

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	30.1%	12.9%	1.2%	11.3%	1.42x	13.1x	18.3x
IT Services - Europe	19.9	13.5	4.8	3.9	1.19	9.3	23.2
IT Services - India	22.7	17.4	4.7	10.6	2.40	11.8	19.4
IT Services - China	25.8	6.5	25.2	19.6	1.67	21.8	30.4
IT Staff Augmentation	26.4	8.1	-1.5	11.6	0.75	11.1	15.5
IT SUPPLY CHAIN SERVICES							
IT Solution Providers - North America	17.0%	4.2%	2.2%	10.0%	0.40x	8.1x	16.6x
IT Solution Providers - Europe	14.8	5.5	10.7	15.3	0.53	10.3	23.0
IT Products Distributors	10.6	3.4	-5.0	8.9	0.24	7.8	11.0
SOFTWARE							
SaaS	70.5%	14.2%	14.6%	20.8%	6.95x	32.0x	38.5x
Enterprise Applications	76.1	27.5	8.4	14.8	6.37	13.7	19.2
Cyber Security	74.6	12.3	10.6	18.5	5.60	16.9	34.1

IT Services - North America										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	Rate	
Accenture Plc Class A	\$220.19	88.9%	\$139,505	\$138,113	\$44,327	\$45,120	\$7,585	\$8,326	3.6%	31.6%	17.1%	3.12x	3.06x	18.2x	16.6x	27.9x	28.7x	6.9%	
CGI Inc. Class A	60.88	69.9	14,026	18,288	9,232	9,274	1,785	1,828	1.2	13.6	17.8	1.98x	1.97x	10.2	10.0	17.9	16.4	4.8	
EPAM Systems, Inc.	313.70	88.0	17,521	17,486	2,505	2,625	457	492	14.4	32.9	18.3	6.98x	6.66x	38.3	35.6	62.0	52.8	18.1	
Booz Allen Hamilton Holding Corporati	81.19	90.8	11,196	12,703	7,795	7,956	855	820	9.6	22.6	11.3	1.63x	1.60x	14.9	15.5	22.1	22.5	10.5	
Genpact Limited	35.66	78.9	6,803	8,372	3,645	3,660	588	641	3.9	32.7	16.2	2.30x	2.29x	14.2	13.1	22.0	17.3	8.2	
CACI International Inc Class A	216.25	74.9	5,454	7,431	5,816	5,945	683	617	11.1	33.0	12.1	1.28x	1.25x	10.9	12.0	15.9	15.7	9.8	
DXC Technology Co.	18.96	49.4	4,820	13,361	19,189	18,121	2,540	2,707	-8.6	11.7	13.6	0.70x	0.74x	5.3	4.9	NA	6.3	NA	
ManTech International Corporation Clas	66.25	70.5	1,798	2,798	2,427	2,487	235	222	11.9	12.8	10.7	1.15x	1.13x	11.9	12.6	21.1	23.7	7.4	
ICF International, Inc.	67.09	70.4	1,265	1,873	1,483	1,473	159	131	-0.3	33.5	12.9	1.26x	1.27x	11.8	14.3	20.3	18.3	16.0	
Perficient, Inc.	40.15	74.7	1,325	1,490	595	609	89	112	7.7	33.5	14.9	2.50x	2.44x	16.8	13.3	39.0	16.5	12.0	
Virtusa Corporation	50.23	95.1	1,522	1,820	1,294	1,278	105	129	-1.2	25.9	8.2	1.41x	1.42x	17.4	14.2	41.8	24.0	14.0	
Unisys Corporation	13.14	72.5	828	290	2,191	2,004	290	279	-32.0	22.4	13.3	0.13x	0.14x	1.0	1.0	NA	15.2	NA	
Hackett Group, Inc.	13.10	69.3	394	365	264	230	30	29	-18.5	30.1	11.6	1.38x	1.58x	12.2	12.6	40.6	21.6	15.7	
Information Services Group, Inc.	2.09	55.5	100	155	255	229	20	22	-14.0	39.0	7.8	0.61x	0.68x	7.7	6.9	33.5	NA	14.0	
RCM Technologies, Inc.	1.27	39.7	15	40	166	149	4	1	-22.0	24.7	2.2	0.24x	0.27x	10.9	31.6	NA	NA	NA	
Median									1.2%	30.1%	12.9%	1.38x	1.42x	11.9x	13.1x	25.0x	18.3x	11.3%	
Mean									-2.2%	26.7%	12.5%	1.78x	1.77x	13.4x	14.3x	30.3x	21.5x	11.5%	

Source: FactSet; based on consensus estimates.

IT Services - Europe										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	Rate	
Amadeus IT Group SA Class A	\$47.72	54.6%	\$21,498	\$24,535	\$4,738	\$2,756	\$1,478	\$327	-55.0%	21.0%	30.9%	5.18x	8.90x	16.6x	NA	50.3x	NA	NA	
Capgemini SE	117.41	81.5	19,895	28,145	17,301	18,449	2,654	2,783	20.4	26.2	15.3	1.63x	1.53x	10.6	10.1	21.6	15.5	12.3	
Sage Group plc	8.07	78.0	8,822	9,157	2,537	2,442	692	618	-1.6	87.3	27.3	3.61x	3.75x	13.2	14.8	20.1	23.4	1.7	
Atos SE	68.42	75.3	7,526	9,787	13,502	13,123	2,016	1,723	4.9	21.4	14.9	0.72x	0.75x	4.9	5.7	11.3	8.3	2.7	
Globant SA	179.37	89.0	7,096	6,694	730	790	122	141	19.8	33.1	19.2	9.17x	8.47x	NA	47.6	NA	76.2	NA	
TietoEVRY Oyj	25.11	73.6	2,974	4,123	3,081	3,280	381	535	74.4	15.6	12.9	1.34x	1.26x	10.8	7.7	43.9	10.1	NA	
Reply S.p.A.	108.74	87.7	4,068	3,934	1,441	1,448	204	224	10.7	44.1	14.1	2.73x	2.72x	19.3	17.6	29.2	31.9	NA	
Netcompany Group A/S	82.67	83.9	4,134	4,191	417	451	116	127	25.2	35.1	27.8	10.06x	9.29x	36.2	33.0	61.6	46.2	23.9	
Alten SA	81.11	61.4	2,770	2,710	3,027	2,742	328	213	-3.2	15.3	10.8	0.89x	0.99x	8.3	12.7	15.6	28.5	11.4	
Sopra Steria Group SA	118.81	67.6	2,440	3,404	5,171	5,039	577	491	4.7	15.2	10.9	0.66x	0.68x	5.9	6.9	14.3	13.7	7.7	
Indra Sistemas, S.A. Class A	5.99	47.5	1,059	1,813	3,613	3,560	294	195	1.1	18.9	8.0	0.50x	0.51x	6.2	9.3	34.8	45.0	3.9	
Kainos Group PLC	15.75	86.7	1,927	1,893	232	260	32	58	21.9	47.0	14.0	8.15x	7.28x	NA	32.5	78.5	44.7	1.7	
Endava Plc Sponsored ADR Class A	62.76	89.9	2,165	3,459	442	497	51	111	23.1	26.8	11.6	7.83x	6.96x	NA	31.3	NA	48.4	NA	
Devoteam SA	113.69	97.0	947	901	913	885	117	107	2.9	14.8	12.8	0.99x	1.02x	7.7	8.4	19.6	22.1	NA	
Neurones SA	27.00	87.8	654	475	601	582	79	67	2.0	12.5	13.1	0.79x	0.82x	6.0	7.0	19.6	23.2	NA	
Wavestone SA	26.59	83.0	537	602	497	466	77	62	0.7	22.5	15.5	1.21x	1.29x	7.8	9.7	14.4	18.2	NA	
NNIT A/S	16.88	73.6	422	494	456	439	68	62	-2.4	14.3	15.0	1.08x	1.12x	7.3	7.9	22.6	24.7	NA	
Aubay SA	33.80	81.7	446	446	500	496	59	54	7.9	10.7	11.8	0.89x	0.90x	7.5	8.2	14.5	16.3	NA	
Allgeier SE	61.44	79.7	694	886	937	929	103	104	8.9	13.4	9.8	0.95x	0.95x	8.6	8.5	24.7	22.0	2.5	
Columbus A/S	1.32	88.3	164	179	306	-	25	-	NA	13.4	8.5	0.59x	NA	7.1	NA	50.2	NA	NA	
Proware SA	5.73	62.8	44	191	214	209	41	54	0.5	NA	NA	0.89x	0.91x	4.6	3.6	4.0	4.2	NA	
Median									4.8%	19.9%	13.5%	1.08x	1.19x	7.8x	9.3x	21.6x	23.2x	3.9%	
Mean									8.4%	25.4%	15.2%	2.85x	3.00x	10.5x	14.9x	29.0x	27.5x	7.5%	

Source: FactSet; based on consensus estimates.

IT Services - India										'19 - '20E		Valuation Multiples						EPS		
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS	
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Growth	
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	LTM	2020E	Rate
			Equity	Enterprise	LTM	2020E	LTM	2020E												
Tata Consultancy Services Limited	\$34.99	88.8%	\$131,280	\$126,067	\$21,536	\$21,457	\$5,904	\$5,850	4.7%	32.8%	27.4%	5.85x	5.88x	21.4x	21.6x	31.5x	30.6x	8.5%		
Infosys Limited	14.40	89.2	61,351	58,363	12,872	13,172	3,424	3,446	5.3	29.6	26.6	4.53x	4.43x	17.0	16.9	25.1	24.8	12.7		
Cognizant Technology Solutions Corp	70.80	92.6	37,853	37,352	16,752	16,700	3,120	2,957	-0.5	32.6	18.6	2.23x	2.24x	12.0	12.6	26.2	19.4	12.0		
HCL Technologies Limited	11.05	88.9	29,978	29,385	9,966	10,088	2,589	2,509	4.8	29.8	26.3	2.95x	2.91x	11.3	11.7	18.1	18.4	10.1		
Wipro Limited	4.50	86.5	25,716	21,407	8,329	8,223	1,768	1,786	1.8	29.3	21.2	2.57x	2.60x	12.1	12.0	19.5	19.4	6.8		
Tech Mahindra Limited	10.94	90.3	10,577	8,511	5,120	5,052	805	829	2.7	22.7	16.1	1.66x	1.68x	10.6	10.3	17.6	17.0	8.8		
Larsen & Toubro Infotech Ltd	38.35	80.0	6,697	6,370	1,602	1,599	327	330	13.1	24.7	20.6	3.98x	3.98x	19.5	19.3	29.3	29.0	14.0		
Oracle Financial Services Software Lir	42.24	91.3	3,633	3,191	670	694	313	336	5.5	49.7	47.2	4.76x	4.60x	10.2	9.5	17.0	16.5	NA		
Mindtree Limited	17.70	80.8	2,915	2,713	1,068	1,059	186	184	3.5	22.7	17.4	2.54x	2.56x	14.6	14.8	24.6	24.9	5.2		
Mphasis Limited	18.22	91.3	3,401	3,310	1,272	1,289	237	239	10.0	24.3	18.9	2.60x	2.57x	14.0	13.8	20.5	20.5	10.6		
L&T Technology Services Ltd.	21.81	85.2	2,288	2,197	745	735	135	134	-0.5	24.5	18.7	2.95x	2.99x	16.3	16.4	24.2	24.9	10.5		
Coforge Limited	28.44	74.2	1,723	1,697	599	611	103	106	12.0	22.1	17.4	2.83x	2.78x	16.4	16.0	29.6	27.6	14.7		
Persistent Systems Limited	15.15	79.9	1,158	996	523	532	80	81	13.2	17.4	15.3	1.90x	1.87x	12.5	12.3	23.4	22.1	9.8		
Sonda S.A.	0.65	60.2	566	732	1,028	1,020	108	105	-5.1	16.5	10.5	0.71x	0.72x	6.8	7.0	65.6	32.8	19.0		
Cyient Limited	5.40	74.9	594	501	568	558	74	76	-7.5	18.7	13.2	0.88x	0.90x	6.8	6.6	13.7	12.9	12.0		
Sonata Software Limited	4.28	83.2	450	416	520	509	49	49	7.0	15.8	10.2	0.80x	0.82x	8.5	8.5	12.6	13.4	NA		
Birlasoft Limited	2.34	81.6	650	589	467	484	58	64	NA	19.2	12.6	1.26x	1.22x	10.2	9.3	20.0	17.7	NA		
Zensar Technologies Limited	2.34	81.5	527	460	546	542	73	81	-3.4	17.3	13.6	0.84x	0.85x	6.3	5.7	21.2	13.3	NA		
KPIT Technologies Limited	1.22	69.0	335	289	284	275	39	39	-8.9	16.9	13.4	1.02x	1.05x	7.5	7.4	18.3	15.3	13.1		
Mastek Limited	11.74	92.7	288	299	187	192	30	33	34.3	22.3	16.8	1.60x	1.56x	9.9	9.1	13.9	14.6	NA		
Sasken Technologies Ltd	8.84	81.6	133	113	62	-	14	-	NA	30.7	24.1	1.83x	NA	7.8	NA	11.7	NA	NA		
Xchanging Solutions Limited	0.95	69.5	105	62	25	-	7	-	NA	31.4	27.6	2.51x	NA	9.2	NA	14.2	NA	NA		
3i Infotech Limited	0.04	64.1	64	157	144	-	24	-	NA	26.0	16.8	1.09x	NA	6.5	NA	6.1	NA	NA		
Rolta India Limited	0.06	58.7	10	578	203	-	NA	-	NA	-12.4	-9.6	2.85x	NA	NA	NA	NA	NA	NA		
Allied Digital Services Limited	0.29	79.6	15	20	46	-	6	-	NA	18.1	13.2	0.44x	NA	3.4	NA	8.1	NA	NA		
Median									4.7%	22.7%	17.4%	2.23x	2.40x	10.4x	11.8x	19.7x	19.4x	10.6%		
Mean									4.8%	23.3%	18.2%	2.29x	2.41x	11.3x	12.0x	21.3x	20.7x	11.2%		

Source: FactSet; based on consensus estimates.

IT Professional Services - China										'19 - '20E		Valuation Multiples						EPS			
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth		
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	LTM	2020E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	LTM	2020E	Rate	
Inspur Electronic Information Industry (	\$4.13	59.6%	\$5,999	\$6,490	\$8,738	\$9,630	\$175	\$300	31.9%	12.2%	2.3%	0.74x	0.67x	37.1x	21.6x	38.1x	31.4x	19.6%		
Wonders Information Co., Ltd. Class A	3.24	73.5	3,803	4,204	312	388	NA	71	29.3	18.7	-52.1	13.50x	10.84x	NA	NA	NA	NA	NA			
Beijing Thunisoft Corporation Limited (	3.51	72.5	2,865	2,426	418	614	54	110	23.9	38.3	18.5	5.81x	3.95x	44.8	22.0	65.7	30.4	NA		
Shanghai 2345 Network Holding Group	0.37	72.5	2,136	1,352	177	-	NA	-	NA	90.9	29.7	7.65x	NA	NA	NA	42.9	NA	NA			
Beijing Teamsun Technology Co., Ltd.	1.43	58.9	1,568	1,694	561	-	NA	-	NA	15.2	-0.8	3.02x	NA	NA	NA	NA	NA	NA			
Neusoft Corporation Class A	1.62	72.8	2,014	2,087	1,180	1,251	30	65	5.8	25.2	3.0	1.77x	1.67x	NA	32.3	NA	NA	NA			
Chinasoft International Ltd.	0.74	85.2	2,021	2,090	1,797	2,123	285	197	25.2	29.2	9.4	1.16x	0.98x	7.3	10.6	16.1	14.4	NA			
Insigma Technology Co. Ltd. Class A	1.24	69.3	1,271	1,280	556	-	50	-	NA	27.9	9.5	2.30x	NA	25.4	NA	NA	NA	NA			
Shenzhen Forms Syntron Information (	3.57	77.1	1,011	961	88	-	15	-	NA	48.1	17.5	10.94x	NA	NA	NA	75.3	NA	NA		
Beyondsoft Corporation Class A	1.54	82.9	819	673	606	-	43	-	NA	21.3	6.5	1.11x	NA	15.6	NA	20.5	NA	NA			
Ronglian Group Ltd. Class A	0.80	68.8	536	520	461	-	25	-	NA	15.6	4.4	1.13x	NA	20.7	NA	NA	NA	NA			
Wiscom System Co., Ltd. Class A	1.21	74.1	491	609	248	-	17	-	NA	25.8	6.7	2.46x	NA	36.1	NA	NA	NA	NA			
Bringspring Science & Technology Co.	1.07	83.8	641	624	110	-	9	-	NA	37.4	3.6	5.70x	NA	NA	NA	81.9	NA	NA			
Median									25.2%	25.8%	6.5%	2.46x	1.67x	25.4x	21.8x	42.9x	30.4x	19.6%			
Mean									23.2%	31.2%	4.5%	4.41x	3.62x	26.7x	21.6x	48.6x	25.4x	19.6%			

Source: FactSet; based on consensus estimates.

IT Staff Augmentation										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	Rate	
Robert Half International Inc.	\$51.61	80.8%	\$5,916	\$5,850	\$5,342	\$5,047	\$482	\$461	-16.9%	39.7%	8.9%	1.10x	1.16x	12.1x	12.7x	18.1x	20.2x	4.6%	
ManpowerGroup Inc.	68.81	68.1	3,996	3,861	18,143	17,675	431	390	-15.3	15.9	2.1	0.21x	0.22x	9.0	9.9	48.1	20.7	2.6	
ASGN Inc	69.27	92.6	3,637	4,705	3,964	3,923	404	424	0.0	25.8	10.0	1.19x	1.20x	11.6	11.1	20.0	14.9	7.6	
Insperty, Inc.	82.87	87.7	3,215	3,185	4,306	4,251	246	263	-1.5	17.4	5.8	0.74x	0.75x	13.0	12.1	21.1	19.8	17.5	
TechnoPro Holdings Inc.	65.74	88.2	2,376	2,377	1,508	1,494	181	164	5.7	23.7	12.0	1.58x	1.59x	13.1	14.5	22.4	24.3	11.2	
PageGroup PLC	4.60	62.7	1,512	1,425	1,933	1,611	168	76	-24.6	47.4	8.8	0.74x	0.88x	8.5	18.6	23.6	NA	NA	
Kforce Inc.	35.44	83.1	778	814	1,360	1,381	80	82	2.5	28.5	5.9	0.60x	0.59x	10.1	10.0	16.3	15.5	15.0	
Kelly Services, Inc. Class A	18.78	74.9	741	613	4,842	4,463	118	66	-16.7	18.2	2.4	0.13x	0.14x	5.2	9.4	NA	15.1	12.0	
Heidrick & Struggles International, Inc.	22.80	68.7	441	308	652	606	74	68	-14.3	26.4	11.3	0.47x	0.51x	4.1	4.5	NA	14.2	10.0	
Mastech Digital, Inc.	15.93	53.1	181	200	196	197	16	-	1.5	27.3	8.1	1.02x	1.02x	12.4	NA	18.5	13.3	20.0	
Hudson Global, Inc.	10.10	77.1	27	1	100	101	NA	NA	7.6	41.2	-0.2	0.01x	0.01x	NA	NA	67.8	NA	20.0	
Median									-1.5%	26.4%	8.1%	0.74x	0.75x	10.9x	11.1x	21.1x	15.5x	11.6%	
Mean									-6.5%	28.3%	6.8%	0.71x	0.73x	9.9x	11.4x	28.4x	17.6x	12.1%	

Source: FactSet; based on consensus estimates.

IT Solution Provider - North America										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Growth
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	Rate	
CDW Corp.	\$126.45	86.6%	\$18,041	\$21,804	\$18,048	\$17,697	\$1,488	\$1,487	-1.9%	18.3%	8.1%	1.21x	1.23x	14.7x	14.7x	25.0x	21.1x	9.1%	
Insight Enterprises, Inc.	56.03	76.5	1,965	2,612	8,322	8,221	326	335	6.3	14.4	3.9	0.31x	0.32x	8.0	7.8	13.3	10.1	10.0	
PC Connection, Inc.	46.14	81.9	1,205	1,062	2,708	2,590	107	95	-8.2	15.7	4.0	0.39x	0.41x	9.9	11.2	17.9	20.6	NA	
ePlus inc.	68.74	69.0	932	907	1,541	1,501	99	108	-2.0	23.5	6.2	0.59x	0.60x	9.2	8.4	13.1	12.5	10.0	
Converge Technology Solutions Corp.	2.24	96.1	161	291	627	756	28	41	55.2	21.5	4.5	0.46x	0.38x	10.2	7.1	NA	81.4	97.0	
Pivot Technology Solutions, Inc.	1.95	98.9	75	199	1,113	1,456	23	34	19.5	13.1	2.1	0.18x	0.14x	8.5	5.9	4.8	12.2	NA	
Median									2.2%	17.0%	4.2%	0.43x	0.40x	9.5x	8.1x	13.3x	16.6x	10.0%	
Mean									11.5%	17.7%	4.8%	0.52x	0.51x	10.1x	9.2x	14.8x	26.3x	31.5%	

Source: FactSet; based on consensus estimates.

IT Solution Provider - Europe										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Growth
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	Rate	
			Equity	Enterprise	LTM	2020E	LTM	2020E											
Bechtle AG	\$169.54	79.3%	\$7,121	\$7,367	\$6,521	\$6,721	\$378	\$412	16.9%	13.7%	5.8%	1.13x	1.10x	19.5x	17.9x	34.2x	32.7x	11.6%	
SoftwareONE Holding Ltd.	24.25	77.0	3,846	3,261	8,548	8,650	201	258	8.4	2.8	2.6	0.38x	0.38x	16.3	12.6	27.4	24.7	15.4	
Softcat Plc	14.20	72.9	2,822	2,736	1,399	1,444	126	127	8.9	21.9	9.0	1.96x	1.90x	21.6	21.5	28.6	28.7	NA	
CANCOM SE	41.80	63.3	1,611	1,474	1,864	1,929	129	140	12.8	6.3	6.9	0.79x	0.76x	11.4	10.5	41.4	28.8	15.2	
Computacenter Plc	28.69	86.3	3,274	3,258	6,607	6,746	318	316	6.4	13.3	5.1	0.49x	0.48x	10.2	10.3	21.5	19.7	NA	
Asseco Poland S.A.	16.10	78.8	1,336	2,092	2,969	3,020	456	446	21.6	21.5	15.3	0.70x	0.69x	4.6	4.7	15.2	14.2	NA	
Atea ASA	11.46	75.5	1,262	1,401	4,097	4,045	159	153	1.9	4.0	3.8	0.34x	0.35x	8.8	9.2	22.3	21.4	NA	
Dustin Group AB	6.48	76.8	575	800	1,494	1,502	82	81	12.6	15.5	5.5	0.54x	0.53x	9.8	9.8	18.3	12.8	NA	
Crayon Group Holding ASA	11.09	82.0	901	774	1,841	2,035	32	41	37.4	1.1	1.9	0.42x	0.38x	24.4	18.9	NA	68.9	NA	
Comarch S.A.	50.12	80.1	408	381	384	390	71	58	5.4	30.2	18.4	0.99x	0.98x	5.4	6.5	12.8	17.7	NA	
Datatec Limited	1.37	53.6	276	405	4,169	-	152	-	NA	14.8	3.6	0.10x	NA	2.7	NA	25.8	14.9	NA	
Plaisio Computers SA	3.83	89.6	85	92	386	372	16	15	NA	19.3	4.0	0.24x	0.25x	5.9	6.3	34.2	36.5	32.5	
Byte Computer ABEE	1.20	85.3	19	20	34	-	3	-	NA	15.5	7.9	0.57x	NA	7.0	NA	14.9	NA	NA	
Median									10.7%	14.8%	5.5%	0.54x	0.53x	9.8x	10.3x	24.0x	23.0x	15.3%	
Mean									13.2%	13.8%	6.9%	0.67x	0.71x	11.4x	11.7x	24.7x	26.8x	18.7%	

Source: FactSet; based on consensus estimates.

IT Distributors										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		EPS
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Growth
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	Rate	
Arrow Electronics, Inc.	\$79.80	93.0%	\$6,029	\$8,325	\$27,557	\$27,882	\$1,030	\$1,062	-2.7%	10.5%	3.8%	0.30x	0.30x	8.1x	7.8x	13.8x	10.9x	4.3%	
SYNNEX Corporation	137.18	87.7	7,071	9,020	23,843	23,806	1,180	1,174	0.2	10.3	5.0	0.38x	0.38x	7.6	7.7	14.5	11.1	9.4	
Avnet, Inc.	25.78	59.9	2,546	3,750	17,727	17,615	417	419	-5.0	11.5	2.4	0.21x	0.21x	9.0	9.0	NA	13.4	8.5	
ScanSource, Inc.	20.44	52.4	519	737	3,048	3,028	102	99	-12.7	10.6	3.4	0.24x	0.24x	7.2	7.5	NA	10.3	10.0	
TESSCO Technologies Incorporated	5.62	41.6	49	93	507	467	NA	NA	-16.0	16.1	-2.9	0.18x	0.20x	NA	NA	NA	NA	NA	
Median									-5.0%	10.6%	3.4%	0.24x	0.24x	7.9x	7.8x	14.2x	11.0x	8.9%	
Mean									-7.3%	11.8%	2.3%	0.26x	0.27x	8.0x	8.0x	14.2x	11.4x	8.0%	

Source: FactSet; based on consensus estimates.

SaaS										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Growth	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Rate	LTM	LTM	LTM	2020E	LTM	2020E	LTM	2020E	Rate	
salesforce.com, inc.	\$232.45	81.7%	\$211,530	\$211,221	\$19,380	\$20,465	\$3,602	\$6,107	22.0%	67.4%	14.0%	10.90x	10.32x	58.6x	34.6x	91.1x	63.1x	10.2%	
ServiceNow, Inc.	476.00	89.2	92,868	95,334	4,221	4,477	614	1,430	29.4	70.5	18.7	NA	NA	155.1	66.7	134.7	105.3	34.7	
Workday, Inc. Class A	205.48	82.6	36,370	47,871	3,980	4,213	NA	1,039	18.4	71.2	-0.9	12.03x	11.36x	NM	46.1	NM	83.0	24.0	
Splunk Inc.	191.34	84.7	30,690	30,986	2,343	2,327	NA	48	0.7	78.3	-19.4	13.22x	13.32x	NM	NM	NM	NM	33.5	
Twilio, Inc. Class A	277.74	81.3	38,956	38,330	1,545	1,665	NA	145	46.8	49.8	-15.3	NA	NA	NM	NM	NM	NM	17.7	
Paycom Software, Inc.	360.60	90.7	21,107	20,178	792	828	275	312	12.3	82.4	34.6	NA	NA	73.5	64.7	119.6	109.6	25.0	
SS&C Technologies Holdings, Inc.	59.90	89.8	15,429	22,956	4,668	4,632	1,747	1,835	-0.8	44.4	37.1	4.92x	4.96x	13.1	12.5	27.9	14.2	9.3	
Slack Technologies, Inc. Class A	25.05	62.5	12,102	13,467	768	856	NA	NA	40.1	86.8	-31.9	17.53x	15.74x	NM	NM	NM	NM	30.0	
Coupa Software, Inc.	247.29	69.9	17,025	16,864	458	489	NA	68	29.1	61.8	-3.6	NA	NA	NM	NM	NM	NM	37.3	
NICE Ltd	230.72	95.8	14,473	14,652	1,674	1,645	440	542	4.2	63.8	26.3	8.75x	8.91x	33.3	27.1	70.5	41.1	10.0	
Fair Isaac Corporation	390.85	86.3	11,334	12,532	1,226	1,255	326	427	6.5	70.5	26.9	10.23x	9.99x	38.5	29.4	50.6	42.6	10.0	
Zendesk, Inc.	109.97	93.7	12,693	12,949	974	1,022	NA	113	25.2	74.9	-8.9	13.29x	12.67x	NM	114.9	NM	NM	43.3	
Sage Group plc	8.07	78.0	8,822	9,157	2,537	2,442	692	618	-1.6	87.3	27.3	3.61x	3.75x	13.2	14.8	20.1	23.4	1.7	
HubSpot, Inc.	290.88	88.0	13,254	12,413	762	831	NA	91	23.2	80.8	-2.1	16.28x	14.93x	NM	136.0	NM	NM	21.5	
Xero Limited	78.07	90.7	11,151	11,152	486	529	93	117	28.5	71.5	19.0	NA	NA	120.6	95.5	NM	NM	NA	
Paylocity Holding Corp.	180.56	92.0	9,794	9,972	561	593	108	155	15.4	67.1	19.2	17.77x	16.81x	92.5	64.2	156.3	108.3	20.0	
LogMeIn, Inc.	-	-	-	-	1,313	-	370	-	NA	62.8	28.2	NA	NA	NM	NM	NM	NM	NA	
Envestnet, Inc.	78.28	84.6	4,209	4,780	958	981	123	222	7.8	16.5	14.8	4.99x	4.87x	38.9	21.5	NM	33.8	NA	
New Relic, Inc.	59.32	79.9	3,574	3,203	621	652	NA	82	14.6	81.8	-1.5	5.16x	4.92x	NM	39.3	NM	NM	34.6	
Software AG	35.68	67.5	2,640	2,320	1,049	978	270	221	-0.1	74.7	25.7	2.21x	2.37x	8.6	10.5	16.8	18.4	NA	
Cloudera, Inc.	9.81	69.1	3,066	2,715	835	845	NA	197	10.0	65.8	-13.3	3.25x	3.22x	NM	13.8	NM	33.3	11.0	
Cornerstone Ondemand, Inc.	37.78	58.6	2,438	3,582	629	718	91	217	24.5	72.1	14.4	5.69x	4.99x	39.6	16.5	NM	36.0	NA	
Zuora, Inc. Class A	9.51	53.5	1,001	1,006	291	295	NA	NA	8.4	54.0	-19.2	3.46x	3.41x	NM	NM	NM	NM	NA	
Blucora, Inc.	10.10	38.1	485	815	723	741	45	89	3.3	39.0	6.8	1.13x	1.10x	17.9	9.2	NM	10.6	15.0	
Median									14.6%	70.5%	14.2%	7.22x	6.95x	38.9x	32.0x	70.5x	38.5x	20.8%	
Mean									16.0%	66.5%	8.2%	8.58x	8.20x	54.1x	45.4x	76.4x	51.6x	21.6%	

Source: FactSet; based on consensus estimates.

Enterprise Applications										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA					P/E		Growth
\$ 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	2020E	LTM	2020E	LTM	2020E	Rate	
Microsoft Corporation	\$202.33	86.9%	\$1,529,715	\$1,490,433	\$147,114	\$150,786	\$68,619	\$69,990	12.3%	68.3%	46.3%	10.13x	9.88x	21.7x	21.3x	32.6x	32.3x	14.8%	
Adobe Inc.	444.94	82.9	213,446	215,258	12,413	12,976	4,720	6,253	14.8	84.6	38.9	17.34x	16.59x	45.6	34.4	56.1	44.3	16.0	
Oracle Corporation	56.45	90.2	169,965	204,526	39,217	39,584	17,551	19,225	1.0	76.1	44.8	5.22x	5.17x	11.7	10.6	17.7	13.9	6.6	
SAP SE	104.94	61.9	128,917	135,819	32,767	31,950	9,536	10,806	5.1	70.7	29.0	4.14x	4.25x	14.2	12.6	21.7	17.1	8.4	
International Business Machines Corp	112.91	71.1	100,609	156,071	75,031	73,930	16,206	14,473	-4.2	46.2	21.7	2.08x	2.11x	9.6	10.8	12.8	13.4	NA	
Intuit Inc.	316.42	87.9	82,841	80,121	7,679	7,926	2,454	2,990	10.8	82.0	32.0	10.43x	10.11x	32.6	26.8	45.7	39.0	14.7	
Veeva Systems Inc Class A	268.04	85.4	36,380	41,673	1,283	1,394	347	554	28.6	71.5	27.4	NA	NA	NA	NA	NA	NA	15.3	
Citrix Systems, Inc.	114.43	65.9	14,136	15,405	3,237	3,209	896	1,121	6.6	83.2	27.5	4.76x	4.80x	17.2	13.7	24.6	19.1	7.6	
VMware, Inc. Class A	127.00	73.3	14,339	56,371	11,138	11,551	2,446	4,321	8.4	82.1	18.9	5.06x	4.88x	23.0	13.0	30.0	19.2	19.3	
Hewlett Packard Enterprise Co.	8.91	50.7	11,462	23,243	26,827	26,713	4,201	4,578	-7.0	30.3	15.7	0.87x	0.87x	5.5	5.1	NA	6.6	1.1	
Aspen Technology, Inc.	111.09	77.7	7,523	7,815	590	660	258	349	11.2	89.6	43.8	13.24x	11.84x	30.2	22.4	33.9	25.4	15.0	
Manhattan Associates, Inc.	85.42	80.5	5,426	5,365	592	577	120	138	-6.6	52.0	20.3	9.06x	9.29x	44.7	38.8	65.8	52.1	NA	
Tenable Holdings, Inc.	34.46	81.3	3,553	3,299	419	436	NA	28	22.9	81.9	-11.6	7.87x	7.57x	NA	NA	NA	NA	85.6	
Median									8.4%	76.1%	27.5%	6.54x	6.37x	21.7x	13.7x	31.3x	19.2x	14.8%	
Mean									8.0%	70.6%	27.3%	7.52x	7.28x	23.3x	19.0x	34.1x	25.7x	18.6%	

Source: FactSet; based on consensus estimates.

Cyber Security										'19 - '20E		Valuation Multiples						EPS	
As of November 2, 2020										Revenue	Gross	EBITDA					Growth		
\$ 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	2020E	LTM	2020E	LTM	2020E	Rate	
Fortinet, Inc.	\$110.59	72.8%	\$17,897	\$16,657	\$2,458	\$2,565	\$607	\$754	19.0%	77.9%	24.8%	6.78x	6.49x	27.5x	22.1x	41.2x	34.2x	15.4%	
Palo Alto Networks, Inc.	221.85	80.7	21,068	21,225	3,408	3,669	326	845	18.0	63.2	9.6	6.23x	5.79x	NA	25.1	NA	42.7	17.8	
Okta, Inc. Class A	203.86	81.2	24,455	25,157	704	784	NA	NA	37.6	73.0	-22.5	NA	NA	NA	NA	NA	121.9		
Akamai Technologies, Inc.	95.81	79.8	15,589	17,219	3,124	3,181	1,141	1,391	9.9	61.2	36.0	5.51x	5.41x	15.1	12.4	28.1	18.4	12.7	
Check Point Software Technologies Ltd	115.51	88.2	16,195	14,691	2,045	2,057	929	1,054	3.1	89.1	45.4	7.18x	7.14x	15.8	13.9	19.5	17.2	7.3	
NortonLifeLock Inc.	20.94	73.0	12,376	15,417	2,454	2,496	972	1,312	-18.0	86.4	45.8	6.28x	6.18x	15.9	11.8	4.2	16.8	4.7	
Zscaler, Inc.	134.43	82.1	17,867	16,920	431	497	NA	58	39.4	77.5	-8.2	NA	NA	NA	NA	NA	NA	64.1	
F5 Networks, Inc.	131.23	83.9	8,018	7,572	2,351	2,387	569	819	5.3	82.3	24.2	3.22x	3.17x	13.3	9.2	26.2	13.8	11.0	
CrowdStrike Holdings, Inc. Class A	124.47	80.9	22,954	25,953	654	793	NA	49	71.7	72.1	-13.2	NA	NA	NA	NA	NA	NA	25.0	
Trend Micro Incorporated	56.30	86.6	7,914	6,150	1,612	1,657	536	503	11.3	80.7	33.2	3.82x	3.71x	11.5	12.2	28.0	28.0	NA	
Proofpoint, Inc.	93.57	70.4	5,400	5,212	1,018	1,044	22	179	17.6	72.0	2.2	5.12x	4.99x	NA	29.1	NA	50.0	23.0	
Avast Plc	5.86	74.4	6,020	6,866	906	891	480	497	2.1	75.2	53.0	7.58x	7.70x	14.3	13.8	25.4	17.2	4.7	
SolarWinds Corp.	20.85	93.1	6,490	8,210	1,001	1,020	411	486	9.3	65.9	39.9	8.20x	8.05x	20.0	16.9	NA	21.3	49.2	
Aisino Corp. Class A	2.09	56.5	3,873	3,243	3,793	4,599	374	420	-3.8	19.0	8.2	0.86x	0.71x	8.7	7.7	57.0	20.5	NA	
CyberArk Software Ltd.	99.71	68.8	3,862	3,419	451	462	45	92	6.5	75.4	17.6	7.58x	7.40x	NA	37.2	NA	54.4	15.3	
Qualys, Inc.	89.87	71.8	3,527	3,384	342	360	120	160	12.0	79.0	35.5	9.88x	9.40x	28.3	21.2	43.4	33.9	NA	
Tenable Holdings, Inc.	34.46	81.3	3,553	3,299	419	436	NA	28	22.9	81.9	-11.6	7.87x	7.57x	NA	NA	NA	NA	85.6	
FireEye, Inc.	13.63	74.3	3,074	3,152	928	932	NA	145	4.8	61.6	-4.4	3.40x	3.38x	NA	21.7	NA	47.3	37.8	
Mimecast Limited	38.05	69.9	2,430	2,484	443	476	75	94	17.6	74.6	17.6	5.61x	5.22x	33.1	26.3	NA	56.0	25.0	
Rapid7 Inc.	62.28	91.9	3,177	3,299	368	402	NA	17	23.0	68.9	-10.0	8.96x	8.20x	NA	NA	NA	NA	NA	
Varonis Systems, Inc.	116.43	83.9	3,694	3,629	270	281	NA	NA	10.6	84.7	-24.7	13.44x	12.90x	NA	NA	NA	NA	83.9	
SailPoint Technologies Holdings, Inc.	41.95	87.2	3,804	3,723	333	342	30	23	18.5	76.9	8.5	11.19x	10.88x	NA	NA	NA	NA	17.9	
Radware Ltd.	22.20	82.3	1,025	856	249	247	22	32	-2.0	82.0	8.8	3.44x	3.47x	38.8	26.8	58.8	34.7	18.5	
F-Secure Oyj	4.00	89.8	635	640	257	256	35	43	8.0	70.2	13.5	2.49x	2.50x	18.5	15.0	50.3	36.8	NA	
Zix Corporation	6.23	67.1	355	636	204	215	32	51	23.9	44.5	16.9	3.12x	2.96x	20.1	12.5	NA	10.6	NA	
SecureWorks Corp. Class A	10.56	57.9	129	700	563	556	6	31	1.2	53.2	1.1	1.24x	1.26x	NA	22.6	NA	54.0	NA	
Techpoint, Inc.	4.44	54.3	28	59	35	28	4	1	-90.2	50.7	12.3	1.67x	2.08x	13.7	NA	25.2	34.4	NA	
Median									10.6%	74.6%	12.3%	5.92x	5.60x	15.9x	16.9x	28.0x	34.1x	18.5%	
Mean									10.3%	70.3%	13.3%	5.86x	5.69x	19.6x	18.8x	33.9x	32.1x	33.7%	

Source: FactSet; based on consensus estimates.