

Affinity strategy delivers valuation uplift

Total Brain (ASX:TTB) is the developer of a neuroscience-based mental health & fitness platform powered by the largest standardized neuroscientific database in the world formed over almost two decades and with \$50m of R&D funding. The FY19 result, released on August 30, reflects the company's ongoing transition with strong growth in core revenues and cost containment relative to our forecasts. Cash burn per month was \$0.75m, up from \$0.475m in FY18 and reflecting the expansion of the business including the doubling of the team in FY19. We are forecasting that the \$0.08 options which expire in March 2020 will be taken up, delivering an additional \$5m in equity capital, and we have factored in an additional \$7.4m raise in FY21. Our per share valuation dilutes for these raises. Total Brain has made significant inroads into its B2C Affinity strategy with the recently announced partnership with IBM (NYSE:IBM) in which Total Brain's technology will be embedded in IBM's THRIVE360^o Mental Fitness Program as a core functionality. These together with the Mental Health America and Everyday Health Affinity deals have now been incorporated into our forecasts.

Business model

Total Brain operates a subscription as a service (SaaS) model for its mental health and fitness platform. The science behind the platform has been developed over almost two decades with input from the leading academic institutions in the field. This has generated a proprietary neuroscientific database of scale which underpins the scientific validation that differentiates Total Brain from other brain training and wellness applications. The app, promoted by affinity partners, assesses the four core brain capacities (emotion, feeling, cognition, self-control), pre-screens seven common mental health conditions and delivers personalised brain and mind/body training.

FY19 result

The company announced FY19 revenues of \$2.6m, flat on the previous year but core revenue growth of 33% to \$1.79m. Underlying EBITDA loss of \$6.7m was an increase on FY18's \$4.9m operating loss but lower than our expectation for \$7.4m and demonstrated better than forecast cost containment for the period. Cash receipts for the year were \$2.7m. The company ended FY19 with \$5.2m cash.

Base case valuation upgraded to \$0.15/share (A\$141.3m)

We have used the discounted cashflow methodology to value Total Brain, arriving at a base case valuation of \$141.3m (previously \$103.6m) after incorporating estimates for the Affinity partnerships with IBM Thrive 360^o, Mental Health America and Everyday Health and adjusting for a longer sales cycle for its B2B offering. We have kept our WACC at 14.7% in recognition of our near-term earnings revisions. Our per share base case DCF valuation is now \$0.15 (previously \$0.123/share). The terminal value in our base case valuation is \$0.10/share. A reverse DCF calculation on the current share price reflects an estimated 22.7% CAGR in free cashflows from 2023-2029 using the same WACC. Our peer valuation, which incorporates the "Golden Rule" adjustment for EV/Revenue multiples is \$0.11/share.

Historical earnings and RaaS Advisory estimates

Year end	Revenue (A\$m)	EBITDA reported (A\$m)	NPAT reported (A\$m)	EPS* (c)	P/E (x)	EV/Sales (x)
06/19	2.6	(6.7)	(8.6)	(1.22)	na	10.7
06/20e	5.0	(6.0)	(6.7)	(0.85)	na	9.5
06/21e	11.3	(1.8)	(1.9)	(0.21)	na	4.0
06/22e	19.6	4.2	2.5	0.27	20.7	2.3

Source: Company data, RaaS Advisory Estimates for FY20e, FY21e, FY22e *adj for one-time items

Healthcare services

26th September 2019

Share details

ASX Code	TTB
Share price	\$0.056
Market Capitalisation	\$46.66M
Shares on issue	778M
Net cash at June 30	\$5.2M
Free float	~57%

Share performance (12 months)



Upside Case

- Highly scalable SaaS model
- Significant validation achieved with IBM choosing the platform as the engine for Thrive 360
- Targeting predominantly US corporates and consumers

Downside Case

- Need to sell at the Enterprise level which means a sales cycle of 9-18 months for the B2B product
- New consumer product yet to be fully trialed in market
- Commercial success to date has been elusive

Board of Directors

Dr Evian Gordon	Executive Chairman/ Founder
Louis Gagnon	Managing Director/ CEO
Matthew Morgan	Non-Executive Director
Dr Stephen Koslow	Non-Executive Director
Ajay Arora	Non-Executive Director
David Torrible	Non-Executive Director

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FY19 result

Total Brain reported a small decline in FY19 revenues relative to FY18 but a 33% increase in the core Total Brain corporate revenues. Gross profit declined 8% to \$2.3m with margin at 88% versus 95% a year ago but ahead of our forecast for 83%. Employee costs and other operating costs were below our expectations (\$9.3 actual versus our forecast for \$10.6m) but increased 24% on the year prior with most of the additional costs in human resources. Staff doubled in FY19. We set out the P&L breakdown for FY19 vs FY18 and our forecasts in the following exhibit.

Exhibit 1: FY19a versus FY20a and RaaS's forecast				
	FY18a	FY19a	% chg	RaaS fct
Revenue	2.6	2.6	(0.3%)	3.3
Gross profit	2.5	2.3	(8%)	2.7
EBITDA underlying	(4.9)	(6.7)	38%	(7.4)
EBIT underlying	(4.9)	(7.2)	45%	(7.7)
NPAT reported	(23.9)	(8.6)	(63%)	(8.5)
NPAT underlying	(4.7)	(8.6)	83%	(8.5)
Source: Company data, RaaS estimates				

The core corporate revenue grew 33% for the period to \$1.79m and while Affinity revenues declined in FY19, this was due to a one-time payment from the AARP contract in FY18. Clinical revenues, non-core, continued to decline in FY19 as expected.

Exhibit 2: Divisional revenue breakdown			
	FY18a	FY19a	% chg
Total Brain Corporate	1.34	1.79	33.3%
Total Brain Affinity*	0.50	0.19	(61.5%)
Total Brain all other	0.25	0.09	(65.7%)
Clinical	0.48	0.32	(32.4%)
Discovery	0.04	0.04	20.4%
iSPOT	-	0.17	n.a
Total Revenue	2.6	2.6	(0.3%)
Source: Company data *Affinity revenues in FY18 impacted by a one-time payment			

Incorporating the new Affinity Partners

We have incorporated estimates for the new Affinity partners acquired by Total Brain in the latter part of FY19 and this current quarter. The main partners are as follows:

- IBM (NYSE:IBM) has chosen Total Brain's platform for core functionality of the IBM Thrive360[®] platform which in turn has been chosen by US Department of Veterans Affairs to power GRIT (Get Results in Transition), a digital solution for US veterans, active-duty service members and reservists. In our view, this deal is a game changer for Total Brain and will not just stop at Veterans Affairs. This will be discussed in more detail below;
- Mental Health America (MHA) has chosen Total Brain's Brain Performance app to its 77m members for an initial free trial which we expect to shift to a revenue sharing deal;
- The company has a collaborative agreement with New York-based Everyday Health, one of the largest consumer health websites in the US, with more than 56m monthly visitors to its websites. In the first phase of the deal, Total Brain will expose its app to a small, but growing portion of Everyday Health's audience with the goal being to engage those visitors with Total Brain content in exchange for them registering with both services.

We anticipate that CY20 will see the start of revenue generation for all three of these deals. In a blog, posted on the [IBM Website](#) it was noted that "Veterans are not alone in facing difficult life transitions: addicts in recovery, inmates coming out of prison and young adults aging out of foster care, for example, can face tremendous difficulties coping with their new reality. At one time or another, everyone struggles to cope with a big transition, whether it's marriage, divorce, college graduation, a job change, having kids or losing someone close. In the long run, digital solutions like GRIT, powered by the THRIVE platform, could help

people in all walks of life face everyday challenges and maintain an even keel whenever their seas get rough”.

Our analysis of the addressable market for Thrive360^o is as follows:

- 18.2m Veterans
- 3.4m populations in transition including 1.3m in active duty armed forces, 0.825m reservists and national guard, 0.9m foster children becoming adults in care, 0.34m prisoners on parole
- 22m addicts in recovery – we assume there will be crossover with other populations and so have taken 25% of these.

This gives us an addressable market of **27.1m** for the IBM collaboration, of which our base case assumes it takes 10 years to get to 5.0% penetration. We don’t anticipate any revenue from this collaboration until 1H CY20. We estimate that Total Brain will generate revenue of ~US\$18 per year per user (or US\$1.50 per month) with volume discounts kicking in longer term and bringing the yearly rate down to US\$11 per user. We estimate that this lower rate will kick in once 500,000 users are on the Thrive360^o platform.

We assume it takes 10 years for Total Brain to secure 5.0% of Mental Health America’s 7.7m members. Everyday Health has 56m monthly visitors, we assume that Total Brain will penetrate 2.5% of these by June 2029. Both Everyday Health and Mental Health America users are expected to generate US\$1.50 per user per month. We have set out the base case, upside case and downside cases for penetration and customers in the following Exhibit.

Exhibit 3: Affinity Partner penetration and customers at June 2029			
	Base case	Downside Case	Upside Case
IBM Thrive 360 penetration	5.0%	2.5%	10.0%
IBM Thrive 360 customers at June 2029 (M)	1.4	0.7	2.7
Mental Health America (penetration of users)	5.0%	2.5%	10.0%
Mental Health Customers at June 2029 (M)	0.4	0.2	0.8
Everyday Health (penetration of users)	2.5%	1.0%	5.0%
Everyday Health customers at June 2029 (M)	1.4	0.6	2.9
Source: RaaS Estimates			

Earnings Adjustments

We have reduced our revenue forecasts to reflect the longer than expected lead times that Total Brain is experiencing with its B2B Corporate strategy. While it experienced good growth (33%) in FY19, it was below our forecast for 55% growth in FY19. Commentary from the company’s results suggests that while the company is increasing its traction with existing clients, the sales cycle with new clients needed to be accelerated. In our view, the Affinity partnership wins represent a medium term (2H CY20) opportunity.

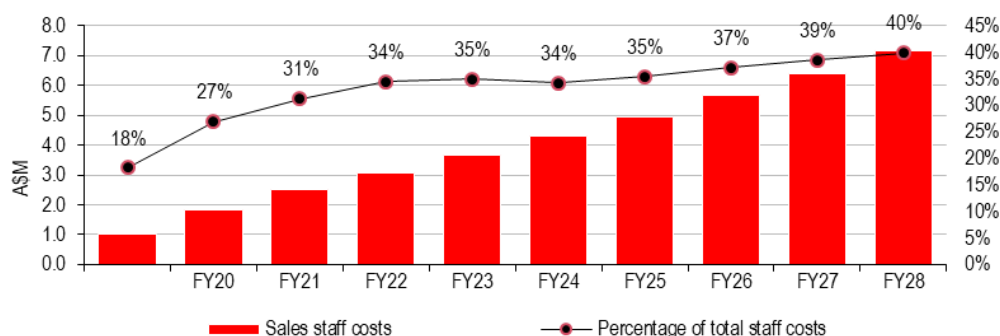
Note that the cost containment in FY19 has resulted in a reduction in our costs estimates. We now anticipate a monthly burn rate of \$0.85m versus our previous forecast for \$1.0m in FY20. Our earnings adjustments are set out in the following exhibit.

Exhibit 4: Earnings Adjustments						
	FY20 old	FY20 new	FY21 old	FY21 new	FY22 old	FY22 new
Revenue	8.7	5.0	19.0	11.3	26.5	19.6
Gross profit	6.9	4.3	15.2	9.8	21.2	17.0
EBITDA underlying	(5.5)	(6.0)	1.4	(1.8)	6.1	4.2
EBIT underlying	(6.0)	(6.8)	0.9	(2.7)	5.6	3.3
NPBT	(5.9)	(6.7)	1.0	(2.6)	5.6	3.4
NPAT	(4.1)	(6.7)	0.7	(1.9)	3.9	2.5
Source: RaaS Estimates						

Staff costs were 64% of total operating costs in FY19 and we expect this to be the major cost centre for the company. Our forecasts anticipate total staff costs to increase to 84% of total costs with sales staff making up

an increasing proportion of total staff costs. We set out our estimates for the growth in sales staff costs and as a proportion of total staff costs in the following exhibit.

Exhibit 5: Sales staff costs estimates in A\$m and as a percentage of total staff costs



Source: RaaS Estimates

Peer Comparison

Total Brain is a SaaS company operating in the US market, but Australian listed. It is tempting to consider US SaaS company multiples for a peer comparison for TTB but the Enterprise Valuations of these companies are substantially greater than Total Brain's. We set out the US listed SaaS companies in the Exhibit 6 on the following page to highlight that on a 12-month forward EV/sales estimates basis, the median multiple is 11.7x. We note that our DCF valuation, discussed in the following section on page 6, implies an EV/Sales multiple of 12.5x our FY21 forecasts and 7.2x our FY22 forecasts. Our preference is to consider Australian SaaS companies which we do on the following page.

In our initiation report on Total Brain, [Delivering human performance solutions](#), we highlighted the "Golden Rule" valuation methodology which was set out by Dr Kingsley Jones¹ in a paper which discussed how venture capitalists and early stage investors sense-checked their valuations. The golden rule is based on the following:

- Early-stage companies have revenue as the most visible performance metric
- Later-stage companies have earnings and margin as visible metrics
- Valuations at both stages are subject to sentiment and changing multiples

This simple valuation rule takes into account profit margins and earnings multiples and is defined as:

$$\text{Current price to sales} = \text{Stable NPAT margin} \times \text{Price Earnings Ratio} \times \text{Sales uplift/Price uplift.}$$

If we apply the simple valuation rule explained above and make the following assumptions:

- Sales uplift (defined as the expected growth in sales over the investor's investment horizon) divided by price (to the investor) uplift (defined as the investor's expectations of return over the investor's investment horizon). In Total Brain's case, we are forecasting a CAGR in sales growth of 45% over the next 10 years and an investor would reasonably expect a 20% internal rate of return (IRR). Therefore, the sales uplift would be 2.25x;
- A long run profit margin for the industry. We look to the Australian tech/SaaS market for profit margins as fewer than 40% of the US peers are cashflow positive whereas most of the Australian tech peers in Exhibit 7 are profitable operationally and at net margin. As a combined group, the median NPAT margin for the Australian peer group is 15.5%.

¹ Jevons Global – Valuation for Early-Stage Technology Companies

- The third component to this calculation is Price Earnings Ratio. The long term PE ratio of the ASX is 15x. The median PE for Australian profitable companies in our comparative company group is 38.55x. The market capitalization of this group of companies averages \$937m. Most of these companies are profitable tech leaders in their respective markets and this, together with relative size and growth prospects, sees the market paying around 2-3x the market PE.

Exhibit 6: US SaaS Companies

Company	Ticker	Price (US\$)	Market Cap (US\$m)	EV (US\$m)	EV/Rev 12 months fwd (x)
2U, Inc.	TWOU	16.76	1,606	1,645	2.4
Adobe Systems Incorporated	ADBE	272.47	198,354	199,005	15.7
AppFolio, Inc.	APPF	92.45	4,671	4,685	15.4
Atlassian Corporation Plc	TEAM	129.59	48,957	47,671	25.6
BlackLine, Inc.	BL	47.41	3,920	3,711	11.3
Box	BOX	16.74	3,730	3,636	4.8
Carbonite, Inc.	CARB	14.94	793	1,553	3.0
Coupa Software Incorporated	COUP	143.58	13,300	13,173	31.4
DocuSign, Inc.	DOCU	61.72	16,772	16,325	15.0
Dropbox, Inc.	DBX	19.79	12,379	11,217	6.1
Everbridge, Inc.	EVBG	66.1	3,346	3,135	13.1
Five9, Inc.	FIVN	55.81	5,177	5,032	14.2
HubSpot, Inc.	HUBS	154.35	10,088	9,161	11.7
Instructure, Inc.	INST	37.23	2,086	2,015	6.7
j2 Global, Inc.	JCOM	88.88	6,520	7,941	5.6
LogMein, Inc.	LOGM	70.37	5,258	5,387	4.1
Medidata Solutions, Inc.	MDSO	91.47	8,463	8,290	10.1
Mimecast Limited	MIME	36.35	3,421	3,275	6.7
New Relic, Inc.	NEWR	64	5,541	5,015	7.1
Okta, Inc.	OKTA	102.39	18,126	17,710	26.2
Paycom Software, Inc.	PAYC	208.93	18,762	18,665	21.8
Paylocity	PCTY	97.42	7,868	7,627	11.7
Paypal	PYPL	103.69	182,670	173,873	8.6
Proofpoint, Inc.	PFPT	125.17	10,567	10,294	10.1
Q2 Holdings, Inc.	QTWO	79.82	5,667	5,364	14.6
Qualys, Inc.	QLYS	73.98	4,442	4,000	11.1
RealPage, Inc.	RP	63.13	9,017	9,506	8.9
Ringcentral, Inc.	RNG	127.26	16,310	16,023	15.6
Salesforce.com Inc	CRM	152.05	200,316	196,325	9.9
ServiceNow, Inc.	NOW	257.5	73,925	72,460	17.2
Shopify	SHOP	295.47	52,064	48,904	25.3
Smartsheet	SMAR	38	6,968	6,665	19.7
Square	SQ	57.5	35,807	35,396	12.4
Twilio Inc.	TWLO	151.31	22,665	20,564	14.7
Veeva Systems Inc.	VEEV	115.54	33,342	31,249	26.0
Wix.com Ltd.	WIX	167.51	8,803	8,209	9.0
Workday, Inc.	WDAY	16.57	58,745	57,702	13.8
Yext, Inc.	YEXT	73.6	2,828	2,422	6.6
Zendesk, Inc.	ZEN	49.23	12,659	12,719	12.8
Zscaler, Inc.	ZS	15.17	9,472	8,931	23.7
Zuora	ZUO	21.18	3,152	2,912	9.3
Median			9,017	8,931	11.7

Source: Thomson Reuters, Stockopedia Prices at 24th September 2019

Exhibit 7: Australian/New Zealand SaaS/Tech Companies

Company	Code	MC (A\$m)	EV (A\$m)	EV/Rev 12 months fwd (x)	PER fwd (x)	Net Margin (%)
Altium	ALU	4,479	4,350	19.5	50.1	30.6
Appen	APX	2,610	2,570	4.1	45.1	10.1
Bravura Solutions	BVS	1,010	812	3.2	25.2	12.7
Class	CL1	168	150	3.5	27.3	23.2
Gentrack	GTK.NZ	535	533	4.3	46.8	na
Infomedia	IFM	660	640	6.5	33.3	19.1
IRESS	IRE	2,060	2,310	4.3	23.7	21.7
Integrated Research	IRI	550	541	4.9	27.8	13.1
Nearmap	NEA	1,157	1,082	9.9	0	na
Pushpay	PPH.NZ	864	843	6.3	42.1	5.8
Praemium	PPS	199	185	3.7	35	19.6
Serko	SKO.NZ	305	291	7.8	149.4	7.0
Wisetech Global	WTC	11,140	10,880	21.7	129.6	15.5
Xero	XRO	9,290	9,270	11.3	471.3	na
Median		937	828	5.6	38.55	15.5

Source: Thomson Reuters, Stockopedia Prices at 24th September 2019

Applying what we have set out above, we arrive at the following:

Golden Rule Multiple = 2.25 x 0.155 x 38.55

= 13.44x

This is applied to our 12 months forward estimate for Total Brain and we set this out in the following exhibit, arriving at a Golden Rule Peer valuation of \$0.11/share.

Exhibit 8: Golden Rule Valuation

Valuation	Parameters
Golden Rule multiple (x)	13.44
Revenue 12 months forward (A\$m)	6.55
Golden rule valuation (A\$m)	88.07
Per share	\$ 0.11

Source: RaaS estimates

DCF valuation

Despite our discussion above, we are of the view that the discounted cashflow methodology is the most appropriate methodology for valuing early stage companies. Our base case DCF valuation of Total Brain is \$141.3m (previously \$103.6m), including \$12.4m from equity capital raises. Incorporating the \$0.08 options that were attached to the March share issue and which will expire in March 2020 and an additional \$7.4m raise in FY21 which we have priced at \$0.10/share, we arrive at a per share valuation of \$0.15 (previously \$0.123/share). These two raises increase the estimated share count from currently 777.7M to 917M. If we include the 69.4M \$0.08 options issued to employees and with various expiry dates, the valuation is \$0.14/share. Our terminal value is \$0.10/share within this valuation. We have maintained our WACC at 14.7%, for although the Affinity partnerships potentially help de-risk future earnings, we have revised our near-term forecasts to push out the timing of sales from B2B customers.

Exhibit 9: Base Case DCF valuation

Parameters	Outcome
Discount Rate / WACC	14.7%
Beta	2.2
Terminal growth rate assumption	2.20%
Sum of PV	39.9
PV of terminal Value	83.8
PV of Enterprise	123.7
Debt (Cash) after future forecasted capital raisings	(17.6)
Net Value - Shareholder	141.3
No of shares on issue (m) including March 2020 options	917
NPV	\$0.15
Source: RaaS estimates	

Our model also incorporates an upside case and a downside case based on higher/lower than base case penetration of audiences, higher/lower cost bases but using the same valuation parameters. The following exhibit sets out the upside case and downside case and the CAGR in free cashflow that is estimated in each case. A reverse DCF of the current share price using the same parameters but incorporating the FY19 year-end cash position and current share count of 777.7m reveals that the market is factoring in 22.7% CAGR in free cashflow from FY23 to FY29.

Exhibit 10: Base, Upside, Downside and Reverse DCF valuations and CAGR in FCF

Valuation method	Discount rate	CAGR in FCF	Est + FCFs	Value A\$m	Value per share
Base case DCF valuation	14.7%	42.5%	FY23-29	141.3	\$0.15
An upside case DCF valuation	14.7%	35.4%	FY22-29	437.1	\$0.48
A downside case DCF valuation	14.7%	58.0%	FY26-29	24.6	\$0.03
Reverse DCF*	14.7%	22.7%	FY23-29	43.5	\$0.056
Source: RaaS Estimates *Uses current share count of 778m					

Exhibit 11: Financial year financial summary

Total Brain (TTB.AX)						Share price (25 September 2019)						A\$	0.056
Profit and Loss (A\$m)						Interim (A\$m)							
Y/E 30 June	FY18A	FY19A	FY20F	FY21F	FY22F		H119A	H219A	H120F	H220F	H220F	H220F	H220F
Revenue	2.6	2.6	5.0	11.3	19.6	Revenue	1.1	1.5	2.1	2.9	4.5	6.8	
Gross profit	2.5	2.3	4.3	9.8	17.0	EBITDA	(4.4)	(3.7)	(3.1)	(2.9)	(1.8)	(0.0)	
GP margin %	95.3%	87.8%	86.8%	86.8%	86.8%	EBIT	(4.5)	(4.0)	(3.4)	(3.3)	(2.2)	(0.5)	
EBITDA	(4.9)	(6.7)	(6.0)	(1.8)	4.2	NPAT (normalised)	(4.5)	(4.1)	(3.4)	(3.3)	(1.6)	(0.3)	
Depn	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	Minorities	0.0	0.0	0.0	0.0	0.0	0.0	
Amort	(0.1)	(0.4)	(0.8)	(0.8)	(0.9)	NPAT (reported)	(4.5)	(4.1)	(3.4)	(3.3)	(1.6)	(0.3)	
EBIT	(23.4)	(7.2)	(6.8)	(2.7)	3.3	EPS (normalised)	(0.7)	(0.6)	(0.4)	(0.4)	(0.2)	(0.0)	
Interest	(0.5)	0.0	0.1	0.1	0.1	EPS (reported)	(0.7)	(0.6)	(0.4)	(0.4)	(0.2)	(0.0)	
Tax	0.8	0.0	0.0	0.7	(0.9)	Dividend (cps)	0.0	0.0	0.0	0.0	0.0	0.0	
Minorities	0.0	0.0	0.0	0.0	0.0	Imputation	30.0	30.0	30.0	30.0	30.0	30.0	
Equity accounted assoc	(0.0)	0.0	0.0	0.0	0.0	Operating cash flow	(2.3)	(3.4)	(2.5)	(3.0)	(1.2)	(0.1)	
NPAT pre significant items	(23.1)	(8.6)	(6.7)	(1.9)	2.5	Free Cash flow	(1.0)	(2.0)	(1.5)	(1.9)	(0.1)	1.0	
Significant items	0.0	0.0	0.0	0.0	0.0	Divisionals	H119A	H219A	H120F	H220F	H220F	H220F	
NPAT (reported)	(23.1)	(8.6)	(6.7)	(1.9)	2.5	B2B Revenue	0.9	0.9	1.5	2.0	2.6	3.8	
Cash flow (A\$m)						B2C Revenue	0.1	0.2	0.2	0.5	1.5	2.7	
Y/E 30 June	FY18A	FY19A	FY20F	FY21F	FY22F	Total Revenue	0.9	1.1	1.7	2.5	4.1	6.5	
EBITDA	(4.9)	(6.7)	(6.0)	(1.8)	4.2	Gross profit	1.0	1.3	1.8	2.5	3.9	5.9	
Interest	0.0	0.0	0.1	0.1	0.1	Gross Profit Margin %	106%	114%	105%	99%	94%	92%	
Tax	0.0	0.0	0.0	0.0	(0.9)	Employment	2.8	2.7	3.2	3.7	3.9	4.1	
Working capital changes	1.0	1.1	0.4	0.4	(0.5)	Marketing	0.4	0.4	0.4	0.4	0.4	0.4	
Operating cash flow	(3.9)	(5.6)	(5.5)	(1.3)	2.9	Other costs	1.2	1.3	1.3	1.3	1.4	1.4	
Mtce capex	0.0	0.0	(0.2)	(0.2)	(0.2)	Total costs	4.4	4.4	4.9	5.4	5.7	6.0	
Free cash flow	(3.9)	(5.6)	(5.7)	(1.5)	2.7	EBITDA	(3.4)	(3.1)	(3.1)	(2.9)	(1.8)	(0.0)	
Growth capex	(1.7)	(2.7)	(2.0)	(2.0)	(2.0)	EBITDA margin %	nm	nm	nm	nm	nm	0%	
Acquisitions/Disposals	0.0	0.0	0.0	0.0	0.0	Margins, Leverage, Returns	FY18A	FY19A	FY20F	FY21F	FY22F		
Other	(0.1)	0.1	0.0	0.0	0.0	EBITDA margin %	(186.7%)	(258.7%)	(120.7%)	(15.9%)	22%		
Cash flow pre financing	(5.7)	(8.2)	(7.7)	(3.5)	0.7	EBIT margin %	(893.4%)	(274.8%)	(136.6%)	(23.5%)	17%		
Equity	10.5	6.7	4.8	7.0	0.0	NPAT margin (pre significant items)	(882.9%)	(329.4%)	(135.2%)	(16.4%)	13%		
Debt	(0.1)	0.0	0.0	0.0	0.0	Net Debt (Cash)	6.62	5.21	2.29	5.81	6.51		
Dividends paid	0.0	0.0	0.0	0.0	0.0	Net debt/EBITDA (x)	(x)	n/a	n/a	n/a	n/a	1.54	
Net cash flow for year	4.7	(1.5)	(2.9)	3.5	0.7	ND/ND+Equity (%)	(%)	(43.6%)	(34.8%)	(14.3%)	(33.0%)	(33.6%)	
Balance sheet (A\$m)						EBIT interest cover (x)	(x)	n/a	n/a	n/a	n/a	(3.5%)	
Y/E 30 June	FY18A	FY19A	FY20F	FY21F	FY22F	ROA		(95.8%)	(32.3%)	(32.9%)	(11.8%)	12.4%	
Cash	6.6	5.2	2.3	5.8	6.5	ROE		(124.4%)	(40.8%)	(34.9%)	(8.9%)	10.1%	
Accounts receivable	1.3	0.8	0.8	1.5	2.2	ROIC		(162.5%)	(109.5%)	(146.9%)	(43.0%)	38.7%	
Inventory	0.0	0.0	0.0	0.0	0.0	NTA (per share)		4.1%	3.4%	2.0%	2.6%	2.8%	
Other current assets	0.0	0.2	0.2	0.2	0.2	Working capital		82.8%	35.3%	16.0%	78.0%	147.1%	
Total current assets	8.0	6.2	3.3	7.5	8.9	WC/Sales (%)		31.6%	13.6%	3.2%	6.9%	7.5%	
PPE	0.2	0.2	0.4	0.5	0.6	Revenue growth		10.4%	(0.5%)	90.6%	128.3%	72.8%	
Goodwill	0.0	0.0	0.0	0.0	0.0	EBIT growth pa		n/a	n/a	n/a	n/a	(224.3%)	
Intangibles	14.7	14.9	16.1	17.3	18.4	Pricing		FY18A	FY19A	FY20F	FY21F	FY22F	
Deferred tax asset	0.0	0.0	0.0	0.0	0.0	No of shares (y/e)	(m)	531	590	917	917	917	
Other non current assets	0.0	0.0	0.0	0.0	0.0	Weighted Av Dil Shares	(m)	362	590	878	917	917	
Total non current assets	14.9	15.2	16.5	17.8	19.1	EPS Reported	cps	(6.38)	(1.45)	(0.83)	(0.20)	0.27	
Total Assets	22.9	21.4	19.8	25.3	28.0	EPS Normalised/Diluted	cps	(1.30)	(1.22)	(0.85)	(0.21)	0.27	
Accounts payable	0.5	0.5	0.7	0.7	0.7	EPS growth (norm/dil)		n/a	n/a	n/a	n/a	nm	
Short term debt	0.0	0.0	0.0	0.0	0.0	DPS	cps	-	-	-	-	-	
Tax payable	0.0	0.0	0.0	0.0	0.0	DPS Growth		n/a	n/a	n/a	n/a	n/a	
Deferred revenue	0.5	0.6	0.8	1.1	1.3	Dividend yield		0.0%	0.0%	0.0%	0.0%	0.0%	
Total current liabilities	1.0	1.1	1.5	1.8	2.0	Dividend imputation		30	30	30	30	30	
Long term debt	0.0	0.0	0.0	0.0	0.0	PE (x)		-	-	-	-	20.7	
Other non current liabs	0.1	0.1	0.1	0.1	0.1	PE market		15.2	15.2	15.2	15.2	15.2	
Total long term liabilities	0.1	0.1	0.1	0.1	0.1	Premium/(discount)		(100.0%)	(100.0%)	(100.0%)	(100.0%)	36.2%	
Total Liabilities	1.1	1.2	1.6	1.9	2.1	EV/EBITDA		(7.4)	(4.1)	(7.8)	(25.4)	10.6	
Net Assets	21.8	20.2	18.3	23.4	25.9	FCF/Share	cps	(0.7)	(1.0)	(0.6)	(0.1)	0.3	
Share capital	58.1	64.8	69.5	76.5	76.5	Price/FCF share		(7.7)	(5.9)	(9.6)	(45.7)	16.7	
Accumulated profits/losses	(40.2)	(48.8)	(55.5)	(57.3)	(54.9)	Free Cash flow Yield		(13.0%)	(17.1%)	(10.4%)	(2.2%)	6.0%	
Reserves	3.9	4.2	4.2	4.2	4.2								
Minorities	0.0	0.0	0.0	0.0	0.0								
Total Shareholder funds	21.8	20.2	18.3	23.4	25.9								

Source: RaaS Advisory

Exhibit 12: Calendar year financial summary

Total Brain (TTB.AX)						Share price (25 September 2019)						A\$	0.056
Profit and Loss (A\$m)						Interim (A\$m)							
Y/E December 31	CY18A	CY19F	CY20F	CY21F	CY22F	Revenue	H1CY18A	H2CY18A	H1CY19F	H2CY19F	H1CY20F	H2CY20F	
Revenue	2.7	3.6	7.4	15.7	23.4	EBITDA	(5.9)	(4.4)	(3.7)	(3.1)	(2.9)	(1.8)	
Gross profit	2.5	3.1	6.4	13.7	20.3	EBIT	(9.3)	(4.5)	(4.0)	(3.4)	(3.3)	(2.2)	
GP margin %	93.5%	86.8%	86.8%	86.8%	86.8%	NPAT (normalised)	(11.0)	(4.5)	(4.1)	(3.4)	(3.3)	(1.6)	
EBITDA	(10.2)	(6.8)	(4.7)	1.5	6.8	Minorities	0.0	0.0	0.0	0.0	0.0	0.0	
Depn	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	NPAT (reported)	(11.0)	(4.5)	(4.1)	(3.4)	(3.3)	(1.6)	
Amort	(0.2)	(0.6)	(0.8)	(0.9)	(0.9)	EPS (normalised)	(2.1)	(0.7)	(0.6)	(0.4)	(0.4)	(0.2)	
EBIT	(13.9)	(7.4)	(5.5)	0.6	5.8	EPS (reported)	(2.1)	(0.7)	(0.6)	(0.4)	(0.4)	(0.2)	
Interest	0.0	0.1	0.0	0.1	0.1	Dividend (cps)	0.0	0.0	0.0	0.0	0.0	0.0	
Tax	0.0	0.0	0.6	(0.2)	(1.6)	Imputation	30.0	30.0	30.0	30.0	30.0	30.0	
Minorities	0.0	0.0	0.0	0.0	0.0	Operating cash flow	(2.2)	(2.3)	(3.4)	(2.5)	(3.0)	(1.2)	
Equity accounted assoc	0.0	0.0	0.0	0.0	0.0	Free Cash flow	(0.8)	(1.0)	(2.0)	(1.5)	(1.9)	(0.1)	
NPAT pre significant items	(15.5)	(7.4)	(4.9)	0.5	4.3	Divisionals							
Significant items	0.0	0.0	0.0	0.0	0.0	B2B Revenue	1.6	0.9	0.9	1.5	2.0	2.6	
NPAT (reported)	(15.5)	(7.4)	(4.9)	0.5	4.3	B2C Revenue		0.1	0.2	0.2	0.5	1.5	
Cash flow (A\$m)						Total Revenue	1.6	0.9	1.1	1.7	2.5	4.1	
Y/E December 31	CY18A	CY19F	CY20F	CY21F	CY22F	Gross profit	H1CY18A	H2CY18A	H1CY19A	H2CY19F	H1CY20F	H2CY20F	
EBITDA	(10.2)	(6.8)	(4.7)	1.5	6.8	Gross Profit Margin %	97%	106%	114%	105%	99%	94%	
Interest	0.0	0.1	0.0	0.1	0.1	Employment	2.3	2.8	2.7	3.2	3.7	3.9	
Tax	0.0	0.0	0.0	(0.3)	(1.6)	Marketing	0.2	0.4	0.4	0.4	0.4	0.4	
Working capital changes	5.7	0.8	0.5	(0.4)	(0.6)	Other costs	1.3	1.2	1.3	1.3	1.3	1.4	
Operating cash flow	(4.5)	(5.9)	(4.2)	0.9	4.7	Total costs	3.7	4.4	4.4	4.9	5.4	5.7	
Mtce capex	0.0	(0.1)	(0.2)	(0.2)	(0.2)	EBITDA	(2.2)	(3.4)	(3.1)	(3.1)	(2.9)	(1.8)	
Free cash flow	(4.5)	(6.0)	(4.3)	0.7	4.5	EBITDA margin %	nm	nm	nm	nm	nm	-43%	
Growth capex	(2.8)	(2.4)	(2.0)	(2.0)	(2.0)	Margins, Leverage, Returns							
Acquisitions/Disposals	0.0	0.0	0.0	0.0	0.0	EBITDA margin %		(384.5%)	(189.2%)	(63.7%)	9%	29%	
Other	(0.1)	0.1	0.0	0.0	0.0	EBIT margin %		(521.2%)	(207.0%)	(74.9%)	4%	25%	
Cash flow pre financing	(7.4)	(8.2)	(6.3)	(1.3)	2.5	NPAT margin (pre significant items)		(582.8%)	(206.9%)	(66.3%)	3%	18%	
Equity	1.2	6.7	11.7	0.0	0.0	Net Debt (Cash)		3.27	1.61	7.03	5.72	8.23	
Debt	0.0	0.0	0.0	0.0	0.0	Net debt/EBITDA (x)	(x)	n/a	n/a	n/a	3.87	1.22	
Dividends paid	0.0	0.0	0.0	0.0	0.0	ND/ND+Equity (%)	(%)	(22.9%)	(10.6%)	(42.2%)	(30.9%)	(40.6%)	
Net cash flow for year	(6.1)	(1.6)	5.4	(1.3)	2.5	EBIT interest cover (x)	(x)	n/a	n/a	n/a	(22.2%)	(2.1%)	
Balance sheet (A\$m)						ROA		(62.3%)	(40.4%)	(25.2%)	2.2%	20.4%	
Y/E December 31	CY18A	CY19F	CY20F	CY21F	CY22F	ROE		(94.3%)	(43.3%)	(24.1%)	2.1%	16.3%	
Cash	3.3	1.6	7.0	5.7	8.2	ROIC		(102.9%)	(256.5%)	(81.9%)	6.9%	87.7%	
Accounts receivable	0.5	0.6	1.1	1.8	2.6	NTA (per share)		3.3%	2.9%	2.6%	2.6%	3.1%	
Inventory	0.0	0.0	0.0	0.0	0.0	Working capital		(6.6%)	(1.1%)	42.4%	111.7%	185.5%	
Other current assets	0.1	0.2	0.2	0.2	0.2	WC/Sales (%)		(2.5%)	(0.3%)	5.8%	7.1%	7.9%	
Total current assets	3.8	2.4	8.3	7.7	11.0	Revenue growth		12.3%	35.1%	104.8%	113.5%	48.6%	
PPE	0.2	0.3	0.4	0.6	0.7	EBIT growth pa		n/a	n/a	n/a	(110.5%)	903.8%	
Goodwill	0.0	0.0	0.0	0.0	0.0	Pricing							
Investments	0.0	0.0	0.0	0.0	0.0	No of shares (y/e)	(m)	531	778	917	917	917	
Deferred tax asset	0.0	0.0	0.0	0.0	0.0	Weighted Av Dil Shares	(m)	590	778	917	917	917	
Other non current assets	14.5	15.5	16.7	17.9	19.0	EPS Reported	cps	(2.92)	(0.96)	(0.57)	0.06	0.47	
Total non current assets	14.8	15.9	17.2	18.5	19.7	EPS Normalised/Diluted	cps	(2.92)	(0.96)	(0.57)	0.06	0.47	
Total Assets	18.6	18.3	25.5	26.2	30.7	EPS growth (norm/dil)		n/a	n/a	n/a	(109.9%)	739%	
Accounts payable	0.5	0.6	0.7	0.7	0.8	DPS	cps	-	-	-	-	-	
Short term debt	0.0	0.0	0.0	0.0	0.0	DPS Growth		n/a	n/a	n/a	n/a	n/a	
Tax payable	0.0	0.0	0.0	0.0	0.0	Dividend yield		0.0%	0.0%	0.0%	0.0%	0.0%	
Deferred revenue	0.4	0.7	1.0	1.2	1.4	Dividend imputation		30	30	30	30	30	
Total current liabilities	0.9	1.3	1.7	1.9	2.1	PE (x)		-	-	-	100.3	12.0	
Long term debt	0.0	0.0	0.0	0.0	0.0	PE market		13.8	13.8	13.8	13.8	13.8	
Other non current liabs	0.1	0.1	0.1	0.1	0.1	Premium/(discount)			(100.0%)	(100.0%)	626.9%	(13.3%)	
Total long term liabilities	0.1	0.1	0.1	0.1	0.1	EV/EBITDA		(3.6)	(5.6)	(10.4)	30.8	6.6	
Total Liabilities	1.0	1.4	1.8	2.0	2.2	FCF/Share	cps	(0.7)	(0.7)	(0.6)	-0.1	0.3	
Net Assets	17.5	16.8	23.7	24.2	28.5	Price/FCF share		(7.7)	(7.7)	(9.6)	-	45.7	16.7
Share capital	58.1	64.8	76.5	76.5	76.5	Free Cash flow Yield		(13.0%)	(13.0%)	(10.4%)	(2.2%)	6.0%	
Accumulated profits/losses	(44.8)	(52.2)	(57.0)	(56.5)	(52.2)								
Reserves	4.2	4.2	4.2	4.2	4.2								
Minorities	0.0	0.0	0.0	0.0	0.0								
Total Shareholder funds	17.5	16.8	23.7	24.2	28.5								

Source: RaaS Advisory



FINANCIAL SERVICES GUIDE

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Corporate Authorised Representative, number 1248415

of

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