Q4: Quarterly Industry Update

AS OF December 31, 2018

Cloud Computing

INDUSTRY SUMMARY

COGENT VALUATION identified **Cloud Computing** publicly traded companies, IPOs, and recent M&A transactions within the Cloud Computing industry, which provides a basis for market and transaction pricing that can be used by your firm in estimating market sentiment and its impact on your firm's value. Over the last year since December 31, 2017, the median 52-week share price return of the Cloud Computing industry was 7.9%. Between December 31, 2016 and December 31, 2018, the median EV/EBITDA multiple increased from 7.4 to 11.3. However, the median price-to-earnings multiple decreased from 25.5 to 16.5 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were 2.6% and 9.6%, respectively.

Public Company Key Statistics

Median 52-Week Return	Median 3-Year CAGR Return	Median EV/Revenue Multiple
7.9%	20.4%	2.4x
Median EV/EBITDA Multiple	**Median Price/Earnings Multiple**	**Median EV/Gross CF Multiple**
11.3x	16.5x	28.9x

Comparable Public Company Market Price Returns as of December 31, 2018

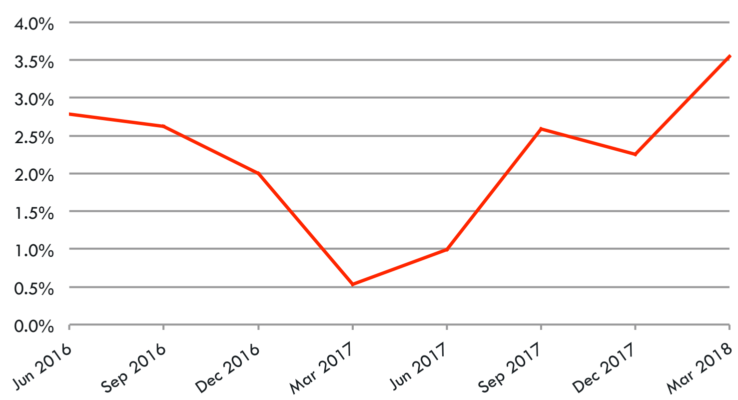
	YTD	3 Month	1 Year	2 Year	2017	2016	2015	2014
Carbonite, Inc.	0.6%	2.1%	5.0%	8.5%	4.8%	11.2%	-6.2%	-9.5%
CDW Corporation	16.6%	10.1%	124.0%	35.9%	53.0%	67.3%	-31.3%	20.6%
GigaMedia Limited	-1.3%	-1.4%	56.0%	35.1%	33.4%	23.9%	19.5%	50.6%
NetApp, Inc.	7.9%	9.4%	28.5%	-11.9%	4.1%	-3.6%	-35.4%	-6.0%
Red Hat, Inc.	46.2%	1.4%	11.3%	-15.9%	3.4%	-39.3%	28.1%	2.7%
salesforce.com, inc.	34.0%	16.6%	62.9%	12.7%	56.8%	32.9%	-36.0%	0.8%
Unisys Corporation	42.7%	58.1%	31.9%	12.3%	72.3%	-15.8%	19.8%	23.4%
Wayside Technology Group, Inc.	-40.1%	-8.2%	9.1%	11.5%	49.3%	-12.7%	32.2%	7.5%
Xunlei Limited	-77.9%	-32.1%	75.8%	-20.0%	-45.5%	35.3%	-62.5%	-12.2%
Median of Industry Public Companies	**7.9%**	**1.8%**	**28.5%**	**8.5%**	**33.4%**	**-0.8%**	**3.6%**	**2.7%**

Multiple year periods are calculated as the average annual return.

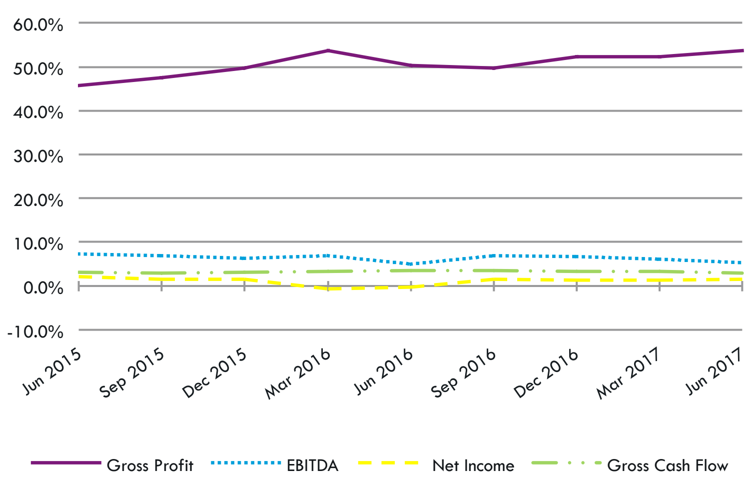
Highest Return *Lowest Return* *Median Return*

Industry Revenue Growth and Profit Margins for the Past Two Years

Median Quarterly Revenue Growth of All Cloud Computing Companies



Median Gross Profit, EBITDA, Net Income, and Gross Cash Flow Margins



Public Company Median Multiples by Quarter

	12/31/18	9/30/18	6/30/18	12/31/17	9/30/17	6/30/17	3/31/17	12/31/16
EV/Revenues Multiple	2.4x	3.2x	2.9x	2.7x	1.9x	2.6x	2.2x	2.1x
EV/EBITDA Multiple	11.3x	14.2x	13.6x	8.6x	9.6x	10.2x	9.9x	9.5x
Price/Earnings Multiple	16.5x	21.6x	33.1x	21.2x	19.7x	17.9x	17.7x	16.2x
EV/Gross Cash Flows Multiple	28.9x	42.6x	24.9x	14.6x	14.6x	16.5x	11.8x	14.2x

Highest Multiple *Lowest Multiple* *Median Multiple*

Industry Initial Public Offerings—Cloud Computing (dollars in millions, except share prices)

Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
11/20/18	**CannaOne Technologies Inc.**	$0.30	2.1	$6.1	$97.1	$68.4	$233.5	($91.7)	($105.7)	$3.4
10/19/18	**Straker Translations Limited**	$1.08	30.0	$4.8	$22.6	$13.7	$0.4	$3.9	$1.0	($0.1)
10/11/18	**Anaplan, Inc.**	$17.00	15.0	$3.6	$11.3	$0.0	$189.6	$0.0	$1.2	$14.9
9/25/18	**SVMK Inc.**	$12.00	99.8	$339.7	$86.5	$5.0	$116.2	($39.0)	($43.2)	$22.9
9/19/18	**archTIS Limited**	$0.15	16.1	$3.1	$843.0	$171.5	$11.7	$150.6	$76.6	($0.8)
9/12/18	**111, Inc.**	$14.00	8.2	$131.2	$843.0	$171.5	$0.0	$150.6	$76.6	($1.4)
6/28/18	**Domo, Inc.**	$21.00	4.0	$80.0	$843.0	$171.5	$225.6	$150.6	$76.6	$2.9
6/26/18	**Property Data Bank, Inc.**	$16.19	10.2	$1.6	$843.0	$171.5	$1.4	$150.6	$76.6	($6.5)
11/20/18	**Median of all IPOs**	**nm**	nm	**$5.4**	**$470.1**	**$120.0**	**$63.9**	**$77.3**	**$38.9**	**$1.4**

Multiple year periods are calculated as the average annual return.

Highest Return *Lowest Return* *Median Return*

Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

Transaction Date	Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
12/31/18	Veracode, Inc.	Thoma Bravo, LLC	$950.0	100%	$595.5	N/A
12/27/18	Beijing Soyuan Science & Technology Co., Ltd.	BizConf Telecom Co.,Ltd.	$54.9	100%	N/A	N/A
12/24/18	Decimal Software Limited	Sargon Capital Pty Ltd	$3.2	100%	N/A	N/A
12/20/18	Threadsol Software Pvt. Ltd	Coats Global Services Limited	$12.0	100%	$19.0	0.8x
12/20/18	Commcise Software Limited	Euronext N.V.	$34.1	100%	N/A	N/A
12/19/18	Substantially All of the Assets of CovalentWorks Corporation	SPS Commerce, Inc.	$23.0	100%	N/A	2.6x
12/19/18	TapInfluence, Inc.	IZEA, Inc. (nka:IZEA Worldwide, Inc.)	$875.0	100%	$0.2	N/A
12/31/18	HEALTHCAREfirst Inc.	Brightree LLC	$950.0	100%	$361.9	0.1x
7/2/18	Viewpoint, Inc.	Trimble Inc.	$1,200.0	100%	$10.2	N/A
6/28/18	SiteHelix Inc.	Overstock.com, Inc.	$4.2	100%	N/A	1.1x
5/22/18	Ability Data Services SA	DataCenter Finland Oy	$405.0	100%	N/A	2.8x
1/16/18	N2W Software Inc.	Veeam Software AG	$0.5	100%	N/A	N/A

USA *International* *Highest* *Lowest* *Median*

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Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

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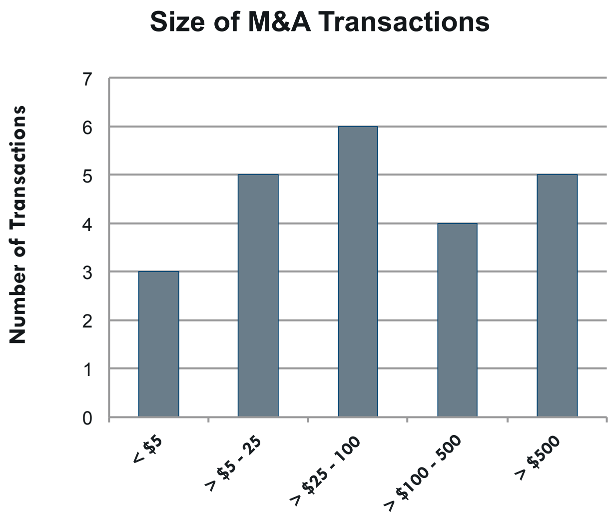
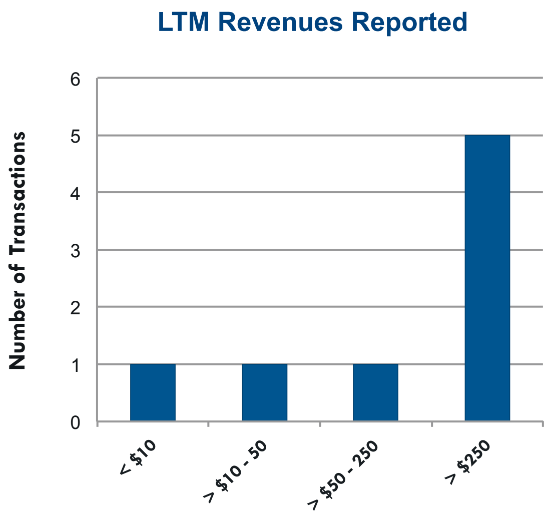
Transaction Date	Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
8/31/17	**DC74, LLC**	**Lumos Networks Corp.**	$29.5	100%	N/A	N/A
9/26/17	**Applied Micro Circuits**	**MACOM Technology**	$772.3	100%	$165.0	4.2x
1/25/17	**CannaBuild , LLC**	**MassRoots, Inc.**	$2.5	100%	N/A	N/A
8/24/17	**eGov Holdings, Inc.**	**Booz Allen Hamilton Inc.**	$250.0	100%	N/A	N/A
1/19/17	**IntraLinks Holdings, Inc.**	**Synchronoss Technologies**	$903.4	100%	$290.4	2.9x
7/10/17	**ServiceMax, Inc.**	**GE Digital LLC**	$915.0	100%	N/A	N/A
1/6/17	**Datalink Corporation**	**Insight Enterprises, Inc.**	$297.9	100%	$756.5	0.3x
	Median of the M&A Transaction Targets		**$65.5**	**100%**	**$67**	**1.1x**

USA *International* *Highest* *Lowest* *Median*

Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions) as of December 31, 2018





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Definitions of Financial Terms Used in this Quarterly Industry Update:

Enterprise Value (EV): Market Value of Equity + Market Value of Debt —Cash

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA): Profitability metric sometimes also referred to as operating profit or operating earnings.

Gross Cash Flows: Net Income + Depreciation and Amortization Expense

Latest Twelve Months (LTM): Financial information is as of the latest twelve months through the date of this Quarterly Industry Update.

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