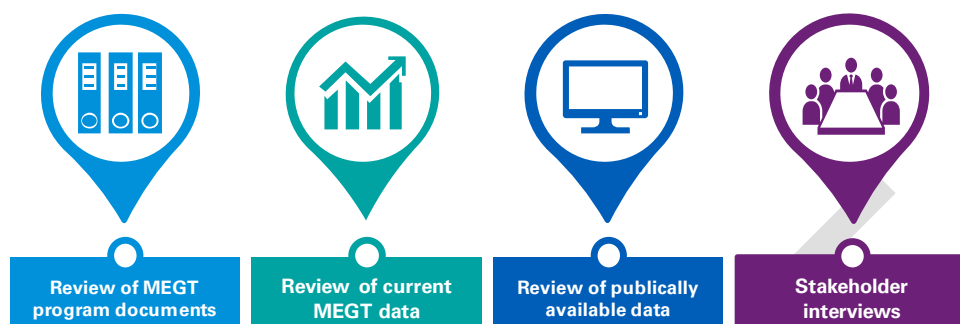
Key data sources for the implementation of the preliminary evaluation are outlined in the following sub-sections. Further detail regarding the additional data sources that are proposed to track progress and measure impact in the years ahead are discussed in Section 8.

The ability to adequately quantify costs and benefits is dependent on the availability and quality of relevant data to inform assumptions to underpin the preliminary CBA.

## 5.2 Preliminary Outcomes Evaluation

The evaluation questions set out a mixed methods approach, as outlined in Figure 5-1. Each of these methods are explained in further detail in the following sub-sections.

Figure 5-1: Evaluation methods



### Review of MEGT program documentation:

MEGT documentation relating to the Microsoft Traineeship Program was reviewed to gain further contextual understanding of the Program. The preliminary review of the Program documents was a key input into the development of the Theory of Change and evaluation questions and contributed to understanding how MEGT operates.

Documents that were reviewed include:

- MEGT and Microsoft, Memorandum of Understanding;
- MEGT and Microsoft, Updated Memorandum of Understanding;
- MEGT, Microsoft Traineeship Program: Course Overview;
- MEGT, Microsoft Traineeship Program Rate Card;
- TAFE NSW, NSW Apprenticeship/ Traineeship – Training Plan;
- MEGT, Host Employer handbook;
- MEGT, Trainee handbook;
- MEGT, Recruitment process;
- MEGT, Site visit questionnaire;
- Australian Apprenticeships, National Standards for Group Training Organisations; and
- MEGT, Host Employer Agreement.

### Review of MEGT data

MEGT data collected on the Program since its commencement was reviewed to understand and assess MEGT's delivery model and the impact of the Program. Data that was analysed includes:

- Microsoft Trainee Data;
- Microsoft Program Impact Study and Data;
- Microsoft National Skills Program – Trainee Feedback;
- Microsoft National Skills Program – Host Feedback; and
- Microsoft Charge Sheet – National Breakdown.

## Review of Publicly Available Data

Desktop research and analysis of publicly available data was also undertaken to understand the IT industry and vocational training sector overall, including outcomes for students who are not part of the Microsoft Traineeship Program. The key sources of publicly available data are detailed in Table 6.

Table 6: Publicly available data to be reviewed

Agency	Data	Source
ABS	<ul style="list-style-type: none"> <li>Household earnings</li> <li>Workforce participation</li> </ul>	ABS, 2016, Census of Population and Housing.
ABS	<ul style="list-style-type: none"> <li>Income by qualifications</li> <li>Workforce status by qualifications</li> </ul>	ABS, 2018-19 Qualifications and work.
Centre for Education Statistics and Evaluation	<ul style="list-style-type: none"> <li>Secondary student pathway statistics</li> </ul>	Centre for Education Statistics and Evaluation, NSW Secondary Students' Post-School Destinations and Expectations: 2018 Main Destination findings.
Forbes	<ul style="list-style-type: none"> <li>Staff attrition rates</li> </ul>	Johnston, T., June 2018, The Real Problem With Tech Professionals: High Turnover, Forbes.
Deloitte	<ul style="list-style-type: none"> <li>Size of the IT workforce</li> <li>Demographics of the IT workforce</li> </ul>	Deloitte, 2020, ACS: Australia's Digital Pulse.
Diversity Council of Australia	<ul style="list-style-type: none"> <li>Benefits of diverse workplaces</li> </ul>	Diversity Council of Australia, Inclusion@Work Index 2017-2018.
DESE	<ul style="list-style-type: none"> <li>University completion rates</li> </ul>	DESE, 2019, Completion Rates of Higher Education Students- Cohort Analysis, 2005-2019.
DESE	<ul style="list-style-type: none"> <li>University enrolments</li> </ul>	DESE, 2020, 2019 Student summary tables.
DESE	<ul style="list-style-type: none"> <li>Employment outcome data</li> <li>Trainee demographics</li> </ul>	Department of Education, Skills and Employment, 2020, Youth Jobs PaTH Evaluation Report.
Human Resource Director Magazine	<ul style="list-style-type: none"> <li>Cost of recruitment</li> </ul>	Hilton, J., November 2019, This is how much it costs to hire one employee.
NCVER	<ul style="list-style-type: none"> <li>Retention rates</li> <li>Completion rates</li> </ul>	NCVER, 2020, Completion and attrition rates for apprentices and trainees 2019.
NCVER	<ul style="list-style-type: none"> <li>VET employment outcomes</li> </ul>	NCVER, 2019, VET student outcomes.

Agency	Data	Source
	<ul style="list-style-type: none"> <li>Income of VET graduates</li> </ul>	
NCVER	<ul style="list-style-type: none"> <li>VET program enrolments</li> <li>VET program completions</li> <li>VET students</li> </ul>	NCVER, 2020, Total VET students and courses.
NCVER	<ul style="list-style-type: none"> <li>VET completion rates</li> <li>VET attrition rates</li> </ul>	NCVER, 2019, VET qualification completion rates 2017.
Productivity Commission	<ul style="list-style-type: none"> <li>Prevalence of mental ill-health</li> <li>Costs of mental ill-health to the economy</li> </ul>	Productivity Commission, November 2020, Inquiry Report: Mental Health.
QILT	<ul style="list-style-type: none"> <li>University student outcomes</li> <li>University graduate incomes</li> </ul>	QILT, 2019, Graduate Outcomes Survey.
SafeWork NSW	<ul style="list-style-type: none"> <li>Benefit of workplace mental health interventions</li> </ul>	Glozier, N., September 2017, Review of Evidence of Interventions to Reduce Mental Ill-Health in the Workplace, SafeWork NSW.
Society for Human Resource Management	<ul style="list-style-type: none"> <li>Cost of human resource services</li> </ul>	Society for Human Resource Management, 2015, Workforce Analytics: A Critical Evaluation: How Organizational Staff Size Influences HR Metrics.

## Stakeholder Interviews

The purpose of stakeholder interviews was to:

- Gather qualitative information to inform the evaluation and a broad range of evaluation questions;
- Gain further context to evaluate the outcomes achieved by MEGT's Microsoft Traineeship Program; and
- Verify and deepen assumptions to support the preliminary Cost Benefit Analysis.

Five consultations were held with Program Trainees. The focus of the interviews with Trainees was to gather perspectives on:

- Background to their role and reasons for applying for the Microsoft Traineeship;
- Trainee's experience throughout the Traineeship, including the impact it has had on their career, education and skills;
- Where Trainees expect to be in the future and how the Program has impacted this; and
- Any other impacts that the Trainees have experienced as a result of the Program.

Four consultations were held with Host Employers to gather perspectives on:

- Host Employer's roles in relation to the Microsoft Trainee;
- Overview of the workforce, including the organisation's involvement with this and other

Traineeship Programs;

- The skills and capabilities of the Microsoft Trainee, including how they have changed over time and how they compare to other employees;
- The ways in which the Microsoft Trainee has impacted the diversity of the workforce; and
- Other considerations, including whether the organisation has experienced any other outcomes and any barriers that organisations might face to joining the Program.

The detailed consultation guides that were used during interviews are included in Appendix C.

## 5.3 Preliminary Cost Benefit Analysis Analytical Framework

### 5.3.1 Overview of Cost-Benefit Analysis

Cost-benefit analysis is a systematic approach to analysing the economic and social costs and benefits associated with a program. CBA uses discounted cash flow analysis to compare the marginal costs and benefits of different options, such as the conducting of a program, relative to a 'do nothing' base case scenario.

The purpose of this preliminary economic evaluation will be to estimate the total economic benefits associated with the Microsoft Traineeship Program and estimate the extent to which these benefits may outweigh the costs of the programs. The preliminary CBA will involve the following steps:

- **Step One:** Articulating the 'do-nothing' base case and the 'option case' (Microsoft Traineeship Program) for analysis.
- **Step Two:** Identifying relevant economic and social costs and benefits for the 'do-nothing' base case and the 'option case'.
- **Step Three:** Quantification of the costs and benefits.
- **Step Four:** Identification of qualitative benefits that accrue to beneficiaries but may not be able to be directly quantified in market-based monetary terms.
- **Step Five:** Comparing and contrasting the quantified costs against benefits over an appropriate timeframe.
- **Step Six:** Generating performance measures such as Net Present Value (NPV), Benefit-to-Cost Ratio (BCR) and Internal Rate of Return (IRR) to evaluate the relative economic impact of the MEGT programs.
- **Step Seven:** Sensitivity analysis to assess the impacts of changes in key variables on performance measures.

This approach is consistent with NSW Treasury Guidelines on conducting CBA.<sup>16</sup>

### 5.3.2 Options

The preliminary CBA compares an 'option' (the Microsoft Traineeship Program) with a 'do nothing' base case, which is consistent with NSW Treasury Guidelines for conducting a business case. This process requires mapping the outcomes of a group of students along each step of their potential educational and work pathway. Depending on the cohort's participation, or non-participation, in the MTP, different proportions of people will take different routes, and the journey along the pathway will lead to a different set of costs and benefits in the base case and in the option case.

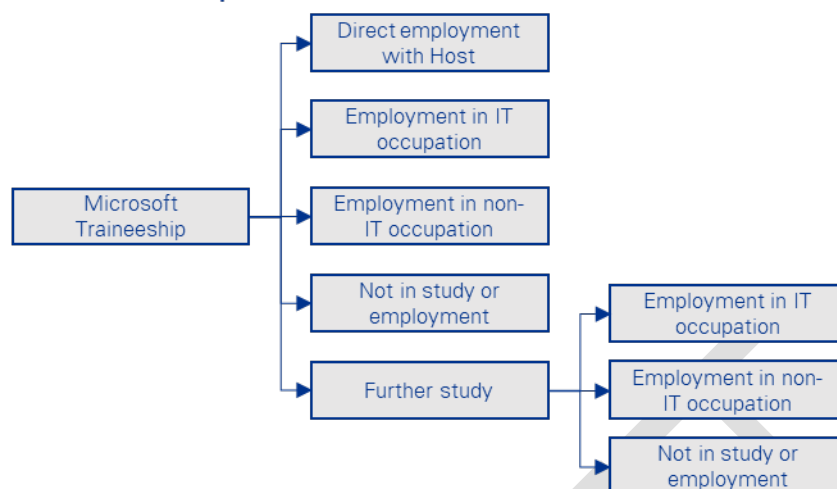
Figure 5-2 illustrates the different potential pathways of people into training and work.

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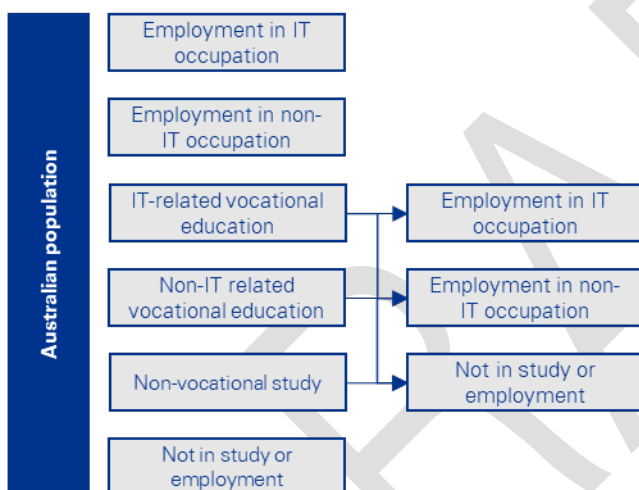
<sup>16</sup> NSW Treasury 2017, NSW Government Guide to Cost-Benefit Analysis, Policy and Guidelines Paper.

Figure 5-2: Potential educational and employment pathways

#### Option – Microsoft Traineeship



#### Base Case



To conduct the preliminary CBA, we need to understand how individuals would progress through the potential pathway with or without the Microsoft Traineeship Program. That is, we are estimating a counterfactual — what the outcomes of Microsoft Traineeship Program participants would have been in the absence of the program. Figure 5-2 presents a preliminary view of the potential educational and employment outcomes for an individual under the ‘base case’ and with the program. The **assumptions about outcomes under the program** relative to the base case **were confirmed in the preliminary outcomes evaluation**. In this example, the ‘base case’ is assumed to be outcomes in line with the Australian population overall.

The students who apply for and receive MEGT Microsoft Traineeship positions are likely to be systematically different from the population overall, and these differences may mean that the group may have experienced different outcomes than the population even in the absence of the program. As we work with MEGT data, we will consider how the cohort differs from the population and seek to use a comparison group whose characteristics more closely match those of participants.

Table 7: Microsoft Traineeship and non-Microsoft Traineeship pathways

Assumptions under the base case and the options case – to be confirmed in the outcomes evaluation		
Stage of pathway	Base case	Microsoft Traineeship
<b>IT-related employment (no vocational qualifications)</b>	Earnings in line with the Australian average for people without a non-school qualification	People who fail to complete the Program are assumed to have employment and earnings outcomes in line with the base case
<b>Non-IT related employment (no vocational qualifications)</b>	Earnings in line with the Australian average for people without a qualification	People who fail to complete the Program are assumed to have employment and earnings outcomes in line with the base case
<b>IT-related vocational education</b>	Likelihood of people entering and completing IT-related vocational education in line with Australian average for people without a non-school qualification	People who fail to complete the Program are assumed to enter into alternative IT-related vocational education in line with the base case
<b>Non-IT related vocational education</b>	Likelihood of people entering and completing non-IT related vocational education in line with Australian average for people without a non-school qualification	People who fail to complete the Program are assumed to enter in alternative non-IT related vocational education in line with the base case
<b>Non-vocational education</b>	Likelihood of people entering and completing higher education in line with Australian average for people without a non-school qualification	People who fail to complete the Program are assumed to enter into higher education in line with the base case
<b>IT-related employment (following IT-related vocational education)</b>	Earnings in line with the Australian average for people with an IT-related vocational qualification	<p>People who complete the Program are assumed to enter into IT-related employment at a higher rate than the base case</p> <p>People who fail to complete the Program are assumed to enter into IT-related employment in line with the base case</p>
<b>Non-IT related employment (following IT-related vocational education)</b>	Earnings in line with the Australian average for people with an IT-related vocational qualification	<p>People who complete the Program are assumed to enter into non-IT related employment at a higher rate than the base case</p> <p>People who fail to complete the Program are assumed to enter into non-IT related</p>

Assumptions under the base case and the options case – to be confirmed in the outcomes evaluation		
Stage of pathway	Base case	Microsoft Traineeship
		employment in line with the base case
<b>IT-related employment (following non-IT related vocational education)</b>	Earnings in line with the Australian average for people with a non-IT related vocational qualification	People who fail to complete the Program are assumed to enter into IT-related employment in line with the base case
<b>Non-IT related employment (following non-IT related vocational education)</b>	Earnings in line with the Australian average for people with a non-IT related vocational qualification	People who fail to complete the Program are assumed to enter into non-IT related employment in line with the base case
<b>IT-related employment (following non-vocational education)</b>	Earnings in line with the Australian average for people with a higher education qualification	People who fail to complete the Program are assumed to enter into IT-related employment in line with the base case
<b>Non-IT related employment (following non-vocational education)</b>	Earnings in line with the Australian average for people with a higher education qualification	People who fail to complete the Program are assumed to enter into non-IT related employment in line with the base case
<b>Not in employment or study</b>	Likelihood of being not in employment or study in line with the Australian average for people without a non-school qualification	<p>People who complete the Program are assumed to be not in employment or study at a lower rate than the base case</p> <p>People who fail to complete the Program are assumed to be not in employment or study at the same rate as the base case</p>

### 5.3.3 Preliminary CBA Parameters

A range of timing, cost and escalation assumptions were adopted to undertake the preliminary CBA. These assumptions are summarised in Table 8 below.

Table 8: Preliminary CBA parameters

Item	Assumption	Source
<b>Scope of analysis</b>	2019 Trainee Cohort, Australia	Base assumption



Item	Assumption	Source
<b>Base date for NPV</b>	2019 (as this is when the cohort started in the program)	Base assumption
<b>Discount rate (real)</b>	7 per cent per annum	NSW Treasury
<b>Price year</b>	All costs and benefits in the evaluation will be presented in 2019 Australian prices.	Base assumption
<b>Evaluation period</b>	2019-2028	Base assumption
<b>Preliminary economic evaluation</b>	<p>The preliminary economic evaluation considered the project from a community perspective and includes costs and benefits faced by individuals, communities and Government.</p> <p>We anticipate that some of these impacts will not be directly quantified in market-based monetary terms.</p>	Base assumption

### 5.3.4 Identification of Costs and Benefits

The analysis aims to measure the economic impacts of the Microsoft Traineeship Program. The primary focus of the analysis will be to measure the financial and other costs associated with the base case and option case and options, and the immediate economic benefits derived from any measurable improvement in educational attainment and employment outcomes.

Table 9: Identified costs and benefits

Cost/Benefit	Bearer/Beneficiary	Description	Quantified
<b>Costs</b>			
Trainee wages	Employers	Cost of employing Trainees	Yes
Microsoft contribution	Microsoft	Cost incurred by Microsoft to deliver a range of services including the Microsoft certifications, cultural awareness training and events	Yes
Vocational education course fees	Employers / State government	The average costs of vocational education incurred by Employers and the cost to State governments of subsidising vocational education	Yes
Program administration costs	MEGT / Federal Government	Costs to administer and run the MTP, including MEGT staff wages, and wage subsidies incurred by the Federal Government	Yes
Time dedicated to supporting Trainees	Employers	Cost to employers of allocating staff to provide on-the-job learning and support to Trainees	Yes
<b>Benefits</b>			
Employers experience lower staff wages (during the Program)	Employers	Employers benefit from paying Trainees Award rates for the 2-year duration of the MTP, instead of paying a higher wage to a university graduate to fill the position, as stated under the Base Case.	Yes
Employers avoid the administrative burden of managing staff	Employers	Employers benefit from contracting MEGT to legally hire and undertake administrative services to support Trainees throughout the MTP (for example, payroll services)	Yes

Cost/Benefit	Bearer/Beneficiary	Description	Quantified
Employers experience reduced staff turnover	Employers	Employers experience a reduced likelihood of losing staff during the two-year MTP given that Trainees are on fixed-term contracts. Employers benefit from avoided turnover and recruitment costs.	Yes
Employers experience lower recruitment costs after the Program	Employers	By participating in the MTP, Employers have the option of hiring their Trainee in an ongoing capacity, thereby avoiding the cost of recruiting a university graduate to fill the position, as stated under the Base Case.	Yes
Increased diversity in the IT workforce	Employers/ Community	Increasing the diversity of the workforce is associated with a range of benefits including enhancing productivity and lower staff turnover.	Yes
Increased productivity in the IT workforce	Employers/ Community	Providing pathways into the IT workforce for Trainees with relevant skills and knowledge increases capability in the sector, and with access to the latest technologies through the Program, Employers can provide improved services to their customers. Collectively, these factors result in increased productivity in the IT workforce in comparison to the Base Case.	No
Trainees receive a wage while completing the Program	Individuals/Employers	Trainees benefit from earning a wage completing the MTP which is higher than the average income of persons outside the Program as stated under the Base Case. The benefit is the difference in the Trainee earnings with the Program and the base case earnings.	Yes
Trainees receive mental health and wellbeing support while completing the Program	Individuals/Employers	Trainees are provided with mental health and wellbeing support throughout the Program which may reduce the prevalence of mental ill-health in MTP	Yes

Cost/Benefit	Bearer/Beneficiary	Description	Quantified
		Trainees, and thereby reduces the rate of absenteeism and presenteeism.	
Trainees given a fast-tracked pathway into sustainable IT careers	Individuals/ Community	<p>Participation in the Program increases the likelihood of retention in vocational courses, and subsequent completion of courses in comparison to the Base Case.</p> <p>By increasing their IT skills and knowledge and forming lasting, trusted relationships with mentors and industry networks, Trainees are provided with a fast-tracked pathway into sustainable IT careers.</p> <p>Further, Trainees have access to higher average earnings as a result of increased educational attainment and a higher earning employment pathway in comparison to the Base Case as they progress through their career.</p>	Yes
Trainees have a higher likelihood of employment	Individuals	Participation in the Program increases the likelihood of transitioning into employment given the skills, experience and qualifications attained by Trainees in comparison to the Base Case. Additionally, Trainees have the opportunity to transition into direct employment with their Host Employer after completing the MTP.	Yes
Increased industry engagement in the vocational education and training sector	RTO's/Community	Increased engagement of MEGT and Host Employers with RTO's may increase the quality and relevance of vocational education courses, thereby strengthening the ability of RTOs to deliver graduates that meet the needs of employers and the industry	No

### 5.3.5 Quantification of Costs and Benefits

Table 10 below provides a detailed framework of our approach to the analysis, including an outline of costs and benefits, the bearers and beneficiaries, the base case and option definition, and the sources of information used to estimate the economic impacts.

Table 10: Quantification approach

Cost/benefit	Quantification approach	Source of data	Base case	Options case
<b>Costs</b>				
Trainee wages	Host Employers pay each Trainee a wage as outlined under the Award rate (Clerks - Private Sector Award 2010).  On average, Employers pay Trainees \$38,352 per year (weighted by the distribution of Trainees in the MTP by age and level of school attainment).	MEGT Program data		✓
Microsoft contribution	The annual Benevity funding provided by Microsoft to MEGT was \$208,247 in 2019 and \$244,675 in 2020.	MEGT Program data		✓
Vocational education course fees	Host Employers pay, on average, \$1,001 per Trainee to undertake vocational education.  State and territory governments incur an average training subsidy of \$7,948 per Trainee.	MEGT Program data  National Skills Commission – Certificate IV in Information Technology		✓
Vocational education course fees	The average vocational course costs in Australia is \$9,000.	Australian Government, Further Education in Australia	✓	
Tertiary education costs	The average tertiary education costs in Australia is \$26,500.	Australian Government, Further Education in Australia	✓	
Program administration costs	Host Employers pay a 12 per cent service fee per Trainee per year to MEGT of \$4,602 (weighted by the distribution of Trainees in the MTP by age and level of school attainment).	MEGT Program data		✓

Cost/benefit	Quantification approach	Source of data	Base case	Options case
	The Federal Government contributes \$1,500 per Trainee in year 1 and \$2,500 per Trainee in year 2.			
Time dedicated to supporting Trainees	<p>It is assumed that Employers, on average, dedicate an additional 1.5 hours per week to provide on-the-job support to each Trainee.</p> <p>The hourly wage of persons in the IT industry is estimated to be \$51.85.</p>	Deloitte: Australia's Digital Pulse		✓
<b>Benefits</b>				
Employers experience lower staff wages (during the Program)	<p>Trainees receive, on average, \$35,352 per year while completing the MTP.</p> <p>A university graduate is paid, on average, \$62,600 per year.</p> <p>Employers benefit from incurring a lower employee wage.</p> <p>It is assumed that Employers receive 50 per cent of the benefit accrued due to the difference in wage, noting that Trainees do not have the same level of qualification as university graduates.</p>	<p>MEGT Program data</p> <p>QILT – 2019 Graduate Outcome Survey</p>		✓
Employers avoid the administrative burden of managing staff	<p>The average human resource cost to manage an employee is estimated to be \$3,592.</p> <p>Employees avoid paying this cost for every Trainee they employ.</p>	<p>Society for Human Resource Management – How Organizational Staff Size Influences HR Metrics</p> <p>MEGT Program data</p>		✓
Employers experience reduced staff turnover during the Traineeship	<p>25 per cent of Microsoft Trainees fail to complete their Traineeships. This compares with 44 per cent among apprenticeships and traineeships in Australia overall.</p> <p>Employers therefore face a reduced likelihood of replacement and avoid the average cost to recruit an entry-level employee of \$9,772.</p>	<p>MEGT Program Data</p> <p>NCVER: VET completion rates</p> <p><i>Human Resource Director, 2019</i></p>		✓

Cost/benefit	Quantification approach	Source of data	Base case	Options case
Employers experience lower recruitment costs after the Program	47 per cent of Employers are assumed to hire a Microsoft Trainee upon completion of the Traineeship. Employers avoid the average cost to recruit an entry-level employee of \$9,772 for every Trainee they hire.	MEGT projection <i>Human Resource Director, 2019</i>		✓
Increased diversity in the IT workforce	Average turnover in the IT industry is 13 per cent. The average Host Employer is assumed to have 200 employees and two Trainees. People working in inclusive workplaces are four times more likely to stay with their current employer. Trainees are assumed to increase diversity of Host Employers and thereby reduce staff turnover by 75 per cent. Average recruitment cost of is estimated to be \$18,982. Reflecting that the Program has only some impact, the estimated cost saving to Employers is discounted by half.	Forbes Diversity Council of Australia MEGT projection <i>Human Resource Director, 2019</i>		✓
Increased productivity in the IT workforce	Data is not currently available to quantify this benefit	n/a		
Trainees receive a wage while completing the Program	Trainees receive, on average, \$35,352 per year while completing the MTP. 24 per cent of persons in the Base Case are assumed to be employed and receive an average annual wage of \$52,000.	MEGT program data ABS: Qualifications and Work 2018-19 Hays 2020/21 Salary Guide		✓
Trainees receive mental health and wellbeing support while completing the Program	Trainees receive mental health and wellbeing support as part of the Traineeship. 26 per cent of people aged 20-25 experience mental ill health. Workplace mental health support programs reduce mental ill-health by 40 per cent.	Institute for Health Metrics and Evaluation SafeWork NSW Productivity Commission MEGT Program Data		✓

Cost/benefit	Quantification approach	Source of data	Base case	Options case
	On average, 21 days per year are lost due to absenteeism and presenteeism in persons with mental ill-health.  The average daily wage of Trainees is \$130.54.			
Trainees given a fast-tracked pathway into sustainable IT careers	75 per cent of Trainees complete the MTP and MTP graduates earn an average annual income of \$75,000.  28 per cent of vocational education graduates, on average, enter in employment and receive an average annual income of \$48,550.  40 per cent of persons without a non-school qualification, on average, enter in employment and receive an average annual income of \$48,876.  22 per cent of university graduates, on average, enter into employment after 4 years and receive an average annual income of \$96,350.	MEGT projection ABS: Qualifications and Work 2018-19 NCVER: 2019 student outcomes QILT – 2019 Graduate Outcome Survey		✓
Trainees have a higher likelihood of employment	2 per cent of Trainees who complete the MTP enter into unemployment.  5 per cent of persons without a non-school qualification are in unemployment  After completing the MTP, Trainees earn an average annual income of \$75,000.	MEGT projection ABS: Qualifications and Work 2018-19		✓
Increased industry engagement in the vocational education and training sector	Data is not currently available to quantify this benefit	n/a		



Given the preliminary stage of Program implementation, there are a number of evaluation considerations and limitations that readers should be aware of when reading this report. Refer to Section 1.2 for further details.

## 6 Preliminary Outcomes Evaluation Findings

This Section of the report will outline the findings of the preliminary outcomes evaluation based on the KEQs, as detailed below.

KEQ	Key findings	Section
To what extent does the Microsoft Traineeship Program enable pathways into IT careers?	<p>Preliminary data suggests that the Program enables pathways into IT, with 89 per cent (n=42/47) of Trainees responding that they would pursue a career in IT following Program completion. 80 per cent of Trainees interviewed (n= 4/5) responded that they would have pursued a career in IT but that the Program has fast tracked their careers.</p> <p>Of the 29 Trainees expected to graduate in December 2020, 55 per cent have received an offer of employment by their Host Employer.</p>	Section 6.1
To what extent have participants increased their IT skills and knowledge?	<p>Host Employers and Trainees in the first cohort believe that their IT skills and knowledge have increased as a result of the Program. 98 per cent of Trainees (n= 46/47) believe that on the job training is the key benefit of the Program and 100 per cent of Trainees interviewed (n= 5/5) felt that their skills and knowledge had increased as a result of the Program.</p> <p>There are mixed views regarding the benefit and relevance of the TAFE course from both Trainees and Host Employers. 55 per cent (n= 26/47) of Trainees responding that the course “was mostly good but could be better” and 58 per cent (n= 11/19) of Host Employers responding that they were “neither satisfied nor dissatisfied” with TAFE learning.</p>	Section 6.2
To what extent does the Microsoft Traineeship Program increase the diversity of the IT workforce?	<p>Current data suggests that participants in the MTP are more diverse than the IT industry as a whole. For example, when accounting for diversity indicators such as gender, Indigeneity, disability, youth at risk and non-English speaking backgrounds, 67 per cent of Program participants are diverse. Furthermore, 39 per cent of Trainees are female, which is 10 per cent higher than the proportion of women in Australia’s IT workforce.</p>	Section 6.3
To what extent is the productivity of the workforce increased as a result of the Program?	<p>The data and information that is currently available indicates that the productivity of Trainees is comparable to other employees. 89 per cent (n= 17/19) of Host Employers responded that Trainees are performing at a good level or above average. However, Trainees and Host Employers noted that it is challenging to compare capability levels with multiple years of experience in the industry. Through consultations, Trainees and Host Employers acknowledged that further development was needed to reach the level of output of colleagues with further qualifications and experience. Furthermore, Trainees and Host Employers responded that the productivity of Trainees is dependent on “individual goals” and “attitudes”.</p>	Section 6.4

KEQ	Key findings	Section
Have there been any other impacts of the Program for Trainees, Host Employers or MEGT?	<p>Through consultations, a number of other impacts were highlighted, including:</p> <ul style="list-style-type: none"> <li>• Host Employers felt that the Program strengthened their relationship with Microsoft;</li> <li>• Host Employers felt that the Program contributed to their own upskilling in management, coaching and technology skills; and</li> <li>• Trainees highlighted the benefit of the social element of the Program, including the connections made with Trainees in other organisations.</li> </ul>	Section 6.5

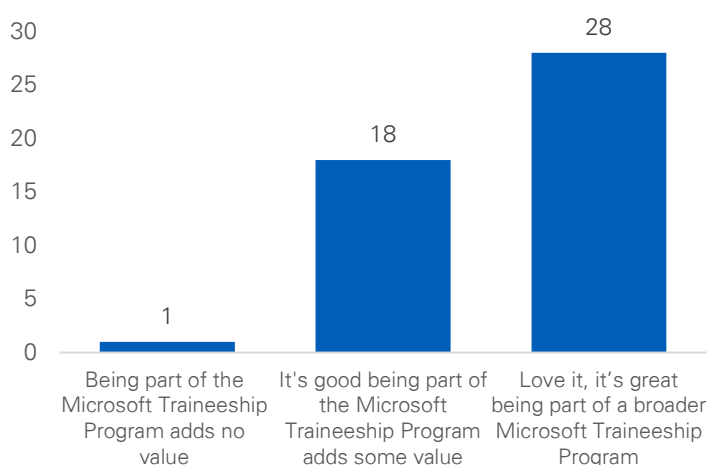
## 6.1 Increased Pathways into IT

A key objective of the MTP is to increase pathways into IT through completion of the program. This preliminary evaluation used the following data to measure this outcome:

- MEGT Program data (based on 140 participants in total and 119 active participants);
- MEGT Trainee feedback survey (47 responses which represents 39 per cent of all active participants);
- MEGT Host Employer survey (19 responses which represents 35 per cent of all Host Employers); and
- Consultations with five Trainees and four Host Employers.

Current MTP Trainees are satisfied with the Traineeship overall, with 60 per cent (n= 28/47) responding that they “love (the Program), it’s great being part of a broader Microsoft Traineeship Program. Only one Trainee responded that the Program “adds no value”.

Figure 6-1: Trainee satisfaction with the Microsoft Traineeship (n= 47)



*“The Microsoft Traineeship program has been the greatest career opportunity for me as somebody who has always been so passionate for technology, IT and Software Development but lacked the resources to become certified and introduced to the industry to reach my career goals and work in IT”*

MTP Trainee

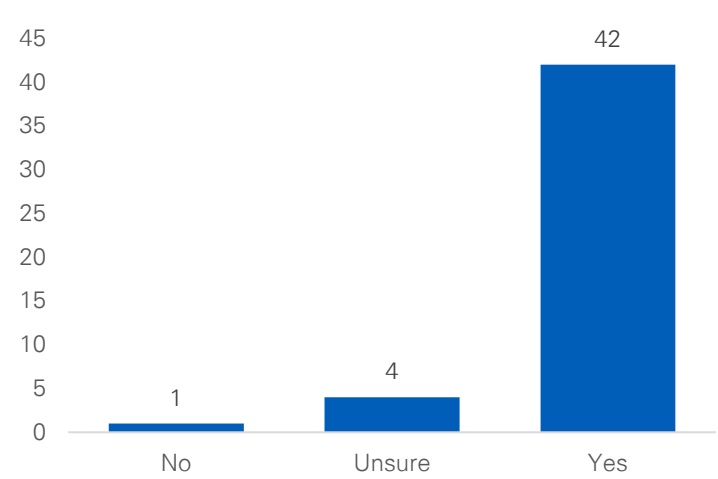
Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: “How satisfied are you with the program overall?”

80 per cent of Trainees (n= 4/5) interviewed responded that they would have pursued a career in IT, but the Program has fast-tracked their career. One Trainee responded that they would not have pursued a career in IT without the Program.

60 per cent of Trainees (n = 3/5) interviewed responded that they were considering attending university to study an IT related course prior to the Program and one Trainee was considering a non-IT related university course prior. Two Trainees commented that they were “deterred by the four year duration which is significantly longer than the Traineeship” and that they “wanted to start in IT immediately”.

A large majority (89 per cent) of Trainee survey respondents indicated that they believe they would pursue a career in IT following Program completion. These responses from current Trainees indicate that the Program increases pathways into IT.

Figure 6-2: Number of active Trainees who believe they will work in an IT role after Program completion (n= 47)

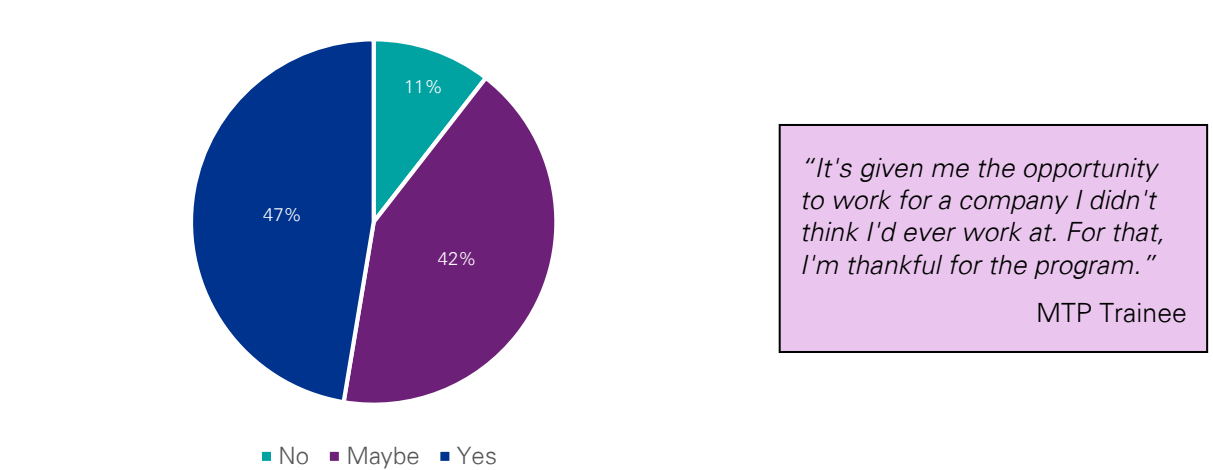


Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: “Do you intend to stay working in an IT role after your traineeship?”

Further, 100 per cent of Trainees interviewed (n= 5/5) responded that they would like to be employed by their Host Organisation in two years’ time. 100 per cent of Trainees interviewed (n= 5/5) also responded that they would like to remain in the IT field in ten years’ time.

As shown in Figure 6-3, the largest number of Host Employers surveyed (n= 9/19) responded yes to the question “do you intend to keep your Trainee on after they complete the traineeship”.

Figure 6-3: Proportion of Host Employers that intend to keep their Trainee on after the Program (n= 19)



Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: “Do you intend to keep your Trainee on after they complete their traineeship?”

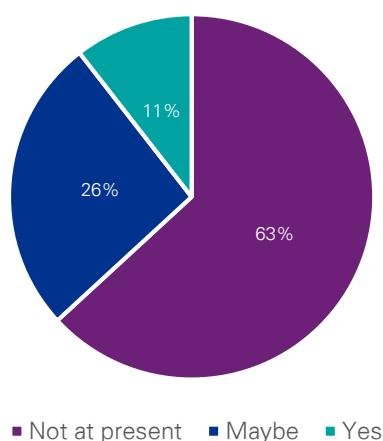
Furthermore, three out of four Host Employers responded that they would not have filled the Trainee position with a university graduate without the Program. This was for a range of reasons including:

- The Host Employer does not have a graduate program;
- The role would have been taken on by an existing staff member without the Program; and
- The roles are different and the Program “hasn’t inhibited anything [the Host Employer] would have done, it has just been supplementary”.
- One Host Employer consulted responded that they would have filled the role with a university graduate, but the Program was well-suited to their needs at the time.

These insights indicate that the MTP increases pathways into IT for individuals who may not have had the opportunity without the Program. However, it will be important for MEGT to collect concrete data on Trainee pathways over the longer term to substantiate this finding.

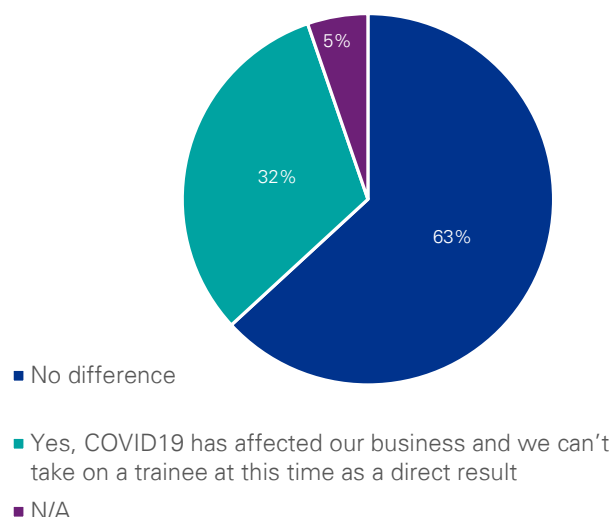
Although the largest number of Host Employers responded that they would employ their Microsoft Trainee after Program completion, most Host Employers (n= 12/19) responded that they were not interested in taking on another Trainee.<sup>17</sup> Six employers in total responded that COVID-19 has directly impacted their ability to take on another Trainee, however only four of the 12 Employers who responded that they would not take on another Trainee responded that COVID-19 was a direct reason for this.

Figure 6-5: Proportion of Host Employers interested on taking on another Trainee (n= 19)



Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: “Are you interested in taking on another Trainee?”

Figure 6-4: The impact of COVID-19 on Host Employers' ability to take on another Trainee (n= 19)

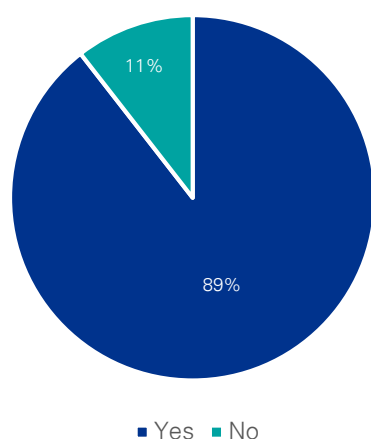


Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: “Has COVID-19 affected your plans to take on another Trainee?”

A large majority of Host Employers (n= 17/19) responded that they would recommend the Program to others in the IT industry. Recommendations from Host Employers to other organisations in the IT industry would be beneficial to enable the Program to grow in the future and to further increase pathways for individuals into IT.

<sup>17</sup> Note that there this question may be subject to interpretation bias, as it is not clear whether the Host Employer responded regarding taking on another Trainee now or in the future.

Figure 6-6: Proportion of Host Employers that would recommend the Program to others in the IT industry (n= 19)



*"[The Program is a] very good launch pad for someone who has raw ability and is an alternate pathway for someone to join the ranks of people with other qualifications."*

Host Employer

Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: "Would you recommend this Program to colleagues in the IT industry?"

*"Some of these people [trainees] wouldn't have got a shot in the technology sector at all so this has given them the opportunity to join a Tier 1 technology firm which wouldn't have come to these people ordinarily"*

Host Employer

Consultations with Host Employers indicate that the Program has broadened their perspectives regarding vocational education, with one commenting that it has enabled their organisation to "leverage a talent pool that the organisation was not previously leveraging". Another Host Employer commented that [they] "would not have considered VET before the MTP".

### **Finding - To what extent does the Microsoft Traineeship Program enable pathways into IT careers?**

Preliminary data suggests that the Program enables pathways into IT, with 89 per cent (n=42/47) of Trainees responding that they would pursue a career in IT following Program completion. 80 per cent of Trainees interviewed (n= 4/5) responded that they would have pursued a career in IT but that the Program has fast tracked their careers.

Despite these indications, the actual pathways of Trainees following Program completion are unconfirmed at this stage due to the first cohort still completing the Program.

#### **Data to be collected**

In order to confirm whether the Program enables pathways into IT careers, it will be necessary to collect data of Trainees following Program completion. It is suggested that this will be collected through an alumni survey which will include questions relating to employment, further education, wages and career progression.

## **6.2 Increased Skills and Knowledge**

Another key objective of the MTP is to increase Trainee's IT skills and knowledge to increase pathways into IT. The Program aims to do this through:

1. Practical on-the-job learning at Host Employers;

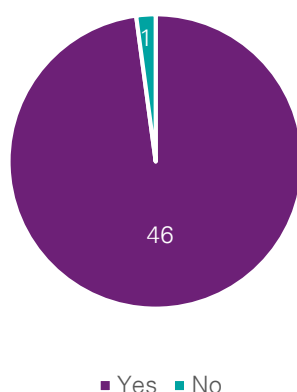
2. Completion of the Certificate IV in Information Technology Networking through RTOs; and
3. Completion of Microsoft Certifications, including:
  - Five core certificate units such as MTA Operating System Fundamental 98-349, MTA Networking Fundamentals 98-366, MTA Windows Server Admin Fundamentals 98-365 and MTA Security Fundamentals 98-367; and
  - 15 elective certification units to align with market demand and Microsoft certifications.

Given the existing data limitations, it is important to note the distinction between information regarding the completion of training which is included in this Section and actual uplift in skills and knowledge. Current survey data does not allow for a determination of whether skills and knowledge have increased at this stage. Further survey data which will be collected in the future will enable a more accurate determination of the uplift in skills and knowledge of Trainees.

#### *Completion of educational requirements*

Since the first cohort has not yet completed the Program, data is not available regarding the number of people who have completed all induction requirements, including how many Trainees have completed the Certificate IV course and all required Microsoft Certifications. However, all Trainees but one that completed the Trainee feedback survey (n= 46/47) responded that they intend to complete the Program. The reason for the singular 'no' response was that "(the Trainee) tried it, and it's not really for (them)."

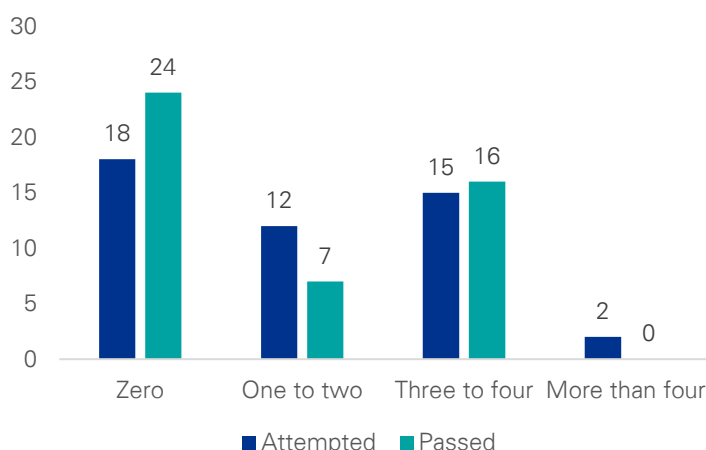
*Figure 6-7: Number of active Trainees who intend to complete the Program (n= 47)*



*Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: "Do you intend to complete your traineeship?"*

As outlined in Figure 6-8, the largest number of Trainees surveyed have not yet attempted or passed any Microsoft Certifications. It is important to note that data shown in Figure 6-8 reflects the stage of the Program that surveyed Trainees are currently at, with the largest number (49 per cent or 23/47 Trainees) in the first six months of the Program.

Figure 6-8: Number of Microsoft Certifications attempted and passed by Trainees (n= 47)



Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: “Can you confirm the number of Microsoft Certifications you’ve attempted?” and “Can you confirm the number of Microsoft Certifications you’ve passed?”

Six Trainees responded that they would benefit from “sitting in on additional virtual training sessions (similar to Artificial Intelligence Ethics and Microsoft Teams 101)”. The types of training they responded as benefitting from included:

- Technical training and an introduction to business apps/programming languages. Soft skills such as presentation tips and tricks, career development skills, motivational and discipline sessions to improve time management and increase our growth mindset;
- Technical skills;
- Any and all;
- I’m unsure of which specific training, but I will most likely love to be involved with whatever training Microsoft has to offer; and
- Primarily soft skills.

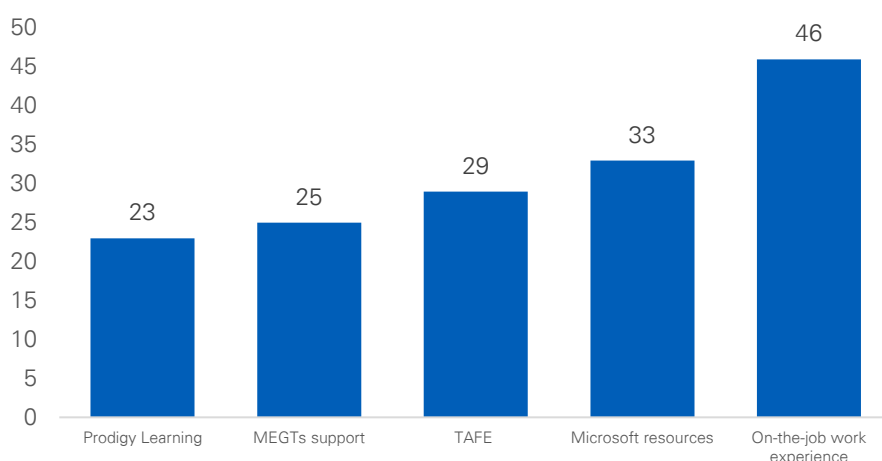
Given the preliminary stage of the Program, it will be necessary for MEGT to collect additional data regarding Certificate IV and Microsoft Certification completion over time in order to build an accurate view of the number and proportion of Trainees that complete all induction requirements. Further, it will be necessary for MEGT to develop measurement of the extent to which skills actually increase, which could use the IT skills assessment/ aptitude or another testing instrument to test as a baseline.

#### *Satisfaction with educational requirements*

The benefits of the Program that was selected by the most Trainees related to the on-the-job experience and training received through Microsoft and RTO’s. As shown in Figure 6-9, 98 per cent of Trainees thought that the on-the-job experience was a key benefit of the Program.



Figure 6-9: Key benefits of the Microsoft Traineeship, as perceived by Trainees (n= 47)



Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: "I believe the key benefits of the Microsoft Traineeship program are:"

Furthermore, 51 per cent of Trainees "love" the on-the-job learning and 40 per cent believe that "it is mostly good but could be better".

Qualitative feedback that was received by Trainees regarding on the job training through consultations included:

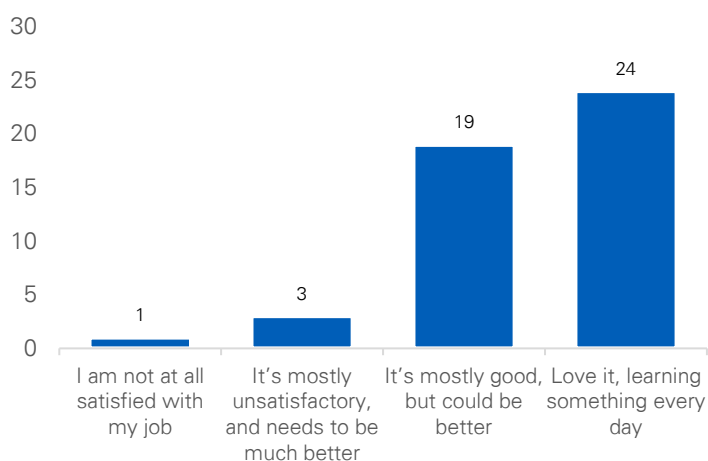
- "Mentors from the company have been very helpful in providing assistance and support";
- "On the job experience has helped to reinforce skills learnt during formal during. All elements [of the Program] contribute"; and
- "On the job learning has been most helpful component of the program for specific skills/knowledge,"

*"This program allows me to get on the job, relevant industry training in an industry that I have wanted to be a part of for a while. It enables me to get new skills and also network with other industry professionals while I become qualified. I am very grateful to have the opportunity to be a part of the program."*

MTP Trainee

The findings from the Trainee feedback survey and consultations with Trainees therefore demonstrate that the on-the-job learning element of the Program is a very effective way for Trainees to increase their knowledge and skills.

Figure 6-10: Trainee satisfaction with on-the-job learning (n=47)

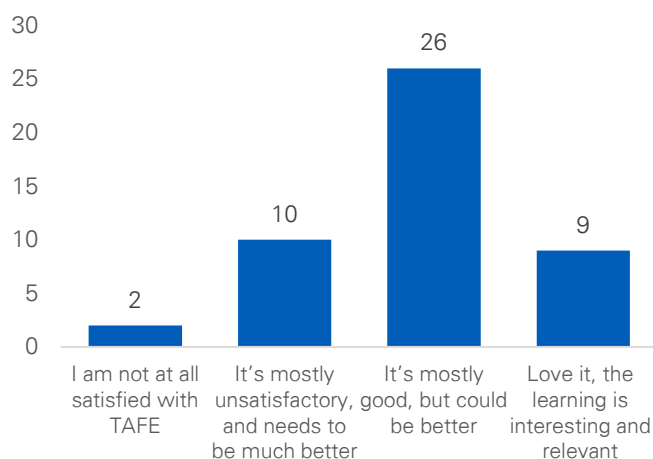


Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: "How satisfied are you with on-the-job learning?"

Host Employers that were consulted also commented that on the job learning is very beneficial for Trainees. One Host Employer explained that they went through the TAFE course list with their Trainee at the start of the Program and highlighted which employees within the company were specialist in each area so that the Trainee could reach out to them. Another Host Employer commented that he had attended a number of training courses separate to the MTP with their Trainee so that the Trainee could learn about technology that was not covered in their TAFE course or Microsoft certifications.

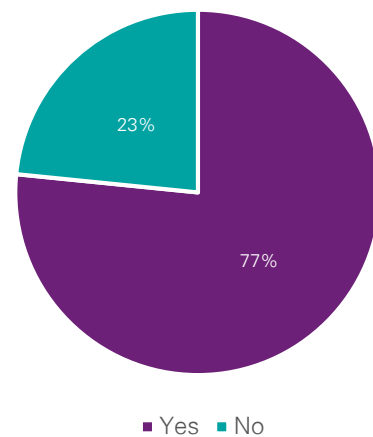
The majority of Trainees (55 per cent) responded that TAFE is "mostly good, but could be better", with 19 per cent of Trainees responding that they "love it, the learning is interesting and relevant". Furthermore, Figure 6-11 shows that 77 per cent of Trainees believe that there is enough support and encouragement from TAFE to enable completion of the Microsoft certifications.

Figure 6-12: Trainee satisfaction with TAFE (n= 47)



Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: "How satisfied are you with TAFE?"

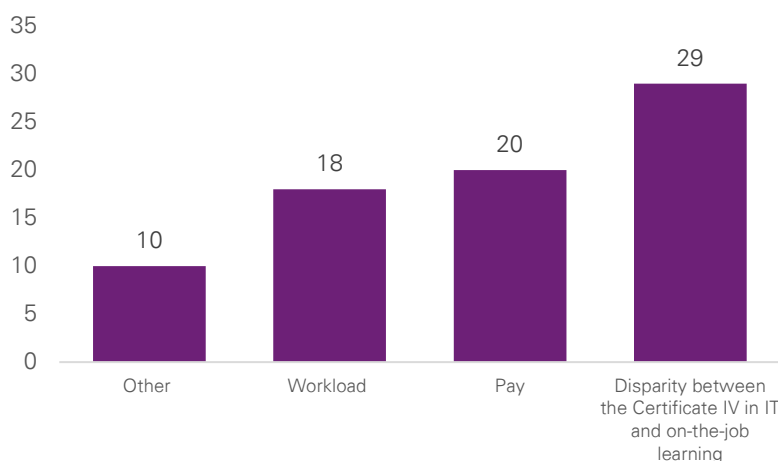
Figure 6-11: Trainee perceptions regarding whether TAFE support is enough to enable completion (n = 47)



Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: "Is there enough support / encouragement from TAFE to enable you to complete your Microsoft Certifications?"

However, 26 per cent of Trainees were mostly unsatisfied or not at all satisfied with TAFE. The disparity between the TAFE learning and on-the-job learning was also highlighted as the key challenge faced by 62 per cent of Trainees.

Figure 6-13: Key challenges of the Microsoft Traineeship, as perceived by Trainees (n= 47)



Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: "I believe the key challenges of the Microsoft Traineeship program are:"

Qualitative feedback received through the Trainee feedback survey regarding TAFE included:

- "I feel the TAFE portion could be tweaked. I would prefer our TAFE days go from 8:40-5 like our typical workday rather than being shorter. I also feel that some assignments should be spaced out more as there is sometimes a lot to work on in a short period of time. The workload is possible - just sometimes quite stressful, particularly when combined with the MOS exam prep"
- "If possible, have the assignments at TAFE be more based around practical tasks instead of majority of it being written work as I think it would be more effective to learn by doing instead of just researching."
- "The TAFE side seems to be still a learning process for everyone, and the next cohort will benefit from all the teething problems."
- "The course content of TAFE is not relevant to a lot of the students who attend, such as the IT support unit we have worked on. About 2 people out of the whole class do support type roles and even then the course content is extremely broad and provides no real experience or benefit even to those in that kind of role."
- "A lot of miscommunication on TAFE end and I believe that because of the confusion there it has dragged a lot of the trainees down"

The Trainees that were consulted provided slightly more positive qualitative feedback regarding the TAFE course including:

- "The teachers provide good feedback and are accessible and approachable. [The course] has helped to grow IT skills"
- "TAFE learnings have helped with tasks in the workplace"
- "The formal training provides standardised information and breadth of knowledge across different areas of IT"
- "TAFE doesn't go into a lot of detail but provides a broad base of knowledge. It is good to provide awareness of what is out there in IT"

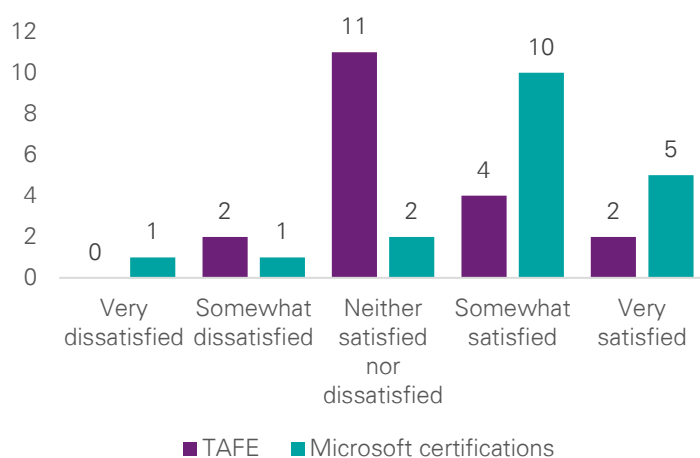
There are opportunities for Trainees to deliver business improvements informed by their formal learnings, with one Trainee commenting that they brought their TAFE learnings to their job on three

occasions, including in suggesting improvements for their organisation's processes which they have subsequently implemented.

Most Employers (58 per cent) were "neither satisfied nor dissatisfied" with TAFE learning. Qualitative feedback from Host Employers regarding TAFE learning included:

- "At present I feel there are still a lot execution issues that need to be worked through. The quality of the TAFE content is not particularly great and doesn't build skills that the students can then use at work."
- "The TAFE learning environment does not seem entirely suitable for Trainees, the cost due to the trainee being at TAFE two days a week is also high. This would not be a problem if we thought the Trainee was engaged and learning at TAFE."
- "On the job training seems to vastly outpace Canberra Institute of Technology (CIT) training."
- "The IT industry has a huge breadth of capability and I think our trainees are finding the CIT training a little pedestrian. As a Microsoft program it would be fantastic for them to have more access to leading edge Microsoft training/certs and be able to tailor their academic learning and certifications to line up with their real-world experience."
- "Visibility on the Trainees progress at TAFE is required to make sure that all parties on the same page regarding the progress and any outstanding issues. It is difficult for CompNow and the trainees to clearly know what success looks like from a TAFE perspective. A web dashboard of the trainee's performance and progress would be ideal."

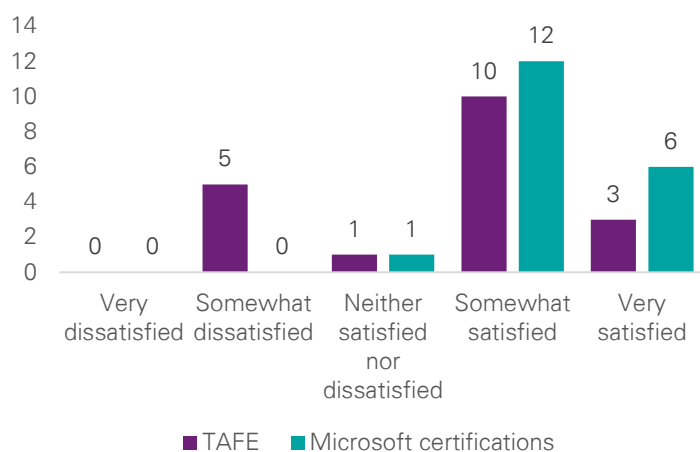
Figure 6-14: Host Employer satisfaction with TAFE learning and Microsoft certifications (n= 19)



Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: "How satisfied are you with the provision of TAFE learning and Microsoft certifications?"

Host Employers reported higher levels of satisfaction with the Microsoft certifications, with 52 per cent responding that they were "somewhat satisfied" and 26 per cent "very satisfied". Host Employers also responded more positively when asked about the relevance of TAFE education and Microsoft certifications to their workplace. The majority were "somewhat satisfied" with the relevance of TAFE and Microsoft learning (53 per cent and 63 per cent respectively).

Figure 6-15: Host Employer satisfaction with the relevance of TAFE learning and Microsoft certifications (n= 19)



*"We had tried to with university graduates ourselves... but it didn't pull together all the types of training that we needed [CIT, Industry certifications and on-the-job learning]. This program ticked all three boxes and allowed people to enter the industry which is currently suffering a big skills shortage."*

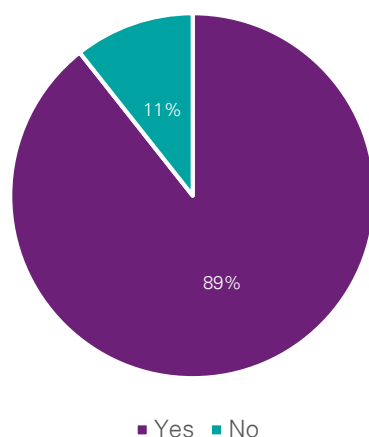
Host Employer

Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: "How satisfied are you with the relevance of the TAFE education and Microsoft certifications to your workplace?"

Feedback received from Trainees and Host Employers regarding the contribution of TAFE for increasing skills and knowledge indicates that there may be improvements to be made by MEGT and Microsoft to ensure that training is relevant and beneficial for both parties.

Despite the challenges faced with TAFE training, the majority (n = 42/47) Trainees responded that they would recommend the Program to a friend.

Figure 6-16: Proportion of Trainees who would recommend the Program to a friend (n=47)



*This program has provided me with invaluable hands on experience in the IT field. I feel this gives me a truly incredible opportunity to gain entry into the IT industry. In addition, I have access to very useful MOS certs which I feel will aid me greatly in gaining employment outside of the traineeship. I believe this program has also allowed me to get a good feel for what the industry is like and possible areas I would like to one day specialise in."*

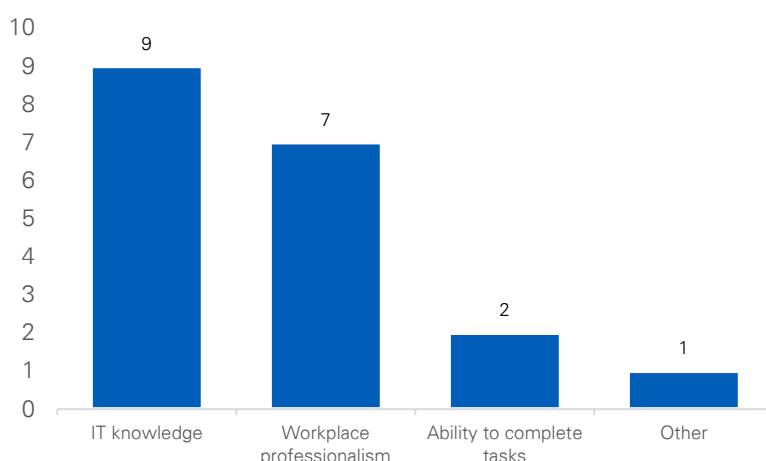
MTP Trainee

Source: KPMG analysis of MEGT Trainee feedback survey. Response to the question: "Would you recommend this program to a friend?"

### Perceived increase in skills and knowledge

100 per cent of Trainees interviewed (n= 5/5) responded that their skills and knowledge have increased as a result of the Program. 47 per cent of Host Employers also responded that a key area of improvement for their Trainees is in their IT knowledge, which may reflect a combination of the on-the-job, TAFE and Microsoft learning that Trainees receive throughout the Program.

Figure 6-17: Host Employer perceptions on improvement of Trainees over time (n= 19)



Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: "Have you seen an improvement with your Trainee over time in any of the following areas?"

Through consultations, Host Employers highlighted the importance of their Trainee's attitude and enthusiasm, which impacts their willingness and openness to learn. Two Host Employers commented that there is "a little more work and effort to onboard" Trainees, but that "if they have the right attitude, we can train them at the organisation, and continue to teach them technical skills along the way". When compared to contractors, another Host Employer commented that Trainees are "more willing to learn and more energetic".

*"The skillset is "very different to what the organisation might typically look for", Trainees bring a can do attitude which is beneficial for increasing their skills and knowledge."*

Host Employer

Overall, Host Employers felt that Trainees had "come up to speed quite quickly" and that their skills and knowledge had evolved over the course of the Program. One Host Employer also commented that "Trainees are more knowledgeable about new technologies than other employees". Another Host Employer commented that there is "no one driver" of skills and knowledge and that "MEGT provides the framework, RMIT provides the grounding and capability and the employee's job is to provide an opportunity for the candidates to practice what they are learning".

#### **Finding - To what extent have participants increased their IT skills and knowledge?**

Host Employers and Trainees in the first cohort believe that their IT skills and knowledge have increased as a result of the Program. 98 per cent of Trainees (n= 46/47) believe that on the job training is the key benefit of the Program and 100 per cent of Trainees interviewed (n= 5/5) felt that their skills and knowledge had increased as a result of the Program.

There are mixed views regarding the benefit and relevance of the TAFE course from both Trainees and Host Employers. 55 per cent (n= 26/47) of Trainees responding that the course "was mostly good but could be better" and 58 per cent (n= 11/19) of Host Employers responding that they were "neither satisfied nor dissatisfied" with TAFE learning.

#### **Data to be collected**

While Trainees and Host Employers both reported a perceived uplift in skills and knowledge, it is important to acknowledge the difference between Trainees completing training requirements and actual skills uplift, which is not possible to determine from the current survey data. It is suggested that MEGT conducts pre and post data literacy assessments to be able to measure skills uplift more accurately.

## 6.3 Increased Diversity

Another key aim of the MTP is to increase the diversity of the IT workforce. In particular, the Program aims to achieve the following diversity metrics:

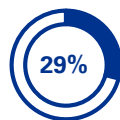
- 50 per cent female Trainees;
- Six per cent Indigenous Trainees; and
- Ten per cent Trainees with a disability.

Given that the first cohort of Trainees have not yet completed the Program and been integrated into the broader IT workforce, it is not possible to definitively comment on the impact that the Program is having on the diversity of the workforce. The information included in this Section outlines the current diversity of the Trainee cohort, which indicates the potential of the Program to impact the diversity of the workforce once Trainees have graduated and entered ongoing employment.

At present<sup>18</sup>,



39 per cent of the current 119 MTP Trainees are female



...which is 10 per centage points higher than the proportion of women in Australia's IT workforce in total



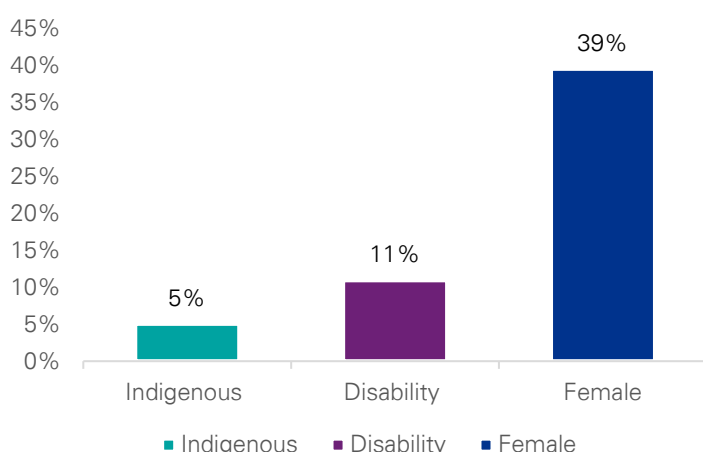
...and significantly higher than the proportion of female domestic enrolments in IT courses in 2017.

Two Trainees consulted commented that they were among the first women to join their teams. For example, one Employer had four women in a team of 30 people. One of the Trainees noted that they had seen a noticeable increase in the diversity of the team since joining, including more women being recruited. They commented that increased diversity is beneficial as it provides different approaches to work which may complement others. The broader diversity statistics of the Program are included below.

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<sup>18</sup> Deloitte Access Economics, 2020, *ACS Australia's Digital Pulse: Unlocking the potential of Australia's technology workforce*; Workplace Gender Equality Agency, 2019, 'Higher education enrolments and graduate labour market statistics', available at: <https://www.wgea.gov.au/data/fact-sheets/higher-education-enrolments-and-graduate-labour-market-statistics>.

Figure 6-18: Active Trainees by diversity type (n=119)



*"The IT industry has been very male dominated in the past. Diversity brings different perspectives which can be taken advantage of. The Trainee has brought fresh ideas to the company."*

Host Employer

Source: KPMG analysis of MEGT Program data, 2020

**39%** 39% of **Trainees** are **women** against MEGT's target of 50%

**10%** Approximately 10% of **Trainees** have a **disability** against a target of 10%

**4%** Approximately 4% of **Trainees** are **Indigenous** against a target of 8%

**67%** When including youth at risk and non-English speaking background participants plus the above, **approximately 67% of Trainees are diverse.**

Age is also a differentiator of Trainees from employees in other pathways. 40 per cent of Trainees interviewed (n = 2/5) felt that they were significantly younger than other staff, while one Host Employer commented that Trainees are more diverse, as they could be mature age students compared to graduate employees.

One Host Employer commented that "[through the Traineeship], they get a different cross-section of individuals than they would from graduate programs" and that the Program "gives people who wouldn't be on the radar a chance". Another Host Employer commented that "gender diversity has increased as a result of the Program" and another Employer commented that the Trainee cohort was diverse, from both an age and gender perspective.

*"Having someone else that has a new perspective on something and has enthusiasm and desire to learn is really infectious and breeds such a wonderful culture."*

Host Employer



The Host Employers consulted were not able to comment on whether the recruitment or selection processes had changed as a result of the Program.

#### **Finding - To what extent does the Microsoft Traineeship Program increase the diversity of the IT workforce?**

Current data suggests that participants in the MTP are more diverse than the IT industry as a whole. For example, when accounting for diversity indicators such as gender, Indigeneity, disability, youth at risk and non-English speaking backgrounds, 67 per cent of Program participants are diverse. Furthermore, 39 per cent of Trainees are female, which is 10 per cent higher than the proportion of women in Australia's IT workforce.

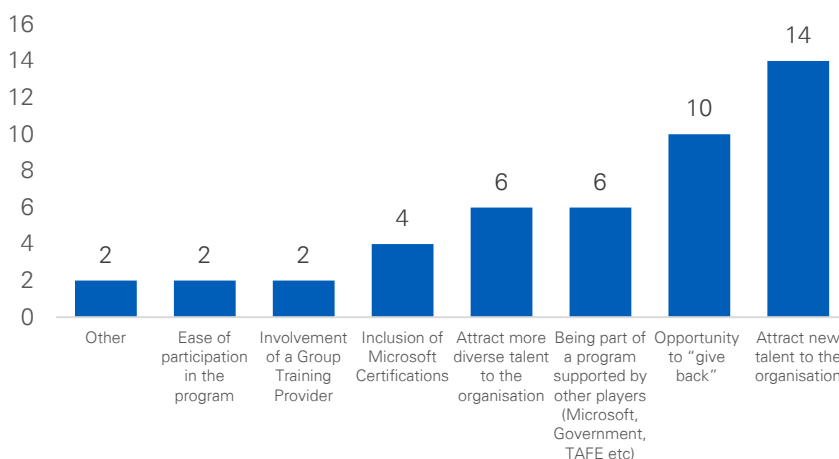
#### **Data to be collected**

The statistics included in this section indicate that there is potential for the Program to improve the diversity of the IT industry if Trainees remain employed in the IT industry following Program completion. However, it is necessary to collect further information and data to substantiate and quantify the Program's impact on the diversity of the IT workforce outside of the Program. In particular, data regarding the career outcomes and pathways of Trainees following Program completion will be a critical input to assess this outcome. This information could be collected through an alumni survey of Trainees and through consultations with recruitment or human resources staff at Host Employer organisations.

## 6.4 Greater Capability and Productivity of the IT Workforce

As outlined in Figure 6-19, the largest proportion of Host Employers (74 per cent) reported that their key reason for taking on a Trainee was to "attract new talent to the organisation".

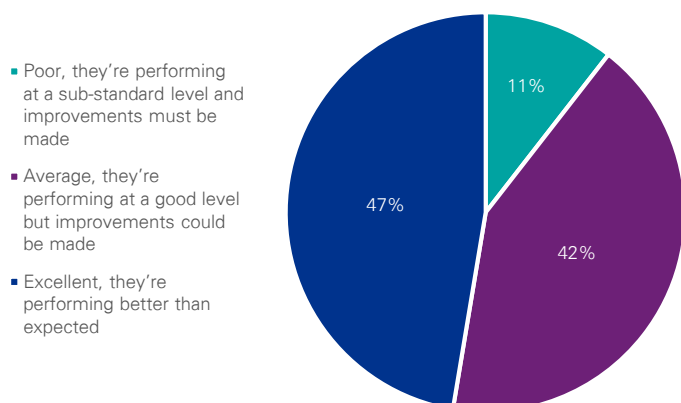
Figure 6-19: Key reasons for Host Employers to take on Trainees (n= 19)



Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: "What was the key driver for your organisation to take on a Trainee/s?"

According to Host Employers surveyed, the performance of Trainees is exceeding Host Employer expectations in 47 per cent of circumstances. A large proportion of Host Employers also reported that Trainees are "average (and) performing at a good level but improvements could be made".

Figure 6-20: Host Employer perceptions of their Trainee's performance (n= 19)



Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: "How would you rate your Trainee's performance?"

Through consultations, Host Employers highlighted that "Trainees are thought of as a long-term investment" and that they "will progress skills over the long term. However, the payoff of having a Trainee is lower productivity" in the short term. One Host Employer commented that the role that would be offered to a Trainee after Program completion "wouldn't be higher than a graduate".

The perspectives of Trainees that were consulted were consistent with the views of Host Employers, with Trainees acknowledging that they need development to reach the level of output of their colleagues. Two Trainees estimated that they would be approximately 20 to 40 per cent less efficient than their colleagues at present. However, Trainees also acknowledged that they would achieve capability uplift over the course of the Program.

100 per cent of Trainees interviewed (n= 5/5) and 100 per cent of Host Employers interviewed (n= 4/4) found it challenging to compare capabilities against other colleagues who had multiple years of experience in the IT field and different educational backgrounds. One Host Employer commented that they "would expect someone with a university degree in IT would require less support. but [the organisation] doesn't have any graduates so it is difficult to compare the two". Having a more similar comparison group (such as a comparison of outcomes against unsuccessful Program applicants) would provide a more accurate picture of the ways in which Trainee productivity compares to other employees.

*"[The Program] is not about productivity or economic measures so much but about giving someone a go and doing the right thing and helping to launch their career"*

Host Employer

### **Finding - To what extent is the productivity of the workforce increased as a result of the Program?**

The data and information that is currently available indicates that the productivity of Trainees is comparable to other employees. 89 per cent (n= 17/19) of Host Employers responded that Trainees are performing at a good level or above average. However, Trainees and Host Employers noted that it is challenging to compare capability levels with multiple years of experience in the industry. Through consultations, Trainees and Host Employers acknowledged that further development was needed to reach the level of output of colleagues with further qualifications and experience. Furthermore, Trainees and Host Employers responded that the productivity of Trainees is dependent on “individual goals” and “attitudes”.

#### **Data to be collected**

To more accurately measure this outcome in the future, consultations with recruitment or human resources staff within Host Employer organisations would be beneficial. This would enable a clearer insight into the ways in which Trainee progression and performance compares to other colleagues. MEGT could also consider conducting a survey of unsuccessful Program applicants to compare career, educational, wage and progression outcomes with a cohort that is more similar to Trainees.

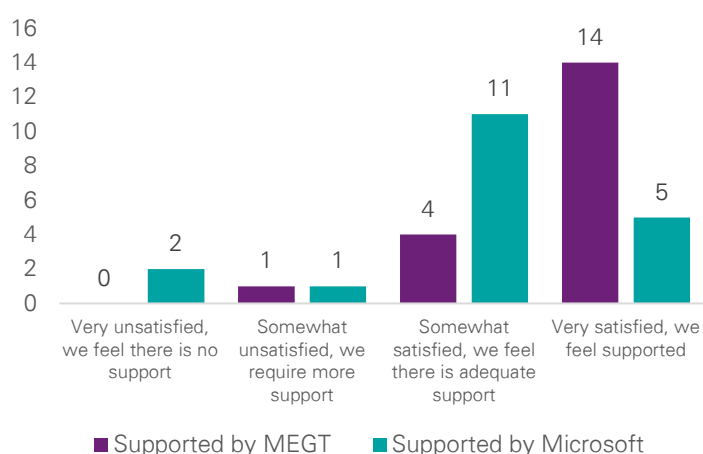
## **6.5 Other Impacts**

Through consultations, Host Employers highlighted a number of other impacts experienced as a result of the Program, including:

- Developing a greater understanding of technology, as a result of the education undertaken by Trainees;
  - Upskilling their mentoring and coaching skills relating to business skills as well as technology skills.
  - One Host Employer commented that “most older people get a kick out of teaching others and it boosts morale” and another commented; and
  - Another Host Employer commented that the Program has been “excellent internally in terms of our staff being able to mentor people and experience what it’s like to take on an apprentice”.
- Enhancing the relationship between organisations and Microsoft.
- A range of other impacts were also experienced by Trainees including:
- Social impacts as a result of meeting Trainees working for other organisations. One Trainee commented that the social element was “beneficial, particularly for anyone who moved to a new state prior to the Program”; and
- One Trainee returned to their high school to do an interview about the Program, which resulted in another young woman joining the Program.

While a large majority (74 per cent) of Host Employers feel “very satisfied” with the support from MEGT, a smaller proportion feel “very satisfied” with the support from Microsoft. Of the respondents who feel “very unsatisfied” by the support from Microsoft, the respondents stated that they were “unaware of any support provided by Microsoft to the Trainee or Host Organisation”.

Figure 6-21: Host Employer satisfaction with support from MEGT and Microsoft (n= 19)



Source: KPMG analysis of MEGT Host Employer feedback survey. Response to the question: “How satisfied are you with the support from MEGT and Microsoft?”

One Host Employer commented that improvements could be made by MEGT by tailoring their documentation to be more specific to IT. The Host Employer commented that “currently, the MTP is structured more as an apprenticeship program” and that “extensive risk assessments that are required by MEGT are not as applicable to office jobs as they are to construction jobs”. The Host Employer also felt that further support could be offered by MEGT during the contract phase. It was suggested that MEGT could provide standard templates for businesses to fill in regarding their policies and procedures. This improvement would assist smaller businesses with less capacity to submit the relevant documentation for participation in the Program in a timely manner.

#### **Finding - Have there been any other impacts of the Program for Trainees, Host Employers or MEGT?**

Through consultations, a number of other impacts were highlighted, including:

- Host Employers felt that the Program strengthened their relationship with Microsoft;
- Host Employers felt that the Program contributed to their own upskilling in management, coaching and technology skills; and
- Trainees highlighted the benefit of the social element of the Program, including the connections made with Trainees in other organisations.

#### **Data to be collected**

In addition to ongoing consultations with Trainees and Host Employers, MEGT could consider conducting consultations with RTOs such as TAFE NSW, RMIT and CIT, surveys with former Host Employers and consultations with recruitment or human resources staff to capture other impacts from multiple perspectives. Other impacts may also be captured through a survey of Program alumni.

## **6.6 Summary of Preliminary Outcomes Evaluation Findings**

Overall, the findings of the preliminary outcomes evaluation indicate that the MTP is achieving their aims to:

1. Increase the diversity of IT professionals;
2. Increase pathways into IT; and

### 3. Increase certifications.

MEGT creates a framework and structure which enables students who are interested in IT to find a pathway to pursue their desired career. The findings of this preliminary outcomes evaluation indicate that the Program is working well and helping outcomes to be achieved. However, as outlined, it will be necessary to collect further data and information to further substantiate the findings in this Section in the future.

## 7 Preliminary Economic Evaluation Findings

The following Section outlines the findings of a preliminary CBA of the Microsoft Traineeship Program relative to the Base Case scenario. The methodology adopted to undertake the preliminary CBA is outlined in the CBA Analytical Framework and includes the options, costs, and benefits identified as inputs for the analysis.

Each cost and benefit is described in detail, including quantification where possible, and the results of the preliminary CBA, including sensitivity analysis, are included in Section 6.5.

### 7.1 Headline Findings

The analysis shows that **for every dollar invested** by Employers, Microsoft and state and federal governments, **a benefit of approximately \$2.5** is realised over a ten year period.

This result is based on an **estimated net benefit of approximately \$9.6 million** associated with the Program over a ten year period. This represents the difference between the benefits experienced by Trainees, Employers and the community and the total Program costs.

Additionally, a number of benefits identified in the preliminary outcomes evaluation and preliminary economic evaluation cannot be quantified. As such, the estimated benefits are thought to be conservative.

### 7.2 Benefits

This Section identifies and quantifies (where possible) the benefits to Host Employers, Trainees and the community associated with the MTP.

#### 7.2.1 Benefits to Employers

##### Employers experience lower staff wages (during the Program)

For the two-year duration of the MTP, Employers bear the cost of Trainee wages. Trainees are employed on a full-time basis and paid at an Award rate (Clerks - Private Sector Award 2010). By hiring a MTP Trainee instead of an alternative entry-level employee, such as a university graduate, the Employer benefits from incurring a lower average annual wage for the duration of the MTP, as outlined in Table 11 below. Noting that Trainees do not have the same level of qualification as university graduates, it is assumed that Employers accrue 50 per cent of the cost saving.

Table 11: Average annual wage of entry-level employees

	Average Annual Wage
Microsoft Traineeship Program Trainee	\$38,352
Undergraduate university graduate	\$62,600

Source: KPMG analysis of MEGT Program data; QILT – 2019 Graduate Outcomes Survey

##### Employers avoid the administrative burden of managing staff

By participating in the MTP, Employers avoid the burden of managing their Trainee. Rather, MEGT has responsibility for all management and payroll services required. Consequently, Employers avoid the

costs associated with managing an employee. This is estimated to be \$3,592 per employee per year for companies with 1-250 employees.<sup>19</sup>

## Employers experience reduced staff turnover

By employing a Trainee through the MTP, instead of through an alternative traineeship program, Employers are likely to experience reduced staff turnover. This is as a result of the low attrition rate in the MTP in comparison to other programs, as outlined in Table 12 below. Consequently, Employers have a reduced likelihood of needed to recruit a replacement employee for the duration of the MTP, avoiding the cost of undertaking recruitment, which is estimated to be \$9,772 on average for an entry-level position.<sup>20</sup>

Table 12: Vocational education attrition rates

Qualification	Attrition rate
Microsoft Traineeship Program	15% (retention 85%, completion 75%)
Apprenticeships/traineeships	44%

Source: KPMG analysis of MEGT Program data; NCVER – 2017 VET completion rates

## Employers experience lower recruitment costs after the Program

At the completion of the MTP, Employers can employ their Trainee/s on an ongoing basis. 47 per cent of Host Employees do so and avoid the need to undertake any recruitment tasks for the position filled by the Trainee. Therefore, for every Trainee retained, Employers may avoid the average cost to recruit an entry-level employee, which is estimated to be \$9,772.<sup>21</sup>

## Increased diversity in the IT workforce

The MTP has diversity targets of 50 per cent, 10 per cent and six per cent for females, Indigenous persons and persons with a disability respectively. Participation in the MTP presents Employers with an opportunity increase the diversity of their workforce which is associated with a number of benefits.

For example, the Diversity Council of Australia's *Inclusion@Work Index*, a survey of 3,000 Australians, estimates that employees in inclusive teams are 10 times more likely to be highly effective, 5 times more likely to provide excellent customer service, and 4 times more likely to stay with their employer.<sup>22</sup>

The IT sector has a relatively high staff turnover rate, estimated to be 13 per cent,<sup>23</sup> so by increasing staff retention, Employers can benefit from avoided recruitment costs across the organisation. For example, it is estimated the Host Employers, on average, have 200 employees and the average cost of recruitment is estimated to be \$18,982,<sup>24</sup> by increasing diversity in their organisations and reducing

<sup>19</sup> Society for Human Resource Management, 2015, Workforce Analytics: A Critical Evaluation: How Organizational Staff Size Influences HR Metrics.

<sup>20</sup> Hilton, J., November 2019, This is how much it costs to hire one employee. Available at: <https://www.hcamag.com/au/specialisation/employee-engagement/this-is-how-much-it-costs-to-hire-one-employee/192036>

<sup>21</sup> Ibid.

<sup>22</sup> Diversity Council of Australia, Inclusion@Work Index 2017-2018. Available at: <https://www.dca.org.au/research/project/inclusion-index>

<sup>23</sup> Johnston, T., June 2018, The Real Problem With Tech Professionals: High Turnover, Forbes. Available at: <https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2018/06/29/the-real-problem-with-tech-professionals-high-turnover/?sh=72ac3c5c4201>

<sup>24</sup> Hilton, J., November 2019, This is how much it costs to hire one employee. Available at: <https://www.hcamag.com/au/specialisation/employee-engagement/this-is-how-much-it-costs-to-hire-one-employee/192036>

staff turnover by 75 per cent, Host Employers may save up to \$57,903 per year.<sup>25</sup> Reflecting that the MTP has only some impact, it is assumed that Employers accrues half of this cost saving.

## Increased productivity in the IT workforce

Following the completion of the MTP, Trainees who transition into the IT workforce bring with them industry-relevant skills and knowledge and on-the-job experience which may increase capability in the IT workforce. Further, the MTP exposes both Trainees and Host Employers to the latest technologies, ensuring their knowledge is kept up-to-date and in alignment with emerging technologies. Collectively, these factors may result in increased productivity in the IT workforce in comparison to the Base Case, and cost savings to Employers.

At the time of this evaluation, data was not available to quantify the uplift in productivity attributable to the MTP, however Section 8 outlines data which, if collected in the future, could be used to quantify this benefit.

### 7.2.2 Benefits to Trainees

#### Trainees receive a wage while completing the Program

Trainees benefit from receiving an annual income for the two-year duration of the MTP which is higher than the average annual income of someone in the Base Case, which includes persons without a non-school qualification who may be in employment, undertaking an alternative qualification, or not in study or employment.

Table 13: Completion rate by qualification

Qualification	Proportion of cohort	Average annual income
<b>Microsoft Traineeship Program</b>	100%	\$38,352
<b>Base Case</b>		
<b><i>Employed</i></b>	24%	\$56,000 for those employed
<b><i>Weighted wage for Base Case</i></b>		\$13,468
<b>Additional earning for Trainees</b>		\$24,884

Source: KPMG analysis of MEGT Program data; ABS: Qualifications and Work 2018-19

#### Trainees receive mental health and wellbeing support while completing the Program

MEGT offers mental health and wellbeing support to Trainees for the duration of the MTP. Research into the outcomes of workplace mental health services estimates that workplace support interventions can reduce mental ill-health among those who experience it by up to 40 per cent.<sup>26</sup>

As well as providing benefits to Trainees, providing mental health and wellbeing support to employees has been shown to increase productivity in the workplace and reduce absenteeism and presentism. For example, the ABS estimates that up to 12 days per worker with mental ill-health per year, on average, are lost because of absenteeism and presentism.<sup>27</sup>

<sup>25</sup> KPMG analysis of MEGT Program data

<sup>26</sup> Glozier, N., September 2017, Review of Evidence of Interventions to Reduce Mental Ill-Health in the Workplace, SafeWork NSW.

<sup>27</sup> Productivity Commission, November 2020, Inquiry Report: Mental Health.



Prevalence of mental ill health in persons aged 20-25 is estimated to be 26 per cent.<sup>28</sup> Therefore, by offering mental health support to MTP Trainees, Employers may be able to save up to \$287 in days lost to absenteeism and presenteeism.<sup>29</sup>

## Trainees given a fast-tracked pathway into sustainable IT careers

By participating in the MTP, Trainees are provided with a pathway into a career in the IT industry without needing any prior experience or non-school qualifications. The incentive of employment, in addition to the supports provided to Trainees from MEGT, Host Employers, RTO's and Microsoft, ensures that Trainee completion rates are relatively high, as shown in Table 14 below.

Table 14: Completion rate by qualification

Qualification	Completion rate
Microsoft Traineeship Program	75%
Certificate IV in Information Technology	39%
Vocational qualification in Information Technology	47%

Source: KPMG analysis of MEGT Program data; NCVER – 2017 VET Qualification Completion Rates

After just two years in the MTP, Trainees have the opportunity to transition into an ongoing role in the IT industry. This transition is supported by the industry relevant skills and knowledge developed, on-the-job training and experience gained, and network connections developed through the MTP.

In addition to the benefits of fast-tracked entry into the IT industry, MTP Trainees have an increased earnings potential after completing the MTP. For example, in comparison to graduates of a Certificate IV in Information Technology and an undergraduate degree in computing and information systems (which takes on average 4 years to complete), MTP graduates, on average, receive a higher annual salary as shown in Table 15 below.

Table 15: Graduate salaries by qualification

Qualification	Average Duration	Graduate salary
<b>Microsoft Traineeship Program</b>	2 years	\$75,000
<b>Certificate IV in Information Technology</b>	2 years	\$48,550
<b>Undergraduate computing and information systems degree</b>	4 years	\$65,000

Source: KPMG analysis of MEGT Program data; NCVER – 2019 VET Student Outcomes; QILT – 2019 Graduate Outcomes Survey

## Trainees have a higher likelihood of employment

After completing the MTP, Trainees have an increased likelihood of transitioning into employment given the skills, experience and qualifications attained, in comparison to the Base Case as shown in Table 16. Trainees also have the opportunity to secure direct employment with their Host Employer, with this established industry relationship further increasing the likelihood of Trainee transitioning into employment.

<sup>28</sup> Institute for Health Metrics and Evaluation

<sup>29</sup> KPMG analysis of MEGT Program data

Table 16: Student outcome by qualification

Qualification	Employed or in further study
Microsoft Traineeship Program	100%
Vocational qualification in Information Technology	78%

Source: KPMG analysis of MEGT Program data; NCVER – 2019 VET Student Outcomes

### 7.2.3 Benefits to the Community

#### Increased industry engagement in the vocational education and training sector

The MTP provides a pathway for increased engagement between MEGT, Host Employers, Microsoft and RTO's, and the opportunity for RTO's to incorporate feedback into course content and delivery. This engagement has the potential to benefit the stakeholders across the VET system. As noted in the *2019 Joyce Review*, increasing industry engagement can benefit employers by providing "greater confidence that VET graduates have the skills they need for specific jobs ... [and] clarity about the Government programs and support available for apprentices."<sup>30</sup> More broadly, by working with industry to ensure VET courses reflect the skills needed in the IT industry, RTO's have a strengthened ability to deliver job-ready graduates.

## 7.3 Costs

This Section outlines the costs associated with delivering the MTP which are incurred by Employers, Microsoft, state and territory governments and the Federal Government.

### Trainee wages

For the two-year duration of the Program, Employers bear the cost of Trainee wages. Trainees are employed on a full-time basis and paid at an Award rate (Clerks - Private Sector Award 2010). The annual wage received by Trainees is determined by their age and school attainment level and in 2019-20 the average cost incurred by Employers was \$38,352 per Trainee.<sup>31</sup>

### Microsoft contribution

Each year, MEGT applies for funding for the MTP through the Microsoft Benevity Fund. Microsoft allocates monies from the fund based on applications received and assessed need, providing MEGT with \$208,272 and \$244,675 in 2019 and 2020 respectively. This funding covers the cost of providing Trainees with access to the Microsoft Certifications (delivered through Prodigy Learning), program events such as a graduation ceremony, and additional supports for Employers and Trainees.

### Vocational education course fees

The cost of vocational education is incurred by Host Employers and state and territory governments under the MTP. Trainees are enrolled in a Certificate IV in Information Technology at participating registered training organisations in their state/territory (such as TAFE NSW and the Canberra Institute of Technology) at an average total cost of \$9,108.<sup>32</sup> Of the total cost, Host Employers incurred an

<sup>30</sup> Australian Government, 2019, Strengthening Skills: Expert Review of Australia's Vocational Education and Training.

<sup>31</sup> KPMG analysis of MEGT Program data

<sup>32</sup> National Skills Institute, Certificate IV in Information Technology. Available at: <https://www.myskills.gov.au/courses/details?Code=ICT40118>

average cost of approximately \$1,000 per Trainee in 2018-19, and the average state/territory government subsidy was approximately \$7,947 per Trainee.<sup>33</sup>

The Federal Government's recently announced Job Trainer program also offers subsidies for vocational courses such as the Certificate IV in Information Technology in New South Wales, Victoria, and Western Australia. The subsidy ensures the cost of the course is free (or low-fee) for eligible students and may apply to Trainees in the MTP.<sup>34</sup> This subsidy was not included in the current evaluation as data was not available, however, we note that future evaluations should consider this as an input into the MTP, where appropriate.

## **Program administration costs**

Host Employers pay an administration cost to MEGT who has responsibility for administering the MTP. The administration cost paid by Host Employers is set at 12 per cent of the annual wage of each Trainee. In 2019-20, the average administration cost incurred by Host Employers was \$4,602 per Trainee per year.

The 12 per cent margin represents the costs of the service delivery by MEGT over and above the trainee employment costs, and includes three key services, namely:

1. Recruitment
  - Includes all aspects of recruitment and placement including advertising, eligibility checks, resume screening, interviewing, aptitude testing and personality profiling;
  - Half day MEGT induction, cultural awareness and soft skills training; and
  - Traineeship registration via the relevant state training authority.
2. Payroll provides/supports:
  - Online timesheet submission and access to historical timesheets;
  - Online timesheet approval for employers;
  - Process weekly timesheets;
  - Calculate wages and entitlements;
  - Pay rate and allowance accrual calculations;
  - Manage Award increases and updates (if relevant);
  - Transfer pay to the Apprentice/Trainee bank account;
  - Invoice the Client;
  - Provide Tax Certificates;
  - Pay superannuation and insurances; and
  - Payslip, YTD balance for items such as allowances, ordinary hours, PAYG etc.
3. Management - This includes all aspects of Trainee management and complies with Government monitored National Standards and provides/supports the following:
  - Employer OHS assessments, recommendations and support;
  - Employer and site-specific inductions and safety training;
  - First day employer/Apprentice onsite introductions;

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<sup>33</sup> KPMG analysis of MEGT Program data

<sup>34</sup> National Skills Institute, Certificate IV in Information Technology. Available at: <https://www.myskills.gov.au/courses/details?Code=ICT40118>

- Scheduled supervisor and Trainee visits (8-week cycle);
- Training program management and Training plan progress reporting;
- Disciplinary action and Termination support;
- Rotation of Trainees to other client workplaces;
- Downtime facilitation;
- Injury management;
- Employee Assistance Program (EAP) for Trainees; and
- Career coaching and post placement support.

In addition to monies received from Host Employers, MEGT also received funding from the Federal Government as the legal employer of each Trainee; a \$1500 Commencement Incentive (paid at 6 months) and \$2,500 Completion Incentive paid at traineeship completion (i.e. 2 years) is received per Trainee in the MTP.<sup>35</sup>

The Federal Government recently announced Job Trainer program may also contribute funding to the MTP through the Boosting Apprenticeship Commencement wage subsidy. To be eligible for the subsidy, employers must employ trainees after 5 October 2020 and until 30 September 2021 however places are limited to 100,000 nationally. This subsidy was not included in the current evaluation as data was not available, however, we note that future evaluations should consider this as an input into the MTP, where appropriate.<sup>36</sup>

## Time dedicated to supporting Trainees

In addition to incurring the costs of Trainee wages and vocational education course fees, Employers bear the cost of providing on-the-job training and support to Trainees. The additional time required to support Trainees, in comparison to other entry-level or new employees, is estimated to be 1.5 hours per week and represents an opportunity cost to Employers of approximately \$4,602.25 per Trainee per year.<sup>37</sup>

## 7.4 Results and Sensitivity Analysis

### 7.4.1 Results summary

For every dollar invested into the MTP, a benefit of approximately \$3 is realised over the 10-year evaluation period (2019-2028). This result is based on an estimated net benefit of approximately \$9,600,320 in real terms that is generated by the evaluation cohort under the MTP.

The net benefit represents the incremental benefits over the Base Case derived from higher earning, educational and employment pathways entered into by MTP Trainees, in comparison to the wage earnings associated with the educational and employment pathways of the population without a non-school qualification overall.

Table 17 summarises the present value results of all the benefits and costs quantified under this model using a discount rate of 7 per cent. It shows a strong positive result.

Table 17: Results Summary

Results	10 year period (\$ million)
Trainee wages	\$4.57

<sup>35</sup> MEGT Program data

<sup>36</sup> MEGT Program data

<sup>37</sup> KPMG analysis of MEGT Program data

Results	10 year period (\$ million)
Microsoft contribution	\$0.46
Vocational education course fees	\$0.012
Program administration costs	\$0.78
Time dedicated to supporting Trainees	\$0.48
<b>Total Costs</b>	<b>\$6.31</b>
Employers experience lower staff wages (during the Program)	\$1.44
Employers avoid administrative burden of hiring staff	\$0.42
Employers experience reduced staff turnover	\$0.34
Employers experience lower recruitment costs after the Program	\$0.31
Increased diversity in the IT workforce	\$3.45
Trainees receive a wage while completing the Program	\$2.96
Trainees receive mental health and wellbeing support while completing the Program	\$0.034
Trainees given a fast-tracked pathway into sustainable IT careers	\$5.96
Trainees have a higher likelihood of employment	\$0.97
<b>Total Benefits</b>	<b>\$15.92</b>
<b>NPV</b>	<b>\$9.60</b>
<b>BCR – Total</b>	<b>2.52</b>

Source: KPMG calculations

#### 7.4.2 Sensitivity Analysis

A sensitivity analysis was completed to evaluate the impact of changes to key variables and assumptions on the overall model results. This included using alternative discount rates in the modelling and assessing variability in benefits and costs.

## Alternate Discount Rates

The first sensitivity test applied was to change the discount rate in line with Australian Government guidelines. The recommended sensitivity testing should be undertaken at 3 per cent and 10 per cent<sup>38</sup> according to the Australian Department of Prime Minister and Cabinet, with the results of this testing shown in Table 18 below.

Table 18: Net Present Value and BCR of the MTP Based on Changes to Discount Rates.

Discount rate	BCR (20-year)
3 per cent	2.62
7 per cent	2.52
10 per cent	2.46

Note: 2019 prices. Source: KPMG calculations

## Alternate Benefits

This analysis is based on a combination of MEGT Program data and data from other sources. Wherever possible, historical actuals are used as an input. Future benefits however are the product of the assumptions outlined above.

This sensitivity analysis uses variation in the benefits to highlight the impact of over or understating the benefits of the MTP. Some potential channels through which this may occur are outlined below:

- Given that Microsoft Trainees are selected into the Program, the analysis may overstate the benefits.
- Some benefits may be overstated, such as the impact of Trainees on workplace diversity.
- The MTP is associated with a broad range of benefits that go beyond increased educational attainment, higher earnings and avoided employee-related costs. These other benefits cannot be quantified, so the overall benefit of the program is likely to be understated.

Table 19 below show the impact of the alternative benefit assumptions on the overall model results.

Table 19: Alternate Benefits.

Results	40% reduction in benefits	20% reduction in benefits	No change	20% increase in benefits	40% increase in benefits
10-year analysis	2.51	2.02	2.52	3.02	3.53

Note: 2019 prices. Source: KPMG calculations

## Alternate Costs

This analysis is based on MEGT Program data, meaning historical actuals are used as an input. Future costs, however, are the product of the assumptions outlined above.

This sensitivity analysis uses variation in the costs to highlight the impact of over or understating the benefits of the MTP. Some potential channels through which this may occur are outlined below:

<sup>38</sup> Department of Prime Minister and Cabinet, Office of Best Practice Regulation, 2016, *Guidance Note, Cost-Benefit Analysis*, Department of Prime Minister and Cabinet, Canberra.

- The assumption that Employees spend, on average, an additional 1.5 hours per week providing on -the-job support to Trainees, in comparison to other entry-level employees.
- Changes in the cost of program administration.

Table 20 below show the impact of the alternative benefit assumptions on the overall model results.

*Table 20: Alternate Benefits.*

<b>Results</b>	<b>40% reduction in costs</b>	<b>20% reduction in costs</b>	<b>No change</b>	<b>20% increase in costs</b>	<b>40% increase in costs</b>
10-year analysis	4.20	3.15	2.52	2.10	1.80

*Note: 2019 prices. Source: KPMG calculations*

## 8 Next Steps

As outlined through this report, data is limited at this stage due to the Program being in preliminary stages of implementation. In order to evaluate the program more fulsomely in the future, MEGT may consider collecting additional data for the preliminary outcomes and preliminary economic evaluations. The types of data to be collected for the full outcomes evaluation and purpose for collecting it is outlined in Table 21.

### Outcomes evaluation

Table 21: Additional data to be collected for future outcomes evaluations

Data to be collected	Purpose
Alumni survey	Track the outcomes of alumni including: <ul style="list-style-type: none"> <li>• Employment by occupation and sector</li> <li>• Retention in IT industry</li> <li>• Wages (likely brackets)</li> <li>• Ongoing impact of vocational training</li> <li>• Participation in further training</li> </ul>
Pre-post skills testing through digital literacy assessment	Test uplift in skills throughout completion of the course
Survey of former employers/survey of employers over time	<ul style="list-style-type: none"> <li>• Understand the impact of alumni on Host Employers over time</li> <li>• Understand the ways in which the Program has changed over time, including Host Employer reflections on Trainees over time</li> <li>• Gain insight into reasons that Trainees are or are not still involved in the Program or employed by the organisation</li> </ul>
Program data – additional fields	It is suggested that MEGT continues to collect Program data, with the addition of some information fields such as: <ul style="list-style-type: none"> <li>• Where people were working beforehand</li> <li>• Additional diversity characteristics including LGBTIQ+/intersectionality</li> <li>• Whether participants had applied to the Program previously and if so, the activities that they undertook between applications</li> </ul>
Host Employer and Trainee feedback survey – refinements	It is suggested that MEGT also continues to collect Host Employer and Trainee feedback through existing surveys. However, some refinements to the surveys are suggested, including: <ul style="list-style-type: none"> <li>• Limiting potential interpretation bias in questions through re-wording</li> </ul>



	<ul style="list-style-type: none"> <li>• Ensuring comparability between Host Employers and Trainees by including some of the same questions across surveys</li> <li>• Adding further free text explanations/ reasons for some questions</li> <li>• Using a consistent rating system for responses</li> <li>• Maximising comparability of data across years, by ensuring consistency in survey questions between cohorts</li> <li>• Considering sampling/ distribution to ensure representative samples are captured over time</li> </ul>
Focus groups/ interviews with RTOs such as TAFE NSW, RMIT, CIT / broader sector	<ul style="list-style-type: none"> <li>• Understand the impact of the Program on training organisations</li> <li>• Understand how capability of Trainees has changed over time</li> <li>• Understand whether any changes have been made to the training delivered over time, including refinements in course offerings etc</li> <li>• Understand the strengths of links between business and RTOs/ industry engagement as a result of the Program</li> </ul>
Consultation with recruitment/ human resources staff at Host Employers	<ul style="list-style-type: none"> <li>• Validate assumptions around retention</li> <li>• Validate assumptions about recruitment and administration costs</li> <li>• Strengthen knowledge base about any changes in business</li> <li>• Build knowledge about diversity</li> </ul>

## Economic evaluation

The types of data to be collected for the full economic evaluation and purpose for collecting it is outlined in Table 22.

*Table 22: Additional data to be collected for future economic evaluations*

Data to be collected	Purpose
Real employment outcomes	<ul style="list-style-type: none"> <li>• Validate assumptions about employment outcomes of MTP graduates to strengthen estimate of economic benefit</li> </ul>
Real wages	<ul style="list-style-type: none"> <li>• Validate assumptions about wages of MTP graduates and provide evidence about how wage growth over time compares to broader sector to strengthen estimate of economic benefits</li> </ul>

Data to be collected	Purpose
Stronger comparison group data – through survey of unsuccessful applications	<ul style="list-style-type: none"> <li>• Compare the outcomes of a cohort that is close to Trainees to facilitate a stronger measurement of Program impact</li> <li>• It is suggested that the survey should include similar questions to the Trainee survey regarding: <ul style="list-style-type: none"> <li>– Workforce participation</li> <li>– Wages</li> <li>– Progression</li> <li>– Career pathways</li> </ul> </li> <li>• The comparison to a cohort that is closer to the Trainees will minimise the risk of overstating Program benefits since people are self-selecting into the Program.</li> </ul>
Productivity improvements in the workplace (additional inputs from Host Employers including over time)	Provide evidence about positive benefits of Trainees on business profitability and output.

## Appendix A: Evaluation Questions

The evaluation sought to answer the following key evaluation questions. These evaluation questions will also guide data collection and analysis into the future.

Evaluation question	Aspects to consider	Measures/indicators	Methods/data sources	Data available?	Timeframes
<b>To what extent does the Microsoft Traineeship Program enable pathways into IT careers?</b>	<ul style="list-style-type: none"> <li>How many Trainees are included in the Program, over time?</li> <li>How many and what proportion of Program graduates are employed?</li> <li>How many and what proportion of Program graduates transition into ICT-related employment?</li> <li>How many and what proportion of Program graduates who were in non-ICT employment prior to the Program have transitioned into ICT-related employment?</li> <li>How many and what proportion of Program graduates are not in further study or employment?</li> <li>Prior to the Program, were Trainees considering a career in IT?</li> <li>Prior to the Program, were Trainees considering enrolling in a university ICT course?</li> <li>How many Program graduates remain in employment in the years after their Traineeship?</li> </ul>	<ul style="list-style-type: none"> <li>Number of Trainees over time</li> <li>Number and distribution of Program graduates in employment, by industry, over time</li> <li>Number of Program graduates not in employment or further study</li> <li>Number and distribution of participants of other training Programs in employment, by industry, over time</li> <li>Qualitative feedback from Trainees on the employment and training pathways and perceptions of the contribution of MEGT support to their pathways and outcomes</li> </ul>	<p><b>Data available now:</b></p> <ul style="list-style-type: none"> <li>MEGT Program data</li> <li>Trainee feedback survey</li> <li>Host Employer feedback survey</li> <li>Consultations with Trainees and Host Employers</li> <li>Site Visit questionnaires - Trainee answers regarding what could be done by MEGT and Host Employers to improve the experience and satisfaction rating</li> </ul> <p><b>Data to be collected:</b></p> <ul style="list-style-type: none"> <li>Survey of unsuccessful applicants</li> </ul>	●	<p>Employment outcomes to be measured two years after completion of each cohort. For example:</p> <ul style="list-style-type: none"> <li>Employment outcomes of cohort 1: December 2022</li> <li>Employment outcomes of cohort 2: December 2024</li> </ul>

Evaluation question	Aspects to consider	Measures/indicators	Methods/data sources	Data available?	Timeframes
	<ul style="list-style-type: none"> <li>How does the retention rate of Trainees compare to employees entering through other pathways?</li> <li>How do career outcomes differ by participant characteristics?</li> <li>How do transition outcomes of Program graduates compare with the outcomes of participants in other training programs and graduate pathways? To what extent did the Microsoft Traineeship Program contribute?</li> <li>What are the barriers to the achievement of the outcome?</li> <li>What number and proportion of Trainees have been offered direct employment by Host Employers? Which aspects of the Program contributed to this decision?</li> <li>Would Host Employers have considered hiring a Trainee without this Program?</li> <li>Prior to this Program, would Host Employers have filled the position with an employee from another pathway (such as a university graduate)?</li> <li>Has the Program changed the perspective of Host Employers about hiring people with vocational training compared to university degrees?</li> <li>What benefits have Host Employers experienced as a result of the Program? Has this evolved over the two years of the Program?</li> <li>What barriers exist to other businesses joining the Program? What was easier and</li> </ul>	<ul style="list-style-type: none"> <li>Number of Trainees offered direct employment by Host Employers</li> <li>Qualitative feedback from Host Employers regarding the Traineeship</li> </ul>	<ul style="list-style-type: none"> <li>Alumni survey</li> <li>Survey of former Host Employers</li> <li>Consultations with recruitment/ HR staff at Host Employers</li> </ul>		

Evaluation question	Aspects to consider	Measures/indicators	Methods/data sources	Data available?	Timeframes
	<p>harder than anticipated in participating in the program?</p> <ul style="list-style-type: none"> <li>What are the pathways of individuals who were not selected for the Program? How does this compare with Trainees that were selected?</li> <li>What are the perceptions of Host Employers regarding the impacts of the program on their business access to talent over time?</li> <li>What are the perceptions of the Program by Host Employers that have opted out of the Program?</li> </ul>				
<b>To what extent have participants increased their IT skills and knowledge?</b>	<ul style="list-style-type: none"> <li>How many and what proportion of Program participants complete all induction requirements?</li> <li>How many and what proportion of Program participants complete the TAFE course?</li> <li>How many and what proportion of Program participants complete all required Microsoft Certification courses?</li> <li>To what extent have participants increased their IT skills?</li> <li>How does the skills and accreditation level of Program participants compare with others in the industry?</li> <li>Do Trainees believe the Program contributed to increased IT skills and knowledge?</li> </ul>	<ul style="list-style-type: none"> <li>Retention and completion rates of TAFE course</li> <li>Retention and completion rates of Microsoft Certification courses</li> <li>Retention and completion rates in work experience</li> <li>Pre and post program digital literacy assessment</li> <li>Qualifications of IT workforce, by pathway into the industry, over time</li> <li>Qualitative feedback from Trainees</li> </ul>	<p><b>Data available now:</b></p> <ul style="list-style-type: none"> <li>MEGT Program data</li> <li>Trainee and Host Employer surveys</li> <li>Consultations with Trainees and Host Employers</li> <li>Site Visit questionnaires – Trainee answers to questions relating to course progression and goals</li> </ul> <p><b>Data to be collected:</b></p>	<p>●</p>	<p>To be measured at the start and conclusion of each cohort for comparison. For example:</p> <ul style="list-style-type: none"> <li>Cohort 1: January 2018 and December 2020</li> <li>Cohort 2: January 2021 and December 2022</li> </ul>

Evaluation question	Aspects to consider	Measures/indicators	Methods/data sources	Data available?	Timeframes
	<ul style="list-style-type: none"> <li>Are Host Employers satisfied with the competency of Trainees during the Program?</li> <li>How does the capability of Trainees compare to employees recruited from other pathways, such as graduate pathways or other Traineeships?</li> <li>How does the rate of growth (e.g. progression and promotions) of Trainees compare to other pathways?</li> <li>Do Host Employers experience a capability uplift from Trainees?</li> <li>At what point in the Program do Host Employers experience the Trainees making contributions?</li> <li>Do Host Employers believe that the vocational training received by Trainees is a differentiator compared to employees entering through other pathways?</li> <li>How does the level of IT skills and knowledge of Trainees compare with people who were not selected for the Program?</li> <li>Which components of the Program do Trainees feel contributed most to their skills and knowledge?</li> </ul>	<ul style="list-style-type: none"> <li>regarding change in their skills and knowledge</li> <li>Qualitative feedback from Host Employers regarding the capability of their workforce</li> <li>Host Employer views on progression and promotion of Trainees</li> </ul>	<ul style="list-style-type: none"> <li>Pre-post results of Digital Literacy Assessments</li> <li>Alumni survey</li> <li>Survey of former Host Employers</li> <li></li> </ul>		

Evaluation question	Aspects to consider	Measures/indicators	Methods/data sources	Data available?	Timeframes
<b>To what extent does the Microsoft Traineeship Program increase the diversity of the IT workforce?</b>	<ul style="list-style-type: none"> <li>How do the demographic characteristics of Trainees compare with demographic characteristics of the industry and other training Programs?</li> <li>What are Host Employers perceptions of the value of a diverse IT workforce? What are the characteristics of a typical IT worker?</li> <li>What is MEGT's selection criteria? Are specific diversity groups being targeted?</li> <li>How many and what proportion of Trainees identify with one type of diversity?</li> <li>How many and what proportion of Program graduates transition into ICT-related employment, by diversity groups?</li> <li>Do Host Employers believe their workforce is more diverse with the addition of Microsoft Trainees?</li> <li>What are Host Employers' perceptions regarding the diversity of their IT workforce before, during and after the program?</li> <li>Is the workforce at Host Employers more diverse than other organisations in the IT sector?</li> <li>Have Host Employers changed recruitment and selection processes around diversity as a result of the Program?</li> </ul>	<ul style="list-style-type: none"> <li>Number and distribution of Program graduates in employment, by type of diversity</li> <li>Host Employer views on the diversity of their workforce as a result of the Program, over time</li> <li>Organisational diversity and inclusion reports (e.g. Google Diversity Report, IBM Diversity Report)</li> <li>Host Employer perceptions of the diversity of their IT workforce before, during and after the Program</li> </ul>	<p><b>Data available now:</b></p> <ul style="list-style-type: none"> <li>MEGT Program data</li> <li>Consultations with Host Employers</li> </ul> <p><b>Data to be collected</b></p> <ul style="list-style-type: none"> <li>Alumni surveys</li> <li>Survey of former Host Employers</li> <li>Consultations with recruitment/ HR staff</li> </ul>	●	<p>To be measured at the conclusion of each cohort. For example:</p> <ul style="list-style-type: none"> <li>Cohort 1: December 2020</li> <li>Cohort 2: December 2022</li> </ul>

Evaluation question	Aspects to consider	Measures/indicators	Methods/data sources	Data available?	Timeframes
<b>To what extent is the productivity of the workforce increased as a result of the Program?</b>	<ul style="list-style-type: none"> <li>Has the Program facilitated a connection between businesses and the vocational system?</li> <li>Has the Program contributed to affordability of talent for smaller organisations?</li> <li>Have Host Employers experienced increased access to emerging technologies as a result of the Program?</li> <li>To what extent has the Program strengthened the ability of vocational institutes to deliver IT ready graduates?</li> </ul>	<ul style="list-style-type: none"> <li>Host Employer views on the connection between their business and TAFE</li> <li>Host Employer views on affordability of talent and access to emerging talent</li> <li>Number of TAFE staff trained to deliver MEGT course content</li> </ul>	<p><b>Data available now:</b></p> <ul style="list-style-type: none"> <li>Consultations with Host Employers</li> <li>Host Employer surveys</li> </ul> <p><b>Data to be collected:</b></p> <ul style="list-style-type: none"> <li>Alumni survey</li> <li>Survey of former Host Employers</li> <li>Focus groups with RTOs</li> </ul>	●	<p>To be measured at the conclusion of each cohort. For example:</p> <ul style="list-style-type: none"> <li>Cohort 1: December 2020</li> <li>Cohort 2: December 2022</li> </ul>
<b>What is the economic impact of the Program?</b>	<ul style="list-style-type: none"> <li>What are the financial, economic, community and social costs of the Program?</li> <li>What are the financial, economic, community and social benefits of the Program?</li> <li>What is the average spend per contract?</li> </ul>	To be developed as part of CBA framework (See Table 9 in Section 5.3.4)	See Table 10 in Section 5.3.5	●	<p>To be measured at the conclusion of each cohort. For example:</p> <ul style="list-style-type: none"> <li>Cohort 1: December 2020</li> <li>Cohort 2: December 2022</li> </ul>



Evaluation question	Aspects to consider	Measures/indicators	Methods/data sources	Data available?	Timeframes
<b>Have there been any other impacts of the Program for Trainees, Host Employers or MEGT?</b>	<ul style="list-style-type: none"> <li>Have Trainees undertaken further IT-related study as a result of their participation in the Program?</li> <li>To what extent has MEGT responded to change and learnings successfully? (e.g. in terms of contracts, onboarding of hosts and induction)</li> <li>Have employees at Host Employers experienced any impacts as a result of the Program?</li> <li>Do Trainees perception of the program change over time?</li> <li>Has the Program contributed to any other unintended outcomes? Are these positive or negative?</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative feedback from Trainees, Host Employers and MEGT</li> <li>Trainee perceptions of the outcomes they experienced through the Program and whether these were expected or not</li> <li>Host Employer perceptions of the role and contribution of MEGT services delivered in administering the Program</li> </ul>	<p><b>Data available now:</b></p> <ul style="list-style-type: none"> <li>Consultations with Trainees, Host Employers and MEGT</li> <li>Survey of Trainees and Host Employers</li> </ul> <p><b>Data to be collected:</b></p> <ul style="list-style-type: none"> <li>Alumni survey</li> <li>Survey of former Host Employers</li> <li>Consultations with recruitment/ HR staff</li> <li>Focus groups with RTOs</li> </ul>	●	<p>To be measured at the conclusion of each cohort. For example:</p> <ul style="list-style-type: none"> <li>Cohort 1: December 2020</li> <li>Cohort 2: December 2022</li> </ul>

## Appendix B: MEGT Services and Policy Context

This appendix provides further detail regarding the services offered by MEGT and the policy context of the Microsoft Traineeship Program.

### MEGT Services

#### Recruitment services

Employers looking for assistance in recruiting staff can access the services of MEGT in one of three ways.

Firstly, businesses can register as a Host Employer. Under this arrangement, MEGT acts as the legal employer of staff and undertakes all recruitment and staff management processes. The business is responsible for providing day-to-day work, supervision, on-the-job training and development activities. The MTP fits into this portfolio of activities.

Secondly, businesses which choose to directly hire staff can contract MEGT to assist in the recruitment process. This may include conducting activities such as advertising, screening, interviewing, aptitude testing and reference and pre-employment checks.

Lastly, MEGT's Apprenticeship Network Provider (ANP) team offers a free online jobs board which businesses can utilise when conducting recruitment activities.

#### Management services

MEGT is responsible for managing staff placed with Host Employers. This includes conducting induction, work health & safety and performance management services. Additionally, businesses can contract MEGT to execute payroll services for their staff. These activities are undertaken as part of the MTP.

The ANP is also contracted by the Australian Government to provide Australian Apprenticeship Support Network services, supporting businesses to sign-up, train and retain apprentices and Trainees under the Government scheme.

#### Development services

MEGT Institute is a registered training organisation (RTO) and specialist provider of professional development short courses and nationally accredited qualifications. Courses are delivered at MEGT campuses in Sydney and Melbourne, online and in the workplace and cover content including:

- Business: leadership and management, accounting, and administration;
- Services: retail, childcare, disability, and hospitality; and
- Trades: pre-apprenticeships, electrotechnology, and carpentry.
- MEGT also offers English language courses through their language school, ABILITY English.
- MEGT mentors and coaches are available to assist in the development of staff, apprentices and Trainees. The Indigenous Apprenticeship and Traineeship Network (IATN) is also available to provide specialised culturally aware mentoring and support to Indigenous employees and their employers.<sup>39</sup>

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<sup>39</sup> MEGT, MEGT Corporate Brochure. Viewed 3 November 2020 at: [https://moos.scos.com.au/index.php?controller=attachment&id\\_attachment=1368&id\\_product=833](https://moos.scos.com.au/index.php?controller=attachment&id_attachment=1368&id_product=833)

## Policy Context

MEGT was selected by the Australian Government in 2019 to deliver one of nine industry-led employment pathways under the Youth Jobs Prepare Trial Hire (PaTH) Industry Pilot Program. MEGT's ICT PaTH Pilot Program seeks to deliver online learning to equip Trainees with industry recognised credentials and employability skills with the aim of filling 500 ICT jobs Australia wide. The PaTH Pilot Program is separate from the MTP.

Further, once Trainees have completed the ICT PaTH Pilot Program, MEGT assists job seekers to identify potential career opportunities through their extensive network of employers and partnership with the Microsoft Traineeship Program.<sup>40</sup>

Youth Jobs PaTH is an Australian Government employment service that helps young people gain skills and work experience they need to find and keep a job. The PaTH Industry Pilots 2020-21 (Industry Pilots) are industry-led employment pathways designed to assist young people into work using elements of Youth Jobs PaTH, employment services and other supports. The Industry Pilots were announced by the Government in response to calls from industry for greater input in selecting, training, matching and supporting young job seekers.<sup>41</sup>

The Government has committed up to \$10 million to deliver nine industry pilots between January 2020 and 30 June 2021. The aims of the Industry Pilots are to:

- Test if and how industry-led approaches can increase employer take up and more effective use of employment services, particularly the Australian Government's Youth Jobs PaTH program;
- Align pre-employment pathways with the needs of employers with significant workforce demand, and in growing industries; and
- Inform the development of future employment services, including the design of future pre-employment and work experience programs.<sup>42</sup>

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<sup>40</sup> MEGT ICT PaTH Pilot. Viewed 3 November 2020, <https://www.megt.com.au/megt-ict-path-pilot>

<sup>41</sup> Senator the Hon. Michaelia Cash, Industry pilots announced for Youth Jobs PaTH, December 2019, Media release.

<sup>42</sup> Department of Education, Skills and Employment, Youth Jobs PaTH Industry Pilots. Viewed 2 November 2020, <https://www.employment.gov.au/youth-jobs-path-industry-pilots>

# Appendix C: Stakeholder Consultation Guides

This Appendix includes the guides for consultations with Host Employers and Microsoft Trainees.

## Host Employers Guide

### **Section A: Introduction – 5 minutes**

#### *Purpose of the consultation*

- KPMG has been engaged to assist MEGT with evaluating the outcomes of the Microsoft Traineeship Program.
- Our focus is on understanding the impact of the Microsoft Traineeship Program as a whole and how key outcomes are being achieved. We are not reviewing the performance of individual Host Employers.

#### *How the information will be used*

- Participation in this interview is voluntary. The information you provide to us will be used to answer a set of evaluation questions focused on the outcomes of the Microsoft Traineeship Program.
- Your decisions about whether to answer questions or not, and the comments that you make, will not have an impact on your relationship to MEGT.
- If we wish to attribute any comment to you in our final report, which MEGT intends to make public, we will seek your consent. We will include a list of the Host Employers that we speak with in our final report.
- As part of the evaluation, we will provide the notes today's discussion to MEGT. We are also happy to provide a copy of the notes to you to ensure accuracy of the information.

### **Section B: Interview questions – 50 minutes**

#### *Introductory questions*

1. Could you please describe your organisation? What is your role at your organisation?
2. What is your organisation's role in relation to the Microsoft Trainee? Could you please describe your organisation's involvement with the Microsoft Traineeship Program over time?

#### *Traineeship*

3. Could you please provide an overview of your workforce? How many employees do you have? How many Trainees do you have (both Microsoft Trainees and other Trainees)?
4. Do you work with other organisations that provide Traineeships? If so who and in what capacity? If not, would you have considered a Trainee without this Program?
5. Did your organisation have to make any changes to become a Host Employer for the Microsoft Traineeship Program?
6. Without the Program, would you have filled the Trainee position with a university graduate?
7. What benefits have been experienced by the business as a result of having a Microsoft Trainee (e.g. access to emerging technologies, affordability of talent)? Has this evolved over the course of the Traineeship? (Prompt if required: Are you able to quantify these benefits?)

#### *Skills and capabilities of Trainees*

8. Are you satisfied with the level of competency of Trainees? How do the skills and accreditation level of Trainees compare with other employees entering through different pathways? How has the skills and competency of the Trainees varied over time?
9. Do you believe that the industry specific credentials received by Trainees is a differentiator compared to employees entering through other pathways?
10. Which component of the program (on the job training, vocational training, industry specific training) is the driver of the Trainee's skills?
11. How do you think the productivity and performance of Trainees compares with employees entering through other pathways (e.g. other Traineeships, graduate programs)?
12. Has the Program changed your perspective on vocational education? Has the Program facilitated a connection between the business and the vocational system?
13. Do you expect to offer the Trainee a position upon program completion? How does your organisation help to ensure that Trainees are retained and complete the Program? How does retention and completion of Trainees compare to other employees?
14. Does the Microsoft Traineeship Program enable students to enter a career that they would otherwise not be able to? How and in what ways does it do this?

#### *Diversity*

15. Do you believe that your IT workforce is more diverse with the addition of Microsoft Trainees?
16. Have you made changes to your recruitment and selection processes as a result of the Program (e.g. shifting the training background of new hires, employing more diverse individuals)?

#### *Other considerations*

17. Are there any other outcomes for your organisation that have resulted from your partnership with MEGT (e.g. outcomes for managers, other team members, with clients)?
18. Would your organisation expand the Traineeship Program? If so, how many Trainees would you like to be able to have in your organisation?
19. What barriers exist for other businesses joining the Program? Was anything easier or harder than anticipated in relation to the Program?
20. Is there anything else you would like to add?

### **Section C: Interview close – 5 minutes**

- Thank you for your time today. Do you have any questions for me?
- If you like, we are happy to circulate a copy the notes from the interview to you within the next week to ensure we have accurately captured our conversation.
- We will collate the findings from the consultations into the evaluation report. MEGT will be in touch to share the final report with you when it is published.

*If the person has any complaints about any aspect of this project or interview: Any person with concerns or complaints about the conduct of this research can contact:*

KPMG contact – Madeleine D'Arcy ([mdarcy2@kpmg.com.au](mailto:mdarcy2@kpmg.com.au); 02 9346 5569)

MEGT contact – Josh Grice ([JoshGrice@megt.com.au](mailto:JoshGrice@megt.com.au); 07 3387 0680)

# Microsoft Trainees Guide

## **Section A: Introduction and consent – 5 minutes**

### *Purpose of the consultation*

- KPMG has been engaged to assist MEGT with evaluating the outcomes of the Microsoft Traineeship Program.
- Our focus is on understanding the impact of the Microsoft Traineeship Program as a whole and how key outcomes are being achieved. We are not reviewing the performance of individual Host Employers or Trainees.

### *How the information will be used*

- Participation in this interview is voluntary. The information you provide to us will be used to answer a set of evaluation questions focused on the outcomes of the Microsoft Traineeship Program.
- Your decisions about whether to answer questions or not, and also the comments that you make, will not have an impact on your relationship to MEGT or your Host Organisation.
- If we wish to attribute any comment to you in our final report, we will seek your consent. We will not include individual names in the report.
- As part of the evaluation, we will provide the notes today's discussion to MEGT. We are also happy to provide a copy of the notes to you to ensure accuracy of the information.

## **Section B: Interview questions – 50 minutes**

### *Introductory questions*

1. What is your current role?
2. How long have you been in the Traineeship?
3. What were you doing prior to joining the Traineeship?
4. Were you considering a career in IT before the Program?
5. Were you considering enrolling in a university IT course?
6. What were your key reasons for applying for the Traineeship?

### *Traineeship experience*

7. What impact do you feel the Traineeship has had on your education, future career and life more broadly?
8. How likely do you think it is that you would have pursued a career in IT without the Traineeship? What do you think you would have been doing without the Traineeship?
9. What barriers to a career in IT did you face?
10. Have you faced any barriers throughout your Traineeship? Can you share any examples?
11. Where do you expect to be in two years? In ten years? To what extent has the Traineeship accelerated you towards those goals?
12. Do you feel that your IT skills and knowledge has increased as a result of the Program? If so, which elements of the Program have contributed the most (TAFE course, Microsoft Certification courses, on the job training)?

13. How do you feel your level of capability compares to other employees recruited through different pathways (e.g. other Traineeships, graduate program etc)?
14. What benefits do you feel you deliver to your Host Organisation? (Prompt if required: Have you brought learnings from your study to work? Have you shared information about emerging technologies?)
15. Are you planning to undertake further IT-related study as a result of the Program?
16. Do you feel you have received sufficient support from MEGT, TAFE and your Host Employer throughout your Traineeship?

#### *Other impacts*

17. Are there any other outcomes that, from your perspective, the Microsoft Traineeship Program is having on Trainees, Host Employers, TAFE or others more broadly? Can you share an example of these impacts?
18. Would you recommend the Traineeship to others? Why or why not?
19. Is there anything else you would like to add?

### **Section C: Interview close – 5 minutes**

- Thank you for your time today. Do you have any questions for me?
- If you like, we are happy to circulate a copy the notes from the interview to you within the next week to ensure we have accurately captured our conversation.
- We will collate the findings from the consultations into the evaluation report. MEGT will be in touch to share the final report with you when it is published.

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