

Scoreboard

IT & IT-ENABLED OUTSOURCED SERVICES	Margin %		Growth %		Multiples		
	GM	EBITDA	Revenue	5 Yr EPS	EV/Revenue	EV/EBITDA	P/E
IT Services - North America	31.2%	12.4%	10.3%	12.0%	1.53x	13.9x	19.8x
IT Services - Europe	23.0	14.6	5.3	11.6	1.34	8.9	16.6
IT Services - India	24.2	16.8	5.3	10.5	1.83	9.4	14.9
IT Services - China	30.3	8.3	10.2	47.1	2.45	33.7	41.2
IT Staff Augmentation	27.5	8.2	-1.3	10.0	0.62	7.9	12.4
IT SUPPLY CHAIN SERVICES							
IT Solution Providers - North America	15.5%	4.5%	10.1%	10.8%	0.38x	8.5x	13.2x
IT Solution Providers - Europe	15.0	4.8	10.8	16.4	0.70	12.0	21.1
IT Products Distributors	11.2	3.5	-3.2	7.6	0.30	7.4	10.1
SOFTWARE							
SaaS	70.9%	11.9%	28.1%	20.0%	6.65x	33.6x	50.0x
Enterprise Applications	75.5	27.1	10.5	13.3	6.28	17.5	25.0
Cyber Security	74.1	10.9	14.2	15.0	5.60	18.2	27.5

IT Services - North America										'18 - '19E		Valuation Multiples						EPS	
As of March 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
\$ 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	
			Equity	Enterprise	LTM	2019E	LTM	2019E											
Accenture Plc Class A	\$189.55	87.6%	\$120,373	\$120,347	\$43,968	\$44,146	\$7,413	\$7,469	8.2%	31.2%	16.9%	2.74x	2.73x	16.2x	16.1x	25.3x	25.2x	9.5%	
CGI Inc. Class A	71.52	82.1	17,193	21,662	9,187	9,224	1,719	1,716	3.9	13.8	17.3	2.36x	2.35x	12.6	12.6	20.7	19.8	9.9	
EPAM Systems, Inc.	229.87	92.6	12,686	12,583	2,294	2,294	406	427	24.5	33.2	17.7	5.49x	5.49x	31.0	29.4	50.8	42.4	20.6	
Booz Allen Hamilton Holding Corporati	74.05	90.3	10,383	11,812	7,274	7,251	748	736	10.3	22.7	10.8	1.62x	1.63x	15.8	16.0	24.3	24.2	15.0	
Genpact Limited	40.15	88.8	7,633	9,172	3,521	3,521	527	631	17.3	33.9	15.0	2.61x	2.61x	17.4	14.5	25.7	19.6	9.3	
CACI International Inc Class A	251.13	87.0	6,296	8,154	5,398	5,343	524	525	13.0	33.0	10.0	1.51x	1.53x	15.6	15.5	24.1	21.8	10.0	
DXC Technology Co.	23.73	35.1	6,021	14,287	20,042	19,916	3,444	3,773	-8.2	15.8	17.2	0.71x	0.72x	4.1	3.8	NA	3.9	NA	
ManTech International Corporation Cle	78.74	83.8	2,126	3,174	2,223	2,223	223	197	13.5	12.4	10.0	1.43x	1.43x	14.3	16.1	27.8	27.8	8.0	
ICF International, Inc.	81.52	85.6	1,533	1,878	1,479	1,479	166	135	10.5	33.6	11.2	1.27x	1.27x	11.3	13.9	22.7	19.6	14.4	
Perficient, Inc.	42.84	79.7	1,409	1,456	566	566	77	95	13.5	33.7	13.6	2.57x	2.57x	18.9	15.4	37.2	20.7	12.0	
Virtusa Corporation	44.62	78.3	1,332	1,797	1,312	1,314	114	130	10.3	28.1	8.8	1.37x	1.37x	15.7	13.8	46.2	17.7	11.9	
Unisys Corporation	15.74	86.8	982	1,112	2,949	2,949	414	422	4.4	23.0	14.1	0.38x	0.38x	2.7	2.6	NA	7.4	NA	
Hackett Group, Inc.	15.99	84.6	478	501	282	282	39	47	-1.2	34.6	NA	1.77x	1.77x	12.8	10.8	22.2	16.0	15.7	
Information Services Group, Inc.	3.09	68.7	147	239	268	267	19	32	-3.0	39.7	6.9	0.89x	0.89x	12.9	7.5	NA	51.5	14.0	
RCM Technologies, Inc.	2.39	51.0	31	69	198	192	8	8	-4.0	24.5	3.9	0.35x	0.36x	9.0	8.2	8.4	8.0	NA	
Median									10.3%	31.2%	12.4%	1.51x	1.53x	14.3x	13.9x	24.8x	19.8x	12.0%	
Mean									7.5%	27.5%	12.4%	1.80x	1.81x	14.0x	13.1x	28.0x	21.7x	12.5%	

Source: FactSet; based on consensus estimates.

IT Services - Europe										'18 - '19E		Valuation Multiples						EPS	
As of March 2, 2020										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	
			Equity	Enterprise	LTM	2019E	LTM	2019E											
Amadeus IT Group SA Class A	\$69.57	79.6%	\$30,004	\$33,361	\$6,075	\$6,127	\$2,459	\$2,465	8.8%	33.3%	40.5%	5.49x	5.44x	13.6x	13.5x	24.7x	21.5x	6.9%	
Capgemini SE	106.33	79.8	18,006	19,776	15,404	15,324	2,413	2,354	3.0	26.7	15.7	1.28x	1.29x	8.2	8.4	18.9	15.3	10.9	
Sage Group plc	8.85	85.2	9,659	10,174	2,508	2,495	641	618	3.7	88.8	25.6	4.06x	4.08x	15.9	16.5	27.9	24.1	4.2	
Atos SE	73.98	68.3	8,078	12,631	12,638	12,506	1,917	1,735	-10.1	24.5	14.7	1.00x	1.01x	6.6	7.3	15.8	8.9	8.4	
Globant SA	123.50	87.2	4,570	4,678	659	659	115	134	26.2	36.0	17.4	7.10x	7.10x	40.8	35.0	86.4	53.9	NA	
Altran Technologies SA	16.15	97.9	4,151	5,763	3,509	3,526	583	564	6.2	6.9	16.6	1.64x	1.63x	9.9	10.2	26.4	17.1	13.0	
Alten SA	110.20	83.5	3,764	3,942	2,862	2,832	291	328	9.9	15.6	10.9	1.38x	1.39x	13.5	12.0	21.0	19.7	9.7	
TietoEVRY Oyj	28.43	83.3	3,367	3,435	1,891	1,880	248	292	3.3	19.6	13.1	1.82x	1.83x	13.8	11.8	25.5	14.9	3.0	
Sopra Steria Group SA	157.84	89.8	3,242	4,290	4,836	4,812	546	501	3.6	7.1	11.3	0.89x	0.89x	7.9	8.6	18.3	16.2	17.0	
Reply S.p.A.	72.30	83.4	2,705	2,686	1,212	1,299	160	207	10.9	45.0	13.2	2.22x	2.07x	16.8	13.0	24.0	22.4	NA	
Netcompany Group A/S	47.99	86.2	2,400	2,503	358	360	98	104	15.2	34.7	27.5	6.99x	6.94x	25.5	24.0	41.6	40.2	18.2	
Indra Sistemas, S.A. Class A	10.93	86.7	1,931	2,938	3,509	3,524	364	383	-0.5	23.0	10.3	0.84x	0.83x	8.1	7.7	13.6	14.1	12.2	
Kainos Group PLC	9.58	81.5	1,168	1,129	222	214	33	34	21.3	46.0	14.7	5.10x	5.29x	34.6	33.3	45.4	45.0	16.0	
Endava Plc Sponsored ADR Class A	53.03	93.4	986	2,780	406	402	37	83	24.8	30.9	14.6	6.85x	6.91x	NA	33.4	NA	48.5	20.0	
Devoteam SA	91.17	72.3	760	813	784	838	90	99	13.7	15.1	11.5	1.04x	0.97x	9.0	8.2	17.4	17.0	NA	
Neurones SA	23.04	88.1	560	428	546	559	61	65	0.9	10.4	11.2	0.78x	0.77x	7.0	6.5	17.3	15.9	NA	
Wavestone SA	26.55	75.2	536	636	440	458	68	72	6.1	24.3	15.5	1.45x	1.39x	9.3	8.8	16.5	14.9	NA	
Aubay SA	31.56	80.5	417	441	449	460	51	49	0.9	11.2	11.4	0.98x	0.96x	8.7	9.1	13.7	14.0	NA	
Allgeier SE	35.06	83.4	390	561	838	850	53	67	10.8	12.9	6.7	0.67x	0.66x	10.6	8.3	82.2	30.4	58.3	
NNIT A/S	15.28	52.1	382	449	446	450	73	73	-2.2	15.3	16.4	1.01x	1.00x	6.1	6.1	14.1	12.5	NA	
Columbus A/S	1.18	56.5	147	176	276	280	22	34	-1.5	23.1	7.6	0.64x	0.63x	8.1	5.2	7.4	5.5	NA	
Prodware SA	7.01	61.0	54	204	193	207	38	33	4.5	8.0	19.9	1.06x	0.98x	5.3	6.2	7.4	4.5	6.3	
Median									5.3%	23.0%	14.6%	1.33x	1.34x	9.3x	8.9x	18.9x	16.6x	11.6%	
Mean									7.3%	25.4%	15.7%	2.47x	2.46x	13.3x	13.3x	26.9x	21.7x	14.6%	

Source: FactSet; based on consensus estimates.

IT Services - India										'18 - '19E		Valuation Multiples						EPS		
As of March 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS	
\$ 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	LTM	2019E	Rate
			Equity	Enterprise	LTM	2019E	LTM	2019E												
Tata Consultancy Services Limited	\$27.50	83.5%	\$103,196	\$99,058	\$21,680	\$21,550	\$5,763	\$5,798	5.3%	36.8%	26.7%	4.57x	4.60x	17.2x	17.1x	22.8x	22.8x	8.3%		
Infosys Limited	10.24	86.6	43,591	41,363	12,456	12,397	3,073	3,093	7.0	31.1	24.5	3.32x	3.34x	13.5	13.4	19.2	19.3	9.5		
Cognizant Technology Solutions Corp	61.33	81.9	33,648	32,349	16,783	16,783	3,192	3,165	4.1	33.6	19.0	1.93x	1.93x	10.1	10.2	18.6	15.4	10.1		
HCL Technologies Limited	7.55	86.2	20,481	20,647	9,522	9,500	2,245	2,200	11.9	26.1	23.8	2.17x	2.17x	9.2	9.4	14.0	13.9	10.2		
Wipro Limited	3.04	70.3	17,343	13,984	8,436	8,413	1,714	1,709	0.7	29.0	21.2	1.66x	1.66x	8.2	8.2	13.0	13.2	8.2		
Tech Mahindra Limited	10.23	83.9	9,883	8,372	5,073	5,110	842	855	4.9	24.5	16.8	1.65x	1.64x	9.9	9.8	14.7	15.0	10.5		
Larsen & Toubro Infotech Ltd	26.15	91.0	4,551	4,399	1,448	1,456	270	276	11.3	24.8	18.6	3.04x	3.02x	16.3	16.0	22.0	21.8	15.4		
Oracle Financial Services Software Lir	37.05	70.7	3,181	2,693	673	691	306	313	-1.3	50.6	44.8	4.00x	3.90x	8.8	8.6	15.0	14.8	NA		
L&T Technology Services Ltd.	22.80	87.5	2,383	2,378	771	766	153	150	11.9	24.1	20.0	3.08x	3.10x	15.6	15.9	21.1	21.4	15.0		
Mindtree Limited	13.82	93.6	2,275	2,209	1,056	1,052	143	148	9.0	27.6	13.5	2.09x	2.10x	15.5	14.9	26.1	24.7	16.1		
Mphasis Limited	11.99	81.5	2,237	2,178	1,192	1,192	216	218	10.5	27.0	18.4	1.83x	1.83x	10.1	10.0	14.6	14.4	10.4		
NIIT Technologies Limited	24.57	85.1	1,535	1,414	566	566	97	100	11.2	22.3	17.4	2.50x	2.50x	14.5	14.1	25.0	24.3	16.7		
Persistent Systems Limited	9.56	92.1	731	609	484	491	73	73	3.5	19.5	15.0	1.26x	1.24x	8.4	8.3	15.5	15.2	10.6		
Cyient Limited	5.85	58.7	643	610	632	633	87	89	-1.6	19.9	13.9	0.97x	0.96x	7.0	6.9	9.8	10.6	10.4		
Sonda S.A.	0.72	43.2	631	870	1,061	1,075	113	122	-12.4	16.9	10.6	0.82x	0.81x	7.7	7.1	21.8	22.4	15.6		
Sonata Software Limited	4.60	86.5	483	437	511	485	53	54	18.9	17.0	10.5	0.86x	0.90x	8.3	8.1	12.2	12.0	NA		
Zensar Technologies Limited	1.89	48.4	426	460	590	580	69	68	6.2	19.2	11.9	0.78x	0.79x	6.6	6.8	11.0	10.8	7.3		
Birlasoft Limited	1.23	73.3	339	290	444	-	46	-	NA	18.2	11.1	0.65x	NA	6.2	NA	10.9	NA	NA		
KPIT Technologies Limited	1.14	67.6	312	-	-	314	-	43	NA	NA	NA	NA	NA	NA	NA	NA	12.8	25.0		
Mastek Limited	5.63	76.9	136	120	140	144	17	19	0.8	20.6	12.3	0.86x	0.83x	6.9	6.3	9.4	9.5	NA		
Sasken Technologies Ltd	7.76	69.7	117	102	72	70	13	15	-4.0	25.4	18.2	1.42x	1.45x	8.1	7.0	9.6	9.3	NA		
Xchanging Solutions Limited	0.65	69.9	73	32	26	-	6	-	NA	NA	NA	1.23x	NA	5.3	NA	11.2	NA	NA		
3i Infotech Limited	0.03	40.8	43	152	163	-	24	-	NA	24.2	14.7	0.94x	NA	6.4	NA	4.0	NA	NA		
Allied Digital Services Limited	0.26	69.6	13	18	42	-	7	-	NA	22.2	16.4	0.43x	NA	2.5	NA	4.3	NA	NA		
Rohta India Limited	0.04	27.4	7	1,062	208	-	NA	-	NA	-15.8	-267.4	5.11x	NA	NA	NA	NA	NA	NA		
Median									5.3%	24.2%	16.8%	1.65x	1.83x	8.4x	9.4x	14.6x	14.9x	10.5%		
Mean									5.2%	23.7%	5.7%	1.96x	2.04x	9.7x	10.4x	15.0x	16.2x	12.5%		

Source: FactSet; based on consensus estimates.

IT Professional Services - China										'18 - '19E		Valuation Multiples						EPS	
As of March 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Growth
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
			Equity	Enterprise	LTM	2019E	LTM	2019E											
Inspur Electronic Information Industry (	\$6.24	86.6%	\$8,042	\$8,264	\$7,359	\$7,894	\$188	\$245	13.0%	11.4%	2.7%	1.12x	1.05x	44.0x	33.7x	70.0x	63.7x	47.1%
Wonders Information Co., Ltd. Class A	3.13	98.3	3,571	4,517	326	328	79	67	0.2	43.0	25.1	13.84x	13.77x	NA	NA	NA	NA	NA	
Beijing Thunisoft Corporation Limited (	4.30	88.6	3,478	3,301	502	498	78	95	23.9	38.8	21.0	6.58x	6.63x	42.3	34.6	40.7	41.2	NA
Shanghai 2345 Network Holding Group	0.48	63.6	2,753	2,088	501	-	228	-	NA	91.3	37.6	4.17x	NA	9.2	NA	18.8	NA	NA	
Neusoft Corporation Class A	2.08	81.0	2,587	2,270	1,067	-	23	-	NA	27.8	3.4	2.13x	NA	NA	NA	NA	NA	NA	
Beijing Teamsun Technology Co., Ltd.	1.63	78.1	1,795	1,977	683	822	4	-	NA	16.4	1.6	2.89x	2.41x	NA	NA	NA	54.4	NA	
Chinasoft International Ltd.	0.63	84.3	1,652	1,860	1,671	1,703	273	157	7.6	30.3	9.8	1.11x	1.09x	6.8	11.8	14.5	15.2	NA	
Insigma Technology Co. Ltd. Class A	1.34	73.7	1,406	1,444	509	-	46	-	NA	30.8	11.2	2.84x	NA	31.4	NA	59.5	NA	NA	
Shenzhen Forms Syntron Information (	5.67	81.7	1,072	1,010	70	-	9	-	NA	39.9	13.1	14.35x	NA	NA	NA	NA	NA	NA
Beyondsoft Corporation Class A	1.59	85.4	836	731	506	-	39	-	NA	22.1	8.3	1.45x	NA	18.5	NA	22.8	NA	NA	
UEC Group Ltd. Class A	1.06	76.3	704	730	464	-	NA	-	NA	6.8	-18.6	1.57x	NA	NA	NA	NA	NA	NA	
Bringspring Science & Technology Co.	1.12	86.8	622	635	105	-	4	-	NA	33.4	7.3	6.07x	NA	NA	NA	95.1	NA	NA	
Wiscom System Co., Ltd. Class A	1.42	61.2	573	685	284	275	12	-	10.2	26.8	6.8	2.41x	2.49x	NA	NA	42.8	24.8	NA	
Median									10.2%	30.3%	8.3%	2.84x	2.45x	25.0x	33.7x	41.7x	41.2x	47.1%	
Mean									11.0%	32.2%	9.9%	4.66x	4.57x	25.4x	26.7x	45.5x	39.8x	47.1%	

Source: FactSet; based on consensus estimates.

IT Staff Augmentation										'18 - '19E		Valuation Multiples						EPS		
As of March 2, 2020										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	LTM	2019E	Rate
			Equity	Enterprise	LTM	2019E	LTM	2019E												
Robert Half International Inc.	\$51.07	73.9%	\$5,879	\$5,948	\$6,074	\$6,074	\$686	\$687	4.7%	40.6%	11.3%	0.98x	0.98x	8.7x	8.7x	13.1x	13.1x	6.4%		
ManpowerGroup Inc.	76.54	75.8	4,499	5,140	20,864	20,864	798	782	-5.1	16.2	3.8	0.25x	0.25x	6.4	6.6	9.9	10.3	6.3		
Insperty, Inc.	69.41	47.9	2,733	2,693	4,315	4,315	215	250	12.7	16.3	5.0	0.62x	0.62x	12.5	10.8	18.8	16.7	15.0		
ASGN Inc	50.93	70.1	2,689	3,752	3,924	3,924	406	449	15.4	27.5	10.4	0.96x	0.96x	9.2	8.4	15.5	11.0	9.0		
TechnoPro Holdings Inc.	61.99	83.1	2,240	2,239	1,391	1,427	148	144	20.2	25.1	10.6	1.61x	1.57x	15.1	15.6	23.6	23.8	NA		
PageGroup PLC	4.88	66.6	1,604	1,643	2,098	1,964	247	234	-3.6	51.4	11.9	0.78x	0.84x	6.6	7.0	11.1	11.9	NA		
Kforce Inc.	30.58	71.7	695	794	1,347	1,347	81	86	-5.0	28.9	6.0	0.59x	0.59x	9.8	9.3	14.1	13.0	NA		
Kelly Services, Inc. Class A	16.45	56.9	650	688	5,356	5,356	144	122	-2.9	18.0	2.7	0.13x	0.13x	4.8	5.6	5.8	7.6	NA		
Heidrick & Struggles International, Inc.	23.31	53.2	447	233	726	707	78	85	-1.3	30.0	10.8	0.32x	0.33x	3.0	2.7	9.7	9.0	10.0		
Mastech Digital, Inc.	13.10	73.4	145	174	194	194	13	-	NA	25.1	NA	0.90x	0.90x	13.3	NA	13.2	16.0	22.0		
Hudson Global, Inc.	9.98	59.4	29	3	85	96	NA	0	NA	50.2	-3.3	0.04x	0.03x	NA	7.5	NA	NA	35.0		
Median									-1.3%	27.5%	8.2%	0.62x	0.62x	9.0x	7.9x	13.2x	12.4x	10.0%		
Mean									3.9%	29.9%	6.9%	0.65x	0.65x	8.9x	8.2x	13.5x	13.2x	14.8%		

Source: FactSet; based on consensus estimates.

IT Solution Provider - North America										'18 - '19E		Valuation Multiples						EPS	
As of March 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Growth
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	EV/Rev		EV/EBITDA		P/E		Rate	
			Equity	Enterprise	LTM	2019E	LTM	2019E				LTM	2019E	LTM	2019E	LTM	2019E		
CDW Corp.	\$119.98	82.1%	\$17,239	\$21,393	\$18,032	\$18,032	\$1,394	\$1,441	11.0%	16.9%	7.7%	1.19x	1.19x	15.4x	14.8x	24.1x	19.7x	13.6%	
Insight Enterprises, Inc.	57.07	77.9	2,013	3,120	7,731	7,731	304	319	9.2	14.1	3.9	0.40x	0.40x	10.3	9.8	12.9	10.5	NA	
PC Connection, Inc.	41.74	74.1	1,100	1,023	2,820	2,820	126	126	4.5	15.5	4.5	0.36x	0.36x	8.1	8.1	13.5	13.4	NA	
ePlus inc.	76.08	76.4	1,028	1,029	1,526	1,539	95	115	11.4	22.6	5.8	0.67x	0.67x	10.8	9.0	14.4	13.2	8.0	
Converge Technology Solutions Corp.	0.90	68.5	57	162	-	520	-	23	48.9	NA	NA	NA	0.31x	NA	6.9	NA	NA	NA	
Pivot Technology Solutions, Inc.	1.22	80.9	48	194	1,212	1,214	24	26	-11.6	12.3	2.0	0.16x	0.16x	8.0	7.5	NA	4.1	NA	
Median									10.1%	15.5%	4.5%	0.40x	0.38x	10.3x	8.5x	13.9x	13.2x	10.8%	
Mean									12.2%	16.3%	4.8%	0.56x	0.52x	10.5x	9.4x	16.2x	12.2x	10.8%	

Source: FactSet; based on consensus estimates.

IT Solution Provider - Europe										'18 - '19E		Valuation Multiples						EPS		
As of March 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS	
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Growth	
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	LTM	2019E	Rate
			Equity	Enterprise	LTM	2019E	LTM	2019E												
Bechtle AG	\$132.24	81.3%	\$5,554	\$5,811	\$5,595	\$5,783	\$299	\$340	18.1%	14.1%	5.3%	1.04x	1.00x	19.5x	17.1x	31.8x	30.2x	14.1%		
SoftwareONE Holding Ltd.	21.62	79.4	3,429	3,279	5,858	8,006	160	220	NA	3.5	2.7	0.56x	0.41x	20.5	14.9	31.8	27.0	19.9		
Softcat Plc	13.37	79.7	2,655	2,562	1,285	1,392	112	114	2.3	21.3	8.7	1.99x	1.84x	22.8	22.5	29.8	29.3	NA		
Computacenter Plc	20.99	83.3	2,396	2,535	6,181	6,449	200	228	13.1	12.4	3.2	0.41x	0.39x	12.7	11.1	22.2	18.3	NA		
CANCOM SE	49.31	78.5	1,901	1,737	1,735	1,815	127	143	17.1	7.4	7.3	1.00x	0.96x	13.6	12.2	28.5	26.5	16.4		
Asseco Poland S.A.	16.90	95.8	1,403	2,181	2,646	2,703	395	398	9.8	21.6	14.9	0.82x	0.81x	5.5	5.5	16.4	16.5	NA		
Atea ASA	11.16	71.8	1,225	1,301	3,944	3,982	144	147	-1.7	4.1	3.6	0.33x	0.33x	9.1	8.8	21.4	21.1	NA		
Dustin Group AB	6.57	65.1	583	779	1,333	1,301	66	66	10.8	15.0	4.8	0.58x	0.60x	11.8	11.8	17.0	14.0	NA		
Datatec Limited	2.11	79.9	426	720	4,178	-	122	-	NA	15.3	2.8	0.17x	NA	5.9	NA	28.8	10.3	NA		
Crayon Group Holding ASA	5.56	68.9	425	443	1,474	1,481	24	32	36.2	1.2	1.7	0.30x	0.30x	18.1	14.0	NA	84.4	NA		
Comarch S.A.	47.24	84.0	384	372	367	380	60	65	5.1	29.6	16.3	1.01x	0.98x	6.2	5.8	13.0	13.1	NA		
Plaisio Computers SA	3.52	70.6	78	105	337	-	10	-	NA	20.7	3.0	0.31x	NA	10.3	NA	22.2	NA	NA		
Byte Computer ABEE	0.86	54.1	14	16	29	-	2	-	NA	15.6	6.7	0.58x	NA	8.6	NA	37.5	NA	NA		
Median									10.8%	15.0%	4.8%	0.58x	0.70x	11.8x	12.0x	25.3x	21.1x	16.4%		
Mean									12.3%	14.0%	6.2%	0.70x	0.76x	12.7x	12.4x	25.0x	26.4x	16.8%		

Source: FactSet; based on consensus estimates.

IT Distributors										'18 - '19E		Valuation Multiples						EPS	
<i>As of March 2, 2020</i>										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
<i>\$ in millions except per share data</i>										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Growth
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	EV/Rev		EV/EBITDA		P/E		Rate	
			Equity	Enterprise	LTM	2019E	LTM	2019E				LTM	2019E	LTM	2019E	LTM	2019E		
Arrow Electronics, Inc.	\$68.81	79.4%	\$5,549	\$8,735	\$28,917	\$28,665	\$1,095	\$1,196	-3.3%	10.7%	3.8%	0.30x	0.30x	8.0x	7.3x	NA	9.1x	4.8%	
SYNNEX Corporation	129.81	84.8	6,678	9,353	23,757	23,685	1,233	1,300	16.3	11.2	5.2	0.39x	0.39x	7.6	7.2	13.3	9.7	10.4	
Tech Data Corporation	143.40	94.7	5,080	5,838	37,082	36,987	765	782	-0.6	6.2	2.1	0.16x	0.16x	7.6	7.5	15.5	11.5	NA	
Avnet, Inc.	31.52	64.3	3,147	4,687	18,545	18,659	654	652	-3.2	12.3	3.5	0.25x	0.25x	7.2	7.2	32.9	10.5	NA	
Anixter International Inc.	97.58	98.2	3,301	4,607	8,846	8,846	451	462	5.3	19.7	5.1	0.52x	0.52x	10.2	10.0	12.7	13.0	NA	
ScanSource, Inc.	29.22	74.7	741	1,084	3,851	3,617	128	136	-6.3	10.7	3.3	0.28x	0.30x	8.5	8.0	16.2	9.4	NA	
TESSCO Technologies Incorporated	5.44	27.2	47	90	557	560	NA	0	-6.6	18.5	-0.2	0.16x	0.16x	NA	NA	NA	NA	NA	
Median									-3.2%	11.2%	3.5%	0.28x	0.30x	7.8x	7.4x	15.5x	10.1x	7.6%	
Mean									0.2%	12.8%	3.3%	0.30x	0.30x	8.2x	7.8x	18.1x	10.5x	7.6%	

Source: FactSet; based on consensus estimates.

SaaS										'18 - '19E		Valuation Multiples						EPS	
As of March 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
\$ in millions except per share data										Growth	Margin	Margin	LTM	2019E	LTM	2019E	LTM	2019E	Growth
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	Rate	
			Equity	Enterprise	LTM	2019E	LTM	2019E											
salesforce.com, inc.	\$176.76	90.3%	\$156,786	\$148,167	\$17,098	\$16,774	\$2,598	\$4,733	28.6%	73.2%	15.2%	8.67x	8.83x	57.0x	31.3x	NM	59.5x	18.8%	
ServiceNow, Inc.	344.40	94.9	65,367	64,051	3,460	3,460	413	986	32.6	72.1	11.9	18.51x	18.51x	155.2	65.0	108.4	103.7	22.1	
Workday, Inc. Class A	172.89	76.2	28,873	38,903	3,627	3,559	NA	730	28.7	70.6	-6.2	10.73x	10.93x	NM	53.3	NM	94.2	22.7	
Splunk Inc.	152.02	86.2	23,710	23,300	2,190	2,305	NA	379	31.1	81.7	-8.6	10.64x	10.11x	NM	61.4	NM	83.0	40.2	
Paycom Software, Inc.	291.96	85.4	17,181	15,468	738	738	268	318	30.3	82.2	36.4	NA	NA	57.6	48.7	94.5	83.4	25.0	
SS&C Technologies Holdings, Inc.	57.63	85.1	14,564	22,567	4,633	4,669	1,706	1,817	34.2	43.3	36.8	4.87x	4.83x	13.2	12.4	34.7	15.0	17.1	
Twilio, Inc. Class A	111.48	73.8	13,891	12,876	1,134	1,134	NA	40	74.5	51.2	-19.4	11.35x	11.35x	NM	NM	NM	NM	14.7	
Fair Isaac Corporation	387.06	88.6	11,282	12,589	1,196	1,183	291	377	11.1	70.1	24.3	10.52x	10.64x	43.3	33.4	56.6	50.0	10.0	
Coupa Software, Inc.	158.53	89.1	10,114	9,925	353	371	NA	37	45.8	64.9	-13.3	NA	NA	NM	NM	NM	NM	40.6	
NICE Ltd	159.82	87.6	9,930	10,485	1,634	1,577	428	515	7.8	63.5	26.2	6.42x	6.65x	24.5	20.3	51.4	30.1	10.0	
Sage Group plc	8.85	85.2	9,659	10,174	2,508	2,495	641	618	3.7	88.8	25.6	4.06x	4.08x	15.9	16.5	27.9	24.1	4.2	
Zendesk, Inc.	78.47	82.7	8,895	8,566	814	816	NA	65	36.4	71.4	-14.6	10.52x	10.49x	NM	131.4	NM	NM	44.0	
Slack Technologies, Inc. Class A	27.21	64.8	7,928	14,045	570	604	NA	NA	NA	90.9	NA	NA	NA	NM	NM	NM	NM	NA	
HubSpot, Inc.	180.61	86.8	7,818	7,231	675	675	NA	83	31.6	80.7	-2.5	10.72x	10.72x	NM	87.0	NM	120.4	22.5	
Paylocity Holding Corp.	133.22	88.4	7,142	7,376	519	520	96	149	23.0	67.4	18.6	14.21x	14.18x	77.2	49.5	128.5	83.4	20.0	
Xero Limited	48.60	80.3	6,890	6,930	400	430	77	82	25.5	71.1	19.2	17.31x	16.13x	89.9	84.9	NM	NM	56.5	
LogMeIn, Inc.	85.06	98.2	4,133	4,397	1,260	1,262	343	413	4.5	61.9	27.2	3.49x	3.49x	12.8	10.7	NM	16.5	6.8	
Envestnet, Inc.	75.47	86.0	3,960	4,428	900	900	95	193	10.8	15.2	10.6	4.92x	4.92x	46.6	22.9	NM	35.1	NA	
New Relic, Inc.	54.92	50.4	3,254	2,982	572	565	NA	88	26.0	83.1	-1.5	5.21x	5.27x	NM	33.9	NM	94.7	20.0	
Cloudera, Inc.	9.10	59.0	2,613	2,398	727	758	NA	52	61.2	62.5	-29.0	3.30x	3.16x	NM	46.1	NM	NM	NA	
Cornerstone Ondemand, Inc.	41.10	63.8	2,519	2,420	577	577	54	128	7.2	74.1	9.3	4.20x	4.20x	45.2	18.9	NM	35.1	NA	
Software AG	32.56	84.8	2,409	2,166	971	980	280	310	-1.4	77.2	28.9	2.23x	2.21x	7.7	7.0	14.3	11.7	NA	
Zuora, Inc. Class A	12.98	53.1	1,216	1,293	270	274	NA	NA	19.4	51.1	-26.4	4.79x	4.72x	NM	NM	NM	NM	NA	
Blucora, Inc.	18.19	48.9	869	1,212	718	718	121	137	28.1	43.5	16.8	1.69x	1.69x	10.0	8.8	18.6	8.6	NA	
Median									28.1%	70.9%	11.9%	6.42x	6.65x	44.2x	33.6x	51.4x	50.0x	20.0%	
Mean									26.1%	67.2%	8.1%	8.02x	7.96x	46.9x	42.2x	59.4x	55.8x	23.2%	

Source: FactSet; based on consensus estimates.

Enterprise Applications										'18 - '19E		Valuation Multiples						EPS	
As of March 2, 2020										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	
			Equity	Enterprise	LTM	2019E	LTM	2019E											
Microsoft Corporation	\$172.79	90.6%	\$1,314,249	\$1,281,822	\$134,088	\$133,945	\$61,186	\$60,014	13.4%	67.7%	45.6%	9.56x	9.57x	20.9x	21.4x	30.1x	33.2x	14.4%	
Adobe Inc.	360.28	93.2	175,718	177,065	11,131	11,338	3,965	5,111	23.1	83.4	35.6	15.91x	15.62x	44.7	34.6	60.0	44.9	15.0	
Oracle Corporation	50.90	84.1	163,269	196,379	39,582	39,711	17,099	18,745	0.1	75.5	43.1	4.96x	4.95x	11.5	10.5	16.2	13.6	9.6	
SAP SE	123.56	87.6	151,794	159,302	30,049	30,399	8,131	9,089	7.6	69.7	27.1	5.30x	5.24x	19.6	17.5	40.7	22.0	12.2	
International Business Machines Corpo	134.30	84.6	119,313	179,198	77,147	77,147	16,676	17,812	-3.1	45.9	21.6	2.32x	2.32x	10.7	10.1	12.7	10.5	5.7	
Intuit Inc.	281.18	91.6	73,244	72,720	7,127	7,092	2,170	2,608	11.8	82.2	30.4	10.20x	10.25x	33.5	27.9	45.5	39.7	14.4	
Veeva Systems Inc Class A	144.05	81.4	19,045	21,400	1,025	1,071	303	419	26.5	73.3	29.6	NA	19.97x	NA	NA	74.4	67.7	20.9	
Hewlett Packard Enterprise Co.	12.89	73.3	16,669	27,403	28,902	29,084	4,779	5,204	-4.8	31.1	16.5	0.95x	0.94x	5.7	5.3	16.8	7.2	6.8	
VMware, Inc. Class A	121.74	58.9	13,380	55,347	10,811	10,655	2,393	3,906	20.6	82.4	22.1	5.12x	5.19x	23.1	14.2	8.1	19.5	17.0	
Citrix Systems, Inc.	108.78	83.3	13,310	15,150	3,011	3,011	793	1,105	1.2	83.0	26.3	5.03x	5.03x	19.1	13.7	21.6	19.1	7.8	
Aspen Technology, Inc.	109.03	76.3	7,404	7,806	603	598	283	312	8.9	89.9	46.9	12.95x	13.05x	27.6	25.0	30.3	27.9	NA	
Manhattan Associates, Inc.	68.33	75.5	4,357	4,377	618	618	124	156	10.5	52.6	20.1	7.08x	7.08x	35.3	28.1	51.9	39.3	NA	
Tenable Holdings, Inc.	24.93	68.8	2,458	2,227	355	355	NA	NA	32.6	82.8	-22.5	6.28x	6.28x	NA	NA	NA	NA	NA	
Median									10.5%	75.5%	27.1%	5.79x	6.28x	20.9x	17.5x	30.2x	25.0x	13.3%	
Mean									11.4%	70.7%	26.3%	7.14x	8.12x	22.9x	18.9x	34.0x	28.7x	12.4%	

Source: FactSet; based on consensus estimates.

Cyber Security										'18 - '19E		Valuation Multiples						EPS				
As of March 2, 2020										Revenue		Gross		EBITDA		EV/Rev		EV/EBITDA		P/E		EPS
\$ in millions except per share data										Growth	Margin	Margin							Growth			
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2019E	LTM	2019E	LTM	2019E	LTM	2019E	Rate		
			Equity	Enterprise	LTM	2019E	LTM	2019E														
Fortinet, Inc.	\$110.10	90.4%	\$18,994	\$17,248	\$2,156	\$2,156	\$514	\$587	19.7%	71.4%	23.8%	8.00x	8.00x	33.6x	29.4x	59.0x	44.6x	18.0%				
Palo Alto Networks, Inc.	189.29	75.4	18,873	17,340	3,121	3,098	242	767	22.2	71.1	2.6	5.56x	5.60x	NA	22.6	NA	37.0	20.4				
Check Point Software Technologies Ltd	104.12	78.4	15,146	14,257	1,995	1,995	906	1,032	4.1	89.1	45.4	7.15x	7.15x	15.7	13.8	19.0	17.0	7.3				
Okta, Inc. Class A	133.43	93.3	14,999	14,837	534	560	NA	NA	44.4	75.5	-30.5	NA	NA	NA	NA	NA	NA	25.0				
Akamai Technologies, Inc.	90.91	88.0	14,727	16,096	2,894	2,894	1,009	1,211	6.6	61.8	34.9	5.56x	5.56x	16.0	13.3	31.3	20.2	12.0				
NortonLifeLock Inc.	19.93	69.4	11,966	4,719	3,662	3,081	1,070	1,299	-36.0	73.9	34.3	1.29x	1.53x	4.4	3.6	3.5	18.8	14.1				
F5 Networks, Inc.	120.04	71.1	7,299	6,480	2,268	2,278	565	822	4.4	84.0	24.9	2.86x	2.84x	11.5	7.9	18.3	11.8	9.8				
Trend Micro Incorporated	49.76	89.5	6,991	5,355	1,501	1,489	486	486	2.6	80.4	32.4	3.57x	3.60x	11.0	11.0	27.2	27.5	NA				
Zscaler, Inc.	52.78	58.9	6,754	6,214	360	350	NA	35	47.3	79.6	-3.0	17.26x	17.76x	NA	NA	NA	NA	85.9				
Aisino Corp. Class A	3.51	75.1	6,537	6,062	3,412	3,787	456	447	-8.9	23.7	NA	1.78x	1.60x	13.3	13.6	23.8	27.5	NA				
Proofpoint, Inc.	113.29	84.8	6,458	6,245	888	888	NA	156	23.9	71.7	-0.1	7.03x	7.03x	NA	40.0	NA	64.0	23.2				
CrowdStrike Holdings, Inc. Class A	59.13	58.0	6,248	11,187	410	449	NA	NA	NA	69.4	-30.5	NA	NA	NA	NA	NA	NA	25.0				
SolarWinds Corp.	18.48	85.3	5,754	7,597	933	933	401	454	11.9	65.1	43.0	8.15x	8.15x	18.9	16.7	NA	21.7	9.6				
Avast Plc	5.08	70.4	5,137	6,052	885	873	464	484	5.6	74.3	52.4	6.84x	6.93x	13.1	12.5	19.6	15.9	5.5				
CyberArk Software Ltd.	106.85	71.8	4,047	3,576	434	434	73	131	26.4	85.4	16.8	8.24x	8.24x	49.0	27.2	66.0	38.6	14.2				
Sophos Group Plc	7.40	98.7	3,812	3,749	738	808	96	120	16.5	76.8	13.0	5.08x	4.64x	39.0	31.1	NA	39.7	NA				
Qualys, Inc.	82.03	85.5	3,207	3,144	322	322	106	142	15.3	78.4	32.9	9.78x	9.78x	29.7	22.2	48.9	35.2	13.2				
FireEye, Inc.	13.62	74.3	3,032	2,882	889	889	NA	64	7.0	63.4	-10.8	3.24x	3.24x	NA	44.8	NA	NA	9.9				
Varonis Systems, Inc.	84.44	90.6	2,585	2,492	254	254	NA	NA	-6.0	86.2	-23.9	9.80x	9.80x	NA	NA	NA	NA	NA				
Mimecast Limited	40.10	73.5	2,507	2,617	405	404	55	70	25.9	74.1	14.2	6.46x	6.48x	47.5	37.6	NA	95.8	20.0				
Tenable Holdings, Inc.	24.93	68.8	2,458	2,227	355	355	NA	NA	32.6	82.8	-22.5	6.28x	6.28x	NA	NA	NA	NA	NA				
Rapid7 Inc.	46.48	70.4	2,295	2,290	327	327	NA	12	33.9	69.9	-8.6	7.00x	7.00x	NA	NA	NA	NA	NA				
SailPoint Technologies Holdings, Inc.	25.09	78.6	2,251	2,132	289	289	7	30	15.9	75.6	2.3	7.39x	7.39x	NA	NA	NA	NA	15.0				
ForeScout Technologies, Inc.	32.66	70.3	1,572	1,449	337	337	NA	NA	13.2	76.5	-26.5	4.30x	4.30x	NA	NA	NA	NA	NA				
Radware Ltd.	23.04	85.4	1,080	959	252	252	28	-	7.5	82.1	11.2	3.80x	3.80x	34.0	NA	47.8	27.4	16.0				
F-Secure Oyj	3.22	85.1	511	525	237	237	19	31	9.9	68.6	7.9	2.22x	2.22x	28.2	17.1	NA	NA	NA				
Zix Corporation	8.15	73.1	454	713	173	173	33	39	146.1	49.7	19.1	4.11x	4.11x	21.5	18.2	NA	19.0	15.0				
SecureWorks Corp. Class A	13.62	61.9	153	985	541	547	NA	11	6.4	49.5	-1.4	1.82x	1.80x	NA	NA	NA	NA	NA				
Techpoint, Inc.	5.14	62.4	28	72	32	291	3	3	836.6	48.8	10.5	2.26x	0.25x	21.5	21.1	43.3	NA	NA				
Median									14.2%	74.1%	10.9%	5.56x	5.60x	21.5x	18.2x	29.3x	27.5x	15.0%				
Mean									47.7%	71.0%	9.4%	5.81x	5.74x	24.0x	21.3x	34.0x	33.0x	18.9%				

Source: FactSet; based on consensus estimates.