

Canaccord Genuity M&A and Capital Raising Activity Report

Technology, Media, Marketing, and Information Services Industry Sectors

September 2019

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/ CG Petsky Prunier – Senior Technology Team

Deep understanding of the global technology market with unrivaled access to the international landscape

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/ Strong M&A Advisory Track Record

Agency & Marketing Services
AI

Collaboration Consulting & Digital Transformation
CRM

Data & Info Services
Digital/Mobile

- Advisory credentials across a wide range of outcomes
- Deep, extensive sponsor & strategic relationships

E-Commerce
FinTech
HCIT






















HCM
Infrastructure
MarTech/AdTech

Media
Software
Other Vertical⁽¹⁾

PROPHET Financial Advisor on growth financing from Gladstone & Comerica September 2019	FALFURRIAS CAPITAL Financial Advisor on Majority Investment in INDUSTRY DIVE September 2019	once innovations inc Financial Advisor on sale to signify September 2018	MUTESIX Financial Advisor on sale to iProspect A member of the dentsu AEGIS network June 2019	signpost a portfolio company of Georgian Partners & Spark Capital Financial Advisor on recapitalization by HIGHBAR PARTNERS June 2019	\$182,000,000 mobiquity a portfolio company of New Spring Financial Advisor on sale to HEXAWARE June 2019	W2O a portfolio company of Mountain Gate Capital Financial Advisor on an investment from NMC NEW MOUNTAIN CAPITAL LLC June 2019	EDB POSTGRES a portfolio company of Peak Equity Partners Financial Advisor on sale to Great Hill PARTNERS June 2019
\$300,000,000 RPM TECHNOLOGIES a portfolio company of Bay Shore Capital Advisors Financial Advisor on sale to Broadridge June 2019	Hedgehog Financial Advisor on sale to sitecore Own the experience™ A portfolio company of IEQT June 2019	ITS Top Image Systems a portfolio company of Trident Capital Financial Advisor on sale to KOFAX May 2019	DIGITAL Financial Advisor on sale to PSP PARTNERS ERIE STREET CAPITAL May 2019	VENDINI a portfolio company of Level Equity Financial Advisor on sale to AudienceView RUBICON May 2019	LD vision group Financial Advisor on sale to HARDY CAPITAL PARTNERS April 2019	HIGHER EDUCATION a portfolio company of Vistra Financial Advisor on sale to RED VENTURES April 2019	CareATC Growth recapitalization with LLR Partners March 2019
STRONG-BRIDGE ENVISION a portfolio company of B & W RIVER CAPITAL Financial Advisor on sale to HCL March 2019	FUTURI Financial Advisor on an investment from MILLPOND EQUITY PARTNERS February 2019	MediaAlpha a portfolio company of White Mountains Insurance Group Financial Advisor on significant minority investment from INSIGNIA CAPITAL GROUP February 2019	backstage Financial Advisor on significant investment from Ridgmont EQUITY PARTNERS™ February 2019	GC Incentives GiftCertificates.com a portfolio company of Marlin Equity Partners Financial Advisor on sale to TANGO CARD a portfolio company of FTV Capital February 2019	PUBLICIS HEALTH Financial Advisor on sale of Publicis Health Solutions to Altamont CAPITAL PARTNERS January 2019	qualtrics a portfolio company of Accel Partners & Insight Venture Partners Financial Advisor January 2019	PERISCOPE Financial Advisor on sale to Quad January 2019

/ Leading Technology Financing Platform

Agency & Marketing Services	Collaboration Consulting & Digital Transformation	Data & Info Services	<ul style="list-style-type: none"> 245+ completed transactions⁽¹⁾ Raised \$45B+ capital⁽¹⁾ ~110 as bookrunner or lead manager⁽¹⁾ Unique access to global growth investors 	E-Commerce	HCM	Media
AI	CRM	Digital/ Mobile		FinTech	Infrastructure	Software
				HCIT	MarTech/AdTech	Other Vertical

 \$45,000,000 Debt Offering Sole Advisor September 2019	 \$655,216,848 IPO Co-Manager July 2019	 Direct Listing Advisor June 2019	 \$200,000,000 Debt Offering Sole Advisor June 2019	 \$13,955,800 Equity Offering Joint Bookrunner June 2019	 \$26,714,324 Equity Offering Joint Bookrunner June 2019	 \$645,322,500 Equity Offering Joint Bookrunner June 2019	 \$286,898,490 Equity Offering Co-Manager June 2019	 \$244,950,000 Equity Offering Co-Manager June 2019
 \$230,000,000 Convertible Debt Offering Co-Manager June 2019	 \$8,100,000,000 IPO Co-Manager May 2019	 \$159,390,000 Equity Offering Lead Manager May 2019	 So-Young International \$179,400,000 IPO Co-Manager May 2019	 £27,800,000 Equity Offering Co-Manager March 2019	 \$2,555,772,840 IPO Co-Manager March 2019	 \$565,180,000 Equity Offering Co-Manager March 2019	 \$11,511,500 Equity Offering Sole Bookrunner March 2019	 \$135,625,000 Equity Offering Co-Manager March 2019
 \$127,075,000 Equity Offering Co-Manager January 2019	 \$30,529,690 Equity Offering Sole Bookrunner November 2018	 \$455,000,000 Equity Offering Co-Manager November 2018	 \$303,025,000 IPO Co-Manager October 2018	 \$289,800,000 IPO Co-Manager October 2018	 \$50,347,035 Equity Offering Joint Bookrunner September 2018	 \$446,703,125 Equity Offering Co-Manager August 2018	 \$230,000,000 Convertible Debt Offering Co-Manager July 2018	 \$46,230,000 Equity Offering Joint Bookrunner July 2018
 \$51,844,408 IPO Joint-Bookrunner July 2018	 \$373,749,969 Equity Offering Co-Manager June 2018	 \$84,375,000 IPO Co-Manager June 2018	 \$250,000,000 Convertible Debt Offering Co-Manager June 2018	 \$68,999,997 Equity Offering Co-Manager June 2018	 \$50,312,500 Equity Offering Joint Bookrunner June 2018	 \$222,719,840 Equity Offering Co-Manager June 2018	 \$460,782,000 Equity Offering Co-Manager May 2018	 \$258,750,000 Convertible Debt Offering Co-Manager May 2018

/ Ranked #1 by PitchBook For Media & Information Services Deal Activity

2018			2016-2018			2014-2018		
Rank	Advisor	# of Transactions	Rank	Advisor	# of Transactions	Rank	Advisor	# of Transactions
1	CG Petsky Prunier	27	1	CG Petsky Prunier	64	1	CG Petsky Prunier	105
2	Houlihan Lokey	12	2	Goldman Sachs	32	2	Goldman Sachs	56
2	JEGI	12	3	JEGI	29	3	Morgan Stanley	49
4	Morgan Stanley	9	4	Bank of America	28	4	Bank of America	47
4	GP Bullhound	9	5	Houlihan Lokey	27	5	JEGI	44
6	Moelis & Company	8	6	Morgan Stanley	26	6	JP Morgan	43
6	JP Morgan	8	6	Credit Suisse	26	7	GP Bullhound	41
8	RBC	7	6	GP Bullhound	26	8	Credit Suisse	38
9	Evercore Group	6	9	JP Morgan	24	9	RBC	36
9	Raymond James	6	10	RBC	23	10	Houlihan Lokey	34
9	KPMG	6	11	Raymond James	19	11	Jefferies Group	28
9	Credit Suisse	6	12	Jefferies Group	17	12	GCA Savvian	27
9	CambonPartners	6	13	Deutsche Bank	16	12	Deutsche Bank	27
9	Oaklins DeSilva & Phillips	6	13	CambonPartners	16	14	Moelis & Company	26
15	Deutsche Bank	5	15	Moelis & Company	15	14	Raymond James	26

- Numbers for CG Petsky Prunier represent total transactions in Media & Information Services as tracked by PitchBook completed for Petsky Prunier LLC and Canaccord Genuity Group Inc., which merged in February 2019.
- On a stand-alone basis prior to its merger with Canaccord Genuity, Petsky Prunier completed more than 90 transactions during 2016-2018 and has closed and more than 200 transactions since 2011 across all industries, including Media & Information Services, as well as Advertising and Marketing, E-commerce, Technology and Software, among other areas.

/ Ranked #1 by Refinitiv For TMT Deal Activity

Rank	Firm Name	# of Transactions
		2018
1	CG Petsky Prunier	39
1	Raymond James Financial	39
3	Houlihan Lokey	32
4	William Blair	31
5	Moelis	20
5	Robert W Baird	20
7	Jefferies	18
8	Goldman Sachs	16
8	AGC Partners	16
8	Evercore Partners	16
8	JP Morgan	16
8	Duff & Phelps	16
13	Daiwa Securities Group	15
14	KeyBanc Capital Markets	14
14	Citi	14

- Numbers for CG Petsky Prunier as tracked by Refinitiv represent total 2018 U.S. M&A transactions less than \$500 million in the Technology, Media, and Telecom Sectors for Petsky Prunier LLC and Canaccord Genuity Group Inc., which merged in February 2019.

/ CG Petsky Prunier: Maximizing Shareholder Value

- Top-ranked, global investment bank dedicated to digital advertising and marketing, e-commerce, digital media, technology, information, business services, and healthcare services industries
 - Extensive sell-side M&A and capital raise expertise, with a transaction closing rate unmatched at our level of deal volume
- Founded in 1999, merged with Canaccord Genuity in February 2019
- CG Petsky Prunier, combined with the other members of Canaccord Genuity's investment banking team, has more than 100 focused professionals in offices in New York, Boston, San Francisco, Chicago, Nashville, Charlotte, Las Vegas, and Toronto
- Deep relationships across a broad spectrum of strategic buyers, as well as private equity, growth equity, and VC groups and lenders
- Global reach enhanced through Canaccord Genuity's international network of offices
- Securities transactions are processed through Canaccord Genuity LLC, a registered broker-dealer regulated by the SEC and FINRA. Member SIPC.

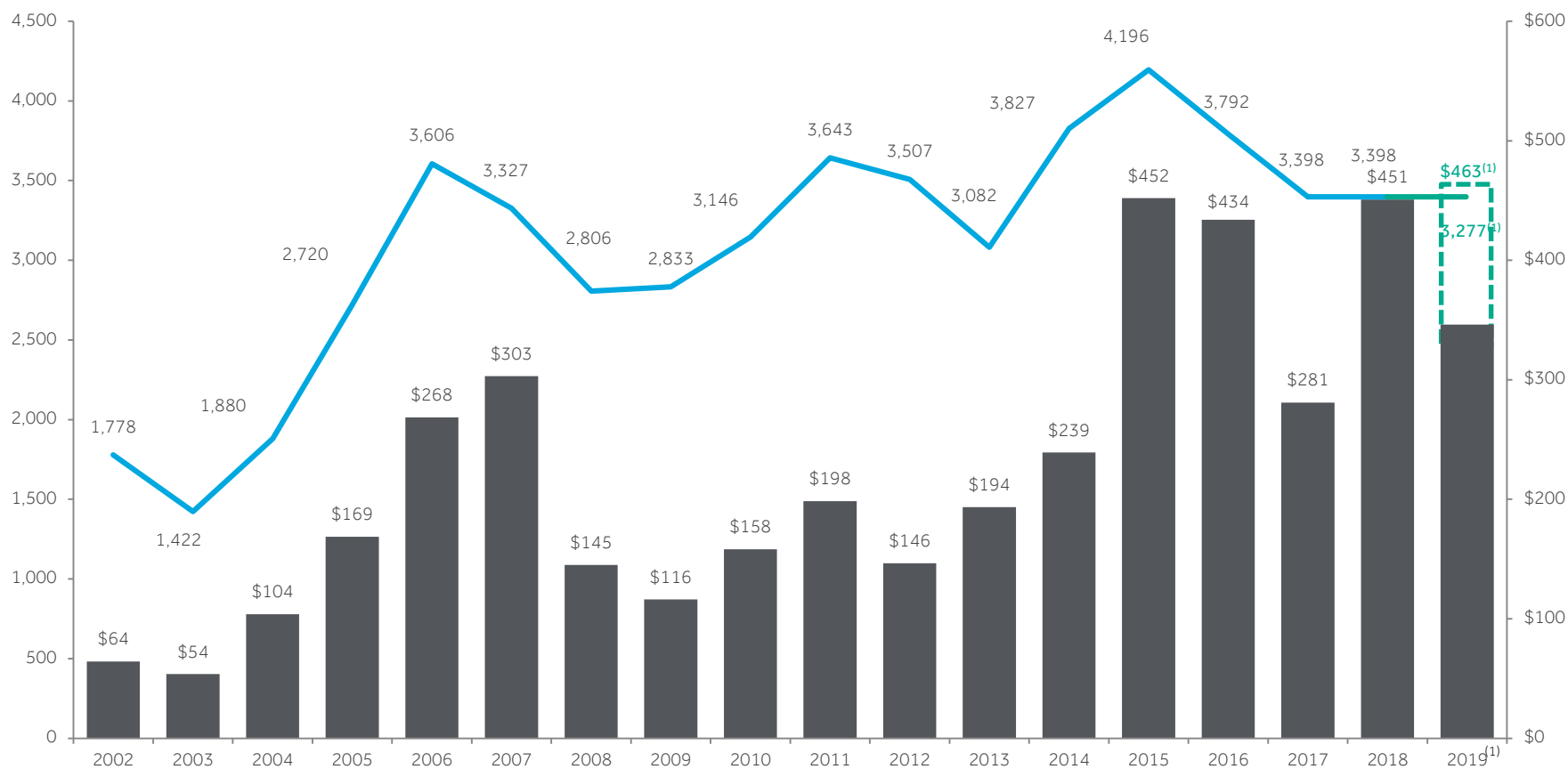


- M&A Advisory and Sell-Side Representation
 - Privately-Owned Companies
 - Entrepreneur-Led Businesses
 - Private Equity Portfolio Companies
 - VC-Backed Companies
 - Corporate Divestitures
 - Selected Buy-Side Engagements
- Capital Raising and Private Placements
- Advertising & Marketing
 - E-commerce
 - Digital Media
 - Technology
 - Information
 - Business & IT Services
 - Healthcare Services

Market Environment

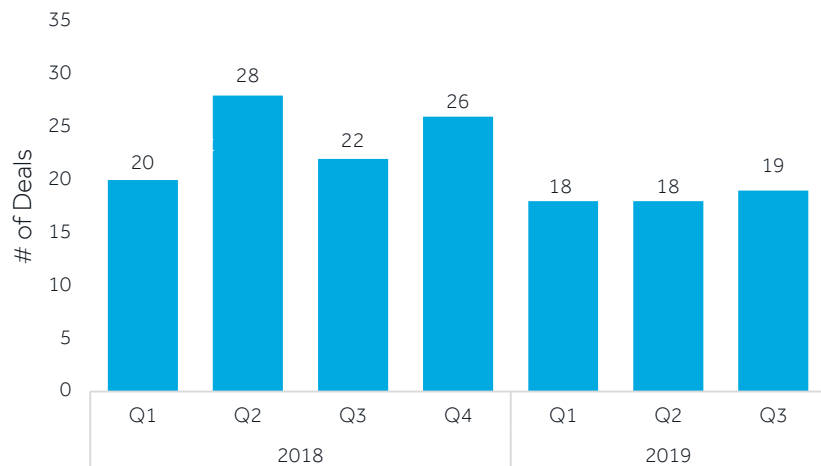
/ Historical Global Technology M&A Volume

Strong Technology M&A volume in Q3 2019 on pace with strong 2018 volume

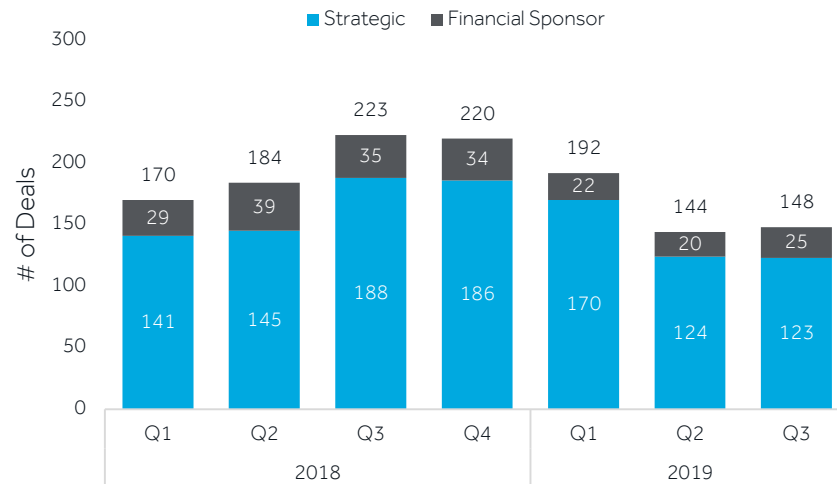


/ Quarterly Technology M&A Activity Trends

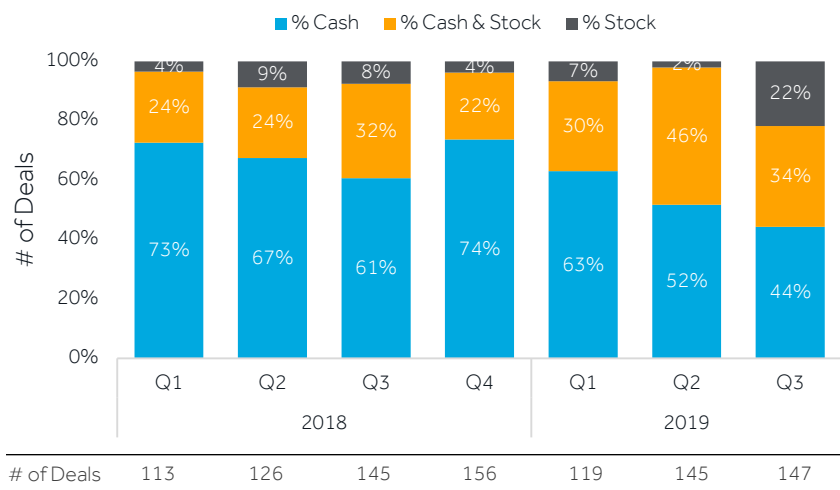
\$1B+ Technology Deals



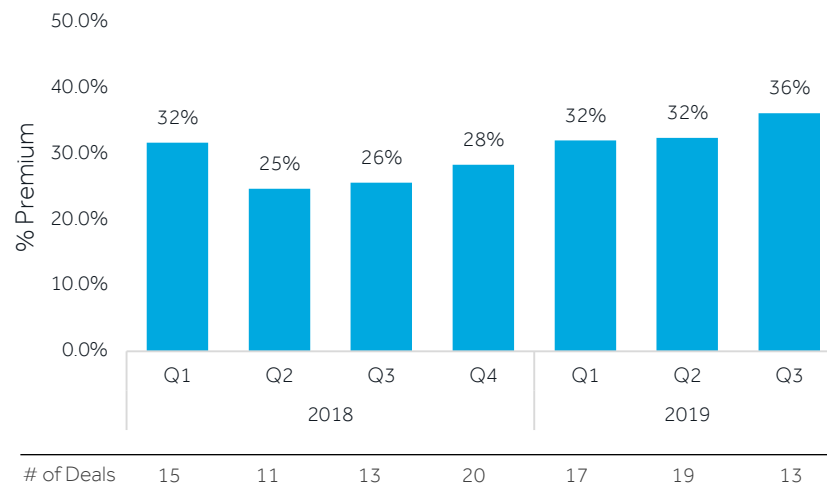
Strategic vs Financial Sponsor Transactions



Consideration Mix⁽¹⁾



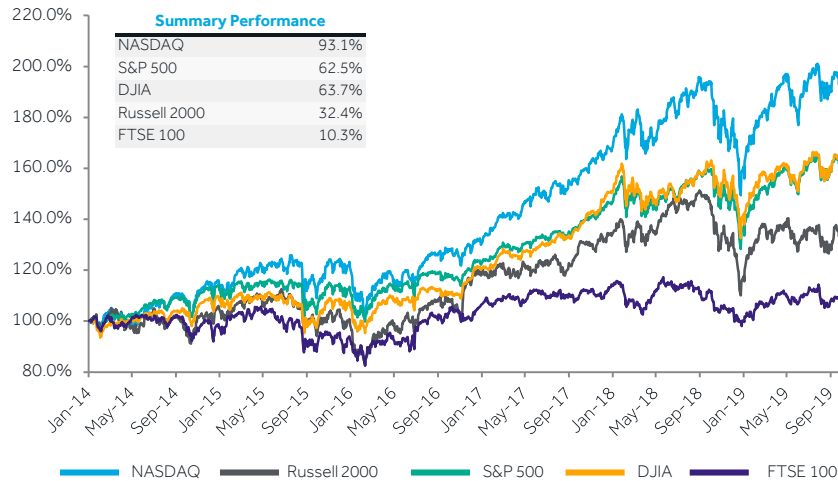
Median 30-Day Premium



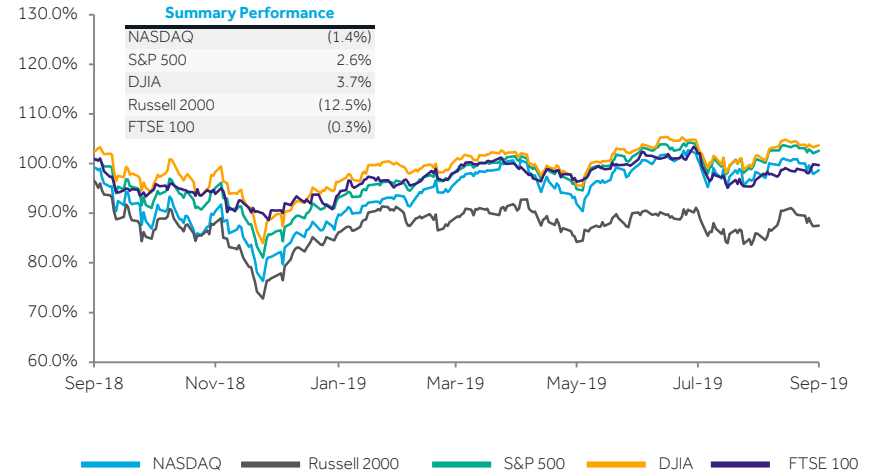
/ Equity Market Backdrop

September 2019 saw continued momentum of long running bull market

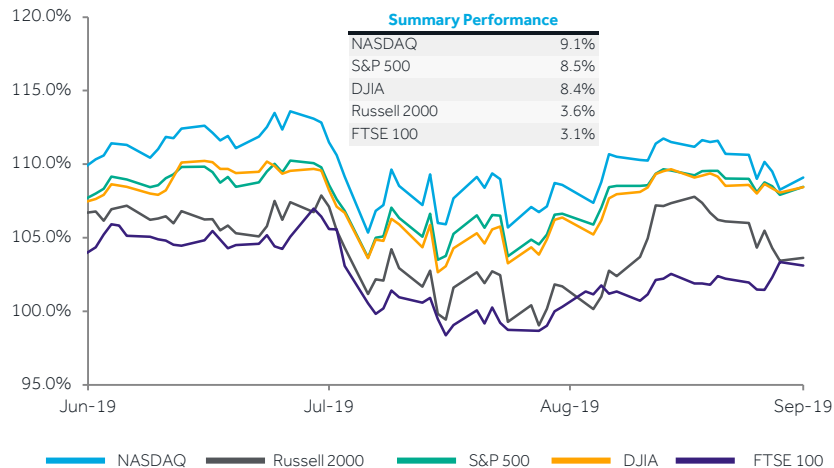
Major Indices 2014 – September 2019



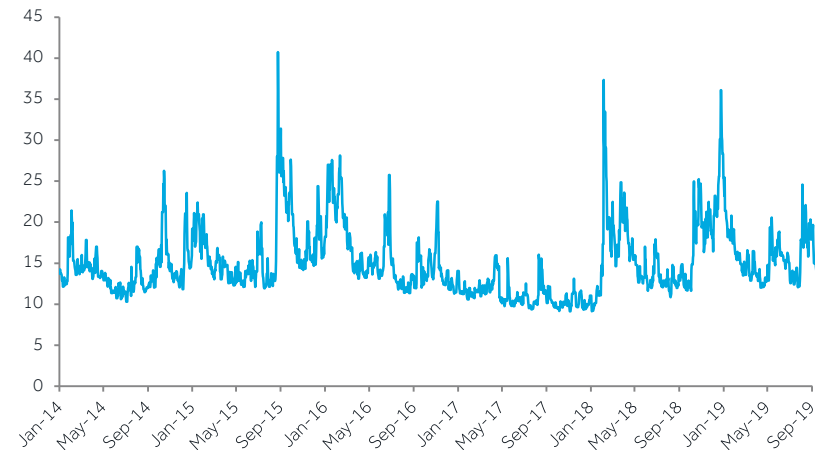
Major Indices September 2019, LTM



Major Indices September 2019, Last 3 Months



VIX 2014 – September 2019



/ Selected Strategic Buyer Transactions in September 2019

	Announced	Acquirer	Target	Segment	Deal Value (\$mm)	EV/LTM Revenue	EV/LTM EBITDA	Premium (1 Month)	Cash Mix %		
>\$100M ⁽¹⁾	09/23/19	Cofina.pt	Grupo Media Capital	Traditional Media	\$280	1.4x	7.7x				
	09/16/19	Ocean Outdoor	Visual Art Media	Traditional Media	69	2.2x	13.9x				
	09/16/19	Mosaic Acquisition Corp.	Vivint Inc. [Blackstone]	Software	2,316	5.0x	15.2x				
	09/05/19	Prudential Financial Inc.	Assurance IQ Inc.	Digital Media/Commerce	2,350				51.0%		
	09/05/19	Alibaba Group Holding Ltd.	Kaola [NetEase Inc.]	Digital Media/Commerce	2,000				85.0%		
	09/27/19	AMETEK Inc.	Gatan Inc. [Roper Technologies]	Technology	925	5.1x					
	09/26/19	Veeva Systems Inc.	Crossix Solutions Inc.	Software	430						
	09/11/19	ANSYS Inc.	Livermore Software Technology Corporation	Software	775						
	09/10/19	Cellnex Telecom S.A.	Signal [InfraVia Capital Partners]	Technology	231						
	09/09/19	Shopify Inc.	6 River Systems Inc.	Software	450				60.0%		
	09/04/19	CommVault Systems, Inc.	Hedvig Inc.	Software	207				77.0%		
					Mean:	\$912	3.4x	12.3x	NA	68.3%	
					Median:	\$450	3.6x	13.9x	NA	68.5%	
\$50-100M ⁽²⁾	09/04/19	Chegg Inc.	Thinkful Inc	Business & IT Services	80	5.7x			100.0%		
	09/04/19	Palo Alto Networks Inc.	Zingbox Inc.	Software	75	15.0x			100.0%		
	09/03/19	Rambus Inc.	Verimatrix Inc.(silicon IP business)	Technology	65	3.0x			100.0%		
						Mean:	\$73	7.9x	NA	NA	100.0%
						Median:	\$75	5.7x	NA	NA	100.0%
						Blended	Mean:	\$732	5.3x	12.3x	NA
						Median:	\$355	5.0x	13.9x	NA	85.0%

/ Selected Financial Buyer Transactions in September 2019

Announced	Acquirer	Target	Segment	Deal Value (\$mm)	EV/LTM Revenue	EV/LTM EBITDA	Premium (1 Month)	Cash Mix %	
	09/20/19	Confluence Technologies Inc. [TA Associates]	StatPro Group plc	Software	\$189	3.1x		36.2%	100.0%
	09/16/19	Mapletree Investments Pte Ltd.	Digital Realty Trust Inc. (3 VA data centers)	Technology	811				
	09/16/19	Mapletree Investments Pte Ltd.	Digital Realty Trust Inc. (Powered Base Building portfolio)	Technology	557				
	09/03/19	The Carlyle Group	HireVue Inc.	Software	400	5.7x			
	09/03/19	Kerridge Commercial Systems [aka KCS][Accel-KKR]	MAM Software Group Inc.	Software	154	4.1x	28.8x	13.2%	100.0%
	Mean:				\$422	4.3x	28.8x	24.7%	100.0%
	Median:				\$400	4.1x	28.8x	24.7%	100.0%

/ Recent High Profile Private Financings in September 2019

Observations:

- Private markets remain active and open, particularly for the strongest companies
- Exit environment (IPOs, M&A) constructive leading to more favorable private valuation discussions

Company	Segment	Date of Latest Funding	Latest Round of Funding (\$mm)	Latest Valuation (\$mm)	Total Equity Funding (\$mm)	Est. % Sold	Recent Lead Investor(s)
Checkr	Software	09/19/19	160	2,200	309		T. Rowe Price
Stripe	Software	09/19/19	250	35,250	1,285		Andreessen Horowitz, General Catalyst, Sequoia Capital
GitLab	Software	09/17/19	268	2,748	414	9.8%	ICONIQ Capital, Goldman Sachs
TuSimple	Business /IT Services	09/17/19	215	1,215	298		Sina
Automattic	Marketing Technology	09/16/19	300	3,000	491		Salesforce Ventures
Shape Security	Software	09/12/19	51	1,076	183	4.7%	C5 Capital
Anduril	Business /IT Services	09/11/19	127	1,027	185	12.3%	Andreessen Horowitz
Nextdoor	Digital Media/Commerce	09/10/19	170	2,170	468	7.8%	Riverwood Capital
Samsara	Software	09/10/19	300	6,300	530	4.8%	Andreessen Horowitz, Dragoneer Investment Group
Grove Collaborative	Digital Media/Commerce	09/05/19	150	1,000	150	15.0%	Lone Pine Capital, General Atlantic, Glynn Capital, Norwest Venture Partners

/ Securities in Registration (\$ in Millions)

Date	Company Name	Country	Segment	Aggregate	Last Twelve Months	
				Offering Value	Revenue	EBITDA
May-19	EndeavorGroup Holdings, Inc.	United States	Traditional Media	100.0	3,903.1	350.8
Sep-18	Valtech SE	United Kingdom	Agency & Marketing Services	100.0	298.0	21.0

/ Last Twelve Months Initial Public Offering Activity

Date	Ticker	P/LLC Segment	Company Name	Country	Initial Offering Price Range	Final Price Per Share	Stock Price at Close on 1st Trading Day	Stock Price on Sep 30, 2019	% Change from 1st Trading Day
Sep-19	PTON	Software	Peloton Interactive, Inc.	United States	\$26.00-\$29.00	29.00	\$25.76, down 11.2%	25.10	(2.6%)
Sep-19	DDOG	Software	Datadog, Inc.	United States	24.00-26.00	27.00	\$27.55, up 2.0%	33.91	23.1%
Sep-19	NET	Software	Cloudflare, Inc.	United States	12.00-14.00	15.00	\$18.00, up 20.0%	18.57	3.2%
Aug-19	SDC	Software	SmileDirectClub, Inc.	United States	19.00-22.00	23.00	\$16.67, down 27.5%	13.88	(16.7%)
Aug-19	DT	Software	Dynatrace, Inc.	United States	13.00-15.00	16.00	\$23.85, up 49.1%	18.67	(21.7%)
Jul-19	HCAT	Software	Health Catalyst, Inc.	United States	24.00-25.00	26.00	\$39.17, up 50.7%	31.64	(19.2%)
Jul-19	MDLA	Software	Medallia, Inc.	United States	16.00-18.00	21.00	\$37.05, up 76.4%	27.43	(26.0%)
Jun-19	WORK	Software	Slack Technologies, Inc.	United States	24.00	38.50	\$38.62, up 0.3%	23.73	(38.6%)
Jun-19	CHWY	Digital Media/Commerce	Chewy, Inc.	United States	19.00-21.00	22.00	\$34.99, up 29.6%	24.58	(29.8%)
Jun-19	FVRR	Digital Media/Commerce	Fiverr International Ltd.	Israel	18.00-20.00	21.00	\$39.90, up 90.0%	18.70	(53.1%)
Jun-19	CRWD	Software	CrowdStrike Holdings, Inc.	United States	28.00-30.00	34.00	\$58.00, up 70.6%	58.31	0.5%
Jun-19	RVLV	Digital Media/Commerce	Revolve Group, Inc.	United States	16.00-18.00	18.00	\$34.00, up 88.9%	23.37	(31.3%)
May-19	PSN	Business Services	Parsons Corporation	United States	26.00-28.00	27.00	\$30.07, up 11.4%	32.98	9.7%
May-19	HHR	Business Services	HeadHunter Group PLC	Russia	11.00-13.50	13.50	\$14.75, up 16.7%	19.29	22.5%
May-19	FSLY	Software	Fastly, Inc.	United States	14.00-16.00	16.00	\$24.00, up 50.0%	24.00	0.0%
May-19	UBER	Digital Media/Commerce	Uber Technologies, Inc.	United States	44.00-50.00	45.00	\$41.57, down 7.6%	30.47	(26.7%)
Apr-19	PINS	Digital Media/Commerce	Pinterest, Inc.	United States	15.00-17.00	19.00	\$24.40, up 28.4%	26.45	8.4%
Apr-19	ZM	Software	Zoom Video Communications, Inc.	United States	33.00-35.00	36.00	\$72.00, up 72.2%	76.20	22.9%
Apr-19	JMIA	Digital Media/Commerce	Jumia Technologies AG	Germany	13.00-16.00	14.50	\$25.45, up 75.6%	7.93	(68.9%)
Apr-19	PD	Software	PagerDuty, Inc.	United States	21.00-23.00	24.00	\$38.25, up 59.4%	28.25	(26.1%)
Apr-19	TW	Software	Tradeweb Markets Inc.	United States	24.00-26.00	27.00	\$35.81, up 32.6%	36.98	3.3%
Mar-19	LYFT	Digital Media/Commerce	Lyft, Inc.	United States	62.00-68.00	72.00	\$78.29, up 8.7%	40.84	(47.8%)
Mar-19	FHL	Software	Futu Holdings Limited	Hong Kong	10.00-12.00	12.00	\$15.32, up 27.7%	10.97	(28.4%)
Dec-18	QFIN	Software	360 Finance, Inc.	China	16.50-18.50	16.50	\$16.49, down 0.1%	8.90	(46.0%)
Dec-18	TME	Digital Media/Commerce	Tencent Music Entertainment Group	China	13.00-15.00	13.00	\$14.19, up 9.2%	12.77	(10.0%)
Dec-18	MOGU	Digital Media/Commerce	MOGU Inc.	China	14.00-16.00	12.00	\$14.00, up 16.7%	2.51	(82.0%)
Nov-18	WEI	Software	Weidai Ltd.	China	9.00-\$11.00	10.50	\$10.25, down 2.4%	6.10	(40.5%)
Oct-18	STNE	Software	StoneCo Ltd.	Brazil	21.00-23.00	24.00	\$31.35, up 30.6%	34.78	10.9%
Oct-18	SWI	Software	SolarWinds Corporation	United States	15.00-16.00	15.00	15.03, up 0.0%	18.45	22.8%
Oct-18	PLAN	Software	Anaplan, Inc.	United States	13.00-15.00	17.00	24.30, up 42.9%	47.00	93.4%
Oct-18	ESTC	Marketing Technology	Elastic N.V.	United States	33.00-35.00	36.00	70.00, up 94.4%	82.34	17.6%
Oct-18	UPWK	Digital Media/Commerce	Upwork Inc.	United States	12.00-14.00	15.00	21.18, up 41.2%	13.31	(37.2%)

/ Additional Selected Technology Follow-ons, LTM as of September 2019

Observations:

- Follow-on market activities track broader market direction
- Better known, more liquid issuers using accelerating formats
- Average discount to last sale of (2.5%) for September deals vs. (1.8%) for August deals

Issuer	Pricing Date	Amount Offered (\$mm)	Mkt Cap at Offer	% Mkt Cap @ Offer	% Primary	Premium/Discount to:		Aftermarket Performance	
						Last Sale	Filing Price	Offer + 1 Day	Offer/Current
Opera	09/20/19	\$75.0	\$1,165.7	6.4%	100.0%	(5.4%)	(22.8%)	1.0%	36.1%
NCR	09/19/19	299.0	4,281.4	7.0%	0.0%	(2.6%)	(2.6%)	(1.4%)	(3.8%)
International Money Express	09/11/19	76.5	493.8	15.5%	0.0%	(1.9%)	(6.3%)	9.8%	2.3%
Cardlytics	09/10/19	105.3	779.6	13.5%	55.7%	(0.4%)	(11.2%)	10.1%	10.5%
Clarivate Analytics	09/06/19	634.8	4,933.4	12.9%	0.0%	(1.0%)	(9.2%)	8.0%	10.1%
Appian	09/04/19	130.4	3,763.3	3.5%	78.4%	(3.5%)	(3.5%)	(1.3%)	6.2%
Workiva	08/13/19	72.4	2,631.0	2.8%	0.0%	(1.4%)	(9.2%)	(8.3%)	(14.5%)
EVO Payments	08/13/19	114.0	2,411.4	4.7%	0.0%	(3.0%)	(3.0%)	0.1%	4.1%
Ceridian	08/06/19	497.5	7,136.8	7.0%	0.0%	(1.1%)	(1.1%)	1.4%	16.1%
Anterix	07/16/19	100.0	693.9	14.4%	100.0%	(4.4%)	(3.9%)	(1.7%)	(13.9%)
HealthEquity	07/09/19	473.5	3,966.3	11.9%	100.0%	(3.5%)	(3.6%)	10.6%	(2.7%)
InterXion	06/26/19	291.0	5,254.9	5.5%	100.0%	(0.5%)	(3.1%)	3.1%	11.3%
Iteris	06/14/19	28.8	170.2	16.9%	100.0%	(8.8%)	(8.8%)	5.8%	17.0%
Smartsheet	06/12/19	645.3	4,636.0	13.9%	60.5%	(0.2%)	(4.4%)	4.8%	11.7%
Q2	06/06/19	210.8	3,114.6	6.8%	95.5%	(1.3%)	(4.6%)	1.2%	29.4%
Avalara	06/05/19	286.9	4,860.9	5.9%	100.0%	(0.1%)	6.0%	3.9%	21.5%
Descartes Systems	06/05/19	245.0	2,828.7	8.7%	100.0%	(3.1%)	(9.0%)	6.2%	(0.1%)
I3 Verticals	06/05/19	117.5	545.9	21.5%	100.0%	(4.9%)	(7.8%)	0.6%	(0.6%)
Mercury Systems	05/22/19	476.1	3,437.9	13.8%	100.0%	(2.8%)	(5.3%)	(0.3%)	24.1%
SolarWinds	05/22/19	270.0	5,578.0	4.8%	0.0%	(6.0%)	(6.1%)	(1.6%)	(5.4%)
Veoneer	05/22/19	420.0	1,568.8	26.8%	100.0%	(2.6%)	(7.5%)	0.0%	(16.2%)
Ceridian	05/21/19	404.0	7,211.0	5.6%	0.0%	(1.4%)	(1.4%)	1.1%	14.4%
Carvana	05/21/19	273.0	2,959.7	9.2%	100.0%	(3.0%)	(3.3%)	0.2%	24.9%
Waitr Holdings	05/16/19	50.0	546.1	9.2%	100.0%	(5.3%)	(5.3%)	0.7%	(76.6%)
Dasan Zhone Solutions	05/16/19	46.0	165.7	27.8%	100.0%	(2.3%)	(2.3%)	7.5%	9.4%
Upland Software	05/08/19	159.4	949.9	16.8%	100.0%	(5.2%)	(9.6%)	10.7%	(9.5%)
Endava	04/17/19	156.7	1,382.4	11.3%	0.0%	(2.3%)	(2.5%)	10.1%	37.9%
EVO Payments	04/03/19	152.4	719.5	21.2%	100.0%	(2.4%)	(9.3%)	5.4%	12.0%
Ceridian	03/19/19	656.5	6,986.4	9.4%	0.0%	(0.6%)	(1.7%)	(1.1%)	14.4%
Yext	03/18/19	150.5	2,350.0	6.4%	100.0%	(6.5%)	(6.5%)	2.5%	(26.7%)
eGain	03/14/19	22.0	347.7	6.3%	100.0%	(11.7%)	(11.7%)	0.8%	(34.7%)
ShotSpotter	03/06/19	17.8	517.3	3.4%	64.8%	(2.5%)	(2.5%)	(1.6%)	(41.1%)
Bandwidth	03/06/19	156.0	733.5	21.3%	100.0%	(1.7%)	(6.0%)	12.8%	60.7%
Pluralsight	03/06/19	456.1	4,051.2	11.3%	0.0%	(1.2%)	(11.3%)	(1.0%)	(45.0%)
BlackLine	03/04/19	236.9	2,739.6	8.6%	0.0%	(2.7%)	(2.7%)	(0.5%)	5.0%
Benefitfocus	02/28/19	275.3	1,572.7	17.5%	0.0%	(1.8%)	(16.5%)	(4.6%)	(45.9%)
HubSpot	02/14/19	354.8	6,742.5	5.3%	100.0%	(4.0%)	(4.0%)	0.7%	21.0%
eHealth	01/23/19	133.9	996.1	13.4%	100.0%	(5.5%)	6.7%	12.6%	71.8%
Everbridge	01/15/19	146.1	1,671.4	8.7%	100.0%	(2.0%)	0.0%	(1.8%)	56.0%
Angi Homeservices	12/11/18	24.7	1,244.3	2.0%	0.0%	(1.3%)	(1.3%)	4.3%	(52.7%)
Sabre Corp	11/26/18	581.5	6,929.6	8.4%	0.0%	(0.9%)	(0.9%)	1.6%	(5.3%)
Internap	10/19/18	40.0	222.7	18.0%	100.0%	(14.0%)	(14.0%)	(5.8%)	(76.8%)
Mean:		\$239.6	\$2,745.0	11.1%	60.8%	(3.3%)	(5.5%)	2.5%	1.4%
Median:		\$158.0	\$2,380.7	9.2%	100.0%	(2.5%)	(4.5%)	1.0%	5.6%

■ Indicates Canaccord Genuity Transaction

M&A and Investments by Segment

/ M&A and Investment Summary for All Segments

Transaction Distribution

- A total of 702 deals was announced in September 2019, of which 333 were worth \$25.8 billion in aggregate reported value
- Software accounted for more than 40 percent of transactions with 288 deals announced – 173 of which reported \$9.3 billion in value
- Digital Media/Commerce was the most valuable segment with 105 transactions – 59 of which were valued at \$10.2 billion
- Strategic buyers announced 343 deals (35 reported \$14.4 billion in value)
- VC/Growth Capital investors completed 339 transactions (294 reported \$9.2 billion in value)
- Private Equity buyers announced 20 deals during the month (three reported \$2.3 billion in value)

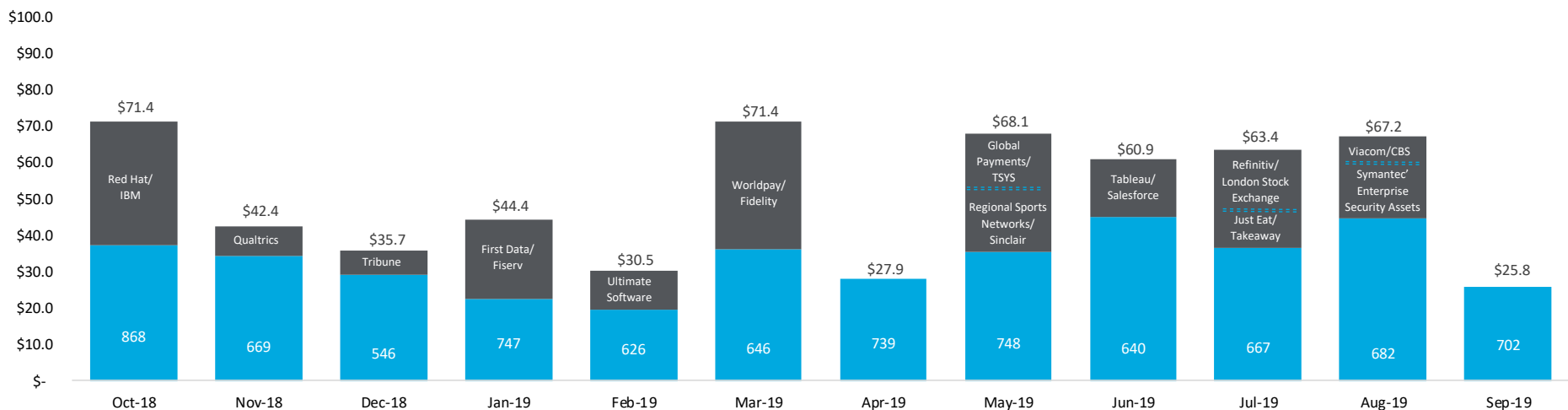
September 2019

	BUYER/INVESTOR BREAKDOWN									
	Transactions		Reported Value		Strategic		Buyout		Venture/Growth Capital	
	#	%	\$MM	%	#	\$MM	#	\$MM	#	\$MM
Software	288	41%	\$9,329.0	36%	95	\$3,001.6	10	\$800.0	183	\$5,527.4
Business Services	112	16%	\$700.0	3%	86	\$158.3	5	-	21	\$541.7
Digital Media/Commerce	105	15%	\$10,217.5	40%	52	\$8,465.7	0	-	53	\$1,751.8
Marketing Technology	93	13%	\$2,264.8	9%	43	\$314.1	2	\$1,000.0	48	\$950.7
Agency & Marketing Services	33	5%	\$29.0	0%	28	\$29.0	0	-	5	-
Traditional Media	27	4%	\$402.3	2%	23	\$349.8	1	-	3	\$52.5
Digital Advertising	23	3%	\$268.9	1%	9	\$93.9	0	-	14	\$175.0
Information	21	3%	\$2,628.6	10%	7	\$2,000.0	2	\$470.0	12	\$158.6
Total	702	100%	25,840.1	100%	343	14,412.4	20	2,270.0	339	9,157.7

/ M&A and Investment Summary for all Segments

Transaction Distribution

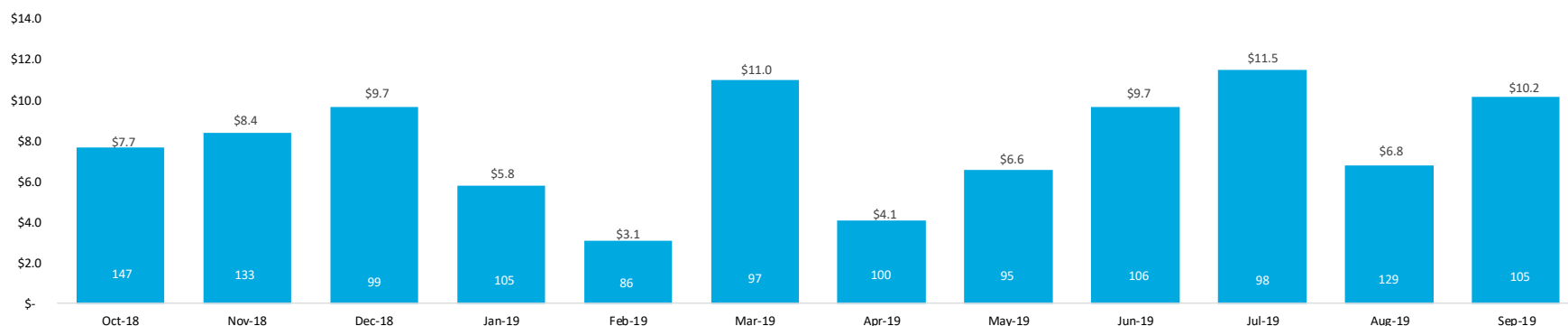
- M&A total deal activity was up flat in September 2019, compared with August
- The largest transactions recorded during the month were:
 - Yahoo Japan's \$3.7 billion acquisition of online fashion group Zozo
 - The \$2.4 billion acquisition of online consumer insurance buying service Assurance IQ by Prudential Financial
 - NetEase's sale of cross-border e-commerce platform Kaola to Alibaba for \$2 billion
 - The sale of web collaboration and publishing platform Acquia to Vista Equity Partners for \$1 billion
 - The \$755 million purchase of engineering simulation software Livermore Software by ANSYS



*Note, transactions valued at \$6 billion or more have been excluded from totals to limit comparative distortions. The aggregate total does not include Carlyle Group's \$6.7 billion acquisition of Sedgwick Management Services, IBM's \$34 billion acquisition of Red Hat, SAP's \$8 billion acquisition of Qualtrics, Nexstar's pending \$6.4 billion acquisition of Tribune Media, Fiserv's \$22 billion acquisition of First Data Corporation, Ultimate Software's \$11 billion sale to a consortium of buyers, and Fidelity's \$35.2 billion acquisition of Worldpay, Disney's pending sale of 21 regional sports networks to Sinclair Broadcast Group for \$10.6 Billion, TSYS' pending \$22.1 billion acquisition of Global Payments, the \$15.7 billion acquisition of Tableau by Salesforce, the pending sale of Refinitiv to London Stock Exchange for \$27 billion, the pending \$6 billion acquisition of Just Eat by Takeaway, CBS' pending purchase of Viacom for \$11.7 Billion, and the \$10.7 billion pending acquisition of Symantec's enterprise security assets by Broadcom

/ Digital Media/Commerce

- Of the 105 transactions recorded in the Digital Media/Commerce segment in September, 59 were announced for \$10.2 billion in reported value
- Excluding the acquisitions of Zozo, Assurance IQ, and Kaola, select Digital Media/Commerce transactions include:
 - Tencent's \$300 million investment in China-based online used goods site Zhuan Zhuan
 - The \$200 million round of funding digital pharmacy Capsule raised from Thrive Capital and Glade Brook Capital
 - The \$50 million round of funding digital media company Group Nine Media raised from Discovery and Axel Springer
 - Fair's purchase of online car subscription platform Canvas
 - Spotify's acquisition of audio collaboration and talent marketplace SoundBetter



DIGITAL MEDIA/COMMERCE								
	2Q19		3Q19		LTM		Sep-19	
	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)
Strategic	128	\$8,695.7	158	\$12,656.0	529	\$33,787.2	52	\$8,465.7
Private Equity - Buyout	9	2,604.2	3	124.0	31	6,751.7	0	0.0
Private Equity - VC/Growth Capital	164	9,121.7	170	9,782.9	739	48,480.9	53	1,751.8
Total	301	\$20,421.6	331	\$22,562.9	1,299	\$89,019.8	105	\$10,217.5

/ Digital Media

(\$ in Millions, except stock price data)

US-Based Digital Media and Internet

Company Name	Stock Price 09/30/19	Change % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
					Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Alphabet Inc.	\$1,221.14	-6%	\$ 845,993.1	\$ 739,163.1	\$ 148,299.0	\$ 43,507.0	29.3%	19.7%	5.0x	17.0x
Apple Inc.	223.97	-4%	1,012,160.7	1,025,964.7	259,034.0	76,545.0	29.6%	1.5%	4.0x	13.4x
Facebook, Inc.	178.08	-15%	508,053.4	467,661.4	62,604.0	26,732.0	42.7%	29.1%	7.5x	17.5x
Fitbit, Inc.	3.81	-45%	984.3	520.3	1,550.2	(96.0)	NM	2.6%	0.3x	NM
Glu Mobile Inc.	4.99	-58%	728.0	663.5	386.4	12.0	3.1%	16.0%	1.7x	55.3x
GoPro, Inc.	5.19	-32%	751.2	839.1	1,198.5	17.0	1.4%	4.2%	0.7x	49.3x
IAC/InterActiveCorp	217.97	-19%	18,374.6	19,388.2	4,501.2	799.5	17.8%	17.4%	4.3x	24.3x
j2 Global, Inc.	90.82	-2%	4,442.7	5,477.8	1,261.1	475.6	37.7%	8.9%	4.3x	11.5x
Leaf Group Ltd.	4.20	-59%	109.5	108.9	156.8	(17.6)	NM	11.0%	0.7x	NM
The Meet Group, Inc.	3.28	-48%	241.4	253.7	199.7	26.7	13.4%	30.7%	1.3x	9.5x
Netflix, Inc.	267.62	-31%	117,173.4	125,847.2	17,630.3	1,955.4	11.1%	27.0%	7.1x	64.4x
Pinterest, Inc.	26.45	-28%	14,354.7	12,659.8	926.5	(1,167.6)	NM	0.0%	13.7x	NM
RealNetworks, Inc.	1.66	-51%	63.2	60.2	117.9	(23.3)	NM	61.9%	0.5x	NM
Remark Holdings, Inc.	1.05	-77%	48.2	66.3	77.5	(15.2)	NM	77.0%	0.9x	NM
Roku, Inc.	101.76	-42%	11,828.0	11,562.9	905.9	(18.9)	NM	49.4%	12.8x	NM
Snap Inc.	15.80	-14%	21,792.5	20,966.5	1,396.0	(1,018.2)	NM	41.5%	15.0x	NM
Twitter, Inc.	41.20	-10%	31,774.2	28,581.7	3,295.2	812.4	24.7%	22.2%	8.7x	35.2x
Upwork Inc.	13.31	-47%	1,474.2	1,391.8	274.6	(8.2)	NM	20.0%	5.1x	NM
Zynga Inc.	5.82	-12%	5,480.3	5,237.1	1,053.8	(40.8)	NM	19.3%	5.0x	NM
Average									5.3x	15.9x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (14.4x) and EBITDA multiples that are 1.0 standard deviations above the mean (49.8x)

/ Digital Media

(\$ in Millions, except stock price data)

Internationally-based Digital Media and Internet

Company Name	Headquarters	Stock Price 09/30/19	Change % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Baidu, Inc.	China	\$102.76	-54%	\$ 35,816.0	\$ 28,553.5	\$ 15,646.0	\$ 3,508.8	22.4%	11.2%	1.8x	8.1x
Bilibili Inc.	* China	14.12	-34%	4,604.9	3,920.3	749.3	(56.6)	NM	53.3%	5.2x	NM
CyberAgent, Inc.	Japan	38.39	-33%	4,835.6	4,753.0	4,169.4	334.1	8.0%	8.6%	1.1x	14.2x
DeNA Co., Ltd.	Japan	17.64	-18%	2,564.2	1,741.9	1,128.0	192.8	17.1%	-11.2%	1.5x	9.0x
Fiverr International Ltd.	* Israel	18.70	-58%	579.6	426.9	90.0	(28.3)	NM	0.0%	4.7x	NM
G5 Entertainment AB (publ)	Sweden	12.88	-60%	115.7	103.0	138.5	11.8	8.5%	-7.7%	0.7x	8.7x
Gree, Inc.	Japan	4.55	-10%	1,047.9	266.9	658.1	59.3	9.0%	-9.0%	0.4x	4.5x
HolidayCheck Group AG	* Germany	2.42	-33%	139.2	118.8	164.3	2.0	1.2%	5.6%	0.7x	60.2x
HUYA Inc.	* China	23.64	-21%	5,157.0	3,846.4	935.4	23.4	2.5%	100.3%	4.1x	NM
International Game Technology PLC	United Kingdom	14.21	-28%	2,905.0	11,777.8	4,799.4	1,395.5	29.1%	-3.5%	2.5x	8.4x
iQIYI, Inc.	China	16.13	-45%	11,696.1	12,120.1	4,083.3	1,213.3	29.7%	34.7%	3.0x	10.0x
mixi, Inc.	Japan	21.03	-22%	1,584.5	304.2	1,208.4	304.7	25.2%	-25.8%	0.3x	1.0x
Meituan, Inc.	* China	0.23	-67%	969.7	634.6	403.2	(108.1)	NM	-1.0%	1.6x	NM
Ncsoft Corporation	South Korea	434.63	-6%	8,956.7	8,010.0	1,359.4	587.9	43.2%	-27.6%	5.9x	13.6x
NAVER Corporation	South Korea	130.97	-2%	19,049.9	18,212.3	5,233.0	912.7	17.4%	17.8%	3.5x	20.0x
NetEase, Inc.	China	266.18	-8%	34,060.6	29,005.9	10,750.0	1,998.4	18.6%	28.3%	2.7x	14.5x
NEXON Co., Ltd.	Japan	12.13	-28%	10,882.7	6,187.7	2,434.1	1,011.7	41.6%	4.4%	2.5x	6.1x
Opera Limited	* Norway	10.05	-33%	1,183.8	1,049.8	204.6	36.6	17.9%	31.0%	5.1x	28.7x
Pacific Online Limited	China	0.23	-9%	251.1	208.1	155.0	33.2	21.4%	8.9%	1.3x	6.3x
Phoenix New Media Limited	* China	2.56	-50%	186.3	20.6	205.1	(38.7)	NM	-8.2%	0.1x	NM
Renren Inc.	* China	0.81	-67%	56.4	148.7	474.6	(96.3)	NM	65.0%	0.3x	NM
Sea Limited	* Singapore	30.95	-19%	13,771.8	12,109.6	1,276.2	(939.0)	NM	128.9%	9.5x	NM
Sogou Inc.	China	4.94	-33%	1,933.3	820.8	1,130.7	73.3	6.5%	4.2%	0.7x	11.2x
Spotify Technology S.A.	* Luxembourg	114.00	-37%	20,490.4	19,511.8	6,855.9	72.8	1.1%	31.2%	2.8x	NM
Tencent Music Entertainment	* China	12.77	-36%	20,880.9	18,012.6	3,203.5	530.0	16.5%	45.6%	5.6x	34.0x
Weibo Corporation	China	44.75	-40%	10,070.3	9,409.2	1,773.1	652.7	36.8%	20.3%	5.3x	14.4x
Wemade Co., Ltd.	* South Korea	25.65	-43%	420.7	373.6	107.8	(37.9)	NM	7.2%	3.5x	NM
Yandex N.V.	Netherlands	35.01	-17%	11,444.7	10,892.7	2,381.1	608.1	25.5%	39.6%	4.6x	17.9x
YY Inc.	China	56.23	-37%	4,546.4	2,476.9	2,885.7	328.0	11.4%	44.2%	0.9x	7.6x
Average										3.2x	12.4x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (7.3x) and EBITDA multiples that are 1.0 standard deviations above the mean (28.2x)

/ E-commerce

(\$ in Millions, except stock price data)

US-based e-commerce

Company Name	Stock Price 09/30/19	Change % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
					Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
1-800-FLOWERS.COM, Inc.	\$14.80	-32%	\$ 955.0	\$ 879.0	\$ 1,248.6	\$ 75.8	6.1%	8.4%	0.7x	11.6x
Alphabet Inc.	1,221.14	-6%	845,993.1	739,163.1	148,299.0	43,507.0	29.3%	19.7%	5.0x	17.0x
Amazon.com, Inc.	1,735.91	-15%	858,678.3	888,829.3	252,063.0	33,110.0	13.1%	21.1%	3.5x	26.8x
Apple Inc.	223.97	-4%	1,012,160.7	1,025,964.7	259,034.0	76,545.0	29.6%	1.5%	4.0x	13.4x
Blucora, Inc.	21.64	-44%	1,057.2	1,344.1	616.2	121.9	19.8%	11.7%	2.2x	11.0x
Blue Apron Holdings, Inc.	8.43	-66%	110.3	169.2	552.4	(24.9)	NM	-28.7%	0.3x	NM
Booking Holdings Inc.	1,962.61	-6%	83,434.3	85,935.3	14,749.0	5,666.0	38.4%	7.6%	5.8x	15.2x
CarGurus, Inc.	30.95	-44%	3,453.4	3,365.5	525.5	29.9	5.7%	37.4%	6.4x	NM
Carvana Co.	66.00	-22%	3,285.0	4,360.4	2,861.2	(201.8)	NM	115.8%	1.5x	NM
CDW Corporation	123.24	-1%	17,834.6	21,543.5	17,035.8	1,308.9	7.7%	10.1%	1.3x	16.5x
Chegg, Inc.	29.95	-38%	3,583.6	3,661.5	361.2	30.4	8.4%	25.7%	10.1x	NM
Chewy, Inc.	24.58	-41%	9,797.6	9,863.4	4,226.2	(235.7)	NM	0.0%	2.3x	NM
Copart, Inc.	80.33	-4%	18,656.7	18,871.6	2,042.0	801.4	39.2%	13.1%	9.2x	23.5x
eBay Inc.	38.98	-7%	32,695.0	38,216.0	10,856.0	3,141.0	28.9%	4.1%	3.5x	12.2x
Etsy, Inc.	56.50	-23%	6,806.0	6,548.5	700.8	129.3	18.4%	41.3%	9.3x	50.7x
Expedia Group, Inc.	134.41	-7%	22,886.0	23,882.0	11,597.0	1,390.0	12.0%	8.7%	2.1x	17.2x
Grubhub Inc.	56.21	-59%	5,135.0	5,372.2	1,183.8	114.7	9.7%	40.9%	4.5x	46.8x
IAC/InterActiveCorp	217.97	-19%	18,374.6	19,388.2	4,501.2	799.5	17.8%	17.4%	4.3x	24.3x
Liberty TripAdvisor Holdings, Inc.	9.41	-54%	705.8	3,950.8	1,602.0	320.0	20.0%	2.0%	2.5x	12.3x
Liquidity Services, Inc.	7.40	-19%	249.0	182.6	220.4	(13.1)	NM	-5.5%	0.8x	NM
Lyft, Inc.	40.84	-54%	11,958.8	9,036.1	2,897.8	(2,295.8)	NM	0.0%	3.1x	NM
Match Group, Inc.	71.44	-25%	20,073.1	21,461.4	1,863.9	615.1	33.0%	20.2%	11.5x	34.9x
Overstock.com, Inc.	10.59	-64%	373.7	377.1	1,634.6	(130.5)	NM	-9.6%	0.2x	NM
Peloton Interactive, Inc.	25.10	-10%	6,971.8	7,534.8	915.0	(188.9)	NM	110.3%	8.2x	NM
PetMed Express, Inc.	18.02	-46%	360.8	277.5	276.0	38.8	14.1%	-2.0%	1.0x	7.1x
Qurate Retail, Inc.	10.32	-59%	4,306.1	11,896.1	13,803.0	1,934.0	14.0%	13.3%	0.9x	6.2x
Revolve Group, Inc.	23.37	-52%	1,609.5	1,564.7	552.9	47.8	8.6%	23.8%	2.8x	32.7x
Shutterstock, Inc.	36.12	-34%	1,274.8	1,072.0	638.7	56.2	8.8%	6.0%	1.7x	19.1x
SmileDirectClub, Inc.	13.88	-34%	1,462.8	1,943.9	586.5	(62.9)	NM	0.0%	3.3x	NM
Spark Networks SE	5.53	-69%	143.8	142.1	114.7	5.8	5.1%	4.4%	1.2x	24.4x
Stamps.com Inc.	74.45	-67%	1,277.9	1,261.3	588.5	174.0	29.6%	13.0%	2.1x	7.2x
Stitch Fix, Inc.	19.25	-49%	1,942.0	1,650.4	1,463.7	43.1	2.9%	25.5%	1.1x	38.3x
Uber Technologies, Inc.	30.47	-35%	51,799.1	46,234.1	12,183.0	(7,641.0)	NM	0.0%	3.8x	NM
U.S. Auto Parts Network, Inc.	1.55	-14%	55.5	69.0	282.5	(4.6)	NM	-5.1%	0.2x	NM
Wayfair Inc.	112.12	-35%	10,352.9	11,154.7	8,007.7	(541.8)	NM	40.6%	1.4x	NM
Average									4.2x	18.6x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (9.5x) and EBITDA multiples that are 1.0 standard deviations above the mean (33.9x)

/ E-commerce

(\$ in Millions, except stock price data)

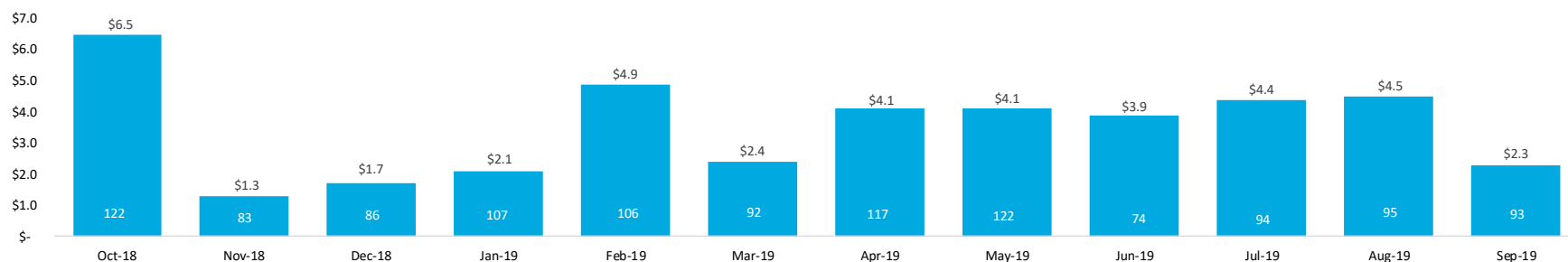
Internationally-based e-commerce

		Stock Price	Change % From	Equity	Enterprise	Last Twelve Months				Last Twelve Months Multiples	
Company Name	Headquarters	09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
58.com Inc.	China	\$49.31	-34%	\$ 7,331.2	\$ 6,523.5	\$ 2,096.7	\$ 440.9	21.0%	26.4%	3.1x	14.8x
Alibaba Group Holding Limited	China	167.23	-15%	435,395.2	440,593.9	59,825.8	17,136.6	28.6%	46.2%	7.4x	25.7x
Cango Inc.	China	5.38	-54%	814.6	787.3	188.5	42.7	22.7%	20.4%	4.2x	18.4x
Cnova N.V.	* Netherlands	3.25	-31%	1,121.7	1,788.8	2,504.9	43.1	1.7%	2.0%	0.7x	41.5x
Despegar.com, Corp.	Argentina	11.32	-40%	766.3	475.4	542.1	70.8	13.1%	-9.3%	0.9x	6.7x
Farfetch Limited	* United Kingdom	8.64	-73%	2,590.8	2,027.1	713.4	(255.8)	NM	46.9%	2.8x	NM
JD.com, Inc.	* China	28.21	-13%	41,154.8	37,903.6	74,404.1	1,033.4	1.4%	22.7%	0.5x	36.7x
Jumei International Holding Limited	* China	2.12	-24%	251.4	(80.2)	623.6	(13.4)	NM	-26.3%	NM	6.0x
Julia Technologies AG	* Germany	7.93	-84%	621.8	254.0	169.0	(228.7)	NM	0.0%	1.5x	NM
LightInTheBox Holding Co., Ltd.	* China	1.20	-34%	80.7	123.1	211.1	(30.1)	NM	-28.3%	0.6x	NM
MercadoLibre, Inc.	* Argentina	551.23	-21%	27,401.6	25,875.9	1,802.3	42.0	2.3%	36.6%	14.4x	NM
MOGU Inc.	* China	2.51	-90%	269.0	56.2	155.4	(46.0)	NM	10.6%	0.4x	NM
PChome Online Inc.	* Taiwan	4.17	-21%	488.3	439.1	1,179.9	0.7	0.1%	15.5%	0.4x	NM
Pinduoduo Inc.	* China	32.22	-13%	37,451.1	32,870.1	3,037.8	(1,004.8)	NM	266.2%	10.8x	NM
Rakuten, Inc.	Japan	9.85	-19%	13,340.2	15,690.1	10,910.3	1,737.3	15.9%	15.7%	1.4x	9.0x
Secoo Holding Limited	China	6.70	-49%	336.6	472.4	910.5	33.7	3.7%	41.6%	0.5x	14.0x
trivago N.V.	Germany	4.11	-45%	1,446.1	1,319.7	970.2	80.1	8.3%	-11.5%	1.4x	16.5x
Uxin Limited	* China	2.45	-75%	719.2	945.8	533.7	(216.8)	NM	45.1%	1.8x	NM
Vipshop Holdings Limited	China	8.92	-10%	5,955.6	5,226.7	12,810.9	550.7	4.3%	9.9%	0.4x	9.5x
X Financial	China	2.27	-77%	356.0	278.8	477.4	162.8	34.1%	6.0%	0.6x	1.7x
Average										6.4x	24.7x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (10.6x) and EBITDA multiples that are 1.0 standard deviations above the mean (29.0x)

/ Marketing Technology

- The Marketing Technology segment announced 93 transactions in September, of which 46 were reported for \$2.3 billion in value
- In addition to Vista Equity Partners' purchase of Acquia, select Marketing Technology transactions include:
 - The \$300 million investment web publishing company Automattic received from Salesforce Ventures, Insight, Tiger Global, and True Ventures
 - Kerridge Commercial System's acquisition of automotive aftermarket software MAM Software for \$154 million
 - The sale of sales enablement platform iPresent to Mediafly
 - Merck's sale of patient engagement and analytics platform Aptus Health to WebMD for an undisclosed amount
 - The purchase of business intelligence and analytics platform Arcadia Data by Cloudera
 - McDonald's acquisition of customer service applications developer Apprente



MARKETING TECHNOLOGY

	2Q19		3Q19		LTM		Sep-19	
	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)
Strategic	148	\$4,510.0	82	\$3,539.7	82	\$3,539.7	43	\$314.1
Private Equity - Buyout	10	2,470.0	13	3,320.0	42	10,227.9	2	1,000.0
Private Equity - VC/Growth Capital	157	3,040.5	141	2,801.8	613	14,300.0	48	950.7
Total	315	\$10,020.5	236	\$9,661.5	737	\$28,067.6	93	\$2,264.8

/ Marketing Technology

(\$ in Millions, except stock price data)

US-based Marketing Technology

Company Name	Stock Price 09/30/19	Change % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
					Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Adobe Inc.	\$276.25	-12%	\$ 133,726.72	\$ 134,212.94	\$ 10,643.98	\$ 3,566.51	33.5%	24.2%	12.6x	37.6x
AppFolio, Inc.	95.14	-13%	3,238.9	3,271.6	221.2	17.9	8.1%	33.8%	14.8x	182.5x
Blackbaud, Inc.	90.34	-10%	4,328.2	4,974.9	872.2	119.4	13.7%	5.1%	5.7x	41.7x
Brightcove Inc.	10.48	-19%	401.2	398.2	171.4	(6.1)	NM	5.5%	2.3x	NM
Cardlytics, Inc.	33.52	-15%	815.9	820.2	167.1	(27.8)	NM	20.3%	4.9x	NM
ChannelAdvisor Corporation	9.33	-35%	261.6	230.5	130.6	1.5	1.2%	1.8%	1.8x	150.8x
Cision Ltd.	7.69	-54%	1,141.1	2,432.1	739.9	217.2	29.3%	6.4%	3.3x	11.2x
Eventbrite, Inc.	17.71	-52%	1,466.2	1,055.1	311.6	(33.0)	NM	22.0%	3.4x	NM
eBay Inc.	38.98	-7%	32,695.0	38,216.0	10,856.0	3,141.0	28.9%	4.1%	3.5x	12.2x
Endurance International Group	3.75	-63%	547.7	2,331.9	1,125.1	288.6	25.7%	-3.7%	2.1x	8.1x
Five9, Inc.	53.74	-18%	3,259.3	3,173.7	289.6	19.6	6.8%	28.4%	11.0x	161.6x
GoDaddy Inc.	65.98	-20%	11,676.5	13,166.8	2,822.5	335.4	11.9%	14.3%	4.7x	39.3x
HubSpot, Inc.	151.61	-27%	6,443.5	6,068.0	590.9	(33.6)	NM	33.9%	10.3x	NM
IBM Corporation	145.42	-6%	128,824.0	160,982.0	77,859.0	17,207.0	22.1%	-3.6%	2.1x	9.4x
LivePerson, Inc.	35.70	-13%	2,242.8	2,211.8	267.3	(26.8)	NM	14.3%	8.3x	NM
Marin Software Incorporated	2.56	-79%	17.0	20.1	54.9	(14.7)	NM	-16.3%	0.4x	NM
Medallia, Inc.	27.43	-39%	3,499.9	3,082.4	356.8	(52.4)	NM	0.0%	8.6x	NM
MicroStrategy Incorporated	148.37	-3%	1,519.2	1,061.8	487.2	(2.6)	NM	-3.7%	2.2x	NM
Nuance Communications, Inc.	16.31	-10%	4,658.8	5,909.2	2,041.2	429.9	21.1%	11.6%	2.9x	13.7x
Oracle Corporation	55.03	-9%	180,636.9	202,294.9	39,531.0	16,168.0	40.9%	0.1%	5.1x	12.5x
PayPal Holdings, Inc.	103.59	-15%	121,891.8	116,482.8	16,342.0	2,989.0	18.3%	12.5%	7.1x	39.0x
PROS Holdings, Inc.	59.60	-21%	2,397.3	2,312.1	221.7	(36.1)	NM	20.7%	10.4x	NM
salesforce.com, inc.	148.44	-11%	129,936.8	130,326.8	14,729.0	2,064.0	14.0%	24.3%	8.8x	63.1x
Servion S.A.	0.12	-98%	8.4	267.5	1,676.8	70.0	4.2%	-31.6%	0.2x	3.8x
SharpSpring, Inc.	9.70	-54%	106.2	95.7	20.9	(8.2)	NM	32.0%	4.6x	NM
SVMK Inc.	17.10	-14%	2,275.6	2,427.2	276.9	(118.2)	NM	18.6%	8.8x	NM
Square, Inc.	61.95	-38%	26,460.7	26,327.4	3,948.2	34.5	0.9%	47.1%	6.7x	NM
GlobalData Plc	10.21	-5%	1,204.5	1,319.7	217.4	38.7	17.8%	25.0%	6.1x	34.1x
Teradata Corporation	31.00	-37%	3,537.1	3,563.1	2,060.0	150.0	7.3%	-6.4%	1.7x	23.8x
Verint Systems Inc.	42.78	-33%	2,856.5	3,369.3	1,273.8	178.8	14.0%	6.6%	2.6x	18.8x
Veritone, Inc.	3.57	-66%	79.3	34.1	42.9	(58.8)	NM	171.9%	0.8x	NM
Zoom Video Communications, Inc.	76.20	-29%	20,844.7	20,142.8	463.7	19.8	4.3%	0.0%	43.4x	NM
Zendesk, Inc.	72.88	-23%	8,088.5	8,252.6	703.1	(123.5)	NM	39.0%	11.7x	NM
Adjusted Weighted Average									6.9x	30.0x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (22.0x) and EBITDA multiples that are 1.0 standard deviations above the mean (106.7x)

/ Marketing Technology

(\$ in Millions, except stock price data)

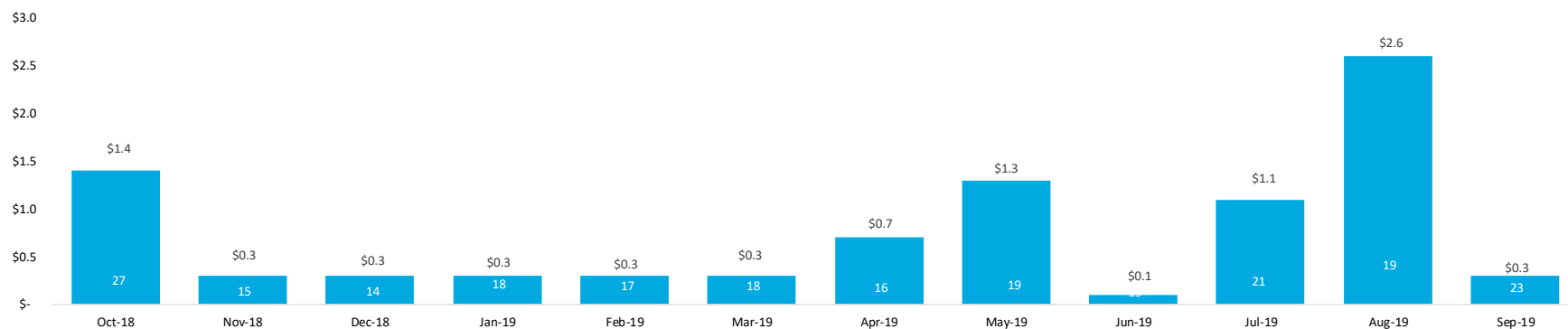
Internationally-based Marketing Technology

Company Name	Headquarters	Stock Price 09/30/19	Change % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Baozun Inc.	China	\$42.70	-24%	\$ 2,660.34	\$ 2,664.39	\$ 917.91	\$ 70.43	7.7%	39.0%	2.9x	37.8x
Bitauto Holdings Limited	China	14.97	-41%	1,050.4	4,608.0	1,655.7	103.7	6.3%	16.4%	2.8x	44.5x
ChinaCache International Holdings Ltd.	China	0.04	-98%	1.07	51.46	130.12	(31.96)	NM	-7.8%	0.4x	NM
MercadoLibre, Inc.	Argentina	551.23	-21%	27,401.6	25,875.9	1,802.3	42.0	2.3%	36.6%	14.4x	NM
Open Text Corporation	Canada	40.81	-8%	10,986.4	12,661.5	2,868.8	888.6	31.0%	1.9%	4.4x	14.2x
Shopify Inc.	Canada	311.66	-24%	35,943.0	34,044.2	1,296.4	(93.8)	NM	51.9%	26.3x	NM
The Sage Group plc	United Kingdom	8.50	-16%	9,261.2	9,780.2	2,479.5	682.4	27.5%	7.3%	3.9x	14.3x
United Internet AG	Germany	35.69	-21%	7,111.5	9,655.9	5,869.1	1,336.6	22.8%	7.4%	1.6x	7.2x
Weborama SA	France	4.49	-53%	18.3	15.1	42.5	(1.9)	NM	3.5%	0.4x	NM
Wix.com Ltd.	Israel	116.74	-25%	5,971.5	5,629.3	679.5	(34.5)	NM	32.3%	8.3x	NM
Adjusted Weighted Average										4.3x	18.4x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (24.7x) and EBITDA multiples that are 1.0 standard deviations above the mean (40.0x)

/ Digital Advertising

- A total of 23 transactions was announced in the Digital Advertising segment
- VC/Growth Capital transactions represented more than half of segment activity in September 2019
- Select transactions in the segment include:
 - The purchase of live streaming monetization company Streamlabs for \$89 million by Logitech
 - The \$16 million round of funding gambling and I-Gaming industry-focused affiliate site Gambling.com Group raised from Edison Partners
 - SITO Mobile's purchase of mobile marketing and customer engagement platform MediaJel
 - The investment Twin Point Capital made in video monitoring platform Stealth Monitoring



DIGITAL ADVERTISING

	2Q19		3Q19		LTM		Sep-19	
	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)
Strategic	33	\$683.0	30	\$958.9	125	\$2,610.1	9	\$93.9
Private Equity - Buyout	1	1,000.0	0	0.0	7	1,136.0	0	0.0
Private Equity - VC/Growth Capital	19	377.7	33	3,013.0	94	5,025.5	14	175.0
Total	53	\$2,060.7	63	\$3,971.9	226	\$8,771.6	23	\$268.9

/ Digital Advertising

(\$ in Millions, except stock price data)

US-based Digital Advertising

Company Name	Stock Price	Change % From	Equity	Enterprise	Last Twelve Months			Last Twelve Months Multiples		
	09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Alliance Data Systems Corporation	\$128.13	-46%	\$ 5,900.0	\$ 27,279.3	\$ 7,695.0	\$ 1,779.5	23.1%	13.2%	3.5x	15.3x
Alphabet Inc.	1,221.14	-6%	845,993.1	739,163.1	148,299.0	43,507.0	29.3%	19.7%	5.0x	17.0x
ANGI Homeservices Inc.	7.09	-69%	3,595.2	3,632.1	1,229.4	220.4	17.9%	28.7%	3.0x	16.5x
AutoWeb, Inc.	3.10	-38%	40.8	42.8	122.7	(14.6)	NM	-6.9%	0.3x	NM
Care.com, Inc.	10.45	-60%	342.4	298.8	203.3	12.8	6.3%	11.7%	1.5x	23.4x
CarGurus, Inc.	*	-44%	3,453.4	3,365.5	525.5	29.9	5.7%	37.4%	6.4x	112.7x
DHI Group, Inc.	3.85	-13%	193.6	213.1	151.4	23.7	15.6%	-19.5%	1.4x	9.0x
EverQuote, Inc.	21.34	-15%	550.7	513.6	189.4	(16.7)	NM	29.5%	2.7x	NM
Facebook, Inc.	178.08	-15%	508,053.4	467,661.4	62,604.0	26,732.0	42.7%	29.1%	7.5x	17.5x
Fluent, Inc.	2.74	-63%	210.0	253.8	274.5	33.0	12.0%	22.3%	0.9x	7.7x
Groupon, Inc.	2.66	-33%	1,509.9	1,296.0	2,503.8	128.9	5.1%	-9.0%	0.5x	10.1x
Inuvo, Inc.	0.27	-85%	13.2	15.9	63.3	(4.4)	NM	-24.2%	0.3x	NM
LendingTree, Inc.	310.43	-29%	4,032.2	4,374.0	940.5	117.2	12.5%	34.8%	4.7x	37.3x
QuinStreet, Inc.	12.59	-37%	641.7	579.1	455.2	26.1	5.7%	12.6%	1.3x	22.2x
Quotient Technology Inc.	7.82	-50%	693.6	611.4	413.4	15.0	3.6%	17.7%	1.5x	40.7x
Redfin Corporation	16.84	-28%	1,546.5	1,477.4	572.3	(80.7)	NM	33.8%	2.6x	NM
Snap Inc.	*	-14%	21,792.5	20,966.5	1,396.0	(1,018.2)	NM	41.5%	15.0x	NM
Telaria, Inc.	6.91	-35%	317.3	290.5	65.0	(9.5)	NM	30.6%	4.5x	NM
The Rubicon Project, Inc.	8.71	-20%	461.5	390.7	141.4	(11.3)	NM	17.7%	2.8x	NM
The Trade Desk, Inc.	*	-35%	8,436.7	8,294.2	560.2	121.5	21.7%	47.4%	14.8x	68.3x
TiVo Corporation	7.62	-42%	950.7	1,679.8	667.6	148.4	22.2%	-13.8%	2.5x	11.3x
Travelzoo	10.69	-53%	125.5	127.7	111.4	12.3	11.1%	0.7%	1.1x	10.4x
TripAdvisor, Inc.	38.68	-44%	5,388.1	4,592.1	1,602.0	264.0	16.5%	2.0%	2.9x	17.4x
TrueCar, Inc.	3.40	-76%	361.0	231.2	358.3	(38.2)	NM	7.1%	0.6x	NM
Twitter, Inc.	41.20	-10%	31,774.2	28,581.7	3,295.2	812.4	24.7%	22.2%	8.7x	35.2x
Yelp Inc.	34.75	-29%	2,468.2	2,309.8	967.7	58.8	6.1%	7.4%	2.4x	39.3x
Yext, Inc.	15.89	NA	1,791.6	1,633.1	263.5	(81.4)	NM	32.9%	6.2x	NM
Zillow Group, Inc.	29.55	-42%	6,143.3	6,090.6	1,762.1	(84.4)	NM	48.2%	3.5x	NM
Average									7.3x	18.7x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (11.9x) and EBITDA multiples that are 1.0 standard deviations above the mean (56.5x)

/ Digital Advertising

(\$ in Millions, except stock price data)

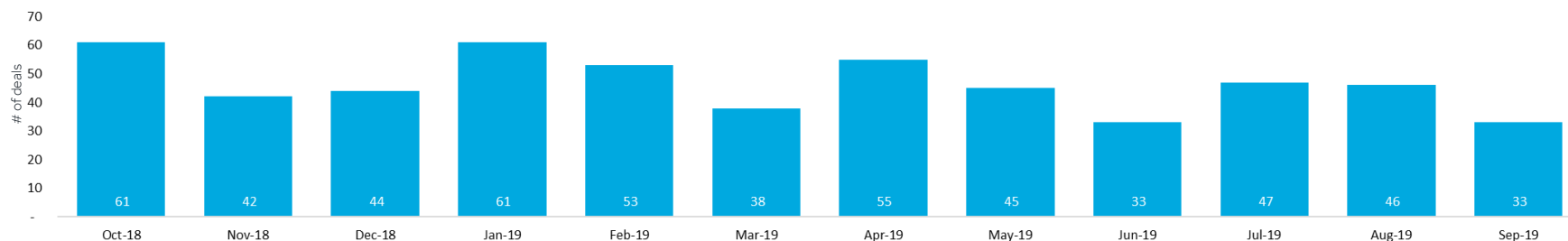
Internationally-based Digital Advertising

Company Name	Headquarters	Stock Price	Change % From	Equity	Enterprise	Last Twelve Months				Last Twelve Months Multiples	
		09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Clq Digital AG	Germany	\$2.42	-50%	\$ 15.0	\$ 25.2	\$ 63.6	\$ 3.8	6.0%	-15.5%	0.4x	6.6x
Criteo S.A.	France	18.69	-39%	1,218.1	1,025.1	2,285.2	216.9	9.5%	-2.3%	0.4x	4.7x
iClick Interactive Asia Group Limited	Hong Kong	3.00	-49%	171.1	191.5	170.7	(26.5)	NM	15.7%	1.1x	NM
MakeMyTrip Limited	India	22.69	-30%	2,336.8	2,100.9	490.3	(129.9)	NM	-21.0%	4.3x	NM
Matomy Media Group Ltd.	Israel	0.03	-93%	2.6	14.8	68.0	8.7	12.8%	-36.9%	0.2x	1.7x
Metaps Inc.	Japan	9.37	-61%	127.1	99.0	117.7	22.4	19.1%	-36.8%	0.8x	4.4x
Pacific Online Limited	China	0.23	-9%	251.1	208.1	155.0	33.2	21.4%	8.9%	1.3x	6.3x
Perion Network Ltd.	Israel	4.89	-31%	126.4	130.5	246.6	23.6	9.6%	-7.3%	0.5x	5.5x
Rightmove plc	* United Kingdom	6.77	-6%	5,956.4	5,905.3	356.6	269.3	75.5%	10.1%	16.6x	21.9x
Septeni Holdings Co., Ltd.	* Japan	2.92	-27%	369.6	232.3	152.1	1.4	0.9%	6.5%	1.5x	170.3x
Tencent Holdings Limited	China	42.11	-18%	399,949.4	408,895.8	49,476.8	18,014.5	36.4%	21.9%	8.3x	22.7x
TradeDoubler AB (publ)	Sweden	0.34	-40%	15.2	26.1	129.1	3.0	2.4%	6.7%	0.2x	8.6x
XLMedia PLC	Cyprus	0.75	-44%	137.6	110.4	113.1	34.0	30.1%	-3.2%	1.0x	3.2x
Yandex N.V.	Netherlands	35.01	-17%	11,444.7	10,892.7	2,381.1	608.1	25.5%	39.6%	4.6x	17.9x
Average										3.0x	22.8x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (12.0x) and EBITDA multiples that are 1.0 standard deviations above the mean (69.8x)

/ Agency & Marketing Services

- A total of 33 transactions was announced in the Agency & Marketing Services segment
- Strategic transactions accounted for 85 percent of segment activity
- Select transactions include:
 - The investment digital marketing agency Prophet received from Gladstone Capital and Comerica Bank (A CG Petsky Prunier-Led Transaction)
 - Accenture's purchase of Mexico-based service design and research company Insitum
 - Havas Group's acquisitions of France-based creative agency Buzzman and India-based digital marketing agency Langoor
 - The acquisition of commerce-focused digital transformation agency Mediotype by Blue Acorn iCi
 - Infobean's purchase of UX consulting company Philosophie Group



Note: Deal values are not included in chart, as the majority of Agency & Marketing Services transactions were reported without a value

AGENCY/MARKETING SERVICES								
	2Q19		3Q19		LTM		Sep-19	
	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)
Strategic	115	\$5,897.0	111	\$293.0	498	\$7,075.2	28	\$29.0
Private Equity - Buyout	7	718.9	4	3,170.9	23	2,167.8	0	0.0
Private Equity - VC/Growth Capital	11	62.4	11	939.0	37	1,080.1	5	0.0
Total	133	\$6,678.3	126	\$4,402.9	558	\$10,323.1	33	\$29.0

(\$ in Millions, except stock price data)

Company Name	Headquarters	Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months				Last Twelve Months Multiples	
		09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Cello Health plc	United Kingdom	\$1.56	-9%	\$ 165.7	\$ 175.9	\$ 213.4	\$ 17.3	8.1%	-0.5%	0.8x	10.2x
Dentsu Inc.	Japan	35.20	-34%	9,923.1	12,718.4	9,592.5	1,528.2	15.9%	NM	1.3x	8.3x
Enero Group Limited	Australia	1.41	-10%	120.4	92.4	161.4	16.0	9.9%	40.7%	0.6x	5.8x
Hakuhodo DY Holdings Inc	Japan	14.44	-24%	5,390.1	5,235.5	13,496.5	604.4	4.5%	7.1%	0.4x	8.7x
Huntsworth plc	United Kingdom	1.05	-29%	387.2	586.2	312.9	55.3	17.7%	20.1%	1.9x	10.6x
M&C Saatchi plc	United Kingdom	2.14	-57%	196.2	241.3	538.5	27.9	5.2%	23.5%	0.4x	8.7x
MDC Partners Inc.	United States	2.82	-32%	202.9	1,604.8	1,460.4	165.4	11.3%	-1.7%	1.1x	9.7x
Next Fifteen Communications Group	United Kingdom	6.15	-25%	524.8	529.9	354.0	52.5	14.8%	14.3%	1.5x	10.1x
Omnicom Group Inc.	United States	78.30	-8%	17,032.1	22,208.0	14,989.7	2,323.3	15.5%	-2.6%	1.5x	9.6x
OPT Holding, Inc.	* Japan	15.17	-53%	347.4	305.0	790.1	11.2	1.4%	-1.4%	0.4x	27.1x
Publicis Groupe S.A.	France	49.20	-20%	11,658.1	14,269.6	10,368.7	2,049.4	19.8%	2.0%	1.4x	7.0x
The Interpublic Group of Companies,	United States	21.56	-14%	8,348.5	13,452.7	8,440.1	1,354.3	16.0%	9.8%	1.6x	9.9x
UDG Healthcare plc	Ireland	9.23	-10%	2,301.5	2,366.6	1,296.5	167.2	12.9%	-1.5%	1.8x	14.2x
WPP plc	United Kingdom	12.52	-12%	15,800.8	24,436.5	19,983.6	2,099.0	10.5%	0.5%	1.2x	11.6x
Adjusted Weighted Average										1.3x	9.6x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (2.2x) and EBITDA multiples that are 1.0 standard deviations above the mean (15.9x)

/ Marketing Services

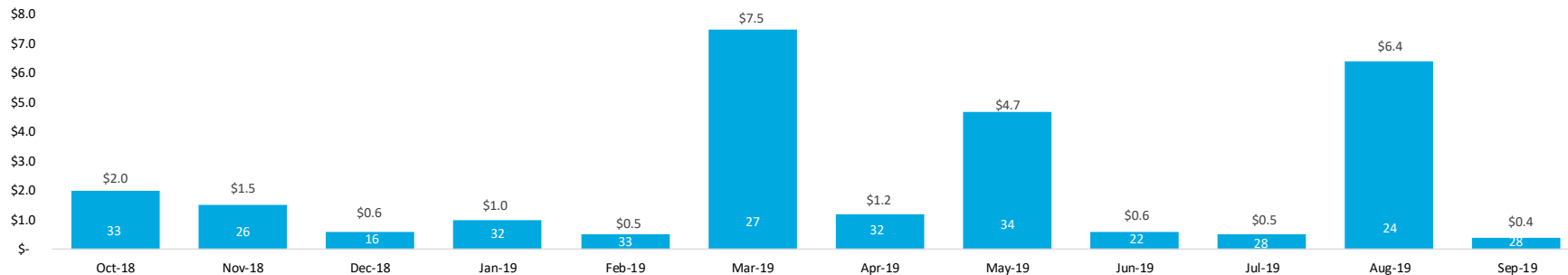
(\$ in Millions, except stock price data)

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months				Last Twelve Months Multiples	
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Aimia Inc.	Canada	2.55	-25%	277.0	116.8	110.9	(44.8)	NM	NM	1.1x	NM
Alliance Data Systems Corporation	United States	128.13	-46%	5,900.0	27,279.3	7,695.0	1,779.5	23.1%	13.2%	3.5x	15.3x
Dolphin Entertainment, Inc.	United States	0.84	-69%	12.0	25.7	24.1	(1.9)	NM	-3.6%	1.1x	NM
Fluent, Inc.	United States	2.74	-63%	210.0	253.8	274.5	33.0	12.0%	22.3%	0.9x	7.7x
CSG Systems International, Inc.	United States	51.68	-10%	1,644.9	1,972.0	951.0	159.5	16.8%	16.1%	2.1x	12.4x
Deluxe Corporation	United States	49.16	-12%	2,110.5	3,040.6	2,010.9	427.7	21.3%	1.9%	1.5x	7.1x
Fair Isaac Corporation	* United States	303.52	-19%	8,770.7	9,514.5	1,143.6	291.6	25.5%	14.7%	8.3x	32.6x
Harte Hanks, Inc.	United States	3.05	-62%	19.2	33.7	247.6	(14.7)	NM	-28.2%	0.1x	NM
High Co. SA	France	5.89	-4%	122.9	78.5	198.7	22.1	11.1%	7.2%	0.4x	3.6x
Pitney Bowes Inc.	United States	4.57	-47%	781.0	3,394.4	3,489.7	485.7	13.9%	2.3%	1.0x	7.0x
Points International Ltd.	Canada	10.98	-26%	146.9	93.3	385.4	18.9	4.9%	5.1%	0.2x	4.9x
Viad Corp	United States	67.15	-7%	1,363.9	1,774.9	1,343.0	123.8	9.2%	6.8%	1.3x	14.3x
Adjusted Weighted Average										2.4x	12.5x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (6.3x) and EBITDA multiples that are 1.0 standard deviations above the mean (20.5x)

/ Traditional Media

- Of the 27 transactions recorded in the Traditional Media segment in September, four were reported for \$402million in aggregate value
- Entertainment Media was the most active subsegment, accounting for more than one-third of segment activity
 - The purchase of B-to-B media company Industry Dive by Falfurrias Capital Partners (A CG Petsky Prunier-Led Transaction)
 - The \$280 million acquisition of Portugal-based TV channel operator Media Capital by Cofina
 - Ocean Outdoor's \$69.4 million purchase of digital out-of-home company Visual Art Media
 - Vox's acquisition of New York Media, which owns biweekly print magazine New York, along with the websites The Cut, Grub Street, Intelligencer, The Strategist, and Vulture, in an all-stock transaction



	2Q19		3Q19		LTM		Sep-19	
	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)
Strategic	75	\$5,642.3	70	\$7,138.5	281	\$23,681.9	23	\$349.8
Private Equity - Buyout	3	740.8	3	470.0	19	2,270.8	1	0.0
Private Equity - VC/Growth Capital	8	211.0	8	244.5	34	1,555.5	3	52.5
Total	86	\$6,594.1	81	\$7,853.0	334	\$27,508.2	27	\$402.3

/ Traditional Media

(\$ in Millions, except stock price data)

Large Cap Diversified Media

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
CBS Corporation	United States	\$40.37	-32%	\$ 15,193.3	\$ 25,352.3	\$ 15,263.0	\$ 3,123.0	20.5%	6.6%	1.7x	8.1x
Discovery, Inc.	United States	26.63	-24%	18,025.2	36,000.2	10,993.0	5,056.0	46.0%	26.8%	3.3x	7.1x
Fox Corporation	United States	31.54	-24%	19,571.6	23,288.6	11,389.0	2,681.0	23.5%	12.2%	2.0x	8.7x
Viacom Inc.	United States	24.03	-29%	9,803.8	18,332.8	12,890.0	3,024.0	23.5%	0.9%	1.4x	6.1x
The Walt Disney Company	* United States	130.32	-11%	234,755.7	301,042.7	64,776.0	16,542.0	25.5%	11.9%	4.6x	18.2x
Adjusted Weighted Average										4.1x	7.7x

* Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (5.3x) and EBITDA multiples that are 1.0 standard deviations above the mean (14.5x)

(\$ in Millions, except stock price data)

B-to-B Media

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Ascential plc	United Kingdom	\$4.66	-10%	\$ 1,875.7	\$ 2,041.4	\$ 503.0	\$ 124.2	24.7%	25.0%	4.1x	16.4x
Centaur Media Plc	United Kingdom	\$0.52	-28%	75.1	59.9	88.4	7.1	8.0%	24.7%	0.7x	8.4x
Emerald Expositions Events, Inc.	United States	\$9.73	-40%	700.4	1,240.8	400.5	149.7	37.4%	13.6%	3.1x	8.3x
Euromoney Institutional Investor PLC	United Kingdom	\$18.20	-2%	1,958.6	1,922.6	502.8	253.8	50.5%	-1.9%	3.8x	7.6x
Hyve Group Plc	United Kingdom	1.05	0%	788.7	951.6	271.0	49.6	18.3%	31.4%	3.5x	19.2x
Informa plc	United Kingdom	10.48	-5%	13,117.0	16,831.5	3,583.5	1,129.7	31.5%	56.8%	4.7x	14.9x
MCH Group AG	* Switzerland	23.65	-22%	142.1	315.5	442.4	8.4	1.9%	-19.6%	0.7x	37.7x
TechTarget, Inc.	United States	22.53	-10%	622.9	633.4	126.8	22.7	17.9%	8.3%	5.0x	27.9x
Adjusted Weighted Average										4.4x	14.6x

* Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (6.5x) and EBITDA multiples that are 1.0 standard deviations above the mean (28.2x)

(\$ in Millions, except stock price data)

Radio Broadcasting

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Beasley Broadcast Group, Inc.	United States	\$3.10	-57%	\$ 86.4	\$ 354.7	\$ 264.1	\$ 44.6	16.9%	12.7%	1.3x	7.9x
Emmis Communications Corporation	* United States	5.01	-26%	65.8	199.1	113.9	14.3	12.5%	-16.5%	1.7x	14.0x
Entercom Communications Corp.	United States	3.34	-58%	476.0	2,454.1	1,479.6	310.0	21.0%	42.0%	1.7x	7.9x
Salem Media Group, Inc.	United States	1.53	-56%	40.7	360.9	257.9	35.5	13.8%	-1.8%	1.4x	10.2x
Sirius XM Holdings Inc.	* United States	6.26	-4%	27,833.6	35,929.6	6,684.7	2,174.0	32.5%	19.6%	5.4x	16.5x
Townsquare Media, Inc.	United States	7.03	-12%	133.3	673.7	444.1	100.1	22.5%	10.3%	1.5x	6.7x
Urban One, Inc.	United States	1.92	-20%	87.7	1,032.5	444.3	137.0	30.8%	1.9%	2.3x	7.5x
Adjusted Weighted Average										1.7x	7.8x

* Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (5.1x) and EBITDA multiples that are 1.0 standard deviations above the mean (13.8x)

/ Traditional Media

(\$ in Millions, except stock price data)

Broadcast, Cable, and Satellite Television

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Altice Europe N.V.	Netherlands	\$5.23	-1%	\$ 6,249.3	\$ 47,552.3	\$ 16,171.6	\$ 4,251.1	26.3%	-3.6%	2.9x	11.2x
AMC Networks Inc.	United States	\$49.16	-28%	2,735.4	5,724.3	3,026.2	948.4	31.3%	5.2%	1.9x	6.0x
CVC Limited	Australia	1.44	-25%	169.7	156.1	41.5	4.2	10.2%	-4.6%	3.8x	37.0x
CBS Corporation	United States	40.37	-32%	15,193.3	25,352.3	15,263.0	3,123.0	20.5%	6.6%	1.7x	8.1x
Charter Communications, Inc.	United States	412.12	-4%	91,275.4	173,056.4	44,676.0	16,215.0	36.3%	4.9%	3.9x	10.7x
Comcast Corporation	United States	45.08	-5%	204,887.9	315,551.9	103,698.0	32,476.0	31.3%	18.3%	3.0x	9.7x
Discovery, Inc.	United States	26.63	-24%	18,025.2	36,000.2	10,993.0	5,056.0	46.0%	26.8%	3.3x	7.1x
DISH Network Corporation	United States	34.07	-24%	16,793.2	30,407.8	13,100.4	2,591.7	19.8%	-6.3%	2.3x	11.7x
Entertainment Communications Corporation	United States	3.18	-41%	270.2	398.8	290.6	53.6	18.4%	-47.1%	1.4x	7.4x
Gray Television, Inc.	United States	16.32	-36%	1,630.5	5,993.5	1,633.1	593.8	36.4%	75.7%	3.7x	10.1x
Grupo Televisa, S.A.B.	Mexico	1.96	-43%	5,657.3	11,896.6	5,178.0	1,956.0	37.8%	0.6%	2.3x	6.1x
Liberty Global Plc	United Kingdom	24.75	-14%	17,591.8	47,713.2	11,597.2	4,717.1	40.7%	-2.6%	4.1x	10.1x
Nexstar Media Group, Inc.	United States	102.31	-15%	4,717.4	8,543.5	2,766.7	1,033.7	37.4%	8.9%	3.1x	8.3x
Sinclair Broadcast Group, Inc.	United States	42.74	-36%	3,936.0	6,971.7	3,152.4	870.9	27.6%	14.5%	2.2x	8.0x
TEGNA Inc.	United States	15.53	-6%	3,364.6	6,378.9	2,234.8	772.8	34.6%	12.8%	2.9x	8.3x
The E.W. Scripps Company	United States	13.28	-43%	1,074.0	2,617.5	1,300.5	218.1	16.8%	30.1%	2.0x	12.0x
Adjusted Weighted Average										3.2x	9.8x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (4.5x) and EBITDA multiples that are 1.0 standard deviations above the mean (18.0x)

(\$ in Millions, except stock price data)

Entertainment Media

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Cineplex Inc.	Canada	\$18.33	-34%	\$ 1,160.6	\$ 2,689.7	\$ 1,237.8	\$ 191.3	15.5%	1.4%	2.2x	14.1x
Eros International Plc	United States	1.91	-85%	208.0	543.2	270.1	28.6	10.6%	3.4%	2.0x	19.0x
Lions Gate Entertainment Corp.	United States	9.25	-63%	1,945.0	5,216.9	3,711.4	344.9	9.3%	-8.5%	1.4x	15.1x
Live Nation Entertainment, Inc.	United States	66.34	-10%	13,978.9	16,350.5	11,321.9	727.3	6.4%	12.0%	1.4x	22.5x
Fox Corporation	United States	31.54	-24%	19,571.6	23,288.6	11,389.0	2,681.0	23.5%	12.2%	2.0x	8.7x
Liberty Global Plc	United Kingdom	24.75	-14%	17,591.8	47,713.2	11,597.2	4,717.1	40.7%	-2.6%	4.1x	10.1x
Village Roadshow Limited	Australia	1.92	-27%	373.8	598.8	690.7	59.9	8.7%	2.4%	0.9x	10.0x
World Wrestling Entertainment, Inc.	United States	71.15	-29%	5,596.7	5,549.9	912.2	119.7	13.1%	5.2%	6.1x	46.3x
Adjusted Weighted Average										2.9x	13.0x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (6.3x) and EBITDA multiples that are 1.0 standard deviations above the mean (32.0x)

/ Traditional Media

(\$ in Millions, except stock price data)

Out-of-Home Media

Company Name	Headquarters	Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months			Last Twelve Months Multiples		
		09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
APG/SGA SA	Switzerland	\$270.61	-26%	\$ 811.3	\$ 800.9	\$ 318.7	\$ 67.7	21.3%	3.2%	2.5x	11.8x
Clear Channel Outdoor Holdings, Inc.	United States	2.52	-61%	1,164.2	8,292.8	2,696.5	574.4	21.3%	0.5%	3.1x	14.4x
Clear Media Limited	Hong Kong	0.50	-48%	268.9	553.0	245.9	90.0	36.6%	-6.2%	2.2x	6.1x
JCDecaux SA	France	27.09	-22%	5,766.6	12,929.8	3,851.8	707.3	18.4%	10.7%	3.4x	18.3x
Lamar Advertising Company (REIT)	United States	81.93	-3%	8,223.9	12,382.4	1,679.6	725.4	43.2%	6.4%	7.4x	17.1x
National CineMedia, Inc.	United States	8.20	-21%	647.6	1,810.1	434.6	190.1	43.7%	-3.6%	4.2x	9.5x
NTN Buzztime, Inc.	United States	3.36	-29%	9.7	13.8	22.0	3.1	14.1%	0.3%	0.6x	4.4x
Outfront Media Inc.	United States	27.78	-2%	3,982.1	7,725.0	1,698.2	438.9	25.8%	10.8%	4.5x	17.6x
Stingray Group Inc.	Canada	5.43	-19%	415.1	702.8	197.7	66.0	33.4%	91.6%	3.6x	10.7x
TOM Group Limited	* Hong Kong	0.18	-27%	731.5	1,134.6	118.4	14.8	12.5%	-3.2%	9.6x	76.9x
Adjusted Weighted Average										5.1x	16.7x

* Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (8.5x) and EBITDA multiples that are 1.0 standard deviations above the mean (32.7x)

(\$ in Millions, except stock price data)

Publishing

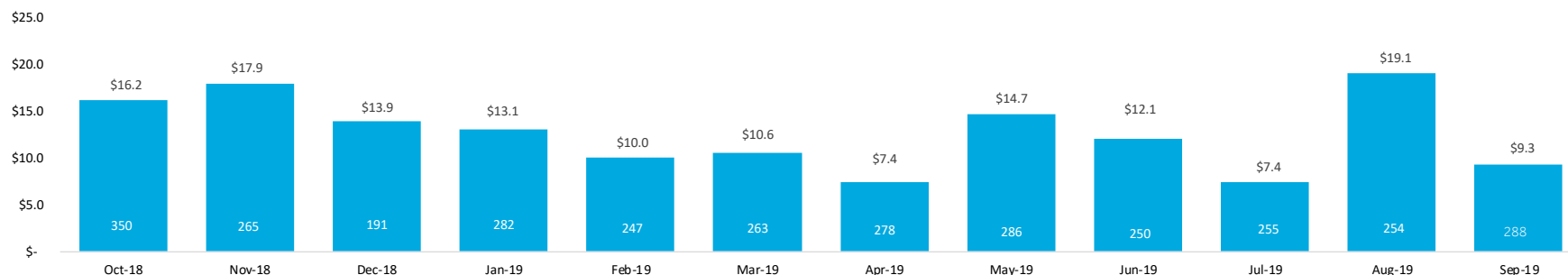
Company Name	Headquarters	Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months			Last Twelve Months Multiples		
		09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
A.H. Belo Corporation	United States	\$3.75	-22%	\$ 80.5	\$ 53.8	\$ 196.0	\$ 4.4	2.3%	-13.0%	0.3x	12.1x
Daily Mail and General Trust plc	United Kingdom	10.48	0%	2,387.2	2,173.9	1,829.0	209.5	11.5%	-7.3%	1.2x	10.4x
Emmis Communications Corporation	United States	5.01	-26%	65.8	199.1	113.9	14.3	12.5%	-16.5%	1.7x	14.0x
Gannett Co., Inc.	United States	10.74	-10%	1,231.1	1,770.9	2,786.9	281.2	10.1%	-8.7%	0.6x	6.3x
Glacier Media Inc.	* Canada	0.52	-13%	65.3	107.7	143.1	4.0	2.8%	0.6%	0.8x	26.9x
John Wiley & Sons, Inc.	United States	43.94	-29%	2,493.5	3,304.7	1,812.7	297.8	16.4%	1.0%	1.8x	11.1x
Meredith Corporation	United States	36.66	-41%	1,675.1	4,503.6	3,188.5	687.8	21.6%	40.8%	1.4x	6.5x
News Corporation	United States	13.92	-5%	8,264.0	9,224.0	10,074.0	1,040.0	10.3%	2.4%	0.9x	8.9x
Pearson plc	United Kingdom	9.04	-31%	7,069.1	9,112.1	5,201.2	737.0	14.2%	-5.5%	1.8x	12.4x
Scholastic Corporation	United States	37.76	-21%	1,310.6	1,221.8	1,668.1	68.0	4.1%	0.6%	0.7x	18.0x
The E.W. Scripps Company	United States	13.28	-43%	1,074.0	2,617.5	1,300.5	218.1	16.8%	30.1%	2.0x	12.0x
The McClatchy Company	United States	2.83	-69%	22.4	816.3	763.0	70.0	9.2%	-11.3%	1.1x	11.7x
The New York Times Company	* United States	28.48	-21%	4,728.0	4,343.5	1,767.3	224.2	12.7%	5.2%	2.5x	19.4x
Adjusted Weighted Average										1.5x	10.5x

(1) All financials are representative of the Reed Elsevier combined businesses, except per stock data, which represents Reed Elsevier (LSE:REL)

* Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (2.6x) and EBITDA multiples that are 1.0 standard deviations above the mean (18.7x)

/ Software

- A total of 288 transactions was announced in the Software segment, of which 112 were valued at \$9.3 billion
- VC/Growth Capital investor transactions represented more than 60 percent of segment activity
- In addition to ANSYS' purchase of Livermore Software, transactions in the segment include:
 - Facebook's acquisition of neutral interface platform CTRL-labs for, reportedly, more than \$500 million
 - Vector Capital's \$500 sale of collaborative software development solution CollabNet by TPG Capital
 - The \$450 million purchase of fulfillment automation platform 6 River Systems by Shopify
 - The purchase of pharmaceutical customer analytics company Crossix by Veeva for \$430 million
 - The \$388 million of debt and equity funding Canada-based financial crime management software Verafin raised from Spectrum Equity, IVP, Northleaf Capital Partners, BDC Capital, Teralys Capital, Wells Fargo Capital Finance and Scotiabank



	2Q 19		SOFTWARE 3Q 19		LTM		Sep-19	
	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)
Strategic	299	\$13,947.2	329	\$15,695.2	1,206	\$61,348.6	95	\$3,001.6
Private Equity - Buyout	24	4,780.0	20	1,473.4	92	27,153.6	10	800.0
Private Equity - VC/Growth Capital	491	15,561.9	448	15,948.1	1,911	60,664.4	183	5,527.4
Total	814	\$34,289.1	797	\$33,116.7	3,209	\$149,166.6	288	\$9,329.0

/ Software

(\$ in Millions, except stock price data)

Financial & Credit/Risk Management Software

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Alfa Financial Software Holdings PLC	United Kingdom	\$1.01	-52%	\$ 302.6	\$ 263.1	\$ 87.7	\$ 25.0	28.5%	-8.6%	3.0x	10.5x
Anaplan, Inc.	United States	47.00	-22%	6,195.9	5,893.4	291.6	(145.7)	NM	45.9%	20.2x	NM
Avalara, Inc.	United States	67.29	-29%	5,079.9	4,638.2	323.1	(43.5)	NM	35.4%	14.4x	NM
BlackLine, Inc.	United States	47.81	-15%	2,644.9	2,520.6	254.8	(9.3)	NM	26.0%	9.9x	NM
Coupa Software Incorporated	United States	129.57	-17%	8,142.5	8,089.4	318.8	(46.0)	NM	45.5%	25.4x	NM
Donnelley Financial Solutions, Inc.	United States	12.32	-32%	422.6	917.5	905.7	89.5	9.9%	-8.8%	1.0x	10.3x
Ebiz, Inc.	United States	42.10	-47%	1,283.6	2,029.4	552.2	171.0	31.0%	28.3%	3.7x	11.9x
GreenSky, Inc.	United States	6.85	-63%	408.6	494.5	466.0	146.0	31.3%	26.2%	1.1x	3.4x
Guidewire Software, Inc.	* United States	105.38	-7%	8,656.3	7,849.3	719.5	41.4	5.8%	10.2%	10.9x	189.5x
i3 Verticals, Inc.	United States	20.12	-36%	290.3	487.8	351.8	25.2	7.1%	13.0%	1.4x	19.4x
Intuit Inc.	United States	265.94	-10%	69,164.0	66,860.0	6,784.0	2,059.0	30.4%	12.6%	9.9x	32.5x
ModelN, Inc.	United States	27.76	-5%	908.1	898.6	141.3	(6.3)	NM	-7.9%	6.4x	NM
Performant Financial Corporation	United States	1.10	-62%	59.0	117.8	138.0	(16.1)	NM	-8.8%	0.9x	NM
Q2 Holdings, Inc.	United States	78.87	-16%	3,756.6	3,586.2	276.7	(29.4)	NM	28.6%	13.0x	NM
RealPage, Inc.	United States	62.86	-5%	5,811.0	6,273.3	930.1	154.4	16.6%	20.1%	6.7x	40.6x
SS&C Technologies Holdings, Inc.	United States	51.57	-24%	13,086.3	21,196.7	4,388.6	1,591.2	36.3%	101.8%	4.8x	13.3x
StoneCo Ltd.	* Brazil	34.78	-24%	9,646.8	10,193.1	243.4	1.6	0.6%	95.8%	41.9x	NM
Tradeweb Markets Inc.	United States	36.98	-27%	5,285.7	4,572.3	721.2	159.5	22.1%	0.0%	6.3x	28.7x
Tyler Technologies, Inc.	United States	262.50	-1%	10,128.0	10,125.4	1,000.2	191.5	19.1%	12.4%	10.1x	52.9x
Zuora, Inc.	United States	15.05	-39%	1,690.1	1,528.2	258.7	(76.2)	NM	25.3%	5.9x	NM

Adjusted Weighted Average

9.0x

31.9x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (29.3x) and EBITDA multiples that are 1.0 standard deviations

(\$ in Millions, except stock price data)

Healthcare Software

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Allscripts Healthcare Solutions, Inc.	United States	\$10.98	-23%	\$ 1,829.9	\$ 2,653.6	\$ 1,751.3	\$ 116.4	6.6%	14.2%	1.5x	22.8x
Cegedim SA	France	28.35	-10%	393.1	648.0	552.9	57.0	10.3%	5.4%	1.2x	11.4x
Cerner Corporation	United States	68.17	-11%	21,704.9	21,931.6	5,526.7	1,203.4	21.8%	5.3%	4.0x	18.2x
Computer Programs and Systems, Inc.	United States	22.61	-34%	312.7	442.6	276.9	33.4	12.1%	-2.5%	1.6x	13.2x
Craneware plc	United Kingdom	31.18	-27%	820.9	774.8	71.4	20.2	28.3%	6.5%	10.9x	38.4x
HealthEquity, Inc.	United States	57.15	-44%	4,035.7	3,260.1	319.9	109.9	34.3%	23.9%	10.2x	29.7x
McKesson Corporation	United States	136.66	-9%	25,269.0	34,854.0	217,440.0	4,225.0	1.9%	3.6%	0.2x	8.2x
Medidata Solutions, Inc.	* United States	91.50	-7%	5,524.8	5,517.7	684.6	78.1	11.4%	16.9%	8.1x	70.7x
NantHealth, Inc.	United States	0.72	-63%	79.4	289.3	94.6	(27.7)	NM	7.0%	3.1x	NM
NextGen Healthcare, Inc.	United States	15.67	-26%	1,024.5	1,056.0	527.8	38.3	7.2%	-1.0%	2.0x	27.6x
Streamline Health Solutions, Inc.	United States	1.08	-48%	22.0	34.3	21.0	1.5	7.0%	-12.7%	1.6x	23.4x
Veeva Systems Inc.	* United States	152.69	-14%	22,595.8	21,185.9	968.7	289.1	29.8%	26.1%	21.9x	73.5x

Adjusted Weighted Average

3.1x

15.1x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (18.1x) and EBITDA multiples that are 1.0 standard deviations

/ Software

(\$ in Millions, except stock price data)

HR Software

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
51job, Inc.	China	\$74.00	-24%	\$ 4,910.9	\$ 3,540.8	\$ 569.1	\$ 198.2	34.8%	19.5%	6.2x	17.9x
Benefitfocus, Inc.	United States	23.81	-61%	778.5	916.6	272.7	(22.1)	NM	10.4%	3.4x	NM
Castlight Health, Inc.	United States	1.41	-66%	204.8	163.0	153.5	(26.5)	NM	5.2%	1.1x	NM
Ceridian HCM Holding Inc.	United States	49.37	-16%	7,092.1	7,570.2	778.6	142.9	18.4%	9.1%	9.7x	53.0x
Cornerstone OnDemand, Inc.	United States	54.82	-13%	3,326.5	3,300.8	554.2	15.3	2.8%	6.7%	6.0x	NM
DHI Group, Inc.	United States	3.85	-13%	193.6	213.1	151.4	23.7	15.6%	-19.5%	1.4x	9.0x
Domo, Inc.	United States	15.98	-66%	439.5	404.8	158.7	(115.3)	NM	27.4%	2.6x	NM
Paycom Software, Inc.	* United States	209.49	-19%	12,077.4	12,043.0	652.9	219.1	33.6%	31.1%	18.4x	55.0x
Paylocity Holding Corporation	* United States	97.58	-13%	5,179.7	5,018.0	467.6	73.9	15.8%	23.9%	10.7x	67.9x
Pluralsight, Inc.	United States	16.80	-53%	1,700.2	1,757.0	274.3	(127.1)	NM	41.5%	6.4x	NM
Workday, Inc.	United States	169.96	-25%	38,750.9	38,367.0	3,244.6	(277.8)	NM	33.6%	11.8x	NM
Adjusted Weighted Average										10.4x	46.5x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (17.6x) and EBITDA multiples that are 1.0 standard deviations

(\$ in Millions, except stock price data)

Security Software

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Last Twelve Months Multiples		
						Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Absolute Software Corporation	Canada	\$5.75	-18%	\$ 239.4	\$ 204.0	\$ 98.9	\$ 13.7	13.9%	5.6%	2.1x	14.9x
Carbon Black, Inc.	United States	25.99	-1%	1,946.0	1,815.3	229.7	(65.8)	NM	23.8%	7.9x	NM
Check Point Software Technologies Ltd.	Israel	109.50	-18%	16,670.2	15,054.9	1,956.3	912.1	46.6%	4.0%	7.7x	16.5x
Cisco Systems, Inc.	United States	49.41	-15%	209,759.8	201,013.8	51,904.0	15,936.0	30.7%	5.2%	3.9x	12.6x
Cheetah Mobile Inc.	China	3.58	-66%	488.8	120.5	697.3	27.5	3.9%	-0.9%	0.2x	4.4x
Cloudflare, Inc.	United States	18.57	-16%	5,447.4	5,662.2	234.7	(72.1)	NM	0.0%	24.1x	NM
CrowdStrike Holdings, Inc.	* United States	58.31	-43%	13,174.9	12,348.1	351.0	(131.4)	NM	0.0%	35.2x	NM
CyberArk Software Ltd.	Israel	99.82	-33%	3,767.3	3,268.7	389.8	74.1	19.0%	32.3%	8.4x	44.1x
FireEye, Inc.	United States	13.34	-35%	2,820.3	2,912.2	857.3	(112.5)	NM	6.5%	3.4x	NM
Forescout Technologies, Inc.	United States	37.92	-18%	1,752.3	1,688.9	324.2	(77.8)	NM	24.9%	5.2x	NM
Fortinet, Inc.	United States	76.76	-21%	13,125.3	11,332.6	1,955.2	333.5	17.1%	19.9%	5.8x	34.0x
Juniper Networks, Inc.	United States	24.75	-20%	8,558.9	7,751.3	4,465.0	733.9	16.4%	-6.7%	1.7x	10.6x
Mimecast Limited	* United Kingdom	35.67	-35%	2,203.0	2,253.7	361.2	28.1	7.8%	28.0%	6.2x	80.2x
Palo Alto Networks, Inc.	* United States	203.83	-22%	19,769.6	18,396.5	2,899.6	113.8	3.9%	27.5%	6.3x	161.7x
Proofpoint, Inc.	United States	129.05	-3%	7,235.8	7,110.1	800.0	(27.6)	NM	29.9%	8.9x	NM
Qualys, Inc.	United States	75.57	NA	2,965.3	2,705.9	300.1	91.7	30.5%	17.5%	9.0x	29.5x
Rapid7, Inc.	United States	45.39	NA	2,216.9	2,228.8	283.3	(29.3)	NM	28.1%	7.9x	NM
SecureWorks Corp.	United States	12.93	NA	1,049.9	963.3	533.2	(3.5)	NM	8.2%	1.8x	NM
Symantec Corporation	United States	23.63	-9%	14,604.1	17,576.1	4,822.0	1,087.0	22.5%	0.1%	3.6x	16.2x
Tenable Holdings, Inc.	United States	22.38	-42%	2,168.0	1,881.5	310.3	(79.9)	NM	37.4%	6.1x	NM
Trend Micro Incorporated	Japan	47.55	-32%	6,608.3	5,128.2	1,506.5	482.4	32.0%	4.3%	3.4x	10.6x
Tufin Software Technologies Ltd.	Israel	16.46	-47%	560.3	454.5	96.1	(9.9)	NM	0.0%	4.7x	NM
VenSign, Inc.	United States	188.63	-15%	22,328.5	22,899.0	1,225.9	838.0	68.4%	3.0%	18.7x	27.3x
Varonis Systems, Inc.	United States	59.78	-25%	1,813.1	1,732.3	270.6	(43.0)	NM	11.8%	6.4x	NM
Zscaler, Inc.	United States	47.26	-47%	6,023.5	5,658.9	302.8	(12.8)	NM	59.2%	18.7x	NM
Adjusted Weighted Average										6.0x	15.5x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (24.2x) and EBITDA multiples that are 1.0 standard deviations

/ Software

(\$ in Millions, except stock price data)

Engineering Software

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Revenue Growth	Last Twelve Months Multiples	
						Revenue	EBITDA	EBITDA Margin		Enterprise Value/Revenue	Enterprise Value/EBITDA
Altair Engineering Inc.	* United States	\$34.62	-20%	\$ 2,480.0	\$ 2,432.0	\$ 424.4	\$ 32.5	7.7%	11.3%	5.7x	74.9x
ANSYS, Inc.	United States	221.36	0%	18,616.5	18,092.4	1,390.6	554.6	39.9%	19.2%	13.0x	32.6x
Dassault Systèmes SE	France	142.57	-11%	37,016.2	34,796.4	4,268.7	1,098.1	25.7%	13.4%	8.2x	31.7x
PTC Inc.	* United States	68.18	-36%	7,852.9	8,250.9	1,233.1	128.2	10.4%	-0.2%	6.7x	64.4x
Synopsys, Inc.	United States	137.25	-6%	20,626.8	20,087.9	3,304.7	638.5	19.3%	9.3%	6.1x	31.5x
Trimble Inc.	United States	38.81	-16%	9,772.0	11,425.7	3,237.1	634.2	19.6%	11.5%	3.5x	18.0x
Adjusted Weighted Average										8.1x	30.3x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (14.5x) and EBITDA multiples that are 1.0 standard deviations

(\$ in Millions, except stock price data)

Infrastructure Software

Company Name	Headquarters	Stock Price 09/30/19	Chg % From 52WK High	Equity Value	Enterprise Value	Last Twelve Months			Revenue Growth	Last Twelve Months Multiples	
						Revenue	EBITDA	EBITDA Margin		Enterprise Value/Revenue	Enterprise Value/EBITDA
Adobe Inc.	United States	\$276.25	-12%	\$ 133,726.7	\$ 134,212.9	\$ 10,644.0	\$ 3,566.5	33.5%	24.2%	12.6x	37.6x
Atlassian Corporation Plc	Australia	125.44	-16%	30,470.3	29,612.0	1,210.1	(21.1)	NM	37.4%	24.5x	NM
Appian Corporation	United States	47.50	-25%	3,168.7	3,091.3	241.7	(51.9)	NM	16.9%	12.8x	NM
Alteryx, Inc.	United States	107.43	-27%	6,746.6	6,626.3	309.8	23.0	7.4%	77.5%	21.4x	NM
Bandwidth Inc.	United States	65.11	-28%	1,522.9	1,327.0	212.9	(7.3)	NM	15.0%	6.2x	NM
Cloudera, Inc.	United States	8.86	-56%	2,477.7	2,284.7	647.7	(187.4)	NM	54.5%	3.5x	NM
Commvault Systems, Inc.	United States	44.71	-35%	2,020.0	1,588.3	697.0	42.4	6.1%	-1.8%	2.3x	37.5x
Datadog, Inc.	* United States	33.91	-18%	9,950.4	10,087.2	266.0	(16.7)	NM	0.0%	37.9x	NM
Elastic N.V.	United States	82.34	-21%	6,303.6	6,020.5	304.7	(116.8)	NM	64.8%	19.8x	NM
Endurance International Group Holdings, Inc.	United States	3.75	-63%	547.7	2,331.9	1,125.1	288.6	25.7%	-3.7%	2.1x	8.1x
Fastly, Inc.	United States	24.00	-32%	2,243.3	2,048.4	169.3	(21.9)	NM	0.0%	12.1x	NM
Filinvest Development Corporation	Philippines	0.25	-20%	2,168.4	4,567.5	1,497.3	480.9	32.1%	10.9%	3.1x	9.5x
IBM Corporation	United States	145.42	-6%	128,824.0	160,982.0	77,859.0	17,207.0	22.1%	-3.6%	2.1x	9.4x
MongoDB, Inc.	United States	120.48	-35%	6,785.0	6,650.8	346.0	(104.0)	NM	66.5%	19.2x	NM
Nutanix, Inc.	United States	26.25	-52%	4,957.5	4,507.6	1,236.1	(535.1)	NM	7.0%	3.6x	NM
Okta, Inc.	United States	98.46	-31%	11,495.0	11,376.6	486.8	(144.4)	NM	51.1%	23.4x	NM
PagerDuty, Inc.	United States	28.25	-53%	2,155.1	1,813.9	142.7	(47.5)	NM	0.0%	12.7x	NM
Rapid7, Inc.	United States	45.39	-31%	2,216.9	2,228.8	283.3	(29.3)	NM	28.1%	7.9x	NM
Pivotal Software, Inc.	United States	14.92	-39%	4,106.2	3,441.8	716.1	(127.0)	NM	23.0%	4.8x	NM
Resonance Health Limited	Australia	0.08	-26%	36.0	33.9	2.5	0.7	28.8%	25.1%	13.4x	46.3x
SailPoint Technologies Holdings, Inc.	* United States	18.69	-45%	1,665.7	1,615.1	270.0	12.7	4.7%	26.2%	6.0x	127.3x
salesforce.com, inc.	United States	148.44	-11%	129,936.8	130,326.8	14,729.0	2,064.0	14.0%	24.3%	8.8x	63.1x
ServiceNow, Inc.	United States	253.85	-16%	47,587.2	47,040.9	3,011.4	164.9	5.5%	33.1%	15.6x	NM
Smartsheet Inc.	United States	36.03	-35%	4,200.2	3,697.0	219.9	(60.5)	NM	55.9%	16.8x	NM
Splunk Inc.	United States	117.86	-18%	17,837.9	17,168.4	2,044.5	(202.3)	NM	36.1%	8.4x	NM
Synchronoss Technologies, Inc.	United States	5.40	-40%	219.7	458.2	331.3	(2.9)	NM	-7.4%	1.4x	NM
GlobalData Plc	United Kingdom	10.21	-5%	1,204.5	1,319.7	217.4	38.7	17.8%	25.0%	6.1x	34.1x
Talend S.A.	United States	33.98	-51%	1,040.8	1,040.0	226.2	(50.5)	NM	28.2%	4.6x	NM
Twilio Inc.	United States	109.96	-27%	14,942.2	13,684.8	881.4	(177.4)	NM	78.9%	15.5x	NM
Varonis Systems, Inc.	United States	59.78	-25%	1,813.1	1,732.3	270.6	(43.0)	NM	11.8%	6.4x	NM
Adjusted Weighted Average										10.4x	36.6x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (28.2x) and EBITDA multiples that are 1.0 standard deviations

/ Software

(\$ in Millions, except stock price data)

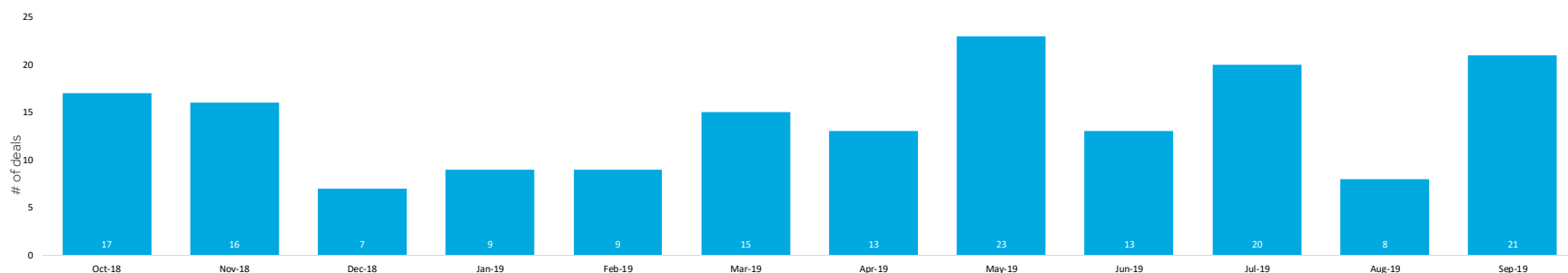
SaaS/Cloud Software

Company Name	Headquarters	Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months			Last Twelve Months Multiples		
		09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Adobe Inc.	United States	\$276.25	-12%	\$ 133,726.7	\$ 134,212.9	\$ 10,644.0	\$ 3,566.5	33.5%	24.2%	12.6x	37.6x
Anaplan, Inc.	United States	47.00	-22%	6,195.9	5,893.4	291.6	(145.7)	NM	45.9%	20.2x	NM
Asure Software, Inc.	United States	6.71	-45%	104.4	218.5	99.5	10.3	10.3%	38.4%	2.2x	21.3x
AppFolio, Inc.	* United States	95.14	-13%	3,238.9	3,271.6	221.2	17.9	8.1%	33.8%	14.8x	182.5x
Avalara, Inc.	United States	67.29	-29%	5,079.9	4,638.2	323.1	(43.5)	NM	35.4%	14.4x	NM
Benefitfocus, Inc.	United States	23.81	-61%	778.5	916.6	272.7	(22.1)	NM	10.4%	3.4x	NM
BlackLine, Inc.	United States	47.81	-15%	2,644.9	2,520.6	254.8	(9.3)	NM	26.0%	9.9x	NM
Box, Inc.	United States	16.56	-34%	2,447.2	2,644.3	655.2	(83.7)	NM	18.1%	4.0x	NM
Carbonite, Inc.	United States	15.49	-57%	537.3	1,106.5	357.4	36.1	10.1%	34.8%	3.1x	30.7x
Ceridian HCM Holding Inc.	United States	49.37	-16%	7,092.1	7,570.2	778.6	142.9	18.4%	9.1%	9.7x	53.0x
ChannelAdvisor Corporation	* United States	9.33	-35%	261.6	230.5	130.6	1.5	1.2%	1.8%	1.8x	150.8x
Coupa Software Incorporated	United States	129.57	-17%	8,142.5	8,089.4	318.8	(46.0)	NM	45.5%	25.4x	NM
DocuSign, Inc.	United States	61.92	-5%	10,895.0	10,764.4	827.7	(184.3)	NM	37.4%	13.0x	NM
Dropbox, Inc.	United States	20.17	-26%	8,338.0	8,233.4	1,523.3	107.6	7.1%	22.1%	5.4x	76.5x
Everbridge, Inc.	United States	61.71	-41%	2,071.2	1,946.2	172.0	(33.3)	NM	40.0%	11.3x	NM
HubSpot, Inc.	United States	151.61	-27%	6,443.5	6,068.0	590.9	(33.6)	NM	33.9%	10.3x	NM
Instructure, Inc.	United States	38.74	-23%	1,436.9	1,440.1	232.4	(52.8)	NM	25.0%	6.2x	NM
LivePerson, Inc.	United States	35.70	-13%	2,242.8	2,211.8	267.3	(26.8)	NM	14.3%	8.3x	NM
LogMeIn, Inc.	United States	70.96	-27%	3,508.0	3,708.0	1,239.9	329.5	26.6%	9.7%	3.0x	11.3x
Paycom Software, Inc.	United States	209.49	-19%	12,077.4	12,043.0	652.9	219.1	33.6%	31.1%	18.4x	55.0x
Paylocity Holding Corporation	United States	97.58	-13%	5,179.7	5,018.0	467.6	73.9	15.8%	23.9%	10.7x	67.9x
Pluralsight, Inc.	United States	16.80	-53%	1,700.2	1,757.0	274.3	(127.1)	NM	41.5%	6.4x	NM
Q2 Holdings, Inc.	United States	78.87	-16%	3,756.6	3,586.2	276.7	(29.4)	NM	28.6%	13.0x	NM
RealPage, Inc.	United States	62.86	-5%	5,811.0	6,273.3	930.1	154.4	16.6%	20.1%	6.7x	40.6x
RingCentral, Inc.	United States	125.66	-14%	10,426.0	10,272.9	779.1	7.0	0.9%	33.7%	13.2x	NM
salesforce.com, Inc.	United States	148.44	-11%	129,936.8	130,326.8	14,729.0	2,064.0	14.0%	24.3%	8.8x	63.1x
Shopify Inc.	Canada	311.66	-24%	35,943.0	34,044.2	1,296.4	(93.8)	NM	51.9%	26.3x	NM
Smartsheet Inc.	United States	36.03	-35%	4,200.2	3,697.0	219.9	(60.5)	NM	55.9%	16.8x	NM
SolarWinds Corporation	United States	18.45	-13%	5,659.5	7,422.8	879.0	216.3	24.6%	11.8%	8.4x	34.3x
SPS Commerce, Inc.	United States	47.07	-20%	1,642.0	1,463.6	263.5	47.4	18.0%	12.5%	5.6x	30.9x
Veeva Systems Inc.	United States	152.69	-14%	22,595.8	21,185.9	968.7	289.1	29.8%	26.1%	21.9x	73.3x
Workday, Inc.	United States	169.96	-25%	38,750.9	38,367.0	3,244.6	(277.8)	NM	33.6%	11.8x	NM
Workiva Inc.	United States	43.83	-32%	2,019.6	1,922.7	268.8	(20.8)	NM	19.1%	7.2x	NM
Yext, Inc.	United States	15.89	-32%	1,791.6	1,633.1	263.5	(81.4)	NM	32.9%	6.2x	NM
Zendesk, Inc.	United States	72.88	-23%	8,088.5	8,252.6	703.1	(123.5)	NM	39.0%	11.7x	NM
Zuora, Inc.	United States	15.05	-39%	1,690.1	1,528.2	258.7	(76.2)	NM	25.3%	5.9x	NM
Adjusted Weighted Average										12.9x	36.4x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (28.2x) and EBITDA multiples that are 1.0 standard deviations

/ Information

- The Information Segment had 19 transactions in September 2019, up more than 50 percent from August
- Select transactions from the segment included:
 - Boeing's \$2 billion sale of aviation parts B-to-B supply chain solution Inventory Locator Service to CAMP Systems International
 - IHS Markit's \$470 million sale of Jane's Information Group to Montagu Private Equity
 - The acquisition of climate and market data platform Carbon Delta by MSCI
 - The purchase of financial data and content analytics company Selerity by ION Investment Group-backed Dealogic
 - The \$43 million round of funding consumer credit health management platform Credit Sesame raised from ATW Partners, Menlo Ventures, Inventus Capital, Globespan Capital, IA Capital Groups, Symantec, and Capital One Ventures



Note: Deal values are not included in chart, as the majority of Information transactions were reported without a value

	INFORMATION							
	2Q19		3Q19		LTM		Sep-19	
	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)
Strategic	21	\$8,815.3	18	\$364.0	74	\$9,785.4	7	\$2,000.0
Private Equity - Buyout	3	325.0	4	1,900.0	10	2,225.0	2	470.0
Private Equity - VC/Growth Capital	25	583.6	24	644.0	83	3,061.9	12	158.6
Total	49	\$9,723.9	46	\$2,908.0	167	\$15,072.3	21	\$2,628.6

/ Information

(\$ in Millions, except stock price data)

Financial & Credit/Risk Management Information

		Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months				Last Twelve Months Multiples	
Company Name	Headquarters	09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Broadridge Financial Solutions, Inc.	United States	\$124.43	-9%	\$ 14,220.2	\$ 15,417.0	\$ 4,362.2	\$ 912.8	20.9%	0.7%	3.5x	16.9x
Computershare Limited	Australia	10.89	-22%	5,905.5	7,298.9	2,346.0	615.3	26.2%	2.5%	3.1x	11.9x
CoreLogic, Inc.	United States	46.27	-7%	3,707.8	5,525.9	1,732.3	342.4	19.8%	-7.4%	3.2x	16.1x
CoStar Group, Inc.	* United States	593.20	-7%	21,680.7	20,526.4	1,293.3	425.7	32.9%	20.6%	15.9x	48.2x
Envestnet, Inc.	* United States	56.70	-23%	2,958.7	3,584.2	837.3	80.5	9.6%	10.5%	4.3x	44.5x
Equifax Inc.	United States	140.67	-5%	17,004.8	19,891.2	3,395.6	672.8	19.8%	-0.6%	5.9x	29.6x
Experian plc	Ireland	31.97	-1%	28,798.5	31,945.4	4,861.0	1,509.0	31.0%	6.0%	6.6x	21.2x
FactSet Research Systems Inc.	United States	242.97	-20%	9,295.0	9,483.6	1,435.4	498.5	34.7%	6.3%	6.6x	19.0x
Fair Isaac Corporation	United States	303.52	-19%	8,770.7	9,514.5	1,143.6	291.6	25.5%	14.7%	8.3x	32.6x
Fidelity National Information Services, Inc.	* United States	132.76	-6%	81,440.9	90,359.9	8,420.0	2,446.0	29.0%	-0.2%	10.7x	36.9x
Moody's Corporation	United States	204.83	-8%	38,753.8	43,647.5	4,496.6	2,103.0	46.8%	-0.7%	9.7x	20.8x
Morningstar, Inc.	United States	146.14	-10%	6,249.4	5,989.5	1,056.8	271.8	25.7%	9.1%	5.7x	22.0x
MSCI Inc.	United States	217.75	-12%	18,443.1	20,436.7	1,476.6	767.4	52.0%	7.7%	13.8x	26.6x
S&P Global Inc.	United States	244.98	-9%	60,338.6	64,799.6	6,357.0	3,149.0	49.5%	1.3%	10.2x	20.6x
SEI Investments Company	United States	59.26	-3%	8,948.9	8,314.3	1,624.1	472.3	29.1%	1.2%	5.1x	17.6x
SS&C Technologies Holdings, Inc.	United States	51.57	-24%	13,086.3	21,196.7	4,388.6	1,591.2	36.3%	101.8%	4.8x	13.3x
Thomson Reuters Corporation	Canada	66.89	-6%	33,521.8	34,861.6	5,721.0	1,043.0	18.2%	6.4%	6.1x	33.4x
TransUnion	United States	81.11	-5%	15,232.5	19,137.7	2,497.9	890.1	35.6%	18.7%	7.7x	21.5x
Verisk Analytics, Inc.	United States	158.14	-4%	25,856.8	28,491.3	2,490.2	1,092.2	43.9%	8.2%	11.4x	26.1x
Workiva Inc.	United States	43.83	-32%	2,019.6	1,922.7	268.8	(20.8)	NM	19.1%	7.2x	NM
Adjusted Weighted Average										8.6x	23.0x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (14.5x) and EBITDA multiples that are 1.0 standard deviations above the mean (35.3x)

/ Information

(\$ in Millions, except stock price data)

Marketing Information											
Company Name	Headquarters	Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months			Last Twelve Months Multiples		
		09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Alliance Data Systems Corporation	United States	\$128.13	-46%	\$ 5,900.02	\$ 27,279.32	\$ 7,695.00	\$ 1,779.50	23.1%	13.2%	3.5x	15.3x
comScore, Inc.	United States	1.91	-92%	122.5	334.7	411.4	(33.3)	NM	0.2%	0.8x	NM
Ebiquity plc	United Kingdom	0.64	-32%	48.1	70.1	88.1	6.0	6.9%	26.2%	0.8x	11.6x
InnerWorkings, Inc.	* United States	4.43	-45%	228.1	405.4	1,116.3	14.9	1.3%	-3.0%	0.4x	27.2x
INTAGE HOLDINGS Inc.	Japan	8.64	-15%	347.0	265.7	508.8	52.0	10.2%	8.5%	0.5x	5.1x
Ipsos SA	France	28.51	-6%	1,252.3	2,129.4	2,124.3	221.2	10.4%	7.7%	1.0x	9.6x
LiveRamp Holdings, Inc.	United States	42.96	-32%	2,905.8	1,924.8	305.7	(171.0)	NM	29.6%	6.3x	NM
Nielsen Holdings plc	United States	21.25	-25%	7,558.1	16,560.1	6,449.0	1,410.0	21.9%	-3.2%	2.6x	11.7x
SVMK Inc.	* United States	17.10	-14%	2,275.6	2,427.2	276.9	(118.2)	NM	18.6%	8.8x	NM
System1 Group PLC	United Kingdom	2.25	-29%	28.3	23.1	35.0	2.5	7.2%	-0.1%	0.7x	9.1x
YouGov plc	* United Kingdom	6.59	-13%	691.9	661.2	166.6	29.3	17.6%	13.2%	4.0x	22.5x
Adjusted Weighted Average										3.3x	12.8x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (8.2x) and EBITDA multiples that are 1.0 standard deviations above the mean (21.4x)

(\$ in Millions, except stock price data)

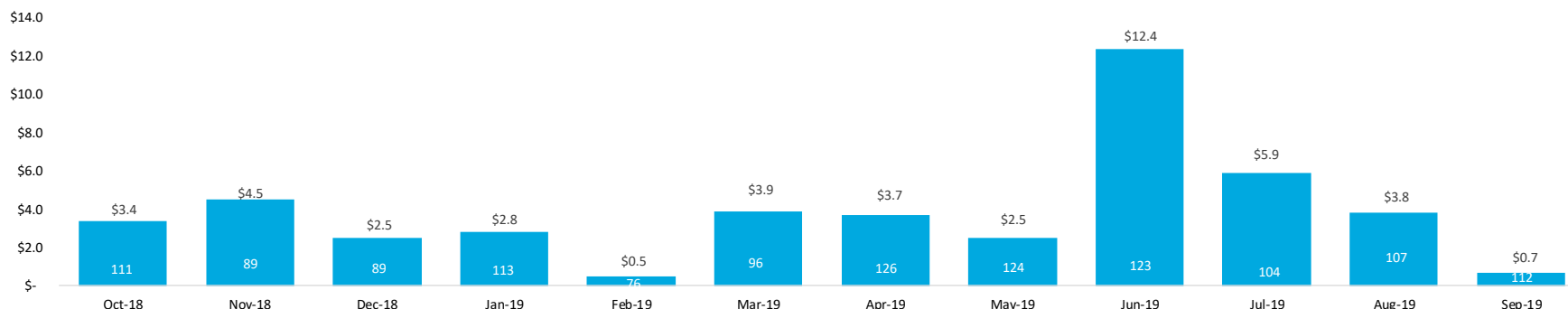
Other Information											
Company Name	Headquarters	Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months			Last Twelve Months Multiples		
		09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Forrester Research, Inc.	United States	\$32.14	-38%	\$ 596.26	\$ 748.00	\$ 412.31	\$ 32.29	7.8%	19.6%	1.8x	23.2x
Gartner, Inc.	United States	142.99	-17%	12,888.7	15,756.6	4,051.9	590.7	14.6%	6.4%	3.9x	26.7x
HealthStream, Inc.	United States	25.89	-15%	838.2	710.3	248.7	31.2	12.6%	12.1%	2.9x	22.8x
IQVIA Holdings Inc.	United States	149.38	-9%	29,262.7	40,511.7	10,706.0	1,857.0	17.3%	5.8%	3.8x	21.8x
Informa plc	United Kingdom	10.48	-5%	13,117.0	16,831.5	3,583.5	1,129.7	31.5%	56.8%	4.7x	14.9x
National Research Corporation	* United States	57.75	-16%	1,431.9	1,467.8	123.5	45.2	36.6%	4.8%	11.9x	32.5x
NIC Inc.	United States	20.65	-12%	1,382.7	1,208.5	342.4	75.1	21.9%	-1.4%	3.5x	16.1x
Premier, Inc.	United States	28.92	-39%	1,830.2	1,722.8	1,217.6	521.8	42.9%	2.8%	1.4x	3.3x
Proofpoint, Inc.	United States	129.05	-3%	7,235.8	7,110.1	800.0	(27.6)	NM	29.9%	8.9x	NM
Reed Elsevier plc ⁽¹⁾	United Kingdom	23.77	-4%	45,997.8	54,341.7	9,819.2	2,988.8	30.4%	6.0%	5.5x	18.2x
Wolters Kluwer N.V.	Netherlands	73.03	-1%	19,201.8	21,746.7	5,056.9	1,382.6	27.3%	5.4%	4.3x	15.7x
Adjusted Weighted Average										4.8x	19.0x

(1) All financials are representative of the Reed Elsevier combined businesses, except per stock data, which represents Reed Elsevier (LSE:REL)

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (11.0x) and EBITDA multiples that are 1.0 standard deviations above the mean (27.4x)

/ Business & IT Services

- The Business & IT Services segment had 112 transactions, 16 of which were valued at \$700 million
- IT Consulting transactions accounted for more than 50 percent of all transactions throughout the month with 61 deals
- Select transaction from the segment include:
 - Chegg's acquisition of online coding school Thinkful for \$100 million
 - The \$100 million round of funding online medical education company AllinMD has raised from Tencent, Sheares Healthcare Group, Trustbridge Partners, and WeDo Capital
 - New Mountain Capital's sale of healthcare IT company Convey Health Solutions to TPG Capital
 - The acquisition of digital transformation company Skookum by Global Logic
 - McKinsey's purchase of capital projects specialist Westney Consulting



BUSINESS SERVICES & IT SERVICES

	2Q19		3Q19		LTM		Sep-19	
	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)	Number of Transactions	Reported Value (\$MM)
Strategic	272	\$9,623.9	245	\$1,824.3	926	\$22,627.7	86	\$158.3
Private Equity - Buyout	28	6,482.0	23	7,283.0	108	17,255.6	5	0.0
Private Equity - VC/Growth Capital	73	2,512.7	55	1,282.4	256	6,677.8	21	541.7
Total	373	\$18,618.6	323	\$10,389.7	1,290	\$46,561.1	112	\$700.0

/ Business & IT Services

(\$ in Millions, except stock price data)

Consulting

		Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months			Last Twelve Months Multiples		
Company Name	Headquarters	09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Accenture plc	Ireland	\$192.35	-5%	\$ 122,554.11	\$ 116,865.55	\$ 43,215.01	\$ 7,197.83	16.7%	9.2%	2.7x	16.2x
CRA International, Inc.	United States	41.97	-23%	330.5	494.1	429.1	37.8	8.8%	9.1%	1.2x	13.1x
FTI Consulting, Inc.	United States	105.99	-5%	3,872.2	4,180.4	2,175.4	309.4	14.2%	12.9%	1.9x	13.5x
Information Services Group, Inc.	United States	2.49	-51%	117.7	212.2	268.0	18.0	6.7%	-2.5%	0.8x	11.8x
Navigant Consulting, Inc.	United States	27.95	-1%	1,070.3	1,088.4	728.7	70.8	9.7%	12.5%	1.5x	15.4x
ICF International, Inc.	United States	84.47	-2%	1,587.1	2,015.6	1,418.8	129.6	9.1%	13.2%	1.4x	15.6x
Huron Consulting Group Inc.	United States	61.34	-5%	1,332.9	1,704.4	829.1	102.2	12.3%	10.0%	2.1x	16.7x
The Hackett Group, Inc.	United States	16.46	-28%	491.4	486.9	260.1	40.9	15.7%	1.2%	1.9x	11.9x
Adjusted Weighted Average										1.8x	14.1x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (2.5x) and EBITDA multiples that are 1.0

(\$ in Millions, except stock price data)

HR Services

		Stock Price	Chg % From	Equity	Enterprise	Last Twelve Months				Last Twelve Months Multiples	
Company Name	Headquarters	09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Automatic Data Processing, Inc.	United States	\$161.42	-7%	\$ 70,007.71	\$ 70,312.21	\$ 14,175.20	\$ 3,489.40	24.6%	6.4%	5.0x	20.2x
Barrett Business Services, Inc.	United States	88.82	-3%	663.5	592.0	934.3	52.8	5.7%	-0.7%	0.6x	11.2x
Capita plc	United Kingdom	1.78	-3%	2,950.2	4,615.0	4,775.3	318.2	6.7%	-8.8%	1.0x	14.5x
DHI Group, Inc.	United States	3.85	-13%	193.6	213.1	151.4	23.7	15.6%	-19.5%	1.4x	9.0x
Edenred SA	* France	48.01	-6%	11,680.4	13,708.5	1,632.9	596.3	36.5%	12.4%	8.4x	23.0x
Insperty, Inc.	United States	98.62	-32%	4,061.8	3,914.0	4,088.2	224.7	5.5%	14.9%	1.0x	17.4x
Marsh & McLennan Companies, Inc.	United States	100.05	-3%	50,656.4	65,084.4	15,636.0	3,784.0	24.2%	5.9%	4.2x	17.2x
Paychex, Inc.	United States	82.77	-6%	29,643.2	29,727.0	3,772.5	1,558.1	41.3%	11.7%	7.9x	19.1x
TriNet Group, Inc.	United States	62.19	-19%	4,349.3	4,528.3	3,661.0	266.0	7.3%	8.4%	1.2x	17.0x
Adjusted Weighted Average										5.2x	18.7x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (9.6x) and EBITDA multiples that are 1.0

/ Business & IT Services

(\$ in Millions, except stock price data)

IT Consulting

		Stock Price	Chg % From	Equity	Enterprise Value	Last Twelve Months				Last Twelve Months Multiples	
Company Name	Headquarters	09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
Accenture plc	Ireland	\$192.35	-5%	\$ 122,554.11	\$ 116,865.55	\$ 43,215.01	\$ 7,197.83	16.7%	9.2%	2.7x	16.2x
Amdocs Limited	United States	66.11	-2%	8,983.6	8,568.3	4,059.0	758.5	18.7%	2.7%	2.1x	11.3x
Bechtle AG	Germany	101.79	-16%	4,275.1	4,661.2	5,580.0	301.8	5.4%	26.9%	0.8x	15.4x
Booz Allen Hamilton Holding Corporation	United States	71.02	-9%	9,958.3	11,787.3	6,882.4	685.6	10.0%	9.4%	1.7x	17.2x
Business & Decision SA	* France	7.96	-11%	62.7	131.8	97.4	2.4	NA	-2.1%	1.4x	55.8x
Capgemini SE	France	117.87	-9%	19,471.5	22,411.2	15,631.5	2,018.7	12.9%	8.1%	1.4x	11.1x
Cerner Corporation	United States	68.17	-11%	21,704.9	21,931.6	5,526.7	1,203.4	21.8%	5.3%	4.0x	18.2x
CGI Inc.	Canada	79.13	-2%	21,252.6	23,040.3	9,136.3	1,556.9	17.0%	5.6%	2.5x	14.8x
Cognizant Technology Solutions Corporation	United States	60.27	-22%	33,283.8	31,934.8	16,458.0	3,191.0	19.4%	6.1%	1.9x	10.0x
Digi International Inc.	United States	13.62	-7%	383.2	296.9	255.8	26.2	10.3%	23.7%	1.2x	11.3x
DXC Technology Company	United States	29.50	-69%	7,727.9	17,282.9	20,361.0	4,010.0	19.7%	-6.5%	0.8x	4.3x
Endava plc	* United Kingdom	37.85	-14%	1,987.8	1,898.7	365.9	51.4	14.0%	32.3%	5.2x	36.9x
EPAM Systems, Inc.	* United States	182.32	-9%	10,000.3	9,454.5	2,046.0	321.5	15.7%	24.3%	4.6x	29.4x
Globant S.A.	* Luxembourg	91.58	-18%	3,355.8	3,365.2	578.4	104.0	18.0%	22.4%	5.8x	32.4x
Hexaware Technologies Limited	India	5.38	-17%	1,606.0	1,600.5	730.4	114.2	15.6%	20.3%	2.2x	14.0x
International Business Machines Corporation	United States	145.42	-6%	128,824.0	160,982.0	77,859.0	17,207.0	22.1%	-3.6%	2.1x	9.4x
Infosys Limited	India	11.40	-4%	48,330.3	45,955.9	12,099.0	2,959.0	24.5%	8.8%	3.8x	15.5x
ITS Group	France	4.94	-29%	37.2	43.3	134.0	9.8	7.3%	-34.1%	0.3x	4.4x
Larsen & Toubro Limited	India	20.90	-7%	29,327.1	45,048.9	21,126.6	2,734.6	12.9%	16.1%	2.1x	16.5x
Navigant Consulting, Inc.	United States	27.95	-1%	1,070.3	1,088.4	728.7	70.8	9.7%	12.5%	1.5x	15.4x
NTT DATA Corporation	Japan	12.90	-14%	18,087.1	22,426.4	20,278.0	1,332.0	6.6%	5.0%	1.1x	16.8x
Parsons Corporation	United States	32.98	-15%	3,279.4	3,594.8	3,799.2	174.5	4.6%	0.0%	0.9x	20.6x
Perficient, Inc.	United States	38.58	-3%	1,267.0	1,384.1	531.3	67.2	12.6%	6.3%	2.6x	20.6x
Presidio, Inc.	United States	16.90	-3%	1,405.8	2,321.6	3,026.1	220.2	7.3%	9.4%	0.8x	10.5x
Reply S.p.A.	Italy	58.72	-17%	2,196.5	2,178.3	1,282.5	163.7	12.8%	17.4%	1.7x	13.3x
SQLI SA	France	21.59	-23%	98.2	165.6	272.0	18.2	6.7%	6.1%	0.6x	9.1x
Synthomer plc	United Kingdom	3.99	-41%	1,694.7	2,052.4	1,966.9	221.7	11.3%	0.3%	1.0x	9.3x
Tata Consultancy Services Limited	India	29.71	-8%	111,493.3	106,510.8	21,817.0	5,829.4	26.7%	17.7%	4.9x	18.3x
Wipro Limited	India	3.39	-20%	19,302.3	15,025.2	8,606.9	1,741.4	20.2%	8.2%	1.7x	8.6x
Adjusted Weighted Average										2.8x	14.2x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (5.1x) and EBITDA multiples that are 1.0 standard deviations above the mean (27.3x)

/ Business & IT Services

(\$ in Millions, except stock price data)

Outsourced Services

		Stock Price	Chg % From	Equity	Enterprise Value	Last Twelve Months				Last Twelve Months Multiples	
Company Name	Headquarters	09/30/19	52WK High	Value	Value	Revenue	EBITDA	EBITDA Margin	Revenue Growth	Enterprise Value/Revenue	Enterprise Value/EBITDA
AMREP Corporation	United States	\$5.72	-27%	\$ 46.50	\$ 31.75	\$ 13.36	\$ (2.11)	NM	323.2%	2.4x	NM
Cimpress N.V.	Ireland	131.84	-3%	3,778.9	4,981.7	2,751.1	323.0	11.7%	6.1%	1.8x	15.4x
Clairvest Group Inc.	Canada	38.15	-2%	581.6	318.4	109.5	62.7	57.3%	-52.4%	2.9x	5.1x
CSG Systems International, Inc.	United States	51.68	-10%	1,644.9	1,972.0	951.0	159.5	16.8%	16.1%	2.1x	12.4x
Donnelley Financial Solutions, Inc.	United States	12.32	-32%	422.6	917.5	905.7	89.5	9.9%	-8.8%	1.0x	10.3x
Elanders AB (publ)	Sweden	8.10	-18%	286.4	754.4	1,209.8	104.0	8.6%	12.6%	0.6x	7.3x
Eniro AB (publ)	Sweden	0.16	-35%	10.4	119.0	133.1	15.7	11.8%	-17.0%	0.9x	7.6x
ExiService Holdings, Inc.	United States	66.96	-4%	2,288.3	2,392.3	949.1	128.1	13.5%	17.6%	2.5x	18.7x
Firstsource Solutions Limited	India	0.66	-27%	460.6	517.1	563.9	75.5	13.4%	8.7%	0.9x	6.9x
Genpact Limited	Bermuda	38.75	-13%	7,381.9	8,646.8	3,274.3	519.0	15.9%	14.5%	2.6x	16.7x
InnerWorkings, Inc.	United States	4.43	-45%	228.1	405.4	1,116.3	14.9	1.3%	-3.0%	0.4x	27.2x
j2 Global, Inc.	United States	90.82	-2%	4,442.7	5,477.8	1,261.1	475.6	37.7%	8.9%	4.3x	11.5x
Liq Participações S.A.	Brazil	2.69	-77%	7.5	111.2	298.4	(5.6)	NM	-25.5%	0.4x	NM
LSC Communications, Inc.	United States	1.38	-88%	46.3	1,054.3	3,668.0	95.0	2.6%	-3.6%	0.3x	11.1x
MAXIMUS, Inc.	United States	77.26	-6%	4,930.0	4,863.3	2,690.3	368.0	13.7%	9.6%	1.8x	13.2x
Quad/Graphics, Inc.	United States	10.51	-48%	555.5	1,803.6	4,219.1	350.6	8.3%	1.6%	0.4x	5.1x
IQVIA Holdings Inc.	United States	149.38	-9%	29,262.7	40,511.7	10,706.0	1,857.0	17.3%	5.8%	3.8x	21.8x
R.R. Donnelley & Sons Company	United States	3.77	-44%	266.9	2,391.0	6,443.5	381.4	5.9%	-8.6%	0.4x	6.3x
Serco Group plc	United Kingdom	1.84	-2%	2,239.3	2,502.1	3,743.8	166.2	4.4%	4.9%	0.7x	15.1x
Steel Connect, Inc.	United States	1.75	-20%	106.1	513.6	810.4	62.7	7.7%	47.4%	0.6x	8.2x
SYNNEX Corporation	United States	112.90	-2%	5,713.3	8,779.8	23,005.9	1,187.5	5.2%	17.3%	0.4x	7.4x
Sykes Enterprises, Incorporated	United States	30.64	-4%	1,274.3	1,452.8	1,606.5	166.8	10.4%	-1.9%	0.9x	8.7x
Teleperformance SE	France	216.88	-3%	12,703.5	15,702.9	5,615.6	917.2	16.3%	18.4%	2.8x	17.1x
TTEC Holdings, Inc.	United States	47.88	-5%	2,225.6	2,565.9	1,570.9	185.9	11.8%	4.0%	1.6x	13.8x
transcosmos inc.	Japan	24.10	-13%	999.5	833.8	2,699.0	98.4	3.6%	7.0%	0.3x	8.5x
Transcontinental Inc.	Canada	11.69	-33%	1,021.2	2,042.6	2,332.2	387.0	16.6%	32.5%	0.9x	5.3x
Adjusted Weighted Average										1.5x	16.6x

*Calculation is market cap weighted and excludes revenue multiples that are 2.0 standard deviations above the mean (1.4x) and EBITDA multiples that are 1.0 standard deviations above the mean (13.4x)

Additional Information

/ Appendix

- All transaction information has been publicly reported and is sourced from national news publications, industry trade journals and blogs, and public announcements by companies and investors.
- All trading data related to publicly-traded companies has been sourced from Capital IQ.

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