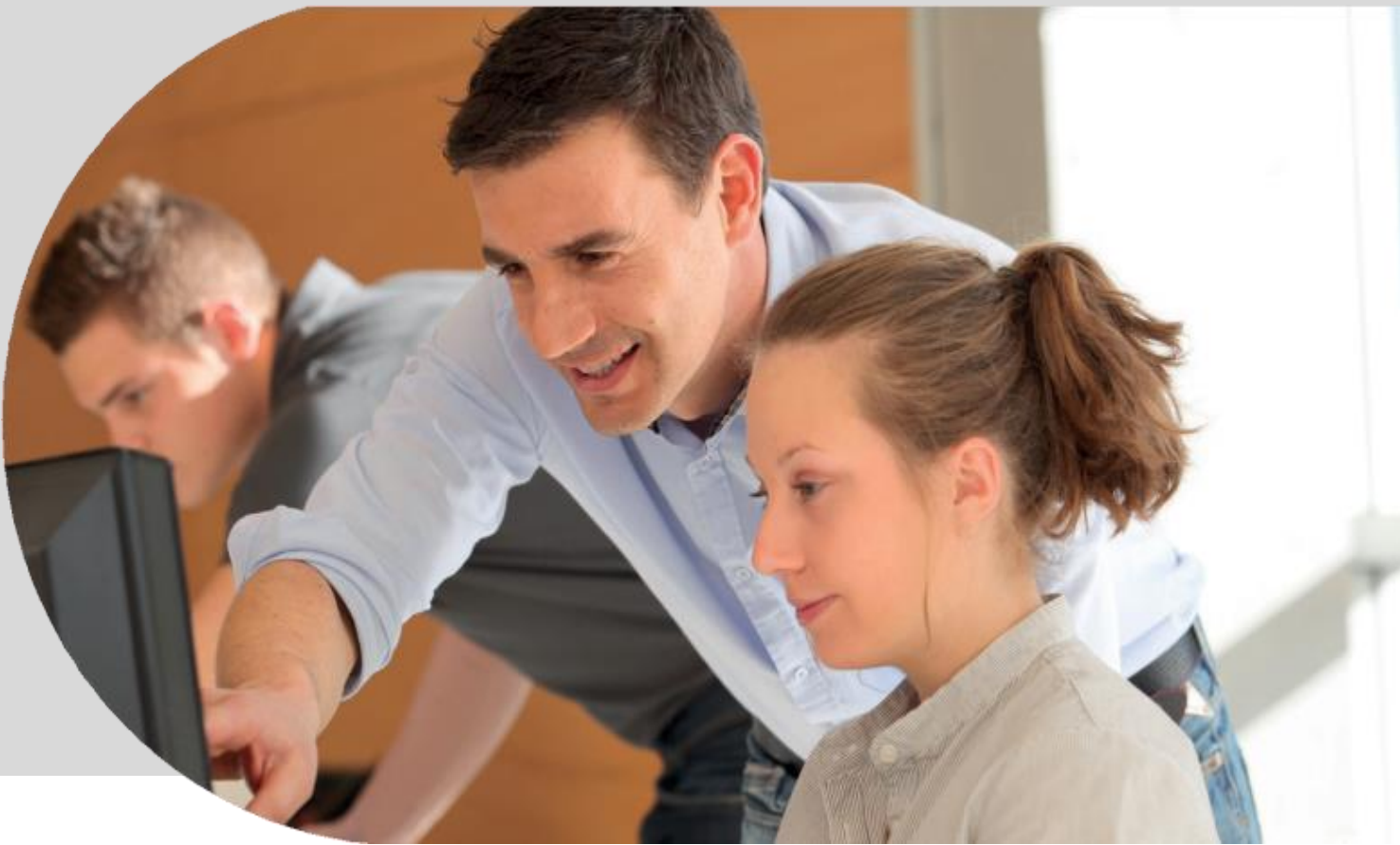# aptem.
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Aptem Usage and Provider Income Generation

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Foreword by Richard Alberg
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Aptem is an online portal that welfare to work providers use to help individuals on their journey into sustained employment. The key question for us and our customers is whether Aptem makes a positive difference. In 2016 we tracked usage at one of our larger customers in Australia and looked at how often Aptem users secured employment compared to those who did not use the platform. We looked at the results for over 70,000 jobseekers and the headline result is that Aptem users are 78% more likely to secure employment (a job placement) than those who did not use the platform.

However, providers are paid for ensuring sustained employment (outcomes) and we therefore extended our study and tracked these placements into outcomes. We used the 4, 12 and 26 week measurement points of the Australian jobactive contract and we also segmented by their Streams A to C job readiness classification.

When the research was completed, I was excited to learn that not only were jobseekers who use Aptem more likely to achieve an outcome of any type (i.e. 4, 12 or 26 weeks), but that this was also true across all streams and in both regional and non-regional locations. We decided to go further and financially quantify the observed differences. Using the published government outcome payment rates we looked at how much more this provider would have earned if all their jobseekers had used Aptem. It was over 5.5 million Australian dollars (£3.4m).

Of course, poor English proficiency, computer literacy, access to technology, etc. mean that many jobseekers who will not be able to use Aptem. However, using the data from this provider, even if half the jobseekers from the *did not use Aptem* group used Aptem, over 2.5 million dollars extra revenue could be expected.

Feedback from our previous research raised the question as to whether Aptem usage caused the increase in placements, or was some other factor at play (i.e. job readiness)? I was pleased that our researchers were able to investigate this and demonstrate that Aptem users were no more job ready than jobseekers who did not use Aptem.

In conclusion, the results from this research confirm and extend the findings of previous research. The study convincingly shows that jobseekers who use Aptem are more likely to achieve a job outcome and this directly translates into increased revenue for the provider.

My colleagues and I are thrilled by the results. They demonstrate that enabling jobseeker self service with active supervision by an advisor very substantially increases the number of people securing jobs and then staying in these jobs. These results were achieved across the spectrum of jobseekers, including the very long term unemployed and hardest to help.

Given the proliferation of payment by results contracts increasing the number of achieved sustained job outcomes is not just a matter of satisfaction in a job well done. It goes to the heart of a provider's financial viability.

Please don't hesitate to get in touch if you have any questions or wish to discuss how Aptem can help your organisation.

Summary

The purpose of this study was to investigate the likelihood that a jobseeker would progress from job secured (a placement) to sustained employment (an outcome). The study also explored whether there were any differences between jobseekers who used Aptem, versus those who did not. Where there were outcome differences the financial impact was also calculated.

70,170 jobseeker commencements were provided by a jobactive provider in Australia. They were divided into two groups; 'jobseekers who did not use Aptem' (n = 50,536), and 'jobseekers who did use Aptem' (n = 19,634). Placement, Outcome and Aptem usage data were added to this to from our total data set. We also included characteristics of the jobseekers within these groups, such as:

- Stream
- Length of unemployment
- Location (regional or non-regional) and
- Found own employment (FOE) or provider brokered employment (PB)

Jobseekers were first assessed on the basis of achieving a placement, and thereafter, whether they progressed to either a 4, 12, or 26 week outcome. Our analysis also looked at how much providers are paid for achieving each outcome and calculated for every 100 jobseekers commencing at that provider the additional revenue the provider would generate through Aptem usage.

The results demonstrate the substantial and positive impact that Aptem has in assisting jobseekers to achieve an outcome. Key results reveal:

- Jobseekers who use Aptem are 61% more likely to achieve a job outcome of any kind (i.e. 4, 12 or 26 week), compared to jobseekers who did not use Aptem
- If all jobseekers within the Commencement file were to use Aptem, the revenue increase would exceed 6 million dollars
- Jobseekers who used Aptem were 61% more likely to remain in employment after four weeks, 56% after twelve weeks and 43% after twenty-six weeks, compared to jobseekers who did not use Aptem
- Jobseekers who used Aptem were more likely to achieve an outcome of any kind irrespective of whether they were from regional locations or non-regional locations, compared to jobseekers who did not use Aptem
- Jobseekers from regional locations and who used Aptem were more likely to achieve an outcome (of any kind) compared to non-regional users of Aptem

Usage of Aptem not only led to a substantial increase in the number of outcomes achieved, but also indicated an extra 5.5 million dollars in revenue that could be generated. While this would require all Commenced jobseekers to use Aptem, even if half the jobseekers were to do this, over 2.5 million dollar increase in revenue could reasonably be expected.

The issue of selection bias was also investigated and its potential for impact on the correlation/causation relationship between Aptem usage and outcomes. This is an important discussion as it directly impacts the contribution of the platform and consequent financial impact. Our analyses revealed:

1. Jobseekers who used Aptem were unemployed on average 10 weeks longer than non-users of Aptem
2. As a person's usage of Aptem increased, so did the likelihood the jobseeker would secure employment (a placement)
3. Jobseekers who used Aptem and secured a placement compared to jobseekers who did not use Aptem but also secured a placement, were no more likely to progress from a 4 week outcome to a 26 week outcome. If only more job ready jobseekers were being assigned to Aptem, we would expect to see a much higher conversion ratio to the full 26 week outcome for the group of jobseekers who used Aptem.

These results, based on a very large sample of people, show that jobseekers enrolled to the Aptem system, were not more 'job-ready' than jobseekers who were not enrolled. In fact, a reasonable argument can be made that the opposite is true.

Introduction

Aptem is an online portal that uses workflows to guide people in their job search, helping them become methodical and focused. The tools and resources in the system include job vacancies (obtained from thousands of job boards and employer sites), CV building, eLearning, activity management and action planning. Advisors also have a login from which they can access all of these resources as well as observe and support each customer's job search activities and progress. Providers can define performance and compliance workflows and have Aptem ensure these are followed.

A core purpose of Aptem is to increase the number of job placements providers can achieve through usage of the Aptem system. To that end, we explored the contribution Aptem made to placements in previous research. Analysis found that, overall, jobseekers who used Aptem were 78% more likely to find a job than jobseekers who did not use Aptem. This positive difference was consistent across all streams and regions.

In Australia provider performance is objectively measured using what are known as Star Ratings. A provider's Star Ratings and the money they are paid are tied to Job outcomes, as opposed to placements. The provider collects a share of the available payment pool for a jobseeker as the person completes 4, 12 and 26 week milestones of continuous employment. The better a provider can achieve this, the higher the revenue collected and the higher the Star Ratings achieved.

With so much riding on the conversion of a placement to a full 26 week outcome, MWS wanted to go beyond simple achievement of a placement and explore the relationship between Aptem usage and a 26 week outcome. MWS also wanted to calculate the financial impact of using the Aptem platform.

Methodology

Jobseeker Commencement data, from the government compliance system, was provided to MWS Technology by a jobactive provider and analysed for over 70,000 jobseekers. These jobseekers were supported by an Australian welfare to work provider between 1st July 2015 and 30th May 2016. Commencement data was then matched with corresponding outcome data that reflected 4, 12 and 26 week outcomes from July 1, 2015 until September 2016. The later date of September for the outcome file was selected so as to better allow for sustained employment outcomes to come to fruition. Commencement and outcome data were then matched to Aptem data for analysis. Two research groups were derived:

1) Jobseekers who used Aptem; and
2) Jobseekers who did not use Aptem.

A jobseeker who logged into the Aptem system at least once, was included in the 'used Aptem group', while jobseekers who were not invited to the Aptem system, were included in the 'did not use Aptem group'. Once the jobseeker was placed in either the 'used' or 'did not use' Aptem group, jobseekers were further categorised in terms of:

- Stream (A, B or C)
- Length of unemployment
- Location (regional or non-regional) and
- Found own employment (FOE) or provider brokered employment (PB)

We then assessed each jobseeker in the following way, which formed the basis of our findings:

- Did not secure employment

- Secured employment, either found by him/her self or provider brokered

- Stayed in employment for 4 weeks

- Stayed in employment for 12 weeks; and/or

- Stayed in employment for 26 weeks

Assumptions and Notes

- Several tables within this report contain 'missed revenue' data. This is designed to reflect the additional revenue that could have been earned, had all commenced jobseekers used Aptem. The missed revenue amounts were calculated in the following way:
  1. Identify the number of actual commencements and outcomes for jobseekers who did not use Aptem
  2. Identify the proportion of jobseekers who achieved an outcome and who used Aptem
  3. Identify the number of potential outcomes that could have been achieved had all commenced jobseekers used Aptem. To calculate this number we multiplied the number of commencements from the 'did not use Aptem' group, by the proportion of jobseekers who achieved an outcome, from the 'used Aptem group
  4. Deduct the number of 'potential outcomes', from 'actual outcomes' to provide an estimation of additional outcomes
  5. Calculate the revenue that would have been generated for each outcome
  6. Finally, multiply the number of additional outcomes, by the revenue calculated against each outcome. This provides a total 'missed revenue' for each of the groups under investigation in this study
- For this analysis, we were only able to calculate 'one' – 4, 12 or 26 week outcome per jobseeker. This was due to the difficulty in matching a single jobseeker, in the Aptem file, to multiple entries for the

jobseeker in the placement and outcome files. While this will have an impact on raw numbers of placements and outcomes recorded, it is not expected to impact the ratios of placements to outcomes, as the rate of data exclusion is expected to be evenly distributed between the two groups assessed (i.e. used Aptem and did not use Aptem)

- Stream A jobseekers who were unemployed <12 weeks were included in the placements file, but not the outcome file. In order to reflect accurate ratios of placements that convert to outcomes, 6,855 jobseekers who were unemployed <12 weeks were removed from the initial data comprising over 77,000 jobseekers.

Results

Finding #1

Jobseekers who use Aptem are 56% more likely to achieve a job outcome of any kind, compared to jobseekers who did not use Aptem

As mentioned in our introduction, the main purpose of Aptem is to improve the number of people who achieve sustained employment (Outcomes) through increasing the number of additional placements Aptem generates. To determine the effectiveness of Aptem in achieving this objective, we compared the ratio of any and all outcomes for jobseekers who used Aptem, with those who did not.

Table 1: Ratio of a 4, 12 or 26 week outcome as a function of Aptem usage

Used Aptem	Commencements	Actual Outcomes	Outcomes per jobseeker	% Difference: Used Aptem v Did Not Use Aptem
No	50,536	10,974	0.217	-55.7%
Yes	19,634	6,628	0.338	55.7%

Table 1 shows that jobseekers who used Aptem achieved an average of 0.34 outcomes compared to 0.22 for jobseekers who did not use Aptem. That represents a difference of 56% in favour of Aptem users, which means it is substantially superior in assisting jobseekers into an outcome, compared with jobseekers who are supported by traditional case management services alone.

Finding #2

The potential for revenue gain if Aptem were used by all jobseekers equates to $5,454,879

Also mentioned in the introduction is the fact that jobseeker outcomes attract a payment to the provider at 4, 12 and 26 week milestones. This represents the biggest driver of revenue earned by providers and also underpins the star rating system; the core indicator of provider performance. The revenue achieved for an outcome varies due to a number of factors, some of which include:

- Outcome type (4, 12 or 26 week outcome)
- Stream (A, B, or C)
- Location (Regional/non-regional)
- Length of unemployment

Knowing, as we do, the difference between the percentage of jobseekers who used Aptem or did not, and who subsequently achieved an outcome, it is possible to estimate the revenue that could have been achieved had all jobseekers used Aptem. To this end, outcome fees were derived from the jobactive deed (see Appendix 1), with the results shown in Table 2.

Table 2: Total revenue missed between jobseekers who used Aptem and achieved an outcome, versus those who did not

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Value of each additional outcome (-GST) (weighted average)	Total missed revenue (-GST)
No	10,974	17,081	6,107	$893.22	**$5,454,879**

*The 'Total missed revenue' figure was derived by applying the outcome ratio for the 'Used Aptem group (.34), to the total number of Commencements for the 'Did Not Use Aptem group. Allowances were also made regarding stream, location and other factors influencing an outcome payment amount. For a full description of the make-up of the Revenue Differential figure, please refer to our statement in the methodology, subsequent tables in this report, and Appendix 2, which has all the calculations.

As described in Table 2, we estimate a potential $5,454,879 in additional revenue would have been generated had all jobseekers at the provider used Aptem. With the cost of a Aptem licence factored in, this represents a substantial sum of money as well as an excellent return on investment. Having stated this, we accept it is not realistic to expect every jobseeker to use Aptem. Barriers may include, but are not limited to:

- English as a second language
- Computer literacy
- Disability
- Access to technology (hardware and/or internet connection), and/or
- Willingness to engage with technology
- Advisor willingness to engage with technology

It is feasible though, to propose that many jobseekers who have not used Aptem to date, could reasonably do so, given the opportunity and support. Even if we could attract half the number of non- Aptem users into the 'Used Aptem group, that would still represent a revenue increase potential of over 2.5 million dollars.

Finding #3

Jobseekers who use Aptem are 43% more likely to achieve the 26 week employment milestone than jobseekers who did not

The maximum funded goal for the provider is to help a jobseeker secure employment and then stay in the job for 26 weeks. It was therefore important to contrast sustained outcomes (26 weeks) for Aptem users against those who did not use the platform. As can be seen in Table 3, 7.3% of jobseekers who used Aptem found a job and stayed in employment for 26 weeks compared to 5.1% of those who did not use Aptem. Therefore, jobseekers who used Aptem are 43.3% more likely to find a job and remain in it for at least 26 weeks.

Given the large sample size obtained over an 11-month period, we can state with a great deal of confidence that usage of Aptem results in a substantial increase in sustained job outcomes. Previous research has demonstrated that users of Aptem are more likely to find a job placement, which is the first step in sustained employment. We now know that those who use Aptem are also more likely to stay in work.

Table 3: 26 week outcomes as a function of Aptem usage

Used Aptem	Commencements	Actual Outcomes - 26 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
No	50536	2590	5.13%	-43.3%
Yes	19634	1442	7.34%	43.3%

Results in Table 4 have calculated that the total in missed revenue is equivalent to $1,382,926, which is derived from an estimated 1,119 additional 26 week outcomes at an average of $1,236 payment per outcome.

Table 4:Additional revenue earned for 26 week outcomes as a function of Aptem usage

Used Aptem	Actual outcomes – 26 weeks	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
No	2,590	3,709	1,119	$1,236	$1,382,926

Finding #4

Across all streams, jobseekers who use Aptem are more likely to reach the 26 week employed milestone than those who do not use it

Our next investigation was to look at the standardised assessment of job readiness (Streams A to C) and ascertain the Aptem impact for each Stream. Results in Table 5 reveal that, for the Stream A group, Aptem is 46.4% more effective in helping jobseekers into sustained employment. For Stream B the difference is 27.5% and Stream C 41.9%.

It is not surprising that the job ready Stream A jobseekers are more likely to retain employment once they have found a placement. Providers are paid more for assisting Stream B and Stream C into employment. These groups are more challenging to place given their increased barriers to employment; for example Stream C jobseekers are on average unemployed for more than 4 years (see Table 7).

Table 5: 26 week outcomes as a function of Aptem usage and stream

Used Aptem	Commencements	Actual Outcome - 26 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
Did not use Aptem				
A	27779	1,827	6.58%	-46.40%
B	13626	504	3.70%	-27.54%
C	9131	259	2.84%	-41.91%
Used Aptem				
A	10926	1,052	9.63%	46.40%
B	5702	269	4.72%	27.54%
C	3006	121	4.03%	41.91%

Results in Table 6 break up missed revenue potential by stream. Note that the total amount of revenue missed is the same as calculated in Table 4. This is because it shows all missed 26 week outcomes, but breaks it up by stream. Stream A represents the highest potential for an increase in raw outcomes and also half of the revenue potential.

Table 6: Missed revenue for 26 week outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	1,827	2675	848	$816.89	$692,719.80
B	504	643	139	$2,476.88	$344,286.00
C	259	368	109	$3,173.58	$345,920.20
				Total Revenue Missed	$1,382,926.00

Table 7: Average number of weeks unemployed by stream

Stream	Commencements	Average weeks unemployed
A	38,705	66 Weeks
B	19,328	160 Weeks
C	12,137	227 Weeks

Finding #5

Jobseekers in regional areas who use Aptem are more likely to achieve a 26 week outcome compared to those in more urban areas.

It can be more challenging to support jobseekers in regional/rural areas where there are fewer job vacancies. Compared to large cities, jobseekers may have to travel further to gain work and technology may not be as available or reliable. Some have used these challenges to question the utility of Aptem as a legitimate outcome generating tool in such locations. However, far from this being the case, results from Table 8 show that, across all streams, Aptem was substantially more successful at placing jobseekers in regional locations than those who used traditional job search methods alone. The most noticeable difference was in Streams A and B.

Table 8: Regional 26 week outcomes as a function of Aptem usage and stream

Stream	Commencements	Actual 26 week outcome	% Employed	% Difference Aptem – Non Aptem
Did not use Aptem				
A	3326	194	5.83%	-88.78%
B	2499	95	3.80%	-56.19%
C	1142	35	3.06%	-18.29%
Used Aptem				
A	890	98	11.01%	88.78%
B	960	57	5.94%	56.19%
C	331	12	3.63%	18.29%

The superior outcome ratio achieved by the Aptem user group is reflected in dollar terms within Table 9. This shows the total missed revenue for the regional jobseekers group at $375,903, which is derived from a proposed additional 172 Stream A 26 week outcomes; 53 Stream B, and 6 Stream C.

Table 9: Missed revenue for regional 26 week outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	194	366	172	$982.49	$168,988.30
B	95	148	53	$2,999.80	$158,989.30
C	35	41	6	$7,987.67	$47,926.00
				Total Revenue Missed	**$375,903.60**

A comparison of 26 week outcomes between regional (Table 8) and non-regional (Table 10) areas found that, across all streams, users of Aptem in regional areas were more likely to achieve the 26 week outcome compared to those who did not use Aptem. For example, Stream A jobseekers in regional areas were 89% more likely to find sustained employment (see Table 8) compared to 42% in non-regional areas (see Table 10). Regional outcomes are rewarded with higher payments and although the raw number of outcomes is not as high compared to non-regional locations, they can have a significant financial impact on provider revenue.

As with 26 week outcomes for the regional group, across all streams, Aptem users from non-regional locations were also more successful in achieving this milestone than non-users.

Table 10: Non-regional 26 week outcomes as a function of Aptem usage and stream

Stream	Commencements	Actual 26 week outcome	% Employed	% Difference Aptem – Non Aptem
Did not use Aptem				
A	24453	1633	6.68%	-42.34%
B	11127	409	3.68%	-21.63%
C	7989	224	2.80%	-45.33%
Used Aptem				
A	10036	954	9.51%	42.34%
B	4742	212	4.47%	21.63%
C	2675	109	4.07%	45.33%

Due to the sheer size of the raw numbers of potential outcomes that could be generated, the revenue gain is substantial. We estimate an extra 1 million dollars plus (see Table 11) could be generated had all these jobseekers had access to the Aptem system. More than half this would have come from the Stream A group, with a substantial proportion also generated by Stream C jobseekers.

Table 11: Missed revenue for non-regional 26 week outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	1633	2325	692	$756.84	$523,731.60
B	409	497	88	$2,105.64	$185,296.60
C	224	325	101	$2,950.44	$297,994.20
				Total Revenue Missed	**$1,007,022.40**

Finding #6

Jobseekers who use Aptem are 56% more likely to achieve the 12 week employment outcome than jobseekers who did not

Next, we investigated whether Aptem played a role in jobseekers achieving a 12 week outcome. As can be seen in Table 12, 11.4% of jobseekers who used Aptem found a job and stayed in employment for 12 full weeks compared to 7.3% of those who did not use Aptem. Therefore, jobseekers who used Aptem are 56.3% more likely to stay in employment for more than 12 weeks than those who did not use Aptem. Given the substantial difference in the percentage of 12 week outcomes achieved, coupled with the high raw number of jobseekers who could potentially use the Aptem system, the revenue gain potential is significant.

Table 12: 12 week outcomes as a function of Aptem usage

Used Aptem	Commencements	Actual Outcome - 26 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
No	50536	3696	7.31%	-56.3%
Yes	19634	2245	11.43%	56.3%

Expressed in financial terms, had non-users used Aptem, an extra $2,245,348 of revenue would have been generated.

Table 13:Additional revenue earned for 12 week outcomes as a function of Aptem usage

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
No	3696	6459	2,763	$813	$2,245,348

Finding #7

Across all Streams, jobseekers who use Aptem are more likely to reach the 12 week employed outcome than those who do not use it

Our next investigation was to look at the standardised assessment of job readiness (Streams A to C) and ascertain the Aptem impact for each Stream. Results in Table 14 reveal that, for the Stream A group, Aptem is 60.0% more effective in helping jobseekers achieve a 12 week outcome, while for the Stream B group, the difference is 32.1%, and 76.1% for Stream Cs.

While it is not surprising that the more 'job ready' Stream A jobseekers are more likely to retain employment once placed, it is especially pleasing that Aptem was also able to assist both B and C groups to a substantially higher proportion of 12 weeks outcomes. Providers are paid more for assisting Stream B and Stream C jobseekers into employment, given that they are more challenging to place due to their increased barriers to employment.

Table 14: 12 week outcomes as a function of Aptem usage and stream

Used Aptem	Commencements	Actual Outcome - 12 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
Did not use Aptem				

A	27779	2484	8.94%	
B	13626	805	5.91%	
C	9131	407	4.46%	
Used Aptem				
A	10926	1564	14.31%	60.08%
B	5702	445	7.80%	32.10%
C	3006	236	7.85%	76.14%

The total revenue opportunity that exists for the 12 week outcome group exceeds 2.2 million dollars (see Table 15). Especially pleasing is the high proportion of Stream C contribution to this number at $767,555. The challenge remains to convert more of these outcomes to 26 week outcomes for this group. This would have both a substantial financial and social impact for provider and jobseeker alike.

Table 15: Missed revenue for 12 week outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	2484	3975	1491	$646.76	$964,321.90
B	805	1063	258	$1,990.19	$513,469.80
C	407	717	310	$2,475.99	$767,555.90
				Total Revenue Missed	**$2,245,347.60**

Finding #8

Jobseekers in regional areas who use Aptem are more likely to reach the full 12 week employed outcome compared to those in more urban areas.

Again we looked at regional and non-regional locations to determine whether a difference in 12 week outcomes was observed between users and non-users of Aptem. Table 16 shows that users of Aptem in regional locations were more likely to achieve a 12 week outcome across all streams, compared to non-users of Aptem. The most substantive difference was observed for the Stream A group, where users of Aptem were 89% more likely to achieve a 12 week outcome than non-users.

Table 16: Regional 12 week outcomes as a function of Aptem usage and stream

Used Aptem	Commencements	Actual Outcome - 12 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
Did not use Aptem				
A	3326	271	8.15%	-88.92%
B	2499	149	5.96%	-57.24%
C	1142	63	5.52%	-31.43%
Used Aptem				
A	890	137	15.39%	88.92%
B	960	90	9.38%	57.24%
C	331	24	7.25%	31.43%

In financial terms this equates to a gain of $459,199 extra revenue had all regional jobseekers used Aptem.

Table 17: Missed revenue for regional 12 week outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	271	512	241	$803.58	$193,662.41
B	149	234	85	$2,259.20	$192,031.67
C	63	83	20	$3,675.26	$73,505.27
				Total Revenue Missed	**$459,199.35**

Users of Aptem from non-regional locations were more likely to achieve a 12 week outcome across all streams than non-users (see Table 18). The difference was most noticeable for Stream C jobseekers, where users of Aptem were 84% more likely to achieve a 12 week outcome than non-users.

Table 18: Non Regional 12 week outcomes as a function of Aptem usage and stream

Used Aptem	Commencements	Actual Outcome - 12 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
Did not use Aptem				
A	24453	2213	9.05%	-57.11%
B	11127	656	5.90%	-26.98%
C	7989	344	4.31%	-84.05%
Used Aptem				
A	10036	1427	14.22%	57.11%
B	4742	355	7.49%	26.98%
C	2675	212	7.93%	84.05%

Again, due to substantial differences in absolute numbers between regional and non-regional locations, the lion's share of revenue potential exists for the non-regional group. Had all these jobseekers had access to Aptem an extra $1,786,148 in revenue would have been generated.

Table 19: Missed revenue for non-regional 12 week outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	2213	3477	1264	$609.70	$770,659.48
B	656	833	177	$1,816.03	$321,438.18
C	344	634	290	$2,393.28	$694,050.66
				Total Revenue Missed	$1,786,148.32

Finding #9

Jobseekers who use Aptem are 61% more likely meet the full 4 week employment outcome than jobseekers who did not

The first outcome payment milestone for providers is the 4 week outcome. We therefore also contrasted achievement of this by Aptem users and those who did not use the platform. As can be seen in Table 20, 15.0% of jobseekers who used Aptem found a job and stayed in employment for 4 full weeks, compared to 9.3% of those who did not use Aptem. Therefore, jobseekers who used Aptem were 61% more likely to stay in employment for 4 weeks than those who did not use Aptem.

Table 20: 4 week outcomes as a function of Aptem usage

Used Aptem	Commencements	Actual Outcome - 4 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
No	50,536	4688	9.28%	
Yes	19,634	2941	14.98%	61.47%

In revenue terms, this equates to an extra $1,826,605 in revenue that could have been earned, if all jobseekers had access to the Aptem platform.

Table 21:Additional revenue earned for 4 week outcomes as a function of Aptem usage

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
No	4,688	7570	2882	$634	$1,826,605

Finding #10

Across all Streams, jobseekers who use Aptem are more likely to reach the full 4 week employed outcome than those who do not use it

Breaking the figures in Table 20 by stream we can see that, for the Stream A group, Aptem is 66.9% more effective in helping jobseekers into sustained employment. For Stream B the difference is 39.9% and Stream C 69.1% (see Table 22).

It is not surprising that the relatively job ready Stream A jobseekers are more likely to retain employment once they have found a job (see 'Ratio of Jobseekers Placed'). This is true of both the used and did not use Aptem group. Consistent with 12 and 26 week outcomes, the biggest differences between the used and did not use Aptem group in percentage terms, are across Stream A and C groups at 67% and 69% respectively.

Table 22: 4 week outcomes as a function of Aptem usage and stream

Stream	Commencements	Actual Outcome - 4 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
Did not use Aptem				
A	27779	3007	10.82%	-66.90%
B	13626	1090	8.00%	-39.87%
C	9131	591	6.47%	-69.10%
Used Aptem				
A	10926	1974	18.07%	66.90%
B	5702	638	11.19%	39.87%
C	3006	329	10.94%	69.10%

Again, due to sheer weight of numbers, the most revenue potential exists with the Stream A group at $868,917 (see Table 23). However, due to the substantial difference in payment amounts for each stream, a small difference in B and C outcome numbers can make a substantial difference in revenue.

Table 23: Missed revenue for 4 week outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	3007	5020	2013	$431.65	$868,917.20
B	1090	1525	435	$973.18	$423,332.80
C	591	999	408	$1309.69	$534,355.20
				Total Revenue Missed	**$1,826,605.20**

Finding #11

Jobseekers in regional areas who use Aptem are more likely to reach the full 4 week employed outcome compared to those in more urban areas.

Again, as with 12 and 26 week outcomes, Aptem users were far more likely to achieve a 4 week outcome than non-users (see Table 24). Also, mirroring previous outcome results, was the fact that the most noticeable difference was amongst the Stream A group, in which Aptem users were almost twice as likely to achieve a 4 week outcome than non-users.

Table 24: Regional 4 week outcomes as a function of Aptem usage and stream

Stream	Commencements	Actual Outcome - 4 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
Did not use Aptem				
A	3326	357	10.73%	
B	2499	225	9.00%	
C	1142	85	7.44%	
Used Aptem				
A	890	185	20.79%	93.66%
B	960	124	12.92%	43.46%
C	331	37	11.18%	50.18%

As can be seen in Table 25, had all jobseekers used the Aptem system, a further $366,111 of revenue could have been generated. Half this figure is the contribution from the Stream A group.

Table 25: Missed revenue for 4 week regional outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	357	691	334	$522.15	$174,396.69
B	225	323	98	$1,199.40	$117,541.45
C	85	128	43	$1,724.95	$74,172.85
				Total Revenue Missed	**$366,110.99**

Table 26 shows us that these differences have generally translated to jobseekers within non-regional locations also. What is both noticeable and interesting is the difference in the proportion of outcomes between Stream A jobseekers who used Aptem and who were from regional locations (93.66%) and non-regional locations (64.49%). It seems Stream A regional jobseekers who use Aptem are almost 30% more likely to achieve a 4 week outcome than their non-regional counterparts. A similar difference is also noticeable among Stream C jobseekers, but not Stream B. This would be worth investigating in future as to what could be driving such differences.

Table 26: Non-regional 4 week outcomes as a function of Aptem usage and stream

Stream	Commencements	Actual Outcome - 4 week	Ratio of Jobseekers Placed	% Difference: Used Aptem v Did Not Use Aptem
Did not use Aptem				
A	24453	2650	10.84%	-64.49%
B	11127	865	7.77%	-39.43%
C	7989	506	6.33%	-72.35%
Used Aptem				
A	10036	1789	17.83%	64.49%
B	4742	514	10.84%	39.43%
C	2675	292	10.92%	72.35%

Table 27: Missed revenue for 4 week non-regional outcomes as a function of Aptem usage and stream

Used Aptem	Actual outcomes	Estimated total outcomes possible	Estimated Additional outcomes	Estimated average value of each additional outcome (-GST)	Total missed revenue (-GST)
Did not use Aptem					
A	2650	4360	1710	$406.15	$694,520.46
B	865	1206	341	$896.75	$305,791.31
C	506	872	366	$1,257.33	$460,182.30
				Total Revenue Missed	**$1,460,494.07**

The total revenue missed for non-regional jobseekers is $1,460,494. This is the additional revenue that would have been generated had all non-regional jobseekers used Aptem.

Dealing with the Potential for Bias

Selection Bias

Selection bias can be identified as either a conscious or sub-conscious prejudice that is applied when choosing people to participate in research. It has been hypothesised that selection bias may have occurred when enrolling jobseekers into the Aptem system. For example, only the more 'motivated', 'capable', or indeed 'job ready' jobseekers were selected for enrolment within Aptem. Therefore these jobseekers will naturally be more likely to be placed than those who have less of these traits. While there is no doubt some level of selection bias has occurred, the following factors need to be considered:

1) Is the selection bias random or structured and purposeful?
2) Is the selection bias applicable to all sites equally, or does it vary from one site to another?
3) Does the selection bias favour one group over another (Used Aptem – Did not use Aptem), or is it more evenly distributed, such that neither the Aptem user group nor the non Aptem user groups were substantially influenced?

These questions are explored in more detail in the section below.

Correlation vs. Causation

Correlation and causation are two different things. Two variables are said to correlate, when they change together. If one variable increases with the other, it is said to be a positive correlation. If one variable goes up while the other goes down, this is said to be a negative correlation. Correlation forms the basis of causation. Causation between two variables can be claimed when all other possible correlates have been identified and removed. This is impossible when studying the inner workings of human behaviour as no one can know entirely what is going on in the human mind. This does not prevent inferring causation between two variables. However, it does mean we should exercise caution when interpreting correlation, while at the same time, using other methods to identify and remove other correlates that are not rightly part of our analysis.

In this study, we have found a correlation between a jobseeker's usage of the Aptem system, and the likelihood that the jobseeker will achieve an outcome. As discussed above, this statistic on its own does not mean Aptem usage has caused the outcome. Equally, it does not mean it has not. Rather, it is likely that Aptem has at the very least contributed to the outcome. To help shed some light on this situation, we need to identify other variables that may be present, that are also contributing to the result. If these can then be eliminated from the analysis, the proposition that Aptem usage causes increased outcomes, is enhanced.

Perhaps the biggest threat to the causal relationship was mentioned in the section above. That is, selection bias. It has been mooted that only the more capable, job-ready and motivated (read 'employable') jobseekers were selected to use Aptem. Meanwhile, those who were less employable, were not considered for Aptem. If this were the case, a selection bias would be present which subsequently may have an impact on the number of outcomes that are produced by each of our research group.

To test this, we looked at several factors:

1) Length of unemployment
2) Whether increased usage within Aptem, lead to increased placements
3) Whether jobseekers who used Aptem and achieved a 4 week outcome, were more likely to progress to a 26 week outcome

Length of Unemployment

As a generalisation, it can be said that the longer jobseekers are unemployed, the less employable they are. Indeed, this notion underpins the entire jobactive Stream structure and the payment system associated with it.

As revealed in our original research document, jobseekers who used Aptem (unemployed average of 102 weeks), were unemployed 10 weeks longer than jobseekers who did not use Aptem (unemployed average 92 weeks). Further, there were no Stream A <12 week jobseekers in the Aptem system. These are regarded as the most employable and more likely to move towards an outcome. As such, we can reasonably conclude that length of unemployment did not favour the 'Used Aptem' group; in fact it is quite likely that it favoured the 'did not use Aptem' group.

Whether increased usage within Aptem, lead to increased placements

If indeed jobseekers who used Aptem were generally more employable than those jobseekers who did not use Aptem, and that usage of Aptem makes no difference to placements/outcomes, then we would expect 'no difference' in the placement ratios of jobseekers who used Aptem a little, versus those who used it a lot. Again, as detailed in our original research report, as usage of the Aptem system increased, so did the percentage of jobseekers placed (See Graph 1 and Table 23 below). This clearly demonstrates that usage of the Aptem system does indeed influence placements, and therefore outcomes. This result clearly demonstrates that increased Aptem usage increases the rate at which jobseekers are placed.

Graph 1: Correlation between logins to Aptem and job placements
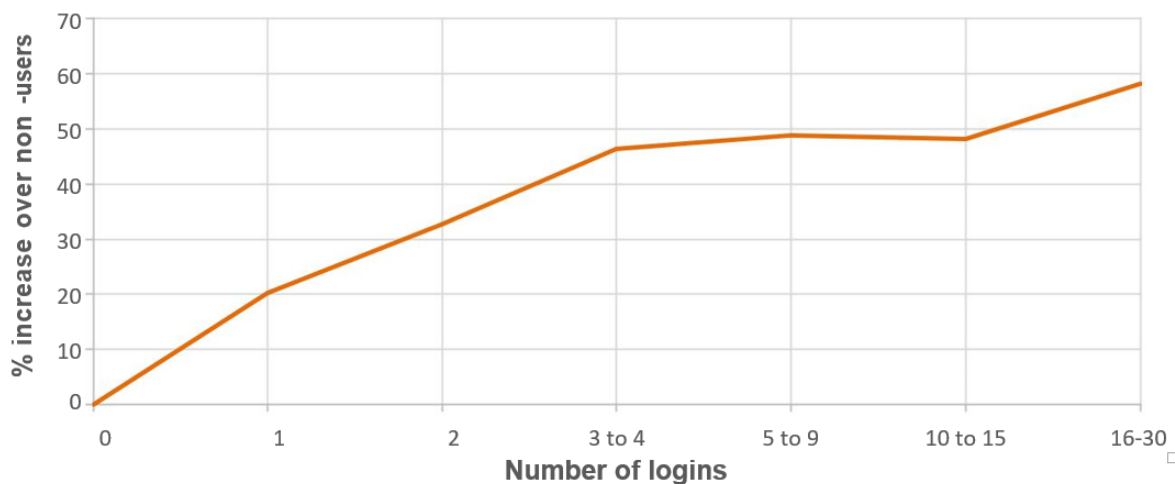
Table 23: Job placements as a function of logins to the Aptem system

Jobseeker logins to Aptem	Did not secure employment	Secured employment	% Placed
0	48,992	5,587	10.2%
1	4,395	617	12.3%
2	2,117	333	13.6%
3 to 4	2,339	412	15.0%
5 to 9	2,611	469	15.2%
10 to 15	1,550	277	15.1%
16 to 30	1,630	315	16.2%

Whether jobseekers who used Aptem and achieved a 4 week outcome, were more likely to progress to a 26 week outcome

It is a logical proposition that if jobseekers who used Aptem are more employable (capable, job-ready and motivated), then a larger percentage of these jobseekers would progress from a 4 week outcome to a 26 week outcome compared to non-users of Aptem (who are less capable, job-ready and motivated). To test this we looked at the number of 4 week outcomes for both groups and compared it to the number of 26 week outcomes.

Table 24: Proportion of jobseekers who progress from a 4 week to 26 week outcome as a function of Aptem Usage

Used Aptem?	No. 4 Week outcomes	No. 26 Week outcomes	% Progressed	Difference
No	4688	2590	55.2%	12.7%
Yes	2941	1442	49.0%	

The results show that the 'did not use Aptem' group achieved a higher conversion ratio of 26 week outcomes compared to the 'used Aptem' group. This result is opposite to what we would expect if we accept the notion that only the more job ready jobseekers were enrolled in Aptem. Exactly why this result occurred is interesting and worthy of further investigation. A first point of investigation would be the influence of duration of unemployment on the likelihood a jobseeker achieves a 26 week outcome.

Appendix 1: Annexure B2 – Payments and Employment Fund credits

OUTCOME PAYMENTS

Table 1A – Outcome Payments for Stream Participants in Non-regional Locations

	Period of Unemployment (less than 24 months inclusive)		Period of Unemployment (24-59 months inclusive)		Period of Unemployment (60 months inclusive plus)	
Employment Outcomes						
Stream A and Volunteers	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**
4 Week	$160	$400	$200	$500	$240	$600
12 Week	$200	$500	$400	$1,000	$500	$1,250
26 Week	$0	$650	$0	$1,250	$0	$1,550
Total	**$360**	**$1,550**	**$600**	**$2,750**	**$740**	**$3,400**
Stream B	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**
4 Week	$300	$750	$400	$1,000	$500	$1,250
12 Week	$600	$1,500	$800	$2,000	$1,000	$2,500
26 Week	$0	$1,900	$0	$2,500	$0	$3,150
Total	**$900**	**$4,150**	**$1,200**	**$5,500**	**$1,500**	**$6,900**
Stream C	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**
4 Week	$400	$1,000	$600	$1,500	$800	$2,000
12 Week	$800	$2,000	$1,200	$3,000	$1,600	$4,000
26 Week	$0	$2,500	$0	$3,750	$0	$5,000
Total	**$1,200**	**$5,500**	**$1,800**	**$8,250**	**$2,400**	**$11,000**
Education Outcomes	**$1000**					

Table 1B – Outcome Payments for Stream Participants in Regional Locations

	Period of Unemployment (less than 24 months inclusive)		Period of Unemployment (24-59 months inclusive)		Period of Unemployment (60 months inclusive plus)	
Employment Outcomes						
Stream A and Volunteers	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**
4 Week	$200	$500	$250	$625	$300	$750
12 Week	$250	$625	$500	$1,250	$625	$1563
26 Week	$0	$813	$0	$1,563	$0	$1,938
Total	**$450**	**$1,938**	**$750**	**$3,438**	**$925**	**$4,251**
Stream B	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**
4 Week	$375	$938	$500	$1,250	$625	$1,563
12 Week	$750	$1,875	$1000	$2,500	$1,250	$3,125
26 Week	$0	$2,375	$0	$3,125	$0	$3,938
Total	**$1,125**	**$5,188**	**$1,500**	**$6,875**	**$1,875**	**$8,626**
Stream C	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**	**Partial Outcome**	**Full Outcome**
4 Week	$500	$1,250	$750	$1,875	$1000	$2,500
12 Week	$1000	$2,500	$1,500	$3,750	$2,000	$5,000
26 Week	$0	$3,125	$0	$4,688	$0	$6,250
Total	**$1,500**	**$6,875**	**$2,250**	**$10,313**	**$3,000**	**$13,750**
Education Outcomes	$1250					

Note 1: Employment Providers providing Services to Stream Participants who live in Regional Locations are entitled to claim an Outcome Payment with a regional loading as set out in Table 1B.

Note 2: The amount of the Outcome Payment payable to the Provider is determined by:

(a)   the Stream Participant's Period of Unemployment;

(b)   the Stream that the Stream Participant was in on the Job Seeker Placement Start Date; and

(c)   whether the Stream Participant has satisfied the requirements for a Full Outcome or a Partial Outcome.

Note 3: In accordance with clause **Error! Reference source not found.***, the amounts of the Outcome Payments in Tables 1A and 1B will increase by 7.8% from 1 January 2018 for all Employment Outcomes and Education Outcomes lodged on or after 1 January 2018.*

Appendix 2: Raw Data and Calculation Tables

Note: For this output jobseekers who are Stream A, less than 12 weeks unemployed have been removed from the analysis.

26 weeks milestones: comparing Aptem vs non-Aptem use

Compare Aptem vs non-Aptem for 26 week outcome overall

Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
1442	19634	2590	50536	1382926	7.34	5.13	43.3

Compare Aptem vs non-Aptem for 26 week outcome by Stream

Stream	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	1052	10926	1827	27779	692719.8	9.63	6.58	46.40
Stream B	269	5702	504	13626	344286.0	4.72	3.70	27.54
Stream C	121	3006	259	9131	345920.2	4.03	2.84	41.91

Compare Aptem vs non-Aptem for 26 week outcome by Region Type

Region Type	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
NR	1275	17453	2266	43569	1007022.4	7.31	5.20	40.46
R	167	2181	324	6967	375903.6	7.66	4.65	64.65

Compare Aptem vs non-Aptem for unemployment duration

Time Unemployed	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
<24 months	702	7483	1315	21316	529547.50	9.38	6.17	52.07
24-59 months	691	10046	1153	23071	774986.97	6.88	5.00	37.63
60+ months	49	2105	122	6149	78391.53	2.33	1.98	17.32

Compare Aptem vs non-Aptem for 26 week outcome by Stream and Region

Stream	Region Type	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	NR	954	10036	1633	24453	523731.6	9.51	6.68	42.34
Stream B	NR	212	4742	409	11127	185296.6	4.47	3.68	21.63
Stream C	NR	109	2675	224	7989	297994.2	4.07	2.80	45.33
Stream A	R	98	890	194	3326	168988.3	11.01	5.83	88.78
Stream B	R	57	960	95	2499	158989.3	5.94	3.80	56.19
Stream C	R	12	331	35	1142	47926.0	3.63	3.06	18.29

12 weeks milestone (Full Outcome only): comparing Aptem vs non-Aptem use

Compare Aptem vs non-Aptem for 12 week outcome overall

Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
2245	19634	3696	50536	2245348	11.43	7.31	56.34

Compare Aptem vs non-Aptem for 12 week outcome by Stream

Stream	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	1564	10926	2484	27779	964321.9	14.31	8.94	60.08
Stream B	445	5702	805	13626	513469.8	7.80	5.91	32.10
Stream C	236	3006	407	9131	767555.9	7.85	4.46	76.14

Compare Aptem vs non-Aptem for 12 week outcome by Region Category

Region Type	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
NR	1994	17453	3213	43569	1786148.3	11.42	7.37	54.93
R	251	2181	483	6967	459199.3	11.51	6.93	66.00

Compare Aptem vs non-Aptem for 12 week outcome by unemployment duration

Time Unemployed	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
<24 months	1099	7483	1924	21316	736828.1	14.69	9.03	62.71
24-59 months	1051	10046	1578	23071	1297862.0	10.46	6.84	52.96
60+ months	95	2105	194	6149	210657.6	4.51	3.15	43.05

Compare Aptem vs non-Aptem for 12 week outcome by Stream and Region Type

Stream	Region Type	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	NR	1427	10036	2213	24453	770659.48	14.22	9.05	57.11
Stream B	NR	355	4742	656	11127	321438.18	7.49	5.90	26.98
Stream C	NR	212	2675	344	7989	694050.66	7.93	4.31	84.05
Stream A	R	137	890	271	3326	193662.41	15.39	8.15	88.92
Stream B	R	90	960	149	2499	192031.67	9.38	5.96	57.24
Stream C	R	24	331	63	1142	73505.27	7.25	5.52	31.43

4 weeks milestone (Full Outcome only): comparing Aptem vs non-Aptem use

Compare Aptem vs non-Aptem for 4 week outcome overall

Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
2941	19634	4688	50536	1826605	14.98	9.28	61.47

Compare Aptem vs non-Aptem for 4 week outcome by Stream

Stream	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	1974	10926	3007	27779	868917.2	18.07	10.82	66.90
Stream B	638	5702	1090	13626	423332.8	11.19	8.00	39.87
Stream C	329	3006	591	9131	534355.2	10.94	6.47	69.10

Compare Aptem vs non-Aptem for 4 week outcome by Region Category

Region Type	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
NR	2595	17453	4021	43569	1460494	14.87	9.23	61.11
R	346	2181	667	6967	366111	15.86	9.57	65.71

Compare Aptem vs non-Aptem for 4 week outcome by unemployment duration

Time Unemployed	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
<24 months	1343	7483	2273	21316	693306.5	17.95	10.66	68.31
24-59 months	1429	10046	2115	23071	892612.6	14.22	9.17	55.17
60+ months	169	2105	300	6149	240686.0	8.03	4.88	64.56

Compare Aptem vs non-Aptem for 4 week outcome by Stream and Region Category

Stream	Region Type	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	NR	1789	10036	2650	24453	694520.46	17.83	10.84	64.49
Stream B	NR	514	4742	865	11127	305791.31	10.84	7.77	39.43
Stream C	NR	292	2675	506	7989	460182.30	10.92	6.33	72.35
Stream A	R	185	890	357	3326	174396.69	20.79	10.73	93.66
Stream B	R	124	960	225	2499	117541.45	12.92	9.00	43.46
Stream C	R	37	331	85	1142	74172.85	11.18	7.44	50.18

Length of unemployment by Aptem user group

Check average length of unemployment by statuses

Stream	Avg weeks unemployed	count
A	66.87	38705
B	160.42	19328
C	227.12	12137

Aptem status2	Stream	Avg weeks unemployed	count
Not Used Aptem	A	65.10	27779
Not Used Aptem	B	161.06	13626
Not Used Aptem	C	231.70	9131
Used Aptem	A	71.36	10926
Used Aptem	B	158.91	5702
Used Aptem	C	213.23	3006

Aptem status2	Stream	Time Unemployed	Avg weeks unemployed	count
Not Used Aptem	A	<24 months	28.51	16187
Not Used Aptem	A	24-59 months	104.25	11062
Not Used Aptem	A	60+ months	365.46	530
Not Used Aptem	B	<24 months	24.88	3976
Not Used Aptem	B	24-59 months	136.64	7004
Not Used Aptem	B	60+ months	430.33	2646
Not Used Aptem	C	<24 months	28.40	1153
Not Used Aptem	C	24-59 months	146.58	5005
Not Used Aptem	C	60+ months	453.83	2973
Used Aptem	A	<24 months	30.96	5479
Used Aptem	A	24-59 months	104.37	5276
Used Aptem	A	60+ months	347.30	171
Used Aptem	B	<24 months	27.78	1641
Used Aptem	B	24-59 months	136.21	2992
Used Aptem	B	60+ months	423.71	1069
Used Aptem	C	<24 months	29.24	363
Used Aptem	C	24-59 months	142.17	1778
Used Aptem	C	60+ months	436.52	865

Breakdown of placements by Aptem user group

Compare Aptem vs non-Aptem for placements overall

Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
5509	19634	8481	50536	1352329	28.06	16.78	67.19

Compare Aptem vs non-Aptem for placements by Stream

Stream	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	3445	10926	5114	27779	882931.9	31.53	18.41	71.27
Stream B	1358	5702	2083	13626	276178.5	23.82	15.29	55.79
Stream C	706	3006	1284	9131	193219.0	23.49	14.06	67.02

Compare Aptem vs non-Aptem for placements by Region category

Region Type	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
NR	4866	17453	7247	43569	1098513.2	27.88	16.63	67.62
R	643	2181	1234	6967	253816.3	29.48	17.71	66.45

Compare Aptem vs non-Aptem for placements by unemployment duration

Length Unemployed	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
<24 months	2270	7483	3705	21316	683411.9	30.34	17.38	74.53
24-59 months	2842	10046	4063	23071	566649.9	28.29	17.61	60.64
60+ months	397	2105	713	6149	102267.7	18.86	11.60	62.65

Compare Aptem vs non-Aptem for placements by Stream and Region Category

Stream	Region Type	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	NR	3124	10036	4474	24453	715265.33	31.13	18.30	70.13
Stream B	NR	1112	4742	1675	11127	211261.61	23.45	15.05	55.78
Stream C	NR	630	2675	1098	7989	171986.25	23.55	13.74	71.36
Stream A	R	321	890	640	3326	167666.54	36.07	19.24	87.44
Stream B	R	246	960	408	2499	64916.93	25.62	16.33	56.95
Stream C	R	76	331	186	1142	21232.79	22.96	16.29	40.97

Breakdown of placements by FOE vs PB

What percentage of placements are FOE (Total and Total unique jobseekers - ie where more than one per person they are not double counted)

Stream	TotalFOE	TotalPB	TotalFOEunique	TotalPBunique	FOErate	FOEuniquerate
Stream A	9024	1353	7660	1256	86.96	85.91
Stream B	3433	697	2951	646	83.12	82.04
Stream C	2058	434	1713	391	82.58	81.42

Exploration of projected Revenue

Missed Revenue for 26 week outcome by Stream

Stream	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	1052	10926	1827	27779	692719.8	9.63	6.58	46.40
Stream B	269	5702	504	13626	344286.0	4.72	3.70	27.54
Stream C	121	3006	259	9131	345920.2	4.03	2.84	41.91
Totals	1442	19634	2590	50536	1382926.0	7.34	5.13	43.30

Missed Revenue by 12 week outcome per Stream (Full outcomes only, partial outcomes excluded)

Stream	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	1564	10926	2484	27779	964321.9	14.31	8.94	60.08
Stream B	445	5702	805	13626	513469.8	7.80	5.91	32.10
Stream C	236	3006	407	9131	767555.9	7.85	4.46	76.14
Totals	2245	19634	3696	50536	2245347.7	11.43	7.31	56.34

Missed Revenue by 4 week outcome per Stream (Full outcomes only, partial outcomes excluded)

Stream	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	1974	10926	3007	27779	868917.2	18.07	10.82	66.90
Stream B	638	5702	1090	13626	423332.8	11.19	8.00	39.87
Stream C	329	3006	591	9131	534355.2	10.94	6.47	69.10
Totals	2941	19634	4688	50536	1826605.1	14.98	9.28	61.47

Missed Revenue by Placements by Stream (FOE and PB combined)

Stream	Aptem outcomes	Aptem jobseekers	Non Aptem outcomes	Non Aptem jobseekers	Revenue Missed $	Used Aptem rate	Non Aptem rate	Aptem Percent gain
Stream A	3445	10926	5114	27779	882931.9	31.53	18.41	71.27
Stream B	1358	5702	2083	13626	276178.5	23.82	15.29	55.79
Stream C	706	3006	1284	9131	193219.0	23.49	14.06	67.02
Totals	5509	19634	8481	50536	1352329.4	28.06	16.78	67.19

Compute overall missed Revenue from 4wk, 12wk and 26 wk outcomes

Aptem outcomes	Non Aptem outcomes	Revenue Missed $
6628	10974	5454879

Compute overall missed Revenue from 4wk, 12wk and 26 wk outcomes AND placements

Aptem outcomes	Non Aptem outcomes	Revenue Missed $
12137	19455	6807208

Compute overall missed Revenue from 4wk, 12wk and 26 wk outcomes, split by Stream

Stream	Aptem outcomes	Non Aptem outcomes	Revenue Missed $
Stream A	4590	7318	2525959
Stream B	1352	2399	1281089
Stream C	686	1257	1647831

Compute overall missed Revenue from 4wk, 12wk and 26 wk outcomes AND placement fee, split by Stream

Stream	Aptem outcomes	Non Aptem outcomes	Revenue Missed $
Stream A	8035	12432	3408891
Stream B	2710	4482	1557267
Stream C	1392	2541	1841050