

# The Data Exchange Network Ltd

## Company report

### Carving a niche in co-location in Australia and Asia

The Data Exchange Network Ltd (DXN) is an early stage company in the process of building two co-location modular data centres in Melbourne and Sydney to tap into perceived increasing demand for cloud services. The company listed on April 11, 2018 after raising \$16m at \$0.20/share. The proceeds of the offer will be used towards developing a data centre in Port Melbourne, Victoria and Homebush, New South Wales, as well as funding head office/administration expenses and working capital. These two facilities are on track to be live by Q4 CY18. DXN is also scouting for locations in Brisbane and Adelaide where it may potentially develop ~900 and ~300 racks respectively. DXN has ambitions to build co-location facilities in Asian markets ex-Singapore with potential identified in Manila, Myanmar, Indonesia and Vietnam, although it is likely to enter Asia initially in a joint venture where DXN would supply its modular data centre technology and engineering expertise. Our financial model primarily considers the Sydney and Melbourne data centres using a base case, an upside case and downside case depending on uptake and costs. The base case parameters generate a DCF valuation of \$0.53/share (WACC 12.6%, 10.9% 10-yr CAGR).

### Business model

The Data Exchange Network is building containerised co-location data centres in leased premises in Sydney and Melbourne. DXN designs, engineers and constructs its own data centre technology with the view to building data centres at a lower capital cost than traditional DC developers. The company has established an engineering and manufacturing facility in Perth to deliver data centre infrastructure to its own operations and to third parties. Revenue will be derived from manufacturing data centre modules, operating and renting rack space in co-location data centres and from software licence fees for its monitoring, management and access control system.

### Earnings estimates and valuation

Our earnings estimates have been derived after analysis of the market players and the current and future capacity available in the DC market. While DXN has stated ambitions to expand into Asia, we have not included estimates for this expansion at this point as it is unlikely to proceed before FY20. We have included the ability to add in a data centre development in Brisbane or Adelaide, which we conclude is the most likely next step beyond the current rollout. We have modelled DXN using a range of scenarios from base case, an upside case and a downside case. We have used the DCF methodology to value the company as we believe this is the most appropriate measure given the early stage nature of the business. Applying a WACC of 12.6% (beta 1.5, terminal growth rate 2.0%), our base valuation for the Sydney and Melbourne DCs is \$0.53/share. This assumes a utilisation rate of 90% within three years of commissioning and monthly revenue of \$2,000 per rack, which is comparable to other DC centres in Australia. Our upside case (99% utilisation rate and MRR of \$2,300 per rack) for the Sydney and Melbourne DCs delivers a DCF of \$1.43/share. We have applied a reverse DCF to determine what is implied in the current share price of \$0.265. This assumes that free cashflows from 2020-29 will grow at just 2.2% (vs our forecast for 10.9% and the 22% forecast for the sector in Australia).

#### Earnings estimates

Year end	Revenue(A\$m)	EBITDA(A\$m)	NPAT (A\$m)	EPS (c)	P/E (x)	EV/EBITDA (x)
06/18e	0.3	(2.8)	(2.2)	(1.33)	na	na
06/19e	8.4	0.4	(0.1)	(0.06)	na	118.42
06/20e	24.5	10.9	6.6	3.09	8.57	3.97
06/21e	37.9	19.5	12.8	5.95	4.45	1.54

Source: RaaS Advisory Estimates

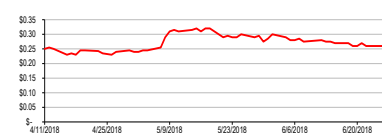
### Data Centres

4 July 2018

#### Share details

ASX Code	DXN
Share price at 6 June	\$0.265
Market Capitalisation	\$48.3M
Shares on issue	182.31M
Enterprise value	\$30.6M
Net cash at float	\$17.7M
Free float	~58%

#### Share performance (since listing)



#### Upside Case

- Board, management and senior advisers experienced in developing tech companies
- Capital light model compared to traditional co-location data centre models
- Modularised and smaller data centres will be critical to 5G mobile and the Internet of Things

#### Downside Case

- Small player in a market dominated by global players with deep pockets
- Significant data centre capacity coming to market in Q4 18
- Growth of mature centres reverts to CPI

#### Substantial/Institutional Shareholders

Carason Ward Pte Ltd (Dean Coetzee and Tim Desmond) 30.55%, Herdsman Lake Capital (Peter Christie) 7.64%, Macquarie Group 5.04%, Ellerston Capital 4.8%, Smart Investments (Terry Smart) 1.95%

#### Board of Directors

Douglas Loh	Non-Executive Chairman
Richard Carden	Non-Executive Director
Terry Smart	Non-Executive Director
Peter Christie	Managing Director/CEO

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## Investment Case

DXN has the opportunity to achieve success, in our view, due to the following reasons:

- Co-location is forecasted to continue to grow strongly (Frost & Sullivan estimates more than 10% CAGR to 2022), providing opportunities for new and existing players;
- Its modular containerized data centres require substantially less capital and time to establish (DXN's capital cost [inclusive of the NPV of the lease] per megawatt is \$3m versus NextDC's \$11m per MW capital cost), giving DXN the opportunity to generate a return on its investment faster than traditional data centre operators;
- The shift to 5G and Internet of Things (IoT) is expected to create demand for smaller, local data centres to host content and this is DXN's sweet spot.

However, its plans are not without risks. DXN's two soon-to-be commissioned 6 MW data centres are coming to market at the same time as Sydney and Melbourne experience an increase in capacity from the expansion of several existing and new data centres being constructed by existing players. We estimate an additional 150-180 megawatts of co-location capacity is coming to market over the next six to 18 months, including DXN's 12 MWs. This is as much as 50% more than currently exists. For example, in its H18 results presentation, NextDC estimates it has almost 87 MW available for sale, including most of the capacity it has built in its Brisbane B2, Melbourne M2, and soon to be completed Sydney S2 facilities. Equinix has announced it will increase capacity in its Port Melbourne DC by 25% in Q3 2018 and has also recently doubled the size of its Sydney operations, while Digital Realty is more than doubling capacity in its Sydney operations which are currently at 99.8% utilisation. This potentially creates oversupply in these markets and could lead to some competitive pricing which could undermine DXN's ability to achieve its monthly recurring revenue target of \$2,000 per rack and its target of 95% utilisation (we have modelled at 90% utilisation to be consistent with the peer group). On the positive side, DXN's cost base is lower than its peer; we estimate that NextDC's operating costs per rack in FY17 based on 100 racks per MW was just over \$1,200, while DXN's operating cost per rack is expected to be around \$600.

Using our free-cashflow estimate of \$7.3m in FY20 as a starting point, we estimate that the market has priced in 2.2% CAGR for 10 years in the current share price of \$0.265/share. By comparison, our base case DCF valuation of \$0.53/share implies a 10-year CAGR in free cashflows of 10.9%, which is still below the market growth rate of 22% from 2015 to 2022 estimated by Frost & Sullivan.

## Company Background

The Data Exchange Network Ltd was formed by the founders of Datacentre Limited, the first company to build a containerised data centre in Australia, and DX Platforms, the developer of its modular data centre technology. Data Exchange was incorporated in August 2017 with the plan to build and sell data centre modules and infrastructure to third party data centre owners and to build its own co-location data centres.

DXN has established an engineering and manufacturing facility in Perth to build its data centre modules and commenced manufacturing early in calendar 2018. Its customer base for the manufacturing side of the business is typically companies that require facilities to house their on-premises computers such as mining companies, utilities and heavy industry. The company has also since listing, commenced the construction of its co-location modular data centres which will be housed in leased facilities in Homebush and Port Melbourne. Both these facilities are on track to be completed by Q4CY18. The development capital cost of each of these facilities is \$4.34m while another \$5.8m combined has been expended on bonds, agent fees and outgoings. We estimate an NPV per lease of \$10m, giving a total capital cost per centre of \$17.2m. This is substantially lower than the cost of building a traditional data centre and positions DXN to secure a return on its investment faster and at a higher rate than its larger peers. We explore this on page 5.

## Australian data centre market

### Composition

There are more than 200 data centres in Australia which can be broadly categorised into three types:

- Specialist independent data centres;
- Broadband service provider owned data centres;
- Data centres owned by other users of communication networks.

Data traffic over networks due to the adoption of cloud services and the rapid uptake of subscription video on demand (SVOD) and other Over-the-Top (OTT) video services has driven demand for non-telco aligned, large scale data centres where enterprise, broadband service providers and cloud/content providers interconnect.

Cisco's Cloud Index forecasts a tripling of annual global data centre traffic from 6.8 Zettabytes (Zb) a year in 2016 to 20.6ZB in 2021<sup>1</sup>. The main driver for usage will be video applications, which are forecast to be 85% of traffic between data centres and end users by 2021, up from 78% in 2016.

DXN falls into the Independent Data Centre category which includes a number of large operators, both multinational and local. Frost & Sullivan estimates in 2017 that the top four operators (actually top three as Equinix bought out Metronode for \$1.0bn in December 2017) accounted for 46% of the market. We have set out the players by revenue and market share in the following exhibit.

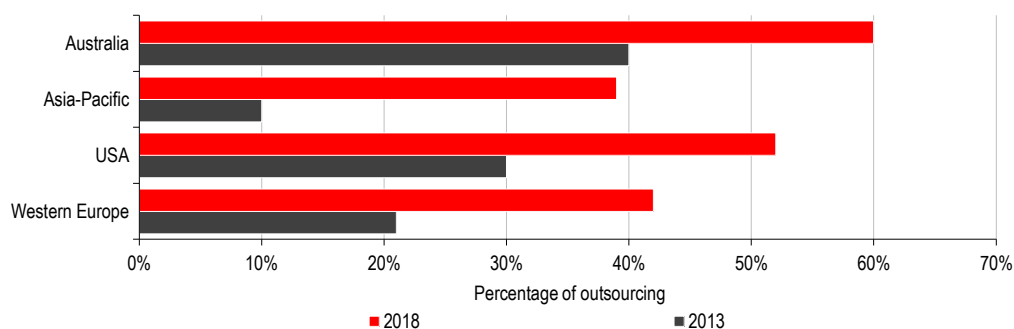
**Exhibit 1: Australian Independent Data Centre market**

Data centre operator	Annual revenue (\$M)	Estimated market share
Equinix	155.4	13%
Global Switch	146.8	12%
Metronode	131.4	11%
NextDC	123.6	10%
Others	675.8	55%
<b>Total industry forecast revenue</b>	<b>1,233.0</b>	

Source: Frost & Sullivan

Australia is estimated to be the fastest growing market for data outsourcing. Frost & Sullivan estimates that 60% of data will be outsourced for hosting in Australia in 2018 up from 40% in 2013. This compares with just over 50% in the US and less than 40% in APAC as the following exhibit highlights.

**Exhibit 2: Outsourcing of data centres by region**



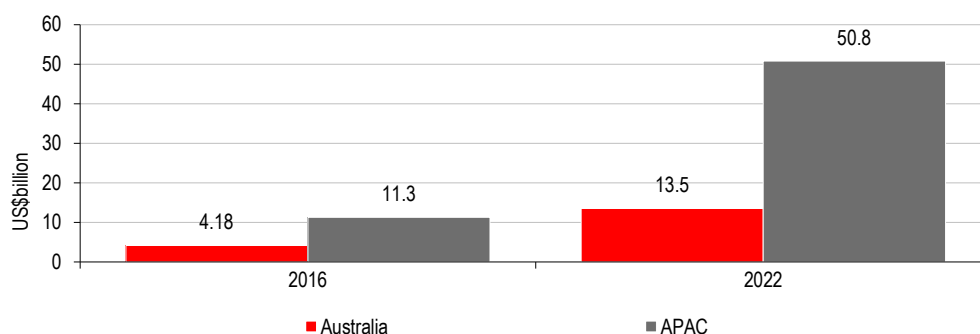
Source: Frost & Sullivan

<sup>1</sup> Cisco, Cisco Global Cloud Index: Forecast and Methodology, 2016-2021, White Paper, 1 Feb 2018

## Growth forecasts

Frost & Sullivan estimates that Australia's data centre revenues, which include independent data centre operators, will grow to US\$13.5bn in 2022 from US\$4.2bn in 2016.

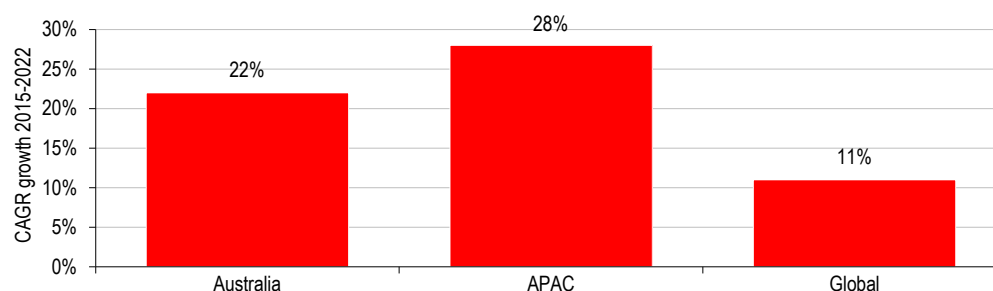
**Exhibit 3: Australia and Asia-Pac Data centre revenue in 2016 and forecasted for 2022**



Source: Frost & Sullivan

This equates to a CAGR of 22% for Australia from 2015-2022, well ahead of Frost & Sullivan's global growth forecast of 11% for the same period.

**Exhibit 4: CAGR growth of data centres from 2015-2022**



Source: Frost & Sullivan

## Comparable Companies

There are several listed data centre groups, both local and international, operating in the Australian market.

All are substantially larger than DXN and are further along in their lifecycle. We set these companies out in the following two tables but do not think it is appropriate to try and apply a compco-multiple to our DXN forecasts. By way of explanation, Infratil (IFT.NZ) owns 48% of Canberra Data Centres and this is the only way of investing directly in that operation.

**Exhibit 5: International peers operating in Australia**

Company name	Code	Currency	Share price	Market Cap (US\$m)	Enterprise value (US\$m)	EV/Rev v TTM (x)	EV/Rev CY18 (x)	EV/EBIT DA TTM (x)	P/E TTM (x)	PE CY18 (x)
Digital RealtyTrust	DLR	109.64	205.95	22,580	31,681	11.8	10.3	21.7	110.7	75.1
Equinix	EQIX	425.57	79.46	33,816	42,896	9.3	8.5	20.9	132.6	80.3
<b>Median</b>				<b>28,198</b>	<b>37,289</b>	<b>10.5</b>	<b>9.4</b>	<b>21.3</b>	<b>121.7</b>	<b>77.7</b>

Source: Company Data, Thomson Reuters (Prices at 27 June 2018)

#### Exhibit 6: Local peers

Company name	Code	Currency	Share price	Market Cap (\$m)	Enterprise value (\$m)	EV/Rev TTM (x)	EV/Rev FY18 (x)	EV/EBITDA TTM (x)	P/E TTM (x)	PE FY18 (x)
Infratil	IFT	NZD	3.37	1,887	3,798	2.1	2.0	10.6	41.9	30.9
Macquarie Telecom	MAQ	AUD	20.00	422	390	1.8	1.7	9.7	30.0	27.5
Next DC	NXT	AUD	7.80	2,227	2,317	18.7	15.2	47.3	95.5	193.5
<b>Median</b>				<b>1,887</b>	<b>2,317</b>	<b>2.13</b>	<b>2.01</b>	<b>10.64</b>	<b>41.86</b>	<b>30.92</b>

Source: Company Data, Thomson Reuters (Prices at 27 June 2018)

In addition, we have looked at the capital management ratios of the three listed pure-play data centre operators, Digital Realty, Equinix and NextDC. All three demonstrate lower levels of ROCE when compared with DXN< due to the high cost of capital investment in traditional wholly-owned and developed data centres. It should be noted that we have adjusted ROCE and ROA for under-utilised capacity for all three of these companies.

#### Exhibit 7: Peer Group Capital management ratios

Based on last reported financial year	ROCE	ROA	ROE
Digital Realty	3.4%	3.4%	3.2%
Equinix	6.6%	5.2%	13.7%
NextDC	10.6%	7.7%	8.9%
Data Exchange Network	55.8%	47.8%	39.2%

Source: Company data, RaaS estimates (NextDC adjusted to remove assets not yet developed)

## New capacity

The industry measures itself by data hall size (square metres), megawatts available and number of racks but each company reports different measures for new construction, making it difficult to get a complete picture of all the new capacity coming to the market. Our estimate, based on published company data, is that an additional 150MW-180 MW is coming onto the market over the next six to 18 months. We run through each company anecdotally to demonstrate their existing and new data centre developments.

### AirTrunk

Privately-owned AirTrunk opened its first 64,000 square metre DC in Sydney in September 2017 at a capital cost of \$200m. The centre has 20MW capacity and will be expanded to 30MW by mid-2018. The company's master plan is to have more than 80MW of IT load and 30 modular data halls across four construction phases.<sup>2</sup> It also plans to launch a site in Melbourne with 50 MW capacity.

### Canberra Data Centres

CDC has two data centre campuses in Canberra, Fyshwick and Hume, which have a combined capacity of 39MW. Construction of a fifth data centre in Fyshwick will be completed for occupancy in September 2018 adding another 21MW capacity to CDC's network.

### Digital Realty

US-listed Digital Realty Trust owns five data centres in Australia and is expanding in both Sydney and Melbourne with capacity due to be commissioned in Q4CY18. According to the company's 2017 annual report, its Sydney data centres are at 99.8% occupancy ahead of a substantial expansion plan, while Melbourne is running at 91.5% occupancy.

<sup>2</sup> "AirTrunk opens \$200m Sydney data centre" ITNews September 20, 2017

#### Exhibit 8: Digital Realty Trust Australian Data Centres

	Number of Data Centres	Rented space SqM	Space under construction SqM	Annualised rent (US\$000)	Occupancy
Melbourne	2	11,643	1,973	16,906	91.5%
Sydney	3	12,840	16,365	16,306	99.8%

Source: 2017 Annual Report

## Equinix

Equinix expanded its footprint in Australia with the \$1.03bn acquisition of Metronode in December 2017. It now has 15 data centres in Australia and is in the process of expanding the Port Melbourne facility by adding 375 new cabinets to take it to 1,500 by Q3 2018. It has also recently doubled the size of its Sydney (Silverwater) DC to 3,000 racks.

#### Exhibit 9: Equinix Utilisation Rates and MRR per rack by region

	Number of racks	Utilisation rate	Monthly recurring revenue per rack (US\$)
AsiaPac	44,400	74%	2,007
Americas	96,300	82%	2,371
EMEA	101,900	82%	1,342

Source: 2017 Annual Report

## Global Switch

Global Switch has two data campuses, Sydney East and Sydney West which span 73,000 square metres in Ultimo, Sydney. The company's London-based parent was purchased by Chinese interests in December 2016, prompting the Australian Defence Department to terminate its 10-year contract with the Australian operation several years' early and effective 2020. . The Defence Department was an anchor customer for Global Switch's \$200m investment in the Sydney data centre.

## NextDC

NXT has invested in more than 126MW of planned capacity across Sydney, Melbourne, Brisbane, Adelaide and Perth. Its three flagship operations in Melbourne, Sydney and Brisbane are almost at capacity, as the following exhibit demonstrates. It raised \$281m in April 2018 to expand capacity in Sydney, Melbourne and Perth, where it will respectively build 30MW, 40MW and 20MW of additional capacity. The Sydney and Melbourne sites are expected to be commissioned in mid FY19 while Perth is slated for mid-FY20.

#### Exhibit 10: Snapshot of NextDC's Melbourne, Sydney and Brisbane flagship operations

	Melbourne (M1)	Sydney (S1)	Brisbane (B1)
Contracted utilisation	91.0%	83.5%	93.5%
Billing utilisation	82.5%	73.5%	93.0%
Recurring revenue	48.19	34.73	14.33
Project revenue	3.12	6.27	0.37
Total Revenue	51.32	41.00	14.70
EBITDAR	42.27	31.70	11.26
EBITDA	37.26	26.08	10.85
EBITDAR margin	82.4%	77.3%	76.6%
Capex	143	146	32
Revenue as % of total revenue	44.0%	35.0%	13.0%
EBITDAR (1)	42.27	31.70	11.26
Depreciation (10%)	13.90	13.50	3.10
EBIT	28.37	18.20	8.16
ROCE	19.6%	11.7%	25.2%
MW	15.00	16.00	2.25
Capex per MW	9.53	9.13	14.22

Source: NextDC FY17 results presentation (1) EBITDAR excludes head office costs

NextDC's capex history and planned and utilised capacity are set out in Exhibit 11 below. B1 and B2 are in Brisbane, M1 and M2 are in Melbourne, S1 and S2 are in Sydney and P1 and C1 are respectively in Perth and

Canberra. Applying NextDC's FY18 guidance of \$58m-\$62m for EBITDA, we estimated that the market has priced in a 10-year CAGR for FCF of 25.9% in NXT's current share price of \$7.80.

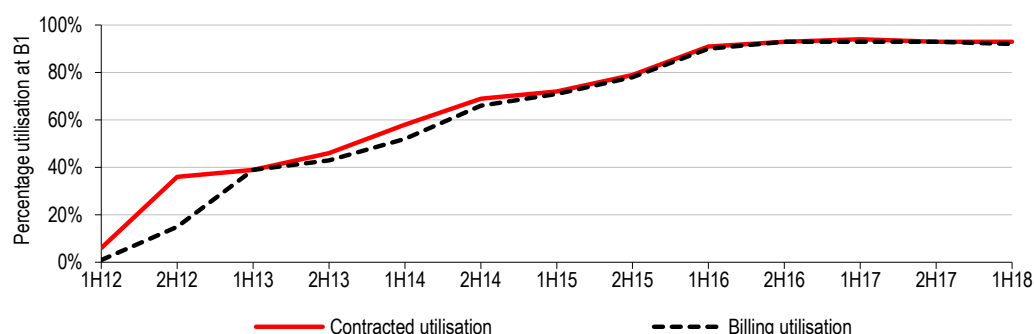
**Exhibit 11: NextDC's capex history and capacity**

	B1	M1	S1	P1	C1	B2	M2	S2	Total
Commenced	Oct-11	Sep-12	Sep-13	Feb-14	Aug-12	Sep-17	Nov-17	1Q19	
Fitout capex to date (\$m)	143	146	57	31	32	38	32	11	490
Land and building capex (\$m)						42	35	3	80
Total power planned	2.25	15	16	6.0	4.8	12.0	40.0	30.0	126.1
Total power built	2.25	15	16	4.1	2.0	2.0	2.0		43.4
Capacity available for sale (MW)	1	0.9	4.3	4.4	0.2	11.8	39.7	24.6	86.9

Source: NextDC H118 results presentation

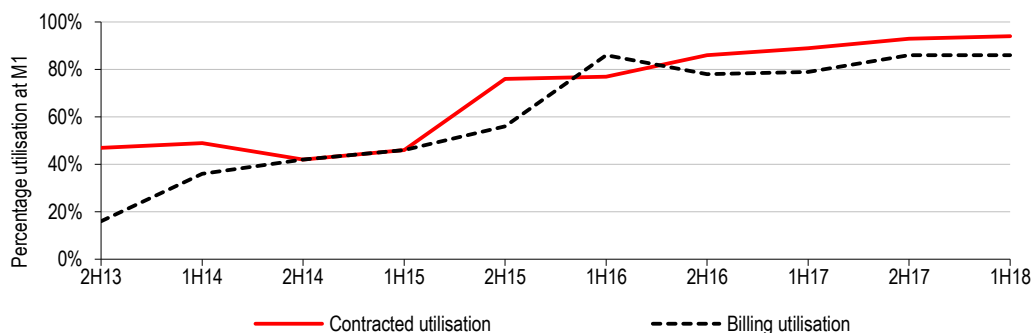
It is also worth examining NextDC's history of contracted and billed utilisation per centre. Below is the experience in Brisbane, its first DC, Melbourne and Sydney, which have experienced similar utilisation patterns from start to maturity. Our forecasts for DXN's utilisation follow a similar pattern.

**Exhibit 12: NextDC's B1 Data Centre utilisation history**



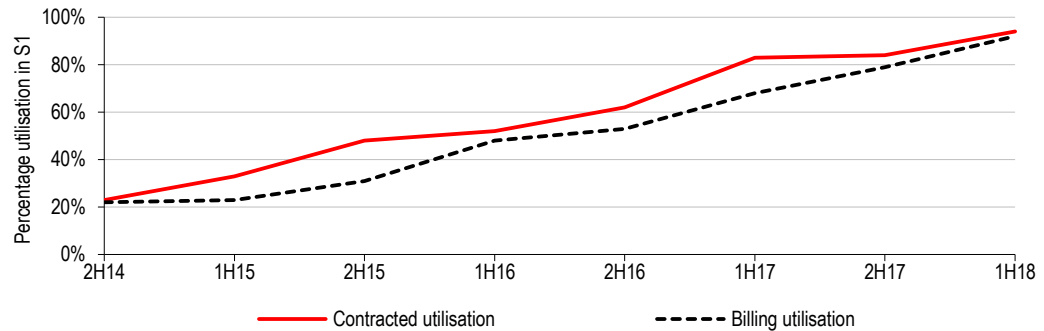
Source: NextDC reports

**Exhibit 13: NextDC's M1 Data Centre utilisation history**



Source: NextDC reports

**Exhibit 14: NextDC's S1 Data Centre utilisation history**



Source: NextDC reports

## RaaS Forecasts

We have modelled each data centre individually and made some assumptions around software sales and manufacturing revenues and COGS. Our assumptions have been derived from examining other operators in the market and from discussions with management.

Our base case assumptions include the key parameters:

- Port Melbourne will have 920 racks commissioned in Q4CY18 and a utilisation rate of 90%\* after three years of operation. Revenue per rack per month is forecast to be \$2,000;
- Similarly for Homebush with 960 racks, the utilisation rate is forecast to get to 90% after three years of operation;
- Software sales are forecast to grow from 2 to 4 per year while contracting and manufacturing revenues are forecast to grow to 8% of total revenues longer term;
- Contract (third party) manufacturing growth rate of 20-50% near term;
- Electricity costs of 14.5c per KW per hour;
- Manufacturing COGS of 70%;
- We have not included any additional data centres in our base case, which anticipates a peak in EBITDA margin in FY22, as set out in the following Exhibit.
- The growth forecasts are front-loaded with the bulk of the growth forecasted from FY19-FY22. Beyond this we revert to CPI in the absence of additional centres.

\*We have decided to reflect a 90% base case utilisation rate after studying existing utilisation rates at NextDC, Equinix and Digital Realty. DXN's management is of the view that DXN's utilisation rate will be closer to 95% and potentially could go above 100% depending on the module configuration and consumed power density.



#### Exhibit 15: Base case earnings forecasts

	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Port Melbourne DC		3.9	11.6	17.8	20.5	21.0	21.5	22.1
Homebush DC		4.0	12.1	18.6	21.4	21.9	22.5	23.0
Software sales	0.1	0.2	0.2	0.4	0.4	0.4	0.4	0.4
Contracting & manufacturing	0.2	0.3	0.7	1.1	1.6	2.4	3.2	4.2
<b>Revenues</b>	<b>0.3</b>	<b>8.4</b>	<b>24.5</b>	<b>37.9</b>	<b>43.9</b>	<b>45.7</b>	<b>47.6</b>	<b>49.7</b>
COGS	0.1	1.9	5.6	8.7	10.5	11.5	12.5	13.8
<b>Gross Margin</b>	<b>0.2</b>	<b>6.5</b>	<b>19.0</b>	<b>29.2</b>	<b>33.4</b>	<b>34.2</b>	<b>35.1</b>	<b>36.0</b>
GP margin %	61.5%	77.3%	77.3%	77.0%	76.1%	74.9%	73.7%	72.3%
Telecoms and technology	0.1	0.7	2.1	3.2	3.7	3.8	3.9	3.9
Marketing	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Employment	1.6	2.8	3.1	3.4	3.6	3.8	3.9	4.1
Rent	1.1	2.3	2.5	2.6	2.7	2.9	3.0	3.2
Other	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.5
<b>Operating costs</b>	<b>3.0</b>	<b>6.1</b>	<b>8.0</b>	<b>9.7</b>	<b>10.5</b>	<b>11.0</b>	<b>11.5</b>	<b>11.9</b>
<b>EBITDA</b>	<b>(2.8)</b>	<b>0.4</b>	<b>10.9</b>	<b>19.5</b>	<b>22.9</b>	<b>23.3</b>	<b>23.6</b>	<b>24.0</b>
EBITDA margin %	n.m	5.1%	44.5%	51.5%	52.2%	50.9%	49.6%	48.3%
% growth	n.m	n.m	2452.8%	78.8%	17.5%	1.4%	1.6%	1.7%
Depreciation & Amortisation	0.0	0.7	1.5	1.5	1.5	1.5	1.4	1.4
EBIT	(2.8)	(0.3)	9.5	18.1	21.5	21.8	22.2	22.6
Net Interest	(0.0)	(0.1)	(0.0)	(0.2)	(0.5)	(0.8)	(1.1)	(1.5)
Tax	(0.7)	(0.1)	2.8	5.5	6.6	6.8	7.0	7.2
<b>NPAT</b>	<b>(2.2)</b>	<b>(0.1)</b>	<b>6.6</b>	<b>12.8</b>	<b>15.4</b>	<b>15.8</b>	<b>16.3</b>	<b>16.8</b>
% growth	n.m	n.m	-5505%	92%	20%	3%	3%	3%

Source: RaaS Estimates

## SWOT Analysis

In our view, the strengths and opportunities for DXN match the weaknesses and threats which we have set out in the following exhibit.

#### Exhibit 16: SWOT analysis

Strengths	Opportunities
Lower funding requirements that most DCs due to leasing model	Mining sites and remote sites offer opportunities for modular sales
Cost base substantially lower due to modular model - break even per rack in FY19 is \$600 vs our estimate of \$1,200 for NextDC in FY17	5G and IoT will require more localised, modularised DCs to cope with local traffic, DXN's sweet spot
More than a decade's experience in building and delivering modular data centres	Opportunities to manage DCs for companies or third parties
Patent pending on equipment system for containerised data centre	Deregulation of telecommunications in emerging Asian markets offer opportunities to build DC's that are technically aligned to DXN's modular approach.
Weaknesses	Threats
Small operator competing with multinationals and well-funded local players such as NextDC and Equinix	Oversupply potential in Q418 could trigger a price war in Australia
DXN has a limited track record	Singapore is the main hub in Asia and could attract business away from Australia
Board and management team spread between Singapore, Perth and Melbourne	New entrants adopting DXN's modular approach
Once capacity is utilised, growth reverts to CPI, excess returns potentially will be competed away	
Supply agreement with Datacentrs Ltd a company founded by the CEO and DXN's third largest shareholders is for only 5 years. DCL to supply services, human capital and products to DXN. Termination notice is just 90 days.	

Source: RaaS Advisory

## Sensitivities

We see several risks for DXN's business model which include but are not limited to the following:

- Execution Risk: DXN is a new company and while its predecessor Datacentre Ltd built a 1,088 rack modular centre in Perth in 2016, the company has a limited track record of building and operating co-location data centres;
- Competitive Risk: As we have discussed, there are several data centres, either stand alone or extensions to existing operations coming to the market later in 2018 and in 2019. While demand forecasts are strong, there is a risk of oversupply in the short term which could lead to delays in filling DXN's DCs and/or potential reductions in prices. We have factored in peak utilisation rates at year three; but competitor behaviour could result in the cost per rack reducing or utilisation rates being lower.
- Co-founder risk – the co-founders and joint largest shareholders have been contracted by DXN to provide sales, pre-sales and product development services under a three year contract which can be terminated by either party with six months' notice. In addition, the company has a five-year supply contract with Datacentre Ltd, a company founded by the CEO Peter Christie for the supply of products and engagement of consulting services. We see this as a potential mismatch with DXN's leasing commitments (25-years) and business plan;
- Geographic risk: DXN's board and management team are spread from Perth, to Singapore to Melbourne which, in our view, potentially stretches management capability in a small company and reduces its capacity to respond to quickly to customer needs. One of the benefits of proximity highlighted in our discussions with industry participants is that if the data centres are within driving distance of each other it's easy for the CEO to be on hand for client meetings and it keeps employee numbers in check (no need to duplicate at each centre).

## Board and Management

The board comprises the following:

**Douglas Loh**, Independent Non- Executive Chairman, is currently executive director of Health Science Innovation Holdings. He was previously head of equities and co-founder of Acorn Capital.

**Richard Carden**, Independent Non-Executive Director, was previously Senior Vice President Integration at Speedcast (SDA). He was the SVP of Global Sales for Pacnet (now part of Telstra's International operations in Singapore) and President and CEO of Verizon, Japan;

**Terry Smart**, Independent Non-Executive Director, is currently MD of Good Guys at JB HiFi. He is the former long-standing CEO of JB HiFi and previously held senior business development roles at Eastman Kodak, where he worked with Peter Christie.

**Peter Christie**, Managing Director, has held senior business development roles with Eastman Kodak, Unisys, Informix and leadership roles with Orange Business Services, TIBCO, Mincom and Logica.

The management team includes:

**Justin Kellerman**, Chief Engineer and data centre architect, is responsible for facility development and design of DXN's modular data centre systems. He has experience across all aspects of data centre design, operations and engineering from extensive experience in Australia and Africa.

**Corrie Coetzee**, head of manufacturing including computer aided design and construction of DXN's modular solutions. Corrie has more than 30 years' experience constructing industrial facilities, plant and equipment globally from Africa and Australia.

**Tim Desmond**, Lead product developer is a co-founder of Data Exchange and manages development of new modular technology and associated software and IoT solutions. Tim is the originator of all of DXN's current patented technology and data centre module designs.

**Dean Coetzee**, is a co-founder of Data Exchange and head of Asia business development, leading DXN's efforts to sell its technology in the Asian region and manage strategic global accounts.

**George Lazarou**, CFO and Company Secretary, is also currently MD of Citadel Capital and a Non Exec director of eSports Mogul (ESH).

## DCF Valuation

We have used the discounted cashflow methodology to value DXN, applying a WACC of 12.6%, beta of 1.5 and terminal growth rate of 2.0%, to our base case free cashflows. This derives a valuation of \$0.53 a share. It should be noted that our base case forecasts only include the Sydney and Melbourne DCs.

### Exhibit 17: DCF valuation

Key Valuation Matrix													
Target gearing, D/(D+E)	0.0%												
Corporate tax rate	30.0%												
Cost of debt after tax	2.0%												
Cost of equity	12.6%												
<b>Discount Rate / WACC</b>	<b>12.6%</b>												
Beta	1.5												
Equity Risk Premium	6.5%												
Risk Free Rate	2.8%												
Terminal growth rate assumpt	2.0%												
Terminal Value capitalisation r	10.6%												
Number of Shares on Issue	182.3 m												
<b>DCF</b>	<b>100%</b>	<b>\$0.53</b>											
Premium(discount) to price		90.9%											
DCF			2018 e	2019 e	2020 e	2021 e	2022e	2023 e	2024 e	2025 e	2026e	2027e	Terminal
			30-Jun-18	30-Jun-19	30-Jun-20	30-Jun-21	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Jun-27	
			1	2	3	4	5	6	7	8	9	10	11
EBITA			-2.8	-0.3	9.5	18.1	21.5	21.8	22.2	22.6	23.0	23.4	
Tax			0.0	0.0	-2.8	-5.4	-6.4	-6.5	-6.7	-6.8	-	6.9	7.0
Depreciation			0.0	0.7	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	
Amortisation			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Maintenance Capex			-0.1	-0.7	-1.5	-1.5	-1.5	-1.5	-1.4	-1.4	-	1.4	1.4
Expansionary Capex			-0.1	-14.4	0.0	0.0	0.0	0.0	0.0	0.0	-	-	
Incremental Working Capital			-0.1	0.3	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.2	
Free Cash flow			-3.1	-14.4	7.232	13.2	15.3	15.4	15.7	16.0	16.3	16.6	0.109
Growth				371.4%	-150.2%	81.9%	16.5%	0.6%	1.8%	2.0%	1.8%	1.8%	
EBITA			-2.8	-0.3	9.5	18.1	21.5	21.8	22.2	22.6	23.0	23.4	
			2018 e	2019 e	2020 e	2021 e	2022e	2023 e	2024 e	2025e	2026e	2027e	Terminal
Free Cash Flow			-3.1	-14.4	7.2	13.2	15.3	15.4	15.7	16.0	16.3	16.6	16.9
DISCOUNTED VALUE			0.888	0.789	0.701	0.623	0.553	0.491	0.436	0.388	0.344	0.306	0.272
Discounted value			-2.7	-11.4	5.1	8.2	8.5	7.6	6.8	6.2	5.6	5.1	4.6
Sum of PV	41.7	49.0%											
TERMINAL VALUE													
TERMINAL VALUE	160.0												
Discount factor	0.272												
PV of terminal Value	43.4	51.0%											
PV of Enterprise	85.1												
Debt (Cash)	-12.3	Net cash June 2018											
Net Value - Shareholder	97.5												
No of shares on issue	182.3												
<b>NPV</b>	<b>\$ 0.53</b>												

Source: RaaS Advisory

At the current share price of \$0.265, DXN's 39.3m \$0.30 options, which have expiry dates of 30/11/20 and 5/4/21 are just out of the money. We have calculated the dilution impact of these in the table below.

### Exhibit 18: Impact of in the money options on DCF valuation

NPV including in the money options	A\$m
PV of Enterprise	85.1
Debt (Cash) including PV of cash from options	(20.1)
Net Value - Shareholder	105.3
No of shares on issue	221.6
NPV including options	\$ 0.47

Source: RaaS Advisory

We have also given regard to the potential impact IFRS 16 – Changes to leases could have on DXN's DCF valuation when it comes into effect in January 2019. We have assumed that 15% of the rent payments are re-classed as interest payments and adjusted the free cashflows to reflect this. The NPV of rent payments under the lease has been added to net debt and deducted from EV. This together with the in the money options brings the base valuation back to \$0.43/share.

### Exhibit 19: Impact of IFRS 16 on DCF valuation (Options included in the share count)

		2018 e	2019 e	2020 e	2021 e	2022e	2023 e	2024 e	2025 e	2026e	2027e	Terminal
<b>NPV of Leases</b>		30-Jun-18	30-Jun-19	30-Jun-20	30-Jun-21	30-Jun-22	30-Jun-23	30-Jun-24	30-Jun-25	30-Jun-26	30-Jun-27	
		1	2	3	4	5	6	7	8	9	10	11
Adjusted FCF to exclude leases (interest payments - assume 15%)		-2.57	-11.09	5.33	8.43	8.70	7.79	7.04	6.39	5.79	5.25	4.76
Annual rent		1.1	2.3	2.5	2.6	2.7	2.9	3.0	3.2	3.5	3.8	3.9
Discount rate		0.888	0.789	0.701	0.623	0.553	0.491	0.436	0.388	0.344	0.306	0.272
		0.97	1.83	1.73	1.62	1.51	1.41	1.31	1.23	1.20	1.17	
PV of leases	13.01											
Terminal value of leases	36.91											
PV of terminal value	10.02											
NPV of leases	23.03											
<b>Valuation adjustment for leases</b>												
Sum of PV Cashflows	43.63											
Terminal value	53.47											
PV of Enterprise	97.10											
Net debt	10.68											
Add net cash from options	- 7.79											
Net value shareholder	94.20											
Number of shares (inc in the money options)	221.64											
<b>NPV including options and finance lease \$</b>	<b>0.43</b>											

Source: RaaS Advisory

## Scenario Analyses

We have built an upside case and a downside case into the model to contemplate how different growth parameters impact profitability and the DCF valuation. We have also looked at the impact of additional data centres in Brisbane or Adelaide in early 2020. This assumes a 900 rack data centre in Brisbane or a 300 rack data centre in Adelaide and 90% utilisation rate by December 2022 for our base case.

Our upside case assumes the following parameters:

- \$2,300 per month recurring revenue per rack, 99% utilisation rate 3 years from commencement;
- 10 software licence sales a year longer term,
- 50-75% revenue growth near term for the contracting and manufacturing business,
- Electricity costs of 13c per KW hour
- Manufacturing COGS of 65%.

Our downside case assumes the following parameters:

- \$1,350 per month recurring revenue per rack, 80% utilisation rate 3.5 years from commencement;
- No software sales long term;
- 10-30% revenue growth near term for the contracting and manufacturing business;
- Electricity costs of 19c per KW hour
- Manufacturing COGS of 75%.

The DCF impact of each of these scenarios is set out below. These scenarios exclude the in the money options and impact of IFRS 16.

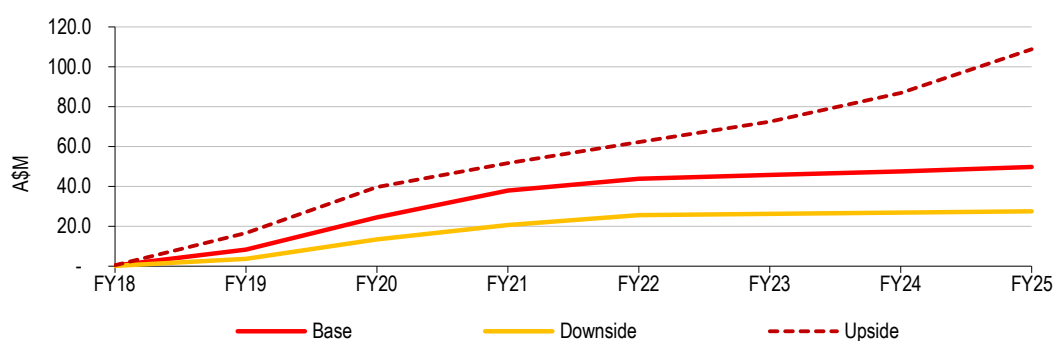
**Exhibit 20: DCF Valuation by Scenarios**

Scenario	DCF
Base	\$ 0.53
Base inc Brisbane	\$ 0.78
Base inc Adelaide	\$ 0.65
Base inc Adelaide and Brisbane	\$ 0.89
Downside	\$ (0.18)
Upside	\$ 1.43
Upside inc Brisbane	\$ 1.79
Upside inc Adelaide	\$ 1.58
Upside inc Adelaide and Brisbane	\$ 1.94

Source: RaaS Advisory

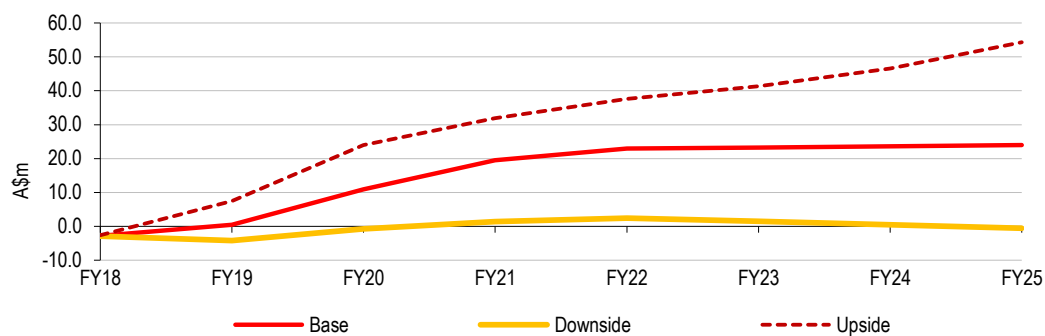
We set out below, the base, upside and downside scenarios on both revenues and EBITDA. These exclude the prospect of Adelaide and Brisbane.

**Exhibit 21: Revenues by scenario analyses**



Source: RaaS Advisory

**Exhibit 22: EBITDA by scenario analyses**



Source: RaaS Advisory

**Exhibit 23: Financial Summary**

The Data Exchange Network (DXN)						Share price (4 July 2018)						A\$	0.27
Profit and Loss (A\$m)						Interim (A\$m)							
Y/E 30 June	FY18F	FY19F	FY20F	FY21F	FY22F	Revenue	H119F	H219F	H120F	H220F	H121F	H221F	
						EBITDA	(1.6)	2.1	4.3	6.6	8.2	11.4	
						EBIT	(1.7)	1.3	3.6	5.9	7.4	10.6	
Revenue	0.3	8.4	24.5	37.9	43.9	NPAT (normalised)	(1.1)	0.9	2.5	4.1	5.3	7.5	
EBITDA	(2.8)	0.4	10.9	19.5	22.9	Minorities	0.0	0.0	0.0	0.0	0.0	0.0	
Depn	(0.0)	(0.7)	(1.4)	(1.4)	(1.4)	NPAT (reported)	(1.1)	0.9	2.5	4.1	5.3	7.5	
Amort	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	EPS (normalised)	n/a	(0.8)	(0.6)	0.5	1.4	2.3	
EBIT	(2.8)	(0.3)	9.5	18.1	21.5	EPS (reported)	n/a	(0.8)	(0.6)	0.5	1.4	2.3	
Interest	0.0	0.1	0.0	0.2	0.5	Dividend (cps)	0.0	0.0	0.0	0.0	0.0	0.0	
Tax	0.7	0.1	(2.8)	(5.5)	(6.6)	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	(0.6)	(2.3)	(1.5)	1.9	3.6	5.1	
Equity accounted assoc	0.0	0.0	0.0	0.0	0.0	Free Cash flow	(0.4)	(2.3)	13.0	2.6	4.3	5.8	
NPAT pre significant items	(2.2)	(0.1)	6.6	12.8	15.4	Divisions							
Significant items	0.0	0.0	0.0	0.0	0.0	Port Melbourne	0.6	3.3	5.0	6.6	7.7	10.1	
NPAT (reported)	(2.2)	(0.1)	6.6	12.8	15.4	Homebush	0.6	3.5	5.2	6.9	8.1	10.5	
Cash flow (A\$m)						Brisbane	0.0	0.0	0.0	0.0	0.0	0.0	
Y/E 30 June	FY18F	FY19F	FY20F	FY21F	FY22F	Software	0.1	0.1	0.1	0.1	0.2	0.2	
EBITDA	(2.8)	0.4	10.9	19.5	22.9	Contract Mfg	0.1	0.2	0.3	0.4	0.5	0.6	
Interest	0.0	0.1	0.0	0.2	0.5	Total Revenue	1.3	7.0	10.5	14.0	16.5	21.4	
Tax	0.0	(0.4)	(2.8)	(5.5)	(6.6)	COGS	0.3	1.6	2.4	3.2	3.8	4.9	
Working capital changes	(0.0)	0.3	0.6	0.5	0.3	Telecommunications	0.1	0.6	0.9	1.2	1.4	1.8	
Operating cash flow	(2.9)	0.5	8.7	14.7	17.1	Marketing	0.0	0.0	0.0	0.0	0.0	0.0	
Mtce capex	(0.1)	(0.7)	(1.5)	(1.5)	(1.5)	Rent	1.1	1.2	1.2	1.3	1.3	1.3	
Free cash flow	(2.9)	(0.3)	7.3	13.3	15.7	Employment	1.3	1.5	1.5	1.6	1.7	1.7	
Growth capex	(0.1)	(14.4)	0.0	0.0	0.0	Other costs	0.1	0.1	0.2	0.2	0.2	0.2	
Acquisitions/Disposals	(0.0)	0.0	0.0	0.0	0.0	Total Costs	3.0	5.0	6.2	7.4	8.3	10.0	
Other	(0.2)	0.0	0.0	0.0	0.0	EBITDA	(1.6)	2.1	4.3	6.6	8.2	11.4	
Cash flow pre financing	(3.2)	(14.7)	7.3	13.3	15.7	Margins, Leverage, Returns							
Equity	17.7	0.0	0.0	0.0	0.0	EBITDA	n/a	5.1%	44.5%	51.5%	52.2%		
Debt	0.0	0.0	0.0	0.0	0.0	EBIT	n/a	(3.7%)	38.5%	47.7%	48.9%		
Dividends paid	0.0	0.0	0.0	0.0	0.0	NPAT pre significant items	n/a	(1.5%)	27.1%	33.8%	35.0%		
Net cash flow for year	14.5	(14.7)	7.3	13.3	15.7	Net Debt (Cash)	12.3	-	2.3	4.9	18.2	33.9	
Balance sheet (A\$m)						Net debt/EBITDA (x)	(x)	n/a	-	5.448	0.451	0.934	1.478
Y/E 30 June	FY18F	FY19F	FY20F	FY21F	FY22F	ND/ND+Equity (%)	(%)	n/a	14.6%	(32.0%)	(122.7%)	(232.9%)	
Cash	14.5	(0.2)	7.1	20.4	36.1	EBIT interest cover (x)	(x)	n/a	n/a	-	0.0	-	0.0
Accounts receivable	0.0	0.0	0.0	0.0	0.0	ROA	n/a	(1.9%)	47.8%	60.0%	48.2%		
Inventory	0.0	0.0	0.0	0.0	0.0	ROE	0.0%	(0.9%)	39.2%	47.9%	37.7%		
Other current assets	0.8	0.8	0.8	0.8	0.8	ROIC	0.0%	(1.6%)	230.8%	56.9%	37.7%		
Total current assets	15.3	0.6	7.9	21.2	36.8	NTA (per share)							
PPE	0.1	14.5	14.5	14.5	14.5	Working capital	(0.0)	(0.3)	(0.9)	(1.4)	(1.7)		
Goodwill	0.0	0.0	0.0	0.0	0.0	WC/Sales (%)							
Investments	0.0	0.0	0.0	0.0	0.0	Revenue growth	n/a	2899.0%	192.6%	54.2%	16.0%		
Deferred tax asset	0.7	1.1	1.1	1.1	1.1	EBIT growth pa	n/a	n/a	(3178.1%)	90.9%	18.9%		
Other assets	0.0	0.0	0.0	0.0	0.0	Pricing							
Total non current assets	0.7	15.6	15.6	15.6	15.6	No of shares (y/e)	(m)	182	182	182	182	182	
Total Assets	16.0	16.2	23.4	36.7	52.4	Weighted Av Dil Shares	(m)	182	182	182	182	182	
Accounts payable	0.0	0.3	0.9	1.4	1.7	EPS Reported	cps	(1.33)	(0.06)	3.09	5.95	7.16	
Short term debt	2.2	2.2	2.2	2.2	2.2	EPS Normalised/Diluted	cps	(1.68)	(0.07)	3.64	7.01	8.43	
Tax payable	0.0	0.0	0.0	0.0	0.0	EPS growth (norm/dil)		n/a	n/a	-5505%	92%	20%	
Other current liabilities	0.1	0.1	0.1	0.1	0.1	DPS	cps	-	-	-	-	-	
Total current liabilities	2.3	2.6	3.2	3.7	4.0	DPS Growth		n/a	n/a	n/a	n/a	n/a	
Long term debt	0.0	0.0	0.0	0.0	0.0	Dividend yield		0.0%	0.0%	0.0%	0.0%	0.0%	
Other non current liabs	0.0	0.0	0.0	0.0	0.0	Dividend imputation		30	30	30	30	30	
Total long term liabilities	0.0	0.0	0.0	0.0	0.0	PE (x)		-	-	8.6	4.5	3.7	
Total Liabilities	2.3	2.6	3.2	3.7	4.0	PE market		15.2	15.2	15.2	15.2	15.2	
Net Assets	13.7	13.6	20.3	33.1	48.4	Premium/(discount)		(100.0%)	(43.6%)	(70.7%)	(75.6%)		
Share capital	16.0	16.0	16.0	16.0	16.0	EV/EBITDA		(12.8)	118.4	4.0	1.5	0.6	
Accumulated profits/losses	(2.2)	(2.4)	4.3	17.1	32.4	FCF/Share	cps	(1.5)	0.7	5.6	8.9	10.2	
Reserves	0.0	0.0	0.0	0.0	0.0	Price/FCF share		(17.3)	40.5	4.8	3.0	2.6	
Minorities	0.0	0.0	0.0	0.0	0.0	Free Cash flow Yield		(5.8%)	2.5%	21.0%	33.5%	38.4%	
Total Shareholder funds	13.8	13.6	20.3	33.1	48.4								

Source: RaaS Advisory



# FINANCIAL SERVICES GUIDE

**RaaS Advisory Pty Ltd**

**ABN 99 614 783 363**

**Corporate Authorised Representative, number 1248415**

**of**

**BR SECURITIES AUSTRALIA PTY LTD**

**ABN 92 168 734 530**

**AFSL 456663**

**Effective Date: 11<sup>th</sup> May 2017**

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- who we are
- our services
- how we transact with you
- how we are paid, and
- complaint processes

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    - Securities
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    - Securities

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Financial Ombudsman Service GPO Box 3 Melbourne VIC 3001 Telephone: 1300 78 08 08 Email: [nfo@fos.org.au](mailto:nfo@fos.org.au)

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BR has in place Professional Indemnity Insurance which satisfies the requirements for compensation under s912B of the Corporations Act and that covers our authorized representatives.



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