Q4: Quarterly Industry Update

AS OF December 31, 2018

cogent valuation
FINANCIAL OPINIONS

Data Analytics

INDUSTRY SUMMARY

COGENT VALUATION identified **Data Analytics** publicly traded companies, IPOs, and recent M&A transactions within the Data Analytics 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 Data Analytics industry was 7.6%. Between December 31, 2016 and December 31, 2018, the median EV/EBITDA multiple increased from 10.8 to 11.5. Furthermore, the median price-to-earnings multiple increased from 20.7 to 27.5 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were 2.5% and 13.9%, respectively.

Public Company Key Statistics

Median 52-Week Return	Median 3-Year CAGR Return	Median EV/Revenue Multiple
7.6%	5.6%	1.7x
Median EV/EBITDA Multiple	**Median Price/Earnings Multiple**	**Median EV/Gross CF Multiple**
11.5x	27.5x	25.8x

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

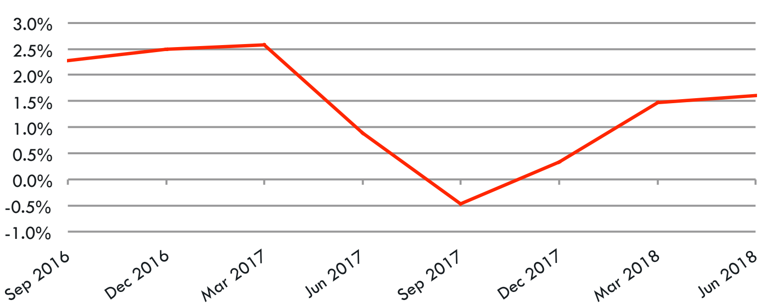
	YTD	3 Month	1 Year	2 Year	3 Year	2016	2015	2014
FTI Consulting, Inc.	70.4%	21.0%	-20.4%	-7.5%	0.5%	30.1%	-10.3%	-6.1%
Huron Consulting Group Inc.	22.1%	20.8%	-42.6%	-25.9%	-17.4%	-14.7%	-13.1%	9.1%
Innodata Inc.	8.1%	47.0%	-39.5%	-19.8%	-21.1%	-14.0%	-2.4%	19.2%
Iron Mountain Incorporated	-8.5%	-1.4%	3.7%	12.0%	6.0%	20.3%	-30.1%	27.4%
MAXIMUS, Inc.	-9.1%	4.7%	14.0%	4.1%	17.1%	-0.8%	2.6%	24.7%
Navigant Consulting, Inc.	18.8%	4.2%	-16.3%	3.1%	6.7%	63.0%	4.5%	-19.9%
Open Text Corporation	6.6%	8.1%	-0.4%	20.1%	5.2%	29.0%	-17.7%	26.7%
Tyler Technologies, Inc.	38.4%	10.3%	1.8%	8.1%	25.4%	-18.1%	59.3%	7.2%
Median of Industry Public Companies	**13.4%**	**5.9%**	**-8.4%**	**3.6%**	**5.6%**	**9.7%**	**-6.3%**	**14.2%**

Multiple year periods are calculated as the average annual return.

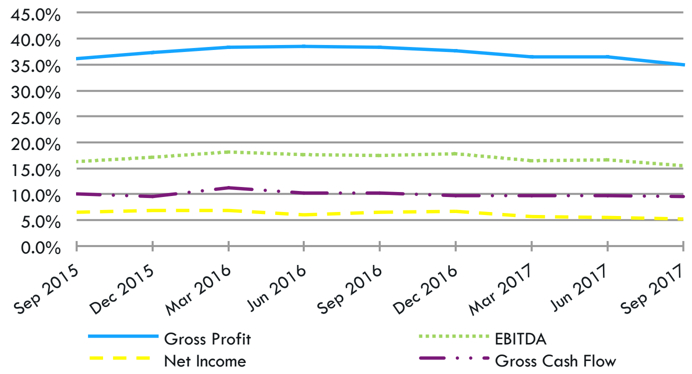
Highest Return *Lowest Return* *Median Return*

Industry Revenue Growth and Profit Margins for the Past Two Years

Median Quarterly Revenue Growth of All Data Analytics 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	6/30/17	9/30/18	3/31/16	12/31/15
EV/Revenues Multiple	1.7x	1.6x	1.7x	1.7x	1.9x	1.9x	1.9x	2.0x
EV/EBITDA Multiple	11.5x	11.6x	11.9x	11.7x	13.7x	13.2x	12.4x	11.3x
Price/Earnings Multiple	27.5x	28.2x	31.0x	28.2x	23.0x	23.6x	24.0x	25.2x
EV/Gross Cash Flows Multiple	25.8x	21.5x	22.6x	20.5x	20.7x	22.6x	19.9x	23.6x

Highest Multiple *Lowest Multiple* *Median Multiple*

Industry Initial Public Offerings—Data Analytics
(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
12/17/18	**Tecnos Data Science Engineering Incorporated**	$28.32	40.0	$33.6	$22.6	$0.9	$1.5	$1.4	$0.5	$2.0
10/11/18	**Anaplan, Inc.**	$17.00	99.8	$70.4	$64.2	$0.0	$39.3	($55.5)	($58.9)	($53.7)
5/30/18	**Maestrano Group Plc**	$0.20	7.4	$74.4	$36.0	$9.6	$1.2	($8.2)	($11.0)	($7.2)
12/18/17	**AYO Technology Solutions Limited**	$3.40	11.6	$161.3	$143.9	$32.9	$26.9	($34.0)	($44.9)	($31.0)
12/13/17	**Pelatro Plc**	$0.84	4.4	$90.0	$42.5	$3.0	$65.1	($10.1)	($11.8)	($8.6)
9/27/17	**Infront ASA**	$2.89	6.2	$195.1	$211.1	$233.3	$53.7	$31.5	($47.0)	$34.3
6/29/17	**Median of all IPOs**	**nm**	**nm**	**$52**	**$26.6**	**$2.0**	**$33.1**	**N/A**	**N/A**	**N/A**

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
10/26/18	Top Data Science Oy	Morpho, Inc.	$5.0	100%	N/A	N/A
9/14/18	Veritas Farm Management Inc.	Deveron UAS Corp.	$0.7	100%	$20.0	N/A
9/7/18	FinTalk	Seven Stars Cloud Group, Inc. (nka:Ideanomics, Inc.)	$7.0	100%	$10.2	N/A
8/20/18	Datorama Inc.	salesforce.com, inc.	$757.9	100%	$1.4	0.5x
6/29/18	Evolve Analytics Limited	Gentrack Group Limited	$29.7	100%	N/A	N/A
4/8/18	Kensho Technologies, Inc.	S&P Global Inc.	$550.0	100%	$30.0	1.9x
1/30/18	Angoss Software Corp.	Datawatch Corporation	$32.7	100%	$200.3	N/A
8/28/17	RecoBell Co., Ltd.	Futurestream Networks	$1.8	100%	N/A	N/A
7/15/16	NCI, Inc.	H.I.G. Capital, LLC	$72.5	100%	$300.0	6.0x

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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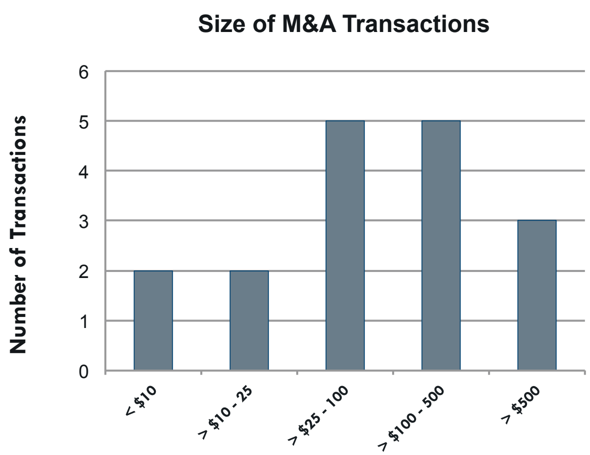
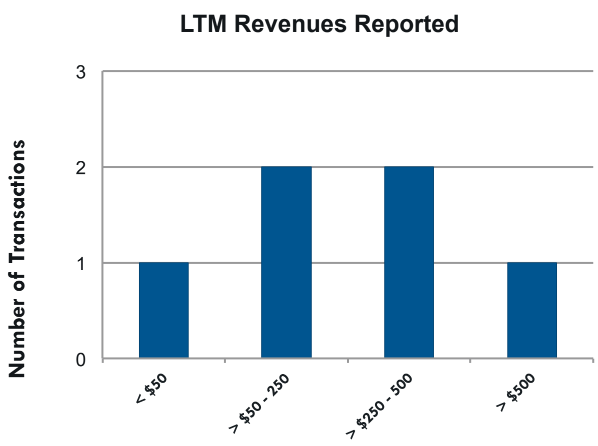
Transaction Date	Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
8/28/17	**NCI, Inc.**	**Thales S.A.**	$215.0	100%	$30.0	7.2x
8/15/17	**Lattice Data, Inc.**	**Pharmaceutical Research Association**	$530.0	100%	N/A	N/A
5/13/17	**Turn Inc.**	**Forcepoint LLC**	$289.2	70%	N/A	N/A
4/10/17	**MKS Data Analytics**	**H.I.G. Capital, LLC**	$200.0	100%	$325.4	0.9x
4/3/17	**Dun & Bradstreet, Benelux**	**Apple Inc.**	$310.0	100%	N/A	N/A
8/28/17	**NCI, Inc.**	**Amobee, Inc.**	$72.5	100%	N/A	N/A
4/3/17	**L-3 National Security**	**Sartorius Stedim Biotech**	$28.0	100%	N/A	N/A
12/19/16	**Global Data**	**Altares - D&B SAS**	$28.0	100%	$59.0	0.5x
	Median of the 17 M&A Transaction Targets		$18.8	**100%**	N/A	N/A

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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