

CONFIDENTIAL

Technology-Enabled Business Services

Quarterly Update – 2018 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:

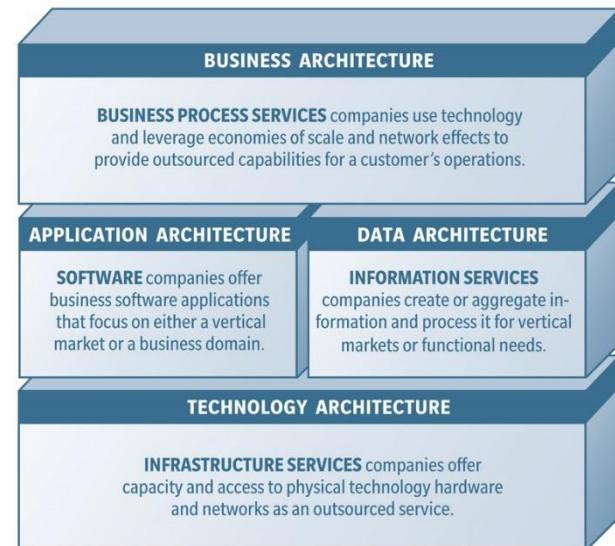
- *Offer a solution, product or service that is delivered or enhanced via technology*
- *Generate revenue primarily from other businesses ("B2B")*
- *Use their own intellectual property to differentiate their solution*

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 – 9/30/2018		
TEBS Segment	EV/Revenue	EV/EBITDA
Software	7.3x	22.5x
Information Services	6.6x	20.2x
Business Process Services	2.2x	18.3x
Infrastructure Services	5.0x	18.0x
S&P 500	3.3x	13.3x

Source: Cherry Tree Research, Capital IQ: 9/30/2018

TEBS 100

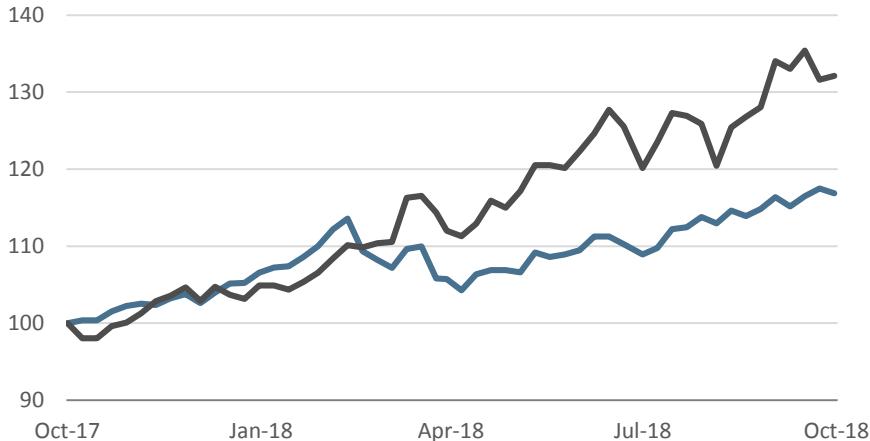
An index of 100 publicly-traded Technology Enabled Business Services companies

TEBS 100 Index Performance

- The TEBS 100 continues to outperform the overall market over a three-year period (94% return over three years vs. 54% return)
- The long-term outperformance is most likely due to superior revenue growth from the TEBS 100

— S&P 500 — TEBS 100

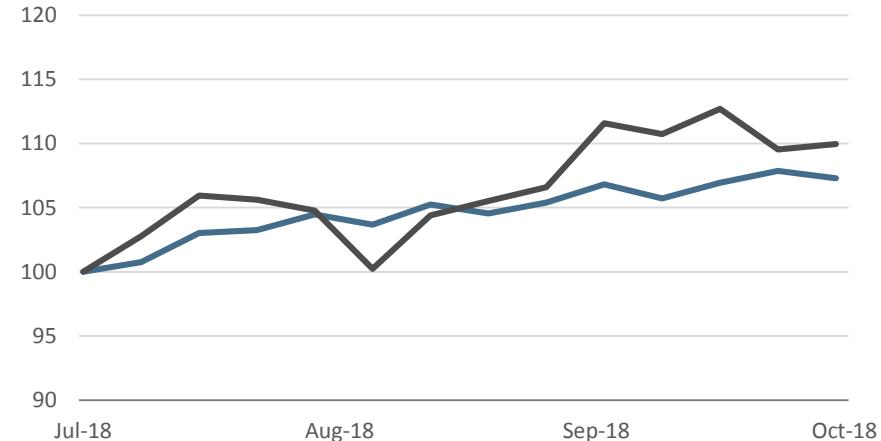
1-Year TEBS 100 Performance vs. S&P 500



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 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

Gross Margin			
	9/30/2016	9/30/2017	9/30/2018
Software	67.7%	69.1%	69.6%
Information Services	64.7%	64.3%	63.0%
Business Process Services	35.2%	39.2%	37.3%
Infrastructure Services	57.4%	58.2%	58.6%
TEBS 100	62.1%	64.3%	63.0%
S&P 500	42.6%	43.1%	44.8%

	Revenue Growth		
	9/30/2016	9/30/2017	9/30/2018
Software	18.2%	16.8%	15.6%
Information Services	11.4%	8.3%	10.1%
Business Process Services	6.7%	5.2%	6.4%
Infrastructure Services	23.0%	22.8%	19.6%
TEBS 100	14.0%	12.3%	13.4%
S&P 500	1.5%	5.5%	8.5%

EBITDA Margin			
	9/30/2016	9/30/2017	9/30/2018
Software	9.8%	10.7%	10.6%
Information Services	27.1%	27.0%	28.8%
Business Process Services	15.8%	17.2%	17.1%
Infrastructure Services	18.7%	21.4%	21.9%
TEBS 100	14.8%	16.7%	17.1%
S&P 500	22.7%	22.9%	22.9%

TEBS 100 SEGMENT PERFORMANCE

Software

Information Services

Business Process Services

Infrastructure Services

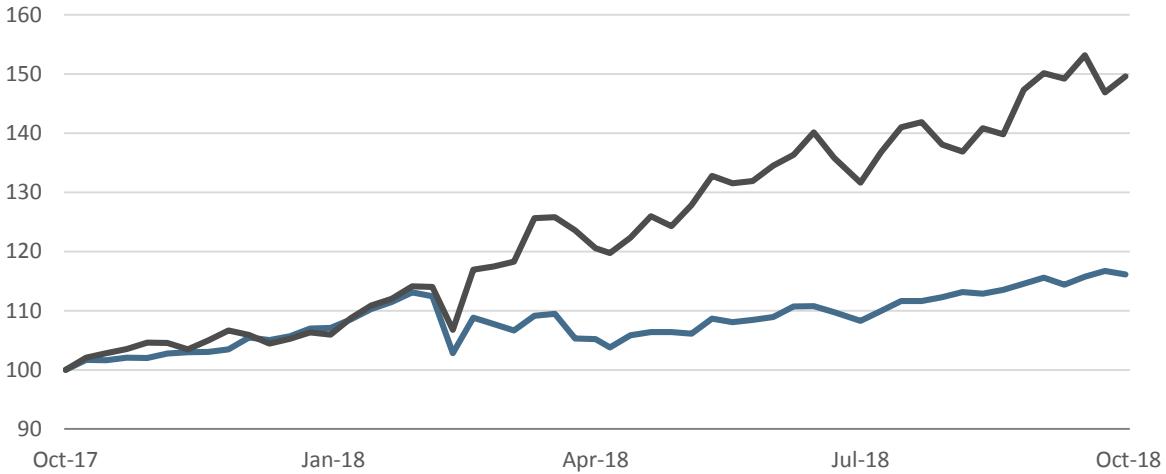
TEBS 100 Companies – Software

Company	Enterprise Value	LTM Revenue	Gross Margin	EBITDA Margin	EV/Revenue		Revenue Growth
					Revenue	EBITDA	
8x8, Inc.	\$1,839	\$311	75.5%	-9.6%	5.9x	n/m	18.4%
ACI Worldwide, Inc.	\$3,878	\$996	55.1%	14.7%	3.9x	26.4x	-3.4%
Adobe Systems Incorporated	\$128,712	\$8,572	87.1%	36.0%	15.0x	n/m	24.2%
Allscripts Healthcare Solutions, Inc.	\$4,484	\$2,006	48.7%	5.2%	2.2x	n/m	21.1%
Amber Road, Inc.	\$279	\$82	54.1%	-7.7%	3.4x	n/m	7.4%
American Software, Inc.	\$290	\$113	54.1%	11.7%	2.6x	21.9x	7.1%
athenahealth, Inc.	\$5,453	\$1,287	54.2%	18.8%	4.2x	22.5x	11.7%
Atlassian Corporation Plc	\$21,789	\$874	80.2%	0.5%	24.9x	n/m	41.0%
Benefitfocus, Inc.	\$1,365	\$267	53.4%	0.2%	5.1x	n/m	14.4%
Blackbaud, Inc.	\$5,253	\$830	55.1%	17.1%	6.3x	37.0x	9.4%
Bottomline Technologies (de), Inc.	\$3,101	\$394	56.1%	10.7%	7.9x	n/m	12.8%
BlackLine, Inc.	\$2,931	\$204	77.7%	-9.1%	14.4x	n/m	37.9%
CA, Inc.	\$18,053	\$4,148	85.5%	30.2%	4.4x	14.4x	2.1%
Citrix Systems, Inc.	\$15,718	\$2,908	86.9%	30.6%	5.4x	17.6x	5.4%
Commvault Systems, Inc.	\$2,740	\$710	85.3%	2.3%	3.9x	n/m	7.6%
Cornerstone OnDemand, Inc.	\$3,233	\$519	71.7%	-2.3%	6.2x	n/m	16.7%
Ellie Mae, Inc.	\$3,040	\$463	59.2%	14.7%	6.6x	n/m	17.6%
Enghouse Systems Limited	\$1,591	\$262	69.6%	27.0%	6.1x	22.5x	6.7%
FireEye, Inc.	\$3,122	\$776	65.2%	-18.7%	4.0x	n/m	3.9%
Fiserv, Inc.	\$37,816	\$5,776	47.7%	32.0%	6.5x	20.5x	3.3%
Five9, Inc.	\$2,479	\$226	59.0%	4.8%	11.0x	n/m	25.3%
Fortinet, Inc.	\$14,173	\$1,631	74.9%	13.2%	8.7x	n/m	17.9%
HubSpot, Inc.	\$5,614	\$441	80.2%	-8.0%	12.7x	n/m	38.6%
Intuit Inc.	\$57,544	\$5,964	83.9%	29.1%	9.6x	33.2x	15.2%
Jack Henry & Associates, Inc.	\$12,323	\$1,537	43.4%	30.8%	8.0x	26.0x	7.4%
Manhattan Associates, Inc.	\$3,507	\$569	58.1%	29.3%	6.2x	21.0x	-4.7%
Medidata Solutions, Inc.	\$4,346	\$587	76.5%	15.5%	7.4x	n/m	15.5%
Mimecast Limited	\$2,424	\$282	73.3%	5.8%	8.6x	n/m	38.8%
MINDBODY, Inc.	\$1,861	\$212	70.7%	-5.6%	8.8x	n/m	32.5%

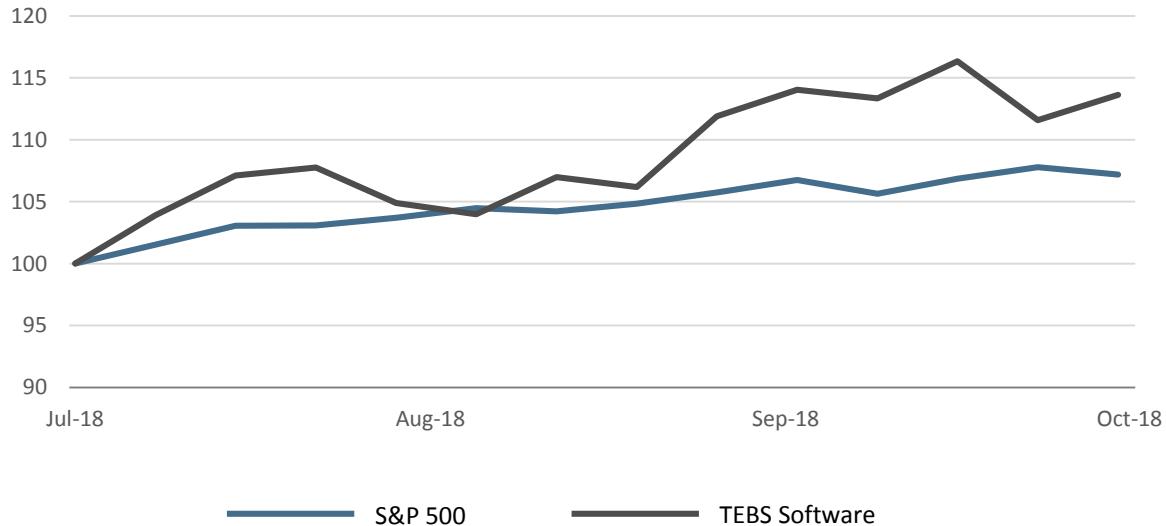
Company	Enterprise Value	LTM Revenue	Gross Margin	EBITDA Margin	EV/Revenue		Revenue Growth
					Revenue	EBITDA	
NextGen Healthcare, Inc.	\$1,308	\$533	54.6%	8.1%	2.5x	30.4x	2.9%
NIC Inc.	\$812	\$347	40.8%	24.9%	2.3x	9.4x	6.1%
Oracle Corporation	\$194,044	\$39,920	79.7%	40.5%	4.9x	12.0x	4.4%
Paycom Software, Inc.	\$9,092	\$498	85.9%	23.6%	18.3x	n/m	30.1%
Pegasystems Inc.	\$4,680	\$830	64.7%	-1.0%	5.6x	n/m	0.5%
Proofpoint, Inc.	\$5,658	\$612	71.5%	-5.9%	9.3x	n/m	37.5%
PROS Holdings, Inc.	\$1,356	\$184	59.6%	-24.4%	7.4x	n/m	15.6%
Q2 Holdings, Inc.	\$2,495	\$215	49.5%	-5.6%	11.6x	n/m	24.7%
QAD Inc.	\$936	\$328	51.5%	1.9%	2.9x	n/m	13.2%
RealPage, Inc.	\$6,190	\$774	60.6%	16.8%	8.0x	n/m	26.7%
Red Hat, Inc.	\$22,921	\$3,157	85.2%	19.1%	7.3x	38.1x	19.4%
salesforce.com, inc.	\$121,309	\$11,793	74.0%	9.4%	10.3x	n/m	25.3%
ServiceNow, Inc.	\$33,919	\$2,276	75.5%	1.7%	14.9x	n/m	40.5%
Shopify Inc.	\$15,997	\$854	56.5%	-5.6%	18.7x	n/m	67.7%
Splunk Inc.	\$16,905	\$1,464	79.5%	-16.6%	11.5x	n/m	38.3%
SPS Commerce, Inc.	\$1,562	\$235	66.7%	10.5%	6.7x	n/m	13.8%
Symantec Corporation	\$15,933	\$4,827	78.8%	25.6%	3.3x	12.9x	12.0%
Tableau Software, Inc.	\$8,356	\$993	87.1%	-12.5%	8.4x	n/m	14.2%
The Descartes Systems Group Inc	\$2,630	\$260	72.9%	32.0%	10.1x	31.6x	20.2%
The Ultimate Software Group, Inc.	\$9,867	\$1,035	62.6%	10.3%	9.5x	n/m	20.3%
Tyler Technologies, Inc.	\$9,319	\$889	47.4%	22.4%	10.5x	n/m	11.7%
Upland Software, Inc.	\$837	\$121	67.0%	21.0%	6.9x	32.8x	47.0%
Veeva Systems Inc.	\$14,722	\$763	69.7%	24.2%	19.3x	n/m	23.0%
VMware, Inc.	\$54,725	\$8,407	85.9%	26.9%	6.5x	24.2x	NA
Workday, Inc.	\$29,870	\$2,428	70.6%	-7.0%	12.3x	n/m	30.7%
25th Percentile	\$2,483	\$315	55.4%	-2.0%	5.2x	19.0x	7.4%
Median	\$4,966	\$769	69.6%	10.6%	7.3x	22.5x	15.6%
75th Percentile	\$15,880	\$1,608	78.5%	24.1%	10.2x	31.0x	25.3%

Segment Performance – Software

1-Year Stock Performance vs. S&P 500



3-Month Stock Performance vs. S&P 500



Top Performers (1-Yr)



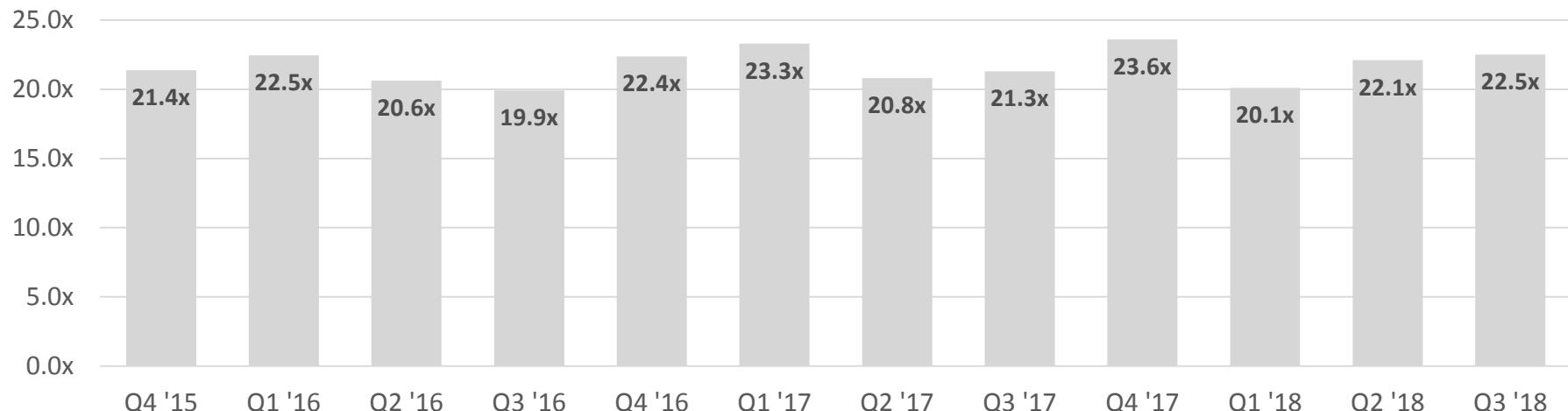
Bottom Performers (1-Yr)

Segment Valuation – Software

Enterprise Value/Revenue



Enterprise Value/EBITDA

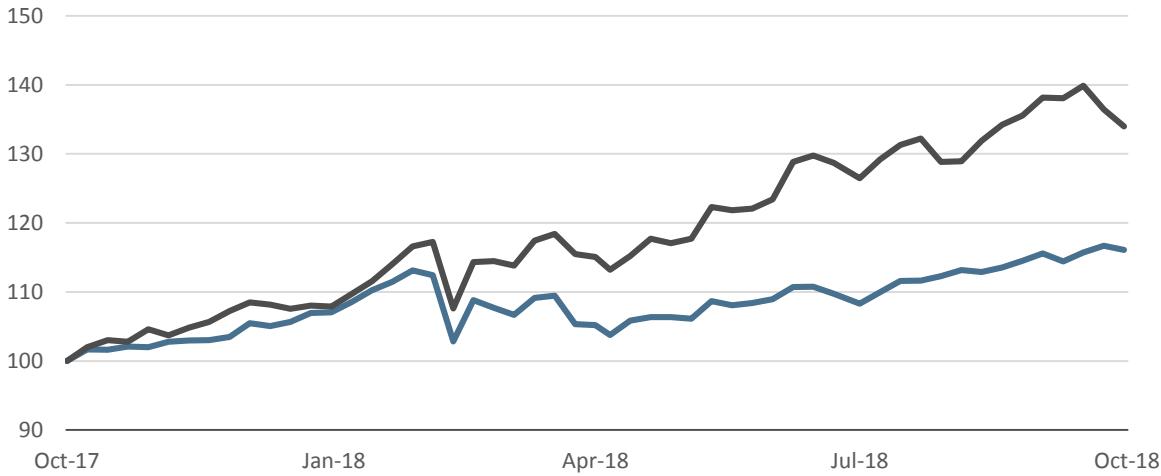


TEBS 100 Companies – Information Services

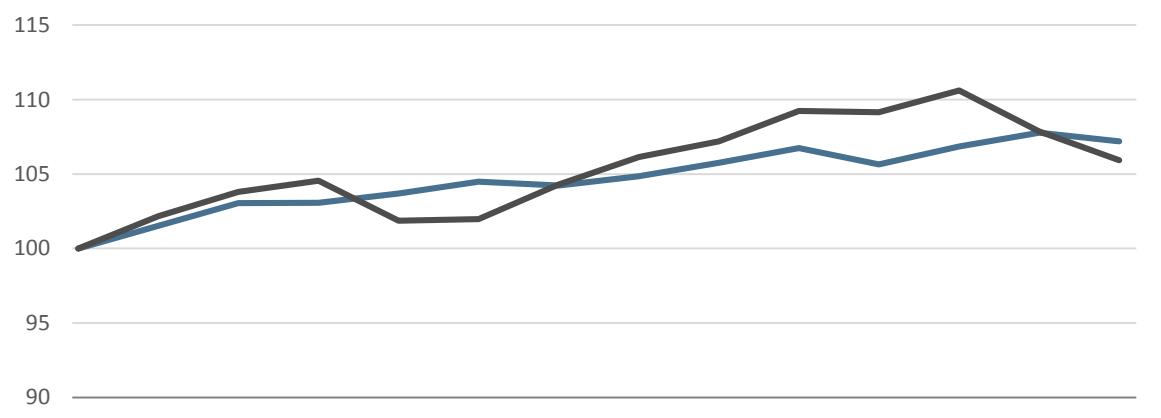
Company	Enterprise	LTM	Gross	EBITDA	EV/		Revenue
	Value	Revenue	Margin	Margin	Revenue	EBITDA	Growth
CoreLogic, Inc.	\$5,722	\$1,871	49.1%	21.9%	3.1x	14.0x	-2.2%
CoStar Group, Inc.	\$14,349	\$1,072	77.3%	26.7%	13.4x	n/m	19.8%
Equifax Inc.	\$18,084	\$3,416	61.7%	28.8%	5.3x	18.4x	3.7%
FactSet Research Systems Inc.	\$8,918	\$1,350	51.2%	31.4%	6.6x	21.1x	10.6%
Fair Isaac Corporation	\$7,300	\$1,006	69.5%	22.4%	7.3x	32.5x	10.0%
Forrester Research, Inc.	\$687	\$345	58.9%	9.2%	2.0x	21.7x	5.2%
Gartner, Inc.	\$16,684	\$3,807	61.8%	13.3%	4.4x	32.9x	38.6%
IHS Markit Ltd.	\$27,182	\$3,886	63.3%	32.9%	7.0x	21.2x	10.1%
Moody's Corporation	\$36,226	\$4,530	71.4%	47.2%	8.0x	17.0x	18.1%
Morningstar, Inc.	\$5,141	\$969	59.1%	27.3%	5.3x	19.4x	14.4%
Nielsen Holdings plc	\$18,286	\$6,659	57.3%	24.9%	2.7x	11.0x	4.1%
S&P Global Inc.	\$52,400	\$6,277	72.1%	48.9%	8.3x	17.1x	8.2%
The Dun & Bradstreet Corporation	\$6,444	\$1,813	68.5%	29.3%	3.6x	12.1x	5.6%
TransUnion	\$17,679	\$2,105	66.1%	36.3%	8.4x	23.1x	16.7%
Verisk Analytics, Inc.	\$22,501	\$2,302	63.0%	45.4%	9.8x	21.5x	13.4%
25th Percentile	\$6,872	\$1,211	59.0%	23.6%	4.0x	17.0x	5.2%
Median	\$16,684	\$2,105	63.0%	28.8%	6.6x	20.2x	10.1%
75th Percentile	\$20,393	\$3,847	69.0%	34.6%	8.2x	21.7x	16.7%

Segment Performance – Information Services

1-Year Stock Performance vs. S&P 500



3-Month Stock Performance vs. S&P 500



— S&P 500 — TEBS Information Services

Top Performers (1-Yr)



62.7%



56.9%



55.7%



48.1%



44.9%



22.4%



20.1%



9.7%



6.9%



(33.3%)

nielsen

Bottom Performers (1-Yr)

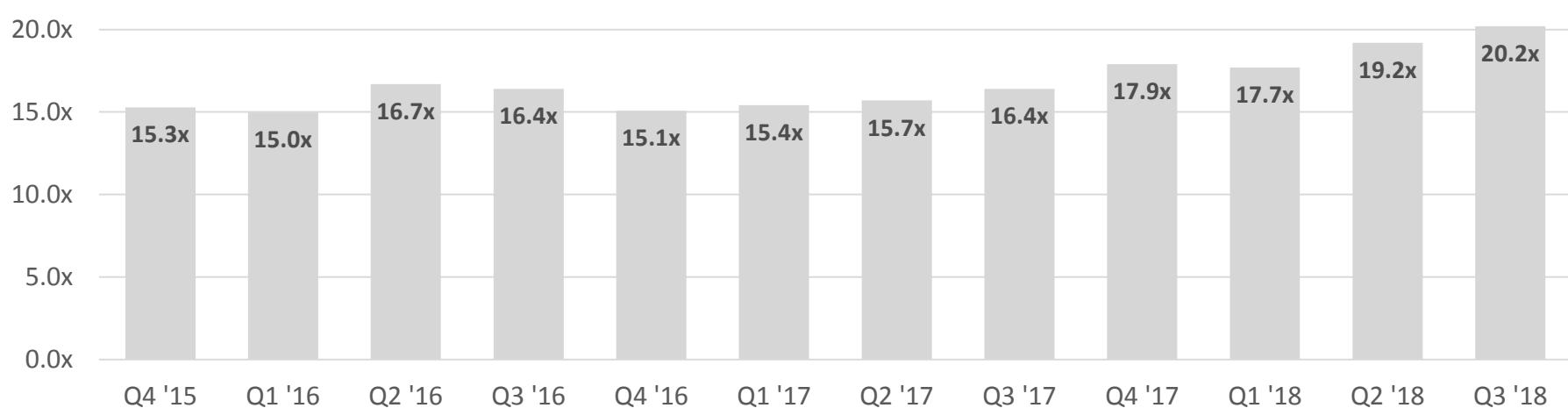
Source: Cherry Tree Research, Capital IQ: 9/30/2018

Segment Valuation – Information Services

Enterprise Value/Revenue



Enterprise Value/EBITDA

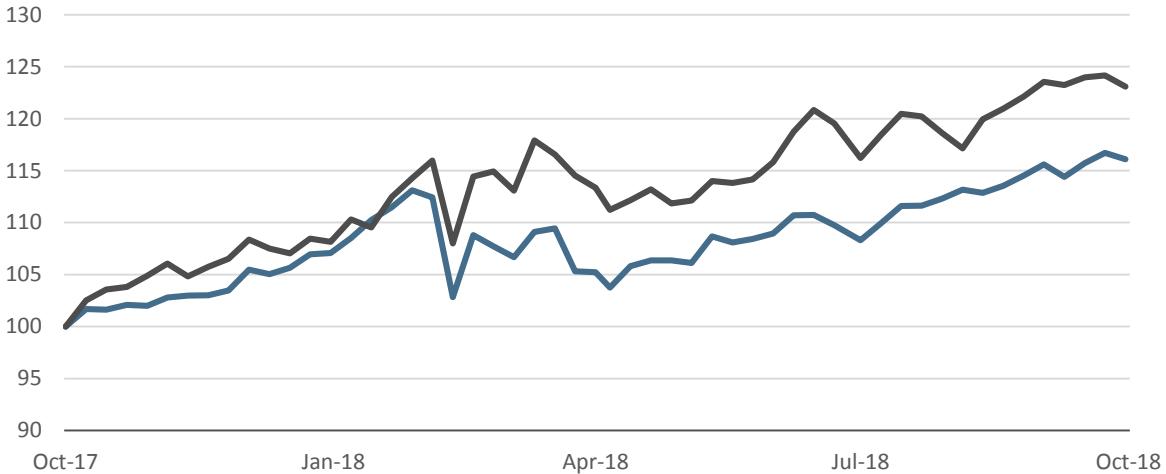


TEBS 100 Companies – Business Process Services

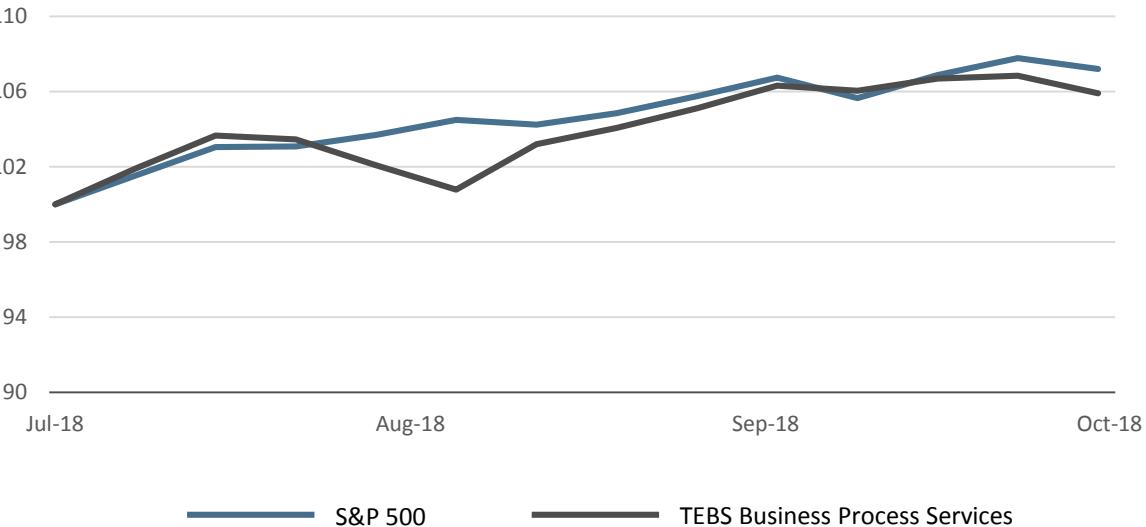
Company	Enterprise	LTM	Gross	EBITDA	EV/		Revenue
	Value	Revenue	Margin	Margin	Revenue	EBITDA	Growth
Amdocs Limited	\$8,815	\$3,952	34.8%	18.5%	2.2x	12.1x	3.2%
Automatic Data Processing, Inc.	\$65,734	\$13,326	43.2%	21.9%	4.9x	22.5x	7.6%
Broadridge Financial Solutions, Inc.	\$16,139	\$4,330	26.8%	18.6%	3.7x	20.0x	4.5%
Cimpres N.V.	\$5,237	\$2,593	50.6%	10.2%	2.0x	19.8x	21.4%
CSG Systems International, Inc.	\$1,520	\$819	49.9%	17.1%	1.9x	10.9x	6.4%
Conduent Incorporated	\$5,949	\$5,780	18.3%	12.3%	1.0x	8.3x	-6.2%
Global Payments Inc.	\$24,114	\$3,721	59.2%	32.8%	6.5x	19.7x	-11.2%
InnerWorkings, Inc.	\$549	\$1,150	23.6%	2.4%	0.5x	20.0x	4.7%
Exela Technologies, Inc.	\$2,361	\$1,528	24.6%	7.6%	1.5x	20.3x	84.9%
Paychex, Inc.	\$26,067	\$3,381	69.9%	42.2%	7.7x	18.3x	7.3%
PFSweb, Inc.	\$175	\$269	31.5%	7.5%	0.6x	8.7x	-4.7%
Genpact Limited	\$6,718	\$2,861	37.3%	14.5%	2.3x	16.2x	9.0%
TTEC Holdings, Inc.	\$1,421	\$1,511	24.2%	11.8%	0.9x	8.0x	12.0%
Worldpay, Inc.	\$38,253	\$3,957	75.3%	29.5%	9.7x	32.7x	4.2%
WageWorks, Inc.	\$1,047	\$462	63.3%	19.9%	2.3x	11.4x	33.1%
25th Percentile	\$1,471	\$1,331	25.7%	11.0%	1.3x	11.1x	3.2%
Median	\$5,949	\$2,861	37.3%	17.1%	2.2x	18.3x	6.4%
75th Percentile	\$20,126	\$3,955	54.9%	20.9%	4.3x	20.0x	12.0%

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)

 **Broadridge** 63.3%

 **exela** 45.5%

 **CONDUENT** 43.7%

 **worldpay** 43.7%

 **cimpress** 39.9%

 **CSG International** 0.1%

 **PFSweb** (11.4%)

 **WageWorks** (29.6%)

 **InnerWorkings** (29.6%)

 **TeleTech.** (38.0%)

Bottom Performers (1-Yr)

Segment Valuation – Business Process Services

Enterprise Value/Revenue



Enterprise Value/EBITDA

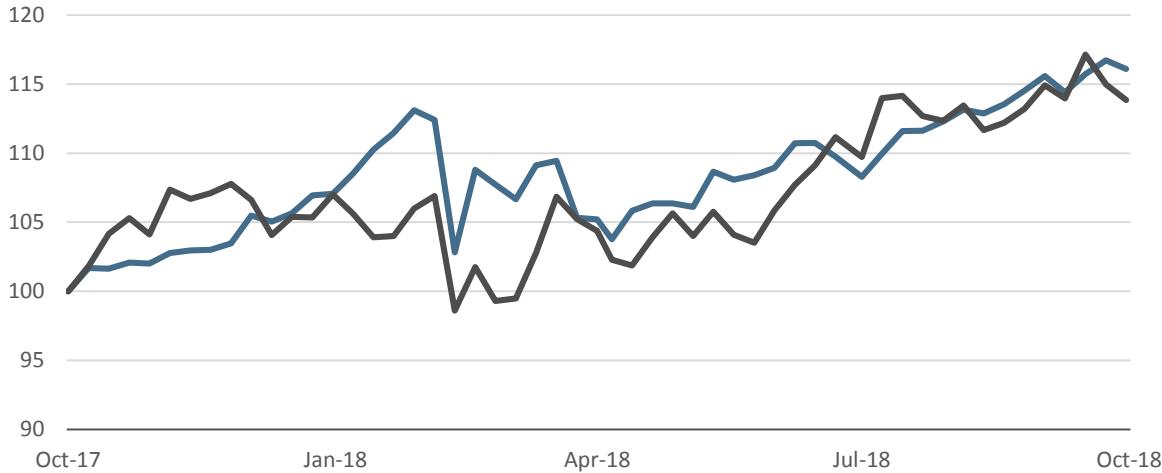


TEBS 100 Companies – Infrastructure Services

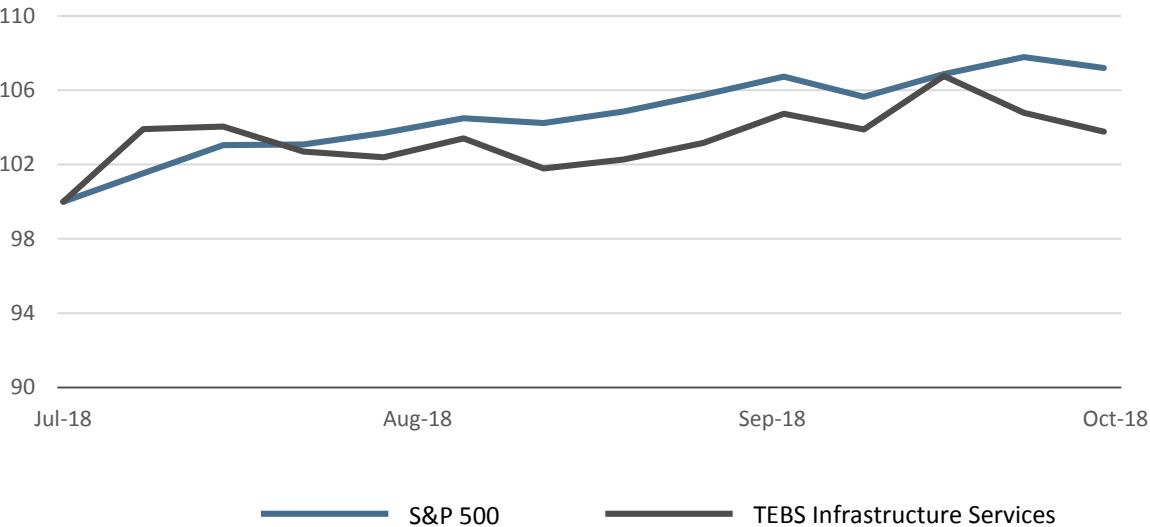
Company	Enterprise	LTM	Gross	EBITDA	EV/		Revenue
	Value	Revenue	Margin	Margin	Revenue	EBITDA	Growth
Akamai Technologies, Inc.	\$12,072	\$2,628	64.8%	25.5%	4.6x	18.0x	9.2%
Boingo Wireless, Inc.	\$1,479	\$229	34.3%	32.1%	6.5x	20.1x	27.7%
Box, Inc.	\$3,275	\$555	72.7%	-18.8%	5.9x	n/m	22.5%
Carbonite, Inc.	\$1,322	\$265	72.6%	10.1%	5.0x	n/m	19.6%
Cogent Communications Holdings, Inc.	\$3,016	\$494	58.6%	31.9%	6.1x	19.1x	8.5%
Endurance International Group Holdings, Inc.	\$3,045	\$1,169	52.7%	26.2%	2.6x	9.9x	-0.2%
Equinix, Inc. (REIT)	\$44,842	\$4,830	48.7%	44.2%	9.3x	21.0x	24.4%
GoDaddy Inc.	\$15,619	\$2,469	66.0%	15.3%	6.3x	n/m	23.1%
Gogo Inc.	\$1,204	\$820	47.3%	13.5%	1.5x	10.9x	27.1%
GTT Communications, Inc.	\$5,517	\$1,039	46.0%	21.9%	5.3x	24.2x	59.9%
Internap Corporation	\$906	\$295	55.2%	29.6%	3.1x	10.4x	1.8%
Limelight Networks, Inc.	\$520	\$197	58.2%	11.6%	2.6x	22.7x	13.4%
Pure Storage, Inc.	\$5,459	\$1,181	65.6%	-10.1%	4.6x	n/m	41.9%
Web.com Group, Inc.	\$1,963	\$751	67.5%	18.9%	2.6x	13.8x	0.1%
Zayo Group Holdings, Inc.	\$14,129	\$2,604	63.8%	45.7%	5.4x	11.9x	18.4%
25th Percentile	\$1,401	\$395	50.7%	12.6%	2.9x	11.4x	8.5%
Median	\$3,045	\$820	58.6%	21.9%	5.0x	18.0x	19.6%
75th Percentile	\$8,795	\$1,825	65.8%	30.7%	6.0x	20.6x	27.1%

Segment Performance – Infrastructure Services

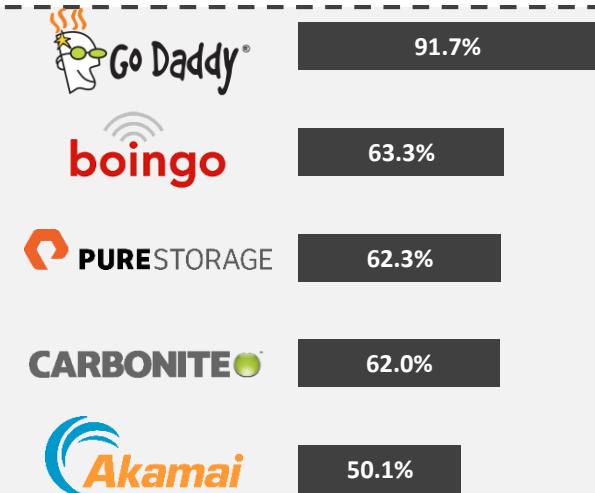
1-Year Stock Performance vs. S&P 500 – Update Chart



3-Month Stock Performance vs. S&P 500



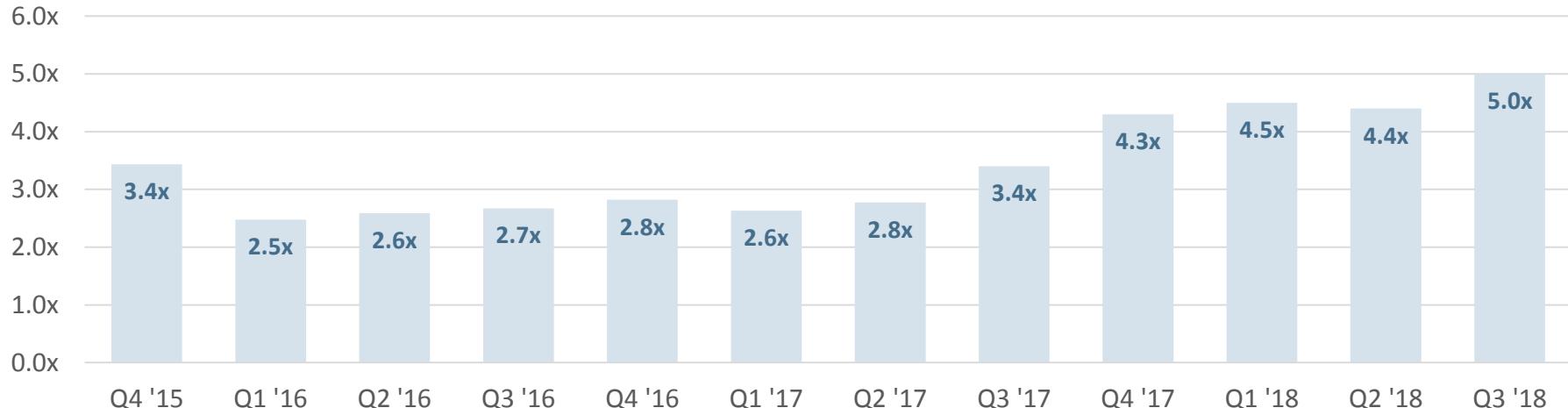
Top Performers (1-Yr)



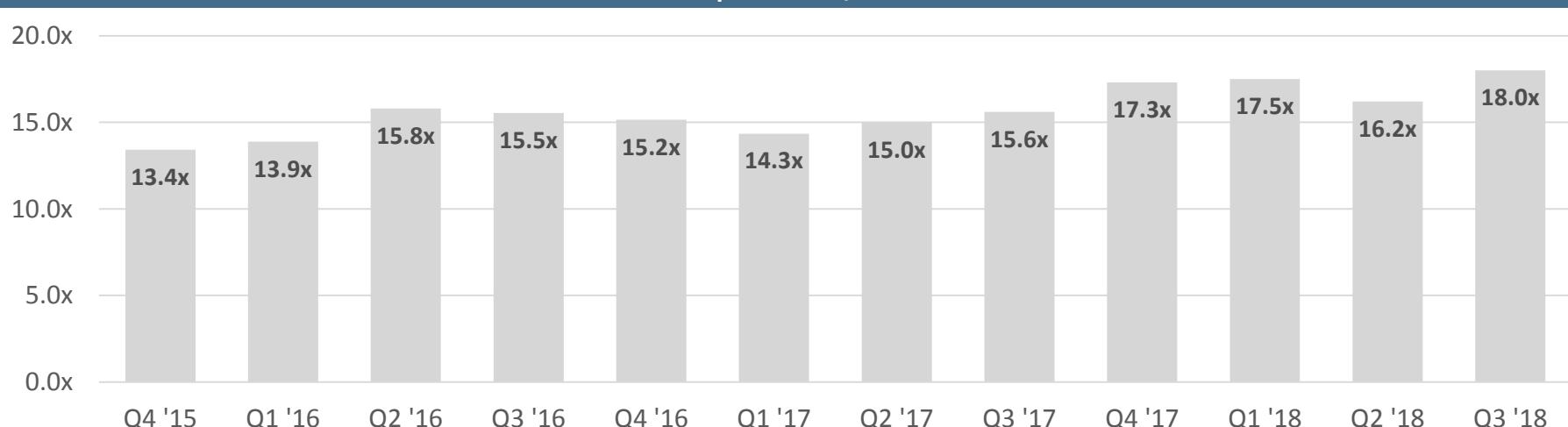
Bottom Performers (1-Yr)

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	EBITDA			
9/30/2018	FusionStorm, Inc.	Computacenter plc (LSE:CCC)	\$90.0	0.2x	-	\$450.0	-	-	-	Infrastructure Services
9/28/2018	Federated Payment Systems	EVO Payments (Nasdaq:EVOP)	-	-	-	-	-	-	-	Business Process Services
9/28/2018	Powervision Software	Coretex Business Solutions (TSXV:CBX)	\$7.0	3.0x	-	\$2.33	-	-	-	Software
9/27/2018	SICOM Systems, Inc.	Global Payments Inc. (NYSE:GPN)	\$415.0	-	-	-	-	-	-	Business Process Services
9/27/2018	Navience Healthcare Solutions	Huntsworth plc (LSE:HNT)	\$70.0	10.9x	18.4x	\$6.4	\$3.8	59.2%	-	Information Services
9/27/2018	Iron Bow Technologies	H.I.G. Capital, LLC	-	-	-	-	-	-	-	Business Process Services
9/26/2018	RightScale, Inc.	Flexera Holdings LP	-	-	-	-	-	-	-	Software
9/26/2018	Datanyze, inc.	Zoom Information, Inc.	-	-	-	-	-	-	-	Information Services
9/26/2018	Vasona Networks, Inc.	Zephyr Telecommunications, Inc.	-	-	-	-	-	-	-	Software
9/26/2018	Augeo FI	Lightyear Capital	\$140.0	-	-	-	-	-	-	Business Process Services
9/26/2018	AppRev/Billing and Payments Business	Output Services Group, Inc.	-	-	-	-	-	-	-	Business Process Services
9/25/2018	NETfacilities, Inc.	Asset Management Technologies	-	-	-	-	-	-	-	Software
9/25/2018	ATM Business of Elan Financial	Fiserv, Inc. (Nasdaq:FISV)	\$690.0	-	-	-	-	-	-	Business Process Services
9/25/2018	Prime Analytics, LLC	KRM22 (AIM:KRM)	\$8.0	3.2x	-	\$2.5	-	-	-	Software
9/25/2018	Locus Energy, LLC	AlsoEnergy, Inc.	-	-	-	-	-	-	-	Software
9/25/2018	Comet Solutions, Inc.	Aras Corporation	-	-	-	-	-	-	-	Software
9/25/2018	Build A Sign LLC	Cimpress N.V. (Nasdaq:CMPR)	\$280.0	2.2x	-	\$127.3	-	-	-	Business Process Services
9/24/2018	OpsPanda, Inc.	Xactly Corporation	-	-	-	-	-	-	-	Software
9/24/2018	Recruiter.com	VocaWorks, Inc.	-	-	-	-	-	-	-	Information Services
9/24/2018	Astro Technology, Inc.	Slack Technologies, Inc.	-	-	-	-	-	-	-	Business Process Services
9/24/2018	Acuant Inc.	Audax Group, Inc.	-	-	-	-	-	-	-	Software
9/24/2018	Ascenty Ltda.	Digital Reality Trust, L.P.	\$1,826.8	-	15.3x	-	\$119.8	-	-	Infrastructure Services
9/20/2018	UnitedLex Corporation	CVC Capital Partners Limited	\$6.0	-	-	-	-	-	-	Business Process Services
9/20/2018	Allure Global Solutions	Creative Realities (OTCPK:CREX)	\$10.5	-	-	-	-	-	-	Software
9/20/2018	NewVoiceMedia Limited	Vonage Holdings (NYSE:VG)	\$463.3	-	-	-	-	-	-	Business Process Services
9/20/2018	Marketo, Inc.	Adobe Systems (Nasdaq:ADBE)	\$4,750.0	-	-	-	-	-	-	Software
9/19/2018	TEAM Software	Accel-KKR LLC	-	-	-	-	-	-	-	Software
9/19/2018	Sitrian, Inc.	Limeade, Inc	-	-	-	-	-	-	-	Business Process Services
9/19/2018	Orchard & Grove	JAMF Software	-	-	-	-	-	-	-	Software
9/19/2018	Remedy Employer Services	CoAdvantage, Inc.	-	-	-	-	-	-	-	Business Process Services
9/18/2018	VeBridge Holdings	Konica Minolta Business Solutions	-	-	-	-	-	-	-	Business Process Services
9/18/2018	Hypemarks	Filestack, Inc.	-	-	-	-	-	-	-	Information Services
9/18/2018	e/Doc Systems	Novatech Inc.	-	-	-	-	-	-	-	Business Process Services
9/18/2018	Choice HR	Fourth Ltd.	-	-	-	-	-	-	-	Business Process Services
9/18/2018	StackPointCloud, Inc.	NetApp (Nasdaq:NTAP)	-	-	-	-	-	-	-	Software
9/18/2018	Advanced Technology Group	Cognizant Technology Solutions (NasdaqGS:CTSH)	-	-	-	-	-	-	-	Business Process Services
9/18/2018	ProcessUnity, Inc.	Long Ridge Equity Partners	\$25.3	-	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/			EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA			
9/18/2018	Oildex, Inc.	Drillinginfo, Inc.	-	-	-	-	-	-	-	Software
9/18/2018	Captio	Certify Inc.	-	-	-	-	-	-	-	Software
9/18/2018	Anacacia Capital	Duncan Solutions, Inc.	-	-	-	-	-	-	-	Business Process Services
9/17/2018	Core BTS, Inc.	Tailwind Capital Group	-	-	-	-	-	-	-	Business Process Services
9/17/2018	Infor, Inc.	Vivonet Inc.	-	-	-	-	-	-	-	Business Process Services
9/17/2018	Prolific Business Solutions	Talus	-	-	-	-	-	-	-	Business Process Services
9/17/2018	Simplified Business Solutions	iSolved HCM, LLC	-	-	-	-	-	-	-	Business Process Services
9/17/2018	Bertelsmann SE & Co.	OnCourse Learning Corp.	-	-	-	-	-	-	-	Information Services
9/16/2018	Lucro Solutions, Inc.	Valify LLC	-	-	-	-	-	-	-	Business Process Services
9/14/2018	Cinnover Financial Technology	Nasdaq Technology	\$176.5	4.4x	-	\$40.1	-	-	-	Information Services
9/14/2018	CSG Systems	Forte Payment Systems	\$85.0	-	-	-	-	-	-	Business Process Services
9/13/2018	AssetLock, LLC	Simplicity Financial Marketing	-	-	-	-	-	-	-	Software
9/13/2018	InXpo, Inc.	West Corporation	-	-	-	-	-	-	-	Business Process Services
9/13/2018	Bomgar Corporation	BeyondTrust Software	-	-	-	-	-	-	-	Software
9/12/2018	MidOcean Partners	Questex LLC	-	-	-	-	-	-	-	Business Process Services
9/11/2018	Apex Revenue Technologies	RevSpring	-	-	-	-	-	-	-	Business Process Services
9/11/2018	NOVAtime Technology	Ascentis Corporation	-	-	-	-	-	-	-	Business Process Services
9/10/2018	FutureSimple	Zendesk (NYSE:ZEN)	-	-	-	-	-	-	-	Software
9/10/2018	Ringail Solutions, Inc.	Nuix Pty	\$55.0	-	-	-	-	-	-	Business Process Services
9/6/2018	Vinyardsoft Corp	Eci Software Solutions	-	-	-	-	-	-	-	Software
9/6/2018	GlobalHosting Business Assets	CentralNic Group (AIM:CNIC)	\$3.0	3.0x	6.1x	\$1.0	\$0.5	49.2%	Business Process Services	
9/6/2018	Intralinks	SS&C Technologies Holdings, Inc. (NasdaqGS:SSNC)	\$1,500.0	4.6x	11.4x	\$326.1	\$131.6	40.4%	Software	
9/6/2018	Episerver AB	Insight Venture Partners	\$1,160.0	-	-	-	-	-	-	Business Process Services
9/6/2018	Gately Communication Co.	WJ Partners	-	-	-	-	-	-	-	Infrastructure Services
9/6/2018	CEB Challenger and Effortless Experience Solutions	Marlin Equity Partners, LLC	-	-	-	-	-	-	-	Information Services
9/5/2018	ListenFirst Media	Frontier Capital	-	-	-	-	-	-	-	Software
9/5/2018	Trendline Interactive	Growth Catalyst Partners	-	-	-	-	-	-	-	Business Process Services
9/5/2018	SuperDataResearch Holdings	Nielsen Holdings	-	-	-	-	-	-	-	Information Services
9/5/2018	Connected2Fiber	Access Point, Inc.	-	-	-	-	-	-	-	Software
9/5/2018	KnowledgeAdvisors, Inc.	eXplorance Inc.	-	-	-	-	-	-	-	Software
9/5/2018	Donuts Inc.	ABRY Partners, LLC	-	-	-	-	-	-	-	Business Process Services
9/4/2018	CHIEF Corporation	ByteCubed	-	-	-	-	-	-	-	Business Process Services
9/4/2018	WegoSide, Inc.	AppFolio (Nasdaq:APPF)	-	-	-	-	-	-	-	Information Services
9/4/2018	Merrill Corporation, Marketing and Communications	Toppan Vintage Inc.	-	-	-	-	-	-	-	Software
9/4/2018	iFountain, LLC	Atlassian Corporation Plc (NasdaqGS:TEAM)	\$295.0	-	-	-	-	-	-	Software
8/31/2018	TAGG Logistics, LLC	Dot Family Holdings	-	-	-	-	-	-	-	Business Process Services
8/30/2018	Reis, Inc. (NasdaqGS:REIS)	Moody's Corporation (NYSE:MCO)	\$262.9	5.5x	37.8x	\$48.1	\$7.0	14.5%	Information Services	

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise		EV/		EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA			
8/30/2018	Data Specialists, Inc.	Dairy, LLC	-	-	-	-	-	-	-	Software
8/30/2018	BE LOCALLY, Corp.	SEO Werkz LLC	-	-	-	-	-	-	-	Business Process Services
8/29/2018	Opcity Inc.	Move, Inc.	\$210.0	-	-	-	-	-	-	Software
8/28/2018	Health Services Integration, Inc.	N/A	-	-	-	-	-	-	-	Business Process Services
8/28/2018	easyBackgrounds, Inc.	Global HR Research, LLC	-	-	-	-	-	-	-	Business Process Services
8/28/2018	CamberView Partners, LLC	PJT Partners Holdings LP	\$165.0	-	-	-	-	-	-	Business Process Services
8/28/2018	D Software Inc.	SmartBear Software Inc.	-	-	-	-	-	-	-	Software
8/28/2018	Iatric Systems, Inc.	Harris Healthcare Group	-	-	-	-	-	-	-	Software
8/28/2018	Optim Earth, Inc.	RoadSafe Traffic Systems, Inc.	-	-	-	-	-	-	-	Software
8/27/2018	Airwavz Solutions, Inc.	Pamlico Capital	-	-	-	-	-	-	-	Infrastructure Services
8/27/2018	InfoArmor, Inc.	The Allstate Corporation (NYSE:ALL)	\$525.0	-	-	-	-	-	-	Business Process Services
8/27/2018	eShare Ltd.	Diligent Corporation	-	-	-	-	-	-	-	Software
8/27/2018	CloudHealth Technologies, Inc.	VMware, Inc. (NYSE:VMW)	-	-	-	-	-	-	-	Software
8/24/2018	Digium, Inc.	Sangoma Technologies Corporation (TSXV:STC)	\$27.9	0.9x	-	\$30.0	-	-	-	Software
8/23/2018	OnGuard Systems LLC	3SG Plus LLC	-	-	-	-	-	-	-	Software
8/23/2018	Silicon Mechanics, Inc.	Source Code Corporation	-	-	-	-	-	-	-	Business Process Services
8/23/2018	ModoPayments, LLC	Deutsche Bank Aktiengesellschaft (DB:DBK)	-	-	-	-	-	-	-	Software
8/23/2018	DHI Group, Inc. (NYSE:DHX)	TCS Capital Management, LLC	\$156.8	0.8x	5.8x	\$188.0	\$26.9	14.3%	-	Information Services
8/23/2018	Compliance Science, Inc.	Vista Equity Partners LLC	-	-	-	-	-	-	-	Software
8/22/2018	Prime Education, LLC	Everyday Health, Inc.	-	-	-	-	-	-	-	Business Process Services
8/22/2018	Shoeboxed Inc.	Earth Class Mail, Inc.	-	-	-	-	-	-	-	Business Process Services
8/22/2018	Midrange Performance Group, Inc.	HelpSystems, LLC	-	-	-	-	-	-	-	Software
8/22/2018	Rock-Pond Solutions Inc	Mediware Information Systems, Inc.	-	-	-	-	-	-	-	Software
8/21/2018	Microsoft Solutions Practice	York Telecom Corporation	-	-	-	-	-	-	-	Business Process Services
8/21/2018	Predikto, Inc.	United Technologies Corporation (NYSE:UTX)	-	-	-	-	-	-	-	Software
8/21/2018	Yellow Pages Digital And Media Solutions Ltd, RedFlagDeals Division	VerticalScope Inc.	\$9.2	-	-	-	-	-	-	Information Services
8/21/2018	Nexsan Corporation	Drobo, Inc.	\$5.7	-	-	-	-	-	-	Software
8/21/2018	StorReduce, Inc.	Pure Storage, Inc. (NYSE:PSTG)	-	-	-	-	-	-	-	Software
8/21/2018	CourtesyConnect/CourtesyLimit	Velocity Solutions, Inc.	-	-	-	-	-	-	-	Software
8/21/2018	Network Communications Telecom	Conterra Ultra Broadband, LLC	-	-	-	-	-	-	-	Infrastructure Services
8/20/2018	Amicus Digital Ventures Pty Ltd	Merkle Inc.	-	-	-	-	-	-	-	Business Process Services
8/20/2018	Financial-Information-Technologies, Inc.	Luminate Capital Management, Inc.; TA Associates Management, L.P.	-	-	-	-	-	-	-	Business Process Services
8/20/2018	Contract Management Strategies, Inc.	SpendMend LLC	-	-	-	-	-	-	-	Business Process Services
8/20/2018	Integral Solutions Group	Immediion, LLC	-	-	-	-	-	-	-	Business Process Services
8/20/2018	Adapt Telephony Services, LLC	Avtex Solutions, LLC	-	-	-	-	-	-	-	Business Process Services

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/			EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA			
8/20/2018	cPanel, Inc.	WebPros Holdco B.V.	-	-	-	-	-	-	-	Software
8/20/2018	3D Results, LLC	Rizing, LLC	-	-	-	-	-	-	-	Business Process Services
8/18/2018	NextiraOne Federal, LLC (nka:Tyto Athene, LLC)	Arlington Capital Partners LP	\$75.0	-	-	-	-	-	-	Business Process Services
8/17/2018	BestX, Ltd.	State Street Corporation (NYSE:STT)	-	-	-	-	-	-	-	Software
8/17/2018	LenderLive Network, Inc.	Computershare Loan Services	-	-	-	-	-	-	-	Business Process Services
8/16/2018	Trinium Technologies, LLC	Wisetech Global Limited (ASX:WTC)	\$49.9	5.6x	17.8x	\$8.9	\$2.8	31.6%	-	Software
8/16/2018	CodeGuard Inc.	Comodo CA Limited	-	-	-	-	-	-	-	Software
8/16/2018	Approved Technologies Inc.	Credit Karma, Inc.	-	-	-	-	-	-	-	Software
8/15/2018	Vista Equity Partners	iCIMS, Inc.	-	-	-	-	-	-	-	Business Process Services
8/15/2018	Exaktime, Inc.	Providence Strategic Growth Capital Partners L.L.C	-	-	-	-	-	-	-	Software
8/15/2018	Industry People Group Inc.	Providence Strategic Growth Capital Partners L.L.C	-	-	-	-	-	-	-	Software
8/15/2018	SugarCRM Inc	Accel-KKR LLC	-	-	-	-	-	-	-	Software
8/15/2018	TRANSAX, Inc.	Synergy Commerce, LLC	-	-	-	-	-	-	-	Business Process Services
8/14/2018	DealCloud, Inc.	Intapp, Inc.	-	-	-	-	-	-	-	Software
8/14/2018	GEOSYS Inc.	UrtheCast Corp. (TSX:UR)	\$20.0	-	-	-	-	-	-	Software
8/14/2018	TradeTapp, Inc.	BuildingConnected Inc.	-	-	-	-	-	-	-	Software
8/14/2018	MercuryGate International, Inc.	Summit Partners LLP	-	-	-	-	-	-	-	Software
8/13/2018	Quorum Business Solutions, Inc.	Thoma Bravo, LLC	-	-	-	-	-	-	-	Software
8/13/2018	Wazee Digital, Inc.	Veritone, Inc. (NasdaqGM:VERI)	\$15.0	0.8x	-	\$19.0	-	-	-	Software
8/13/2018	Performance Bridge Media	Veritone One, Inc	\$11.0	3.0x	-	\$3.7	-	-	-	Business Process Services
8/13/2018	Innovative Discovery, LLC	Silver Oak Services Partners, LLC	-	-	-	-	-	-	-	Business Process Services
8/10/2018	TravelClick, Inc.	Amadeus Americas, Inc.	\$1,520.0	4.1x	17.7x	\$373.0	\$86.0	23.1%	-	Software
8/9/2018	TaskUs, LLC	The Blackstone Group L.P. (NYSE:BX)	-	-	-	-	-	-	-	Business Process Services
8/9/2018	Pillar Technology Group LLC	Accenture plc (NYSE:ACN)	-	-	-	-	-	-	-	Business Process Services
8/9/2018	RapidScale, Inc.	Cox Business Services, LLC	-	-	-	-	-	-	-	Software
8/9/2018	Cablesouth Media, LLC, Fiber Assets	Uniti Group Inc. (NasdaqGS:UNIT)	\$31.0	-	-	-	-	-	-	Infrastructure Services
8/9/2018	Discovery Data	Northlane Capital Partners, LLC	-	-	-	-	-	-	-	Information Services
8/9/2018	Premiere Credit of North America, LLC	Performant Financial Corporation (NasdaqGS:PFMT)	\$4.3	-	-	-	-	-	-	Business Process Services
8/8/2018	The Dun & Bradstreet Corporation (NYSE:DNB)	Thomas H. Lee Partners, L.P.	\$6,675.4	3.7x	12.5x	\$1,813.1	\$533.1	29.4%	-	Information Services
8/8/2018	Cloud Lending Inc.	Q2 Software, Inc.	\$105.0	-	-	-	-	-	-	Software
8/7/2018	Omega Performance Corporation	Moody's Corporation (NYSE:MCO)	-	-	-	-	-	-	-	Business Process Services
8/7/2018	Alegeus Technologies, LLC	Vista Equity Partners LLC	-	-	-	-	-	-	-	Software
8/7/2018	Veritext Corp	Leonard Green & Partners, L.P.	-	-	-	-	-	-	-	Business Process Services
	Conduent Incorporated, Local and Municipal									
8/6/2018	Constituent Government Software Solutions Business	Avenu Insights & Analytics	-	-	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise Value	EV/		EBITDA Margin		Segment	
				Revenue	EBITDA	Revenue	EBITDA		
8/6/2018	Data Strategy, LLC	Trace3, Inc.	-	-	-	-	-	Business Process Services	
8/6/2018	Independent Technologies, LLC	DataOnline LLC	-	-	-	-	-	Software	
8/6/2018	Michigan Evaluation Group, Inc.	Medlogix, LLC	-	-	-	-	-	Business Process Services	
8/2/2018	MediQuality	WebMD Health Corp.	-	-	-	-	-	Software	
8/2/2018	Duo Security, Inc.	Cisco Systems, Inc. (NasdaqGS:CSCO)	\$2,350.0	-	-	-	-	Software	
8/2/2018	AdvancedMD, Inc.	Global Payments Inc. (NYSE:GPN)	\$700.0	-	-	-	-	Software	
8/2/2018	LeaseLabs Inc.	RealPage, Inc. (NasdaqGS:RP)	\$117.0	-	-	-	-	Business Process Services	
8/2/2018	FRAME, Inc.	Nutanix, Inc. (NasdaqGS:NTNX)	-	-	-	-	-	Software	
8/2/2018	Aleyant Systems, LLC	Volaris Group Inc.	-	-	-	-	-	Software	
8/2/2018	Mojo Networks, Inc.	Arista Networks, Inc. (NYSE:ANET)	-	-	-	-	-	Infrastructure Services	
8/2/2018	Integrity Medicolegal Enterprises, LLC	Medlogix, LLC	-	-	-	-	-	Business Process Services	
8/1/2018	KryptonCloud, Inc.	Splunk Inc. (NasdaqGS:SPLK)	-	-	-	-	-	Software	
8/1/2018	AMS Legal, LLC	HighQ Solutions Limited	-	-	-	-	-	Software	
8/1/2018	Vitals Consumer Services, LLC	WebMD Health Corp.	-	-	-	-	-	Software	
8/1/2018	BlueStrata EHR	Mediware Information Systems, Inc.	-	-	-	-	-	Software	
8/1/2018	Mendix Inc.	Siemens Aktiengesellschaft (DB:SIE)	\$700.1	-	-	-	-	Software	
8/1/2018	Cardinal Solution Group, Inc.	Insight Enterprises, Inc. (NasdaqGS:NSIT)	\$79.0	-	-	-	-	Business Process Services	
8/1/2018	Elaauvit Networks, LLC	Boingo Wireless, Inc. (NasdaqGS:WIFI)	\$43.0	-	-	-	-	Infrastructure Services	
8/1/2018	Apogee Corporation Limited	HP Inc. (NYSE:HPQ)	\$498.5	1.8x	-	\$281.1	-	Business Process Services	
8/1/2018	Telefónica Digital Inc	Nexmo, Inc.	\$35.0	-	-	-	-	Software	
8/1/2018	Merrill Corp, Transactions and Compliance Business	Toppan Vintage Inc.	-	-	-	-	-	Software	
8/1/2018	Yiptel, L.L.C.	BroadVoice, Inc.	-	-	-	-	-	Infrastructure Services	
8/1/2018	Afinety, Inc.	Netgain Technology, Inc.	-	-	-	-	-	Business Process Services	
8/1/2018	Celergo LLC	Automatic Data Processing, Inc. (NasdaqGS:ADP)	-	-	-	-	-	Business Process Services	
8/1/2018	ESI Software Inc.	Dye & Durham Corporation	-	-	-	-	-	Software	
8/1/2018	Synetra, Inc.	Computex Inc.	-	-	-	-	-	Business Process Services	
7/31/2018	DATALINK LLC	Revelstoke Capital Partners LLC	-	-	-	-	-	Business Process Services	
7/31/2018	Eze Software Group LLC	SS&C Technologies Holdings, Inc. (NasdaqGS:SSNC)	\$1,450.0	5.2x	13.8x	\$280.0	\$105.0	37.5%	Software
7/31/2018	SpringCM Inc.	DocuSign, Inc. (NasdaqGS:DOCU)	\$220.0	-	-	-	-	-	Software
7/31/2018	Hubdoc Inc.	Xero Limited (ASX:XRO)	\$70.0	-	-	-	-	-	Software
7/31/2018	Solbright Group, Inc. (OTCPK:SBRT)	M2M Spectrum Networks, LLC	-	-	-	\$12.3	\$4.9	-	Software
7/31/2018	DATTUS, Inc.	Plex Systems, Inc.	-	-	-	-	-	-	Software
7/31/2018	Promapp Solutions Limited	Nintex Global Ltd	-	-	-	-	-	-	Software
7/30/2018	Social Reality, Inc., SRAxm Product Line	Halyard Capital	-	-	-	-	-	-	Information Services
7/30/2018	Quantum Technology Sciences, Inc.	Geospace Technologies (NasdaqGS:GEOS)	\$27.9	-	-	-	-	-	Infrastructure Services
7/30/2018	Stellar Loyalty Inc.	Cheetah Digital, Inc.	-	-	-	-	-	-	Software
7/30/2018	Brandt Information Services, LLC	NexPhase Capital	-	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/		EBITDA		Margin	Segment
			Value	Revenue	EBITDA	Revenue	EBITDA		
7/30/2018	PLATINUM Advisor Marketing Strategies, LLC	Faulkner Media Group, LLC	-	-	-	-	-	-	Business Process Services
7/29/2018	Treasure Data, Inc.	ARM Holdings plc	\$600.0	-	-	-	-	-	Business Process Services
7/27/2018	DesertMicro, Inc.	Advanced Manufacturing Control Systems Limited	-	-	-	-	-	-	Software
7/27/2018	Brandt Information Services, LLC	NexPhase Capital, LP	-	-	-	-	-	-	Software
7/26/2018	Improving Holdings, LLC	Trinity Hunt Partners	-	-	-	-	-	-	Business Process Services
7/26/2018	Personify Inc	Pamlico Capital	-	-	-	-	-	-	Software
7/26/2018	Prevoty, Inc.	Imperva, Inc. (NasdaqGS:IMPV)	\$140.6	-	-	-	-	-	Software
7/26/2018	Spookfish Limited (ASX:SFI)	EagleView Technologies, Inc.	-	-	-	-	-	-	Software
7/26/2018	Draker Corporation	AlsoEnergy, Inc.	-	-	-	-	-	-	Software
7/26/2018	Indusa Technical Corp.	Synoptek, Inc.	-	-	-	-	-	-	Business Process Services
7/26/2018	Beeline.com, Inc.	New Mountain Capital, LLC	-	-	-	-	-	-	Software
7/26/2018	Indusa Technical Corp.	Synoptek, Inc.	-	-	-	-	-	-	Business Process Services
7/25/2018	Aimia, Aeroplan loyalty program business	Air Canada (TSX:AC); Canadian Imperial Bank of Commerce (TSX:CM); The Toronto-Dominion Bank (TSX:TD); Visa Canada Corporation	\$1,791.6	-	-	-	-	-	Business Process Services
7/25/2018	MetaPack Limited	Stamps.com Inc. (NasdaqGS:STMP)	\$230.0	4.6x	-	\$50.5	-	-	Software
7/25/2018	SCVNGR, Inc.	GrubHub Inc. (NYSE:GRUB)	\$390.0	-	-	-	-	-	Software
7/24/2018	Invenias Limited	Bullhorn, Inc.	-	-	-	-	-	-	Software
7/24/2018	Figur8 Cloud Solutions	All Cloud BSD	\$10.0	-	-	-	-	-	Business Process Services
7/24/2018	HealthCast Inc.	Identity Automation Systems, LLC	-	-	-	-	-	-	Software
7/24/2018	Arrow Digital LLC	Softvision, LLC	-	-	-	-	-	-	Business Process Services
7/24/2018	REAN Cloud LLC	Hitachi Vantara Corporation	-	-	-	-	-	-	Business Process Services
7/24/2018	The National Research Center for College & University Admissions, Inc.	ACT, Inc.	-	-	-	-	-	-	Information Services
7/24/2018	Arrow Digital LLC	Softvision, LLC	-	-	-	-	-	-	Business Process Services
7/23/2018	National Gift Card Corporation	LaSalle Capital	-	-	-	-	-	-	Business Process Services
7/22/2018	Syntel, Inc. (NasdaqGS:SYNT)	Atos SE (ENXTPA:ATO)	\$3,541.5	3.7x	13.5x	\$966.2	\$262.8	27.2%	Business Process Services
7/20/2018	Alight HR Services India Pvt Ltd	Wipro Limited (BSE:507685)	\$117.0	-	-	-	-	-	Business Process Services
7/20/2018	Charles River Systems, Inc.	State Street Corporation (NYSE:STT)	\$2,600.0	8.4x	-	\$311.2	-	-	Software
7/20/2018	Indus Software Technologies Pvt. Ltd.	Ebix, Inc. (NasdaqGS:EBIX)	\$29.0	1.3x	-	\$22.0	-	-	Software
7/20/2018	Advanced Integrated Technologies, Inc.	Evolve IP, LLC	-	-	-	-	-	-	Infrastructure Services
7/19/2018	Paywire, Incorporated	Payscout, Inc.	-	-	-	-	-	-	Software
7/19/2018	MB3 Technologies Inc.	GCR Inc.	-	-	-	-	-	-	Software
7/19/2018	Marsh ClearSight LLC	Riskconnect, Inc.	-	-	-	-	-	-	Software
7/19/2018	Mosaik Solutions, Inc.	j2 Global, Inc. (NasdaqGS:JCOM)	-	-	-	-	-	-	Software
7/19/2018	basys, LLC	WindRose Health Investors, LLC	-	-	-	-	-	-	Software
7/18/2018	AuthClub Inc.	Okta, Inc. (NasdaqGS:OKTA)	-	-	-	-	-	-	Software

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/		Revenue	EBITDA	EBITDA Margin	Segment
			Value	Revenue	EBITDA				
7/18/2018	W4 LLC	Digital Media Solutions, LLC	-	-	-	-	-	-	-
7/18/2018	Blue Software, LLC	Esko-Graphics bvba	-	-	-	-	-	-	-
7/17/2018	Federal Data Systems, Inc.	McNally Capital, LLC; Pine Crest Capital LLC; Profile Capital Management LLC	-	-	-	-	-	-	-
7/17/2018	PeopleDoc SAS	The Ultimate Software Group, Inc. (NasdaqGS:ULTI)	-	-	-	-	-	-	-
7/17/2018	NAVEX Global, Inc.	BC Partners; Noble Rock Advisors, Inc.	-	-	-	-	-	-	-
7/17/2018	Abacus Labs, Inc.	Certify Inc.	-	-	-	-	-	-	-
7/17/2018	onramp access, llc	LightEdge Solutions, Inc.	-	-	-	-	-	-	-
7/16/2018	Datorama	salesforce.com, inc. (NYSE:CRM)	\$757.9	-	-	-	-	-	\$800.0
7/16/2018	DataX Ltd.	Equifax Inc. (NYSE:EFX)	-	-	-	-	-	-	-
7/16/2018	Agrible, Inc.	Nutrien Ltd. (TSX:NTR)	\$63.0	-	-	-	-	-	\$63.0
7/16/2018	ELEAD1ONE	CDK Global, Inc. (NasdaqGS:CDK)	-	-	-	-	-	-	-
7/16/2018	Donnelley Language Solutions	SDL plc (LSE:SDL)	\$77.5	1.1x	10.5x	\$71.4	\$7.4	10.4%	\$77.5
7/13/2018	Student Loan Hero, Inc.	LendingTree, LLC	\$60.0	-	-	-	-	-	\$60.0
7/13/2018	United Screening Services Corporation	Sarma Ltd.	-	-	-	-	-	-	-
7/13/2018	Beneflex Insurance Services, LLC	OneDigital Health and Benefits, Inc.	-	-	-	-	-	-	-
7/12/2018	Intellinet Corporation	FPT Corporation (HOSE:FPT)	\$53.3	1.8x	-	\$30.0	-	-	\$53.3
7/12/2018	Pomeroy IT Solutions, Inc.	Getronics Services UK Ltd	-	-	-	-	-	-	-
7/12/2018	Safe Banking Systems LLC	Accuity Com	-	-	-	-	-	-	-
7/11/2018	Compusoft AS	TA Associates Management, L.P.	-	-	-	-	-	-	-
7/11/2018	CA, Inc. (NasdaqGS:CA)	Broadcom Inc. (NasdaqGS:AVGO)	\$18,448.0	4.4x	14.7x	\$4,148.0	\$1,255.0	30.3%	\$18,372.0
7/11/2018	SoftVu LLC	LoyaltyExpress, Inc.	-	-	-	-	-	-	-
7/10/2018	MediaMath, Inc.	LightTree Capital Solutions; Searchlight Capital Partners	-	-	-	-	-	-	-
7/10/2018	SWC Technology Partners, Inc.	BDO USA, LLP	-	-	-	-	-	-	-
7/10/2018	Butter AI Corporation	Box, Inc. (NYSE:BOX)	-	-	-	-	-	-	-
7/10/2018	Centrify Corporation	Thoma Bravo, LLC	-	-	-	-	-	-	-
7/10/2018	Zumasys, Inc., Cloud Hosting, Infrastructure and Managed Services Business Units	Nexus Technologies, Inc.	-	-	-	-	-	-	-
7/10/2018	Atata, Inc.	Mimecast Limited (NasdaqGS:MIME)	-	-	-	-	-	-	-
7/10/2018	Machinio, Inc.	Liquidity Services, Inc. (NasdaqGS:LQDT)	\$28.7	-	-	-	-	-	\$28.7
7/10/2018	AlienVault, Inc.	AT&T Communications Americas, Inc.	-	-	-	-	-	-	-
7/9/2018	Young's Communications Co., Inc.	Cotton Creek Capital Management, LLC	-	-	-	-	-	-	-
7/9/2018	San Jose Data Center	Carter Validus Mission Critical REIT II, Inc.	\$49.2	-	-	-	-	-	\$49.2
7/9/2018	Nuesoft Technologies, Inc.	ADP AdvancedMD, Inc.	-	-	-	-	-	-	-
7/9/2018	Assemble Systems, Inc.	Autodesk, Inc. (NasdaqGS:ADSK)	-	-	-	-	-	-	-
7/9/2018	Exiger LLC	Carrick Capital Partners, LLC	-	-	-	-	-	-	-

Select M&A Transactions (Cont'd)

Date	Target	Acquirer	Enterprise	EV/		Revenue	EBITDA	EBITDA Margin	Segment
			Value	Revenue	EBITDA				
7/6/2018	Value Payment Systems, LLC	Greater Sum Ventures, LLC; Providence Equity Partners LLC	-	-	-	-	-	-	Software
7/3/2018	USA Payroll Inc.	Asure Software, Inc. (NasdaqCM:ASUR)	\$3.5	-	-	-	-	-	Business Process Services
7/3/2018	Affinion Benefits Group, LLC	Mill Point Capital LLC	\$550.0	-	-	-	-	-	Business Process Services
7/3/2018	PLI Card Marketing Solutions	Platinum Equity, LLC	-	-	-	-	-	-	Business Process Services
7/2/2018	TC Technology	SSP Innovations, LLC	-	-	-	-	-	-	Software
7/2/2018	IQ Payment Systems LLC	American Bancard, LLC	-	-	-	-	-	-	Business Process Services
7/2/2018	SUSE International Holdings GmbH/SUSE GmbH/SUSE LLC	EQT Fund Management	\$2,535.0	7.3x	22.9x	\$347.3	\$110.5	31.8%	Software
7/2/2018	The Gordian Group, Inc.	Fortive Corporation (NYSE:FTV)	\$775.0	-	-	-	-	-	Software
7/2/2018	Winxnet, Inc.	The Riverside Company	-	-	-	-	-	-	Business Process Services
7/2/2018	K&R Network Solutions, Inc.	Winxnet, Inc.	-	-	-	-	-	-	Business Process Services
7/2/2018	ADS Data Systems, Inc.	Consolo Services Group, LLC	-	-	-	-	-	-	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

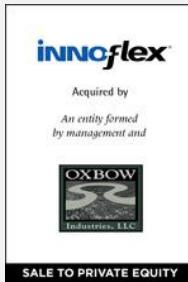
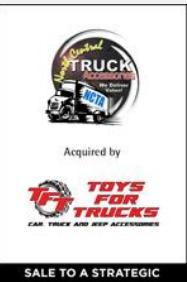
- Sell-side Advisory
- Recapitalizations
- Non-core Divestitures
- Management-led Buyouts
- Buy-side Advisory

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



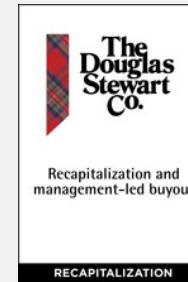
Recapitalizations



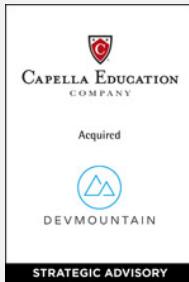
Non-core Divestitures



Management-led Buyouts



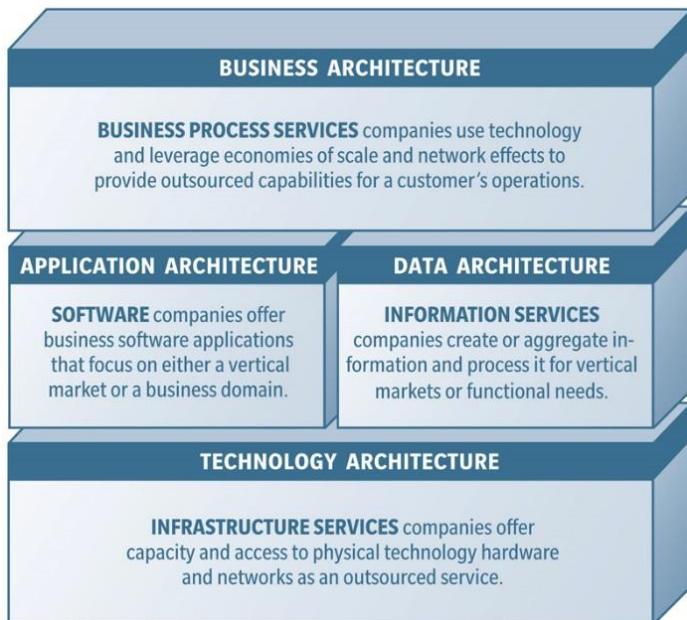
Buy-side Advisory



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 the remittance processing business of

First Data

STRATEGIC ADVISORY



Has Partnered With

N|E|P

Norwest Equity Partners

PRIVATE EQUITY TRANSACTION



Acquired by



SALE TO A STRATEGIC

GeoComm

Welcomes as an Equity Partner

GRANITE EQUITY PARTNERS

SALE TO PRIVATE EQUITY

DELUXE

Acquired

DATA MYX

STRATEGIC ADVISORY



Acquired

Hackbright Academy

STRATEGIC ADVISORY

GroupCast

SchoolReach

Acquired by

west

SALE TO A STRATEGIC

Marquette Companies

The operating group of

POHLAD companies

Has completed the sale of

avtex

to

LaSalle Capital

SALE TO PRIVATE EQUITY

DELUXE

Acquired

RDM

STRATEGIC ADVISORY

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
Managing 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)



Ben Ikeda
Senior Associate

- Joined Cherry Tree & Associates in 2012
- Completed 18 M&A transactions
- Previously with Sterling Partners' Education Opportunity Fund, UnitedHealth Group and Mayo Clinic Ventures
- B.A., Economics, *magna cum laude* and *Phi Beta Kappa*, Gustavus Adolphus College
- M.B.A. Candidate, University of Chicago Booth School of Business



Alex Young
Analyst

- Joined Cherry Tree & Associates in 2017
- Previous experience with Grant Thornton's Transaction Advisory Services group
- B.B.A., Finance and Economics, University of Notre Dame – Mendoza College of Business

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