

Predictive Analytics

INDUSTRY SUMMARY

COGENT VALUATION identified **Predictive Analytics** publicly traded companies, IPOs, and recent M&A transactions within the Predictive 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 Predictive Analytics industry was 1.1%. Between December 31, 2016 and December 31, 2018, the median EV/EBITDA multiple decreased from 20.8 to 18.9. However, the median price-to-earnings multiple increased from 27.5 to 37.8 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were 2.2% and 13.5%, respectively.

Public Company Key Statistics

Median 52-Week
Return

1.1%

Median 3-Year CAGR
Return

10.8%

Median EV/Revenue
Multiple

3.7x

Median EV/EBITDA
Multiple

18.9x

Median Price/Earnings
Multiple

37.8x

Median EV/Gross CF
Multiple

36.7x

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

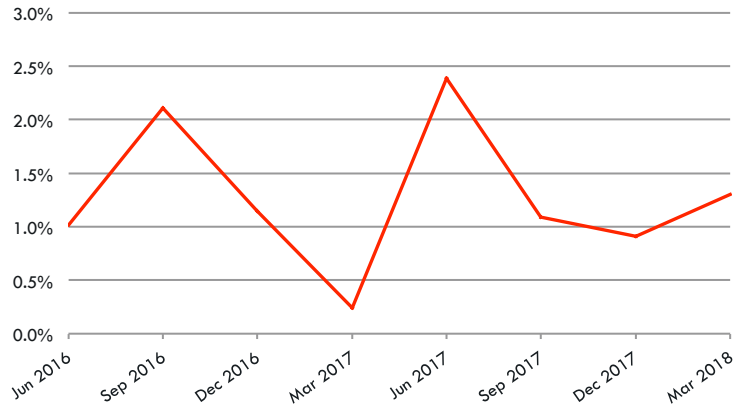
	YTD	3 Month	1 Year	2 Year	2017	2016	2015	2014
Brightcove Inc.	-0.8%	-17.6%	2.8%	14.8%	2.8%	28.1%	3.2%	-45.2%
Fair Isaac Corporation	22.1%	-2.1%	-11.8%	7.0%	-11.8%	29.8%	-20.3%	-45.0%
MicroStrategy Incorporated	-2.7%	-15.5%	-9.8%	-16.8%	-9.8%	-23.3%	-11.4%	62.3%
NetScout Systems, Inc.	-22.4%	10.6%	28.5%	27.5%	28.5%	26.6%	30.3%	15.1%
NICE Ltd.	16.6%	-1.8%	-33.5%	-14.4%	-33.5%	10.1%	10.4%	30.7%
Open Text Corporation	-8.6%	-13.5%	-3.3%	-0.4%	-3.3%	2.6%	-16.0%	23.5%
Pegasystems Inc.	1.4%	1.0%	35.2%	26.6%	35.2%	18.4%	13.9%	23.4%
PROS Holdings, Inc.	18.7%	-2.4%	15.4%	22.0%	15.4%	29.0%	-17.7%	26.7%
Verint Systems Inc.	1.1%	28.6%	31.0%	30.9%	31.0%	30.9%	32.4%	-15.5%
Median of Industry Public Companies	1.1%	-1.8%	15.4%	7.1%	15.4%	18.4%	-11.4%	23.4%

Multiple year periods are calculated as the average annual return.

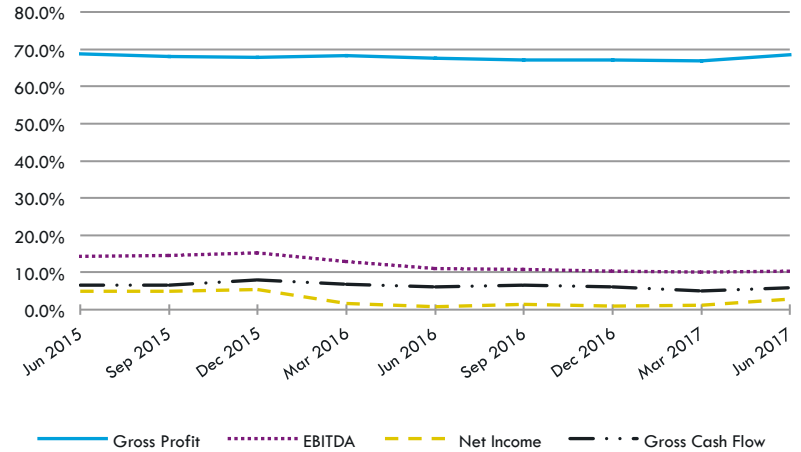
■ Highest Return
 ■ Lowest Return
 ■ Median Return

Industry Revenue Growth and Profit Margins for the Past Two Years

Median Quarterly Revenue Growth of All Predictive 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	3/31/18	12/31/17	9/30/17	3/31/17	12/31/16
EV/Revenues Multiple	3.7x	4.0x	3.5x	3.6x	3.3x	2.8x	2.6x	2.5x
EV/EBITDA Multiple	18.9x	18.8x	18.5x	21.6x	21.3x	22.4x	18.7x	17.3x
Price/Earnings Multiple	37.8x	40.9x	39.4x	35.6x	26.9x	27.0x	25.1x	23.4x
EV/Gross Cash Flows Multiple	36.7x	34.4x	36.8x	34.6x	36.2x	34.2x	30.1x	33.8x

■ Highest Multiple
 ■ Lowest Multiple
 ■ Median Multiple

Industry Initial Public Offerings—Predictive 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
6/24/15	TransUnion	\$22.50	29.5	\$664.8	\$4,614.3	\$2,976.4	\$1,354.4	\$398.9	(\$4.4)	\$629.4
2/17/12	Brightcove Inc.	\$11.00	5.0	\$55.0	\$47.3	\$7.0	\$63.6	(\$14.0)	(\$17.6)	(\$11.9)
6/27/07	PROS Holdings, Inc.	\$11.00	6.8	\$75.1	\$25.7	\$20.0	\$49.9	\$9.5	\$8.3	\$10.7
6/26/07	comScore, Inc.	\$16.50	5.3	\$87.5	\$45.5	\$3.3	\$70.0	\$11.4	\$7.1	\$14.4
12/12/06	Guidance Software, Inc.	\$11.50	5.0	\$57.5	\$26.6	\$2.0	\$51.2	(\$0.3)	(\$1.8)	\$1.4
11/10/05	IHS Markit Ltd.	\$16.00	14.5	\$232.2	\$743.0	\$0.3	\$468.5	\$63.5	\$52.4	\$73.6
Median of all IPOs		nm	5.6	\$81.3	\$46.4	\$5.2	\$66.8	\$3.1	\$2.7	\$12.6

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
1/30/18	Angoss Software Corp.	Datawatch Corporation	\$32.7	100%	\$10.2	2.8x
9/26/17	automotiveMastermind, Inc.	IHS Markit Ltd.	\$435.0	100%	N/A	N/A
8/14/17	MacroPoint, LLC	The Descartes Systems	\$106.6	100%	N/A	N/A
4/12/17	Tollgrade Communications, Inc.	Enghouse Systems Limited	\$17.3	100%	N/A	N/A
10/16/15	Datamyx LLC	Deluxe Corp.	\$160.0	100%	N/A	N/A
9/30/15	Unruly Group Limited	News Corp UK & Ireland	\$176.8	100%	N/A	N/A
8/3/15	1010data, Inc.	Advance Communication	\$500.0	100%	\$2.0	10.0x
11/3/14	Evolv, Inc.	PTC Inc.	\$600.0	100%	\$6.1	7.3x
10/31/14	QuantiSense, Inc.	Market Resource Partners	\$20.0	100%	N/A	N/A
2/28/14	KnowledgeAdvisors, Inc.	Corporate Executive Board	\$45.0	100%	N/A	N/A
1/29/14	Rationalwave, Inc.	Bottomline Technologies	\$8.0	100%	N/A	N/A
1/22/14	Scout Analytics, Inc.	ServiceSource International	\$32.5	100%	\$5.4	6.0x

■ USA
 ■ International
 ■ Highest
 ■ Lowest
 ■ Median

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

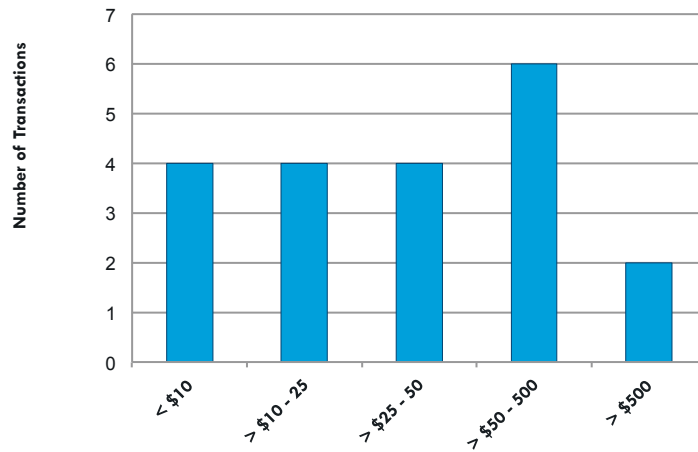
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Transaction Date	Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
1/14/14	Zinnov, LLC	Corporate Executive Board	\$8.0	100%	N/A	N/A
12/25/13	Dentsu Marketing Insight	Macromill, Inc.	\$4.1	51%	\$55.8	0.1x
9/12/13	Molecular Profiles Ltd.	Columbia Laboratories	\$25.4	100%	\$9.0	2.8x
8/28/13	Panopticon Software AB	Datawatch Corporation	\$27.5	100%	\$5.0	5.5x
7/22/13	Neolane SAS	Adobe Systems	\$616.5	100%	\$58.2	10.6x
4/25/13	Angoss Software Corp.	Peterson Partners LP	\$8.5	100%	\$7.0	1.1x
12/27/12	(m)PHASIZE, LLC	Sapient Corp.	\$18.2	100%	N/A	N/A
10/21/11	Algorithmics, Inc.	OpenPages, Inc.	\$380.2	100%	\$163.7	2.3x
Median of the 20 M&A Transaction Targets			\$33.2	100%	\$7.0	5.5x

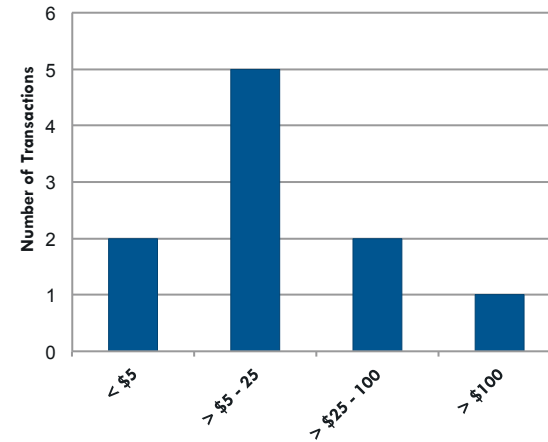
USA
 International
 Highest
 Lowest
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Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions) as of December 31, 2018

Size of M&A Transactions



LTM Revenues Reported



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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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