

Scoreboard

	Margin %		Growth %		Multiples		
	GM	EBITDA	Revenue	5 Yr EPS	EV/Revenue	EV/EBITDA	P/E
IT & IT-ENABLED OUTSOURCED SERVICES							
Commercial IT Professional Services - North America	29.8%	15.4%	6.0%	14.0%	1.85x	12.0x	16.1x
Governmental IT Professional Services - North America	25.2	8.8	10.3	10.0	1.39	14.0	19.7
IT Professional Services - Europe	17.2	11.5	4.6	10.5	1.11	8.1	13.8
IT Professional Services - India	26.0	17.8	10.6	10.7	1.91	10.0	16.2
IT Professional Services - China	22.9	4.7	11.5	NA	0.86	18.7	34.6
IT Staff Augmentation	26.7	6.3	2.9	8.5	0.71	8.5	11.9
IT SUPPLY CHAIN SERVICES							
IT Solution Providers - North America	15.9%	4.0%	2.0%	8.0%	0.29x	7.9x	11.6x
IT Solution Providers - Europe	14.2	3.4	6.6	13.9	0.88	12.1	24.9
IT Products Distributors	11.2	4.1	3.9	9.7	0.29	6.7	7.6
BUSINESS PROCESS OUTSOURCING							
Business Process Outsourcing - North America	42.2%	20.6%	3.7%	12.0%	4.03x	11.4x	19.6x
Business Process Outsourcing - India	32.0	14.8	9.6	10.9	2.09	13.9	18.1
SOFTWARE							
SaaS	74.1%	- 3.8%	26.7%	25.7%	8.86x	44.3x	63.3x
Enterprise Applications	83.5	28.4	9.6	11.7	6.76	18.7	25.9

Commercial IT Professional Services - North America

As of June 3, 2019

\$ in millions except per share data

Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		'18 - '19E			Valuation Multiples						EPS
					LTM	2019E	LTM	2019E	Growth Rate	Gross Margin LTM	EBITDA Margin LTM	EV/Rev		EV/EBITDA		P/E		Growth Rate
												LTM	2019E	LTM	2019E	LTM	2019E	
Accenture Plc Class A	\$175.16	95.5%	\$111,723	\$109,540	\$42,541	\$44,084	\$7,031	\$7,347	8.2%	30.4%	16.5%	2.57x	2.48x	15.6x	14.9x	25.5x	23.3x	7.9%
CGI Inc. Class A	71.81	96.5	17,613	21,161	8,748	9,117	1,609	1,672	3.2	13.5	16.8	2.42x	2.32x	13.1	12.7	22.2	20.1	10.9
DXC Technology Co.	46.64	48.2	12,512	17,637	20,753	20,754	3,903	4,779	-4.3	18.5	18.8	0.85x	0.85x	4.5	3.7	10.4	5.7	5.2
EPAM Systems, Inc.	162.87	90.2	8,898	8,585	1,940	2,255	319	414	22.3	33.6	16.3	4.42x	3.81x	26.9	20.7	39.2	31.2	19.6
Globant SA	87.44	93.5	3,174	3,121	522	642	91	126	22.8	35.8	17.4	5.98x	4.87x	34.3	24.8	62.1	40.0	NA
Virtusa Corporation	41.27	70.4	1,244	1,536	1,248	1,341	99	131	12.5	29.1	8.0	1.23x	1.15x	15.5	11.7	NA	16.3	20.0
Perficient, Inc.	30.18	91.7	994	1,066	511	553	62	87	11.0	32.1	12.2	2.08x	1.93x	17.1	12.2	37.3	16.0	14.0
Unisys Corporation	9.38	44.8	486	697	2,812	2,904	400	438	2.8	23.1	14.5	0.25x	0.24x	1.7	1.6	43.0	4.8	NA
Hackett Group, Inc.	15.80	69.2	470	507	283	286	38	50	-0.1	33.1	13.9	1.79x	1.78x	13.5	10.2	21.5	14.9	16.7
RCM Technologies, Inc.	3.24	60.9	41	75	201	208	8	10	3.8	24.3	3.4	0.37x	0.36x	9.1	7.6	13.1	8.2	NA
Median									6.0%	29.8%	15.4%	1.94x	1.85x	14.5x	12.0x	25.5x	16.1x	14.0%
Mean									8.2%	27.3%	13.8%	2.20x	1.98x	15.1x	12.0x	30.5x	18.0x	13.5%

Source: FactSet; based on consensus estimates.

IT Professional Services - Europe										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
Capgemini SE	\$110.63	79.3%	\$18,507	\$20,328	\$14,763	\$15,816	\$2,041	\$2,272	6.3%	26.5%	13.8%	1.38x	1.29x	10.0x	8.9x	22.6x	15.4x	11.2%	
Sage Group plc	9.48	96.9	10,304	10,895	2,445	2,496	753	651	4.2	89.2	30.8	4.46x	4.37x	14.5	16.7	25.5	24.3	6.1	
Atos SE	76.24	51.1	8,325	13,670	13,713	12,945	1,848	1,710	-6.9	26.4	13.5	1.00x	1.06x	7.4	8.0	11.5	8.1	5.7	
Alten SA	102.83	91.6	3,486	3,484	2,539	2,877	261	305	11.7	16.5	10.3	1.37x	1.21x	13.3	11.4	19.4	16.8	10.5	
Altran Technologies SA	11.99	76.3	3,082	4,204	3,263	3,618	461	550	8.9	15.3	14.1	1.29x	1.16x	9.1	7.6	30.6	12.3	21.3	
Reply S.p.A.	63.90	90.4	2,391	2,316	1,159	1,318	145	191	12.6	46.2	12.5	2.00x	1.76x	15.9	12.2	21.4	20.2	NA	
Sopra Steria Group SA	113.14	51.7	2,323	3,042	4,581	4,864	376	468	4.7	17.6	8.2	0.66x	0.63x	8.1	6.5	16.3	10.5	21.1	
Tieto Oyj	27.91	78.7	2,069	2,374	1,792	1,828	245	285	0.5	28.0	13.6	1.33x	1.30x	9.7	8.3	15.3	13.4	NA	
Indra Sistemas, S.A. Class A	10.42	77.2	1,840	2,705	3,497	3,538	352	381	-0.1	23.8	10.0	0.77x	0.76x	7.7	7.1	12.9	11.8	9.4	
EVRY ASA	3.57	88.2	1,325	2,018	1,491	1,514	216	223	1.1	17.1	10.2	1.35x	1.33x	9.4	9.1	17.6	10.7	NA	
Devoteam SA	106.86	76.9	890	844	730	863	84	103	17.0	16.6	11.5	1.16x	0.98x	10.0	8.2	20.1	17.1	NA	
Endava Plc Sponsored ADR Class A	37.88	95.9	668	1,978	358	400	49	75	23.2	33.5	15.8	5.53x	4.94x	40.5	26.3	75.4	37.9	24.5	
Neurones SA	24.42	80.7	593	427	548	570	53	62	3.0	9.5	9.6	0.78x	0.75x	8.1	6.9	20.4	17.5	NA	
NNIT A/S	18.51	55.9	463	554	458	473	82	78	2.7	17.2	18.0	1.21x	1.17x	6.7	7.1	13.2	14.5	NA	
Aubay SA	34.00	70.3	449	449	448	476	47	52	4.6	11.2	10.6	1.00x	0.94x	9.5	8.7	14.6	14.1	5.4	
Allgeier SE	27.33	66.1	276	501	807	881	39	64	14.5	13.5	5.7	0.62x	0.57x	12.7	7.9	48.9	12.9	79.1	
Columbus A/S	1.79	61.5	223	252	281	297	24	35	4.5	18.6	9.2	0.90x	0.85x	10.3	7.1	15.3	13.4	NA	
Prodware SA	9.11	54.4	70	168	197	198	34	39	0.1	13.6	17.9	0.85x	0.85x	4.9	4.3	6.9	4.7	5.0	
ITS Group SA	5.24	58.2	41	58	150	-	9	-	NA	3.9	4.1	0.39x	NA	6.7	NA	5.7	NA	NA	
Median									4.6%	17.2%	11.5%	1.16x	1.11x	9.5x	8.1x	17.6x	13.8x	10.5%	
Mean									6.3%	23.4%	12.6%	1.48x	1.44x	11.3x	9.6x	21.8x	15.3x	18.1%	

Source: FactSet; based on consensus estimates.

IT Professional Services - India										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Rate	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
Tata Consultancy Services Limited	\$32.34	99.3%	\$121,367	\$116,596	\$20,984	\$22,627	\$5,691	\$6,124	10.6%	35.9%	27.1%	5.56x	5.15x	20.5x	19.0x	27.2x	25.1x	9.4%	
Infosys Limited	10.75	96.3	46,968	42,992	11,845	12,675	3,031	3,140	9.4	34.8	25.6	3.63x	3.39x	14.2	13.7	21.2	19.9	10.0	
Cognizant Technology Solutions Corp	60.54	72.6	34,464	31,982	16,323	16,704	3,138	3,273	3.6	35.6	19.3	1.96x	1.91x	10.2	9.8	17.3	15.5	7.4	
Wipro Limited	4.21	97.5	25,381	21,326	8,393	8,755	1,676	1,784	4.8	29.7	20.0	2.54x	2.44x	12.7	12.0	19.6	18.1	10.6	
HCL Technologies Limited	16.04	93.8	21,759	21,434	8,657	9,688	1,995	2,216	14.1	29.1	23.0	2.48x	2.21x	10.7	9.7	15.2	14.4	7.9	
Tech Mahindra Limited	10.94	89.7	10,543	8,765	4,977	5,281	908	964	8.4	33.8	18.2	1.76x	1.66x	9.7	9.1	15.8	14.7	10.7	
Oracle Financial Services Software Lir	49.65	77.3	4,260	3,861	710	749	307	325	7.0	50.1	43.2	5.43x	5.16x	12.6	11.9	21.4	19.2	NA	
Mphasis Limited	14.25	78.3	2,654	2,609	1,108	1,218	190	210	13.5	16.1	17.1	2.36x	2.14x	13.8	12.4	17.7	16.2	NA	
L&T Technology Services Ltd.	24.89	95.5	2,589	2,525	728	818	131	151	19.5	16.0	18.0	3.47x	3.09x	19.2	16.7	23.5	22.6	13.5	
Mindtree Limited	14.17	86.6	2,327	2,196	1,006	1,106	153	177	14.6	12.8	15.2	2.18x	1.98x	14.4	12.4	21.5	19.8	24.0	
NIIT Technologies Limited	18.96	95.2	1,171	1,050	527	589	93	105	15.6	37.2	17.6	1.99x	1.78x	11.3	10.0	20.2	17.5	17.1	
Sonda S.A.	1.33	75.4	1,162	1,399	1,169	1,218	137	148	-0.8	17.8	11.6	1.20x	1.15x	10.2	9.5	76.2	21.0	49.5	
Cyient Limited	8.05	70.2	911	819	662	705	92	102	9.6	22.2	13.9	1.24x	1.16x	8.9	8.0	13.3	12.1	9.8	
Zensar Technologies Limited	3.65	74.1	821	822	568	634	69	82	16.1	22.8	12.1	1.45x	1.30x	12.0	10.0	18.3	15.8	NA	
Persistent Systems Limited	8.48	66.3	678	524	481	505	88	86	6.7	33.1	18.2	1.09x	1.04x	6.0	6.1	13.5	12.1	15.6	
Sonata Software Limited	5.00	84.7	526	474	424	464	48	54	13.6	20.2	11.3	1.12x	1.02x	9.9	8.7	14.6	13.4	NA	
Birlasoft Limited	1.38	30.3	378	198	365	671	44	-	13.4	10.1	12.0	0.54x	0.29x	4.5	NA	7.1	4.9	NA	
Rohta India Limited	0.09	14.5	16	553	310	-	NA	-	NA	12.3	-165.7	1.79x	NA	NA	NA	NA	NA	NA	
Median									10.6%	26.0%	17.8%	1.98x	1.91x	11.3x	10.0x	18.3x	16.2x	10.7%	
Mean									10.6%	26.1%	8.8%	2.32x	2.17x	11.8x	11.2x	21.4x	16.6x	15.5%	

Source: FactSet; based on consensus estimates.

IT Professional Services - China										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
Inspur Electronic Information Industry (\$3.52	76.7%	\$4,532	\$4,730	\$7,145	\$8,672	\$219	\$254	24.1%	11.7%	3.0%	0.66x	0.55x	21.6x	18.7x	44.7x	34.6x	NA	
Neusoft Corporation Class A	1.81	70.3	2,246	2,198	1,050	1,190	41	111	11.5	30.3	4.7	2.09x	1.85x	NA	19.8	NA	36.2	NA	
Beijing Teamsun Technology Co., Ltd.	1.56	74.4	1,716	1,857	805	-	21	-	NA	16.2	3.0	2.31x	NA	NA	NA	NA	NA	NA	
Chinasoft International Ltd.	0.47	51.8	1,205	1,492	1,519	1,735	249	173	9.6	30.6	10.8	0.98x	0.86x	6.0	8.6	10.9	10.6	NA	
Beyondsoft Corporation Class A	1.30	74.6	680	547	452	-	33	-	NA	22.9	9.7	1.21x	NA	16.4	NA	20.6	NA	NA	
Median									11.5%	22.9%	4.7%	1.21x	0.86x	16.4x	18.7x	20.6x	34.6x	NA	
Mean									15.1%	22.3%	6.2%	1.45x	1.08x	14.7x	15.7x	25.4x	27.1x	NA	

Source: FactSet; based on consensus estimates.

Gvt. IT Professional Services - North America										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
Booz Allen Hamilton Holding Corporat	\$63.04	97.7%	\$8,828	\$10,500	\$6,704	\$7,088	\$682	\$718	7.8%	22.8%	10.2%	1.57x	1.48x	15.4x	14.6x	21.7x	21.3x	12.4%	
CACI International Inc Class A	201.24	95.9	5,005	6,765	4,783	5,248	467	510	11.0	31.9	9.8	1.41x	1.29x	14.5	13.3	19.1	18.1	10.0	
Kratos Defense & Security Solutions, I	22.35	98.9	2,367	2,580	635	741	55	76	19.8	26.5	8.6	4.06x	3.48x	47.0	33.9	NA	NA	NA	
ManTech International Corporation Cl	60.91	89.4	1,626	2,413	1,987	2,169	166	181	10.8	14.2	8.3	1.21x	1.11x	14.6	13.4	29.3	26.6	8.0	
ICF International, Inc.	73.25	89.1	1,379	1,638	1,376	1,470	124	141	9.9	33.7	9.0	1.19x	1.11x	13.2	11.7	22.0	17.4	10.0	
KEYW Holding Corporation	11.24	97.5	564	828	495	519	40	50	2.4	23.8	7.7	1.67x	1.59x	20.7	16.6	NA	NA	NA	
Median									10.3%	25.2%	8.8%	1.49x	1.39x	15.0x	14.0x	21.8x	19.7x	10.0%	
Mean									10.3%	25.5%	8.9%	1.85x	1.68x	20.9x	17.2x	23.0x	20.9x	10.1%	

Source: FactSet; based on consensus estimates.

IT Staff Augmentation										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
Robert Half International Inc.	\$54.59	68.3%	\$6,468	\$6,147	\$5,873	\$6,080	\$664	\$691	4.8%	40.5%	11.3%	1.05x	1.01x	9.3x	8.9x	14.7x	13.8x	7.9%	
ManpowerGroup Inc.	87.52	90.0	5,236	5,903	21,514	21,344	887	834	-2.9	16.3	4.1	0.27x	0.28x	6.7	7.1	10.9	11.2	3.1	
Insperty, Inc.	113.56	85.7	4,685	4,263	3,967	4,327	224	284	13.0	9.2	5.6	1.07x	0.99x	19.0	15.0	29.3	24.2	18.0	
ASGN Inc	52.50	55.7	2,772	3,865	3,638	3,894	390	454	14.5	26.8	10.7	1.06x	0.99x	9.9	8.5	17.0	11.3	9.0	
Kelly Services, Inc. Class A	24.19	91.0	940	989	5,527	5,675	126	133	2.9	17.8	2.3	0.18x	0.17x	7.8	7.4	60.9	9.7	NA	
Kforce Inc.	35.10	80.7	892	961	1,399	1,358	88	89	-4.2	28.9	6.3	0.69x	0.71x	11.0	10.8	11.7	14.7	NA	
Heidrick & Struggles International, Inc.	30.95	68.3	592	489	747	731	85	89	2.1	26.7	11.4	0.65x	0.67x	5.7	5.5	11.7	11.9	NA	
Mastech Digital, Inc.	5.10	44.4	56	94	179	-	13	-	NA	22.6	7.3	0.52x	NA	7.2	NA	9.1	NA	NA	
Hudson Global, Inc.	1.33	72.3	39	13	67	-	NA	-	NA	61.8	-6.7	0.20x	NA	NA	NA	NA	NA	NA	
Median									2.9%	26.7%	6.3%	0.65x	0.71x	8.5x	8.5x	13.2x	11.9x	8.5%	
Mean									4.3%	27.8%	5.8%	0.63x	0.69x	9.6x	9.0x	20.7x	13.8x	9.5%	

Source: FactSet; based on consensus estimates.

IT Solution Provider - North America										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
CDW Corp.	\$99.36	89.0%	\$14,509	\$18,317	\$16,592	\$17,452	\$1,275	\$1,394	7.5%	16.7%	7.7%	1.10x	1.05x	14.4x	13.1x	22.6x	17.1x	14.0%	
Insight Enterprises, Inc.	50.97	84.8	1,823	2,090	7,019	7,215	280	302	1.9	14.2	4.0	0.30x	0.29x	7.5	6.9	10.8	10.6	NA	
Presidio, Inc.	13.01	73.0	1,077	1,854	2,989	3,015	217	236	3.4	17.9	7.3	0.62x	0.61x	8.5	7.9	30.4	8.1	6.0	
ePlus inc.	69.75	65.0	949	915	1,364	1,404	86	100	1.6	22.7	6.3	0.67x	0.65x	10.6	9.1	15.0	14.2	7.3	
PC Connection, Inc.	31.88	74.1	840	752	2,708	2,772	104	106	2.7	14.8	3.8	0.28x	0.27x	7.2	7.1	12.9	12.7	8.0	
PCM, Inc.	24.03	60.5	295	423	2,155	2,206	57	66	2.0	15.9	2.7	0.20x	0.19x	7.4	6.4	12.4	9.2	20.0	
Pivot Technology Solutions, Inc.	0.89	55.8	35	175	1,266	1,232	17	21	-10.3	11.4	1.3	0.14x	0.14x	10.4	8.2	NA	NA	NA	
Median									2.0%	15.9%	4.0%	0.30x	0.29x	8.5x	7.9x	14.0x	11.6x	8.0%	
Mean									1.2%	16.2%	4.7%	0.47x	0.46x	9.4x	8.4x	17.4x	12.0x	11.1%	

Source: FactSet; based on consensus estimates.

IT Solution Provider - Europe										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
Bechtle AG	\$113.14	91.4%	\$4,752	\$4,976	\$5,155	\$5,646	\$268	\$322	15.3%	14.2%	5.2%	0.97x	0.88x	18.6x	15.5x	29.5x	26.1x	12.9%	
Softcat Plc	11.65	92.4	2,310	2,247	1,339	1,344	102	105	-1.8	18.7	7.7	1.68x	1.67x	22.0	21.4	28.4	27.7	2.0	
Computacenter Plc	15.89	73.5	1,814	1,760	5,590	6,079	190	202	6.6	12.5	3.4	0.31x	0.29x	9.3	8.7	17.3	15.9	NA	
CANCOM SE	47.63	78.6	1,669	1,634	1,612	1,671	123	135	7.8	7.8	7.3	1.01x	0.98x	13.3	12.1	34.7	24.9	17.8	
Atea ASA	13.90	84.3	1,521	1,632	4,063	4,292	127	172	6.0	4.7	3.1	0.40x	0.38x	12.8	9.5	28.7	19.6	14.9	
Datatec Limited	2.55	99.8	559	776	4,068	-	102	-	NA	15.0	2.5	0.19x	NA	7.6	NA	49.2	NA	NA	
Plaisio Computers SA	4.76	92.3	105	71	346	-	10	-	NA	20.4	2.8	0.21x	NA	7.5	NA	24.4	NA	NA	
Median									6.6%	14.2%	3.4%	0.40x	0.88x	12.8x	12.1x	28.7x	24.9x	13.9%	
Mean									6.8%	13.3%	4.6%	0.68x	0.84x	13.0x	13.4x	30.3x	22.8x	11.9%	

Source: FactSet; based on consensus estimates.

IT Distributor - North America										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
Arrow Electronics, Inc.	\$63.56	73.4%	\$5,385	\$8,902	\$29,957	\$30,813	\$1,380	\$1,371	3.9%	11.7%	4.6%	0.30x	0.29x	6.5x	6.5x	7.8x	7.5x	5.8%	
SYNNEX Corporation	87.63	75.2	4,488	7,742	20,751	22,268	929	1,151	10.0	10.3	4.5	0.37x	0.35x	8.3	6.7	10.7	7.3	13.5	
Tech Data Corporation	91.58	82.4	3,380	4,035	37,097	37,170	766	818	-0.1	6.0	2.1	0.11x	0.11x	5.3	4.9	9.6	7.6	11.5	
Anixter International Inc.	53.89	71.9	1,815	3,134	8,545	8,853	406	452	5.4	19.4	4.8	0.37x	0.35x	7.7	6.9	11.3	8.6	8.0	
ScanSource, Inc.	29.29	66.1	753	1,082	3,906	3,971	145	152	2.3	10.8	3.7	0.28x	0.27x	7.5	7.1	13.4	8.2	NA	
Wayside Technology Group, Inc.	11.59	79.7	52	37	186	-	5	-	NA	14.4	2.5	0.20x	NA	8.0	NA	15.4	NA	NA	
Median									3.9%	11.2%	4.1%	0.29x	0.29x	7.6x	6.7x	11.0x	7.6x	9.7%	
Mean									4.3%	12.1%	3.7%	0.27x	0.27x	7.2x	6.4x	11.4x	7.8x	9.7%	

Source: FactSet; based on consensus estimates.

Business Process Outsourcing - North America

As of June 3, 2019

\$ in millions except per share data

Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		'18 - '19E															
									Equity	Enterprise	LTM	2019E	LTM	2019E	Revenue Growth Rate	Gross Margin LTM	EBITDA Margin LTM	Valuation Multiples						EPS Growth Rate
																		EV/Rev		EV/EBITDA		P/E		
												LTM	2019E	LTM	2019E	LTM	2019E							
Automatic Data Processing, Inc.	\$156.00	94.3%	\$67,896	\$68,235	\$13,995	\$14,643	\$3,347	\$3,612	6.4%	46.4%	23.8%	4.88x	4.66x	20.4x	18.9x	35.5x	27.1x	16.4%						
Fidelity National Information Services,	116.57	95.7	37,726	46,534	8,414	8,455	3,155	3,298	0.3	34.2	37.5	5.53x	5.50x	14.7	14.1	47.2	15.7	9.7						
Paychex, Inc.	84.43	96.2	30,344	30,521	3,663	4,001	1,537	1,630	10.8	69.4	42.0	8.33x	7.63x	19.9	18.7	29.6	28.2	8.0						
Iron Mountain, Inc.	31.08	83.3	8,916	17,339	4,237	4,300	1,415	1,435	1.8	42.2	33.4	4.09x	4.03x	12.3	12.1	30.3	30.1	4.6						
LiveRamp Holdings, Inc.	49.92	78.9	3,443	2,684	286	346	NA	NA	-21.7	59.1	-47.7	9.40x	7.76x	NA	NA	3.6	NA	25.0						
TTEC Holdings, Inc.	38.44	91.7	1,780	1,969	1,543	1,629	190	207	8.5	19.9	12.5	1.28x	1.21x	10.4	9.5	35.5	22.3	14.0						
CSG Systems International, Inc.	44.14	88.7	1,466	1,649	918	915	172	213	6.5	42.3	20.6	1.80x	1.80x	9.6	7.8	20.2	13.6	NA						
CBIZ, Inc.	20.05	82.3	1,101	1,272	926	956	108	119	3.7	13.5	11.6	1.37x	1.33x	11.8	10.7	17.8	16.8	14.0						
Sykes Enterprises, Incorporated	25.01	79.6	1,061	988	1,615	1,661	159	178	2.2	30.1	9.8	0.61x	0.59x	6.2	5.6	21.3	11.7	10.0						
Median									3.7%	42.2%	20.6%	4.09x	4.03x	12.0x	11.4x	29.6x	19.6x	12.0%						
Mean									2.1%	39.7%	16.0%	4.14x	3.84x	13.2x	12.2x	26.8x	20.7x	12.7%						

Source: FactSet; based on consensus estimates.

Business Process Outsourcing - India

As of June 3, 2019

\$ in millions except per share data

Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		'18 - '19E			Valuation Multiples						EPS Growth Rate
									Revenue Growth Rate	Gross Margin LTM	EBITDA Margin LTM	EV/Rev		EV/EBITDA		P/E		
												LTM	2019E	LTM	2019E	LTM	2019E	
Genpact Limited	\$35.98	95.4%	\$6,847	\$7,986	\$3,119	\$3,384	\$485	\$574	12.8%	34.6%	15.6%	2.56x	2.36x	16.5x	13.9x	25.1x	18.1x	10.9%
WNS (Holdings) Limited Sponsored AI	55.62	96.6	2,784	2,814	809	856	151	172	9.6	34.0	18.7	3.48x	3.29x	18.6	16.4	26.4	20.1	11.3
ExlService Holdings, Inc.	58.69	87.5	2,016	2,058	916	985	123	145	11.5	30.0	15.7	2.25x	2.09x	16.7	14.2	42.7	20.1	10.9
Firstsource Solutions Limited	0.77	62.4	535	593	548	573	77	80	5.6	12.0	14.0	1.08x	1.03x	7.7	7.4	9.9	8.4	8.0
eClerx Services Limited	13.48	67.5	522	406	205	217	44	49	6.7	36.9	21.5	1.98x	1.88x	9.2	8.4	15.7	13.9	5.7
Hinduja Global Solutions Limited	9.39	68.6	196	208	650	-	56	-	NA	6.9	8.9	0.32x	NA	3.7	NA	8.0	NA	NA
Datamatics Global Services Limited	1.51	72.7	89	83	162	-	19	-	NA	35.9	11.8	0.51x	NA	4.3	NA	8.3	NA	NA
R Systems International Limited	0.64	78.5	77	57	107	-	9	-	NA	7.2	9.1	0.54x	NA	6.4	NA	9.2	NA	NA
HOV Services Limited	1.86	51.6	23	23	2	-	0	-	NA	NA	NA	11.98x	NA	NA	NA	68.4	NA	NA
Median									9.6%	32.0%	14.8%	1.98x	2.09x	8.5x	13.9x	15.7x	18.1x	10.9%
Mean									9.3%	24.7%	14.4%	2.74x	2.13x	10.4x	12.1x	23.7x	16.1x	9.4%

Source: FactSet; based on consensus estimates.

SaaS										'18 - '19E															
As of June 3, 2019										Revenue			Gross Margin			EBITDA Margin			Valuation Multiples						EPS
\$ in millions except per share data										Growth		Margin	Margin		EV/Rev		EV/EBITDA		P/E		Growth				
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	LTM	2019E	Rate					
salesforce.com, inc.	\$145.10	86.6%	\$112,420	\$111,122	\$13,282	\$15,891	\$2,157	\$3,624	21.8%	66.7%	16.2%	8.37x	6.99x	51.5x	30.7x	101.5x	54.1x	25.7%							
ServiceNow, Inc.	248.38	88.2	45,876	44,125	2,809	3,448	123	946	32.2	76.3	4.3	15.71x	12.80x	NM	46.6	NM	78.4	22.4							
Workday, Inc. Class A	191.88	88.2	31,085	42,170	3,034	3,501	NA	686	26.7	70.3	-8.7	13.90x	12.04x	NM	61.5	NM	115.8	33.6							
Splunk Inc.	109.05	75.9	16,375	15,233	1,916	2,216	NA	363	26.1	81.1	-11.4	7.95x	6.87x	NM	41.9	NM	62.4	36.1							
Twilio, Inc. Class A	124.54	86.1	13,732	14,006	754	1,106	NA	70	70.2	53.0	-17.9	18.57x	12.66x	NM	NM	NM	NM	51.1							
Zendesk, Inc.	78.42	86.6	8,592	8,476	650	808	NA	57	35.0	69.6	-16.9	13.04x	10.49x	NM	149.5	NM	NM	45.5							
Tableau Software, Inc. Class A	108.26	79.1	8,206	8,194	1,192	1,368	NA	227	18.4	87.4	-4.7	6.88x	5.99x	NM	36.1	NM	63.3	18.3							
HubSpot, Inc.	162.24	84.3	6,831	5,937	550	658	NA	82	28.2	80.5	-3.8	10.79x	9.03x	NM	72.6	NM	126.2	68.0							
New Relic, Inc.	95.30	83.0	5,538	5,085	479	574	NA	82	27.9	83.8	-1.0	10.61x	8.86x	NM	62.3	NM	155.1	20.0							
LogMeIn, Inc.	69.64	60.8	3,470	3,581	1,232	1,258	372	410	4.2	62.1	30.2	2.91x	2.85x	9.6	8.7	103.0	14.0	5.0							
Cornerstone OnDemand, Inc.	50.01	83.1	2,983	2,856	545	568	41	123	5.7	74.1	7.9	5.24x	5.02x	69.4	23.2	NM	48.2	14.0							
Median									26.7%	74.1%	-3.8%	10.61x	8.86x	51.5x	44.3x	102.3x	63.3x	25.7%							
Mean									26.9%	73.2%	-0.5%	10.36x	8.51x	43.5x	53.3x	102.3x	79.7x	30.9%							

Source: FactSet; based on consensus estimates.

Enterprise Applications										'18 - '19E		Valuation Multiples						EPS	
As of June 3, 2019										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
Microsoft Corporation	\$119.84	91.2%	\$918,312	\$873,295	\$121,918	\$131,656	\$51,914	\$57,117	11.9%	65.2%	42.3%	7.16x	6.63x	16.8x	15.3x	26.6x	24.8x	13.7%	
Oracle Corporation	50.24	90.5	171,703	197,575	39,620	39,788	16,998	18,419	0.6	75.3	42.8	4.99x	4.97x	11.6	10.7	18.2	13.8	8.8	
SAP SE	124.58	95.3	153,051	158,939	28,569	30,552	7,731	9,621	8.2	69.3	27.1	5.56x	5.20x	20.6	16.5	40.7	22.9	11.7	
Adobe Inc.	259.03	88.8	126,394	128,824	9,496	11,334	3,191	5,008	23.0	84.7	33.6	13.57x	11.37x	40.4	25.7	48.0	32.5	16.8	
Intuit Inc.	238.07	87.5	61,718	59,805	6,778	7,021	2,154	2,598	11.0	83.4	31.8	8.82x	8.52x	27.8	23.0	38.1	33.9	15.5	
Red Hat, Inc.	184.17	98.8	32,737	32,455	3,362	3,787	655	1,017	14.5	84.7	19.5	9.65x	8.57x	49.5	31.9	79.1	47.4	NA	
VMware, Inc. Class A	169.07	81.8	18,643	71,670	9,231	9,950	2,738	3,832	12.7	85.7	29.7	7.76x	7.20x	26.2	18.7	35.4	25.9	14.8	
Symantec Corporation	17.98	72.6	11,115	14,228	4,731	4,801	1,239	2,003	-0.3	73.4	26.2	3.01x	2.96x	11.5	7.1	NA	10.8	3.3	
Citrix Systems, Inc.	93.48	80.0	12,307	13,293	2,996	3,089	848	1,122	3.9	84.7	27.1	4.44x	4.30x	15.7	11.8	25.0	15.5	8.3	
Aspen Technology, Inc.	111.16	89.0	7,666	7,953	529	566	230	286	6.1	89.5	43.5	15.05x	14.06x	34.6	27.8	40.2	31.7	4.3	
Manhattan Associates, Inc.	63.85	92.6	4,124	4,058	577	588	143	133	5.2	55.2	24.7	7.03x	6.90x	28.4	30.6	40.8	44.3	NA	
Tenable Holdings, Inc.	25.84	65.6	2,493	2,123	289	346	NA	NA	29.5	83.5	-25.5	7.36x	6.13x	NA	NA	NA	NA	NA	
Median									9.6%	83.5%	28.4%	7.26x	6.76x	26.2x	18.7x	39.1x	25.9x	11.7%	
Mean									10.5%	77.9%	26.9%	7.87x	7.23x	25.7x	19.9x	39.2x	27.6x	10.8%	

Source: FactSet; based on consensus estimates.