

CONFIDENTIAL

Technology-Enabled Business Services (TEBS)

Quarterly Update – 2019 Q3



TEBS Overview

Cherry Tree has been tracking trends and activity in the Technology Enabled Business Services (TEBS) space for more than 15 years, including the TEBS 100 index

TEBS companies are defined as those that:

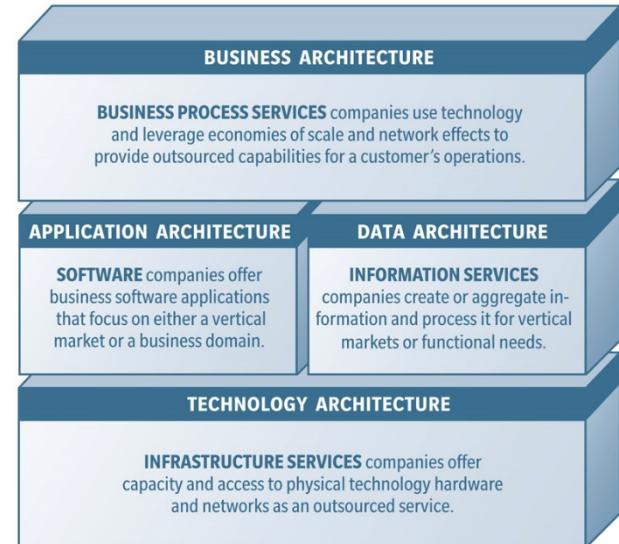
- *Offer a solution, product or service that is delivered or enhanced via technology*
- *Generate revenue primarily from other businesses ("B2B")*
- *Use their own intellectual property to differentiate their solution*

The TEBS 100 is a broad index of 100 publicly-traded companies. The four segments of the TEBS 100 align with the open architecture framework:

- *Business Process Services*
- *Software*
- *Information Services*
- *Infrastructure Services*

TEBS companies are consistently valued at a premium to the overall market due to fundamental business advantages

- *Recurring Revenue*
- *Operating Leverage*
- *High Switching Costs*



Cherry Tree Research, The Open Group

Valuation Multiples – 9/30/2019		
TEBS Segment	EV/Revenue	EV/EBITDA
Software	6.5x	25.2x
Information Services	7.3x	21.5x
Business Process Services	2.1x	15.4x
Infrastructure Services	3.1x	11.9x
S&P 500	3.3x	13.4x

Source: Cherry Tree Research, Capital IQ: 9/30/2019

TEBS 100

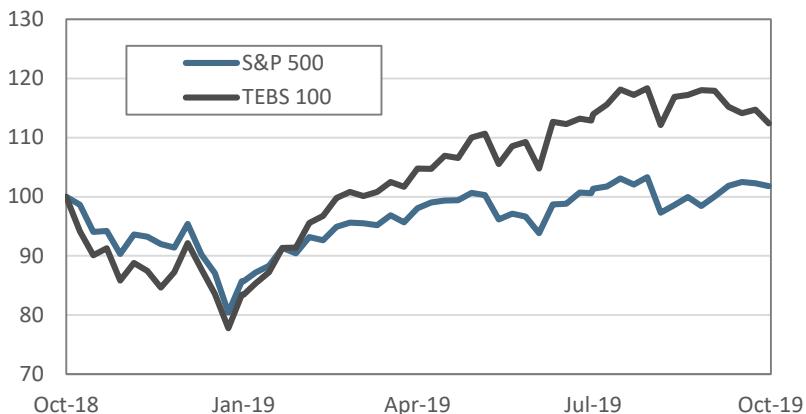
An index of 100 publicly-traded Technology Enabled Business Services companies

TEBS 100 Index Performance

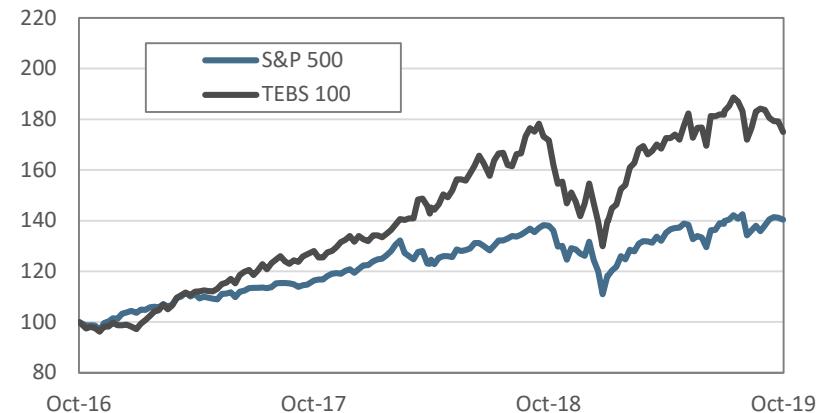
- The TEBS 100 continues to outperform the overall market over a three-year period (75% return over three years vs. 41% return for the S&P 500)
- Over the last twelve months the TEBS 100 had a 2% return, which slightly outperformed the S&P 500's 1.8% return

— S&P 500 — TEBS 100

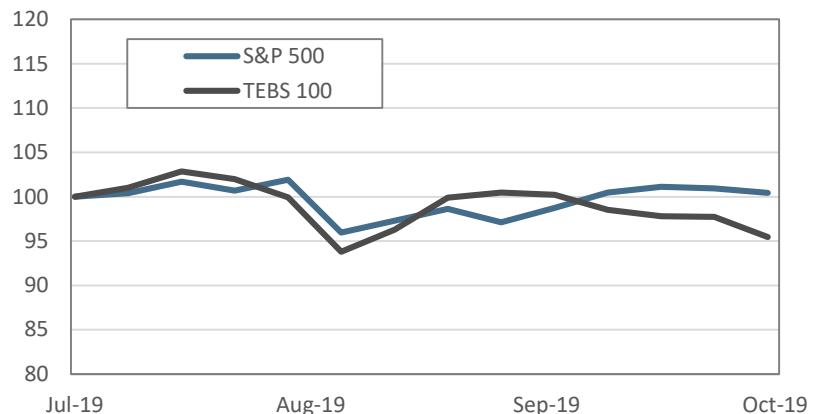
1-Year TEBS 100 Performance vs. S&P 500



3-Year TEBS 100 Performance vs. S&P 500



3-Month TEBS 100 Performance vs. S&P 500



TEBS 100 Segment Operating Metrics

- The revenue growth of the TEBS 100 index and three of its four segments continue to outperform the S&P 500
- Gross margins for the TEBS 100 are much higher than the median S&P 500 company, allowing for greater operating leverage and potential for higher overall profitability
- However, EBITDA margins continue to lag the S&P 500, likely due to reinvestment of profits to drive revenue growth

EBITDA Margin			
	9/30/2017	9/30/2018	9/30/2019
Software	10.9%	10.8%	8.4%
Information Services	27.0%	26.7%	25.7%
Business Process Services	16.6%	14.7%	15.9%
Infrastructure Services	21.4%	21.9%	23.7%
TEBS 100	13.6%	14.9%	15.4%
S&P 500	23.1%	23.3%	22.8%

	Revenue Growth		
	9/30/2017	9/30/2018	9/30/2019
Software	15.0%	15.8%	16.1%
Information Services	8.3%	10.6%	8.2%
Business Process Services	4.8%	7.7%	4.0%
Infrastructure Services	22.9%	22.5%	10.0%
TEBS 100	10.8%	13.4%	12.2%
S&P 500	5.5%	8.1%	5.0%

	Gross Margin		
	9/30/2017	9/30/2018	9/30/2019
Software	67.9%	66.8%	66.9%
Information Services	64.3%	63.0%	63.3%
Business Process Services	35.2%	34.8%	34.9%
Infrastructure Services	58.2%	58.6%	60.3%
TEBS 100	60.2%	61.7%	62.4%
S&P 500	43.6%	43.7%	44.4%

TEBS 100 SEGMENT PERFORMANCE

Software

Information Services

Business Process Services

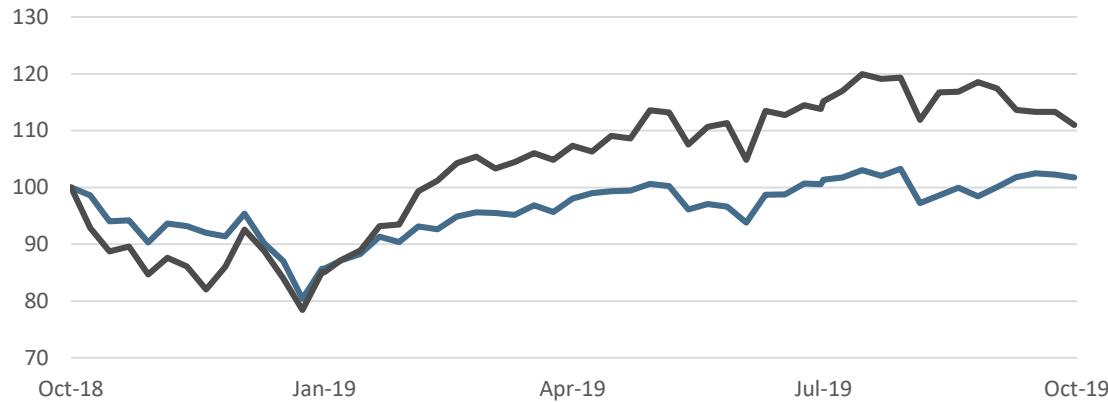
Infrastructure Services

TEBS 100 Companies – Software

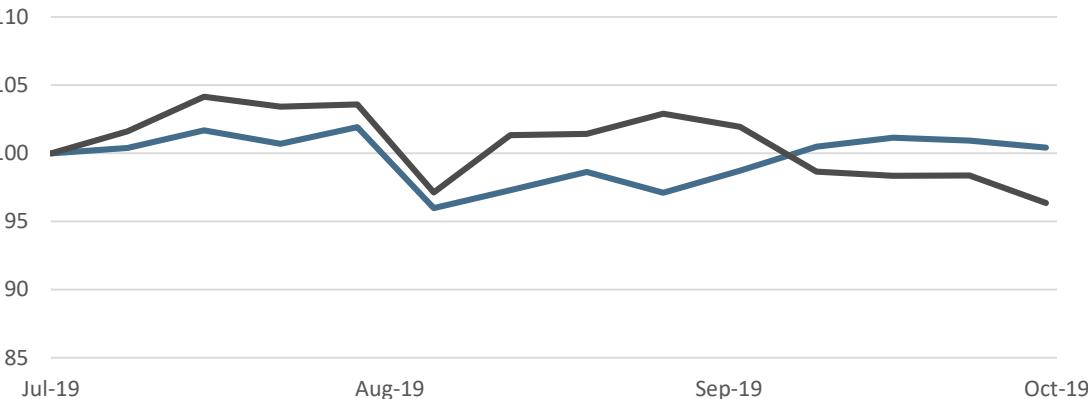
Company	Enterprise Value	LTM Revenue	Gross Margin	EBITDA Margin	EV/		Revenue Growth	EV/			Revenue Growth	
					Revenue	EBITDA		Revenue	EBITDA			
8x8, Inc.	\$1,999	\$366	62.6%	-24.9%	5.5x	n/m	17.8%					
ACI Worldwide, Inc.	\$4,990	\$1,069	55.4%	16.3%	4.7x	28.7x	7.3%					
Adobe Inc.	\$134,213	\$10,644	85.2%	33.5%	12.6x	37.6x	24.2%					
Allscripts Healthcare Solutions	\$2,654	\$1,751	47.6%	6.6%	1.5x	22.8x	14.2%					
American Software, Inc.	\$388	\$109	53.0%	7.9%	3.6x	n/m	-4.0%					
Appian Corporation	\$3,091	\$242	63.0%	-21.5%	12.8x	n/m	16.9%					
Asure Software, Inc.	\$218	\$99	63.2%	10.3%	2.2x	21.3x	38.4%					
Atlassian Corporation Plc	\$29,612	\$1,210	82.6%	-1.7%	24.5x	n/m	37.4%					
Benefitfocus, Inc.	\$917	\$273	51.3%	-8.1%	3.4x	n/m	10.4%					
Blackbaud, Inc.	\$4,975	\$872	54.3%	13.7%	5.7x	n/m	5.1%					
BlackLine, Inc.	\$2,521	\$255	78.0%	-3.7%	9.9x	n/m	26.0%					
Bottomline Technologies	\$1,738	\$422	56.7%	9.0%	4.1x	n/m	7.1%					
Citrix Systems, Inc.	\$13,061	\$3,002	87.0%	26.1%	4.4x	16.7x	3.2%					
Commvault Systems, Inc.	\$1,588	\$697	83.1%	6.1%	2.3x	37.5x	-1.8%					
Cornerstone OnDemand, Inc.	\$3,301	\$554	73.9%	2.8%	6.0x	n/m	6.7%					
Enghouse Systems Limited	\$1,402	\$276	69.3%	28.6%	5.1x	17.8x	6.2%					
FireEye, Inc.	\$2,912	\$857	66.6%	-13.1%	3.4x	n/m	6.5%					
Fiserv, Inc.	\$76,125	\$5,977	47.2%	32.3%	12.7x	39.5x	3.5%					
Five9, Inc.	\$3,174	\$290	59.7%	6.8%	11.0x	n/m	28.4%					
Fortinet, Inc.	\$11,333	\$1,955	75.4%	17.1%	5.8x	34.0x	19.9%					
HealthStream, Inc.	\$710	\$249	58.1%	12.6%	2.9x	22.8x	12.1%					
HubSpot, Inc.	\$6,068	\$591	80.7%	-5.7%	10.3x	n/m	33.9%					
Intuit Inc.	\$66,860	\$6,784	83.1%	30.4%	9.9x	32.5x	12.6%					
Jack Henry & Associates, Inc.	\$11,146	\$1,553	40.6%	27.4%	7.2x	26.2x	5.6%					
Manhattan Associates, Inc.	\$5,112	\$589	55.4%	22.8%	8.7x	38.1x	3.5%					
Medidata Solutions, Inc.	\$5,518	\$685	73.6%	11.4%	8.1x	n/m	16.9%					
Mimecast Limited	\$2,254	\$361	73.6%	7.8%	6.2x	n/m	28.0%					
NextGen Healthcare, Inc.	\$1,056	\$528	58.4%	7.2%	2.0x	27.6x	-1.0%					
NIC Inc.	\$1,209	\$342	40.1%	21.9%	3.5x	16.1x	-1.4%					
Okta, Inc.	\$11,377	\$487	72.3%	-29.7%	23.4x	n/m	51.1%					

Segment Performance – Software

1-Year Stock Performance vs. S&P 500



3-Month Stock Performance vs. S&P 500



S&P 500 — TEBS Software

Top Performers (1-Yr)



(22.9%) Allscripts™

(36.1%) COMMVAULT

(41.1%) BENEFITFOCUS®

(45.9%) Bottomline Technologies®

(46.0%) ASURE SOFTWARE

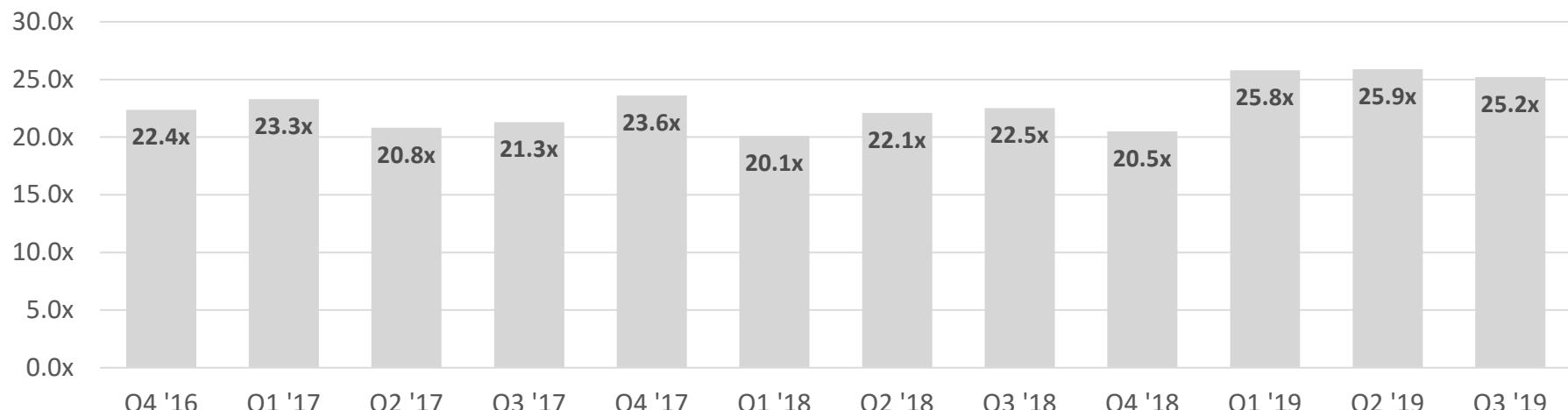
Bottom Performers (1-Yr)

Segment Valuation – Software

Enterprise Value/Revenue



Enterprise Value/EBITDA

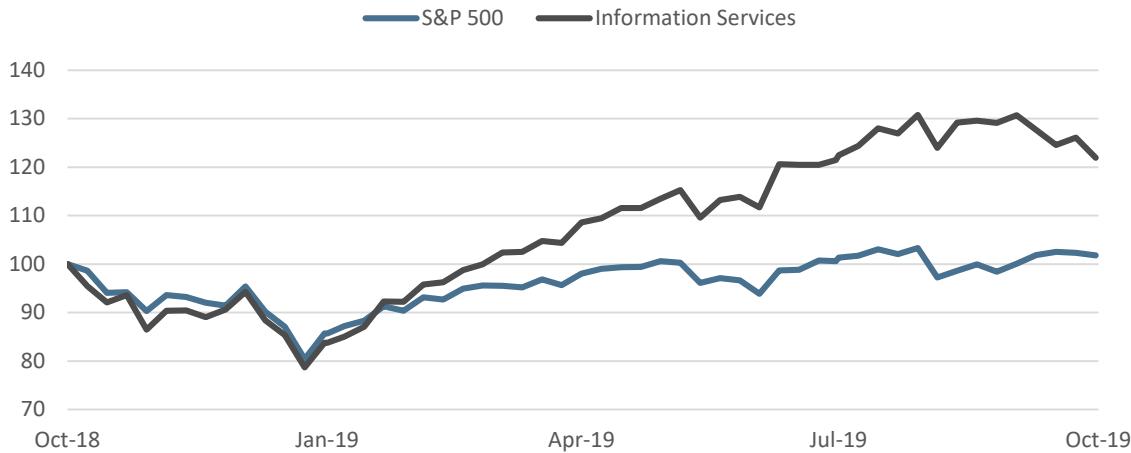


TEBS 100 Companies – Information Services

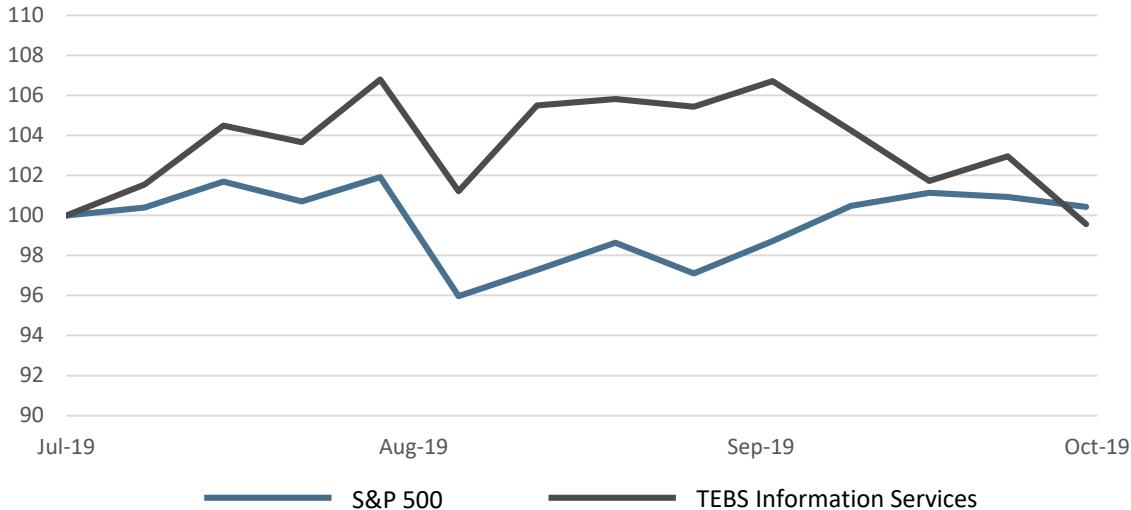
Company	Enterprise Value	LTM Revenue	Gross Margin	EBITDA Margin	EV/		Revenue Growth
					Revenue	EBITDA	
Alteryx, Inc.	\$6,626	\$310	90.4%	7.4%	21.4x	n/m	77.5%
CoreLogic, Inc.	\$5,526	\$1,732	48.7%	19.8%	3.2x	16.1x	-7.4%
CoStar Group, Inc.	\$20,526	\$1,293	78.3%	32.9%	15.9x	n/m	20.6%
Equifax Inc.	\$19,891	\$3,396	55.4%	19.8%	5.9x	29.6x	-0.6%
FactSet Research Systems Inc.	\$9,484	\$1,435	53.8%	34.7%	6.6x	19.0x	6.3%
Fair Isaac Corporation	\$9,514	\$1,144	71.4%	25.5%	8.3x	32.6x	14.7%
Forrester Research, Inc.	\$748	\$412	57.6%	7.8%	1.8x	23.2x	19.6%
Gartner, Inc.	\$15,757	\$4,052	63.5%	14.6%	3.9x	26.7x	6.4%
IHS Markit Ltd.	\$31,762	\$4,362	62.2%	34.4%	7.3x	21.2x	12.2%
Moody's Corporation	\$43,648	\$4,497	71.3%	46.8%	9.7x	20.8x	-0.7%
Morningstar, Inc.	\$5,989	\$1,057	60.1%	25.7%	5.7x	22.0x	9.1%
Nielsen Holdings plc	\$16,560	\$6,449	56.9%	21.9%	2.6x	11.7x	-3.2%
S&P Global Inc.	\$64,800	\$6,357	72.9%	49.5%	10.2x	20.6x	1.3%
TransUnion	\$19,138	\$2,498	66.3%	35.6%	7.7x	21.5x	18.7%
Verisk Analytics, Inc.	\$28,491	\$2,490	63.3%	43.9%	11.4x	26.1x	8.2%
25th Percentile	\$8,055	\$591	57.2%	19.8%	4.8x	20.6x	-0.6%
Median	\$16,560	\$1,293	63.3%	25.7%	7.3x	21.5x	8.2%
75th Percentile	\$24,509	\$2,573	71.4%	35.2%	10.0x	26.1x	18.7%

Segment Performance – Information Services

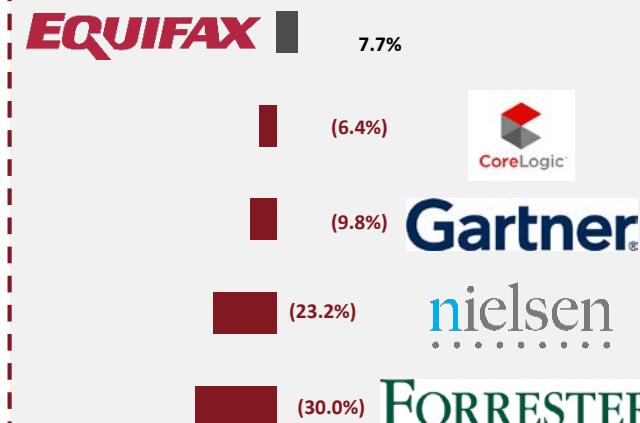
1-Year Stock Performance vs. S&P 500



3-Month Stock Performance vs. S&P 500



Top Performers (1-Yr)



Bottom Performers (1-Yr)

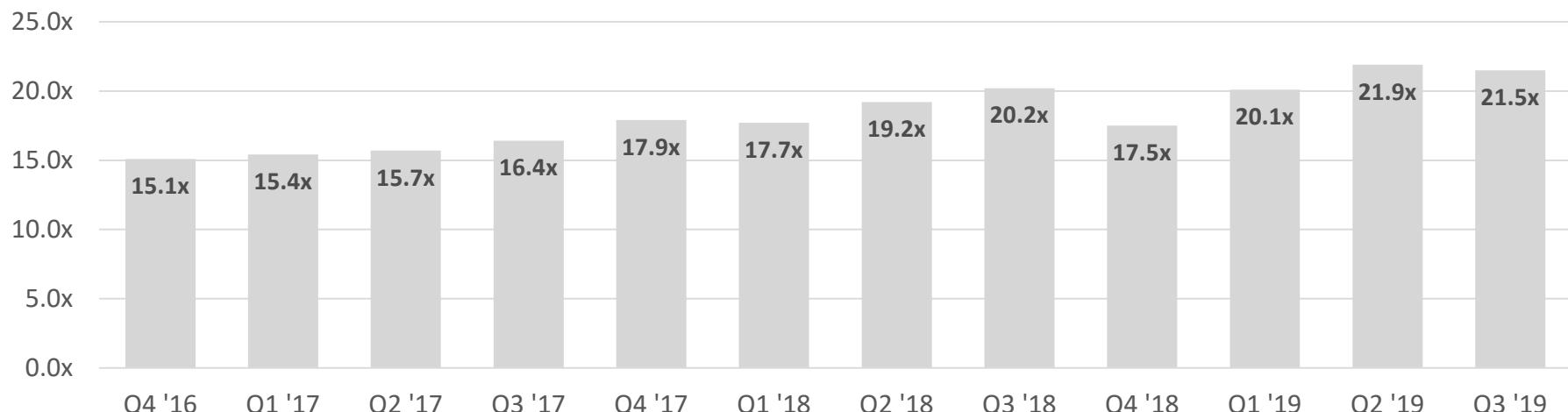
Source: Cherry Tree Research, Capital IQ: 9/30/2019

Segment Valuation – Information Services

Enterprise Value/Revenue



Enterprise Value/EBITDA



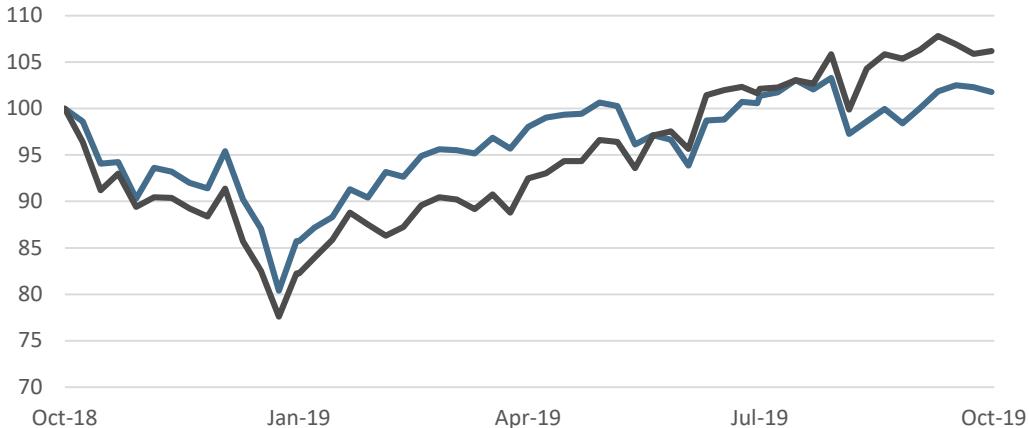
TEBS 100 Companies – Business Process Services

Company	Enterprise Value	LTM Revenue	Gross Margin	EBITDA Margin	EV/		Revenue Growth
					Revenue	EBITDA	
Amdocs Limited	\$8,568	\$4,059	34.9%	18.7%	2.1x	11.3x	2.7%
Automatic Data Processing, Inc.	\$70,312	\$14,175	45.1%	24.6%	5.0x	20.2x	6.4%
Broadridge Financial Solutions, Inc.	\$15,417	\$4,362	28.2%	20.9%	3.5x	16.9x	0.7%
Cass Information Systems, Inc.	\$606	\$159	43.8%	33.1%	3.8x	11.5x	10.0%
Cimpress N.V.	\$4,982	\$2,751	49.1%	11.7%	1.8x	15.4x	6.1%
Conduent Incorporated	\$3,090	\$4,856	22.2%	11.1%	0.6x	5.7x	-16.0%
CSG Systems International, Inc.	\$1,972	\$951	47.4%	16.8%	2.1x	12.4x	16.1%
Exela Technologies, Inc.	\$1,673	\$1,577	23.4%	10.5%	1.1x	10.1x	3.2%
ExlService Holdings, Inc.	\$2,392	\$949	34.0%	13.5%	2.5x	18.7x	17.6%
Genpact Limited	\$8,647	\$3,274	35.7%	15.9%	2.6x	16.7x	14.5%
Global Payments Inc.	\$53,055	\$3,556	66.7%	40.5%	14.9x	36.9x	-4.4%
InnerWorkings, Inc.	\$405	\$1,116	22.8%	1.3%	0.4x	27.2x	-3.0%
Paychex, Inc.	\$29,727	\$3,902	68.3%	41.1%	7.6x	18.5x	13.2%
PFSweb, Inc.	\$115	\$252	31.5%	6.1%	0.5x	7.5x	-6.4%
TTEC Holdings, Inc.	\$2,566	\$1,571	25.7%	11.8%	1.6x	13.8x	4.0%
25th Percentile	\$1,822	\$1,034	27.0%	11.4%	1.3x	11.4x	-3.0%
Median	\$3,090	\$2,751	34.9%	15.9%	2.1x	15.4x	4.0%
75th Percentile	\$12,032	\$3,980	46.2%	22.8%	3.7x	18.6x	13.2%

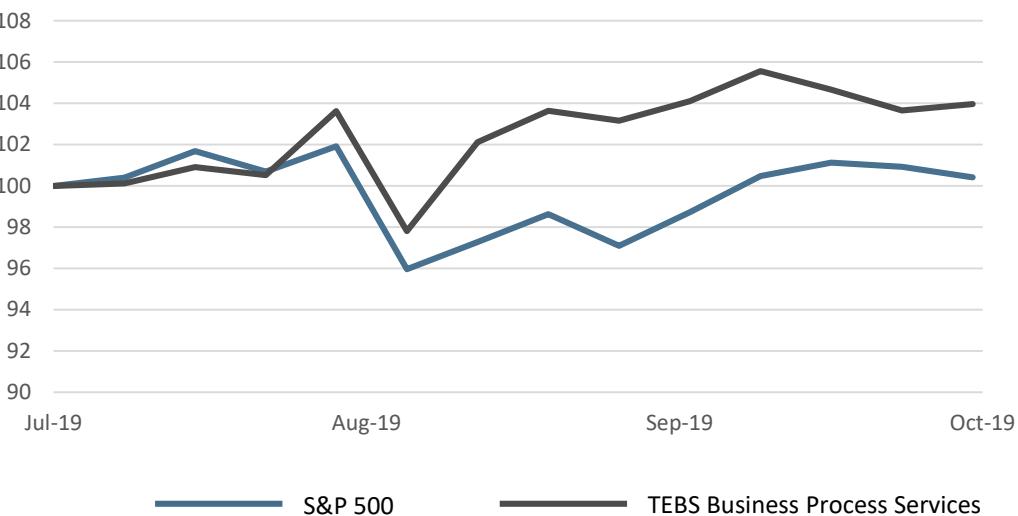
Source: Cherry Tree Research, Capital IQ: 9/30/2019
\$ in millions

Segment Performance – Business Process Services

1-Year Stock Performance vs. S&P 500



3-Month Stock Performance vs. S&P 500



Top Performers (1-Yr)



(5.7%)

(44.1%)

(66.4%)

(72.4%)

(83.5%)

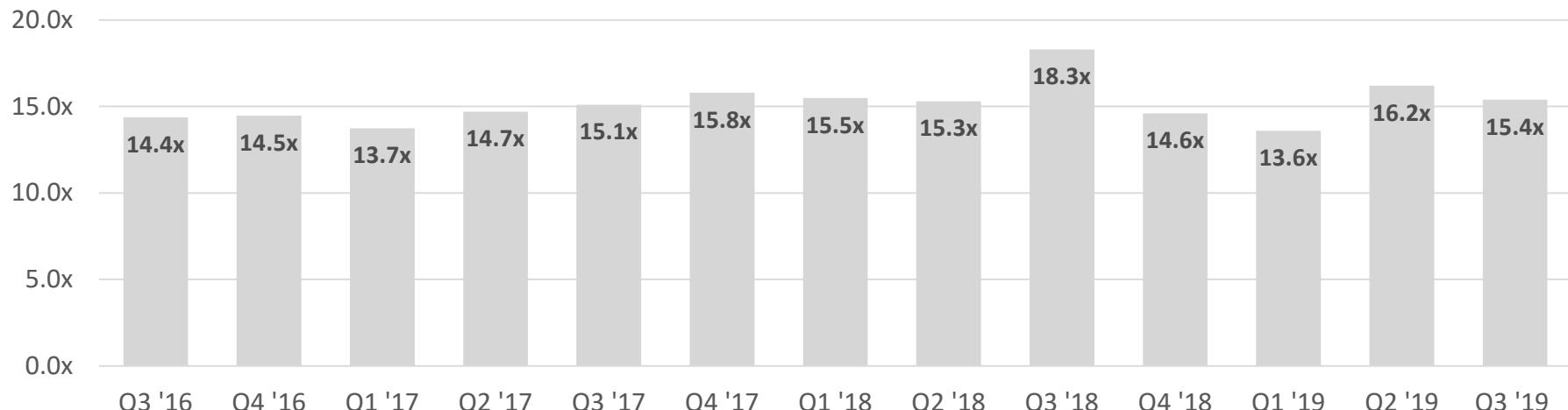
Bottom Performers (1-Yr)

Segment Valuation – Business Process Services

Enterprise Value/Revenue



Enterprise Value/EBITDA

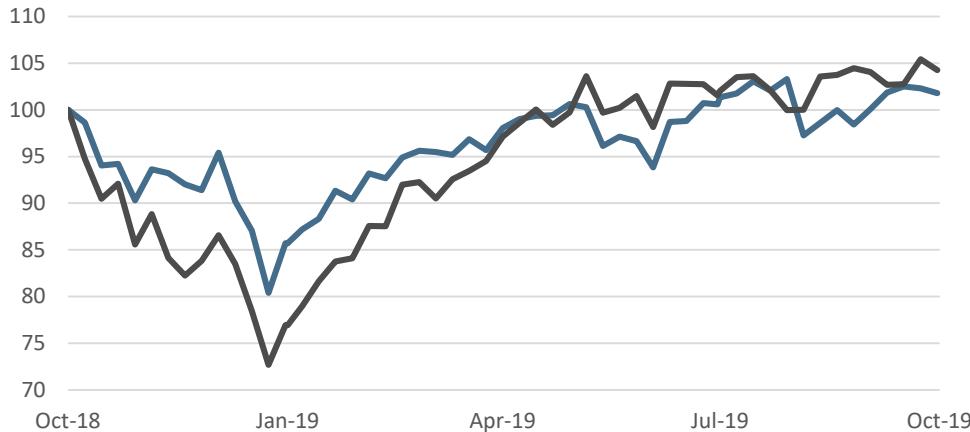


TEBS 100 Companies – Infrastructure Services

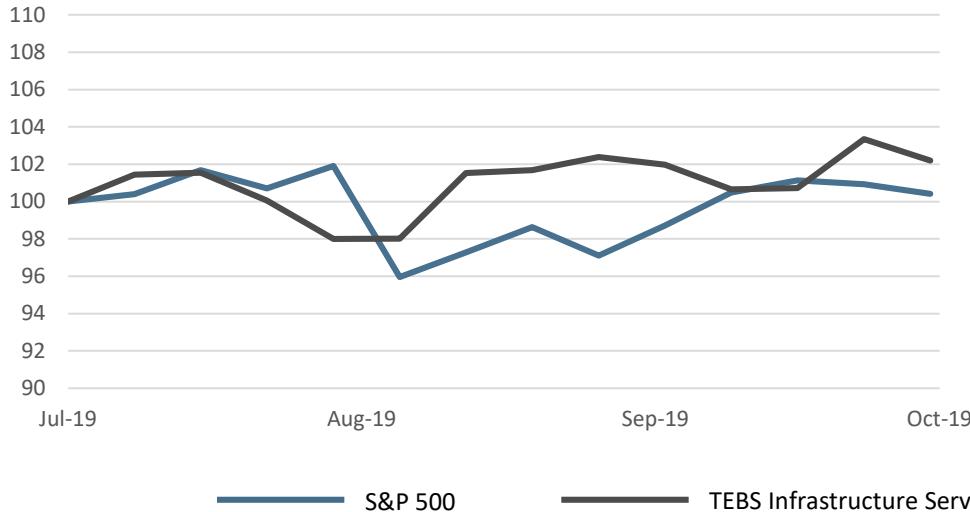
Company	Enterprise Value	LTM Revenue	Gross Margin	EBITDA Margin	EV/		Revenue Growth
					Revenue	EBITDA	
Akamai Technologies, Inc.	\$15,322	\$2,795	65.4%	28.0%	5.5x	19.6x	6.9%
Boingo Wireless, Inc.	\$609	\$268	33.2%	28.7%	2.3x	7.9x	17.2%
Box, Inc.	\$2,644	\$655	70.3%	-12.8%	4.0x	n/m	18.1%
Carbonite, Inc.	\$1,107	\$357	78.4%	10.1%	3.1x	30.7x	34.8%
Cogent Communications Holdings, Inc.	\$3,137	\$518	60.3%	33.0%	6.1x	18.3x	4.9%
Endurance International Group Holdings, Inc.	\$2,332	\$1,125	55.5%	25.7%	2.1x	8.1x	-3.7%
Equinix, Inc. (REIT)	\$59,578	\$5,342	49.2%	44.4%	11.2x	25.1x	10.0%
GoDaddy Inc.	\$13,167	\$2,823	66.4%	11.9%	4.7x	39.3x	14.3%
Gogo Inc.	\$1,551	\$848	46.5%	15.4%	1.8x	11.9x	3.4%
GTT Communications, Inc.	\$4,171	\$1,787	45.3%	23.7%	2.3x	9.8x	72.0%
Internap Corporation	\$784	\$308	54.3%	28.4%	2.5x	9.0x	4.3%
Limelight Networks, Inc.	\$326	\$182	51.0%	-1.6%	1.8x	n/m	-7.2%
Pure Storage, Inc.	\$3,741	\$1,518	66.8%	-9.2%	2.5x	n/m	28.4%
Wix.com Ltd.	\$5,629	\$680	77.4%	-5.1%	8.3x	n/m	32.3%
Zayo Group Holdings, Inc.	\$13,850	\$2,578	64.5%	45.4%	5.4x	11.8x	-0.9%
25th Percentile	\$1,329	\$438	50.1%	4.3%	2.3x	9.4x	3.4%
Median	\$3,137	\$848	60.3%	23.7%	3.1x	11.9x	10.0%
75th Percentile	\$9,398	\$2,183	66.6%	28.5%	5.4x	22.3x	28.4%

Segment Performance – Infrastructure Services

1-Year Stock Performance vs. S&P 500 – Update Chart



3-Month Stock Performance vs. S&P 500



Top Performers (1-Yr)



33.2%



24.9%



16.2%

(1.3%)



(2.4%)



(56.5%)



(57.4%)



(68.2%)



(78.3%)



(79.6%)



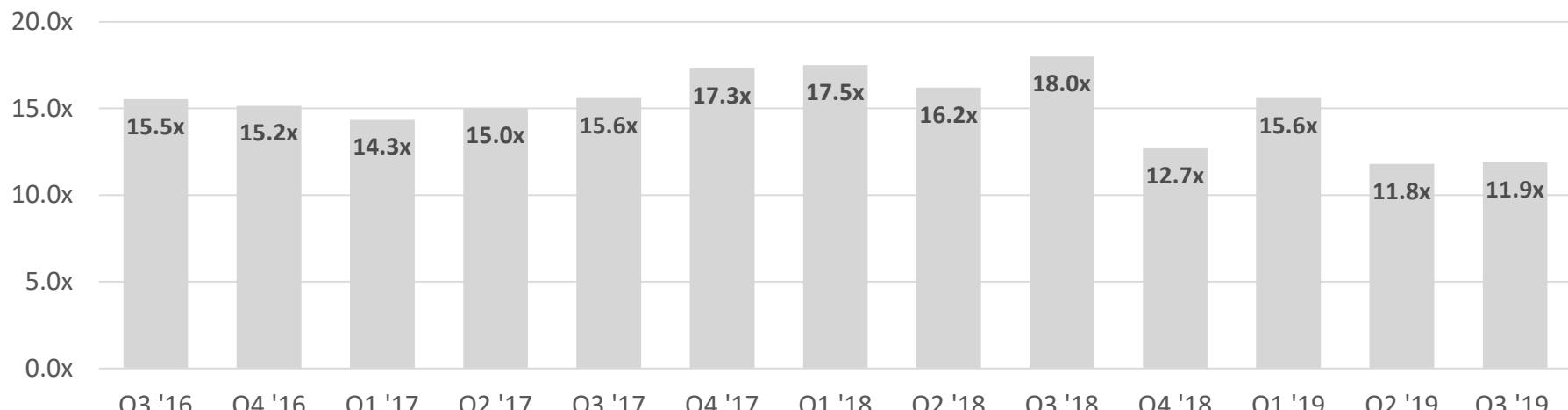
Bottom Performers (1-Yr)

Segment Valuation – Infrastructure Services

Enterprise Value/Revenue



Enterprise Value/EBITDA



M&A ACTIVITY

Select M&A Transactions

Date	Target	Acquirer	Enterprise	EV/			EBITDA Margin	Segment	
			Value	Revenue	EBITDA	Revenue			
9/30/2019	Orchard Software Corporation	Francisco Partners	-	-	-	-	-	Software	
9/30/2019	Xinnovation, Inc.	Bigtincan Holdings Limited (ASX:BTH)	\$7.5	-	-	-	-	Software	
9/30/2019	VitalSmarts, LC	Leeds Equity Partners VI, L.P.	-	-	-	-	-	Software	
9/30/2019	Converged Communications Inc.	The Cook & Boardman Group, LLC	-	-	-	-	-	Software	
9/30/2019	Gopay Information Technology Co.,Ltd	PayPal Holdings, Inc. (NasdaqGS:PYPL)	-	-	-	-	-	Software	
9/30/2019	Tracerisk LLC	Continuity Engine, Inc.	-	-	-	-	-	Software	
9/30/2019	Aptus Health, Inc.	WebMD Health Corp.	-	-	-	-	-	Software	
9/27/2019	PowerLine Technology Inc.	ikeGPS Group Limited (NZSE:IKE)	-	-	-	-	-	Software	
9/26/2019	Crossix Solutions Inc.	Veeva Systems Inc. (NYSE:VEEV)	\$430.0	-	-	-	-	Software	
9/26/2019	Infinite Automation Systems, Inc.	IIOT-OXYS, Inc. (OTCPK:ITOX)	-	-	-	-	-	Software	
9/26/2019	Libring Technologies, Inc.	App Annie Inc.	-	-	-	-	-	Software	
9/26/2019	Streamlabs, Inc.	Logitech International S.A. (SWX:LOGN)	\$118.0	-	-	-	-	Software	
9/26/2019	eMids Technologies Inc.	New Mountain Capital, LLC	-	-	-	-	-	Business Process Services	
9/26/2019	AddSecure	Castik Capital Partners GmbH	-	-	-	-	-	Infrastructure Services	
9/26/2019	Quick Med Claims, LLC	Perella Weinberg Partners LP	-	-	-	-	-	Business Process Services	
9/25/2019	Vanguard Systems, Inc.	MHC Software, Inc.	-	-	-	-	-	Software	
9/25/2019	MHC Software, Inc.	Strattam Capital, LLC	-	-	-	-	-	Software	
9/25/2019	Mainstreet Computers Inc.	Convenient Payments, LLC	-	-	-	-	-	Software	
9/25/2019	Corvana Corporation	SugarCRM Inc.	-	-	-	-	-	Software	
9/25/2019	3Points, LLC	Ntiva, Inc.	-	-	-	-	-	Business Process Services	
9/25/2019	Selerity, Inc.	Dealogic (Holdings) Limited	-	-	-	-	-	Information Services	
9/25/2019	National Tax Search, LLC	CoreLogic, Inc. (NYSE:CLGX)	-	-	-	-	-	Information Services	
9/24/2019	Acquia Inc.	Vista Equity Partners LLC	-	-	-	-	-	Software	
9/24/2019	SimpleTax Software Inc.	Wealthsimple Financial Inc.	-	-	-	-	-	Software	
9/24/2019	Zingle, Inc.	Medallia, Inc. (NYSE:MDLA)	\$42.0	-	-	-	-	Software	
9/24/2019	INLT	Amazon.com, Inc. (NasdaqGS:AMZN)	-	-	-	-	-	Software	
9/24/2019	Kord Technologies, Inc.	Centauri	-	-	-	-	-	Business Process Services	
9/24/2019	Sterling Compliance LLC	Integrated Compliance Solutions, LLC	-	-	-	-	-	Business Process Services	
9/24/2019	Wireless Analytics, LLC	Motus, LLC	-	-	-	-	-	Business Process Services	
9/24/2019	Nexogy, Inc.	T3 Communications, Inc.	-	-	-	-	-	Infrastructure Services	
9/24/2019	IHS Global Limited	Montagu Private Equity LLP	-	-	-	-	-	Information Services	
9/23/2019	Certain Material Assets of Avianis Systems, LLC	Wheels Up Partners LLC	-	-	-	-	-	Software	
9/23/2019	Walker Sands Inc.	Stone-Goff Partners	-	-	-	-	-	Business Process Services	
9/23/2019	Hangar Technology, Inc.	AirMap, Inc.	-	-	-	-	-	Information Services	
9/22/2019	servicefriend	Facebook, Inc. (NasdaqGS:FB)	-	-	-	-	-	Software	
9/20/2019	StatPro Group plc (AIM:SOG)	Confluence Technologies, Inc.	\$210.3	3.4x	28.1x	\$61.3	\$7.5	12.2%	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/		EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA		
9/20/2019	Qualifacts Systems, Inc.	Warburg Pincus LLC	-	-	-	-	-	-	Software
9/19/2019	Interlogic Outsourcing Inc.	PrimePay, LLC	\$3.5	-	-	-	-	-	Business Process Services
9/19/2019	WhereScape Inc.	IDERA, Inc.	-	-	-	-	-	-	Software
9/19/2019	Axiom Cyber Solutions LLC	Entourage Investment Group, LLC	-	-	-	-	-	-	Business Process Services
9/19/2019	The SPI Group LLC	Ruder Finn, Inc.	-	-	-	-	-	-	Business Process Services
9/19/2019	Groundwork Digital, LLC	Bentz, Whaley, Flessner & Associates, Inc.	-	-	-	-	-	-	Business Process Services
9/19/2019	Bromium, Inc.	HP Inc. (NYSE:HPQ)	-	-	-	-	-	-	Infrastructure Services
9/18/2019	Exaserv Inc.	HR Path SAS	-	-	-	-	-	-	Software
9/18/2019	OfferLogic, Inc.	Rokt Pte Ltd.	-	-	-	-	-	-	Software
9/18/2019	Kynectiv, Inc.	US HealthConnect, Inc.	-	-	-	-	-	-	Software
9/18/2019	Semmle Limited	GitHub, Inc.	-	-	-	-	-	-	Business Process Services
9/18/2019	Mediotype LLC	Blue Acorn iCi	-	-	-	-	-	-	Business Process Services
9/18/2019	Outrigger Media, Inc.	Nielsen Holdings plc (NYSE:NLSN)	-	-	-	-	-	-	Information Services
9/18/2019	1Strategy, LLC	TEKsystems Global Services, LLC	\$5.2	1.8x	-	\$2.9	-	-	Business Process Services
9/18/2019	a360inc	Knox Capital Management LLC	-	-	-	-	-	-	Business Process Services
9/17/2019	Nextchapter Bk, Inc.	Fastcase.com, Inc.	-	-	-	-	-	-	Software
9/17/2019	Real Factors, Inc.	7Park Data, Inc.	-	-	-	-	-	-	Software
9/17/2019	Witekio Holding	Avnet, Inc. (NasdaqGS:AVT)	-	-	-	-	-	-	Business Process Services
9/17/2019	Xitij Corporation	Xoriant Corporation	-	-	-	-	-	-	Business Process Services
9/17/2019	Glowlink Communications Technology, Inc.	iDirect Government, LLC	\$20.0	-	-	-	-	-	Infrastructure Services
9/17/2019	Beyond Media Inc	Watch Communications	-	-	-	-	-	-	Infrastructure Services
9/16/2019	Blueocean Technologies Sdn Bhd	Mediaocean LLC	-	-	-	-	-	-	Software
9/16/2019	MediaJel, Inc.	SITO Mobile, Ltd. (NasdaqCM:SITO)	\$17.4	-	-	-	-	-	Business Process Services
9/16/2019	Datasential	Spectrum Equity Management, L.P.	-	-	-	-	-	-	Information Services
9/16/2019	Inventory Locator Service, LLC	CAMP Systems Inc.	-	-	-	-	-	-	Information Services
9/16/2019	KryptCo, Inc.	Akamai Technologies, Inc. (NasdaqGS:AKAM)	-	-	-	-	-	-	Infrastructure Services
9/12/2019	New Service, LLC	Zumper, Inc.	-	-	-	-	-	-	Software
9/12/2019	Investrack Business of Globacom Technologies LLC	SS&C Technologies Holdings, Inc. (NasdaqGS:SSNC)	-	-	-	-	-	-	Software
9/12/2019	Transcendent Corporation	Alpine SG, LLC	-	-	-	-	-	-	Software
9/12/2019	Compass Analytics, LLC	Black Knight, Inc. (NYSE:BKI)	-	-	-	-	-	-	Software
9/12/2019	Avalanche Cloud Corporation	HID Global Corporation	-	-	-	-	-	-	Infrastructure Services
9/11/2019	Burning Glass International Inc.	KKR & Co. Inc. (NYSE:KKR)	-	-	-	-	-	-	Information Services
9/11/2019	Livermore Software Technology Corporation	ANSYS, Inc. (NasdaqGS:ANSS)	\$775.0	-	-	-	-	-	Software
9/11/2019	BP Logix, Inc.	Finrock Growth Partners, LLC	-	-	-	-	-	-	Software
9/11/2019	Mango Health, Inc.	TrialCard Incorporated	-	-	-	-	-	-	Software
9/11/2019	TechLink, Inc.	The Execu-Search Group, Inc.	-	-	-	-	-	-	Business Process Services

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/			EBITDA Margin	Segment
			Value	Revenue	EBITDA	Revenue		
9/11/2019	Web Hosting Brands of Add2net, Inc.	HostPapa, Inc.	-	-	-	-	-	Infrastructure Services
9/11/2019	Vertice Technologies, LLC	Vista Equity Partners LLC	\$500.0	-	-	-	-	Software
9/10/2019	Apprente, Inc.	McDonald's Corporation (NYSE:MCD)	-	-	-	-	-	Software
9/10/2019	Delego Software Inc.	EVO Payments, Inc. (NasdaqGM:EVOP)	-	-	-	-	-	Software
9/10/2019	Foxtec Corp.	Maestro Holdings	-	-	-	-	-	Business Process Services
9/10/2019	Skookum, Inc.	GlobalLogic Inc.	-	-	-	-	-	Business Process Services
9/10/2019	Global Management Systems, Inc.	Dinocrates Group LLC	-	-	-	-	-	Infrastructure Services
9/10/2019	Streamroot, Inc.	CenturyLink, Inc. (NYSE:CTL)	-	-	-	-	-	Infrastructure Services
9/10/2019	Kazan Networks Corporation	Western Digital Corporation (NasdaqGS:WDC)	-	-	-	-	-	Infrastructure Services
9/10/2019	Hatchbuck, Inc.	Benchmark Internet Group, LLC	-	-	-	-	-	Software
9/9/2019	Talech Inc.	U.S. Bancorp (NYSE:USB)	-	-	-	-	-	Software
9/9/2019	RSD SA	Rocket Software, Inc.	-	-	-	-	-	Software
9/9/2019	Substantially all Assets of Ecomdash	Endurance International Group Holdings, Inc.	\$9.6	-	-	-	-	Software
9/9/2019	Xtract Technologies Inc.	Patriot One Technologies Inc. (TSX:PAT)	\$17.4	-	-	-	-	Software
9/9/2019	Electronic Transaction Clearing, Inc.	Apex Clearing Solutions, LLC	-	-	-	-	-	Business Process Services
9/9/2019	6 River Systems, Inc.	Shopify Inc. (NYSE:SHOP)	\$381.0	-	-	-	-	Business Process Services
9/9/2019	eZforex.com, Inc.	Currency Exchange International, Corp. (TSX:CXI)	\$3.3	1.9x	-	\$1.7	-	Business Process Services
9/9/2019	NYI-NJ	365 Operating Company LLC	-	-	-	-	-	Infrastructure Services
9/9/2019	Exceda Ltda.	Akamai Technologies, Inc. (NasdaqGS:AKAM)	-	-	-	-	-	Infrastructure Services
9/9/2019	Telegration, Inc.	Cloud Service Partners, Inc.	-	-	-	-	-	Infrastructure Services
9/9/2019	Ventiv Technology Inc.	Tailwind Capital Group, LLC	-	-	-	-	-	Software
9/9/2019	Orbit Cyber Inc.	Ampcus Cyber Inc.	-	-	-	-	-	Business Process Services
9/6/2019	Vantrix Corporation	Like Minded Entertainment Inc.	-	-	-	-	-	Software
9/6/2019	Computer Word Processing Systems, Inc.	Red River Computer Company, Inc.	-	-	-	-	-	Business Process Services
9/5/2019	TruthPoint Solutions	TVR Communications, LLC	-	-	-	-	-	Software
9/5/2019	Tutela Technologies Ltd.	Comniscient Technologies LLC	-	-	-	-	-	Infrastructure Services
9/5/2019	Innovative Software Solutions, Inc.	Zenith American Holding, Inc.	-	-	-	-	-	Software
9/5/2019	ICON Identity Solutions, Inc.	MC Group	-	-	-	-	-	Business Process Services
9/5/2019	Leveraging Technology Solutions LLC	Lightwell Inc.	-	-	-	-	-	Business Process Services
9/5/2019	Assets of ALTEK Information Technology, Inc.	Digital Intelligence Systems, LLC	-	-	-	-	-	Business Process Services
9/5/2019	I'Car Systems Groupe SAS	Providence Strategic Growth Capital Partners L.L.C	-	-	-	-	-	Software
9/5/2019	ViewPoint Government Solutions, Inc.	OpenGov, Inc.	-	-	-	-	-	Software
9/5/2019	Thought Industries Inc.	Luminate Capital Partners	-	-	-	-	-	Software
9/5/2019	iPresent Limited	Mediafly, Inc.	-	-	-	-	-	Software
9/5/2019	Axiom Global, Inc.	Permira Advisers Ltd. ; Permira Funds	-	-	-	-	-	Software
9/5/2019	Forte Research Systems, Inc.	Advarra	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/		EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA		
9/5/2019	RITEQ Pty Ltd	Ceridian HCM Holding Inc. (NYSE:CDAY)	-	-	-	-	-	-	Software
9/5/2019	OS National, LLC	Opendoor Labs, Inc.	-	-	-	-	-	-	Information Services
9/5/2019	Lasser, Inc.	TGS-NOPEC Geophysical Company ASA (OB:TGS)	-	-	-	-	-	-	Information Services
9/5/2019	Convey Health Solutions, Inc.	TPG Capital, L.P.	-	-	-	-	-	-	Business Process Services
9/5/2019	Business Process Outsourcing of Suppla Group	Iron Mountain Incorporated (NYSE:IRM)	-	-	-	-	-	-	Business Process Services
9/5/2019	AllComm Wireless, Inc.	Mobile Communications, Inc.	-	-	-	-	-	-	Infrastructure Services
9/4/2019	Valiant Solutions, Inc.	Trackforce Inc (nka:Trackforce Valiant)	-	-	-	-	-	-	Software
9/4/2019	TimeClock Plus, LLC	Providence Equity Partners LLC	-	-	-	-	-	-	Software
9/4/2019	CollabNet, Inc.	TPG Capital, L.P.	-	-	-	-	-	-	Software
9/4/2019	ZingBox Inc.	Palo Alto Networks, Inc. (NYSE:PANW)	\$75.0	-	-	-	-	-	Software
9/4/2019	3LOG Systems, Inc.	Trimble Inc. (NasdaqGS:TRMB)	-	-	-	-	-	-	Software
9/4/2019	New Century Software, Inc.	Mistras Group, Inc. (NYSE:MG)	-	-	-	-	-	-	Software
9/4/2019	Pareto Captive Services, LLC	Great Hill Partners, LLC	\$80.0	-	-	-	-	-	Business Process Services
9/4/2019	Certain Assets of Arcadia Data Inc.	Cloudera, Inc. (NYSE:CLDR)	-	-	-	-	-	-	Business Process Services
9/4/2019	Beyond IT, Inc.	Xcellence, Inc.	-	-	-	-	-	-	Business Process Services
9/4/2019	Ace Info Solutions, Inc.	Dovel Technologies, Inc.	-	-	-	-	-	-	Business Process Services
9/4/2019	Substantially All the Assets of QBA Benefits, LLC	CBIZ, Inc. (NYSE:CBZ)	-	-	-	-	-	-	Business Process Services
9/4/2019	World Telecom Group, Inc.	Cloud Service Partners, Inc.	-	-	-	-	-	-	Infrastructure Services
9/4/2019	Cohesion Web Technologies Ltd	Acquia Inc.	-	-	-	-	-	-	Infrastructure Services
9/4/2019	Nexcess.Net, LLC	Liquid Web Inc.	-	-	-	-	-	-	Infrastructure Services
9/4/2019	Movere, Inc	Microsoft Corporation (NasdaqGS:MSFT)	-	-	-	-	-	-	Infrastructure Services
9/4/2019	Hedvig, Inc.	Commvault Systems, Inc. (NasdaqGS:CVLT)	\$225.0	-	-	-	-	-	Infrastructure Services
9/3/2019	Radius Intelligence Inc.	Kabbage, Inc.	-	-	-	-	-	-	Information Services
9/3/2019	Greytwist Data Governance of Greytwist, LLC	SmartRIA, LLC	-	-	-	-	-	-	Software
9/3/2019	XCommerce Inc.	Otimo Retail Group	-	-	-	-	-	-	Software
9/3/2019	OSMS Inc.	Edlio, LLC	-	-	-	-	-	-	Software
9/3/2019	MAM Software Group, Inc. (NasdaqCM:MAMS)	Kerridge Commercial Systems Group Limited	-	-	-	-	-	-	Software
9/3/2019	PowerHub Corp.	BayWa r.e. renewable energy GmbH	-	-	-	-	-	-	Software
9/3/2019	Acrobits S.R.O.	Voyant Communications, LLC	-	-	-	-	-	-	Software
9/3/2019	Annams Systems Corporation, Inc.	CGI Inc. (TSX:GIB.A)	-	-	-	-	-	-	Software
9/3/2019	Financial Database Services, Inc.	Broadridge Financial Solutions, Inc. (NYSE:BR)	-	-	-	-	-	-	Software
9/3/2019	Canadian Enerdata Ltd.	S&P Global Platts Inc.	-	-	-	-	-	-	Information Services
9/3/2019	HireVue, Inc.	The Carlyle Group L.P.	-	-	-	-	-	-	Business Process Services
9/3/2019	Health & Safety Institute, Inc.	Waud Capital Partners, L.L.C.	-	-	-	-	-	-	Business Process Services
9/2/2019	Paperlit Inc.	Datrix	-	-	-	-	-	-	Business Process Services
8/30/2019	Nordic IT, Inc.	Dura software	-	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/		EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA		
8/29/2019	Dairy, LLC	Banneker Partners, LLC	-	-	-	-	-	-	Software
8/29/2019	Bitbar Technologies Oy	SmartBear Software Inc.	-	-	-	-	-	-	Software
8/28/2019	Influenster Inc.	Bazaarvoice, Inc.	-	-	-	-	-	-	Software
8/28/2019	XynManagement, Inc.	CareDx, Inc (NasdaqGM:CDNA)	-	-	-	-	-	-	Software
8/28/2019	Pulse Systems, Inc.	CareTracker Inc.	-	-	-	-	-	-	Software
8/28/2019	Kony, Inc.	Temenos AG (SWX:TEMN)	\$580.0	-	-	-	-	-	Software
8/28/2019	MuteSix, Inc.	iProspect, Inc.	-	-	-	-	-	-	Business Process Services
8/28/2019	Utilitec	Doxim Solutions ULC	-	-	-	-	-	-	Business Process Services
8/28/2019	U.S. CAD, Inc.	RIB Software SE (XTRA:RIB)	\$44.0	-	-	-	-	-	Business Process Services
8/28/2019	Computer Task Group, Incorporated	Assurance Global Services LLC	\$114.3	0.3x	12.8x	\$381.0	\$8.9	2.3%	Business Process Services
8/27/2019	WebPT, Inc.	Warburg Pincus LLC	-	-	-	-	-	-	Software
8/27/2019	Apptimize Inc.	Airship, Inc.	-	-	-	-	-	-	Software
8/27/2019	Certain Assets of MAPADOC	SPS Commerce, Inc. (NasdaqGS:SPSC)	\$11.5	-	-	-	-	-	Software
8/27/2019	Medevision Corporation	MetricAid Inc.	-	-	-	-	-	-	Software
8/27/2019	Symmetry eBanking Suite of Wescom Resources	Connect Financial Software Solutions, LLC	-	-	-	-	-	-	Software
8/27/2019	Fairway Technologies, Inc.	Accenture plc (NYSE:ACN)	-	-	-	-	-	-	Business Process Services
8/27/2019	NextPlane Solutions, LLC.	Press Ganey Associates, Inc.	-	-	-	-	-	-	Business Process Services
8/27/2019	VS Networks, LLC	Spectrio, LLC	-	-	-	-	-	-	Business Process Services
8/27/2019	The Focal Point Llc	IMS ExpertServices	-	-	-	-	-	-	Business Process Services
8/27/2019	Fiscal Circles, Inc.	HT Mobile Apps, LLC	-	-	-	-	-	-	Information Services
8/26/2019	Customer Analytics Technologies Inc.	Cisco Systems, Inc. (NasdaqGS:CSCO)	-	-	-	-	-	-	Software
8/26/2019	ConveyIQ, Inc.	Entelo, Inc.	-	-	-	-	-	-	Software
8/26/2019	Software Solutions business of Pitney Bowes Inc.	Starfish Parent, LP	\$700.0	-	-	-	-	-	Software
8/26/2019	Travelaer, LLC	PROS Holdings, Inc. (NYSE:PRO)	\$12.0	-	-	-	-	-	Software
8/26/2019	Eclipse Cash Systems, LLC	Payment Alliance International, Inc.	-	-	-	-	-	-	Business Process Services
8/26/2019	Innovative Technology Systems & Solutions, Inc.	ePlus inc. (NasdaqGS:PLUS)	-	-	-	-	-	-	Business Process Services
8/22/2019	Ontario Systems, LLC	New Mountain Capital, LLC	-	-	-	-	-	-	Software
8/22/2019	Davisware, Inc.	Serent Capital	-	-	-	-	-	-	Software
8/22/2019	Pivotal Software, Inc. (NYSE:PVTL)	VMware, Inc. (NYSE:VMW)	\$3,037.4	4.4x	-	\$687.5	-\$129.2	-18.8%	Software
8/22/2019	Blue Sombrero LLC/Affinity Sports, LLC	Stack Sports	\$45.0	-	-	-	-	-	Software
8/22/2019	CIMPL Inc.	Upland Software, Inc. (NasdaqGM:UPLD)	\$25.7	-	-	-	-	-	Software
8/22/2019	Key Assets and Technology of IDS Technology	Monaker Group, Inc. (NasdaqCM:MKGI)	\$4.5	-	-	-	-	-	Software
8/22/2019	AutoClerk, Inc.	Best Western International, Inc.	-	-	-	-	-	-	Software
8/22/2019	Carbon Black, Inc. (NasdaqGS:CBLK)	VMware, Inc. (NYSE:VMW)	\$2,139.7	9.3x	-	\$229.7	-\$65.8	-28.6%	Software
8/22/2019	Softrak Systems Inc.	Arcaccsoft Corporation	-	-	-	-	-	-	Business Process Services
8/22/2019	Torres Advanced Enterprise Solutions, LLC	Bootstrap Capital, LLC	-	-	-	-	-	-	Business Process Services

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/		Revenue	EBITDA	EBITDA Margin	Segment
			Value	Revenue	EBITDA				
8/22/2019	NTConnections	NuMSP LLC	-	-	-	-	-	-	Business Process Services
8/22/2019	Ohana Companies Inc.	360insights.com	-	-	-	-	-	-	Business Process Services
8/21/2019	Simplicity First Software Pvt. Ltd.	MINDBODY, Inc.	-	-	-	-	-	-	Software
8/21/2019	Intrinsic	VMware, Inc. (NYSE:VMW)	-	-	-	-	-	-	Infrastructure Services
8/21/2019	Oil & Gas Systems, Inc.	Quorum Business Solutions, Inc.	-	-	-	-	-	-	Software
8/21/2019	SignalFx, Inc.	Splunk Inc. (NasdaqGS:SPLK)	\$1,050.0	-	-	-	-	-	Software
8/21/2019	Cofense Inc.	BlackRock Private Equity Partners	-	-	-	-	-	-	Software
8/21/2019	SQData Corporation	Syncsort Incorporated	-	-	-	-	-	-	Software
8/21/2019	DrillScan SAS	Helmerich & Payne Technologies, LLC	-	-	-	-	-	-	Software
8/21/2019	BestTransport.com, Inc.	The Descartes Systems Group Inc (TSX:DSG)	\$11.2	-	-	-	-	-	Software
8/21/2019	BLUEFIN, LLC	EMEX Holdings, LLC	-	-	-	-	-	-	Business Process Services
8/21/2019	LeverPoint Management, LLC	Ultimus Fund Solutions, LLC	-	-	-	-	-	-	Business Process Services
8/21/2019	Perched, LLC	Elastic N.V. (NYSE:ESTC)	-	-	-	-	-	-	Business Process Services
8/21/2019	Syscom As	DXC Technology Company (NYSE:DXC)	-	-	-	-	-	-	Business Process Services
8/21/2019	Commingle business of LSC Communications, Inc.	United Business Mail, Inc.	\$11.3	-	-	-	-	-	Business Process Services
8/20/2019	Amplifinity, LLC	Impartner Software, Inc.	-	-	-	-	-	-	Software
8/20/2019	Remedy Partners, Inc.	Signify Health, LLC	-	-	-	-	-	-	Software
8/20/2019	GroupHigh LLC	Apifia Inc.	-	-	-	-	-	-	Software
8/20/2019	Method3, Inc.	PredictiveHR, Inc.	-	-	-	-	-	-	Business Process Services
8/20/2019	Inside Real Estate	Lovell Minnick Partners, LLC	-	-	-	-	-	-	Software
8/19/2019	jClarity Ltd	Microsoft Corporation (NasdaqGS:MSFT)	-	-	-	-	-	-	Software
8/19/2019	Assets of SmartZip Analytics Inc.	Constellation Real Estate Group, Inc.	-	-	-	-	-	-	Software
8/19/2019	RiverMeadow Software, Inc.	CloudScale Capital Partners, LLC	-	-	-	-	-	-	Infrastructure Services
8/19/2019	PointR Data Inc.	Mateon Therapeutics, Inc. (OTCPK:MATN)	\$6.6	-	-	-	-	-	Infrastructure Services
8/19/2019	Internet Marketing Inc.	REQ, Inc.	-	-	-	-	-	-	Business Process Services
8/19/2019	Cloudware Connections Inc.	A5 Corporation	-	-	-	-	-	-	Business Process Services
8/19/2019	Benefit Resource Inc.	CIP Capital	-	-	-	-	-	-	Business Process Services
8/19/2019	InRule Technology, Inc.	OpenGate Capital, LLC	-	-	-	-	-	-	Software
8/19/2019	U.S. TelePacific Holdings Corp.	Siris Capital Group, LLC	-	-	-	-	-	-	Infrastructure Services
8/19/2019	Transcend Spatial Solutions, LLC	Rizing, LLC	-	-	-	-	-	-	Information Services
8/19/2019	Briggs Advertising, Inc.	CD&M Communications	-	-	-	-	-	-	Business Process Services
8/18/2019	FixStream Network Inc.	Resolve Systems, LLC	\$24.0	-	-	-	-	-	Software
8/18/2019	Depot Systems Inc.	Wisetech Global Limited (ASX:WTC)	\$4.8	5.5x	34.4x	\$0.9	\$0.1	15.9%	Software
8/18/2019	Summit Broadband Inc.	Grain Management, LLC	-	-	-	-	-	-	Infrastructure Services
8/15/2019	Doxly, Inc.	Freedom Solutions Group, LLC	-	-	-	-	-	-	Software
8/15/2019	Nextopia Software Corporation	Scaleworks Associates ; Scaleworks Fund II	-	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise		EV/		EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA			
8/15/2019	TicTasks, Inc.	Upward.net LLC	-	-	-	-	-	-	-	Business Process Services
8/15/2019	Strategic Information Resources, Inc.	Data Facts, Inc.	-	-	-	-	-	-	-	Information Services
8/15/2019	Plasco, Inc.	Barcodes, Inc.	-	-	-	-	-	-	-	Business Process Services
8/14/2019	Presidio, Inc. (NasdaqGS:PSDO)	BC Partners	\$2,312.6	0.8x	10.5x	\$3,047.0	\$220.0	7.2%	-	Business Process Services
8/14/2019	WiseStamp Ltd.	vCita, Inc.	-	-	-	-	-	-	-	Software
8/14/2019	Metricly, Inc.	Virtual Instruments Corporation	-	-	-	-	-	-	-	Software
8/14/2019	InsightSoftware.com Limited	Genstar Capital, LLC	-	-	-	-	-	-	-	Software
8/14/2019	In Crowd, Inc.	Saroras Private Capital	-	-	-	-	-	-	-	Information Services
8/14/2019	Indecom Global Services (India) Private Limited	Warburg Pincus LLC	\$200.0	-	-	-	-	-	-	Business Process Services
8/14/2019	TriSource Solutions, L.L.C.	Repay Holdings Corporation (NasdaqCM:RPAY)	\$65.0	-	-	-	-	-	-	Business Process Services
8/14/2019	Benefit Commerce Group LLC	Alera Group, Inc.	-	-	-	-	-	-	-	Business Process Services
8/14/2019	Analytics8, LLC	Accenture plc (NYSE:ACN)	-	-	-	-	-	-	-	Business Process Services
8/13/2019	Trivest Software Group	ECi Software Solutions, Inc.	-	-	-	-	-	-	-	Software
8/13/2019	RegTek Solutions, Inc.	Bloomberg L.P.	-	-	-	-	-	-	-	Software
8/13/2019	Qcentive LLC	Apervita, Inc.	-	-	-	-	-	-	-	Software
8/13/2019	Comprehend Systems, Inc.	Saama Technologies, Inc.	-	-	-	-	-	-	-	Software
8/13/2019	LiquidityEdge LLC	MarketAxess Holdings Inc. (NasdaqGS:MKTX)	\$150.0	16.3x	-	\$9.2	-	-	-	Information Services
8/13/2019	Forest2Market, INC./Fisher International, Inc.	Battery Ventures	-	-	-	-	-	-	-	Information Services
8/13/2019	Maverick Cyber-Defense, LLC	Converged Security Solutions	-	-	-	-	-	-	-	Business Process Services
8/13/2019	Farm At Hand Inc.	TELUS Corporation (TSX:T)	-	-	-	-	-	-	-	Software
8/13/2019	InfiSecure Technologies Private Limited	Barracuda Networks, Inc.	-	-	-	-	-	-	-	Infrastructure Services
8/13/2019	Focus FS Inc.	Dräger Safety AG & Co. KGaA	-	-	-	-	-	-	-	Software
8/12/2019	QxMD Software Inc.	WebMD Health Corp.	-	-	-	-	-	-	-	Software
8/12/2019	Sellpoints Inc.	Syndigo LLC	-	-	-	-	-	-	-	Software
8/12/2019	Advanced Computer Software Group Limited	BC Partners	-	-	-	-	-	-	-	Software
8/12/2019	Alchemy IoT Inc.	Maintenance Assistant Inc.	-	-	-	-	-	-	-	Software
8/12/2019	BizEquity, Inc.	American City Business Journals, Inc.	-	-	-	-	-	-	-	Information Services
8/12/2019	Belatrix Global Corporation S.A.	Globant S.A. (NYSE:GLOB)	\$65.0	-	-	-	-	-	-	Business Process Services
8/12/2019	Cloudpipes Ltd	QuickBase, Inc.	-	-	-	-	-	-	-	Infrastructure Services
8/12/2019	ComputerEase Software and CE Payroll Service	Deltek, Inc.	\$185.0	-	-	-	-	-	-	Software
8/9/2019	Nudge, LLC	Salveo Diagnostics, Inc.	-	-	-	-	-	-	-	Software
8/9/2019	Beneco	Ascensus, LLC	-	-	-	-	-	-	-	Business Process Services
8/8/2019	iPipeline	Roper Technologies, Inc. (NYSE:ROP)	\$1,625.0	-	-	-	-	-	-	Software
8/8/2019	My Health Direct, Inc.	Experian Health, Inc.	-	-	-	-	-	-	-	Software
8/8/2019	Messagera Inc.	Groupon, Inc. (NasdaqGS:GRPN)	-	-	-	-	-	-	-	Software
8/8/2019	iCONECT Development, LLC	NewField Capital Partners, LLC	-	-	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/			EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA			
8/8/2019	Surgical Notes Inc	The CapStreet Group, LLC	-	-	-	-	-	-	-	Software
8/8/2019	Enterprise Security assets Of Symantec Corporation	Broadcom Inc. (NasdaqGS:AVGO)	\$10,700.0	4.6x	30.6x	\$2,323.0	\$350.0	15.1%	-	Infrastructure Services
8/8/2019	PharmaSeek LLC	WIRB-Copernicus Group, Inc.	-	-	-	-	-	-	-	Business Process Services
8/8/2019	ThinkNear, Inc.	inMarket Media LLC	-	-	-	-	-	-	-	Business Process Services
8/8/2019	Cognitran Ltd.	Snap-on Incorporated (NYSE:SNA)	\$31.0	-	-	-	-	-	-	Business Process Services
8/7/2019	ClickSoftware Technologies Ltd.	salesforce.com, inc. (NYSE:CRM)	\$1,350.0	-	-	-	-	-	-	Software
8/7/2019	Telecom Technology Services, Inc.	Amdocs Limited (NasdaqGS:DOX)	\$50.0	-	-	-	-	-	-	Software
8/7/2019	Sourcery Technology, Inc.	Lavu, Inc.	-	-	-	-	-	-	-	Software
8/7/2019	eLogic Learning, LLC	Absorb Software Inc.	-	-	-	-	-	-	-	Software
8/7/2019	Open Dining (nka:Paytronix Order & Delivery)	Paytronix Systems, Inc.	-	-	-	-	-	-	-	Software
8/7/2019	Aspire Marketing Services, LLC	Staley Capital Management LLC	-	-	-	-	-	-	-	Business Process Services
8/6/2019	OrgStory LLC	MAGNETIZE, LLC	-	-	-	-	-	-	-	Business Process Services
8/6/2019	FilmTrack Inc.	City National Bank	-	-	-	-	-	-	-	Software
8/6/2019	Voicea	Cisco Systems, Inc. (NasdaqGS:CSCO)	-	-	-	-	-	-	-	Software
8/6/2019	LockPath, Inc.	NAVEX Global, Inc.	-	-	-	-	-	-	-	Software
8/6/2019	Sagent Auto, LLC	defi SOLUTIONS, Inc.	-	-	-	-	-	-	-	Software
8/6/2019	Celect, Inc.	NIKE, Inc. (NYSE:NKE)	-	-	-	-	-	-	-	Software
8/6/2019	Cloud Customer Base of WorkSpace	Altigen Communications, Inc. (OTCPK:ATGN)	-	-	-	-	-	-	-	Infrastructure Services
8/6/2019	Entuity Ltd.	Park Place Technologies, Inc.	-	-	-	-	-	-	-	Infrastructure Services
8/6/2019	Nets Holding	Mastercard Incorporated (NYSE:MA)	\$3,125.0	-	-	-	-	-	-	Business Process Services
8/6/2019	Pixia Corp.	Cubic Corporation (NYSE:CUB)	\$250.0	-	-	-	-	-	-	Software
8/5/2019	Cxense ASA (OB:CXENSE)	Piano Inc.	\$35.9	1.9x	-	\$18.7	-\$6.2	-33.3%	-	Software
8/5/2019	GetFeedback, Inc.	SVMK Inc. (NasdaqGS:SVMK)	\$68.0	-	-	-	-	-	-	Software
8/5/2019	Geosteering Technologies Ltd.	Tsifra LLC	-	-	-	-	-	-	-	Software
8/5/2019	SpotFront, Inc.	aQuantive, Inc.	-	-	-	-	-	-	-	Software
8/5/2019	First Bridge Data LLC	CFRA Research	-	-	-	-	-	-	-	Information Services
8/5/2019	Growth Pilots, LLC	Wpromote, Inc.	-	-	-	-	-	-	-	Business Process Services
8/5/2019	Records Access Services Canada, Inc.	CeCors, Inc. (OTCPK:CEOS)	-	-	-	-	-	-	-	Business Process Services
8/5/2019	Connective DX, Inc.	ProKarma Inc.	-	-	-	-	-	-	-	Business Process Services
8/5/2019	Robbins-Gioia, LLC	Acorn Growth Companies, LLC	-	-	-	-	-	-	-	Business Process Services
8/5/2019	Marketing Execution Business of Madden	InnerWorkings, Inc. (NasdaqGS:INWK)	-	-	-	-	-	-	-	Business Process Services
8/5/2019	Cohesion Corporation	Alta IT Services LLC	-	-	-	-	-	-	-	Business Process Services
8/5/2019	Northstream AB	Accenture plc (NYSE:ACN)	-	-	-	-	-	-	-	Business Process Services
8/5/2019	General Dynamics SATCOM Technologies, Inc.	Communications & Power Industries LLC	-	-	-	-	-	-	-	Infrastructure Services
8/5/2019	Business assets of MapR	Hewlett Packard Enterprise Company (NYSE:HPE)	-	-	-	-	-	-	-	Infrastructure Services
8/4/2019	Credible Labs Inc. (ASX:CRD)	Fox Corporation (NasdaqGS:FOXA)	\$270.8	10.3x	-	\$26.4	-\$13.5	-51.0%	-	Information Services

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/			EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA	Margin		
8/4/2019	heidelpay GmbH	KKR & Co. Inc. (NYSE:KKR)	-	-	-	-	-	-	-	Business Process Services
8/2/2019	Elemica, Inc.	Eurazeo SE (ENXTPA:RF)	-	-	-	-	-	-	-	Software
8/2/2019	Navigant Consulting, Inc. (NYSE:NCI)	Guidehouse LLP	\$1,143.4	1.6x	16.2x	\$728.7	\$70.8	9.7%	-	Business Process Services
8/2/2019	Advanced Integrators, Inc.	Njevity, Inc.	-	-	-	-	-	-	-	Business Process Services
8/1/2019	RedCard Systems, LLC	Zelis Healthcare Corp	-	-	-	-	-	-	-	Software
8/1/2019	Sullivan Data Management, Inc.	Logically, Inc.	-	-	-	-	-	-	-	Business Process Services
8/1/2019	iControl ESI	Legility, Inc.	-	-	-	-	-	-	-	Business Process Services
8/1/2019	MD Insider, Inc.	Accolade, Inc.	-	-	-	-	-	-	-	Information Services
8/1/2019	Planet DDS, Inc.	Level Equity Management, LLC	-	-	-	-	-	-	-	Software
8/1/2019	Protech Computer Systems Limited	ClearCourse Partnership LLP	-	-	-	-	-	-	-	Software
8/1/2019	The Rainmaker Group Ventures, LLC	Cendyn Corporation	-	-	-	-	-	-	-	Software
8/1/2019	Castlight Ltd	Experian	-	-	-	-	-	-	-	Software
8/1/2019	Portway International Inc	Avalara, Inc. (NYSE:AVLR)	-	-	-	-	-	-	-	Business Process Services
8/1/2019	Vinderbit Pty Ltd.	Shopify Inc. (NYSE:SHOP)	-	-	-	-	-	-	-	Software
8/1/2019	Assets of Calgary Data Center of Shaw	eStrustructure Data Centers Inc.	-	-	-	-	-	-	-	Infrastructure Services
8/1/2019	OpenConnect Systems Incorporated	ActiveOps Limited	-	-	-	-	-	-	-	Software
8/1/2019	EdgeWave, Inc.	GoSecure, Inc.	-	-	-	-	-	-	-	Software
8/1/2019	Southeast Computer Solutions, Inc.	Net@Work, Inc.	-	-	-	-	-	-	-	Software
8/1/2019	Sanderson Group plc (AIM:SND)	Aptean Limited	\$85.6	2.5x	14.5x	\$34.6	\$5.9	17.0%	-	Software
8/1/2019	Refinitiv	London Stock Exchange Group plc	\$28,291.5	-	-	-	-	-	-	Information Services
8/1/2019	Think Data Insights, LLC	Lattimore Black Morgan & Cain P.C.	-	-	-	-	-	-	-	Information Services
8/1/2019	RigData, Inc.	Drillinginfo, Inc.	-	-	-	-	-	-	-	Information Services
8/1/2019	NC4, Inc.	Everbridge, Inc. (NasdaqGM:EVBG)	\$86.8	-	-	-	-	-	-	Information Services
8/1/2019	Knight Point Systems, LLC	Perspecta Inc. (NYSE:PRSP)	\$250.0	-	-	-	-	-	-	Business Process Services
8/1/2019	Peer39 Inc.	O3 Industries LLC	-	-	-	-	-	-	-	Business Process Services
7/31/2019	East Valley Data Center	CBRE Global Investors, LLC	\$72.8	-	-	-	-	-	-	Infrastructure Services
7/31/2019	Digita Security LLC	JAMF Software, LLC	-	-	-	-	-	-	-	Software
7/31/2019	Leverton GmbH	MRI Software LLC	-	-	-	-	-	-	-	Software
7/31/2019	Franklin Energy Services, LLC	ABRY Partners, LLC	-	-	-	-	-	-	-	Business Process Services
7/31/2019	CUC Software, Inc.	ServiceTitan, Inc.	-	-	-	-	-	-	-	Software
7/31/2019	acompay	American Express Company (NYSE:AXP)	-	-	-	-	-	-	-	Software
7/31/2019	MemberXP	CU Solutions Group, Incorporated	-	-	-	-	-	-	-	Software
7/31/2019	Gulf Guard Cyber, Inc.	NXTSoft LLC	-	-	-	-	-	-	-	Software
7/31/2019	Link Systems, Inc.	MRI Software LLC	-	-	-	-	-	-	-	Software
7/31/2019	Decision Dynamics, Inc.	IAA, Inc. (NYSE:IAA)	\$21.1	-	-	\$8.3	-	-	-	Software
7/31/2019	Armada Logistics, Inc.	Turvo Inc.	-	-	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise		EV/		EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA			
7/31/2019	PushSpring, Inc.	T-Mobile US, Inc. (NasdaqGS:TMUS)	-	-	-	-	-	-	-	Software
7/31/2019	Realtime Digital Innovations, LLC	Faneuil, Inc.	\$10.0	-	-	-	-	-	-	Software
7/31/2019	Assets and Employees of E8 Storage	Amazon Web Services, Inc.	-	-	-	-	-	-	-	Infrastructure Services
7/31/2019	Veracity Consulting Group, LLC	Resources Connection, Inc. (NasdaqGS:RECN)	\$30.6	1.4x	-	\$21.4	-	-	-	Business Process Services
7/31/2019	KRT Marketing, Inc.	Recruitics, LLC	-	-	-	-	-	-	-	Business Process Services
7/30/2019	J.D. Power	Thoma Bravo, LLC	-	-	-	-	-	-	-	Information Services
7/30/2019	MetaMetrics Inc.	Apax Partners LLP ; The Apax Digital Fund	-	-	-	-	-	-	-	Information Services
7/30/2019	Thinkstep AG	Sphera Solutions, Inc.	-	-	-	-	-	-	-	Software
7/30/2019	Broadband assets of Eagle Communications, Inc.	Mega Broadband Investments LLC	-	-	-	-	-	-	-	Infrastructure Services
7/30/2019	Parity Computing, Inc.	Elsevier B.V.	-	-	-	-	-	-	-	Software
7/30/2019	ORIS Intelligence, LLC	PriceSpider	-	-	-	-	-	-	-	Software
7/30/2019	Metacog, Inc.	ComptIA TCA Community	-	-	-	-	-	-	-	Information Services
7/30/2019	NetXpress LLC	Transaction Network Services, Inc.	-	-	-	-	-	-	-	Infrastructure Services
7/30/2019	Vyve Broadband LLC	Mega Broadband Investments LLC	-	-	-	-	-	-	-	Infrastructure Services
7/30/2019	Blue Water	MissionSide, Inc.	-	-	-	-	-	-	-	Business Process Services
7/29/2019	SmartBrief, Inc.	Future plc (LSE:FUTR)	\$66.1	1.9x	-	\$35.1	-	-	-	Information Services
7/29/2019	Emburse, LLC	Certify Inc.	-	-	-	-	-	-	-	Software
7/29/2019	Strategic Legal Solutions/ Compiled	KLDiscovey Ontrack, LLC	-	-	-	-	-	-	-	Software
7/29/2019	Assets of Simple Bills Corporation	RealPage, Inc. (NasdaqGS:RP)	-	-	-	-	-	-	-	Software
7/29/2019	Waystar, Inc	Canada Pension Plan Investment Board	\$2,700.0	-	-	-	-	-	-	Software
7/29/2019	BlueTalon, Inc.	Microsoft Corporation (NasdaqGS:MSFT)	-	-	-	-	-	-	-	Software
7/26/2019	Monotype Imaging Holdings Inc. (NasdaqGS:TYPE)	HGGC, LLC	\$857.8	3.5x	15.7x	\$244.0	\$54.5	22.4%	-	Software
7/26/2019	Menya Solutions Inc.	Levio Inc.	-	-	-	-	-	-	-	Software
7/26/2019	Data Chief, LLC	Locality Media, Inc.	-	-	-	-	-	-	-	Information Services
7/25/2019	Magnus Health, LLC	Veracross LLC	-	-	-	-	-	-	-	Software
7/25/2019	Digital Bridge Holdings, LLC	Colony Capital, Inc. (NYSE:CLNY)	\$325.0	-	-	-	-	-	-	Infrastructure Services
7/25/2019	Stratos Management Systems, Inc.	Pensare Acquisition Corp. (NasdaqCM:WRLS)	\$65.0	-	-	-	-	-	-	Information Services
7/25/2019	Risk First Limited	Moody's Corporation (NYSE:MCO)	-	-	-	-	-	-	-	Software
7/25/2019	Hybrid Business Solutions, Inc.	Linga POS, LLC	-	-	-	-	-	-	-	Business Process Services
7/25/2019	Sococo, Inc.	Think3 ; Think3 Fund	-	-	-	-	-	-	-	Software
7/25/2019	Uhana, Inc.	VMware, Inc. (NYSE:VMW)	-	-	-	-	-	-	-	Software
7/24/2019	Four Twenty Seven, Inc.	Moody's Investors Service, Inc.	-	-	-	-	-	-	-	Information Services
7/24/2019	OAE Software, LLC	Toast, Inc.	-	-	-	-	-	-	-	Software
7/24/2019	Field Intelligence, Inc.	Network Innovations Inc.	-	-	-	-	-	-	-	Software
7/24/2019	TranSolutions, Inc.	MercuryGate International, Inc.	-	-	-	-	-	-	-	Software
7/24/2019	CoAdvantage, Inc.	Aquiline Capital Partners LLC	-	-	-	-	-	-	-	Business Process Services

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/			EBITDA Margin	Segment
			Value	Revenue	EBITDA	Revenue		
7/24/2019	3Cinteractive, L.L.C.	IMImobile PLC (AIM:IMO)	\$53.1	1.6x	17.7x	\$34.0	\$3.0	8.8% Software
7/24/2019	Lighthouse Conferencing LLC	Select Communications LLC	-	-	-	-	-	Business Process Services
7/24/2019	Top Echelon Network Llc	SageLink Capital	-	-	-	-	-	Software
7/24/2019	Osprey Compliance Software LLC	Steele Compliance Solutions, Inc.	-	-	-	-	-	Software
7/23/2019	Root Data Center Inc.	Compass Datacenters LLC	-	-	-	-	-	Infrastructure Services
7/23/2019	Digital Video Networks Inc.	AVI-SPL, Inc.	-	-	-	-	-	Infrastructure Services
7/23/2019	HigherGround Managed Services, LLC	Ntiva, Inc.	-	-	-	-	-	Business Process Services
7/23/2019	Park Place Technologies, Inc.	Charlesbank Capital Partners, LLC	-	-	-	-	-	Infrastructure Services
7/23/2019	Dreamscape Networks Limited (ASX:DN8)	Web.com Group, Inc.	\$122.3	1.8x	14.1x	\$67.8	\$8.7	12.8% Infrastructure Services
7/23/2019	Billy (nka:Sunrise)	Lendio, Inc.	-	-	-	-	-	Software
7/23/2019	Connexta, LLC	Octo Consulting Group, Inc.	-	-	-	-	-	Infrastructure Services
7/23/2019	Assets of Bixby	Alfred Club, Inc.	-	-	-	-	-	Software
7/23/2019	The Vertex Group	Capital Southwest Corporation (NasdaqGS:CSWC)	-	-	-	-	-	Software
7/22/2019	Bulldog Solutions, Inc.	HERO Digital LLC	-	-	-	-	-	Business Process Services
7/22/2019	QRC, LLC	Parsons Corporation (NYSE:PSN)	\$215.0	-	-	-	-	Software
7/22/2019	IndustrySafe, Inc.	Vector-Solutions.com, Inc.	-	-	-	-	-	Software
7/22/2019	Keysoft Solutions Ltd.	Transoft Solutions, Inc.	-	-	-	-	-	Software
7/19/2019	Evernex SA	3i Group plc (LSE:III)	-	-	-	\$220.0	-	Infrastructure Services
7/18/2019	BitFusion.io Inc.	VMware, Inc. (NYSE:VMW)	-	-	-	-	-	Software
7/18/2019	HighQ Solutions Limited	Thomson Reuters Corporation (TSX:TRI)	-	-	-	-	-	Software
7/18/2019	CFC Technology Corporation, LLC	Urban FT, Inc.	-	-	-	-	-	Business Process Services
7/18/2019	AdvantCo International, LLC	Delvern Capital ; Montage Partners, Inc.	-	-	-	-	-	Infrastructure Services
7/18/2019	Loop, LLC	Affinitiv, Inc.	-	-	-	-	-	Software
7/18/2019	Three North LLC	Point B Fulfillment Solutions, LLC	-	-	-	-	-	Business Process Services
7/17/2019	payworks GmbH	Visa Inc. (NYSE:V)	-	-	-	-	-	Software
7/17/2019	Wavecell Pte. Ltd.	8x8, Inc. (NYSE:EGHT)	-	-	-	-	-	Software
7/17/2019	IDSscanningLaws.com LLC	IDSscan.net	-	-	-	-	-	Information Services
7/17/2019	iKentoo SA	Lightspeed POS Inc. (TSX:LSPD)	-	-	-	-	-	Software
7/17/2019	Fresh Digital Marketing, LLC	Legato Healthcare Marketing, Inc.	-	-	-	-	-	Business Process Services
7/16/2019	Honest Buildings, Inc.	Procure Technologies, Inc.	-	-	-	-	-	Software
7/16/2019	CloudLanes, Inc.	Druva Inc.	-	-	-	-	-	Infrastructure Services
7/16/2019	Visible Equity LLC	nCino, Inc.	-	-	-	-	-	Software
7/16/2019	Perengo Inc.	Associates in Advertising Limited	-	-	-	-	-	Software
7/16/2019	Retail Loss Prevention of Verisk Analytics, Inc.	Apprise Inc.	-	-	-	-	-	Information Services
7/16/2019	Spruce Computer Systems Ltd.	ECi Software Solutions, Inc.	-	-	-	-	-	Software
7/16/2019	Windward Software Systems Inc	Volaris Group Inc.	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/			EBITDA Margin	Segment
			Value	Revenue	EBITDA	Revenue		
7/16/2019	OmniComm Systems, Inc. (OTCPK:OMCM)	Anju Software, Inc.	\$77.4	3.1x	43.0x	\$24.6	\$1.8	7.3% Software
7/16/2019	Healthline Networks, Inc.	Red Ventures, LLC	-	-	-	-	-	Information Services
7/15/2019	Ugam Interactive Solution Pvt Ltd.	Merkle Inc.	-	-	-	-	-	Business Process Services
7/15/2019	Vungle, Inc.	The Blackstone Group Inc. (NYSE:BX)	-	-	-	-	-	Software
7/15/2019	Simple Energy, Inc.	Tendril Networks, Inc.	-	-	-	-	-	Software
7/15/2019	Givex Mexico	Givex Corporation	-	-	-	-	-	Business Process Services
7/15/2019	SA Ignite, Inc.	SPH Analytics	-	-	-	-	-	Software
7/12/2019	BluePay, Inc.	Lovell Minnick Equity Partners V LP	-	-	-	-	-	Business Process Services
7/12/2019	Mnubo Inc.	Aspen Technology, Inc. (NasdaqGS:AZPN)	\$102.0	-	-	-	-	Software
7/12/2019	Event Farm, Inc.	MemberSuite, Inc.	-	-	-	-	-	Software
7/11/2019	Probe Information Services, Inc.	Veracity Research Company	-	-	-	-	-	Information Services
7/11/2019	QxBranch, Inc.	Rigetti & Co, Inc.	-	-	-	-	-	Information Services
7/11/2019	Advizr Inc.	Orion Advisor Services, LLC	-	-	-	-	-	Software
7/11/2019	Tier1Net, Inc.	Thrive CITS, LLC	-	-	-	-	-	Infrastructure Services
7/11/2019	CADMIN Services, Inc.	D3 Technical Services, LLC	-	-	-	-	-	Software
7/11/2019	Mammoth, Inc.	ThinkHR Corporation	-	-	-	-	-	Software
7/10/2019	HotSchedules, Inc./ Fourth Ltd	Insight Venture Partners LLC	-	-	-	-	-	Software
7/10/2019	1WorldSync, Inc.	Battery Ventures	-	-	-	-	-	Software
7/10/2019	QualiTest Ltd.	Bridgepoint Advisers Limited	-	-	-	-	-	Software
7/10/2019	Cloud Academy Inc.	QA Limited	-	-	-	-	-	Software
7/10/2019	Jibestream Inc.	Inpixon Canada, Inc.	\$8.0	-	-	-	-	Software
7/10/2019	ispionage, Inc.	TapClicks, Inc.	-	-	-	-	-	Software
7/10/2019	Rifiniti, Inc.	FM:Systems, Inc.	-	-	-	-	-	Information Services
7/10/2019	Wayin, Inc.	Cheetah Digital, Inc.	-	-	-	-	-	Business Process Services
7/10/2019	Corepoint Health, LLC	Rhapsody	-	-	-	-	-	Software
7/10/2019	Siege Technologies, LLC	Braes Capital LLC	-	-	-	-	-	Software
7/10/2019	Rhimat Software Ltd	Tidal Software LLC	-	-	-	-	-	Software
7/9/2019	GovQA	Frontier Capital, LLC ; Frontier Fund V	-	-	-	-	-	Information Services
7/9/2019	WayPay Inc.	Royal Bank of Canada (TSX:RY)	-	-	-	-	-	Software
7/9/2019	Eave, Inc.	HomeLight, Inc.	-	-	-	-	-	Business Process Services
7/9/2019	OnGolf, LLC	Deere & Company (NYSE:DE)	-	-	-	-	-	Software
7/9/2019	Elastifile Ltd.	Google LLC	-	-	-	-	-	Infrastructure Services
7/9/2019	Tooso Inc.	Coveo Solutions Inc.	-	-	-	-	-	Software
7/9/2019	CBCInnovis, Inc.	Kroll Factual Data, Inc.	-	-	-	-	-	Business Process Services
7/9/2019	Bowfin Consulting	Rightpoint Consulting, LLC	-	-	-	-	-	Infrastructure Services
7/9/2019	PCS Software, Inc.	Capstreet IV, L.P. ; The CapStreet Group, LLC	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise		EV/		EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA			
7/9/2019	Corvil Limited	Pico Quantitative Trading, LLC	-	-	-	-	-	-	-	Information Services
7/9/2019	Noveda Technologies, Inc.	ID Global Corporation (OTCPK:IDGC)	-	-	-	-	-	-	-	Infrastructure Services
7/9/2019	SafeDK Mobile LTD	AppLovin Corporation	-	-	-	-	-	-	-	Infrastructure Services
7/9/2019	Teleset, Inc. (nka:Teleset, a Lanlogic Company)	Lanlogic, Inc.	-	-	-	-	-	-	-	Business Process Services
7/9/2019	Red Dog Systems Inc.	Drillinginfo, Inc.	-	-	-	-	-	-	-	Infrastructure Services
7/8/2019	ShiftCentral Inc.	LAC Group, Inc.	-	-	-	-	-	-	-	Information Services
7/8/2019	SmartClixx, LLC	ZipLine, Inc.	-	-	-	-	-	-	-	Software
7/8/2019	Meridian Loyalty	InComm Inc.	-	-	-	-	-	-	-	Business Process Services
7/8/2019	Clarus Commerce, LLC	Marlin Equity Partners, LLC	-	-	-	-	-	-	-	Business Process Services
7/8/2019	JAGGAER, Inc.	Cinven Limited	-	-	-	-	-	-	-	Software
7/4/2019	Zycomp Systems Limited	Acturis Limited	-	-	-	-	-	-	-	Software
7/3/2019	Perspective Partners, LLC	Manning Partners, LLC	-	-	-	-	-	-	-	Information Services
7/3/2019	Corel Corporation	KKR & Co. Inc. (NYSE:KKR)	-	-	-	-	-	-	-	Software
7/3/2019	Nordisk Systems, Inc.	Converge Technology Solutions Corp. (TSXV:CTS)	\$9.5	0.5x	6.3x	\$19.3	\$1.5	7.8%	-	Infrastructure Services
7/3/2019	Revon Systems, LLC	ZYUS Life Sciences Inc	-	-	-	-	-	-	-	Software
7/3/2019	COMgroup Inc.	Ross & Baruzzini, Inc.	-	-	-	-	-	-	-	Information Services
7/2/2019	Vexata, Inc.	StorCentric, Inc.	-	-	-	-	-	-	-	Infrastructure Services
7/2/2019	D3 Technology Inc.	NCR Corporation (NYSE:NCR)	-	-	-	-	-	-	-	Software
7/2/2019	Pacsoft Australia Pty Ltd.	ECi Software Solutions, Inc.	-	-	-	-	-	-	-	Software
7/2/2019	QDiscovery LLC	Xcellence, Inc.	-	-	-	-	-	-	-	Business Process Services
7/2/2019	DocuWare GmbH	Ricoh Company, Ltd. (TSE:7752)	-	-	-	-	-	-	-	Information Services
7/2/2019	Orange Legal, Inc.	Veritext Corp	-	-	-	-	-	-	-	Business Process Services
7/2/2019	Sunray Technology Ventures, Inc.	Single Digits, Inc.	-	-	-	-	-	-	-	Infrastructure Services
7/2/2019	Optima Healthcare Solutions, LLC	Net Health Systems, Inc.	-	-	-	-	-	-	-	Business Process Services
7/2/2019	ONE11 ADVISORS	Altus Group Limited (TSX:AIF)	-	-	-	-	-	-	-	Business Process Services
7/2/2019	PGFM Solutions, LLC	Gryphon Technologies LC	-	-	-	-	-	-	-	Infrastructure Services
7/2/2019	Majure Data Inc.	Epicor Software Corporation	-	-	-	-	-	-	-	Software
7/2/2019	Paydayta, Inc. (nka:CBIZ Paytime)	CBIZ, Inc. (NYSE:CBZ)	-	-	-	-	-	-	-	Business Process Services
7/2/2019	SkyFormation Ltd.	Exabeam, Inc.	-	-	-	-	-	-	-	Software
7/2/2019	Synergy Business Solutions, Inc.	Velosio	-	-	-	-	-	-	-	Infrastructure Services
7/2/2019	Evolium Technologies S.L.U	Certified Security Solutions, Inc.	-	-	-	-	-	-	-	Software
7/2/2019	Open Storage Solutions, Inc.	iVedha Inc.	-	-	-	-	-	-	-	Infrastructure Services
7/1/2019	HEXONET Services Inc.	CentralNic Group Plc (AIM:CNIC)	\$11.3	0.6x	-	\$18.6	-	-	-	Infrastructure Services
7/1/2019	Management Information Tools, Inc.	Eden Capital Management LLC	-	-	-	-	-	-	-	Software
7/1/2019	DebtFolio, Inc.	Jack Henry & Associates, Inc. (NasdaqGS:JKHY)	-	-	-	-	-	-	-	Software
7/1/2019	intY Limited	ScanSource, Inc. (NasdaqGS:SCSC)	-	-	-	-	-	-	-	Infrastructure Services

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/			Revenue	EBITDA	Margin	Segment
			Value	Revenue	EBITDA					
7/1/2019	GBST Holdings Limited (ASX:GBT)	SS&C Technologies Holdings, Inc. (NasdaqGS:SSNC)	\$168.5	2.7x	21.9x		\$62.9	\$7.7	12.2%	Software
7/1/2019	OpenTempo, Inc.	QGenda, LLC	-	-	-		-	-	-	Software
7/1/2019	Appcast, Inc.	StepStone Deutschland GmbH	\$92.7	-	-		-	-	-	Software
7/1/2019	trinus	DHI Telecom Group	-	-	-		-	-	-	Infrastructure Services
7/1/2019	EPAC Software Technologies, Inc.	JDM Technology Group Inc.	-	-	-		-	-	-	Software

ABOUT CHERRY TREE & ASSOCIATES

Cherry Tree & Associates Overview

Cherry Tree & Associates provides a broad array of M&A advisory services to owner-operators, private equity firms, corporations, management teams and public companies.

M&A Services

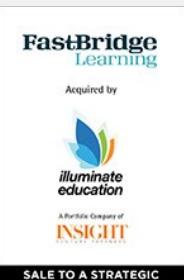
- Sell-side Advisory
- Recapitalizations
- Non-core Divestitures
- Management-led Buyouts
- Buy-side Advisory

Highlights

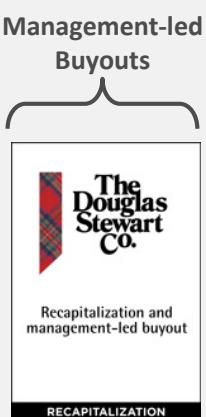
- Based on over 30 years of growing and advising hundreds of entrepreneurial companies
- Been advisor or principal in more than 300 transactions
- Completed over \$3 billion in transactions in the past 10 years
- Expertise in multiple industries
- Experience completing transactions globally
- Cherry Tree professionals have closed deals with leading private equity and venture capital firms
- 13 M&A professionals

RECENT M&A ENGAGEMENTS

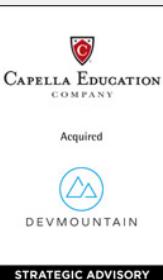
Sell-side Advisory



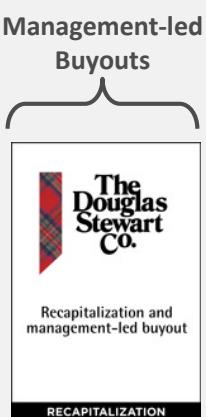
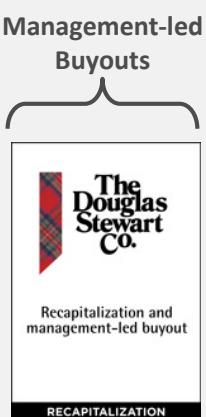
Recapitalizations



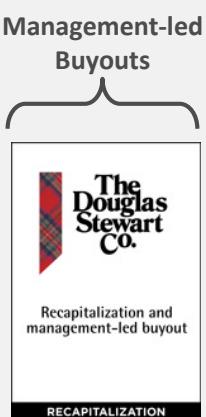
Management-led Buyouts



Non-core Divestitures



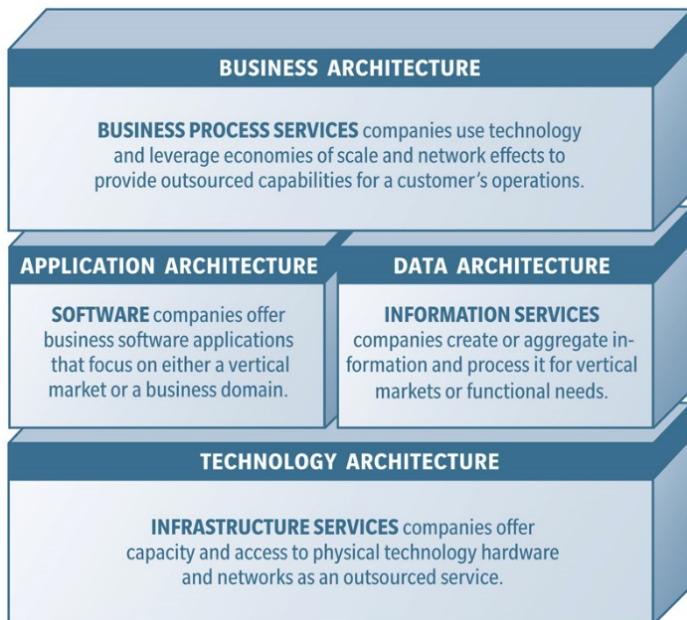
Buy-side Advisory



TEBS Expertise

Cherry Tree has been tracking trends and activity in the Technology Enabled Business Services (TEBS) space for more than 15 years. TEBS companies are defined as those that:

- Offer a solution, product or service that is delivered or enhanced via technology
- Generate revenue primarily from other businesses ("B2B")
- Use their own intellectual property to differentiate their solution



SELECT TRANSACTIONS



Acquired by



A Portfolio Company of
THE HIGRO GROUP

SALE TO A STRATEGIC



Acquired the remittance processing business of



STRATEGIC ADVISORY



Has Partnered With



Norwest Equity Partners

PRIVATE EQUITY TRANSACTION



Welcomes as an
Equity Partner



SALE TO PRIVATE EQUITY



Acquired



STRATEGIC ADVISORY



COMPANY

Acquired



STRATEGIC ADVISORY



Acquired by



SALE TO A STRATEGIC

Marquette Companies

The operating group of



Has completed the sale of



to
LaSalle Capital

SALE TO PRIVATE EQUITY



(OTC:CTIG)

Acquired by



SALE TO A STRATEGIC

Cherry Tree TEBS Team

Each of our senior investment bankers has many years of transaction experience as either an operating executive or private equity professional, in addition to deep investment banking experience.



Mik Gusenius
Director

- Joined Cherry Tree & Associates in 2007
- Over 10 years of middle market investment banking experience
- Completed more than 30 M&A transactions totaling more than \$1 billion of transaction value
- B.A., Economics, Gustavus Adolphus College
- M.B.A., University of Minnesota – Carlson School of Management



Elmer Baldwin
*Senior Executive
Director*

- Joined Cherry Tree & Associates in 2015
- Previously the President and CEO of five information technology companies (20 years)
- Strategic advisor and consultant to over 100 companies over last 30+ years
- Experience working with publicly-traded companies, private-equity syndicates, and owner-operator situations
- B.B.A., Finance, Loyola Marymount University



Dave Latzke
Managing Director

- Joined Cherry Tree & Associates in 2007
- Previously the CFO for two publicly-traded enterprise software companies (13 years)
- Previously with Arthur Andersen (11 years)
- B.A., Accounting, University of Northern Iowa
- Certified Public Accountant (inactive)



Merritt Jackley
Vice President

- Joined Cherry Tree & Associates in 2019
- Has 7 years of investment banking experience and has completed over 20 M&A transactions
- Previously with Vermillion Capital in Minneapolis and Keefe, Bruyette & Woods (A Stifel Company) in New York
- B.A., History, Colgate University



Tom Astrup
Senior Analyst

- Joined Cherry Tree & Associates in 2019
- Previous audit and transaction advisory experience with PricewaterhouseCoopers and Dixon Hughes Goodman
- B.S., Finance and Accounting, University of Minnesota – Carlson School of Management
- Certified Public Accountant

Important Disclosures

The information included in this publication has been obtained from public sources, and is not based upon private or confidential Cherry Tree information. Cherry Tree gathers its data from sources it considers reliable. However, it does not guarantee the accuracy or completeness of the information provided within this publication. Any opinions presented reflect the current judgment of the authors and are subject to change. Cherry Tree makes no warranties, expressed or implied, regarding the accuracy of this information or any opinions expressed by the authors. Officers, directors, partners of Cherry Tree and Cherry Tree proprietary investment funds may have positions in the securities of the companies discussed, and certain affiliates of Cherry Tree may recommend to specific clients the purchase and sale of securities discussed in the publication. This publication does not constitute a recommendation with respect to the securities of any company discussed herein, and it should not be construed as such. Cherry Tree or its affiliates may from time to time provide investment banking or related services to these companies. Like all Cherry Tree employees, the authors of this publication receive compensation that is affected by overall firm profitability. We undertake no obligation to update any information in this publication.

The TEBS 100 Index is a hypothetical index, and does not reflect an actual investment portfolio. Comparisons between the TEBS 100 Index and other indices are for illustrative purposes only. Correlations in performance information for the TEBS 100 Index and other indices should not be relied upon as indicative of risks involved in owning or holding a portfolio of securities similar to the TEBS 100 Index. Past performance should not be relied upon as indicative of future performance.