



November
2019

The Lighthouse

Software
Online & Digital
Tech Enabled Business Services

Pharus Observations

Strategic acquisitions in the data protection and backup space push valuations higher



Over the last twelve months, strategic acquisitions have pushed up valuations in the data protection and backup software and services space. While data storage was a popular feeding ground among private equity firms earlier in the decade, strategics in the broader data storage and management space have begun reinforcing their offering suite by locking up these smaller data protection and backup SaaS and services targets.

In November, Enterprise Information Management SaaS & software provider, **OpenText**, acquired **Carbonite**, a provider of backup & recovery software & services, for \$1.4 billion, marking the largest acquisition of the last 12 months in the data protection space. This represents a healthy 3.2x LTM revenue multiple and 12.6x EBITDA. The deal strengthens OpenText's cloud platform offering by adding end-point security and protection.

Earlier this year, in February, **Carbonite** announced its acquisition of endpoint security and threat intelligence provider, **Webroot**, for \$618.5 million. Through its largest ever acquisition, Carbonite was able to combine its data backup and recovery solutions with Webroot's endpoint security products and services to target smaller and mid-sized customers. The transaction value was 2.9x LTM revenue and 12.4x LTM EBITDA.

Carbonite had a busy couple years. In February 2018, the company acquired **Mozy**, an online data storage SaaS provider, for \$145.8 million. This transaction, like the Webroot acquisition one year later, was a part of Carbonite's consolidation strategy in the online backup market, which is eventually what made it such an attractive target for OpenText last month.

In May, **NetApp** a provider of data storage and management systems provider acquired Israeli-based **Cognigo**, an AI data security software solutions company for \$58 million. The acquisition gives NetApp the tools to address privacy challenges emerging in our era of mass cloud-adoption. This deal yielded a whopping 29x revenue multiple.



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I Capital market trends

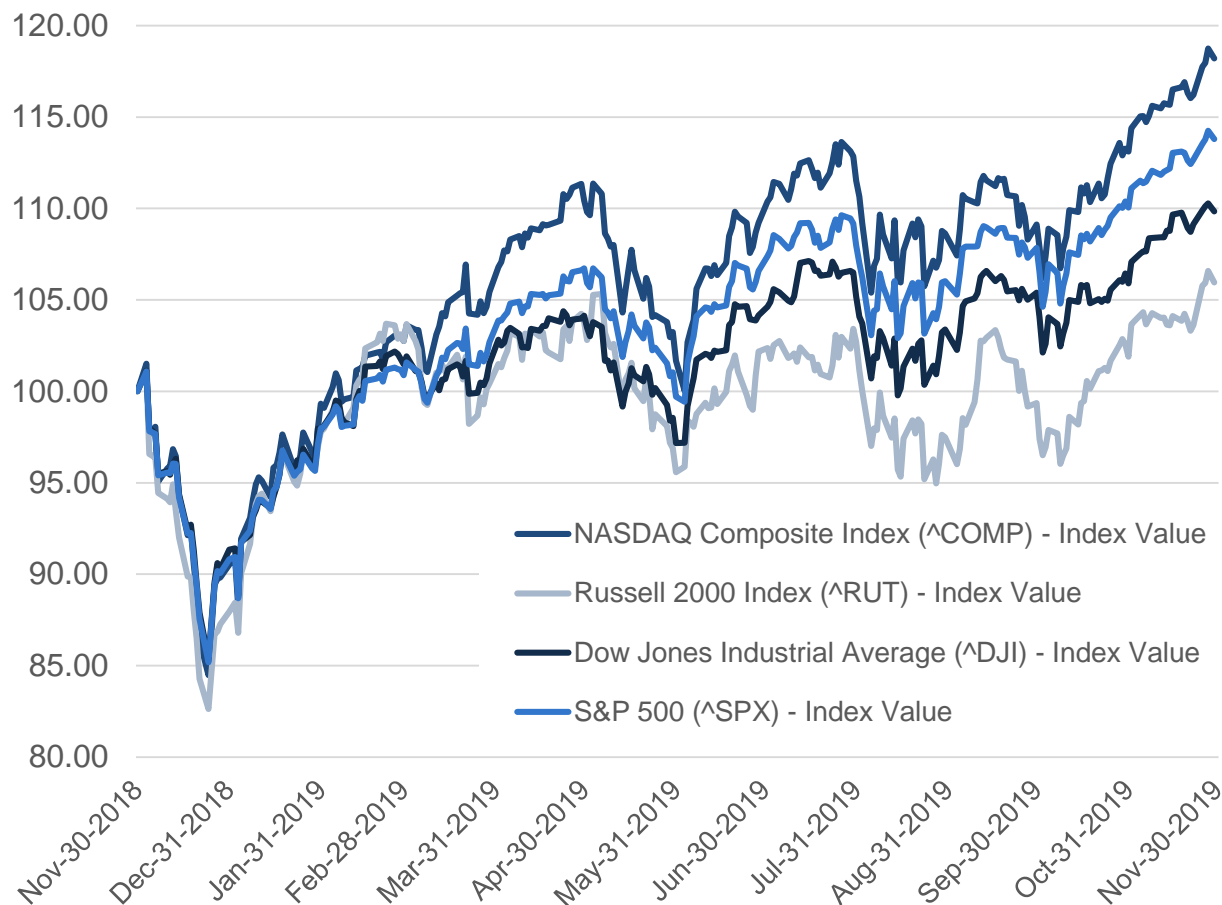


Capital market trends



Relative Performance of Major Indices

Through November 29, 2019 (Base = 100, 11/30/2018)



Index	As of 31-Oct-19	Change %		
		1 Year	3 Months	1 Month
Dow Jones	28,051.41	9.84%	8.04%	11.69%
Nasdaq	8,665.47	18.21%	6.86%	18.61%
S&P 500	3,140.98	13.80%	8.25%	15.83%
Russell 2000	1,624.50	5.95%	-6.68%	7.48%



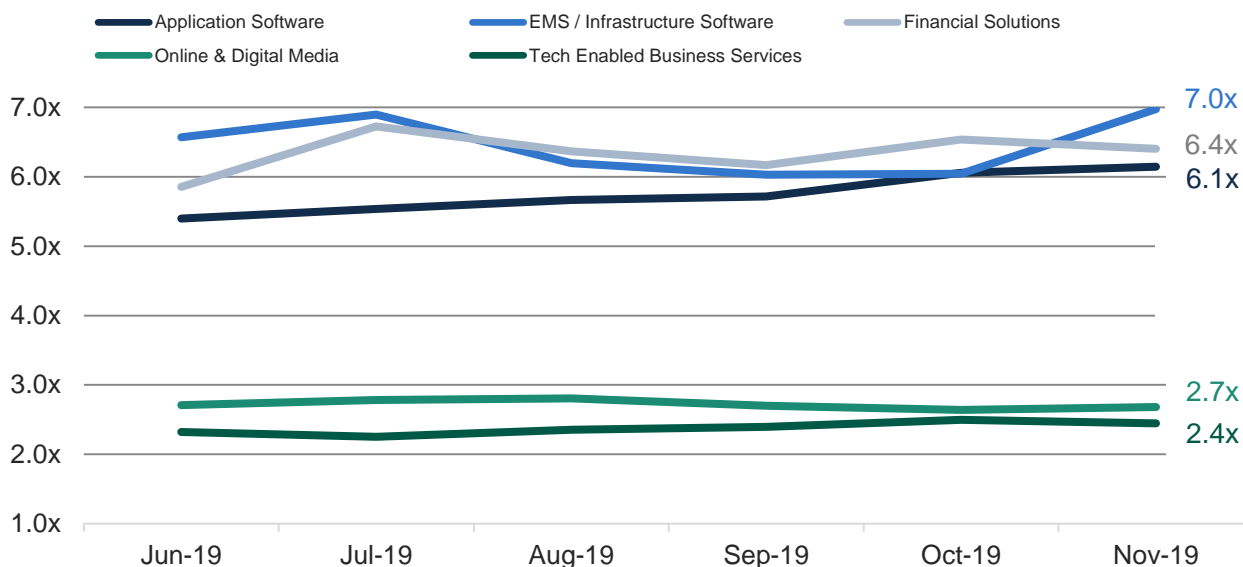
Public market valuations



Public market valuations



Historical Median TEV / Revenue Multiples



	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19
Application Software						
Customer Relationship Management (CRM) & Customer Engagement	7.5x	8.6x	9.3x	8.6x	9.3x	9.7x
Accounting & Enterprise Resource Planning (ERP)	8.2x	7.3x	6.3x	6.4x	6.8x	7.0x
Supply Chain Management (SCM) & Logistics	7.7x	9.1x	8.9x	8.7x	7.7x	8.6x
HR & Workforce Management	6.3x	6.4x	5.6x	5.5x	6.1x	5.4x
Education Technology	3.0x	3.0x	2.4x	2.3x	2.6x	1.9x
Industrial & Automation Software	2.3x	2.3x	2.2x	2.4x	2.6x	2.6x
Business Intelligence & Data	5.9x	7.8x	6.0x	6.3x	6.6x	6.8x
Design & Engineering Software	6.4x	6.6x	6.0x	5.9x	6.1x	6.0x
EMS / Infrastructure Software						
Security Software	8.3x	7.9x	6.7x	6.3x	6.9x	7.3x
System and Network Management Software	3.5x	3.0x	2.3x	3.0x	3.4x	4.1x
Platform / OS	4.4x	4.3x	4.2x	4.4x	4.9x	5.0x
Financial Solutions						
Banking Solutions	6.8x	10.2x	8.3x	8.3x	8.3x	8.4x
Capital Market & Investment Solutions	5.9x	6.1x	6.4x	6.2x	6.6x	6.4x
Consumer Data & Analytics	6.4x	6.7x	6.8x	7.0x	6.5x	6.6x
Payment Processing	3.9x	3.8x	4.2x	4.3x	4.3x	4.5x
Insurance Solutions	4.3x	4.0x	3.3x	3.7x	3.7x	3.8x
Online & Digital Media						
Digital Advertising & Marketing	1.6x	1.7x	1.5x	1.4x	1.4x	1.6x
Digital Media & Video	5.5x	4.9x	5.0x	4.3x	4.1x	4.0x
Digital Advertising Agencies & Service Providers	1.4x	1.3x	1.3x	1.3x	1.3x	1.3x
Online Retail & Marketplaces	2.4x	2.5x	2.8x	2.7x	2.6x	2.8x
Digital Gaming	2.1x	3.2x	2.8x	2.9x	2.7x	2.3x
Social Media	6.4x	6.3x	5.1x	4.9x	5.2x	5.9x
Digital Commerce Solutions	1.3x	1.5x	1.5x	1.4x	1.2x	1.3x
Other Digital Companies	5.0x	5.2x	4.2x	4.1x	4.2x	4.3x
Tech Enabled Business Services						
IT Services, Integration & Consulting	1.5x	1.6x	1.5x	1.5x	1.6x	1.5x
Business Process Management (BPM)	5.5x	4.6x	4.5x	4.8x	4.6x	4.2x
Data Center Hosting & Services	6.0x	5.9x	5.3x	5.5x	5.4x	5.2x
Call Center	1.2x	1.2x	1.2x	1.3x	1.3x	1.3x



Public market valuations



Current & Forward Market Multiples

	Median TEV/Revenue		Median TEV/EBITDA	
	LTM	NTM	LTM	NTM
Application Software				
Customer Relationship Management (CRM) & Customer Engagement	9.7x	7.1x	45.3x	34.2x
Accounting & Enterprise Resource Planning (ERP)	7.0x	6.0x	25.1x	25.6x
Supply Chain Management (SCM) & Logistics	8.6x	8.3x	35.4x	27.0x
HR & Workforce Management	5.4x	5.0x	41.2x	40.7x
Education Technology	1.9x	1.8x	25.5x	26.1x
Industrial & Automation Software	2.6x	2.6x	15.7x	15.1x
Business Intelligence & Data	6.8x	5.6x	15.7x	21.7x
Design & Engineering Software	6.0x	5.5x	32.4x	22.0x
EMS / Infrastructure Software				
Security Software	7.3x	6.0x	33.9x	25.2x
System and Network Management Software	4.1x	4.6x	17.7x	14.9x
Platform / OS	5.0x	4.9x	15.0x	12.0x
Financial Solutions				
Banking Solutions	8.4x	7.4x	37.2x	18.5x
Capital Market & Investment Solutions	6.4x	6.4x	23.4x	19.5x
Consumer Data & Analytics	6.6x	6.4x	27.9x	18.3x
Payment Processing	4.5x	3.8x	20.3x	13.4x
Insurance Solutions	3.8x	6.5x	20.4x	19.8x
Online & Digital Media				
Digital Advertising & Marketing	1.6x	1.8x	10.7x	12.3x
Digital Media & Video	4.0x	3.9x	25.7x	23.3x
Digital Advertising Agencies & Service Providers	1.3x	1.4x	9.6x	8.8x
Online Retail & Marketplaces	2.8x	2.6x	27.0x	13.8x
Digital Gaming	2.3x	2.5x	9.4x	8.2x
Social Media	5.9x	5.1x	19.7x	12.8x
Digital Commerce Solutions	1.3x	1.2x	10.3x	8.1x
Other Digital Companies	4.3x	3.3x	17.2x	15.6x
Tech Enabled Business Services				
IT Services, Integration & Consulting	1.5x	1.4x	12.7x	11.0x
Business Process Management (BPM)	4.2x	3.7x	14.4x	12.2x
Data Center Hosting & Services	5.7x	5.1x	25.9x	17.2x
Call Center	1.3x	1.2x	11.1x	10.2x

Medians				
Application Software	6.1x	5.3x	22.4x	21.7x
EMS / Infrastructure Software	7.0x	5.9x	20.2x	17.4x
Financial Solutions	6.4x	6.4x	25.1x	18.5x
Online & Digital Media	2.8x	2.6x	14.0x	12.6x
Tech Enabled Business Services	2.4x	2.1x	13.3x	11.7x



Public market valuations

Application Software



(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Customer Relationship Management (CRM) & Customer Engagement							
Five9	NasdaqGM:FIVN	\$2,861	\$2,946	9.9x	8.5x	NM	48.7x
LivePerson	NasdaqGS:LPSN	\$2,000	\$2,031	7.5x	6.3x	NM	NM
Medallia	NYSE:MDLA	\$3,456	\$3,874	9.7x	7.8x	NM	NM
NICE Systems	TASE:NICE	\$9,577	\$9,430	6.1x	5.7x	23.9x	17.9x
Pegasystems	NasdaqGS:PEGA	\$6,118	\$6,158	6.9x	6.1x	NM	NM
Salesforce.com	NYSE:CRM	\$142,976	\$142,586	9.7x	7.1x	69.3x	25.0x
SDL	LSE:SDL	\$723	\$698	1.5x	1.4x	13.4x	11.1x
Veeva	NYSE:VEEV	\$20,609	\$22,076	20.1x	15.7x	66.7x	43.4x
Zendesk	NYSE:ZEN	\$9,013	\$8,862	11.9x	9.1x	NM	97.3x
Median				9.7x	7.1x	45.3x	34.2x
Accounting & Enterprise Resource Planning (ERP)							
Avalara, Inc.	NYSE:AVLR	\$5,557	\$6,004	15.8x	12.6x	NM	NM
BasWare	HLSE:BAS1V	\$442	\$393	2.8x	2.5x	NM	28.2x
Blackline	NasdaqGS:BL	\$2,798	\$2,995	10.3x	8.5x	NM	93.6x
Coupa Software	NasdaqGS:COUP	\$9,593	\$9,646	30.1x	21.0x	NM	NM
Intuit	NasdaqGS:INTU	\$65,911	\$67,391	9.5x	8.6x	31.7x	23.6x
Kingdee International	SEHK:268	\$3,061	\$3,292	7.0x	6.0x	57.4x	28.2x
Linx S.A.	NYSE:LINX	\$1,432	\$1,360	8.1x	6.8x	79.5x	25.6x
Model N	NYSE:MODN	\$987	\$1,004	7.0x	6.4x	NM	70.6x
Oracle	NYSE:ORCL	\$205,939	\$184,281	5.2x	5.1x	12.7x	11.1x
QAD	NasdaqGS:QADA	\$891	\$994	2.8x	2.7x	NM	45.2x
Sage	LSE:SGE	\$11,126	\$10,616	4.4x	4.4x	16.4x	16.8x
SAP	DB:SAP	\$174,138	\$162,397	5.9x	5.4x	22.4x	16.0x
Upland Software	NasdaqGM:UPLD	\$1,212	\$978	6.0x	4.7x	25.1x	12.3x
Median				7.0x	6.0x	25.1x	25.6x
Supply Chain Management (SCM) & Logistics							
Descartes Systems Group	TSX:DSG	\$3,619	\$3,610	12.2x	10.3x	35.4x	27.0x
Manhattan Associates	NasdaqGS:MANH	\$5,263	\$5,336	8.6x	8.3x	39.6x	38.8x
SPS Commerce	NasdaqGS:SPSC	\$1,781	\$1,962	6.6x	5.9x	34.8x	22.7x
Median				8.6x	8.3x	35.4x	27.0x



Public market valuations



Application Software (continued)

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
HR & Workforce Management							
Atlassian Corporation	NasdaqGS:TEAM	\$30,406	\$31,036	23.3x	18.3x	NM	72.3x
Benefit Focus	NasdaqGM:BNFT	\$936	\$785	3.3x	2.9x	NM	45.4x
CastLight Health	NYSE:CSLT	\$167	\$203	1.1x	1.2x	NM	NM
Ceridian HCM	NYSE:CDAY	\$9,131	\$8,691	11.4x	10.2x	61.4x	44.9x
Cornerstone OnDemand	NASDAQ: CSOD	\$3,743	\$3,744	6.6x	5.9x	NM	23.5x
DHI Group	NYSE:DHX	\$186	\$167	1.2x	1.2x	7.2x	5.6x
Paycom	NYSE:PAYC	\$15,912	\$15,960	22.9x	18.4x	67.4x	43.4x
Paylocity	NasdaqGS:PCTY	\$6,500	\$6,546	13.2x	11.0x	86.0x	38.0x
TriNet Group	NYSE:TNET	\$4,007	\$3,824	1.1x	4.0x	14.6x	11.0x
Upwork	NasdaqGS:UPWK	\$1,194	\$1,305	4.1x	3.5x	NM	NM
Verint Systems	NasdaqGS:VRNT	\$3,759	\$3,246	3.0x	2.6x	21.0x	10.7x
Workday	NasdaqGS:WDAY	\$40,455	\$40,839	12.5x	9.8x	NM	47.2x
Median				5.4x	5.0x	41.2x	40.7x
Industrial & Automation Software							
3M	NYSE:MMM	\$110,326	\$97,626	3.5x	3.3x	13.9x	12.4x
ABB	SWX:ABBN	\$54,697	\$46,654	1.9x	1.9x	20.3x	16.0x
American Software	NasdaqGS:AMSW.A	\$404	\$496	3.7x	3.5x	47.0x	28.0x
Aspen Technology	NasdaqGS:AZPN	\$8,851	\$8,553	14.3x	14.5x	29.3x	28.4x
Dassault	ENXTPA:DSY	\$38,543	\$40,921	9.1x	7.4x	30.9x	21.4x
Endava	NYSE:DAVA	\$2,444	\$2,501	6.5x	5.2x	42.2x	24.9x
Emerson	NYSE:EMR	\$49,259	\$44,992	2.7x	2.7x	13.1x	12.7x
Fanuc Corporation	TSE:6954	\$31,995	\$36,633	6.4x	6.2x	20.7x	21.7x
General Electric	NYSE:GE	\$182,210	\$98,427	1.5x	1.8x	13.0x	15.8x
HollySys Automation Tech	NasdaqGS:HOLI	\$421	\$888	0.8x	0.7x	3.0x	2.7x
Honeywell	NYSE:HON	\$134,742	\$127,580	3.6x	3.6x	15.6x	14.4x
Johnson Controls	NYSE:JCI	\$38,517	\$33,040	1.6x	1.6x	13.5x	10.6x
KUKA	DB:KU2	\$2,152	\$1,722	0.6x	0.6x	20.2x	11.5x
Materialise	NasdaqGS:MTLS	\$938	\$935	4.4x	3.9x	40.9x	24.6x
Metso	HLSE:METSO	\$6,235	\$5,754	1.6x	1.4x	11.6x	9.0x
OMRON Corp	TSE:6645	\$10,940	\$11,605	1.5x	1.7x	12.7x	13.7x
Parametric Technology	NasdaqGS:PTC	\$9,218	\$8,847	7.3x	6.3x	55.6x	18.0x
Rockwell Automation	NYSE:ROK	\$23,828	\$22,629	3.6x	3.5x	15.7x	15.8x
Schneider Electric	ENXTPA:SU	\$62,441	\$52,750	2.1x	2.0x	12.3x	11.3x
Siemens	DB:SIE	\$131,518	\$101,863	1.4x	1.3x	11.3x	10.7x
YASKAWA Electric Corp	TSE:6506	\$9,868	\$9,611	2.5x	2.5x	21.7x	21.2x
Yokogawa Electric Corp.	TSE:6841	\$4,489	\$4,882	1.2x	1.1x	8.8x	8.1x
Median				2.6x	2.6x	15.7x	15.1x



Public market valuations



Application Software (continued)

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Education Technology							
Blackbaud	NasdaqGS:BLKB	\$4,568	\$3,972	5.2x	4.9x	40.1x	26.1x
Instructure	NYSE:INST	\$1,922	\$2,001	7.8x	6.6x	NM	NM
K12	NYSE:LRN	\$655	\$770	0.6x	0.6x	11.0x	4.6x
Rosetta Stone	NYSE:RST	\$345	\$374	1.9x	1.8x	NM	62.0x
Sunlands Online Education Group	NYSE:STG	\$330	\$452	1.1x	1.1x	NM	NM
Median				1.9x	1.8x	25.5x	26.1x
Business Intelligence & Data							
Alteryx	NYSE:AYX	\$7,241	\$7,388	20.7x	15.1x	NM	NM
AppFolio	NasdaqGM:APPF	\$3,878	\$3,846	16.2x	12.6x	NM	85.7x
Cardylitics	NasdaqGM:CDLX	\$1,346	\$1,441	7.1x	5.5x	NM	NM
Cloudera	NYSE:CLDR	\$2,570	\$2,763	4.0x	3.1x	NM	NM
Corelogic	NYSE:CLGX	\$5,071	\$3,294	2.9x	2.9x	14.2x	9.9x
CoStar Group	NasdaqGS:CSGP	\$21,200	\$22,452	15.8x	13.3x	47.8x	41.1x
Datadog	NasdaqGS:DDOG	\$11,362	\$12,061	36.6x	24.3x	NM	NM
Domo, Inc.	NasdaqGM:DOMO	\$482	\$517	3.0x	NM	NM	NM
Elastic N.V.	NYSE:ESTC	\$6,091	\$6,374	20.0x	NM	NM	NM
Gridsum Holding	NasdaqGS:GSUM	\$153	\$78	3.4x	NA	NM	NA
Health Catalyst	NasdaqGS:HCAT	\$1,264	\$1,453	8.6x	NM	NM	NM
Inovalon Holdings	NASDAQ:INOV	\$3,717	\$2,790	6.1x	5.4x	22.5x	16.2x
MicroStrategy	NasdaqGS:MSTR	\$1,080	\$1,543	2.2x	2.1x	NM	16.8x
MMTEC	NasdaqCM:MTC	\$44	\$44	NM	NA	NM	NA
MongoDB	NasdaqGM:MDB	\$8,240	\$8,374	23.8x	18.7x	NM	NM
NantHealth	NasdaqGS:NH	\$340	\$131	3.6x	3.4x	NM	NA
New Relic	NYSE:NEWR	\$3,716	\$3,999	6.8x	5.8x	NM	39.6x
Open Text	NasdaqGS:OTEX	\$13,590	\$11,736	4.7x	4.6x	14.8x	11.7x
PROS Holdings	NYSE:PRO	\$2,625	\$2,762	11.1x	9.4x	NM	NM
Sabre	NasdaqGS:SABR	\$9,126	\$6,143	2.3x	2.2x	15.7x	9.0x
Splunk	NasdaqGS:SPLK	\$23,150	\$23,031	10.6x	8.5x	NM	50.3x
TrueCar	NasdaqGS:TRUE	\$432	\$560	1.2x	1.2x	NM	26.6x
Varonis Systems	NasdaqGS:VRNS	\$2,316	\$2,381	8.6x	8.6x	NM	NM
Workiva	NYSE:WK	\$1,848	\$2,015	6.6x	5.6x	NM	NM
Yext	NYSE:YEXT	\$1,788	\$1,946	6.8x	5.2x	NM	NM
Median				6.8x	5.6x	15.7x	21.7x



Public market valuations

Application Software (continued)



(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Design & Engineering Software							
Ansys	NasdaqGS:ANSS	\$21,172	\$21,797	14.7x	13.0x	37.1x	28.7x
Altair Engineering	NasdaqGS:ALTR	\$2,338	\$2,381	5.3x	4.8x	90.3x	44.4x
Aurora Mobile	NasdaqGM:JG	\$249	\$275	1.9x	1.1x	NM	19.6x
Autodesk	NasdaqGS:ADSK	\$40,742	\$39,723	13.1x	10.8x	NM	34.1x
Aveva Group	LSE:AVV	\$9,514	\$9,499	8.9x	8.4x	46.1x	28.0x
Cadence Design Systems	NasdaqGS:CDNS	\$19,520	\$19,712	8.5x	8.0x	31.0x	24.3x
Hexagon	OM:HEXA B	\$23,048	\$20,726	5.3x	5.2x	18.5x	15.0x
Pivotal Software	NYSE:PVTL	\$3,469	\$4,134	4.8x	4.2x	NM	NM
Progress Software	NasdaqGS:PRGS	\$2,033	\$1,881	4.9x	4.6x	14.9x	11.4x
RIB Software AG	DB:RIB	\$1,208	\$1,302	5.7x	4.3x	32.4x	18.1x
Synopsys	NasdaqGS:SNPS	\$20,657	\$21,196	6.3x	5.7x	32.4x	19.0x
Twilio	NYSE:TWLO	\$12,907	\$14,165	12.8x	9.4x	NM	NM
Median				6.0x	5.5x	32.4x	22.0x



Public market valuations



EMS / Infrastructure Software

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Security Software							
Check Point Software	NasdaqGS:CHKP	\$16,262	\$17,946	8.2x	7.9x	18.1x	15.6x
Cheetah Mobile	NYSE:CMCM	\$145	\$465	0.2x	0.3x	NM	NA
CrowdStrike	NasdaqGS:CRWD	\$12,278	\$13,105	35.0x	20.8x	NM	NM
CyberArk Software	NasdaqGS:CYBR	\$4,135	\$4,642	10.0x	8.5x	53.2x	30.5x
Everbridge	NasdaqGM:EVBG	\$2,891	\$2,972	15.6x	11.9x	NM	NM
FireEye	NasdaqGS:FEYE	\$3,670	\$3,577	4.2x	4.0x	NM	25.2x
ForeScout	NasdaqGM:FSCT	\$1,645	\$1,690	5.0x	4.4x	NM	NM
Fortinet	NasdaqGS:FTNT	\$16,079	\$17,977	7.8x	6.7x	43.3x	24.5x
Mimecast	NasdaqGS:MIME	\$2,793	\$2,749	7.3x	6.0x	97.3x	32.8x
MobileIron	NasdaqGS:MOBL	\$460	\$541	2.2x	2.2x	NM	NM
Okta	NasdaqGS:OKTA	\$15,033	\$15,152	30.9x	21.9x	NM	NM
OneSpan	NasdaqCM:OSPN	\$678	\$745	2.7x	2.6x	33.9x	21.5x
Palo Alto Networks	NYSE:PANW	\$21,276	\$22,258	7.1x	5.9x	NM	25.9x
Ping Identity Holding	NYSE:PING	\$1,780	\$1,786	7.6x	7.1x	35.8x	80.6x
Proofpoint	NasdaqGM:PFPT	\$6,448	\$6,701	7.6x	6.4x	NM	37.9x
Qualys	NasdaqGS:QLYS	\$3,132	\$3,392	10.1x	8.8x	32.8x	21.2x
Rapid7	NasdaqGM:RPD	\$2,784	\$2,769	9.2x	7.4x	NM	NM
SecureWorks	NasdaqGS:SCWX	\$834	\$921	1.6x	1.5x	NM	73.5x
Tenable	NasdaqGS:TENB	\$2,411	\$2,666	7.2x	5.9x	NM	NM
Trend Micro	TSE:4704	\$5,927	\$7,504	4.0x	3.8x	12.2x	11.7x
Tufin Software	NYSE:TUFN	\$561	\$659	5.5x	4.5x	NM	NM
Zix	NasdaqGS:ZIXI	\$692	\$405	4.9x	3.4x	30.8x	13.7x
Zscaler	NasdaqGS:ZS	\$6,305	\$6,670	20.8x	14.3x	NM	NM
Median				7.3x	6.0x	33.9x	25.2x
System and Network Management Software							
A10 Networks	NYSE:ATEN	\$394	\$512	1.8x	NA	NM	NA
Anaplan	NYSE:PLAN	\$6,850	\$7,108	21.5x	15.9x	NM	NM
Cloudflare	NYSE:NET	\$5,211	\$5,848	20.2x	14.8x	NM	NM
CommVault Systems	NasdaqGS:CVLT	\$1,857	\$2,314	2.7x	2.7x	37.1x	17.8x
Micro Focus	LSE:MCRO	\$6,858	\$4,864	2.3x	2.1x	6.8x	5.2x
Netscout Systems	NasdaqGS:NTCT	\$2,114	\$1,886	2.4x	2.3x	16.0x	NA
Nutanix	NasdaqGS:NTNX	\$6,902	\$7,177	5.6x	4.6x	NM	NM
One Stop Systems	NasdaqCM:OSS	\$30	\$32	0.6x	0.5x	NM	8.5x
Parsons Corporation	NYSE:PSN	\$4,356	\$3,973	1.1x	1.1x	19.3x	14.1x
Presidio	NasdaqGS:PSDO	\$2,377	\$1,380	0.8x	0.8x	10.3x	9.5x
SailPoint	NYSE:SAIL	\$2,115	\$2,233	7.5x	6.7x	NM	NM
ServiceNow	NYSE:NOW	\$53,023	\$53,370	16.4x	12.8x	NM	44.8x
Software	XTRA:SOW	\$2,291	\$2,495	2.3x	2.3x	7.8x	8.4x
SolarWinds	NYSE:SWI	\$7,633	\$5,938	8.4x	7.5x	34.8x	15.6x
Vmware	NYSE:VMW	\$67,227	\$63,761	6.9x	6.1x	26.6x	16.7x
Dynatrace	NYSE:DT	\$7,812	\$7,454	16.2x	13.2x	NM	50.5x
Median				4.1x	4.6x	17.7x	14.9x



Public market valuations

EMS / Infrastructure Software (continued)



(\$ in millions)

		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Platform / OS							
Citrix Systems	NasdaqGS:CTXS	\$15,152	\$14,690	5.0x	4.9x	20.2x	14.6x
Hewlett-Packard	NYSE:HPQ	\$30,357	\$29,757	0.5x	0.5x	6.1x	6.2x
Fastly	NYSE:FSLY	\$1,733	\$1,911	9.5x	7.3x	NM	NM
IBM	NYSE:IBM	\$179,880	\$119,074	2.3x	2.3x	10.8x	9.5x
Microsoft Corp.	NasdaqGS:MSFT	\$1,103,810	\$1,154,849	8.5x	7.7x	19.2x	17.4x
Median				5.0x	4.9x	15.0x	12.0x



Public market valuations



Financial Solutions

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Banking Solutions							
Black Knight	NYSE:BKI	\$10,982	\$9,305	9.4x	9.2x	32.2x	18.5x
Bottomline Technologies	NasdaqGS:EPAY	\$2,221	\$2,176	5.2x	4.8x	58.3x	20.5x
Fidelity National	NYSE:FIS	\$104,366	\$84,907	11.4x	7.9x	37.2x	17.3x
Fiserv	NasdaqGS:FISV	\$102,400	\$79,031	13.3x	6.4x	40.1x	17.1x
GreenSky	NasdaqGS:GSKY	\$582	\$472	1.2x	1.0x	4.0x	3.2x
Jack Henry & Associates	NasdaqGS:JKHY	\$11,667	\$11,690	7.3x	6.9x	26.3x	21.8x
Pintec Technology	NasdaqGM:PT	\$141	\$36	1.0x	NA	NM	NA
Q2 Holdings	NYSE:QTWO	\$3,886	\$4,066	13.1x	10.0x	NM	NM
Senmiao Technology Limited	NasdaqCM:AIHS	\$21	\$22	1.5x	NA	NM	NA
Temenos Group	SWX:TEMN	\$11,896	\$10,757	12.9x	10.4x	41.6x	26.8x
Median				8.4x	7.4x	37.2x	18.5x
Capital Market & Investment Solutions							
Envestnet	NYSE:ENV	\$4,334	\$3,737	5.0x	4.3x	48.9x	18.9x
FactSet Research Systems	NYSE:FDS	\$10,041	\$9,852	7.0x	6.7x	20.1x	19.2x
IRESS	ASX:IRE	\$1,689	\$1,517	5.2x	4.7x	21.5x	17.9x
Moody's	NYSE:MCO	\$47,563	\$42,784	10.2x	9.5x	21.7x	19.7x
Morningstar	NasdaqGS:MORN	\$7,084	\$6,725	6.4x	NA	26.9x	NA
MSCI	NYSE:MSCI	\$23,837	\$21,955	15.8x	14.3x	30.1x	26.0x
SimCorp	CPSE:SIM	\$4,284	\$4,239	8.5x	8.1x	25.1x	25.0x
SS&C Technologies Holdings	NasdaqGS:SSNC	\$23,054	\$15,175	5.1x	4.9x	13.7x	12.2x
Thomson Reuters	TSX:TRI	\$37,296	\$34,932	6.4x	6.1x	NM	20.4x
Median				6.4x	6.4x	23.4x	19.5x
Consumer Data & Analytics							
Equifax	NYSE:EFX	\$20,093	\$16,908	5.8x	5.5x	27.9x	16.0x
Experian	LSE:EXPN	\$34,548	\$30,111	6.6x	6.4x	20.7x	18.3x
Fair Isaac	NYSE:FICO	\$11,375	\$10,651	9.8x	9.1x	40.2x	27.8x
Median				6.6x	6.4x	27.9x	18.3x



Public market valuations



Financial Solutions (continued)

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Payment Processing							
ACI Worldwide	NasdaqGS:ACIW	\$5,700	\$4,335	4.8x	3.8x	25.1x	13.9x
Cielo	BOVESPA:CIEL3	\$7,976	\$5,002	3.0x	3.0x	10.6x	11.8x
Euronet Worldwide	NasdaqGS:EEFT	\$8,207	\$8,493	3.0x	2.8x	14.8x	12.1x
EVO Payments	NasdaqGM:EVOP	\$2,070	\$1,030	4.1x	3.4x	16.8x	11.9x
Global Payments	NYSE:GPN	\$62,607	\$54,429	16.5x	7.0x	39.9x	18.5x
i3 Verticals, Inc.	NasdaqGS:IIVV	\$596	\$396	1.6x	3.7x	23.9x	12.7x
Net 1 Ueps Technologies	NasdaqGS:UEPS	\$253	\$196	0.9x	0.8x	NM	12.9x
PagSeguro Digital	NYSE:PAGS	\$10,647	\$11,144	13.3x	6.5x	NM	17.1x
Square	NYSE:SQ	\$29,595	\$29,700	6.8x	11.0x	NM	60.7x
StoneCo Ltd.	NasdaqGS:STNE	\$11,896	\$11,366	48.4x	15.1x	NM	25.8x
Median				4.5x	3.8x	20.3x	13.4x
Insurance Solutions							
CorVel	NasdaqGS:CRVL	\$1,511	\$1,508	2.5x	NA	16.3x	NA
Ebix	NasdaqGS:EBIX	\$1,752	\$1,061	3.1x	2.6x	11.0x	9.4x
Guidewire Software	NYSE:GWRE	\$9,244	\$10,060	12.8x	11.7x	NM	69.0x
Sapiens International	NasdaqCM:SPNS	\$1,178	\$1,127	3.8x	3.3x	24.5x	18.9x
Verisk	NasdaqGS:VRSK	\$26,797	\$24,168	10.5x	9.6x	25.1x	20.6x
Median				3.8x	6.5x	20.4x	19.8x



Public market valuations



Online & Digital

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Digital Advertising & Marketing							
Alphabet	NasdaqGS:GOOG.L	\$793,409	\$899,713	5.1x	4.3x	18.0x	12.0x
Baidu	NasdaqGS:BDU	\$34,303	\$41,070	2.3x	2.1x	13.8x	12.6x
Criteo	NasdaqGS:CRTO	\$955	\$1,144	0.4x	1.0x	4.4x	3.3x
Hubspot	NYSE:HUBS	\$6,094	\$6,466	9.6x	7.7x	NM	62.0x
iClick Interactive	NasdaqGM:ICLK	\$233	\$185	1.3x	1.0x	NM	57.6x
Marin Software	NasdaqGM:MRIN	\$11	\$10	0.2x	NA	NM	NA
Perion Network	NasdaqGS:PERI	\$130	\$139	0.5x	0.5x	5.4x	4.9x
QuinStreet	NasdaqGS:QNST	\$751	\$806	1.6x	1.4x	31.8x	13.5x
SINA Corp	NasdaqGS:SINA	\$2,775	\$2,427	1.3x	1.2x	5.3x	4.9x
Sogou	NYSE:SOGO	\$852	\$1,922	0.7x	0.7x	7.7x	5.5x
Telaria	NYSE:TLRA	\$353	\$388	5.2x	4.5x	NM	59.7x
The Rubicon Project	NYSE:RUBI	\$367	\$429	2.5x	2.1x	NM	11.6x
Yandex	NasdaqGS:YNDX	\$13,095	\$13,795	5.2x	3.8x	22.6x	13.4x
Median				1.6x	1.8x	10.7x	12.3x
Digital Media & Video							
Adobe Systems	NasdaqGS:ADBE	\$150,324	\$149,837	14.1x	11.9x	42.1x	25.7x
Bilibili	NasdaqGS:BILI	\$5,048	\$5,635	6.1x	3.9x	NM	NM
Blucora	NasdaqGS:BCOR	\$1,448	\$1,152	2.2x	1.8x	11.4x	10.0x
Brightcove	NasdaqGS:BCOV	\$341	\$347	1.9x	1.7x	NM	27.7x
Digimarc	NasdaqGS:DMRC	\$349	\$387	15.2x	13.7x	NM	NA
HUYA Inc.	NYSE:HUYA	\$3,300	\$4,619	3.2x	2.2x	NM	21.7x
IAC/Interactive	NasdaqGS:IAC	\$20,080	\$18,840	4.3x	3.8x	25.7x	17.7x
iQIYI	NasdaqGS:IQ	\$14,755	\$13,886	3.7x	3.3x	21.2x	NM
Leaf Group	NYSE:LEAF	\$94	\$97	0.6x	0.6x	NM	NM
Netflix	NasdaqGS:NFLX	\$147,004	\$137,900	7.8x	6.3x	59.7x	35.1x
Pluralsight	NasdaqGS:PS	\$1,851	\$1,729	6.3x	4.9x	NM	NM
Qutoutiao	NasdaqGS:QTT	\$612	\$746	0.9x	0.6x	NM	NM
Roku	NasdaqGS:ROKU	\$18,709	\$18,938	18.8x	13.4x	NM	NM
Sonic Foundry	OTCPK:SOFO	\$11	\$7	0.3x	NA	NM	NA
TiVo	NasdaqGS:TIVO	\$1,708	\$988	2.6x	2.5x	10.3x	8.8x
VeriSign	NasdaqGS:VRSN	\$22,962	\$22,395	18.7x	18.1x	27.1x	24.8x
Xunlei	NasdaqGS:XNET	\$105	\$351	0.6x	NA	NM	NA
Zoom Video Communications	Nasdaq:ZM	\$19,678	\$20,380	42.4x	25.9x	NM	NM
Median				4.0x	3.9x	25.7x	23.3x



Public market valuations



Online & Digital (continued)

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Digital Advertising Agencies & Service Providers							
Dentsu	TSE:4324	\$14,051	\$10,114	1.5x	1.4x	8.8x	8.6x
IPG	NYSE:IPG	\$13,695	\$8,685	1.6x	1.6x	9.8x	9.1x
M&C Saatchi	AIM:SAA	\$229	\$182	0.4x	0.7x	7.6x	4.4x
MDC Partners	NasdaqGS:MDCA	\$1,548	\$168	1.1x	NA	9.9x	NA
Omnicom	NYSE:OMC	\$22,410	\$17,305	1.5x	1.5x	9.6x	9.3x
Publicis	ENXTPA:PUB	\$13,067	\$10,428	1.3x	1.1x	6.6x	5.0x
WPP	LSE:WPP	\$25,408	\$16,328	1.2x	1.6x	11.6x	8.9x
Median				1.3x	1.4x	9.6x	8.8x
Online Retail & Marketplaces							
1-800-Flowers.com	NasdaqGS:FLWS	\$1,010	\$870	0.8x	0.7x	13.0x	11.2x
Alibaba	NYSE:BABA	\$540,443	\$534,670	8.7x	6.5x	33.7x	20.8x
Amazon	NasdaqGS:AMZN	\$924,022	\$892,832	3.5x	2.9x	27.0x	20.0x
ASOS	AIM:ASC	\$3,581	\$3,464	1.0x	0.9x	45.8x	15.1x
Blue Apron	NYSE:APRN	\$158	\$89	0.3x	0.4x	NM	NM
boohoo.com	AIM:BOO	\$4,538	\$4,754	3.4x	2.6x	37.4x	26.3x
Booking Holding	NasdaqGS:BKNG	\$81,367	\$79,695	5.4x	5.1x	14.1x	13.2x
Cango	NYSE:CANG	\$1,065	\$1,098	5.6x	4.3x	23.0x	NA
CarGurus	NasdaqGS:CARG	\$4,389	\$4,488	7.9x	6.5x	NM	47.4x
Carvana	NYSE:CVNA	\$6,010	\$4,795	1.8x	1.1x	NM	NM
Ebay	NasdaqGS:EBAY	\$34,222	\$28,896	3.2x	3.1x	11.0x	9.2x
Eventbrite	NYSE:EB	\$1,357	\$1,815	4.2x	3.8x	NM	NM
Expedia	NasdaqGS:EXPE	\$17,325	\$14,729	1.5x	1.3x	12.3x	7.8x
Fiverr	NYSE:FVRR	\$566	\$713	5.8x	4.4x	NM	NM
Groupon	NasdaqGS:GRPN	\$1,449	\$1,638	0.6x	0.6x	12.3x	5.1x
Grubhub	NYSE:GRUB	\$4,129	\$3,943	3.3x	2.9x	40.9x	34.6x
EverQuote, Inc.	NasdaqGM:EVER	\$878	\$920	4.1x	2.9x	NM	64.9x
Ocado Group	LSE:OCDO	\$11,942	\$11,965	5.5x	4.8x	NM	NM
Overstock	NasdaqGM:OSTK	\$298	\$268	0.2x	0.2x	NM	NM
Pinduoduo Inc.	NasdaqGS:PDD	\$36,921	\$41,787	10.6x	6.0x	NM	NM
Quotient Technology	NYSE:QUOT	\$863	\$928	2.0x	1.9x	58.7x	16.0x
Rakuten	TSE:4755	\$15,142	\$11,747	1.4x	1.2x	39.9x	14.5x
RumbleON	NasdaqCM:RMBL	\$97	\$29	0.1x	0.1x	NM	NM
Shutterstock	NYSE:SSTK	\$1,244	\$1,474	1.9x	1.8x	24.0x	12.2x
So-Young International	NasdaqGM:SY	\$897	\$1,259	7.3x	3.8x	98.9x	12.9x
Stamps.com	NasdaqGS:STMP	\$1,434	\$1,490	2.5x	2.7x	9.8x	12.8x
The Trade Desk	NasdaqGS:TTD	\$11,773	\$11,886	19.4x	14.8x	95.0x	48.2x
TripAdvisor	NasdaqGS:TRIP	\$3,195	\$3,959	2.0x	2.0x	13.1x	7.0x
Wayfair	NYSE:W	\$8,943	\$7,909	1.0x	0.8x	NM	NM
Wowo	NASDAQ:JMU	\$11	\$11	NM	NA	NM	NA
Yelp	NYSE:YELP	\$2,296	\$2,435	2.3x	2.1x	38.5x	9.0x
Median				2.8x	2.6x	27.0x	13.8x



Public market valuations



Online & Digital (continued)

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Digital Gaming							
Activision	NasdaqGS:ATVI	\$40,135	\$42,124	5.8x	5.9x	17.2x	15.4x
Capcom	TSE:9697	\$2,101	\$2,561	2.4x	2.9x	9.4x	8.4x
Changyou.com	NasdaqGS:CYOU	\$249	\$496	0.5x	0.6x	2.1x	1.9x
DouYu International	NasdaqGS:DOYU	\$1,274	\$2,422	1.4x	1.0x	NM	16.6x
Electronic Arts	NasdaqGS:EA	\$25,861	\$29,493	5.1x	4.9x	20.3x	13.9x
Gree	TSE:3632	\$323	\$1,094	0.5x	0.5x	6.1x	5.2x
Konami	TSE:9766	\$5,172	\$5,952	2.2x	2.0x	8.1x	8.0x
NetDragon WebSoft	SEHK:777	\$1,042	\$1,224	1.4x	1.1x	6.4x	5.5x
Net Entertainment	OM:NET B	\$888	\$652	4.9x	3.9x	14.3x	7.7x
Nintendo	TSE:7974	\$37,614	\$46,068	3.3x	3.1x	13.8x	11.6x
Playtech	LSE:PTEC	\$1,965	\$1,499	1.1x	1.2x	6.1x	4.6x
SciPlay	NasdaqGS:SCPL	\$392	\$268	0.8x	0.8x	3.9x	2.7x
Square Enix	TSE:9684	\$4,833	\$5,890	1.9x	1.6x	14.0x	11.1x
Take-Two Interactive	NasdaqGS:TTWO	\$11,655	\$13,018	3.7x	4.2x	38.1x	16.4x
Ubisoft	ENXTPA:UBI	\$7,349	\$6,866	3.8x	4.0x	NM	7.5x
Zynga	NasdaqGS:ZNGA	\$5,225	\$5,893	4.5x	3.4x	NM	15.5x
Median				2.3x	2.5x	9.4x	8.2x
Social Media							
Facebook	NasdaqGS:FB	\$531,889	\$575,026	8.0x	6.5x	18.7x	12.8x
LINE	TSE:3938	\$11,453	\$11,258	5.6x	4.7x	NM	99.4x
Mail.ru Group	LSE:MAIL	\$4,501	\$4,385	3.2x	2.9x	20.6x	8.2x
Match Group	NasdaqGS: MTCH	\$21,020	\$19,732	10.7x	9.0x	32.2x	24.3x
MeetMe	NasdaqCM:MEET	\$359	\$347	1.7x	1.6x	12.5x	7.7x
Mixi	TSE:2121	\$137	\$1,439	0.1x	0.1x	0.6x	1.2x
Momo	NasdaqGS:MOMO	\$6,628	\$7,799	2.9x	2.5x	13.7x	10.5x
Pinterest	NYSE:PINS	\$9,310	\$10,874	9.2x	6.9x	NM	NM
Renren	NYSE:RENN	\$150	\$63	0.3x	0.2x	NM	NM
Snap	NYSE:SNAP	\$20,304	\$21,350	13.1x	9.4x	NM	NM
Twitter	NYSE:TWTR	\$20,680	\$23,951	6.2x	5.5x	26.8x	15.8x
New Work	XTRA:NWO	\$1,875	\$1,904	6.5x	5.5x	23.1x	17.4x
Median				5.9x	5.1x	19.7x	12.8x



Public market valuations



Online & Digital (continued)

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Digital Commerce Solutions							
Gk Software AG	DB:GKS	\$176	\$140	1.4x	1.4x	37.0x	12.6x
Intershop	XTRA:ISH2	\$43	\$49	1.3x	1.2x	NM	NM
NCR	NYSE:NCR	\$8,328	\$4,189	1.2x	1.2x	9.4x	7.4x
PFS Web	NasdaqCM:PFSW	\$137	\$72	0.6x	0.5x	10.3x	8.1x
Shopify	NYSE:SHOP	\$36,471	\$39,027	25.7x	18.8x	NM	NM
Diebold Nixdorf	NYSE:DBD	\$2,676	\$558	0.6x	0.6x	7.9x	6.1x
Worldline S.A	ENXTPA:WLN	\$12,060	\$11,777	5.3x	4.3x	25.4x	16.7x
Median				1.3x	1.2x	10.3x	8.1x
Other Digital Companies							
Akamai	NasdaqGS:AKAM	\$14,716	\$14,079	5.2x	4.9x	18.3x	11.5x
CooTek (Cayman)	NYSE:CTK	\$308	\$359	2.0x	1.4x	NM	17.1x
Endurance International	NasdaqGS:EIGI	\$2,353	\$593	2.1x	2.1x	8.4x	8.7x
GoDaddy	NYSE:GDDY	\$13,039	\$11,334	4.5x	4.0x	32.9x	16.7x
Just Eat	LSE:JE.	\$6,821	\$6,725	6.0x	4.5x	49.6x	25.4x
Limelight Networks	NasdaqGS:LLNW	\$495	\$498	2.7x	2.2x	NM	16.0x
Moneysupermarket.com	LSE:MONY	\$2,378	\$2,362	4.8x	4.5x	14.7x	12.4x
NetEase	NasdaqGS:NTES	\$34,919	\$40,349	3.3x	3.9x	17.0x	14.1x
Opera	NasdaqGS:OPRA	\$1,026	\$1,206	4.0x	2.7x	17.3x	15.6x
Otello Corporation	OB:OTELLO	\$239	\$243	1.0x	1.0x	NM	9.4x
Phoenix New Media	NYSE:FENG	-\$5	\$225	NM	0.0x	0.1x	0.3x
Redfin Corporation	NasdaqGS:RDFN	\$1,710	\$1,779	2.6x	1.8x	NM	NM
Sea	NYSE:SE	\$15,514	\$17,159	9.2x	4.2x	NM	NM
SurveyMonkey	NasdaqGS:SVMK	\$2,491	\$2,298	8.6x	7.0x	NM	58.5x
Tencent Holdings	SEHK:700	\$410,239	\$402,527	8.2x	6.5x	22.6x	17.6x
United Internet	DB:UTDI	\$10,123	\$6,678	1.8x	1.7x	7.7x	6.8x
Wix	NasdaqGS:WIX	\$5,818	\$6,184	8.1x	6.5x	NM	39.3x
YayYo	NasdaqCM:YAYO	\$70	\$63	12.2x	NA	NM	NA
Zillow	NasdaqGS:ZG	\$8,241	\$8,116	3.8x	2.0x	NM	NM
Median				4.3x	3.3x	17.2x	15.6x



Public market valuations



Tech Enabled Business Services

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
IT Services, Integration & Consulting							
Accenture	NYSE:ACN	\$122,060	\$127,749	2.8x	2.7x	17.6x	15.7x
Atos Origin	ENXTPA:ATO	\$13,788	\$9,226	1.0x	1.1x	7.1x	7.0x
Bechtle	XTRA:BC8	\$5,785	\$5,525	1.0x	1.0x	17.9x	15.5x
CACI International	NYSE:CACI	\$7,921	\$5,993	1.5x	1.4x	16.2x	13.1x
Cancom	XTRA:COK	\$2,028	\$2,075	1.2x	1.0x	17.3x	12.7x
Cap Gemini	ENXTPA:CAP	\$22,509	\$19,539	1.5x	1.4x	11.5x	9.0x
CGI Group	TSX:GIB.A	\$23,788	\$22,187	2.6x	2.5x	15.1x	13.3x
CLPS Incorporation	NasdaqGM:CLPS	\$33	\$38	0.5x	NA	NM	NA
Cognizant Technology	NasdaqGS:CTSH	\$33,727	\$35,104	2.0x	2.0x	10.6x	10.1x
ComputaCenter	LSE:CCC	\$2,352	\$2,205	0.4x	0.4x	12.7x	10.2x
DXC Technology	NYSE:DXC	\$17,793	\$9,556	0.9x	0.9x	4.8x	5.5x
ePlus	NasdaqGS:PLUS	\$1,304	\$1,129	0.9x	0.8x	12.1x	11.1x
FDM Group	LSE:FDM	\$1,367	\$1,372	4.0x	3.7x	20.2x	17.4x
Fujitsu	TSE:6702	\$22,934	\$18,418	0.6x	0.7x	6.2x	8.2x
HCL Technologies	NSEI:HCLTECH	\$21,675	\$21,320	2.4x	2.1x	10.5x	8.9x
Infosys	NSEI:INFY	\$38,975	\$41,138	3.2x	2.9x	13.3x	11.7x
ManTech International	NasdaqGS:MANT	\$3,230	\$3,111	1.5x	1.4x	17.7x	16.2x
MAXIMUS	NYSE:MMS	\$4,681	\$4,776	1.6x	1.5x	11.8x	10.4x
NCC Group	LSE:NCC	\$768	\$742	2.4x	2.1x	15.6x	12.0x
Nomura Research Institute	TSE:4307	\$12,921	\$12,523	2.7x	2.6x	12.9x	12.2x
NSD	TSE:9759	\$1,077	\$1,302	1.9x	1.7x	12.1x	11.0x
OBIC	TSE:4684	\$10,697	\$11,802	15.0x	13.8x	24.0x	25.2x
Perficient	NasdaqGS:PRFT	\$1,494	\$1,379	2.7x	2.5x	20.6x	14.3x
SCSK Corporation	TSE:9719	\$4,893	\$5,433	1.4x	1.3x	9.9x	9.3x
Sopra Group	ENXTPA:SOP	\$4,221	\$3,163	0.9x	0.8x	10.1x	7.2x
Talend	NasdaqGM:TLND	\$1,152	\$1,169	4.9x	4.1x	NM	NM
Tata Consultancy Services	NSEI:TCS	\$100,481	\$107,360	4.7x	4.4x	17.8x	16.7x
The Hackett Group	NasdaqGS:HCKT	\$453	\$458	1.7x	1.6x	11.2x	9.3x
Tieto	HLSE:Tieto	\$2,468	\$2,125	1.4x	1.4x	12.8x	8.0x
Unisys	NYSE:UIS	\$1,064	\$710	0.4x	0.4x	4.2x	2.1x
Virtusa	NasdaqGS:VRTU	\$1,705	\$1,334	1.3x	1.2x	16.5x	11.2x
Wipro	BSE:507685	\$15,829	\$18,841	1.9x	1.8x	9.0x	9.1x
Xerox	NYSE:XRX	\$12,894	\$8,416	1.4x	1.4x	8.2x	7.9x
Median				1.5x	1.4x	12.7x	11.0x



Public market valuations



Tech Enabled Business Services (continued)

(\$ in millions)		TEV	Market Cap	TEV/Revenue		TEV/EBITDA	
				LTM	NTM	LTM	NTM
Business Process Management (BPM)							
Appian	APPN	\$2,732	\$2,893	10.7x	9.2x	NM	NM
Broadridge Financial Solutions	NYSE:BR	\$15,837	\$14,183	3.7x	3.5x	17.7x	15.5x
Cardtronics	NasdaqGS:CATM	\$2,703	\$1,883	2.0x	1.9x	9.7x	8.4x
Cass Information Systems	NasdaqGS:CASS	\$603	\$819	3.7x	NA	11.2x	NA
Change Healthcare	NasdaqGS:CHNG	\$1,696	\$1,672	NM	0.5x	NA	1.7x
Computershare	ASX:CPU	\$7,873	\$6,477	3.5x	3.3x	13.3x	11.9x
CSG Systems International	NasdaqGS:CSGS	\$2,104	\$1,819	2.1x	2.3x	12.6x	9.6x
DocuSign	NasdaqGS:DOCU	\$12,399	\$12,530	15.0x	11.0x	NM	NM
EVERTEC	NYSE:EVTC	\$2,755	\$2,277	5.8x	5.5x	14.4x	11.7x
Exlservice Holdings	NasdaqGS:EXLS	\$2,444	\$2,380	2.5x	NA	18.8x	NA
Genpact	NYSE:G	\$8,861	\$7,731	2.6x	2.4x	16.3x	12.8x
PagerDuty	NYSE:PD	\$1,646	\$1,987	11.5x	8.4x	NM	NM
Smartsheet	NYSE:SMAR	\$5,026	\$5,529	22.9x	14.4x	NM	NM
SS&C Technologies	NasdaqGS:SSNC	\$23,054	\$15,175	5.1x	4.9x	13.7x	12.2x
Tabula Rasa Healthcare	NasdaqGM:TRHC	\$1,133	\$931	4.2x	3.4x	NM	26.2x
Trans Cosmos	TSE:9715	\$948	\$1,086	0.3x	0.3x	9.2x	8.0x
WEX	NYSE:WEX	\$11,310	\$8,707	6.8x	6.0x	19.6x	14.8x
Wirecard	XTRA:WDI	\$14,123	\$16,310	5.0x	4.0x	17.3x	13.0x
WNS	NYSE:WNS	\$3,226	\$3,129	3.8x	3.5x	20.0x	12.6x
Zuora	NYSE:ZUO	\$1,628	\$1,790	6.3x	5.2x	NM	NM
Median				4.2x	3.7x	14.4x	12.2x
Data Center Hosting & Services							
Box	NYSE:BOX	\$2,951	\$2,726	4.4x	3.9x	NM	35.0x
Dropbox	NasdaqGS:DBX	\$7,550	\$7,679	4.7x	4.1x	81.4x	16.9x
Equinix	NasdaqGS:EQIX	\$59,198	\$48,340	11.0x	10.0x	25.4x	21.0x
Interxion Holding	NYSE:INXN	\$8,153	\$6,515	12.1x	10.5x	26.4x	20.3x
Pure Storage	NYSE:PSTG	\$3,472	\$4,117	2.2x	1.9x	NM	17.2x
Switch	NYSE:SWCH	\$2,522	\$1,415	5.7x	5.1x	13.4x	10.1x
Median				5.7x	5.1x	25.9x	17.2x
Call Center							
Sykes Enterprises	NasdaqGS:SYKE	\$1,607	\$1,456	1.0x	1.0x	9.6x	9.1x
TTEC Holdings	NasdaqGS:TTEC	\$2,447	\$2,135	1.5x	1.4x	12.6x	11.3x
Median				1.3x	1.2x	11.1x	10.2x





 M&A
transactions



M&A transactions

Application Software



Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
Nov-19	Q4'2019	The Apri Group of Companies	People Corporation (TSXV:PEO)	\$33.8	2.7x
Nov-19	Q4'2019	Buildium, LLC	RealPage, Inc. (NasdaqGS:RP)	\$580.0	11.6x
Nov-19	Q4'2019	Novabase Digital S.A.	VINCI Energies Portugal, SGPS, S.A.	\$40.1	1.0x
Nov-19	Q4'2019	Netalogue Technologies plc	Truecommerce Holdings Limited	\$7.4	3.7x
Oct-19	Q4'2019	Shenzhen HAWK Internet Co., Ltd.	TCL Electronics (Huizhou) Co., Ltd	\$28.4	1.3x
Oct-19	Q4'2019	Business Operating Software Solution Limited	-	\$38.1	11.1x
Oct-19	Q4'2019	Gaуди BV	ZetaDisplay AB (publ) (OM:ZETA)	\$7.2	1.5x
Oct-19	Q4'2019	Astea International Inc. (OTCPK:ATEA)	IFS Americas, Inc.	\$74.8	2.8x
Oct-19	Q4'2019	Fenix Media Limited / Face US Inc.	Access Intelligence Plc (AIM:ACC)	\$5.8	0.7x
Sep-19	Q3'2019	myelefant SAS	Sinch AB (publ) (OM:SINCH)	\$23.5	2.1x
Sep-19	Q3'2019	Mitrais Pte. Ltd.	CAC Holdings Corporation (TSE:4725)	\$26.9	1.7x
Sep-19	Q3'2019	StatPro Group plc (AIM:SOG)	Confluence Technologies, Inc.	\$244.4	3.4x
Aug-19	Q3'2019	Enterprise Security assets Of Symantec Corporation	Broadcom Inc. (NasdaqGS:AVGO)	-	4.6x
Aug-19	Q3'2019	Pivotal Software, Inc. (NYSE:PVTL)	VMware, Inc. (NYSE:VMW)	\$3,428.1	4.4x
Aug-19	Q3'2019	Carbon Black, Inc. (NasdaqGS:CBLK)	VMware, Inc. (NYSE:VMW)	\$1,816.8	9.0x
Aug-19	Q3'2019	Jiangsu Share-sun Information Technology Co., Ltd.	Shanghai Guao Electronic Technology Co., Ltd. (SZSE:300551)	-	6.0x
Aug-19	Q3'2019	Cxense ASA (OB:CXENSE)	Piano Software B.V.	\$35.0	2.0x
Jul-19	Q3'2019	Decision Dynamics, Inc.	IAA, Inc. (NYSE:IAA)	-	2.5x
Jul-19	Q3'2019	Monotype Imaging Holdings Inc. (NasdaqGS:TYPE)	HGGC, LLC	\$905.6	3.5x
Jul-19	Q3'2019	Gridsum Holding Inc. (NasdaqGS:GSUM)	Beta Dynamic Limited	\$153.6	3.7x
Jul-19	Q3'2019	3Cinteractive, L.L.C.	IMmobile PLC (AIM:IMO)	\$53.1	1.6x
Jul-19	Q3'2019	Construction Computer Software Proprietary Limited	RIB Limited	\$31.5	3.2x
Jul-19	Q3'2019	24i Unit Media B.V.	Amino Technologies plc (AIM:AMO)	\$25.1	8.7x



M&A transactions

Application Software (continued)



Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
Jul-19	Q3'2019	Decision Dynamics, Inc.	IAA, Inc. (NYSE:IAA)	\$21.1	2.5x
Jul-19	Q3'2019	Yougetitback Limited	Blanco Technology Group plc (AIM:BLTG)	\$5.8	4.3x
Jun-19	Q2'2019	Kangaloosh Limited	AB Dynamics Plc (AIM:ABDP)	\$27.5	5.1x
Jun-19	Q2'2019	Sceptre Hospitality Resources, LLC	Whiteboard Labs LLC	\$3.3	0.6x
Jun-19	Q2'2019	youperience GmbH	Persistent Systems Germany GmbH	\$7.7	2.4x
Jun-19	Q2'2019	Thoughtonomy Ltd	Blue Prism Group plc (AIM:PRSM)	\$101.1	10.8x
Jun-19	Q2'2019	SoNET Systems Pty Ltd	RM plc (LSE:RM.)	\$9.2	2.4x
Jun-19	Q2'2019	FutureGov Ltd	The Panoply Holdings plc (AIM:TPX)	\$26.7	3.3x
Jun-19	Q2'2019	Redland Business Solutions Limited	Ideagen plc (AIM:IDEA)	\$22.8	4.5x
Jun-19	Q2'2019	Tableau Software, Inc. (NYSE:DATA)	salesforce.com, inc. (NYSE:CRM)	\$17,364.0	13.7x
Jun-19	Q2'2019	Looker Data Sciences, Inc.	Google LLC	\$2,600.0	-
Jun-19	Q2'2019	Corporate Renaissance Group Inc.	Quisitive Technology Solutions, Inc. (TSXV:QUIS)	\$14.5	2.5x
Jun-19	Q2'2019	Beijing Yongyou Audit Software Co., Ltd.	Beijing Youweishi Technology Center (Limited Partnership)	\$4.8	1.0x
May-19	Q2'2019	Object+ Financial Services BV	KRM22 Plc (AIM:KRM)	\$6.7	6.1x
May-19	Q2'2019	Microgen Financial Systems Limited	Silverfleet Capital Partners	\$64.3	2.8x
May-19	Q2'2019	Shenzhen Edraw Software CO.,LTD.	Wondershare Technology Group Co., Ltd. (SZSE:300624)	\$18.5	11.1x
May-19	Q2'2019	Coheris SA (ENXTPA:COH)	ChapsVision	\$12.3	0.7x
May-19	Q2'2019	Vidyo, Inc.	Enghouse Systems Limited (TSX:ENGH)	\$40.0	0.7x
May-19	Q2'2019	Amber Road, Inc. (NYSE:AMBR)	E2open, LLC	\$427.4	4.9x
May-19	Q2'2019	Q Delft B.V.	Netcompany Group A/S (CPSE:NETC)	\$5.6	0.7x
May-19	Q2'2019	EU Supply Plc (AIM:EUSP)	Mercell Holding AS	\$20.4	2.9x
May-19	Q2'2019	GEOMAP S.A.	1Spatial France SAS	\$6.3	0.7x
May-19	Q2'2019	C-Lutions, LLC	Wolters Kluwer ELM Solutions, Inc.	\$42.0	14.0x



M&A transactions



Application Software (continued)

Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
May-19	Q2'2019	Bellvedi Limited	Tracsis plc (AIM:TRCS)	\$16.8	8.0x
May-19	Q2'2019	Lambert Automation Limited	Mpac Group plc (AIM:MPAC)	\$22.9	0.8x
May-19	Q2'2019	Sigma Systems Canada LP	Hansen Technologies Ltd (ASX:HSN)	-	2.2x
Apr-19	Q2'2019	Breezy HR, Inc.	Learning Technologies Group plc (AIM:LTG)	\$30.0	8.3x
Apr-19	Q2'2019	Axioma, Inc.	Deutsche Börse Aktiengesellschaft (XTRA:DB1)	\$850.0	8.5x
Apr-19	Q2'2019	BSM Technologies Inc. (TSX:GPS)	Geotab Inc.	\$88.2	1.9x
Apr-19	Q2'2019	Celtech Software Group	Universe Group plc (AIM:UNG)	\$6.5	2.7x
Mar-19	Q1'2019	Ipswitch, Inc.	Progress Software Corporation (NasdaqGS:PRGS)	\$225.0	-
Mar-19	Q1'2019	Dynamic Yield	McDonald's Corporation (NYSE:MCD)	\$300.0	-
Mar-19	Q1'2019	Espial Group Inc. (TSX:ESP)	Enghouse Systems Limited (TSX:ENGH)	\$42.1	0.8x
Mar-19	Q1'2019	Tactical Communications Group, LLC	Curtiss-Wright Corporation (NYSE:CW)	\$50.0	-
Mar-19	Q1'2019	EASY SOFTWARE AG (XTRA:ESY)	Deutsche Balaton AG (DB:BBHK)	\$26.9	0.7x
Mar-19	Q1'2019	Figure Eight Inc.	Appen Limited (ASX:APX)	\$300.0	-
Feb-19	Q1'2019	Workday and Cornerstone OnDemand Business	Alight Solutions LLC	\$110.0	-
Feb-19	Q1'2019	Containerchain Pty Ltd	Wisetech Global Limited (ASX:WTC)	\$66.1	-
Feb-19	Q1'2019	Attunity Ltd. (NasdaqCM:ATTU)	QlikTech International AB	\$551.6	5.4x
Feb-19	Q1'2019	PBU CAD-Systeme Gmbh	Tech-Value S.p.A.	\$5.4	-
Feb-19	Q1'2019	GreenShoot Labs Limited	The Panoply Holdings plc (AIM:TPX)	\$9.5	-
Feb-19	Q1'2019	Ellie Mae, Inc. (NYSE:ELLI)	Thoma Bravo, LLC	\$3,683.3	6.6x
Feb-19	Q1'2019	Solium Capital Inc. (TSX:SUM)	Morgan Stanley (NYSE:MS)	\$864.3	7.2x
Feb-19	Q1'2019	Tax Systems plc (AIM:TAX)	Bowmark Capital LLP	\$141.8	6.8x
Feb-19	Q1'2019	The Ultimate Software Group, Inc. (NasdaqGS:ULTI)	Hellman & Friedman LLC; JMI Management, Inc.; The Blackstone Group L.P. (NYSE:BX)	\$10,874.8	9.0x
Feb-19	Q1'2019	Top Image Systems Ltd. (NasdaqCM:TISA)	Kofax Limited	\$22.1	0.7x



M&A transactions



Application Software (continued)

Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
Feb-19	Q1'2019	PCSYS A/S	TECSYS Inc. (TSX:TCS)	\$10.3	-
Feb-19	Q1'2019	Dynacommerce Holding B.V.	Tech Mahindra Limited (NSEI:TECHM)	\$18.2	-
Jan-19	Q1'2019	MSR Customs Corporation	The Descartes Systems Group Inc (TSX:DSG)	\$248.8	-
Jan-19	Q1'2019	Trendkite, Inc.	Cision Ltd. (NYSE:CISN)	\$221.1	-
Dec-18	Q1'2019	Pictureworks Holdings Sdn Bhd	PUC Berhad (KLSE:PUC)	\$37.6	-
Dec-18	Q4'2018	Pictureworks Holdings Sdn Bhd	PUC Berhad (KLSE:PUC)	\$37.6	-
Dec-18	Q4'2018	MINDBODY, Inc. (NasdaqGM:MB)	Vista Equity Partners LLC	\$2,154.4	7.4x
Dec-18	Q4'2018	Global Software Business Unit of Atos Convergence Creators	Enea AB (publ) (OM:ENEA)	\$20.6	-
Dec-18	Q4'2018	Cortex Business Solutions Inc. (TSXV:CBX)	TransZap P2P Canada, Inc.	\$33.3	3.1x
Dec-18	Q4'2018	Socionext Embedded Software Austria GmbH	ArtSpark Holdings Inc. (TSE:3663)	\$17.7	-
Dec-18	Q4'2018	Harvest S.A. (ENXTPA:ALHVS)	Five Arrows Managers SAS	\$75.6	3.9x
Dec-18	Q4'2018	IQMS Inc.	Dassault Systèmes SE (ENXTPA:DSY)	\$425.0	-
Dec-18	Q4'2018	Danal, Inc.	Boku, Inc. (AIM:BOKU)	\$101.4	-
Dec-18	Q4'2018	Lighthouse Computer Services Inc.	Converge Technology Solutions Corp. (TSXV:CTS)	\$23.2	-
Dec-18	Q4'2018	SDH Holding SA/ SDATAWAY SA	Intretech (Hk) Co., Limited	\$36.1	-



M&A transactions

EMS / Infrastructure Software



Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
Nov-19	Q4'2019	Carbonite, Inc. (NasdaqGM:CARB)	Open Text Corporation (NasdaqGS:OTEX)	\$1,494.4	3.4x
Oct-19	Q4'2019	Race Roster Business Operation of Fast North Corporation	ASICS Corporation (TSE:7936)	\$28.1	5.4x
Oct-19	Q4'2019	CSG Limited (ASX:CSV)	Fuji Xerox Asia Pacific Pte Ltd.	\$253.2	1.7x
Oct-19	Q4'2019	Cision Ltd. (NYSE:CISN)	MJ23 UK Acquisition Limited	\$2,818.0	3.8x
Oct-19	Q4'2019	PowerupCloud Technologies Pvt. Ltd.	Larsen & Toubro Infotech Limited (NSE:ITI)	\$15.0	4.3x
Oct-19	Q4'2019	Datatrend Technologies, Inc.	Converge Technology Solutions Corp. (TSXV:CTS)	\$17.5	0.2x
Sep-19	Q3'2019	Dynatech Inc.	ValueCommerce Co., Ltd. (TSE:2491)	\$25.4	1.6x
Sep-19	Q3'2019	Wise lausnir ehf	Centara ehf	\$7.3	0.6x
Sep-19	Q3'2019	Substantially all Assets of Ecomdash	Endurance International Group Holdings, Inc. (NasdaqGS:EIGI)	\$9.6	6.0x
Sep-19	Q3'2019	REGISTER S.p.A.	team.blue	\$441.9	3.8x
Sep-19	Q3'2019	MAM Software Group, Inc. (NasdaqCM:MAMS)	Kerridge Commercial Systems Group Limited	\$158.8	4.1x
Aug-19	Q3'2019	HCL Insys Pte. Ltd.	PCCW Solutions Limited	-	0.5x
Jun-19	Q2'2019	Polystar OSIX AB	Elisa Oyj (HLSE:ELISA)	\$84.8	2.0x
Jun-19	Q2'2019	AIM Software GmbH	SimCorp A/S (CPSE:SIM)	-	3.9x
May-19	Q2'2019	TPP Wholesale Reseller Business of TPP Wholesale Pty Ltd	CentralNic Group Plc (AIM:CNIC)	\$14.7	1.3x
May-19	Q2'2019	Early Birds SAS	ATTRAQT Group plc (AIM:ATQT)	\$17.9	7.0x
May-19	Q2'2019	SecureLink nv	Orange S.A. (ENXTPA:ORA)	-	2.1x
Apr-19	Q2'2019	Xware AB	Wisetech Global Limited (ASX:WTC)	\$16.4	6.6x
Apr-19	Q2'2019	GBST Holdings Limited (ASX:GBT)	Bravura Solutions Limited (ASX:BVS)	\$123.6	1.8x
Feb-19	Q1'2019	Substantially All Assets of Determine, Inc.	Corcentric Collective Business System Corp.	\$46.0	-
Feb-19	Q1'2019	IDology, Inc.	GB Group plc (AIM:GBG)	\$301.0	-
Feb-19	Q1'2019	Webroot Inc.	Carbonite, Inc. (NasdaqGM:CARB)	\$618.5	-
Feb-19	Q1'2019	MicroPact Inc.	Tyler Technologies, Inc. (NYSE:TYL)	\$195.0	-
Dec-18	Q4'2018	Shenzhen Renyong Electronic System Co., Ltd.	Shenzhen Infinova Intelligent Technology Co., Ltd.	\$8.1	-
Dec-18	Q4'2018	Verimatrix, Inc.	Inside Secure S.A. (ENXTPA:INSD)	\$158.0	-



M&A transactions



Tech Enabled Services

Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
Nov-19	Q4'2019	SpireMedia, Inc.	Kin and Carta plc (LSE:KCT)	\$34.9	3.7x
Nov-19	Q4'2019	CYCL AG	LiveTiles Limited (ASX:LVT)	\$22.8	2.4x
Nov-19	Q4'2019	VSS Holdings, LLC	Converge Technology Solutions Corp. (TSXV:CTS)	\$29.2	0.4x
Oct-19	Q4'2019	Intrinsyc Technologies Corporation (TSX:ITC)	Lantronix, Inc. (NasdaqCM:LTRX)	\$24.0	1.0x
Oct-19	Q4'2019	InterXion Holding N.V. (NYSE:INXN)	Digital Realty Trust, Inc. (NYSE:DLR)	\$9,077.3	13.6x
Oct-19	Q4'2019	BroadenGate Software Services Co., Ltd.	Infocore Investment Holding Group Co.,Ltd	\$21.3	1.4x
Oct-19	Q4'2019	PeopleWare ICT Solutions B.V.	Proact IT Group AB (publ) (OM:PACT)	\$18.7	0.6x
Oct-19	Q4'2019	Sophos Group plc (LSE:SOPH)	Thoma Bravo, LLC	\$3,914.6	5.5x
Oct-19	Q4'2019	Brady plc (AIM:BRY)	Abalone Asset Management Limited	\$15.3	0.5x
Oct-19	Q4'2019	AECOM Management Services	American Securities LLC; Lindsay Goldberg LLC	\$2,405.0	0.7x
Sep-19	Q3'2019	Substantially All Assets of First Source Electronics, LLC	Commercial Vehicle Group, Inc. (NasdaqGS:CVGI)	\$44.8	1.0x
Sep-19	Q3'2019	1Strategy, LLC	TEKsystems Global Services, LLC	\$3.7	1.8x
Sep-19	Q3'2019	Shanghai Yulun Education Technology	Shanghai Xinnanyang Only Education & Technology	\$11.9	13.5x
Aug-19	Q3'2019	Presidio, Inc. (NasdaqGS:PSDO)	BC Partners	\$2,244.2	0.8x
Aug-19	Q3'2019	Computer Task Group, Incorporated (NasdaqGS:CTG)	Assurance Global Services LLC	\$96.1	0.3x
Aug-19	Q3'2019	Sanderson Group plc (AIM:SND)	Aptean Limited	\$107.9	2.5x
Aug-19	Q3'2019	NCXX Solutions Co., Ltd.	Jitsugyo no Nihon Sha, Ltd.	-	0.2x
Jul-19	Q3'2019	Tascomi Ltd.	IDOX plc (AIM:IDOX)	-	3.8x
Jul-19	Q3'2019	GBST Holdings Limited (ASX:GBT)	FNZ (UK) Ltd	\$184.8	2.9x
Jul-19	Q3'2019	GBST Holdings Limited (ASX:GBT)	SS&C Technologies Holdings, Inc. (NasdaqGS:SSNC)	\$175.2	2.7x
Jul-19	Q3'2019	RightsID and ChannelID Assets of ZEFR	Vobile Group Limited (SEHK:3738)	\$90.0	2.3x
Jul-19	Q3'2019	Shanghai Rili Technology Development Co., Ltd.	Shangying Global Co., Ltd. (SHSE:600146)	\$63.3	0.2x
Jul-19	Q3'2019	Grand-Flo Berhad (KLSE:GRANFLO)	-	\$19.9	1.0x



M&A transactions



Tech Enabled Services (continued)

Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
Jul-19	Q3'2019	DONAT group GmbH	Data Respons ASA (OB:DAT)	\$9.6	0.9x
Jul-19	Q3'2019	Nordisk Systems, Inc.	Converge Technology Solutions Corp. (TSXV:CTS)	\$9.5	0.5x
Jul-19	Q3'2019	ISS Consulting (Thailand) Ltd.	itelligence AG	\$7.7	0.4x
Jul-19	Q3'2019	Lymbyc Solutions Private Limited	Larsen & Toubro Infotech Limited (NSEI:ITI)	\$5.5	5.4x
Jun-19	Q2'2019	Altran Technologies S.A. (ENXTPA:ALT)	Capgemini SE (ENXTPA:CAP)	\$6,059.0	1.7x
Jun-19	Q2'2019	EVRY ASA (OB:EVRY)	Tieto Oyj (HLSE:TIETO)	\$2,252.1	1.5x
Jun-19	Q2'2019	Mobiquity Inc.	Hexaware Technologies, Inc.	\$182.0	2.6x
Jun-19	Q2'2019	SCISYS Group PLC (AIM:SSY)	CGI Group Holdings Europe Limited	\$109.5	1.4x
Jun-19	Q2'2019	Meritgroup Limited	Dods Group plc (AIM:DODS)	\$28.5	2.4x
Jun-19	Q2'2019	Pace Payment Systems, Inc.	i3-SDCR, Inc.	\$134.7	4.6x
May-19	Q2'2019	Total System Services, Inc. (NYSE:TSS)	Global Payments Inc. (NYSE:GPN)	\$26,708.0	6.4x
May-19	Q2'2019	SafeCharge International (AIM:SCH)	11411802 Canada Inc.	\$861.5	5.6x
May-19	Q2'2019	Gecom s.r.l.	Yarix S.r.l.	\$5.6	0.7x
May-19	Q2'2019	Crimson Consultants Holdings Limited	Tribal Group plc (AIM:TRB)	\$13.0	3.3x
Apr-19	Q2'2019	BlueSoft	Orange Polska (WSE:OPL)	\$52.0	1.6x
Apr-19	Q2'2019	Halfmann Goetsch Partner AG	NNIT (CPSE:NNIT)	\$11.2	1.3x
Apr-19	Q2'2019	Jiangxi Samton Technology	SGSG Science&Technology (SZSE:300561)	\$115.6	1.9x
Apr-19	Q2'2019	Certain Business And Assets of Secarma Limited	Shearwater Group PLC (AIM:SWG)	\$9.7	2.0x
Feb-19	Q1'2019	SpeedPay, Inc.	ACI Worldwide, Inc. (NasdaqGS:ACIW)	\$750.0	-
Feb-19	Q1'2019	Future Focus Infotech Pvt. Ltd.	en-japan inc. (TSE:4849)	\$11.4	-
Feb-19	Q1'2019	SpeedPay, Inc.	ACI Worldwide, Inc. (NasdaqGS:ACIW)	\$750.0	-
Feb-19	Q1'2019	Future Focus Infotech Pvt. Ltd.	en-japan inc. (TSE:4849)	\$11.4	-
Feb-19	Q1'2019	SpeedPay, Inc.	ACI Worldwide, Inc. (NasdaqGS:ACIW)	\$750.0	-



M&A transactions



Tech Enabled Services (continued)

Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
Feb-19	Q1'2019	Future Focus Infotech Pvt. Ltd.	en-japan inc. (TSE:4849)	\$11.4	-
Feb-19	Q1'2019	SpeedPay, Inc.	ACI Worldwide, Inc. (NasdaqGS:ACIW)	\$750.0	-
Feb-19	Q1'2019	Future Focus Infotech Pvt. Ltd.	en-japan inc. (TSE:4849)	\$11.4	-
Feb-19	Q1'2019	Nielsen+Partner Unternehmensberater GmbH	Larsen & Toubro Infotech GmbH	\$31.6	-
Feb-19	Q1'2019	Saracen Datastore Limited	Iron Mountain (UK) plc	\$10.0	-
Jan-19	Q1'2019	Paygent Co.,Ltd.	NTT DATA Corporation (TSE:9613)	\$57.9	-
Jan-19	Q1'2019	Earthport plc (AIM:EPO)	Mastercard Incorporated (NYSE:MA)	\$280.1	6.3x
Jan-19	Q1'2019	Software Information Systems, LLC	Converge Technology Solutions Corp. (TSXV:CTS)	\$15.4	-
Jan-19	Q1'2019	Ruletronics	Larsen & Toubro Infotech Limited (NSE:LT)	\$7.5	-
Jan-19	Q1'2019	Compass Informatics / Compass Informatics UK	Tracsis plc (AIM:TRCS)	\$6.9	-
Jan-19	Q1'2019	First Data Corporation (NYSE:FDC)	Fiserv, Inc. (NasdaqGS:FISV)	\$41,941.6	5.0x
Jan-19	Q1'2019	DeClout Limited (Catalist:5UZ)	Exeo Global Pte. Ltd.	\$128.7	0.5x
Jan-19	Q1'2019	Luxoft Holding, Inc. (NYSE:LXFT)	DXC Technology Company (NYSE:DXC)	\$2,078.4	2.1x
Dec-18	Q4'2018	Earthport plc (AIM:EPO)	Visa International Service Association	\$244.8	4.5x
Dec-18	Q4'2018	KMD A/S	NEC Corporation (TSE:6701)	\$1,222.6	-
Dec-18	Q4'2018	Sandz Solutions (Singapore) Pte Ltd.	Kronologi Asia Berhad (KLSE:KRONO)	\$18.0	-
Dec-18	Q4'2018	Aerospace Network Security Technology (Shenzhen) Co., Ltd.	Aisino Corporation (SHSE:600271)	\$84.5	-
Dec-18	Q4'2018	Travelport Worldwide Limited (NYSE:TVPT)	Siris Capital Group, LLC; Evergreen Coast Capital Corp.	\$4,350.1	1.6x
Dec-18	Q4'2018	PrimeQ Pty Ltd.	Accenture plc (NYSE:ACN)	\$22.3	-
Dec-18	Q4'2018	GCL System Integration	Liaoning Huajun Asset Management Co., Ltd.	\$39.0	-
Dec-18	Q4'2018	Guangdong united Data Holding Group Co., Ltd.	Lontrue Co., Ltd. (SZSE:300175)	\$30.5	-
Dec-18	Q4'2018	Advantech Technologies (IT) Ltd.	One Software Services (1997) Ltd.	\$13.2	-



M&A transactions

Online & Digital



Date Announced	Period	Target	Buyer	Enterprise Value	Revenue Multiple
Oct-19	Q4'2019	Virtual Access (Ireland) Ltd.	Westermo Teleindustri AB	\$20.0	1.5x
Jul-19	Q3'2019	HEXONET Services Inc.	CentralNic Group Plc (AIM:CNIC)	\$11.3	0.6x
Jul-19	Q3'2019	Dreamscape Networks Limited (ASX:DN8)	Web.com Group, Inc.	\$90.1	1.8x
May-19	Q2'2019	Beijing MTM Education Technology Development	Ningbo Meishan Bonded Port Area Qizhi	\$15.0	14.1x
Feb-19	Q1'2019	Xstream A/S	SeaChange International, Inc. (NasdaqGS:SEAC)	\$5.5	-



IV Selected transactions



Selected transactions



Accenture acquires Bow & Arrow, a U.K.- based digital ventures consultancy

Transaction Summary

- Pharus is pleased to announce our role as the exclusive financial advisor to Bow & Arrow in its sale to Accenture. Bow & Arrow has built its success on its ability to blend analytics with creativity, and vision with execution. The consultancy works with clients across a variety of industries, with a focus on communications, media and technology. Bow & Arrow sits at the center of the disruption and innovation agenda for clients. They work in cross-functional 'Start Up' teams, which combine strategists with commercial, research, creative thinking and analytical skills. They also incorporate creatives who have commercial, strategic, customer and product understanding to design transformational experiences.
- About the transaction with Accenture Interactive, Bow & Arrow CEO and Founder Ben Slater commented, "We work with clients when there is an urgent need for fast growth outside of their core business, but they don't know what to do next. Working with Accenture Interactive dramatically increases our capacity to provide game-changing implementation too for these clients."

Bow & Arrow

has been acquired by

accenture

The undersigned acted as the exclusive financial advisor to Bow & Arrow in connection with the transaction

P H A R U S

Key Profiles

- Bow & Arrow is a digital ventures consultancy that works with clients to identify and create new digital products and services that fulfill unmet customer needs. Its expertise is in the emerging category of "white space" identification — finding opportunities for businesses to grow in new market sectors and to offer new experiences.
- Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions — underpinned by the world's largest delivery network — Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 492,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Accenture Interactive helps the world's leading brands transform their customer experiences across the entire customer journey. Through its connected offerings in design, marketing, content and commerce, Accenture Interactive creates new ways to win in today's experience-led economy.

On working with Pharus, Bow & Arrow CEO and Founder Ben Slater commented "...*Firstly, Ken and Suhail are not brokers, they are **strategic geniuses, with deep emotional intelligence and intellect.** Secondly, they speak your language not someone else's, and they care so much about your world inside and outside of the process. Most importantly, they are of a size where they are your day to day guys from the very first meeting to the final execution. **Pharus took our business to the next level...** they made damn sure that we set ourselves up for success for many years to come."*

Selected transactions



Accenture Acquires UK-Based Innovation Firm Happen

Transaction Summary

- Pharus is pleased to announce our role as the exclusive financial advisor to Happen GP Ltd. (Happen) in its sale to Accenture. Happen will become part of Accenture’s Products Industry X.0 business, which helps clients use advanced digital technologies to reinvent their products, services and business models to achieve higher efficiency and growth in operations across the enterprise — including design and engineering, manufacturing, supply chain management, logistics and customer support.
- About the transaction with Accenture, Happen co-founder Mark Cowan commented, “Joining Accenture will enable us to scale our offerings and capabilities and deliver our services to an even greater range of clients. We’re excited to become part of one of the world’s truly great companies.”
- Happen’s shareholders retained Pharus because of our broad expertise in advising market-leading digital transformation and innovation services companies, our comprehensive knowledge of the innovation, strategy, branding and product development services competitive landscape, and our bespoke, high-impact approach to M&A advisory.



has been acquired by



The undersigned acted as the exclusive financial advisor to Happen Group in connection with the transaction

PHARUS

Key Profiles

- Happen is a global innovation agency that brings world-class talent, technologies and expertise together to grow and protect businesses and brands. Happen’s worldwide team, across offices in London, Amsterdam and New York, possess a wide range of innovation skills, including strategy, design, ideation, insight and research. Happen’s work, powered in part by proprietary technology and data-gathering platforms, drives measurable and meaningful business impact for organizations across the consumer landscape.
- Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions — underpinned by the world’s largest delivery network — Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 492,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives.

On working with Pharus, Happen co-founder David Walker, added “*having a **seasoned and experienced advisor** by our side was critical, which enabled us to secure a perfect and high-calibre match for our next chapter of growth, along with **providing high-quality support** to see the transaction through.*”

Selected transactions



Trax Retail Acquires Planorama, leading provider of image recognition solutions for CPG and retail execution

Transaction Summary

- Pharus is pleased to announce our role as the exclusive financial advisor to Planorama in its sale to Trax. Transaction terms were not disclosed. Smollan and WPP were minority shareholders of Planorama.
- The transaction will strengthen Trax's position in image recognition technology and services, enhancing retail execution and space planning solutions, while extending its global presence with longstanding high-profile clients.
- The shareholders of Planorama retained Pharus due to our deep expertise in enterprise software (particularly SaaS) and data analytics pertaining to retail technology sectors, our longstanding success in cross-border transaction completions, and our bespoke approach to M&A advisory. We executed a comprehensive M&A process that involved identifying and approaching a broad set of strategic and financial buyers, spearheading marketing activities, leading due-diligence, and negotiating transaction terms.

Key Profiles

- Planorama is a leading pioneer in image recognition solutions providing Artificial Intelligence powered retail execution and space planning solutions to major CPG companies. Based on shelf pictures from any source, its image recognition solutions can instantly analyze and recognize millions of product items and deliver immediate actionable retail insights for clients and its teams. Today, Planorama powers multinational companies such as Unilever, Mondelez and Coca Cola as it operates across 6 continents with 5 offices worldwide.
- Trax is the global provider of computer vision solutions and analytics for retail. The company enables tighter execution controls in-store and provides clients with the ability to leverage competitive insights through its in-store execution tools, market measurement and analytics services to unlock revenue opportunities at all points of sale. Many of the world's top brands and retailers leverage Trax globally in more than 50 countries to manage in-store execution and increase revenues at the shelf.



has been acquired by



The undersigned acted as the exclusive financial advisor to CVDM Solutions SAS (dba Planorama) in connection with the transaction



Vincent Jacques, Chairman of Planorama, said about Pharus, **“Excellent work Pharus! Way to sprint over the finish line and truly bring in immense value from the initial stages of go-to-market preparation to the very end of negotiation and diligence. The Pharus team has seamlessly helped us through each step of the process, providing a systematic approach and clear insights to ensure a successful transaction. I’m impressed with their vast industry knowledge, business acumen, and dedication working around the clock accommodating different time zones – fantastic job Pharus.”**

Selected transactions



Tata Consultancy Services Acquires W12 Studios, award-winning digital design agency

Transaction Summary

- Pharus is pleased to announce our role as the exclusive financial advisor to W12 Studios Limited (W12) in its sale to Tata Consultancy Services. W12 will become part of TCS Interactive, the digital design division within TCS' Business & Technology Services organization. The transaction, TCS' first in the digital space, will further strengthen TCS Interactive's array of creative and experience service offerings.
- The shareholders of W12 retained Pharus because of our broad expertise in marketing digital transformation services companies, our comprehensive knowledge of the design and strategy services competitive landscape, and our bespoke approach to M&A advisory. We executed a targeted M&A process that involved identifying and approaching a customized universe of strategic buyers, spearheading marketing activities, leading due-diligence, and negotiating transaction terms.

Key Profiles

- Founded in 2012 and based in London, W12 imagines and builds iconic products and experiences for renowned media and technology brands worldwide. With industry-leading expertise in visual, interaction, motion, sonic and creative technology, W12's competencies span the full range of the service journey, from developing innovative brand strategies to building expectation-exceeding product ideas and prototypes. W12 has defined, designed, and prototyped digital products for leading media services and technology companies across 14 countries.
- Tata Consultancy Services is an IT services, consulting and business solutions organization that has been partnering with many of the world's largest businesses in their transformation journeys for the last fifty years. TCS offers a consulting-led, cognitive powered, integrated portfolio of IT, Business & Technology Services, and engineering. This is delivered through its unique Location Independent Agile delivery model, recognized as a benchmark of excellence in software development.
- Tata Consultancy Services was founded in 1968 and is based in Mumbai, India. Tata Consultancy Services Limited is a subsidiary of Tata Sons Limited.

W12 Studios

has been acquired by

**TATA
CONSULTANCY
SERVICES**

The undersigned acted as the exclusive financial advisor to W12 Studios Limited in connection with the transaction

P H A R U S

Fabian Birgfeld, Co-Founder and Chief Executive Officer of W12, said about Pharus, "We are very grateful to the Pharus team for working tirelessly and supporting us throughout the exploratory process and due diligence stage. Their availability and expertise were absolutely essential in bringing TCS and us together and completing this transaction."

Selected transactions



Infosys Acquires Fluido, Largest Salesforce Consulting Partner in the Nordics

Transaction Summary

- Pharus served as the exclusive financial advisor to Fluido Oy in their sale to Infosys Limited (NSEI:INFY).
- Executing on its strategy to help clients navigate the next in their digital transformation journey, this acquisition strengthens Infosys' position as a leading Salesforce enterprise cloud services provider, and enhances its ability to provide clients an unparalleled cloud-first transformation.
- Pharus was mandated by Fluido's shareholders to execute a comprehensive process, that involved identifying and approaching a targeted set of strategic and financial buyers, spearheading marketing and due-diligence, and negotiating the terms of the transaction.
- Infosys acquired Fluido for all-cash purchase price of up to €65 million (\$76 million), including earn-out and bonuses.

Key Profiles

- Fluido is the leading Salesforce Consultancy and Partner in the Nordics. Fluido offers consulting, development and integration services tailored for customer needs to make customer data meaningful in the moments that matter the most. Fluido's headquarters are in Espoo, Finland, with additional offices in Denmark, Norway, Slovakia and Sweden.
- Infosys is a global leader in next-generation digital services and consulting. They provides business information technology services, including application development and maintenance, independent validation, infrastructure management, and business process management services, as well as engineering services, such as engineering and life cycle solutions; and consulting and systems integration services comprising consulting, enterprise solutions, systems integration, and advanced technologies.
- Infosys was founded in 1981 and is headquartered in Bengaluru, India.



has been acquired by



The undersigned acted as the exclusive financial advisor to Fluido Oy in connection with the transaction



Kai Mäkelä, Chief Executive Officer of Fluido, said about Pharus, *"The Pharus team is amazing. They were by our side through every step of the process, providing keen insights, thorough preparation and a depth of relationships in our market. Most important the Pharus team worked tirelessly for the best interests of our shareholders and employees. We are confident that the transaction with Infosys provides our shareholders with the greatest value combined with the best platform for our continued growth. THANKS TO THE PHARUS TEAM!!"*

Selected transactions

Domino Media Group Acquired by Multiply Media

Transaction Summary

- Pharus served as the exclusive strategic advisor to Domino Media Group, Inc. in its transaction with Multiply Media. Transaction terms were not disclosed.
- With this transaction, Multiply reinforces its focus on creating and cultivating enduring, digital-first brands in its sizeable lifestyle categories. Domino joins Multiply’s family of brands, which includes FashionBeans, HealthyWay, and Urbo. The Domino brand stands to expand its core audience with additional support centered on analytics and technology.
- Pharus was retained by the shareholders of Domino (including Launch Capital and iNovia) due to our extensive knowledge of and M&A experience in the digital media and eCommerce sectors.
- In its role as an advisor, Pharus was mandated to execute a comprehensive M&A process, that involved identifying and approaching a targeted set of strategic buyers, spearheading marketing activities, leading due-diligence, and negotiating transaction terms.

Key Profiles

- Domino is a Millennial-focused women’s lifestyle media and eCommerce company with roots in home, design, DIY, and entertaining. Established in 2005, the company quickly solidified its position as an editorial leader in the home décor space through its publications. Domino relaunched in 2013, introducing their expanded content across print, digital and commerce platforms.
- Multiply is a premium digital publisher fluent in technology and analytics platforms built to support and invest in editorial leaders in high value consumer-centric content categories. The Company operates a number of notable digital properties including FashionBeans, HealthyWay, and Urbo.

domino

has been acquired by

multiply

The undersigned acted as the exclusive financial advisor to Domino Media Group, Inc. in connection with the transaction

P H A R U S



Selected transactions



Idean Enterprises OY Acquired By Capgemini

Transaction Summary

- Pharus served as the exclusive financial advisor to Idean Enterprises Oy in its sale to Capgemini. Transaction terms were not disclosed.
- This transaction will reinforce Capgemini's user-centered and digital-first experience design and strategy services, particularly in North America, and extend its network of Digital studios. This transaction is geared to meet growing customer demand for the Group's end to end digital services.
- The shareholders of Idean retained Pharus due to our knowledge of the design and strategy services sector, as well as our M&A advisory experience with digital, innovation and cloud services businesses. We executed a comprehensive M&A process that involved identifying and approaching a broad set of strategic buyers, spearheading marketing activities, leading due-diligence, and negotiating transaction terms.

Key Profiles

- Idean Enterprises, a fast-growing digital strategy and experience design consultancy focuses primarily on digital user experience (UX), customer experience (CX), and digital strategy. Their client list extends from disruptive Bay Area start-ups, global tech leaders to prominent brands in automotive and consumer electronics, looking to reinvent themselves for the digital era. Clients include LG, Mercedes-Benz, Sony, Volkswagen, 23andMe, Airbus, Cole Haan, Ericsson, IBM, Intel, and Kesko.
- Capgemini provides consulting, technology, and outsourcing services. Its consulting services include strategy and transformation, finance and technology transformation, human resources consulting, supply chain management, solutions environment, and innovation. It serves manufacturing, retail, consumer products, distribution and transportation, aerospace and defense, and financial services industries across the world.



The undersigned acted as the exclusive financial advisor to Idean Enterprises Oy in connection with the transaction

PHARUS

Risto Lähdesmäki, Chief Executive Officer of Idean, said about Pharus:

"These guys just rock! I could not be happier with having chosen Pharus as our investment banking advisor. Since I knew this would be once-in-a-lifetime deal for me and whole team, I wanted to set multiple records and Pharus accepted the challenge - and boy we set many. At every step Pharus added immense value and astutely guided us to the most optimal outcome for the shareholders and for everyone in Idean.

I'm very pleased with their experience, dedication, and diligence - working hard 24/7 as one team, we were able to get a complicated deal closed in a compressed time frame. Pharus was with us right from beginning to end to ensure a successful process. The way they guided me and the team with a human touch was just amazing - I truly felt they had our back all the time. **We could not have achieved these results without Pharus - a deal that worked like a dream for all the stakeholders."**

Selected transactions

Capgemini US Acquires Fahrenheit 212, a Leading Innovation and Design Consultancy

Transaction Summary

- Pharus served as the exclusive financial advisor to Fahrenheit 212 LLC in its sale to Capgemini. Transaction terms were not disclosed.
- This transaction will augment the capabilities of Capgemini’s global strategy and transformation consulting organization, Capgemini Consulting, to provide new innovation, business transformation and digital customer experiences solutions. This bolt on acquisition fits into Capgemini’s digital innovation growth strategy.
- The shareholders of Fahrenheit 212 retained Pharus due to our knowledge of the innovation services sector, as well as our M&A advisory experience with digital and cloud services businesses. We executed a comprehensive M&A process that involved identifying and approaching a broad set of strategic and private equity buyers, spearheading marketing activities, leading due-diligence, and negotiating transaction terms.

Key Profiles

- Fahrenheit 212, an innovation and design consultancy, focuses on defining innovation strategies and develops new products, services, and experiences that create sustainable, profitable growth for global clients such as The Coca-Cola Company, Marriott, and Citi.
- Capgemini provides consulting, technology, and outsourcing services. Its consulting services include strategy and transformation, finance and technology transformation, human resources consulting, supply chain management, solutions environment, and innovation. It serves manufacturing, retail, consumer products, distribution and transportation, aerospace and defense, and financial services industries across the world.

Fahrenheit**212**

has been acquired by



The undersigned acted as the exclusive financial advisor to Fahrenheit 212 LLC in connection with the transaction

P H A R U S



Selected transactions

SPS Commerce (NasdaqGS:SPSC) Acquires Toolbox Solutions, a Leading Provider of Retail Solutions in North America

Transaction Summary

- Pharus served as the exclusive financial advisor to Toolbox Solutions, Inc. in their sale to SPS Commerce, Inc. (NasdaqGS:SPSC)
- The acquisition serves to strengthen SPS Commerce’s retail analytics portfolio, and further broadens their network of more than 60,000 organizations in 60 countries to include leading retailers and CPG suppliers in the North American convenience, grocery, and drug store segments.
- Pharus was mandated by Toolbox Solutions’ shareholders to execute a comprehensive process, that involved identifying and approaching a targeted set of strategic and financial buyers, spearheading marketing and due-diligence, and negotiating the terms of the transaction.
- SPS Commerce acquired all of the shares of ToolBox Solutions for approximately \$18.4 million in cash and \$4.5 million in stock which represents approximately 65,000 shares.

Key Profiles

- ToolBox Solutions is a leading provider of point-of-sale analytics, retail and loyalty software solutions, and category management services to retailers and consumer packaged goods suppliers across the US and Canada. The company has established relationships with many leading retailers and CPG suppliers in the convenience, grocery and drug store segments. The employees will continue to be based in Toronto.
- SPS Commerce provides cloud-based supply chain management solutions worldwide through their platform which improves the way suppliers, retailers, distributors, and other customers manage and fulfill orders. The company is headquartered in Minneapolis.



has been acquired by



The undersigned acted as the exclusive financial advisor to Toolbox Solutions, Inc. in connection with the transaction

PHARUS



Selected transactions



Ziff Davis Acquires Offers.com, a Leader in the Digital Coupon and Deal Space

Transaction Summary

- Pharus served as the exclusive financial advisor to Offers.com, LLC in their sale to Ziff Davis, LLC, a subsidiary of J2 Global (NasdaqGS:JCOM).
- The acquisition further expands Ziff Davis' portfolio of market leading digital properties, and strengthens their position in the growing online deals and offers segment.
- Pharus was mandated by Offers.com's shareholders to execute a comprehensive process, that involved identifying and approaching a targeted set of strategic and financial buyers, spearheading marketing and due-diligence, and negotiating the terms of the transaction.
- Transaction terms were not disclosed.
- Pharus had also served as the exclusive financial advisor to Offers.com in 2010, when it received \$7M in a round of funding from Susquehanna Growth Equity.

Key Profiles

- Offers.com operates a leading online marketplace that connects millions of consumers with coupons, promo codes, deals, and discounts from thousands of leading merchants. Offers.com is headquartered in Austin, TX.
- Ziff Davis is a digital media company that engages in the digital publishing of content in gaming, technology, and men's lifestyle categories. It operates PCMag.com, IGN.com, and AskMen.com. Ziff Davis is headquartered in New York, NY.
- Ziff Davis is owned by J2 Global. J2 Global operates through two segments:
 - Business Cloud Services – Offers cloud services to sole proprietors, small to medium-sized businesses and enterprises, and government organizations; provides eFax, KeepItSafe, LiveDrive, eVoice and Onebox.
 - Digital Media – Operates a portfolio of Web properties, including PCMag.com, IGN.com, Speedtest.net, AskMen.com, and TechBargains.com.

Offers.com[™]

has been acquired by



The undersigned acted as the exclusive financial advisor to Offers.com, LLC in connection with the transaction

P H A R U S

Selected transactions



has been acquired by

The undersigned acted as the exclusive financial advisor to Fahrenheit 212 LLC in connection with the transaction.

PHARUS
February 2016

Innovation Services

has been acquired by

The undersigned acted as the financial advisor to Toolbox Solutions, Inc. in connection with the transaction.

PHARUS

Retail Solutions

has been acquired by

The undersigned acted as the exclusive financial advisor to Offers.com, LLC in connection with the transaction.

PHARUS
December 2015

Online Marketing

CG CONTROL GROUP
has merged with

to form

The undersigned acted as the exclusive financial advisor to Control Group, Inc. and its affiliates, in connection with the transactions.

Pharus Securities, LLC

Digital Agency

has been acquired by

The undersigned acted as the exclusive financial advisor to RoyaltyShare, Inc. in its sale to The Orchard Enterprises, Inc.

Pharus Securities
November 2014

Digital Revenue Management

Received Series A financing of \$8 million from

The undersigned acted as the exclusive financial advisor to P97 Networks, Inc. in connection with the transaction.

Pharus Securities

Fuel Payment & Coupon

Completed a growth financing with

The undersigned acted as the exclusive financial advisor to Teachers Strategy Inc. in connection with the transaction.

Pharus Securities
May 2014

Education Technology

has been acquired by

The undersigned acted as the exclusive financial advisor to AmberFin Ltd. in its sale to Dalet S.A. (ENWTPA.DLT)

Pharus Securities
April 2014

Broadcast Technology

Remote DBA Business

has been acquired by

The undersigned acted as financial advisor to Bluewolf Inc. in the sale of its Remote DBA Business to General Corporation, Inc.

Pharus Advisors, LLC
December 2012

IT Services

has been acquired by

Principals of the undersigned acted as financial advisors to SocialGuide, Inc. in its sale to Nielsen Holdings N.V. and M&M Inc. LLC a joint venture between Nielsen and McKinsey & Company, Inc.

Pharus Advisors, LLC
November 2012

Social TV Software

has been acquired by

The undersigned acted as financial advisor to ExpertTune Inc. in its sale to Metso Corporation

Pharus Advisors, LLC
November 2012

Industrial Software

has acquired

The undersigned acted as financial advisor to NetKey, Inc. in connection with this acquisition.

Pharus Advisors, LLC
AUGUST 2007

Retail Software





Pharus overview



Pharus overview

Introduction to Pharus

We are committed to providing clients a high level of attention, independent and objective advice, and creative solutions in challenging environments



**Founded
in 2001**

Global Reach / Cross-border Expertise

New York headquarters,
with offices and affiliates
in major technology
hubs across the globe

Extensive Advisory & Capital Market Capabilities

Mergers & Acquisitions
Valuation &
Fairness Opinions
Corporate Advisory
Private Placements
Principal Investments
Recapitalizations

Industry Specialization & Experience

Digital Media &
Advertising
Software / SaaS
Education Technology
Digital & Creative
Services
Performance Marketing
Data & Analytics
Industrial Technology
Consumer

Strong Network of Key Relationships

110+
Successful
Transactions
Completed

900+
Strategic Buyer
Relationships

1,500+
Venture Capital
& Private Equity
Relationships

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