

## 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	31.5%	14.0%	2.3%	12.0%	1.38x	13.2x	18.7x
IT Services - Europe	20.7	15.1	-2.5	14.1	1.06	8.9	18.7
IT Services - India	24.1	16.4	2.8	8.5	1.38	7.3	12.0
IT Services - China	29.8	9.9	18.6	37.6	2.26	28.1	46.3
IT Staff Augmentation	27.0	7.4	-5.2	10.2	0.84	12.3	19.9
<b>IT SUPPLY CHAIN SERVICES</b>							
IT Solution Providers - North America	16.3%	4.3%	-0.4%	9.6%	0.35x	8.7x	13.7x
IT Solution Providers - Europe	14.6	5.0	2.9	10.5	0.68	10.5	21.8
IT Products Distributors	11.1	3.3	-8.4	9.4	0.29	10.3	15.6
<b>SOFTWARE</b>							
SaaS	70.6%	12.6%	12.5%	22.3%	7.21x	26.3x	41.8x
Enterprise Applications	75.7	28.3	5.7	12.7	6.30	19.8	27.6
Cyber Security	74.0	9.8	8.9	15.0	5.62	15.4	25.6

IT Services - North America										'19 - '20E		Valuation Multiples						EPS	
As of May 8, 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	\$188.57	87.1%	\$120,124	\$120,923	\$44,656	\$44,831	\$7,564	\$8,034	3.1%	31.5%	16.9%	2.71x	2.70x	16.0x	15.1x	24.6x	24.1x	7.4%	
CGI Inc. Class A	65.25	74.9	15,019	20,154	8,729	8,700	1,666	1,697	-3.6	13.9	17.7	2.31x	2.32x	12.1	11.9	19.8	18.9	7.8	
EPAM Systems, Inc.	224.50	90.4	12,481	12,250	2,294	2,579	406	462	12.5	33.3	17.4	5.34x	4.75x	30.2	26.5	49.6	40.6	20.0	
Booz Allen Hamilton Holding Corporatior	73.34	89.4	10,283	12,132	7,274	7,831	748	794	8.1	22.7	10.8	1.67x	1.55x	16.2	15.3	24.1	21.8	13.5	
Genpact Limited	35.68	78.9	6,785	8,331	3,514	3,742	520	632	6.3	33.3	14.8	2.37x	2.23x	16.0	13.2	22.8	17.4	11.7	
CACI International Inc Class A	247.11	85.6	6,199	8,116	5,598	5,891	554	600	10.4	33.0	10.2	1.45x	1.38x	14.7	13.5	22.7	18.7	11.1	
DXC Technology Co.	17.62	29.4	4,469	12,787	20,042	18,499	3,444	3,022	-6.9	15.8	17.2	0.64x	0.69x	3.7	4.2	NA	3.5	NA	
ManTech International Corporation Class	72.85	77.5	1,972	3,128	2,332	2,408	219	212	8.4	12.7	10.4	1.34x	1.30x	14.3	14.7	24.2	27.0	7.7	
ICF International, Inc.	64.82	68.1	1,220	1,865	1,496	1,489	154	131	0.7	33.3	10.8	1.25x	1.25x	12.1	14.2	19.4	18.1	12.0	
Perficient, Inc.	35.80	66.6	1,184	1,235	566	578	77	94	2.3	33.8	14.0	2.18x	2.14x	16.0	13.2	31.1	18.2	12.0	
Virtusa Corporation	34.78	63.9	1,039	1,475	1,312	1,302	114	138	0.7	28.1	8.8	1.12x	1.13x	12.9	10.7	36.0	15.8	18.0	
Unisys Corporation	11.46	63.2	722	167	2,768	2,002	401	272	-32.1	23.5	14.5	0.06x	0.08x	0.4	0.6	NA	17.9	NA	
Hackett Group, Inc.	14.09	74.6	422	440	285	250	40	28	-11.3	33.2	14.3	1.55x	1.76x	11.0	15.6	21.1	23.6	15.7	
Information Services Group, Inc.	2.65	70.4	125	203	266	264	20	31	-0.7	39.8	7.6	0.76x	0.77x	10.1	6.5	37.7	41.4	14.0	
RCM Technologies, Inc.	1.46	35.0	19	59	191	196	8	9	2.5	24.6	4.3	0.31x	0.30x	7.2	6.3	4.7	4.0	NA	
<b>Median</b>									<b>2.3%</b>	<b>31.5%</b>	<b>14.0%</b>	<b>1.45x</b>	<b>1.38x</b>	<b>12.9x</b>	<b>13.2x</b>	<b>24.1x</b>	<b>18.7x</b>	<b>12.0%</b>	
<b>Mean</b>									<b>0.0%</b>	<b>27.5%</b>	<b>12.6%</b>	<b>1.67x</b>	<b>1.62x</b>	<b>12.9x</b>	<b>12.1x</b>	<b>26.0x</b>	<b>20.7x</b>	<b>12.6%</b>	

Source: FactSet; based on consensus estimates.

IT Services - Europe										'19 - '20E		Valuation Multiples						EPS	
As of May 8, 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	
Amadeus IT Group SA Class A	\$44.24	50.6%	\$19,930	\$22,448	\$6,054	\$4,314	\$2,436	\$1,282	-29.6%	33.3%	40.2%	3.71x	5.20x	9.2x	17.5x	15.8x	38.6x	1.3%	
Capgemini SE	96.72	72.6	16,389	18,132	15,353	17,049	2,405	2,491	11.3	26.7	15.7	1.18x	1.06x	7.5	7.3	17.3	14.5	14.1	
Sage Group plc	7.89	75.9	8,602	9,122	2,403	2,326	615	564	-5.1	88.8	25.6	3.80x	3.92x	14.8	16.2	25.9	23.6	2.8	
Atos SE	71.91	79.5	7,852	11,126	12,595	12,188	1,959	1,577	-2.5	22.3	15.6	0.88x	0.91x	5.7	7.1	15.2	9.5	6.9	
Globant SA	124.25	87.7	4,616	4,708	659	765	132	150	16.0	33.8	20.0	7.14x	6.15x	35.7	31.4	84.2	52.5	NA	
TietoEVRY Oyj	23.88	70.0	2,828	4,000	2,250	3,014	339	444	60.3	18.5	15.8	1.78x	1.33x	11.8	9.0	22.4	12.3	NA	
Reply S.p.A.	72.95	84.1	2,729	2,615	1,285	1,310	183	200	0.1	48.2	14.2	2.03x	2.00x	14.3	13.1	22.1	23.3	NA	
Netcompany Group A/S	51.69	92.8	2,584	2,671	372	413	101	116	14.5	34.8	27.2	7.18x	6.47x	26.4	22.9	45.5	31.3	16.5	
Alten SA	75.35	57.1	2,573	2,670	2,852	2,648	344	215	-6.5	16.4	12.0	0.94x	1.01x	7.8	12.4	14.1	21.0	3.7	
Sopra Steria Group SA	112.10	63.8	2,302	3,298	4,819	4,651	533	427	-3.3	15.5	11.1	0.68x	0.71x	6.2	7.7	13.0	14.0	6.4	
Indra Sistemas, S.A. Class A	8.39	66.5	1,482	2,413	3,482	3,435	375	361	-2.7	20.7	10.8	0.69x	0.70x	6.4	6.7	11.2	11.0	14.8	
Kainos Group PLC	9.34	79.4	1,140	1,099	212	224	31	34	8.5	46.0	14.7	5.18x	4.90x	35.2	31.9	46.2	41.1	16.0	
Endava Plc Sponsored ADR Class A	47.10	83.0	876	2,450	406	461	37	100	18.1	30.9	NA	6.04x	5.32x	NA	24.4	NA	38.7	20.0	
Devoteam SA	77.52	61.5	646	650	828	795	104	84	-7.5	14.4	12.6	0.78x	0.82x	6.2	7.7	14.0	22.5	NA	
Neurones SA	21.96	85.5	533	358	554	507	69	50	-11.1	11.1	12.5	0.64x	0.70x	5.2	7.2	15.9	22.6	NA	
Wavestone SA	20.29	63.3	410	512	438	441	68	58	-1.8	24.3	15.5	1.17x	1.16x	7.5	8.9	12.6	15.0	NA	
NNIT A/S	16.12	59.5	403	470	445	413	73	65	-8.3	15.3	16.4	1.05x	1.14x	6.4	7.2	14.9	18.0	NA	
Aubay SA	27.94	71.3	369	384	454	442	55	43	-3.8	10.9	12.0	0.85x	0.87x	7.0	8.9	12.8	18.7	NA	
Allgeier SE	31.31	74.5	349	546	850	879	66	86	3.1	12.6	7.8	0.64x	0.62x	8.3	6.4	20.0	13.5	66.3	
Columbus A/S	1.01	50.9	125	150	281	267	23	27	-4.3	15.7	7.8	0.53x	0.56x	6.4	5.6	41.6	7.7	NA	
Prodware SA	5.96	56.0	46	193	204	205	38	53	-1.4	8.0	19.9	0.95x	0.94x	5.1	3.6	4.0	3.6	NA	
<b>Median</b>									<b>-2.5%</b>	<b>20.7%</b>	<b>15.1%</b>	<b>1.05x</b>	<b>1.06x</b>	<b>7.5x</b>	<b>8.9x</b>	<b>15.8x</b>	<b>18.7x</b>	<b>14.1%</b>	
<b>Mean</b>									<b>2.1%</b>	<b>26.1%</b>	<b>16.4%</b>	<b>2.28x</b>	<b>2.21x</b>	<b>11.7x</b>	<b>12.5x</b>	<b>23.4x</b>	<b>21.6x</b>	<b>15.3%</b>	

Source: FactSet; based on consensus estimates.

IT Services - India										'19 - '20E		Valuation Multiples						EPS	
As of May 8, 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	
Tata Consultancy Services Limited	\$25.06	76.1%	\$94,042	\$90,472	\$20,601	\$20,888	\$5,527	\$5,516	1.9%	33.5%	26.8%	4.39x	4.33x	16.4x	16.4x	22.2x	22.4x	6.2%	
Infosys Limited	8.93	75.6	38,031	35,452	11,917	12,424	2,923	2,977	-0.7	30.4	24.5	2.97x	2.85x	12.1	11.9	17.5	17.3	9.3	
Cognizant Technology Solutions Corp	57.10	79.9	31,324	30,347	16,783	16,268	3,192	2,861	-3.1	33.6	19.0	1.81x	1.87x	9.5	10.6	17.4	16.3	11.0	
HCL Technologies Limited	6.86	78.4	18,616	18,782	8,936	9,697	2,107	2,277	5.7	26.1	23.8	2.10x	1.94x	8.9	8.3	13.6	12.7	7.2	
Wipro Limited	2.44	56.4	13,914	11,135	8,010	8,045	1,605	1,559	-0.4	28.5	20.0	1.39x	1.38x	6.9	7.1	11.1	11.6	7.2	
Tech Mahindra Limited	7.09	60.1	6,852	5,613	4,839	4,967	752	768	1.0	30.3	15.5	1.16x	1.13x	7.5	7.3	11.7	11.9	7.6	
Larsen & Toubro Infotech Ltd	20.96	73.0	3,650	3,489	1,359	1,554	253	291	10.1	24.8	18.6	2.57x	2.25x	13.8	12.0	18.8	17.4	15.4	
Oracle Financial Services Software Lir	32.44	64.8	2,786	2,296	632	672	287	316	1.1	50.6	44.8	3.63x	3.42x	8.0	7.3	14.0	12.5	NA	
Mindtree Limited	11.79	79.8	1,941	1,848	1,019	1,054	146	157	4.1	10.7	14.3	1.81x	1.75x	12.7	11.8	23.4	21.1	4.5	
Mphasis Limited	9.79	66.5	1,826	1,763	1,119	1,237	203	228	7.5	27.0	18.4	1.58x	1.43x	8.7	7.7	12.7	12.0	6.5	
L&T Technology Services Ltd.	15.47	59.3	1,616	1,604	724	797	143	160	7.6	24.1	20.0	2.22x	2.01x	11.2	10.0	15.2	14.3	12.8	
NIIT Technologies Limited	18.54	64.3	1,159	1,041	549	589	95	103	7.9	33.4	17.3	1.89x	1.77x	11.0	10.1	19.8	19.0	12.8	
Persistent Systems Limited	6.99	67.3	534	406	468	485	65	69	2.7	23.9	13.8	0.87x	0.84x	6.3	5.9	12.0	12.0	10.6	
Sonda S.A.	0.60	40.8	523	726	1,017	1,063	99	113	-1.2	16.2	9.7	0.71x	0.68x	7.3	6.4	16.9	30.1	NA	
Cyient Limited	2.76	33.3	304	270	593	559	82	75	-7.1	19.9	13.9	0.46x	0.48x	3.3	3.6	4.9	6.2	NA	
Sonata Software Limited	2.78	52.8	293	249	479	469	50	57	7.7	17.0	10.5	0.52x	0.53x	5.0	4.4	7.9	7.2	NA	
Birlasoft Limited	0.95	64.6	263	212	416	468	44	58	NA	18.2	11.1	0.51x	0.45x	4.9	3.7	9.0	7.7	NA	
Zensar Technologies Limited	1.11	28.4	250	282	554	580	65	72	2.9	19.2	11.9	0.51x	0.49x	4.3	3.9	6.9	7.7	7.3	
KPIT Technologies Limited	0.70	44.9	193	169	276	304	37	43	-0.4	NA	NA	0.61x	0.55x	4.5	3.9	10.3	8.5	25.0	
Mastek Limited	3.57	48.8	87	67	131	160	16	23	15.2	20.6	12.3	0.51x	0.42x	4.1	2.9	6.4	5.9	NA	
Sasken Technologies Ltd	5.03	46.7	76	63	65	71	12	16	4.4	15.6	17.9	0.98x	0.89x	5.5	3.9	7.9	6.4	NA	
Xchanging Solutions Limited	0.49	52.1	54	13	24	-	6	-	NA	NA	NA	0.54x	NA	2.3	NA	8.9	NA	NA	
3i Infotech Limited	0.02	33.0	30	139	153	-	22	-	NA	24.2	14.7	0.91x	NA	6.2	NA	3.0	NA	NA	
Rolta India Limited	0.05	46.9	9	1,064	195	-	NA	-	NA	-15.8	-267.4	5.45x	NA	NA	NA	NA	NA	NA	
Allied Digital Services Limited	0.17	45.1	8	13	39	-	7	-	NA	22.2	16.4	0.34x	NA	2.0	NA	3.0	NA	NA	
<b>Median</b>									<b>2.8%</b>	<b>24.1%</b>	<b>16.4%</b>	<b>1.16x</b>	<b>1.38x</b>	<b>7.1x</b>	<b>7.3x</b>	<b>11.8x</b>	<b>12.0x</b>	<b>8.5%</b>	
<b>Mean</b>									<b>3.4%</b>	<b>23.2%</b>	<b>5.6%</b>	<b>1.62x</b>	<b>1.50x</b>	<b>7.6x</b>	<b>7.6x</b>	<b>12.3x</b>	<b>13.3x</b>	<b>10.2%</b>	

Source: FactSet; based on consensus estimates.

IT Professional Services - China										'19 - '20E		Valuation Multiples						EPS	
As of May 8, 2020										Growth	Gross	EBITDA	EV/Rev		EV/EBITDA		P/E		Growth
\$ in millions except per share data										Rate	Margin	Margin	LTM	2020E	LTM	2020E	LTM	2020E	Rate
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Growth Rate	Margin LTM	Margin LTM	EV/Rev		EV/EBITDA		P/E		EPS Growth Rate	
			Equity	Enterprise	LTM	2020E	LTM	2020E				LTM	2020E	LTM	2020E	LTM	2020E		
Inspur Electronic Information Industry (	\$6.04	90.8%	\$8,706	\$9,088	\$7,504	\$9,160	\$158	\$282	25.3%	12.2%	2.7%	1.21x	0.99x	NA	32.3x	61.5x	46.3x	37.6%	
Wonders Information Co., Ltd. Class A	3.06	87.1	3,593	3,832	287	356	NA	-	18.7	30.5	23.3	13.36x	10.76x	NA	NA	NA	67.9	NA	
Beijing Thunisoft Corporation Limited (	3.86	79.5	3,121	2,880	460	619	101	121	25.0	39.8	20.4	6.26x	4.65x	28.6	23.9	44.1	30.8	NA	
Shanghai 2345 Network Holding Group	0.43	69.0	2,494	1,838	344	-	137	-	NA	88.6	32.8	5.35x	NA	13.4	NA	23.2	NA	NA	
Beijing Teamsun Technology Co., Ltd.	2.24	97.0	2,463	2,566	613	908	13	-	11.9	19.9	1.8	4.19x	2.83x	NA	NA	75.7	58.9	NA	
Neusoft Corporation Class A	1.61	72.2	1,997	1,997	1,112	1,182	52	48	-0.1	26.2	4.1	1.80x	1.69x	38.1	41.8	NA	NA	NA	
Chinasoft International Ltd.	0.63	83.8	1,642	1,704	1,762	2,009	174	178	18.5	29.8	9.9	0.97x	0.85x	9.8	9.6	13.9	13.1	NA	
Insigma Technology Co. Ltd. Class A	1.24	69.5	1,300	1,311	498	-	56	-	NA	31.7	10.8	2.63x	NA	23.3	NA	NA	NA	NA	
Shenzhen Forms Syntron Information (	5.17	74.4	977	924	74	-	14	-	NA	46.3	19.0	12.48x	NA	NA	NA	73.1	NA	NA	
Beyondsoft Corporation Class A	1.26	67.7	668	554	522	-	39	-	NA	22.1	NA	1.06x	NA	14.2	NA	19.2	NA	NA	
UEC Group Ltd. Class A	0.76	65.6	505	504	417	-	26	-	NA	16.4	-17.3	1.21x	NA	19.2	NA	NA	NA	NA	
Wiscom System Co., Ltd. Class A	1.20	64.6	484	628	279	-	18	-	NA	25.7	5.7	2.25x	NA	34.4	NA	35.4	NA	NA	
Bringspring Science & Technology Co.	0.82	63.5	472	468	103	-	4	-	NA	36.5	NA	4.52x	NA	NA	NA	70.1	NA	NA	
<b>Median</b>									<b>18.6%</b>	<b>29.8%</b>	<b>9.9%</b>	<b>2.63x</b>	<b>2.26x</b>	<b>21.2x</b>	<b>28.1x</b>	<b>44.1x</b>	<b>46.3x</b>	<b>37.6%</b>	
<b>Mean</b>									<b>16.5%</b>	<b>32.7%</b>	<b>10.3%</b>	<b>4.41x</b>	<b>3.63x</b>	<b>22.6x</b>	<b>26.9x</b>	<b>46.3x</b>	<b>43.4x</b>	<b>37.6%</b>	

Source: FactSet; based on consensus estimates.

IT Staff Augmentation										'19 - '20E		Valuation Multiples						EPS	
As of May 8, 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.	\$47.29	73.9%	\$5,420	\$5,395	\$6,113	\$5,108	\$671	\$430	-15.9%	40.4%	11.0%	0.88x	1.06x	8.0x	12.5x	12.6x	19.8x	2.7%	
ManpowerGroup Inc.	71.64	70.9	4,204	4,492	20,438	16,851	689	364	-19.2	16.1	3.4	0.22x	0.27x	6.5	12.3	10.4	21.3	1.5	
ASGN Inc	54.96	75.6	2,882	3,956	3,991	3,798	422	376	-3.2	27.0	10.4	0.99x	1.04x	9.4	10.5	16.0	14.3	7.8	
Insperty, Inc.	54.34	37.5	2,106	2,085	4,391	4,268	216	235	-1.1	16.2	4.9	0.47x	0.49x	9.6	8.9	15.9	15.3	15.0	
TechnoPro Holdings Inc.	56.28	75.5	2,034	2,035	1,459	1,584	164	159	11.5	25.4	11.2	1.40x	1.28x	12.4	12.8	19.4	19.9	10.3	
PageGroup PLC	4.42	60.2	1,451	1,459	2,053	1,455	208	138	-31.9	49.5	10.1	0.71x	1.00x	7.0	10.6	11.0	36.4	NA	
Kforce Inc.	30.92	72.5	703	802	1,347	1,277	81	61	-5.2	28.8	6.1	0.60x	0.63x	9.9	13.2	14.3	19.3	13.0	
Kelly Services, Inc. Class A	13.94	48.2	542	591	5,234	4,651	128	21	-13.1	17.9	2.4	0.11x	0.13x	4.6	27.6	NA	22.0	9.0	
Heidrick & Struggles International, Inc.	21.84	62.2	421	388	724	567	80	59	-19.8	30.0	10.9	0.54x	0.68x	4.9	6.6	9.8	22.1	10.0	
Mastech Digital, Inc.	17.09	95.8	191	222	199	198	14	-	2.4	25.7	7.4	1.12x	1.12x	15.6	NA	16.0	19.4	20.0	
Hudson Global, Inc.	9.35	57.7	25	(2)	94	100	NA	1	7.0	43.1	-0.1	NA	NA	NA	NA	NA	NA	20.0	
<b>Median</b>									<b>-5.2%</b>	<b>27.0%</b>	<b>7.4%</b>	<b>0.65x</b>	<b>0.84x</b>	<b>8.7x</b>	<b>12.3x</b>	<b>14.3x</b>	<b>19.9x</b>	<b>10.2%</b>	
<b>Mean</b>									<b>-8.1%</b>	<b>29.1%</b>	<b>7.1%</b>	<b>0.70x</b>	<b>0.77x</b>	<b>8.8x</b>	<b>12.8x</b>	<b>13.9x</b>	<b>21.0x</b>	<b>10.9%</b>	

Source: FactSet; based on consensus estimates.

IT Solution Provider - North America										'19 - '20E		Valuation Multiples						EPS	
As of May 8, 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	
CDW Corp.	\$108.58	74.3%	\$15,453	\$19,802	\$18,032	\$17,658	\$1,394	\$1,386	-2.1%	16.9%	7.8%	1.10x	1.12x	14.2x	14.3x	21.8x	19.5x	9.6%	
Insight Enterprises, Inc.	52.39	71.6	1,847	2,964	7,731	8,261	304	298	6.9	14.4	3.8	0.38x	0.36x	9.8	10.0	11.8	11.3	NA	
PC Connection, Inc.	40.83	72.5	1,066	982	2,899	2,827	128	120	0.2	15.6	4.4	0.34x	0.35x	7.7	8.2	12.8	13.8	10.0	
ePlus inc.	73.58	73.9	994	1,002	1,526	1,508	95	107	-1.0	22.6	5.8	0.66x	0.66x	10.5	9.3	13.9	13.8	2.8	
Converge Technology Solutions Corp.	0.90	69.2	64	197	489	695	21	36	42.8	21.6	4.3	0.40x	0.28x	9.4	5.5	NA	13.6	NA	
Pivot Technology Solutions, Inc.	1.10	73.0	43	155	1,150	1,178	25	29	-3.3	12.3	2.2	0.14x	0.13x	6.1	5.4	3.3	9.2	NA	
<b>Median</b>									<b>-0.4%</b>	<b>16.3%</b>	<b>4.3%</b>	<b>0.39x</b>	<b>0.35x</b>	<b>9.6x</b>	<b>8.7x</b>	<b>12.8x</b>	<b>13.7x</b>	<b>9.6%</b>	
<b>Mean</b>									<b>7.3%</b>	<b>17.2%</b>	<b>4.7%</b>	<b>0.50x</b>	<b>0.48x</b>	<b>9.6x</b>	<b>8.8x</b>	<b>12.7x</b>	<b>13.5x</b>	<b>7.5%</b>	

Source: FactSet; based on consensus estimates.

IT Solution Provider - Europe										'19 - '20E		Valuation Multiples						EPS			
As of May 8, 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	
Bechtle AG	\$161.24	98.5%	\$6,772	\$7,040	\$5,842	\$5,945	\$322	\$353	3.4%	13.4%	5.5%	1.21x	1.18x	21.9x	20.0x	36.5x	36.5x	10.5%			
SoftwareONE Holding Ltd.	22.31	82.0	3,537	3,101	7,844	7,997	193	242	0.6	2.9	2.5	0.40x	0.39x	16.1	12.8	26.5	26.2	1.7			
Softcat Plc	13.99	83.4	2,780	2,730	1,343	1,416	116	118	7.9	21.1	8.7	2.03x	1.93x	23.5	23.1	30.1	30.0	NA			
CANCOM SE	57.62	91.7	2,221	1,723	1,684	1,833	125	150	5.3	6.6	7.4	1.02x	0.94x	13.8	11.5	51.2	31.7	29.1			
Computacenter Plc	18.37	72.9	2,096	2,070	6,273	6,192	292	243	-2.3	13.0	4.7	0.33x	0.33x	7.1	8.5	16.4	17.4	NA			
Asseco Poland S.A.	17.46	98.9	1,449	2,149	2,550	2,530	387	369	1.9	21.6	15.2	0.84x	0.85x	5.6	5.8	18.8	16.4	NA			
Atea ASA	8.87	58.4	975	1,174	3,509	3,804	128	139	-4.4	4.1	3.6	0.33x	0.31x	9.2	8.4	22.2	17.4	NA			
Dustin Group AB	4.94	51.5	438	678	1,323	1,307	68	72	3.1	14.6	5.0	0.51x	0.52x	10.0	9.4	14.7	11.6	NA			
Crayon Group Holding ASA	5.70	70.6	436	454	1,307	1,636	26	34	10.4	1.2	2.0	0.35x	0.28x	17.4	13.4	NA	28.0	NA			
Comarch S.A.	50.22	89.3	408	396	344	375	56	58	2.7	29.6	16.3	1.15x	1.06x	7.1	6.9	14.8	14.7	NA			
Datatec Limited	1.33	50.3	268	549	3,383	-	99	-	NA	15.3	2.8	0.16x	NA	5.6	NA	22.4	NA	NA			
Plaisio Computers SA	3.23	64.9	71	99	336	-	10	-	NA	20.7	3.0	0.29x	NA	9.7	NA	20.4	NA	NA			
Byte Computer ABEE	0.99	62.1	16	18	28	-	2	-	NA	15.6	6.7	0.65x	NA	9.7	NA	43.2	NA	NA			
<b>Median</b>									<b>2.9%</b>	<b>14.6%</b>	<b>5.0%</b>	<b>0.51x</b>	<b>0.68x</b>	<b>9.7x</b>	<b>10.5x</b>	<b>22.3x</b>	<b>21.8x</b>	<b>10.5%</b>			
<b>Mean</b>									<b>2.9%</b>	<b>13.8%</b>	<b>6.4%</b>	<b>0.71x</b>	<b>0.78x</b>	<b>12.0x</b>	<b>12.0x</b>	<b>26.4x</b>	<b>23.0x</b>	<b>13.7%</b>			

Source: FactSet; based on consensus estimates.



IT Distributors										'19 - '20E		Valuation Multiples						EPS	
As of May 8, 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	
Arrow Electronics, Inc.	\$65.26	76.1%	\$5,134	\$7,739	\$28,142	\$26,357	\$987	\$962	-8.1%	10.5%	3.5%	0.28x	0.29x	7.8x	8.0x	NA	11.0x	3.9%	
Tech Data Corporation	139.98	92.4	4,969	5,955	36,998	35,730	762	734	-3.5	6.2	2.1	0.16x	0.17x	7.8	8.1	13.6	12.1	NA	
SYNNEX Corporation	91.43	59.7	4,706	8,103	23,772	21,485	1,236	656	-8.8	11.1	5.2	0.34x	0.38x	6.6	12.3	8.8	21.3	9.4	
Anixter International Inc.	94.40	95.0	3,210	4,573	8,809	8,001	451	355	-9.5	19.7	5.1	0.52x	0.57x	10.1	12.9	12.5	19.1	NA	
Avnet, Inc.	28.90	62.3	2,853	4,372	18,156	16,881	562	426	-8.4	12.0	3.1	0.24x	0.26x	7.8	10.3	NA	20.7	NA	
ScanSource, Inc.	26.83	68.8	680	1,031	3,851	3,245	128	127	-7.8	10.7	3.3	0.27x	0.32x	8.0	8.1	14.9	10.5	10.0	
TESSCO Technologies Incorporated	6.19	31.5	53	97	557	445	NA	3	-20.1	18.5	-0.2	0.17x	0.22x	NA	34.3	NA	NA	NA	
<b>Median</b>									<b>-8.4%</b>	<b>11.1%</b>	<b>3.3%</b>	<b>0.27x</b>	<b>0.29x</b>	<b>7.8x</b>	<b>10.3x</b>	<b>13.1x</b>	<b>15.6x</b>	<b>9.4%</b>	
<b>Mean</b>									<b>-9.5%</b>	<b>12.7%</b>	<b>3.2%</b>	<b>0.28x</b>	<b>0.31x</b>	<b>8.0x</b>	<b>13.4x</b>	<b>12.4x</b>	<b>15.8x</b>	<b>7.8%</b>	

Source: FactSet; based on consensus estimates.

SaaS																		
As of May 8, 2020																		
\$ in millions except per share data																		
Company	Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		'19 - '20E			Valuation Multiples						EPS
			Equity	Enterprise	LTM	2020E	LTM	2020E	Growth Rate	Gross Margin LTM	EBITDA Margin LTM	EV/Rev LTM	EV/Rev 2020E	EV/EBITDA LTM	EV/EBITDA 2020E	P/E LTM	P/E 2020E	Growth Rate
salesforce.com, inc.	\$175.66	89.8%	\$157,991	\$147,192	\$17,098	\$20,404	\$2,626	\$5,604	21.6%	68.0%	15.4%	8.61x	7.21x	56.1x	26.3x	NM	57.1x	11.9%
ServiceNow, Inc.	378.55	97.7	72,191	74,781	3,718	4,348	421	1,301	25.6	71.7	14.6	NA	17.20x	177.4	57.5	110.9	89.4	24.6
Workday, Inc. Class A	165.33	72.9	28,511	37,006	3,621	4,205	NA	907	18.1	70.6	-4.6	10.22x	8.80x	NM	40.8	NM	78.6	25.4
Splunk Inc.	153.54	87.1	24,382	23,441	2,359	2,540	NA	110	9.9	81.6	-8.3	9.94x	9.23x	NM	NM	NM	NM	32.9
Twilio, Inc. Class A	178.91	98.1	23,010	22,033	1,134	1,516	NA	94	33.6	50.6	-19.4	19.42x	14.53x	NM	NM	NM	NM	28.4
Paycom Software, Inc.	271.93	79.5	15,618	14,653	780	837	298	344	13.5	82.9	38.2	18.78x	17.50x	49.2	42.6	81.0	74.1	25.0
SS&C Technologies Holdings, Inc.	58.46	87.6	14,980	22,771	4,669	4,598	1,688	1,772	-1.5	44.2	37.2	4.88x	4.95x	13.5	12.9	33.9	15.0	8.5
Slack Technologies, Inc. Class A	31.41	74.8	13,362	12,044	630	839	NA	NA	37.3	84.6	-82.8	19.11x	14.36x	NM	NM	NM	NM	30.0
Coupa Software, Inc.	194.75	97.4	12,978	12,217	390	481	NA	48	27.0	62.7	-10.4	NA	NA	NM	NM	NM	NM	30.7
NICE Ltd	173.12	94.9	10,803	11,345	1,574	1,694	412	546	7.4	63.5	26.2	7.21x	6.70x	27.5	20.8	57.8	30.4	10.0
Fair Isaac Corporation	370.60	84.9	10,749	11,995	1,226	1,221	324	376	4.2	70.6	26.8	9.78x	9.83x	37.1	31.9	48.2	45.0	10.0
Zendesk, Inc.	78.20	82.4	8,932	8,995	870	1,009	NA	93	23.6	72.8	-13.2	10.34x	8.92x	NM	96.7	NM	175.9	43.3
Sage Group plc	7.89	75.9	8,602	9,122	2,403	2,326	615	564	-5.1	88.8	25.6	3.80x	3.92x	14.8	16.2	25.9	23.6	2.8
HubSpot, Inc.	184.72	88.8	8,043	7,394	675	807	NA	77	19.5	80.7	-2.5	10.96x	9.17x	NM	95.6	NM	NM	22.5
Xero Limited	53.83	88.9	7,639	7,677	379	494	73	108	18.1	71.1	19.2	NA	15.54x	105.3	71.3	NM	NM	NA
Paylocity Holding Corp.	116.49	77.3	6,251	6,426	519	592	96	157	15.6	67.4	18.6	12.38x	10.85x	67.2	41.0	112.4	69.7	20.0
LogMeIn, Inc.	85.30	98.5	4,160	4,263	1,275	1,327	340	399	5.2	62.2	26.7	3.34x	3.21x	12.6	10.7	NM	16.7	NA
Envestnet, Inc.	66.74	76.1	3,550	3,981	900	951	95	203	4.6	15.2	10.6	4.42x	4.19x	41.9	19.6	NM	32.6	NA
New Relic, Inc.	58.49	54.1	3,466	3,191	572	663	NA	89	16.7	83.1	-1.5	5.58x	4.81x	NM	35.7	NM	126.2	20.0
Software AG	37.18	96.8	2,752	2,460	974	920	265	210	-6.0	75.2	27.2	2.52x	2.67x	9.3	11.7	17.4	19.9	NA
Cloudera, Inc.	8.61	70.5	2,542	2,274	794	855	NA	177	11.4	62.1	-25.2	2.86x	2.66x	NM	12.9	NM	41.8	22.0
Cornerstone OnDemand, Inc.	36.64	56.8	2,336	2,140	577	613	54	146	6.4	74.1	9.3	3.71x	3.49x	40.0	14.7	NM	26.9	NA
Zuora, Inc. Class A	11.24	48.9	1,098	1,150	276	295	NA	NA	8.1	51.4	-23.6	4.17x	3.90x	NM	NM	NM	NM	NA
Blucora, Inc.	12.94	37.8	619	947	718	743	125	98	3.5	43.5	17.5	1.32x	1.27x	7.6	9.7	13.2	11.7	15.0
<b>Median</b>									<b>12.5%</b>	<b>70.6%</b>	<b>12.6%</b>	<b>7.21x</b>	<b>7.21x</b>	<b>38.5x</b>	<b>26.3x</b>	<b>48.2x</b>	<b>41.8x</b>	<b>22.3%</b>
<b>Mean</b>									<b>13.3%</b>	<b>66.6%</b>	<b>5.1%</b>	<b>8.25x</b>	<b>8.04x</b>	<b>47.1x</b>	<b>35.2x</b>	<b>55.6x</b>	<b>55.0x</b>	<b>21.3%</b>

Source: FactSet; based on consensus estimates.

Enterprise Applications										'19 - '20E		Valuation Multiples						EPS	
As of May 8, 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	
Microsoft Corporation	\$184.56	96.8%	\$1,399,592	\$1,360,977	\$138,604	\$149,687	\$64,078	\$68,716	12.0%	68.1%	46.2%	9.82x	9.09x	21.2x	19.8x	30.7x	31.0x	14.6%	
Adobe Inc.	368.12	95.2	177,361	179,655	11,623	13,166	4,140	6,207	16.3	83.7	36.6	15.46x	13.65x	43.4	28.9	55.7	37.3	15.5	
Oracle Corporation	53.64	88.7	169,158	203,659	39,764	39,230	17,263	19,089	-0.1	75.7	43.5	5.12x	5.19x	11.8	10.7	16.9	13.4	9.6	
SAP SE	117.14	83.1	143,907	150,383	30,415	30,170	8,724	9,913	-0.8	70.1	28.6	4.94x	4.98x	17.2	15.2	30.2	21.6	11.4	
International Business Machines Corp	122.97	77.5	109,181	167,449	76,537	72,745	16,190	16,373	-5.7	45.8	21.3	2.19x	2.30x	10.3	10.2	12.2	11.0	3.4	
Intuit Inc.	280.69	91.5	73,117	72,368	7,127	7,671	2,170	2,800	8.9	82.2	30.4	10.15x	9.43x	33.3	25.8	45.4	36.4	13.9	
Veeva Systems Inc Class A	193.12	97.5	25,889	29,510	1,104	1,364	313	506	25.9	72.0	28.3	NA	NA	NA	NA	NA	78.6	17.1	
Citrix Systems, Inc.	150.93	99.0	18,632	20,859	3,152	3,182	875	1,054	5.7	83.5	27.8	6.62x	6.56x	23.8	19.8	26.4	26.7	7.0	
VMware, Inc. Class A	140.60	68.0	15,577	63,388	10,811	11,524	2,054	3,884	8.2	83.4	19.0	5.86x	5.50x	30.9	16.3	9.3	22.9	15.7	
Hewlett Packard Enterprise Co.	10.25	58.3	13,206	24,927	28,351	26,206	4,745	4,594	-8.4	31.5	16.7	0.88x	0.95x	5.3	5.4	11.4	7.1	1.8	
Aspen Technology, Inc.	100.88	70.6	6,820	7,240	603	584	283	288	0.7	89.9	46.9	12.01x	12.40x	25.6	25.1	28.1	28.5	12.7	
Manhattan Associates, Inc.	77.17	85.3	4,900	4,906	623	560	120	136	-9.3	51.7	19.3	7.87x	8.75x	40.8	36.0	57.3	50.1	NA	
Tenable Holdings, Inc.	28.27	88.3	2,827	2,599	377	429	NA	NA	21.1	82.4	-20.6	6.90x	6.05x	NA	NA	NA	NA	NA	
<b>Median</b>									<b>5.7%</b>	<b>75.7%</b>	<b>28.3%</b>	<b>6.76x</b>	<b>6.30x</b>	<b>23.8x</b>	<b>19.8x</b>	<b>28.1x</b>	<b>27.6x</b>	<b>12.7%</b>	
<b>Mean</b>									<b>5.7%</b>	<b>70.8%</b>	<b>26.5%</b>	<b>7.32x</b>	<b>7.07x</b>	<b>24.0x</b>	<b>19.4x</b>	<b>29.4x</b>	<b>30.4x</b>	<b>11.2%</b>	

Source: FactSet; based on consensus estimates.

Cyber Security		'19 - '20E																
		As of May 8, 2020																
\$ in millions except per share data		Current Price	% of 52 Wk. High	Market Value		Revenue		EBITDA		Revenue Growth Rate	Gross Margin LTM	EBITDA Margin LTM	Valuation Multiples				EPS Growth Rate	
Company				Equity	Enterprise	LTM	2020E	LTM	2020E				EV/Rev LTM	2020E	EV/EBITDA LTM	2020E	P/E LTM	2020E
Fortinet, Inc.	\$136.49	99.7%	\$22,063	\$21,795	\$2,156	\$2,495	\$406	\$677	15.7%	76.4%	18.8%	10.11x	8.73x	NA	32.2x	73.2x	48.8x	14.0%
Palo Alto Networks, Inc.	214.03	85.2	21,339	19,680	3,121	3,590	242	782	16.7	71.1	2.6	6.31x	5.48x	NA	25.2	NA	42.9	18.8
Okta, Inc. Class A	170.29	96.9	19,770	19,700	586	756	NA	NA	32.6	72.8	-27.8	NA	NA	NA	NA	NA	NA	25.0
Akamai Technologies, Inc.	101.08	93.4	16,375	17,883	2,951	3,105	1,038	1,338	7.3	61.5	35.2	6.06x	5.76x	17.2	13.4	33.6	20.5	9.3
Check Point Software Technologies Lt	107.09	88.5	15,578	13,814	2,009	2,012	901	1,000	0.9	89.0	44.9	6.88x	6.86x	15.3	13.8	19.2	16.9	7.3
NortonLifeLock Inc.	21.38	74.5	12,833	5,631	3,662	2,478	1,070	1,116	-19.5	73.9	34.3	1.54x	2.27x	5.3	5.0	3.7	20.5	13.7
Zscaler, Inc.	74.46	83.2	9,632	9,206	360	467	NA	39	33.5	79.6	-4.7	NA	19.71x	NA	NA	NA	NA	88.8
F5 Networks, Inc.	149.06	96.8	9,077	9,005	2,307	2,352	539	791	4.0	83.6	22.4	3.90x	3.83x	16.7	11.4	26.5	16.2	8.4
CrowdStrike Holdings, Inc. Class A	77.01	75.6	8,852	15,427	481	705	NA	2	52.8	70.5	-25.5	NA	NA	NA	NA	NA	NA	25.0
Trend Micro Incorporated	50.93	91.6	7,156	5,518	1,533	1,626	497	496	9.2	80.4	32.4	3.60x	3.39x	11.1	11.1	27.3	27.4	NA
Proofpoint, Inc.	121.47	90.9	6,960	6,701	888	1,026	NA	145	15.5	71.7	-0.1	7.54x	6.53x	NA	46.1	NA	82.0	24.0
Avast Plc	5.84	80.9	5,949	6,823	848	889	444	495	1.9	74.3	52.4	8.05x	7.67x	15.4	13.8	23.5	17.6	5.4
SolarWinds Corp.	17.06	78.8	5,287	7,098	964	1,013	404	468	8.6	65.5	41.7	7.37x	7.01x	17.6	15.2	NA	19.7	6.6
Aisino Corp. Class A	2.46	66.7	4,583	4,010	4,577	4,629	391	472	2.1	15.5	8.2	0.88x	0.87x	10.3	8.5	66.1	20.4	NA
CyberArk Software Ltd.	109.31	73.5	4,167	3,678	434	484	73	96	11.6	84.3	16.8	8.48x	7.59x	NA	38.2	67.4	53.0	20.5
Qualys, Inc.	103.62	92.7	4,042	4,005	322	359	106	151	11.5	78.4	32.9	12.45x	11.17x	37.8	26.5	61.8	41.3	12.9
Tenable Holdings, Inc.	28.27	88.3	2,827	2,599	377	429	NA	NA	21.1	82.4	-20.6	6.90x	6.05x	NA	NA	NA	NA	NA
FireEye, Inc.	12.24	66.7	2,728	2,786	903	892	NA	87	0.3	62.4	-9.8	3.08x	3.12x	NA	31.9	NA	NA	31.0
Mimecast Limited	40.84	75.1	2,553	2,680	405	481	55	88	18.4	74.1	14.2	6.62x	5.57x	48.7	30.5	NA	71.6	18.9
Rapid7 Inc.	48.73	73.8	2,457	2,396	327	391	NA	10	19.6	69.9	-8.6	7.33x	6.13x	NA	NA	NA	NA	NA
Varonis Systems, Inc.	74.48	79.9	2,344	2,227	252	254	NA	NA	-0.2	85.3	-27.8	8.84x	8.78x	NA	NA	NA	NA	NA
SailPoint Technologies Holdings, Inc.	20.99	77.6	1,893	1,764	289	312	7	9	8.0	75.6	2.3	6.12x	5.66x	NA	NA	NA	NA	15.0
ForeScout Technologies, Inc.	32.23	74.1	1,587	1,428	337	376	NA	NA	11.7	76.5	-25.1	4.24x	3.80x	NA	NA	NA	NA	NA
Radware Ltd.	23.70	87.8	1,098	990	252	248	28	30	-1.8	82.1	11.2	3.93x	4.00x	35.1	33.0	49.2	36.5	18.5
F-Secure Oyj	3.03	80.2	482	494	238	236	22	28	-0.3	69.0	9.1	2.08x	2.09x	22.6	17.9	65.1	74.6	NA
Zix Corporation	6.34	58.6	361	622	173	212	18	51	22.5	44.9	12.0	3.58x	2.93x	33.9	12.3	NA	11.2	15.0
SecureWorks Corp. Class A	12.12	62.7	140	815	553	554	NA	7	0.7	51.7	-1.7	1.48x	1.47x	NA	NA	NA	NA	NA
Techpoint, Inc.	4.23	51.4	23	55	32	38	3	4	-86.8	48.8	10.5	1.71x	1.44x	16.3	15.4	34.8	23.8	NA
<b>Median</b>									<b>8.9%</b>	<b>74.0%</b>	<b>9.8%</b>	<b>6.12x</b>	<b>5.62x</b>	<b>17.0x</b>	<b>15.4x</b>	<b>34.8x</b>	<b>25.6x</b>	<b>15.0%</b>
<b>Mean</b>									<b>7.8%</b>	<b>70.4%</b>	<b>8.9%</b>	<b>5.56x</b>	<b>5.69x</b>	<b>21.7x</b>	<b>21.1x</b>	<b>42.4x</b>	<b>35.8x</b>	<b>19.9%</b>

Source: FactSet; based on consensus estimates.