



Global Technology, Media and Telecom (TMT) M&A Quarterly

Q3'2018



Selected Recent Transactions ⁽¹⁾

Communication Technology and Electronics	  <p>TRS Technologies KPMG CF United States advised TRS Technologies, Inc. on its sale to Tayca Corporation Value not disclosed January 2018</p>	  <p>Vitruvian Partners KPMG CF Sweden advised Vitruvian Partners on its acquisition of The EasyPark Group Value not disclosed December 2017</p>	  <p>Giacom KPMG CF United Kingdom advised Giacom on the sale of the business to Livingbridge Value not disclosed December 2017</p>	  <p>JLS Digital KPMG CF Switzerland advised JLS Digital on its sale to Renaissance Capital Value not disclosed October 2017</p>
	  <p>BeneSys KPMG CF United States advised BeneSys on its sale to Tenex Capital Management Value not disclosed October 2018</p>	  <p>Eze Castle Integration KPMG CF United States advised Eze Castle Integration on raising investment from H.J.G. Capital Value not disclosed May 2018</p>	  <p>GCI KPMG CF United Kingdom advised GCI on its sale to Mayfair Equity Partners \$264.2 million May 2018</p>	  <p>PRIME Research KPMG CF United Kingdom advised PRIME Research on its sale to Cision Ltd. Value not disclosed January 2018</p>
	  <p>Ink KPMG CF United Kingdom advised the shareholders of Volanti Media (Holdings) Limited (Ink) on its sale to The Stagwell Group Value not disclosed October 2018</p>	  <p>ReachLocal Japan KPMG CF United States advised ReachLocal Japan on its sale to New Horizon Capital Value not disclosed September 2018</p>	  <p>RIBA Enterprises KPMG CF United Kingdom advised RIBA Enterprises in raising a minority investment of 42.5% from LDC Value not disclosed June 2018</p>	  <p>LCL KPMG CF Japan advised LCL on its sale to Kakaku.com Value not disclosed December 2017</p>
	  <p>Tenzing Private Equity KPMG CF United Kingdom advised Tenzing Private Equity LLP on the acquisition of Corvia Ltd (Tickester) Value not disclosed October 2018</p>	  <p>tCell.io KPMG CF United States advised tCell.io on its sale to Rapid7 Value not disclosed October 2018</p>	  <p>Nordic Capital KPMG CF United Kingdom advised Nordic Capital on the acquisition of Macrobond Financial \$150.0 million August 2018</p>	  <p>LDC KPMG CF United Kingdom advised LDC (Managers) on the acquisition of Mandata \$27.2 million May 2018</p>
IT Services and BPO	Internet and Media	Software		

2013-2017 Advisor Rankings ⁽²⁾			2017 Advisor Rankings ⁽²⁾			2018 YTD ⁽³⁾ TMT Advisor Rankings ⁽²⁾		
Rank	Advisor	# of Deals	Rank	Advisor	# of Deals	Rank	Advisor	# of Deals
1.	KPMG ⁽¹⁾	2,100	1.	KPMG ⁽¹⁾	395	1.	KPMG ⁽¹⁾	34
2.	PwC	2,068	2.	Rothschild & Co.	311	1.*	Rothschild & Co.	34
3.	Ernst & Young LLP	1,398	3.	PwC	309	1.*	Raymond James Financial	34
4.	Rothschild & Co.	1,287	4.	BDO	223	4.	Ernst & Young LLP	30
5.	Deloitte	1,179	5.	Ernst & Young LLP	222	4.*	Houlihan Lokey	30
6.	BDO	1,077	6.	Houlihan Lokey	219	6.	Mizuho Financial Group	28
7.	Houlihan Lokey	1,006	7.	Deloitte	206	7.	Sumitomo Mitsui Financial	27
8.	Lazard	892	8.	Lazard	189	8.	Goldman Sachs & Co	26
9.	Goldman Sachs & Co.	858	9.	ICBC	184	9.	Deloitte	25
10.	IMAP	835	10.	IMAP	177	10.	Morgan Stanley	24

(1) Represents the Corporate Finance practices of KPMG International's network of independent member firms.


(2) League tables include completed deals which have value from \$0 to \$500mm and also where deal value is not disclosed.

(3) YTD represents first nine months of 2018, ending September 30, 2018.


Source: Thomson Reuters SDC




KPMG CF Transaction Spotlight






Acted as the financial advisor to



on its acquisition of



Value not disclosed
October 2018

<p>Buyer</p>  	<p>Seller</p>  
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Overview:

- KPMG Corporate Finance⁽¹⁾ ('KPMG CF') acted as the financial advisor to Tenzing Private Equity LLP ('Tenzing'), on the buy-out of Corvia Ltd ('Ticketer').
- Founded in 2009, Ticketer offers software and hardware to bus operators, enabling ticket payments and real-time data collection and analysis.
- Ticketer's solution allows multiple payment modes (contactless, e-ticket, m-ticket) and aggregates a broad range of data including trip length, duration, revenue, timetable adherence, driver hours, average segment speeds, boarding speeds and profitability.
- Ticketer occupies a strategically important position in the value chain and is well placed to exploit opportunities in the emerging Mobility-as-a-Service (MaaS) / Smart Transport market, both domestically and overseas.
- Tenzing acquired a majority stake from existing shareholders, with the senior management team retaining a sizable minority interest.


Engagement:

- KPMG worked with Tenzing and Ticketer management, facilitating the development of the investment case business plan, underpinned by a series of strategic initiatives.


Client Feedback:

"We're delighted to have completed our investment in Ticketer. We wanted to work with an advisor with tech sector expertise -particularly within enterprise software -on this transaction, which is what Graham, Paddy and the team at KPMG provided and it was a pleasure working with them"


–Guy Gillon (Co-founder and Managing Partner),
Tenzing Private Equity LLP







Acted as the lead financial advisor to



on its sale to



Value not disclosed
October 2018

<p>Buyer</p>  	<p>Seller</p>  
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Overview:

- KPMG Corporate Finance⁽¹⁾ ('KPMG CF') acted as the lead financial advisor to the shareholders of Volanti Media (Holdings) Limited ('Ink') on the sale of business to a privately backed US media conglomerate, The Stagwell Group ('Stagwell').
- Ink is a global travel media business, specializing in the creation of content for a worldwide audience of c.800 mm travelers across multiple channels, through long-term partnerships with airlines and travel groups, including American Airlines, Singapore Airlines and easyJet.

Engagement:

- KPMG Corporate Finance tracked the business closely since it received an investment from Endless LLP ("Endless") in 2015.
- The acquisition will allow Stagwell to enhance its content and creative capabilities, provide direct access to significant players in the global travel market and help them broaden their portfolio of companies to deliver strong creativity, across multiple channels.
- A strong existing relationship with Endless and Ink's chairman, as well as efforts to reach out and connect with management, helped KPMG win the mandate through a competitive pitch process against other Big 4, UK and US boutique investment banks.
- KPMG's success was based upon strong credentials, deep sector knowledge and access to the global buyer community (leveraging global network).

⁽¹⁾ Represents the Corporate Finance practices of KPMG International's network of independent member firms.

Global TMT Sector M&A Activity

- Strengthened by big ticket transactions at both ends of the quarter, TMT deal activity aggregated \$211.4 billion from 2,281 deals in Q3'2018. Registering a record first nine months in terms of deal value, surpassing the previous record of 2015.
- On the back of steady increase in short term interest rates by the Fed and further hikes expected in the near future, PE-backed deals witnessed a slight decline in Q3'2018, as compared to record PE deal activity in the previous quarter.
- The largest deal announcement in the quarter was Broadcom's acquisition of CA Technologies, a B2B software company, for ~\$18.9 billion.
- The mid-market segment (<\$500 million) witnessed 2,238 announced deals worth \$43.0 billion in Q3'2018, as compared to 2,404 deals worth \$39.2 billion in Q3'2017.
- Driven by communications technology and software, M&A targets continued to witness high valuations within the TMT space.

Sub-sector M&A activity

(Aggregate values in \$ billions) ⁽⁵⁾



Communications Technology and Electronics ⁽¹⁾

	Total Deals		<\$500 mm Deals	
	Value	# of Deals	Value	# of Deals
Q3'18	\$108.4	535	\$11.7	517
Q3'17	\$70.4	555	\$11.5	536



IT Services and BPO ⁽²⁾

	Total Deals		<\$500 mm Deals	
	Value	# of Deals	Value	# of Deals
Q3'18	\$13.3	397	\$7.1	394
Q3'17	\$8.1	396	\$5.5	393



Internet and Media ⁽³⁾

	Total Deals		<\$500 mm Deals	
	Value	# of Deals	Value	# of Deals
Q3'18	\$24.4	600	\$8.7	590
Q3'17	\$33.1	688	\$9.6	679



Software ⁽⁴⁾

	Total Deals		<\$500 mm Deals	
	Value	# of Deals	Value	# of Deals
Q3'18	\$65.3	749	\$15.6	737
Q3'17	\$34.9	805	\$12.6	796

Notes: We have sourced the sub-sector classifications from Capital IQ as below:

- (1) Communications Technology and Electronics: Computers & Peripherals; Electronics; Semiconductors; Space and Satellites; Telecommunications Equipment; Telecommunications Services; Wireless; and Other Telecom.
- (2) IT Services and BPO: Companies/targets with primary industry classification as IT Consulting & Services.
- (3) Internet and Media: Advertising & Marketing; Broadcasting; Cable; Casinos & Gaming; E-commerce / B2B; Internet and Catalog Retailing; Internet Infrastructure; Motion Pictures / Audio Visual; Publishing; and Other Media & Entertainment.
- (4) Software: Companies/targets with primary industry classification as Internet Software & Services; Software; and Other High Technology.
- (5) Deal Values are based on transactions with disclosed deal values only.

Sources: Thomson One and other publicly available information.



Country Spotlight: KPMG CF's Technology Practice in China



YTD 2018
TMT Deals worth
\$116bn

- Owing to the increasing focus on smart manufacturing, advanced medical devices, robotics and advanced AI, Chinese TMT M&A deal activity registered deals worth \$151 billion in 2017.
- In 2017, domestic deals accounted for approximately 62% of the total TMT transactions, with outbound and inbound deals accounting for 26% and 12%, respectively, of the total deals.
- Some of the key trends observed in the TMT M&A space in China are:
 - Active technology and internet sub-sectors, largely dominated by domestic transactions
 - BAT (Baidu, Alibaba and Tencent) led consolidations in the technology market
 - Hong Kong's new listing rules are attracting many high-end technology and innovative companies for primary as well as secondary listing in the region
 - Licensing of virtual banks in Hong Kong is expected to promote the application of financial technology and innovation within the region
 - Tightened Chinese and U.S. regulations leading to an overall dip in cross border M&A activity
- Chinese outward direct investment in Europe witnessed an uptick of 4% in the first half of 2018, reaching a total of \$12 billion.

KPMG China Initiatives

KPMG Digital Ignition (KDI) Centre

- ✓ KDI works with clients, start-ups and alliance partners, to provide pre-packaged solutions, alliance products or specialized solutions
- ✓ Alliance partners include: Microsoft, Oracle, Coupa, Workday and ServiceNow

KPMG Innovative Startup Centre

- ✓ Aims to assist start-ups, investors and enterprises by offering start-up academy, deal services, and ecosystem development & resources matching services, respectively
- 📍 Located in Zhongguancun, Beijing, 'China's Silicon Valley'

Key Advisory Clients

Baidu

China Mobile

JD.com

Orchid Asia

Softbank Vision Fund

Telstra

Tencent

Recent Transactions

KPMG

SB Vision Fund

Deal Advisory

Provided buy-side assistance in its acquisition of stake in Oneconnectand LuFax

Value Undisclosed

KPMG

HK Conglomerate

Deal Advisory

Provided buy-side assistance in acquisition of Portuguese digital bank

Value Undisclosed

KPMG

Ant Financials

Deal Advisory

Provided buy-side assistance in the acquisition of Zomato, a global meal ordering platform

Value Undisclosed

KPMG

Tencent

Deal Advisory

Provided buy-side FDD and TDD assistance in the acquisition of Pinduoduo

\$1.4bn
*Consortium deal

KPMG

Tencent

Deal Advisory

Provided buy-side FDD and TDD assistance in the acquisition of Uber(China)

\$9.3bn
*Consortium deal

Key TMT Team Members



Eric Lau
Partner
KPMG, China

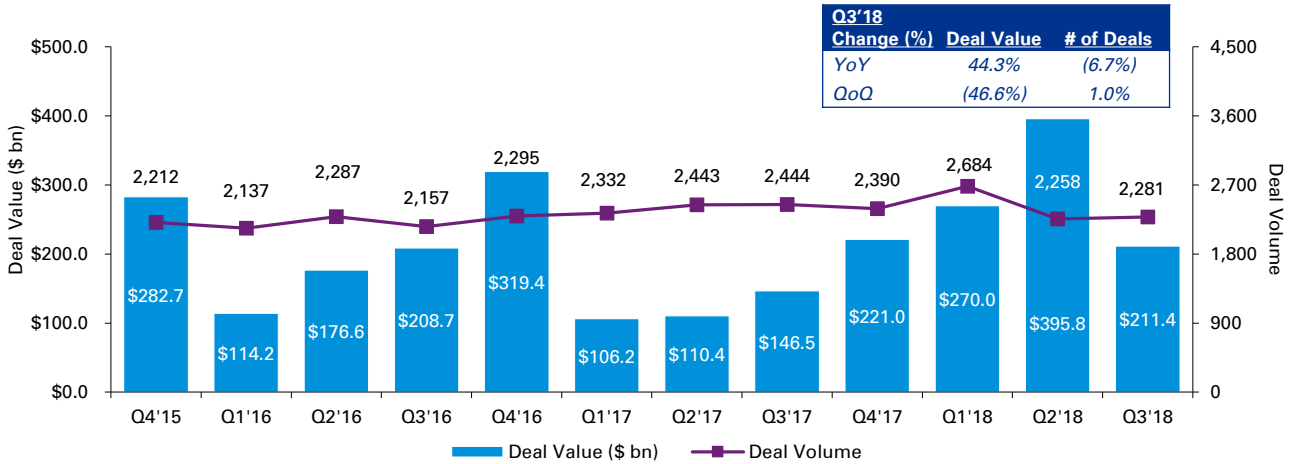
- Eric focuses on mergers and acquisitions and pre-IPO investment advisory, and has advised in numerous cross-border M&A transactions in various sectors across Asia Pacific.
- His areas of expertise include IPO readiness, M&A, and transactions.
- Eric received B. Com. degree from University of British Columbia, Canada and is a licensed representative of the Securities & Futures Commission of Hong Kong.



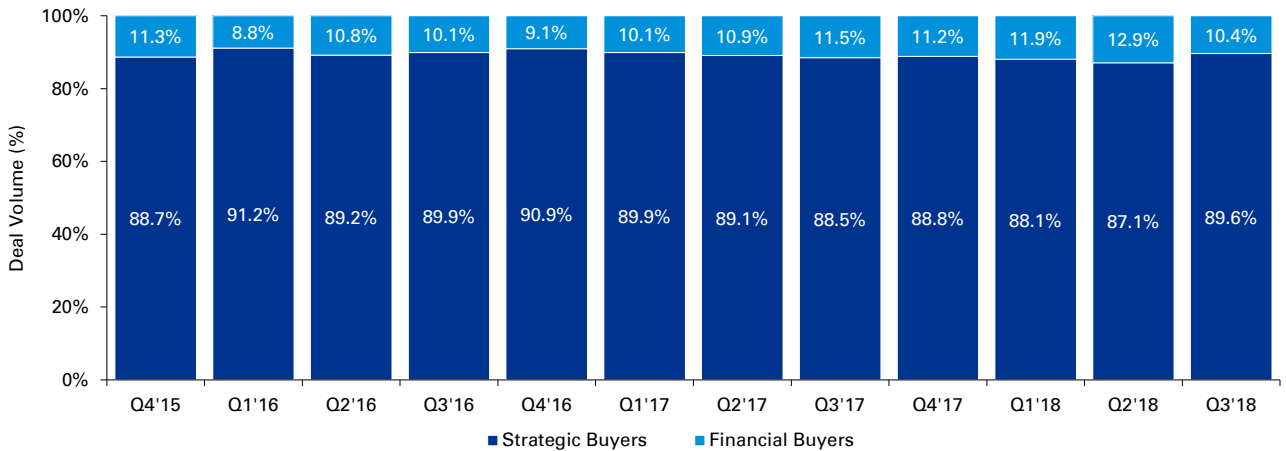
Rainbow Wang
Head of Corporate Finance
KPMG, China

- Rainbow joined KPMG Shanghai in 2003 and has assisted a large number of international firms and local Chinese companies on M&A divestment, JVs and fund raising activities.
- Her areas of expertise include acquisition, due diligence, valuation and advisory.
- Rainbow has a masters degree in Finance and is a Certified Public Valuator and Member of CICPA.

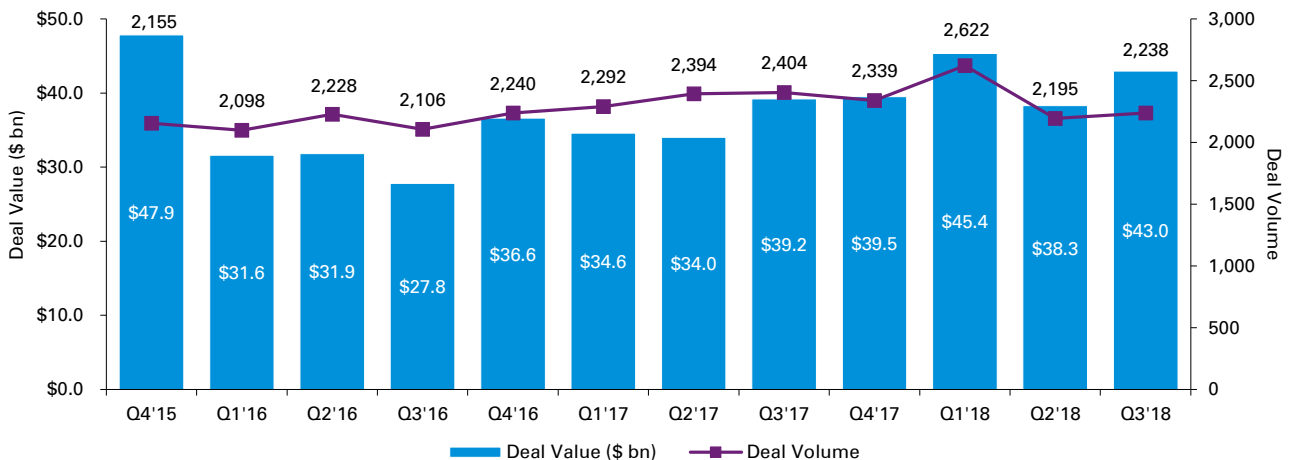
Global TMT M&A Trend: Q4'15 – Q3'18



Global TMT M&A Trend by Buyer Type: Q4'15 – Q3'18



Global TMT Mid-Market M&A Trend (<\$500 mm) ⁽¹⁾: Q4'15 – Q3'18



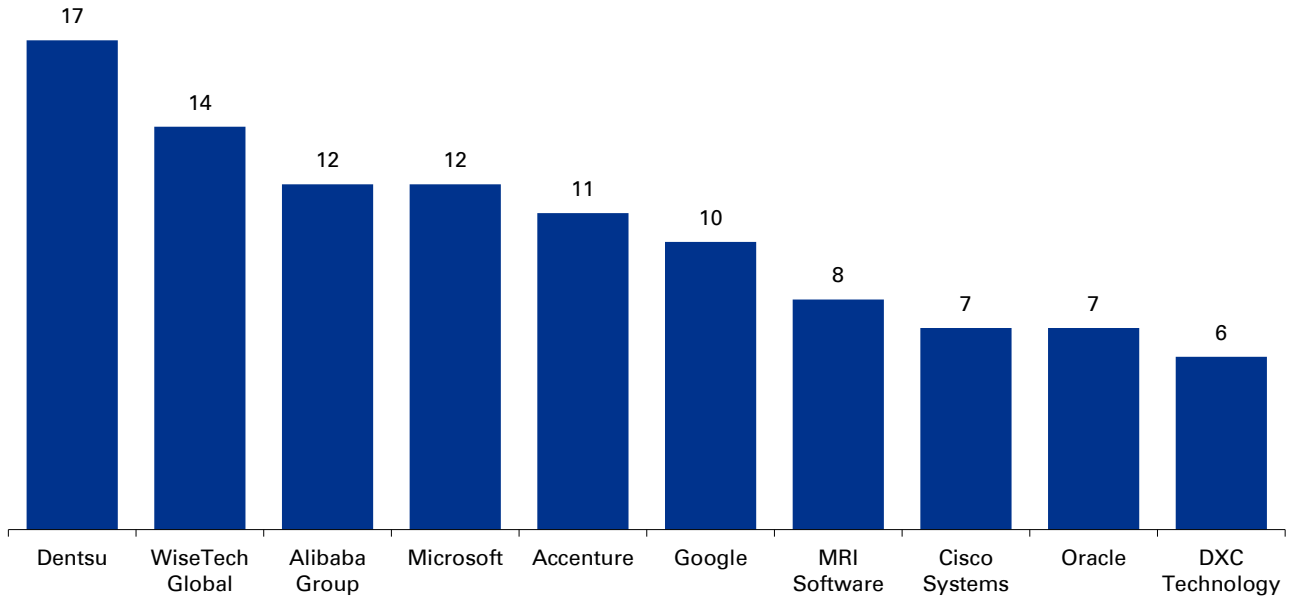
(1) Based on deals with disclosed deal values only.

Source: Thomson One



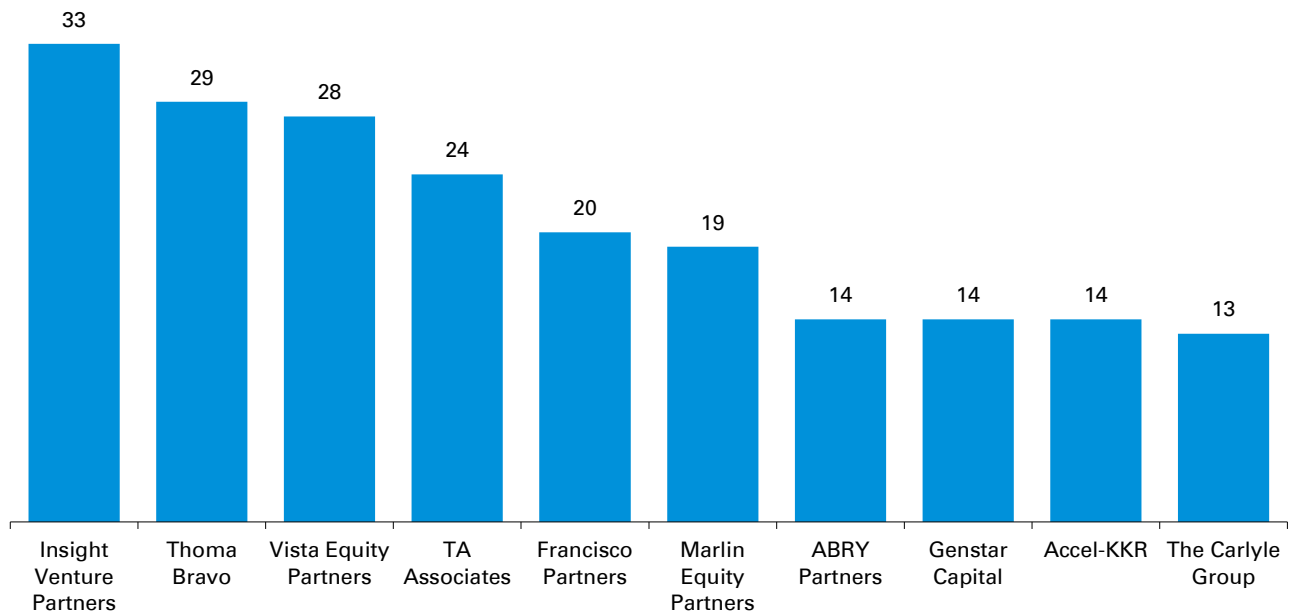
Top 10 Active Global TMT Strategic Buyers: TTM Q3'18

Number of acquisitions in the period



Top 10 Active Global TMT Financial Buyers: TTM Q3'18 ⁽¹⁾

Number of acquisitions in the period

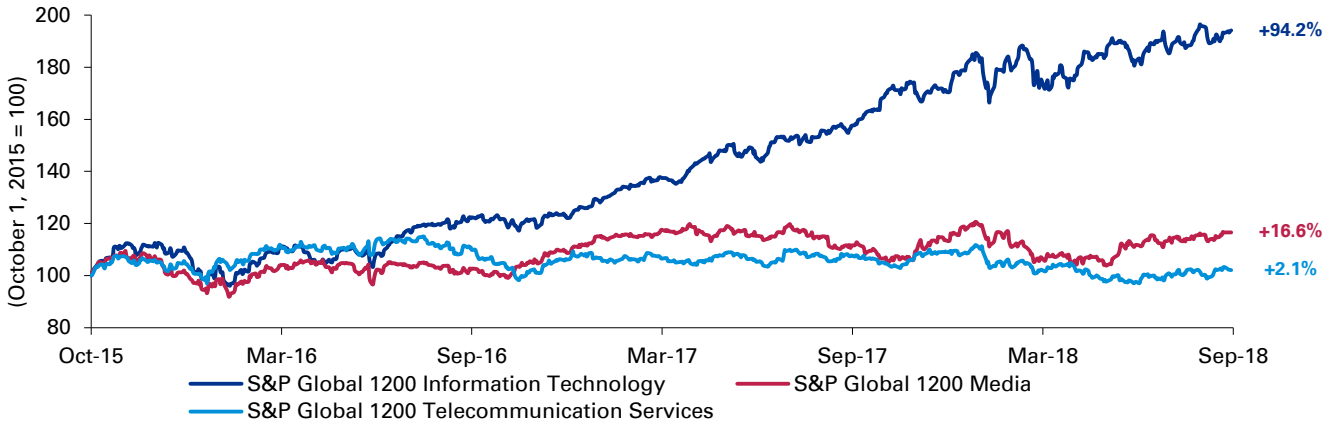


Note: 1. PE deals include bolt-on acquisitions to existing portfolio companies.

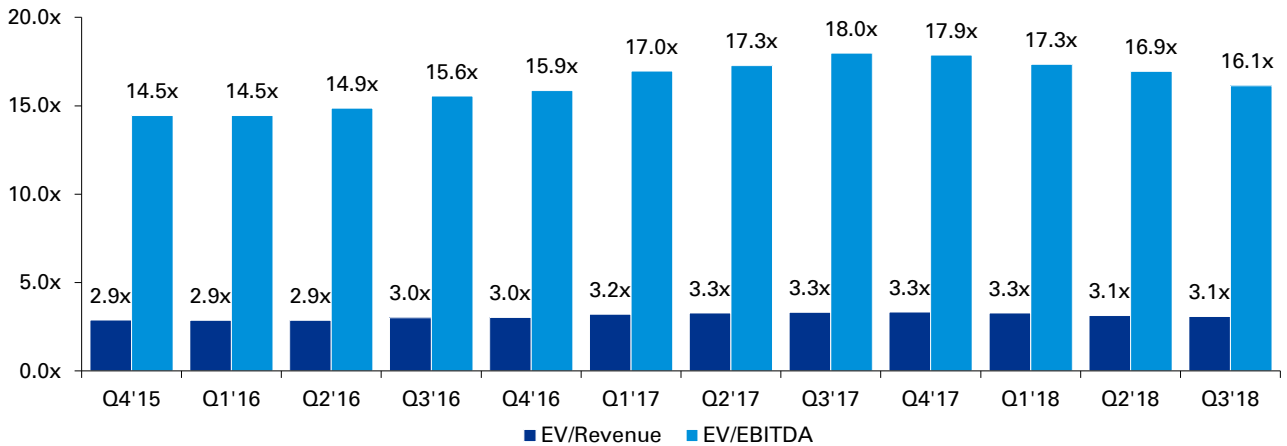
Source: 451 Research



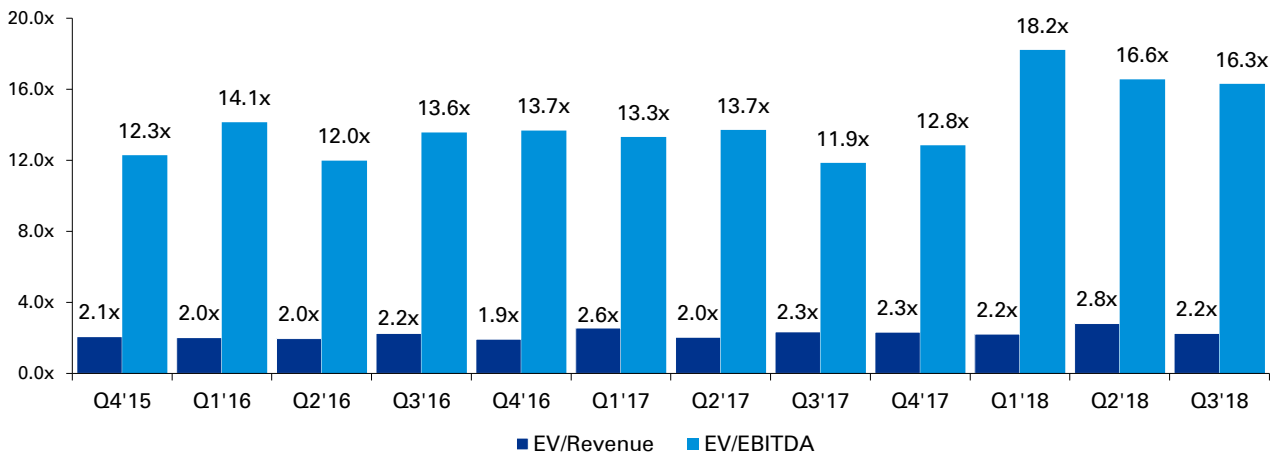
S&P Global TMT Index Price Performance: Q4'15 – Q3'18



Global TMT Public LTM Multiples ^(1,2): Q4'15 – Q3'18



Global TMT M&A Transactions LTM Multiples ⁽²⁾: Q4'15 – Q3'18



(1) Trading multiples include average multiples calculated for all the 'Public Companies' operating in the TMT space (with market capitalization of at least \$500mm) classified under the primary industry classifications listed on all major exchanges globally.

(2) EV/Revenue and EV/EBITDA multiples greater than 10.0x and 50.0x, respectively, were excluded from the analysis.

Source: Thomson One, Capital IQ.



Global TMT Selected Public Comps: Communications Technology & Electronics

Market Data						Operating Metrics							Valuation Multiples					
<i>\$ value millions, except per share</i>	Latest Quarter	Share Price	% of 52 Week High	Market Cap. ⁽¹⁾	Enterprise Value ⁽²⁾	Revenue			Revenue Growth ⁽³⁾		LTM Gross	LTM EBITDA	EV / Revenue			EV / EBITDA		
Company Name	Ending					LTM	2018E	2019E	2017 – 2018E	2018E – 2019E	Margin%	Margin%	LTM	2018E	2019E	LTM	2018E	2019E
Communication Services																		
AT&T	Jun-18	\$33.58	84.4%	\$243,858	\$423,213	\$158,368	\$174,078	\$186,722	8.7%	7.3%	52.0%	28.7%	2.7x	2.4x	2.3x	9.3x	7.5x	6.9x
Verizon	Jun-18	\$53.39	96.3%	\$220,604	\$336,103	\$129,647	\$130,620	\$132,042	4.3%	1.1%	58.8%	36.2%	2.6x	2.6x	2.5x	7.2x	7.1x	6.9x
China Mobile	Jun-18	\$9.86	91.8%	\$201,877	\$131,373	\$112,318	\$109,349	\$112,452	(4.5%)	2.8%	68.9%	38.8%	1.2x	1.2x	1.2x	3.0x	3.3x	3.2x
NTT	Jun-18	\$45.22	86.9%	\$88,200	\$140,844	\$106,853	\$104,333	\$106,720	0.9%	2.3%	51.3%	26.6%	1.3x	1.3x	1.3x	5.0x	5.1x	4.9x
Deutsche Telekom	Jun-18	\$16.16	87.9%	\$76,607	\$155,050	\$88,741	\$86,672	\$89,527	(3.9%)	3.3%	30.6%	26.8%	1.7x	1.8x	1.7x	6.5x	5.9x	5.6x
Vodafone	Mar-18	\$2.15	68.6%	\$57,331	\$97,459	\$57,375	\$53,724	\$52,435	(9.6%)	(2.4%)	29.6%	27.0%	1.7x	1.8x	1.9x	6.3x	5.9x	5.8x
Orange S.A.	Jun-18	\$15.96	90.2%	\$42,372	\$81,639	\$48,151	\$47,796	\$48,344	(2.9%)	1.1%	39.1%	30.4%	1.7x	1.7x	1.7x	5.6x	5.4x	5.3x
Telefónica	Jun-18	\$7.92	73.6%	\$40,609	\$107,357	\$59,602	\$57,048	\$56,729	(8.8%)	(0.6%)	59.8%	32.1%	1.8x	1.9x	1.9x	5.6x	5.9x	5.9x
SingTel	Jun-18	\$2.37	85.3%	\$38,694	\$45,048	\$12,846	\$12,574	\$12,785	(3.9%)	1.7%	30.1%	28.9%	3.5x	3.6x	3.5x	12.1x	12.4x	12.4x
Telstra	Jun-18	\$2.31	84.3%	\$27,433	\$39,477	\$19,239	\$20,129	\$19,439	(10.3%)	(3.4%)	47.1%	25.4%	2.1x	2.0x	2.0x	8.1x	5.9x	6.3x
Comm. Services Upper Quartile			89.6%										2.5x	2.3x	2.2x	7.9x	6.8x	6.8x
Comm. Services Median			86.1%										1.8x	1.8x	1.9x	6.4x	5.9x	5.8x
Comm. Services Lower Quartile			84.3%										1.7x	1.7x	1.7x	5.6x	5.5x	5.4x
Communication Technology																		
TSMC	Jun-18	\$8.61	97.9%	\$223,230	\$202,534	\$33,200	\$33,307	\$37,084	1.1%	11.3%	49.6%	66.5%	6.1x	6.1x	5.5x	9.2x	9.3x	8.3x
Cisco Systems	Jul-18	\$48.65	99.2%	\$222,395	\$201,488	\$49,330	\$50,685	\$52,378	5.6%	3.3%	62.2%	29.9%	4.1x	4.0x	3.8x	13.7x	11.2x	10.8x
Broadcom	Aug-18	\$246.73	86.4%	\$102,010	\$115,478	\$20,248	\$20,689	\$21,788	9.8%	5.3%	65.1%	45.3%	5.7x	5.6x	5.3x	12.6x	8.2x	8.9x
Keyence	Jun-18	\$581.40	91.1%	\$70,503	\$62,944	\$4,999	\$5,250	\$6,095	20.8%	16.1%	82.3%	56.6%	NM	NM	NM	22.3x	21.4x	18.7x
Foxconn (Hon Hai)	Jun-18	\$2.60	69.2%	\$36,003	\$36,730	\$161,473	\$159,373	\$164,983	1.6%	3.5%	6.0%	3.2%	0.2x	0.2x	0.2x	7.2x	6.0x	5.3x
Nokia	Jun-18	\$5.55	88.7%	\$31,098	\$28,405	\$26,121	\$25,720	\$26,476	(6.6%)	2.9%	40.4%	11.4%	1.1x	1.1x	1.1x	9.5x	9.1x	7.1x
Ericsson	Jun-18	\$8.87	98.1%	\$29,250	\$28,046	\$21,922	\$22,407	\$22,325	(9.3%)	(0.4%)	30.5%	1.8%	1.3x	1.3x	1.3x	NM	13.5x	9.6x
FleetCor Technologies	Jun-18	\$227.84	99.0%	\$20,138	\$23,967	\$2,358	\$2,405	\$2,628	7.1%	9.3%	78.4%	52.9%	NM	10.0x	9.1x	19.2x	17.5x	15.7x
Citrix	Jun-18	\$111.16	95.2%	\$15,080	\$15,718	\$2,908	\$2,946	\$3,055	4.3%	3.7%	86.9%	30.6%	5.4x	5.3x	5.1x	17.6x	14.6x	14.3x
ZTE	Jun-18	\$2.66	44.2%	\$10,542	\$10,912	\$14,237	\$14,062	\$16,224	(17.5%)	15.4%	28.8%	(0.7%)	0.8x	0.8x	0.7x	NM	9.3x	6.5x
Juniper Networks	Jun-18	\$29.97	99.3%	\$10,334	\$9,349	\$4,784	\$4,729	\$4,854	(5.8%)	2.6%	59.4%	19.2%	2.0x	2.0x	1.9x	10.2x	9.2x	8.6x
Amdocs	Jun-18	\$65.98	92.0%	\$9,332	\$8,815	\$3,952	\$4,013	\$4,177	3.1%	4.1%	34.8%	18.5%	2.2x	2.2x	2.1x	12.1x	10.5x	9.8x
Comm. Technology Upper Quartile			98.3%										5.1x	5.5x	5.2x	16.6x	13.6x	11.7x
Comm. Technology Median			93.6%										2.1x	2.2x	2.1x	12.3x	9.9x	9.2x
Comm. Technology Lower Quartile			88.1%										1.1x	1.2x	1.2x	9.7x	9.1x	8.0x
Electronics																		
Apple	Jun-18	\$225.74	98.3%	\$1,090,308	\$1,133,938	\$255,274	\$268,351	\$282,865	12.5%	5.4%	38.3%	30.8%	4.4x	4.2x	4.0x	14.4x	13.9x	13.7x
Samsung	Jun-18	\$41.85	80.8%	\$277,869	\$223,549	\$222,109	\$221,107	\$227,959	(1.6%)	3.1%	46.6%	34.0%	1.0x	1.0x	1.0x	3.0x	2.8x	2.8x
Sony Corporation	Jun-18	\$61.38	99.9%	\$77,881	\$75,105	\$77,862	\$77,766	\$79,462	4.5%	2.2%	27.4%	12.5%	1.0x	1.0x	0.9x	7.7x	7.3x	6.9x
Canon	Jun-18	\$31.81	80.7%	\$34,347	\$34,947	\$36,827	\$36,493	\$36,696	0.6%	0.6%	47.8%	15.4%	0.9x	1.0x	1.0x	6.1x	6.3x	6.4x
Panasonic Corporation	Jun-18	\$11.66	73.5%	\$27,201	\$28,520	\$73,309	\$74,060	\$77,582	7.1%	4.8%	28.9%	8.2%	0.4x	0.4x	0.4x	4.7x	4.4x	4.0x
LG Electronics Inc.	Jun-18	\$63.96	62.0%	\$10,880	\$17,652	\$56,032	\$54,809	\$58,811	(3.2%)	7.3%	24.0%	7.4%	0.3x	0.3x	0.3x	4.3x	3.9x	3.7x
Lenovo	Jun-18	\$0.73	100.0%	\$8,783	\$11,935	\$47,250	\$49,398	\$51,962	12.7%	5.2%	13.8%	3.3%	0.3x	0.2x	0.2x	7.7x	7.6x	6.8x
Electronics Upper Quartile			89.6%										2.5x	2.3x	2.2x	7.9x	6.8x	6.8x
Electronics Median			80.8%										0.9x	1.0x	0.9x	6.1x	6.3x	6.4x
Electronics Lower Quartile			77.1%										0.4x	0.4x	0.3x	4.5x	4.1x	3.8x

Source: Capital IQ. Financials are calendarized to December year-end.

(1) Market Data including Market Capitalization amounts are based on closing share prices as of September 30, 2018.

(2) Enterprise Value (EV) equals Market Capitalization plus Debt, Preferred Equity, and Minority Interest, minus Cash and Cash Equivalents.

(3) EBITDA equals Earnings before Interest, Taxes, Depreciation, and Amortization.

(4) AT&T is not adjusted for Time Warner's acquisition.



Global TMT Selected Transactions ⁽¹⁾: Communications Technology & Electronics

Announced Date	Target Name	Target Country	Acquirer Name	Deal Value (\$ mm)	EV / Revenue	EV / EBITDA
27-Sep-2018	AEMtec GmbH [exceet Group]	Germany	capiton AG	\$101	-	-
25-Sep-2018	Tapingo	U.S.	Grubhub	\$150	-	-
20-Sep-2018	Gimatic Srl [AGIC Capital GmbH]	Italy	Barnes Group	\$432	-	-
13-Sep-2018	Cornershop	U.S.	Walmart	\$225	-	-
11-Sep-2018	Fujitsu Electronics Inc	Japan	Kaga Electronics	\$184	0.1x	-
10-Sep-2018	Integrated Device Technology	U.S.	Renesas Electronics Corporation	\$6,313	7.6x	-
4-Sep-2018	Tintri	U.S.	DataDirect Networks	\$25	0.4x	-
30-Aug-2018	TPG Telecom Limited	Australia	Vodafone Hutchison Australia	\$3,950	2.9x	8.8x
27-Aug-2018	Brooks Automation	U.S.	Edwards Vacuum	\$675	3.5x	-
24-Aug-2018	Digium	U.S.	Sangoma Technologies	\$28	-	-
21-Aug-2018	Thumbworks Technologies	India	CapFloat Financial Services Private Limited	\$30	-	-
15-Aug-2018	KMG Chemicals	U.S.	Cabot Microelectronics	\$1,600	3.6x	15.1x
15-Aug-2018	GreatCall [GTCR LLC]	U.S.	Best Buy Co.	\$800	2.7x	-
7-Aug-2018	WTT HK [MBK Partners/TPG Capital]	China	Hong Kong Broadband Network	\$703	-	-
6-Aug-2018	Avnera Corporation	U.S.	Skyworks Solutions	\$405	-	-
1-Aug-2018	Mendix	N/A	Siemens	\$701	-	-
1-Aug-2018	Elauwit Networks	U.S.	Boingo Wireless	\$28	-	-
24-Jul-2018	Quantum Global Technologies	U.S.	Ultra Clean Holdings	\$342	-	-
24-Jul-2018	Road Track Holding	Mexico	Ituran Location and Control	\$92	1.0x	4.4x
23-Jul-2018	Coriant [Oaktree Capital]	Germany	Infinera Corporation	\$430	0.5x	-
17-Jul-2018	Chengdu Skymoos Digital Entertainment	China	iQiyi	\$190	-	-
12-Jul-2018	eASIC Corporation	U.S.	Intel Corporation	-	-	-
6-Jul-2018	Metallurgica Bresciana	Italy	Sterlite Technologies	\$55	-	-
5-Jul-2018	Xplore Technologies.	U.S.	Zebra Technologies	\$66	0.9x	NM
3-Jul-2018	Wind Tre	Italy	CK Hutchison	\$2,860	-	-

Upper Quartile

3.4x 12.0x

Median

1.9x 8.8x

Lower Quartile

0.6x 6.6x

(1) Top M&A transactions on the basis of disclosed deal value in Q3'18.

Source: 451research.



Global TMT Selected Public Comps: IT Services and BPO (1/2)

Market Data						Operating Metrics							Valuation Multiples					
\$ value millions, except per share	Latest Quarter Ending	Share Price	% of 52 Week High	Market Cap. ⁽¹⁾	Enterprise Value ⁽²⁾	Revenue			Revenue Growth ⁽³⁾		LTM Gross	LTM EBITDA	EV / Revenue			EV / EBITDA		
						LTM	2018E	2019E	2017-2018E	2018E-2019E	Margin%	Margin%	LTM	2018E	2019E	LTM	2018E	2019E
IT Commercial Services																		
Accenture	Aug-18	\$170.20	96.9%	\$109,055	\$104,376	\$39,573	\$40,601	\$43,698	14.1%	7.6%	31.4%	17.1%	2.6x	2.6x	2.4x	15.4x	15.1x	14.2x
DXC Technology	Jun-18	\$93.52	86.7%	\$26,294	\$31,111	\$24,602	\$22,340	\$21,808	10.9%	(2.4%)	28.9%	22.0%	1.3x	1.4x	1.4x	5.7x	6.3x	6.4x
Cappgemini	Jun-18	\$125.94	90.5%	\$20,953	\$23,760	\$15,143	\$15,138	\$16,042	(1.2%)	6.0%	26.3%	12.4%	1.6x	1.6x	1.5x	12.6x	11.2x	10.6x
CGI Group	Jun-18	\$64.43	95.5%	\$17,969	\$19,307	\$8,603	\$8,900	\$9,152	1.9%	2.8%	29.5%	16.8%	2.2x	2.2x	2.1x	13.4x	11.8x	11.3x
Atos	Jun-18	\$119.09	75.7%	\$12,518	\$12,806	\$14,805	\$14,325	\$15,426	(6.4%)	7.7%	14.5%	12.6%	0.9x	0.9x	0.8x	6.9x	6.4x	5.4x
Virtusa	Jun-18	\$53.71	91.7%	\$1,597	\$1,809	\$1,093	\$1,206	\$1,366	25.4%	13.3%	29.1%	7.5%	1.7x	1.5x	1.3x	21.9x	18.4x	13.5x
Unisys	Jun-18	\$20.40	97.4%	\$1,041	\$1,136	\$2,787	\$2,782	\$2,810	3.0%	1.0%	23.2%	9.7%	0.4x	0.4x	0.4x	4.2x	2.9x	2.8x
Perficient	Jun-18	\$26.65	85.7%	\$928	\$973	\$488	\$497	\$527	9.9%	6.0%	34.9%	11.7%	2.0x	2.0x	1.8x	17.1x	13.0x	11.6x

IT Commercial Svs Upper Quartile	95.8%	2.1x	2.0x	1.9x	15.8x	13.5x	12.0x
IT Commercial Svs Median	91.1%	1.6x	1.5x	1.5x	13.0x	11.5x	10.9x
IT Commercial Svs Lower Quartile	86.5%	1.2x	1.3x	1.2x	6.6x	6.4x	6.1x

Government Consulting																		
Tyler Technologies	Jun-18	\$245.06	97.1%	\$9,472	\$9,319	\$889	\$944	\$1,050	11.9%	11.2%	47.4%	22.4%	NM	9.9x	8.9x	46.9x	32.8x	28.7x
Booz Allen Hamilton	Jun-18	\$49.63	94.4%	\$7,073	\$8,726	\$6,296	\$6,526	\$6,953	6.3%	6.6%	23.7%	9.9%	1.4x	1.3x	1.3x	14.1x	13.8x	13.2x
CACI International	Jun-18	\$184.15	91.7%	\$4,550	\$5,545	\$4,468	\$4,633	\$4,947	5.5%	6.8%	33.3%	9.1%	1.2x	1.2x	1.1x	13.6x	12.9x	12.3x
MAXIMUS	Jun-18	\$65.06	89.5%	\$4,179	\$3,934	\$2,455	\$2,400	\$2,480	(2.8%)	3.3%	25.2%	14.9%	1.6x	1.6x	1.6x	10.8x	11.1x	10.6x
Science Applications International	Aug-18	\$80.60	86.4%	\$3,425	\$4,327	\$4,563	\$4,580	\$4,743	4.6%	3.6%	9.5%	7.2%	0.9x	0.9x	0.9x	13.1x	13.0x	12.2x
ManTech International	Jun-18	\$63.30	92.9%	\$2,505	\$2,528	\$1,849	\$1,945	\$2,108	13.3%	8.4%	14.5%	8.1%	1.4x	1.3x	1.2x	16.9x	15.1x	13.6x
ICF International	Jun-18	\$75.45	91.7%	\$1,423	\$1,660	\$1,254	\$1,311	\$1,411	7.9%	7.6%	36.8%	8.9%	1.3x	1.3x	1.2x	14.9x	13.5x	12.0x

Govt. Consulting Upper Quartile	93.7%	1.4x	1.5x	1.4x	15.9x	14.4x	13.4x
Govt. Consulting Median	91.7%	1.3x	1.3x	1.2x	14.1x	13.5x	12.3x
Govt. Consulting Lower Quartile	90.6%	1.3x	1.2x	1.1x	13.4x	13.0x	12.1x

Offshore Consulting																		
Tata Consultancy Services	Jun-18	\$30.10	98.7%	\$115,245	\$110,084	\$18,484	\$19,143	\$22,139	1.2%	15.6%	44.7%	27.1%	6.0x	5.8x	5.0x	22.0x	20.9x	17.6x
Cognizant	Jun-18	\$77.15	90.7%	\$44,765	\$41,267	\$15,512	\$16,167	\$17,547	9.2%	8.5%	38.7%	20.6%	2.7x	2.6x	2.4x	12.9x	12.4x	10.7x
Infosys	Jun-18	\$10.06	97.5%	\$43,961	\$40,737	\$11,119	\$10,653	\$11,904	(2.2%)	11.7%	34.8%	26.8%	3.7x	3.8x	3.4x	13.7x	14.4x	12.9x
HCL Technologies	Jun-18	\$14.99	96.7%	\$20,881	\$20,076	\$8,008	\$7,772	\$8,944	(1.7%)	15.1%	34.4%	22.9%	2.5x	2.6x	2.2x	10.9x	11.0x	9.7x
Wipro	Jun-18	\$4.47	95.6%	\$20,218	\$17,404	\$8,008	\$7,802	\$8,588	(8.9%)	10.1%	29.1%	18.5%	2.2x	2.2x	2.0x	11.7x	11.7x	10.7x
Tech Mahindra	Jun-18	\$10.28	95.6%	\$9,088	\$8,025	\$4,631	\$4,614	\$5,177	(2.4%)	12.2%	33.0%	15.9%	1.7x	1.7x	1.6x	10.9x	10.0x	8.6x
Mphasis	Jun-18	\$16.16	91.7%	\$3,125	\$2,816	\$997	\$1,019	\$1,163	3.6%	14.1%	42.3%	16.9%	2.8x	2.8x	2.4x	16.7x	15.9x	13.6x
Mindtree	Jun-18	\$14.25	87.4%	\$2,339	\$2,242	\$849	\$908	\$1,059	9.1%	16.6%	31.2%	14.1%	2.6x	2.5x	2.1x	18.7x	15.8x	12.9x
Hexaware Technologies	Jun-18	\$5.91	76.9%	\$1,755	\$1,655	\$611	\$628	\$738	1.7%	17.5%	24.3%	15.8%	2.7x	2.6x	2.2x	17.2x	16.1x	13.0x

Offshore Consulting Upper Quartile	96.7%	2.8x	2.7x	2.4x	17.2x	15.7x	12.9x
Offshore Consulting Median	95.6%	2.7x	2.6x	2.2x	13.7x	14.4x	12.9x
Offshore Consulting Lower Quartile	90.7%	2.5x	2.4x	2.1x	11.7x	11.6x	10.6x

Source: Capital IQ. Financials are calendarized to December year-end.

(1) Market Data including Market Capitalization amounts are based on closing share prices as of September 30, 2018.

(2) Enterprise Value (EV) equals Market Capitalization plus Debt, Preferred Equity, and Minority Interest, minus Cash and Cash Equivalents.

(3) EBITDA equals Earnings before Interest, Taxes, Depreciation, and Amortization.



Global TMT Selected Public Comps: IT Services and BPO (2/2)

Market Data						Operating Metrics							Valuation Multiples					
\$ value millions, except per share	Latest Quarter Ending	Share Price	% of 52 Week High	Market Cap. ⁽¹⁾	Enterprise Value ⁽²⁾	Revenue			Revenue Growth ⁽³⁾		LTM Gross	LTM EBITDA	EV / Revenue			EV / EBITDA		
						LTM	2018E	2019E	2017-2018E	2018E-2019E	Margin%	Margin%	LTM	2018E	2019E	LTM	2018E	2019E
Management Consulting																		
FTI Consulting	Jun-18	\$73.19	89.4%	\$2,714	\$2,969	\$1,927	\$1,957	\$2,021	9.3%	3.3%	34.9%	13.1%	1.5x	1.5x	1.5x	11.8x	12.4x	12.0x
Huron Consulting	Jun-18	\$49.40	98.0%	\$1,064	\$1,406	\$754	\$768	\$803	4.4%	4.7%	35.5%	12.0%	1.9x	1.8x	1.8x	15.6x	15.6x	13.2x
Navigant Consulting	Jun-18	\$23.06	89.2%	\$1,038	\$1,174	\$951	\$729	\$730	(23.6%)	0.2%	31.0%	13.1%	1.2x	1.6x	1.6x	9.5x	16.3x	13.6x
The Hackett Group	Jun-18	\$20.15	97.9%	\$594	\$594	\$268	\$295	\$311	3.9%	5.3%	38.2%	15.6%	2.2x	2.0x	1.9x	14.2x	12.2x	10.8x
Resources Connection	Aug-18	\$16.60	92.5%	\$523	\$529	\$692	\$719	\$745	22.6%	3.6%	38.1%	8.3%	0.8x	0.7x	0.7x	9.3x	12.1x	10.1x
CRA International	Jun-18	\$50.22	85.5%	\$406	\$418	\$393	\$413	\$444	13.8%	7.5%	30.7%	7.2%	1.1x	1.0x	0.9x	14.8x	NA	NA
Information Services Group	Jun-18	\$4.78	87.6%	\$216	\$304	\$275	\$285	\$300	4.5%	5.2%	42.2%	9.3%	1.1x	1.1x	1.0x	11.9x	8.6x	7.8x

Mgmt. Consulting Upper Quartile	95.2%	1.7x	1.7x	1.7x	14.5x	14.8x	12.9x
Mgmt. Consulting Median	89.4%	1.2x	1.5x	1.5x	11.9x	12.3x	11.4x
Mgmt. Consulting Lower Quartile	88.4%	1.1x	1.0x	1.0x	10.6x	12.1x	10.3x

BPO																		
ADP	Jun-18	\$150.66	99.6%	\$65,905	\$65,734	\$13,326	\$13,733	\$14,573	7.8%	6.1%	43.2%	21.9%	4.9x	4.8x	4.5x	22.5x	21.6x	18.7x
Paychex	Aug-18	\$73.65	97.3%	\$26,491	\$26,067	\$3,451	\$3,461	\$3,704	7.0%	7.0%	69.5%	41.5%	7.6x	7.5x	7.0x	18.2x	18.6x	17.0x
Willis Towers Watson	Jun-18	\$140.94	85.4%	\$18,431	\$22,340	\$8,126	\$8,540	\$8,900	5.3%	4.2%	39.3%	17.2%	2.7x	2.6x	2.5x	15.9x	10.8x	10.2x
Teleperformance	Jun-18	\$188.80	94.6%	\$10,905	\$12,396	\$4,864	\$5,111	\$5,752	1.2%	12.5%	33.9%	15.2%	2.5x	2.4x	2.2x	16.8x	13.8x	11.8x
Iron Mountain	Jun-18	\$34.52	83.1%	\$9,878	\$17,872	\$4,060	\$4,221	\$4,391	11.2%	4.0%	57.3%	33.9%	4.4x	4.2x	4.1x	13.0x	12.2x	11.4x
Genpact	Jun-18	\$30.61	88.0%	\$5,814	\$6,718	\$2,861	\$2,981	\$3,234	9.3%	8.5%	37.3%	14.5%	2.3x	2.3x	2.1x	16.2x	13.3x	11.9x
WNS	Jun-18	\$50.75	93.3%	\$2,561	\$2,536	\$778	\$792	\$866	15.1%	9.3%	34.3%	15.1%	3.3x	3.2x	2.9x	21.6x	17.6x	16.5x
ExlService	Jun-18	\$66.20	98.7%	\$2,272	\$2,107	\$807	\$886	\$1,005	16.7%	13.4%	34.3%	14.0%	2.6x	2.4x	2.1x	18.7x	14.1x	11.9x
CSG Systems	Jun-18	\$40.14	82.2%	\$1,345	\$1,520	\$819	\$854	\$911	9.0%	6.7%	49.9%	17.1%	1.9x	1.8x	1.7x	10.9x	7.8x	7.8x
Sykes Enterprises	Jun-18	\$30.49	94.8%	\$1,288	\$1,216	\$1,638	\$1,636	\$1,704	3.7%	4.2%	36.1%	9.9%	0.7x	0.7x	0.7x	7.5x	7.2x	6.5x
TTEC	Jun-18	\$25.90	59.2%	\$1,196	\$1,421	\$1,511	\$1,498	\$1,565	4.7%	4.4%	24.2%	11.8%	0.9x	0.9x	0.9x	8.0x	7.3x	6.7x
Firstsource Solutions	Jun-18	\$0.85	73.6%	\$587	\$654	\$522	\$512	\$570	(7.0%)	11.4%	32.3%	13.0%	1.3x	1.3x	1.1x	9.6x	9.8x	8.9x
Convergys	Jun-18	\$37.90	94.7%	\$577	\$465	\$229	NA	NA	NA	NA	100.0%	71.3%	2.0x	NA	NA	2.8x	NA	NA
StarTek	Jun-18	\$6.62	80.5%	\$245	\$275	\$270	\$263	\$719	NA	NM	9.8%	1.8%	1.0x	1.0x	0.4x	NM	45.6x	4.1x

BPO Upper Quartile	94.8%	3.1x	3.2x	2.9x	18.2x	17.6x	11.9x
BPO Median	90.7%	2.4x	2.4x	2.1x	15.9x	13.3x	11.4x
BPO Lower Quartile	82.4%	1.4x	1.3x	1.1x	9.6x	9.8x	7.8x

Managed Services																		
Equinix	Jun-18	\$432.89	87.4%	\$34,418	\$44,842	\$4,830	\$5,066	\$5,580	16.2%	10.1%	48.7%	44.2%	9.3x	8.9x	8.0x	21.0x	18.6x	16.5x
CenturyLink	Jun-18	\$21.20	87.6%	\$22,899	\$59,514	\$21,204	\$23,589	\$23,254	33.2%	(1.4%)	55.6%	35.5%	2.8x	2.5x	2.6x	7.9x	6.6x	6.5x
Teradata	Jun-18	\$37.71	85.2%	\$4,491	\$4,106	\$2,202	\$2,145	\$2,191	0.2%	2.2%	47.0%	6.7%	1.9x	1.9x	1.9x	27.9x	12.5x	10.2x
Internap	Jun-18	\$12.63	56.5%	\$255	\$906	\$295	\$323	\$343	15.8%	5.9%	55.2%	29.6%	3.1x	2.8x	2.6x	10.4x	7.9x	7.3x

Managed Services Upper Quartile	87.4%	4.6x	4.3x	4.0x	22.7x	14.0x	11.8x
Managed Services Median	86.3%	2.9x	2.7x	2.6x	15.7x	10.2x	8.7x
Managed Services Lower Quartile	78.0%	2.6x	2.4x	2.4x	9.8x	7.6x	7.1x

Source: Capital IQ. Financials are calendarized to December year-end.

(1) Market Data including Market Capitalization amounts are based on closing share prices as of September 30, 2018.

(2) Enterprise Value (EV) equals Market Capitalization plus Debt, Preferred Equity, and Minority Interest, minus Cash and Cash Equivalents.

(3) EBITDA equals Earnings before Interest, Taxes, Depreciation, and Amortization.



Global TMT Selected Transactions ⁽¹⁾: IT Services and BPO

Announced Date	Target Name	Target Country	Acquirer Name	Deal Value (\$ mm)	EV / Revenue	EV / EBITDA
24-Sep-18	Ascenty [Great Hill Partners]	Brazil	Digital Realty Trust	\$1,826	-	-
18-Sep-18	Command Security	U.S.	Prosegur Compania de Seguridad	\$29	0.1x	-
14-Sep-18	Avantazh	Ukraine	Mobile Telesystems OJSC	\$129	-	-
12-Sep-18	Sedgwick Claims Management Services [KKR]	U.S.	Carlyle Group	\$6,700	-	-
10-Sep-18	Engility Holdings	U.S.	Science Applications International	\$1,495	1.3x	14.6x
31-Aug-18	Mode Transportation	U.S.	York Capital Management	\$239	-	-
30-Aug-18	TGI Systems Corporation	U.S.	QMS Media	\$40	-	-
28-Aug-18	MCS Solutions	Belgium	Nemetschek Group	\$57	-	-
27-Aug-18	Globecomm Systems [HPS Investment Partners/ Tennenbaum Capital]	U.S.	SpeedCast International	\$135	0.9x	8.4x
17-Aug-18	Brookcourt Solutions	U.K.	Shearwater Group	\$38	1.3x	11.0x
7-Aug-18	Secure Designs	U.S.	ADT Corporation	\$30	3.0x	-
1-Aug-18	Apogee Corporation [Equistone Partners Europe]	U.K.	Hewlett-Packard Company	\$499	-	-
1-Aug-18	Cardinal Solutions	U.S.	Insight Enterprises	\$79	1.1x	-
22-Jul-18	Syntel	U.S.	Atos SE	\$3,400	3.8x	13.7x
16-Jul-18	Basefarm AS [ABRY Partners]	Norway	Orange Business Services	\$409	-	-
16-Jul-18	KeyDrive S.A	Luxembourg	CentralNic Group	\$36	0.6x	-
6-Jul-2018	Damovo Corporate Services [Oakley Capital/ Daisy Group]	U.K.	Eli Global	\$134	-	-
Upper Quartile					1.7x	13.9x
Median					1.2x	12.4x
Lower Quartile					0.8x	10.4x

(1) Top M&A transactions on the basis of disclosed deal value in Q3'18.

Source: 451research.



Global TMT Selected Public Comps: Internet and Media

Market Data						Operating Metrics						Valuation Multiples						
\$ value millions, except per share	Latest Quarter Ending	Share Price	% of 52 Week High	Market Cap. ⁽¹⁾	Enterprise Value ⁽²⁾	Revenue			Revenue Growth ⁽³⁾		LTM Gross	LTM EBITDA	EV / Revenue			EV / EBITDA		
						LTM	2018E	2019E	2017 – 2018E	2018E – 2019E	Margin%	Margin%	LTM	2018E	2019E	LTM	2018E	2019E
Internet																		
Amazon.com	Jun-18	\$2,003.00	97.7%	\$976,946	\$995,685	\$208,125	\$234,887	\$287,104	32.5%	22.2%	38.8%	9.9%	4.8x	4.2x	3.5x	48.3x	31.0x	23.6x
Alphabet Inc.	Jun-18	\$1,207.08	93.5%	\$834,977	\$736,704	\$123,898	\$137,004	\$160,803	24.3%	17.4%	57.4%	30.8%	5.9x	5.4x	4.6x	19.3x	14.7x	12.1x
Facebook	Jun-18	\$164.46	75.2%	\$474,832	\$432,644	\$48,497	\$55,483	\$69,166	37.8%	24.7%	85.2%	56.5%	8.9x	7.8x	6.3x	15.8x	12.9x	10.9x
Alibaba	Jun-18	\$164.76	77.8%	\$423,751	\$428,653	\$42,451	\$52,767	\$74,678	55.9%	41.5%	52.8%	30.0%	NM	8.1x	5.7x	33.6x	23.9x	17.1x
Tencent	Jun-18	\$41.30	67.8%	\$390,589	\$399,883	\$42,119	\$46,315	\$61,982	25.5%	33.8%	48.3%	38.7%	9.5x	8.6x	6.5x	24.6x	23.3x	18.7x
Baidu	Jun-18	\$228.68	80.5%	\$80,063	\$70,894	\$14,189	\$15,086	\$18,239	16.4%	20.9%	58.5%	33.8%	5.0x	4.7x	3.9x	14.8x	16.6x	14.0x
eBay	Jun-18	\$33.02	70.3%	\$32,675	\$37,909	\$10,065	\$10,805	\$11,646	12.9%	7.8%	77.1%	29.8%	3.8x	3.5x	3.3x	12.6x	10.5x	9.8x
Twitter	Jun-18	\$28.46	59.6%	\$21,486	\$18,521	\$2,697	\$2,910	\$3,287	21.5%	13.0%	67.3%	21.7%	6.9x	6.4x	5.6x	31.6x	17.3x	14.9x
Snap	Jun-18	\$8.48	40.0%	\$10,832	\$9,278	\$987	\$1,154	\$1,572	45.8%	36.2%	24.0%	NM	9.4x	8.0x	5.9x	NM	NM	NM
Etsy	Jun-18	\$51.38	96.5%	\$6,153	\$5,862	\$496	\$595	\$765	35.9%	28.7%	66.3%	15.3%	NM	9.9x	7.7x	NM	43.4x	31.4x
Internet Upper Quartile			90.2%										9.0x	8.1x	6.2x	32.1x	23.9x	18.7x
Internet Median			76.5%										6.4x	7.1x	5.7x	21.9x	17.3x	14.9x
Internet Lower Quartile			68.4%										4.9x	4.9x	4.1x	15.5x	14.7x	12.1x
Media																		
Walt Disney	Jun-18	\$116.94	99.2%	\$173,918	\$198,385	\$57,906	\$59,202	\$61,272	6.1%	3.5%	45.2%	30.1%	3.4x	3.4x	3.2x	11.4x	11.5x	11.0x
Comcast	Jun-18	\$35.41	80.5%	\$162,246	\$223,492	\$87,179	\$89,536	\$93,031	6.1%	3.9%	69.3%	32.6%	2.6x	2.5x	2.4x	7.9x	7.6x	7.2x
Twenty-First Century Fox	Jun-18	\$46.33	92.4%	\$85,423	\$99,322	\$30,400	\$31,394	\$32,759	7.3%	4.3%	34.8%	22.7%	3.3x	3.2x	3.0x	14.4x	13.7x	12.9x
Sky	Jun-18	\$22.56	99.3%	\$38,737	\$47,325	\$17,925	\$18,326	\$19,213	2.2%	4.8%	43.4%	14.7%	2.6x	2.6x	2.5x	18.0x	14.9x	13.8x
CBS	Jun-18	\$57.45	93.3%	\$21,626	\$31,224	\$14,319	\$14,648	\$15,682	8.7%	7.1%	37.5%	21.7%	2.2x	2.1x	2.0x	10.0x	9.4x	8.8x
REA Group	Jun-18	\$62.20	91.3%	\$8,193	\$8,422	\$642	\$611	\$704	6.4%	15.3%	72.6%	49.7%	NM	NM	NM	26.4x	23.5x	20.3x
News Corp.	Jun-18	\$13.19	76.3%	\$7,796	\$8,920	\$9,024	\$9,957	\$10,376	20.7%	4.2%	45.7%	9.6%	1.0x	0.9x	0.9x	10.3x	7.6x	6.8x
Lagardère	Jun-18	\$30.80	92.4%	\$3,947	\$5,804	\$8,546	\$8,329	\$8,695	(1.7%)	4.4%	46.9%	8.6%	0.7x	0.7x	0.7x	7.9x	7.7x	7.4x
Singapore Press	May-18	\$2.10	98.3%	\$3,391	\$4,655	\$750	\$703	\$714	(5.0%)	1.5%	50.9%	34.1%	6.2x	6.6x	6.5x	18.2x	20.2x	19.7x
DMGT	Mar-18	\$9.16	89.9%	\$3,062	\$3,770	\$2,128	\$1,853	\$1,874	(22.9%)	1.1%	37.0%	11.1%	1.8x	2.0x	2.0x	16.0x	13.9x	13.6x
Media Upper Quartile			97.0%										3.3x	3.2x	3.0x	17.5x	14.6x	13.6x
Media Median			92.4%										2.6x	2.5x	2.4x	12.9x	12.6x	11.9x
Media Lower Quartile			90.2%										1.8x	2.0x	2.0x	10.1x	8.1x	7.8x
Information Services																		
S&P Global	Jun-18	\$195.39	89.9%	\$49,141	\$52,400	\$6,277	\$6,435	\$6,843	7.7%	6.3%	72.1%	48.9%	8.3x	8.1x	7.7x	17.1x	16.5x	15.3x
Moody's	Jun-18	\$167.20	88.9%	\$32,086	\$36,226	\$4,530	\$4,619	\$4,926	12.3%	6.6%	71.4%	47.2%	8.0x	7.8x	7.4x	17.0x	16.3x	15.0x
Thomson Reuters	Jun-18	\$45.60	96.4%	\$31,917	\$39,476	\$11,412	\$5,503	\$5,895	(51.4%)	7.1%	28.3%	21.8%	3.5x	7.2x	6.7x	15.9x	31.0x	28.2x
Experian	Mar-18	\$25.71	98.8%	\$23,201	\$26,437	\$4,662	\$4,845	\$5,021	12.7%	3.6%	42.9%	30.7%	5.7x	5.5x	5.3x	18.5x	15.8x	15.4x
Pearson	Jun-18	\$11.61	91.5%	\$8,999	\$10,116	\$5,715	\$5,499	\$5,454	(11.3%)	(0.8%)	54.2%	13.1%	1.8x	1.8x	1.9x	13.5x	11.3x	10.5x
Information Services Upper Quartile			96.4%										8.0x	7.8x	7.4x	17.1x	16.5x	15.4x
Information Services Median			91.5%										5.7x	7.2x	6.7x	17.0x	16.3x	15.3x
Information Services Lower Quartile			89.9%										3.5x	5.5x	5.3x	15.9x	15.8x	15.0x

Source: Capital IQ. Financials are calendarized to December year-end.

(1) Market Data including Market Capitalization amounts are based on closing share prices as of September 30, 2018.

(2) Enterprise Value (EV) equals Market Capitalization plus Debt, Preferred Equity, and Minority Interest, minus Cash and Cash Equivalents.

(3) EBITDA equals Earnings before Interest, Taxes, Depreciation, and Amortization.



Global TMT Selected Transactions ⁽¹⁾: Internet and Media

Announced Date	Target Name	Target Country	Acquirer Name	Deal Value (\$ mm)	EV / Revenue	EV / EBITDA
28-Sep-2018	CafePress Inc	U.S.	Snapfish	\$25	0.1x	-
25-Sep-2018	XO Group Inc	U.S.	WeddingWire [Permira Funds]	\$933	5.0x	30.3x
25-Sep-2018	BuildASign.com [PWP Growth Equity]	U.S.	Cimpress N.V.	\$280	2.2x	-
24-Sep-2018	Sky plc	U.K.	Comcast	\$39,276	2.6x	17.1x
24-Sep-2018	Pandora Media	U.S.	Sirius XM Radio	\$3,230	2.4x	-
13-Sep-2018	Shengqu Technology	China	Zhejiang Century Huatong	\$4,344	-	-
30-Aug-2018	Reis	U.S.	Moody's Corporation	\$278	5.5x	27.2x
8-Aug-2018	Dun & Bradstreet	U.S.	CC Capital/Cannae Holdings/Thomas H. Lee Partners	\$5,383	3.9x	11.1x
1-Aug-2018	Linio Group	Mexico	S.A.C.I. Falabella	\$138	1.0x	-
31-Jul-2018	InvestmentNews	U.S.	Vitesse Media	\$27	-	-
30-Jul-2018	RLJ Entertainment	U.S.	AMC Networks	\$274	-	-
28-Jul-2018	10bis.co.il	Israel	Takeaway.com	\$158	-	-
25-Jul-2018	CQ Roll Call	U.S.	FiscalNote	\$180	-	-
18-Jul-2018	FINANZCHECK.de	Germany	Scout24 AG	\$334	-	-
13-Jul-2018	Student Loan Hero	U.S.	LendingTree	\$60	-	-
4-Jul-2018	Baihe Jiayuan Network	China	Fosun International	\$601	-	-
2-Jul-2018	Quartz Media	U.S.	Uzabase Inc	\$75	1.9x	-
2-Jul-2018	DuProprio	Canada	Purplebricks Group	\$39	-	11.6x
Upper Quartile					3.9x	27.2x
Median					2.4x	17.1x
Lower Quartile					1.9x	11.6x

(1) Top M&A transactions on the basis of disclosed deal value in Q3'18.

Source: 451research.



Global TMT Selected Public Comps: Software (1/2)

Market Data						Operating Metrics							Valuation Multiples					
\$ value millions, except per share	Latest Quarter Ending	Share Price	% of 52 Week High	Market Cap. ⁽¹⁾	Enterprise Value ⁽²⁾	Revenue			Revenue Growth ⁽³⁾		LTM Gross	LTM EBITDA	EV / Revenue			EV / EBITDA		
						LTM	2018E	2019E	2017-2018E	2018E-2019E	Margin%	Margin%	LTM	2018E	2019E	LTM	2018E	2019E
Diversified Software																		
Microsoft	Jun-18	\$114.37	99.2%	\$877,014	\$830,853	\$110,360	\$117,083	\$128,837	15.7%	10.0%	65.2%	40.7%	7.5x	7.1x	6.4x	18.5x	17.1x	15.3x
Alphabet Inc.	Jun-18	\$1,207.08	93.5%	\$834,977	\$736,704	\$123,898	\$137,004	\$160,803	24.3%	17.4%	57.4%	30.8%	5.9x	5.4x	4.6x	19.3x	14.7x	12.1x
Cisco Systems	Jul-18	\$48.65	99.2%	\$222,395	\$201,488	\$49,330	\$50,685	\$52,378	5.6%	3.3%	62.2%	29.9%	4.1x	4.0x	3.8x	13.7x	11.2x	10.8x
Oracle	Aug-18	\$51.56	96.4%	\$195,342	\$194,044	\$39,920	\$39,782	\$40,721	2.0%	2.4%	79.7%	40.5%	4.9x	4.9x	4.8x	12.0x	10.4x	10.1x
SAP	Jun-18	\$123.23	97.8%	\$147,082	\$150,344	\$27,599	\$28,380	\$30,664	0.5%	8.0%	70.1%	26.2%	5.4x	5.3x	4.9x	20.8x	15.8x	14.4x
IBM	Jun-18	\$151.21	88.4%	\$138,020	\$172,022	\$80,771	\$80,246	\$79,975	2.1%	(0.3%)	45.5%	21.1%	2.1x	2.1x	2.2x	10.1x	8.9x	8.6x
Adobe Systems	Aug-18	\$269.95	97.2%	\$131,772	\$128,712	\$8,572	\$8,994	\$10,731	24.1%	19.3%	87.1%	36.0%	NM	NM	NM	41.7x	32.1x	26.1x
Salesforce.com	Jul-18	\$159.03	98.7%	\$120,338	\$121,309	\$11,793	\$13,190	\$15,855	26.3%	20.2%	74.0%	9.4%	NM	9.2x	7.7x	NM	38.6x	31.2x
Diversified Software Upper Quartile		98.8%											5.8x	6.2x	5.7x	20.0x	20.8x	18.0x
Diversified Software Median		97.5%											5.2x	5.3x	4.8x	18.5x	15.2x	13.2x
Diversified Software Lower Quartile		95.7%											4.3x	4.4x	4.2x	12.8x	11.0x	10.6x
Mid-Cap SaaS (< \$2B Market Cap)																		
SurveyMonkey Inc	Jun-18	\$16.03	80.2%	\$1,995	\$2,362	\$234	NA	NA	NA	NA	71.1%	0.6%	NM	NA	NA	NM	NA	NA
Mindbody	Jun-18	\$40.65	89.3%	\$1,940	\$1,861	\$212	\$248	\$311	36.3%	25.2%	70.7%	(5.6%)	8.8x	7.5x	6.0x	NM	NM	NM
Hortonworks, Inc.	Jun-18	\$22.81	87.0%	\$1,856	\$1,774	\$309	\$342	\$422	33.0%	23.2%	71.3%	(53.0%)	5.7x	5.2x	4.2x	NM	NM	NM
SPS Commerce	Jun-18	\$99.24	98.6%	\$1,734	\$1,562	\$235	\$245	\$268	11.4%	9.4%	66.7%	10.5%	6.7x	6.4x	5.8x	NM	32.5x	27.5x
Rapid7, Inc.	Jun-18	\$36.92	93.7%	\$1,726	\$1,611	\$221	\$239	\$287	19.1%	19.9%	70.4%	(21.3%)	7.3x	6.7x	5.6x	NM	NM	NM
Workiva	Jun-18	\$39.50	97.2%	\$1,711	\$1,649	\$226	\$241	\$276	16.5%	14.6%	71.4%	(24.1%)	7.3x	6.9x	6.0x	NM	NM	NM
SendGrid, Inc.	Jun-18	\$36.79	95.2%	\$1,707	\$1,541	\$128	\$144	\$179	31.0%	24.9%	74.3%	4.6%	NM	NM	8.6x	NM	NM	NM
Everbridge	Jun-18	\$57.64	91.5%	\$1,694	\$1,680	\$123	\$144	\$182	38.9%	26.2%	69.2%	(25.5%)	NM	NM	9.2x	NM	NM	NM
Apptio	Jun-18	\$36.96	89.4%	\$1,647	\$1,506	\$212	\$232	\$271	24.9%	16.7%	69.3%	(6.9%)	7.1x	6.5x	5.6x	NM	NM	NM
LivePerson	Jun-18	\$25.95	94.7%	\$1,619	\$1,550	\$234	\$247	\$276	13.1%	11.9%	74.6%	3.6%	6.6x	6.3x	5.6x	NM	NM	NM
Carbon Black, Inc.	Jun-18	\$21.18	60.5%	\$1,437	\$1,258	\$187	\$207	\$254	NA	22.7%	78.1%	(30.2%)	6.7x	6.1x	5.0x	NM	NM	NM
Benefitfocus	Jun-18	\$40.45	90.5%	\$1,290	\$1,365	\$267	\$257	\$287	0.0%	11.8%	53.4%	0.2%	5.1x	5.3x	4.8x	NM	NM	NM
Instructure	Jun-18	\$35.40	72.0%	\$1,233	\$1,116	\$184	\$208	\$260	32.7%	25.2%	70.5%	(26.6%)	6.1x	5.4x	4.3x	NM	NM	NM
Domo, Inc.	Jul-18	\$21.45	74.3%	\$565	\$423	\$125	\$137	\$166	NA	20.7%	61.0%	NM	3.4x	3.1x	2.6x	NM	NM	NM
Mobiliron	Jun-18	\$5.30	92.8%	\$545	\$446	\$181	\$194	\$213	11.3%	9.9%	83.0%	(25.9%)	2.5x	2.3x	2.1x	NM	NM	NM
Castlight Health	Jun-18	\$2.70	45.4%	\$372	\$303	\$145	\$153	\$165	17.3%	7.2%	60.5%	(36.1%)	2.1x	2.0x	1.8x	NM	NM	28.5x
Mid-Cap SaaS Upper Quartile		94.0%											7.1x	6.5x	5.9x	NM	32.5x	28.2x
Mid-Cap SaaS Median		89.9%											6.6x	6.1x	5.6x	NM	32.5x	28.0x
Mid-Cap SaaS Lower Quartile		78.7%											5.1x	5.2x	4.3x	NM	32.5x	27.7x

Source: Capital IQ. Financials are calendarized to December year-end.

(1) Market Data including Market Capitalization amounts are based on closing share prices as of September 30, 2018.

(2) Enterprise Value (EV) equals Market Capitalization plus Debt, Preferred Equity, and Minority Interest, minus Cash and Cash Equivalents.

(3) EBITDA equals Earnings before Interest, Taxes, Depreciation, and Amortization.



Global TMT Selected Public Comps: Software (2/2)

Market Data						Operating Metrics							Valuation Multiples						
\$ value millions, except per share	Latest Quarter Ending	Share Price	% of 52 Week High	Market Cap. (1)	Enterprise Value (2)	Revenue			Revenue Growth (3)		LTM Gross	LTM EBITDA	EV / Revenue			EV / EBITDA			
						LTM	2018E	2019E	2017-2018E	2018E-2019E	Margin%	Margin%	LTM	2018E	2019E	LTM	2018E	2019E	
Large-Cap SaaS (> \$2B Market Cap)																			
Salesforce.com	Jul-18	\$159.03	98.7%	\$120,338	\$121,309	\$11,793	\$13,190	\$15,855	26.3%	20.2%	74.0%	9.4%	NM	9.2x	7.7x	NM	38.6x	31.2x	
ServiceNow	Jun-18	\$195.63	94.8%	\$34,812	\$33,919	\$2,276	\$2,604	\$3,358	36.0%	29.0%	75.5%	1.7%	NM	NM	NM	NM	NM	36.5x	
Workday	Jul-18	\$145.98	92.9%	\$31,678	\$29,870	\$2,428	\$2,770	\$3,463	29.8%	25.0%	70.6%	(7.0%)	NM	NM	8.6x	NM	NM	46.8x	
Atlassian	Jun-18	\$96.14	99.1%	\$22,703	\$21,789	\$874	\$1,011	\$1,313	37.9%	29.9%	80.2%	0.5%	NM	NM	NM	NM	NM	NM	
Shopify	Jun-18	\$164.46	93.1%	\$17,571	\$15,997	\$854	\$1,035	\$1,439	56.7%	39.0%	56.5%	(5.6%)	NM	NM	NM	NM	NM	NM	
Veeva Systems	Jul-18	\$108.87	99.8%	\$15,733	\$14,722	\$763	\$843	\$997	23.9%	18.3%	69.7%	24.2%	NM	NM	NM	NM	49.6x	41.4x	
Dropbox, Inc.	Jun-18	\$26.83	61.7%	\$10,794	\$9,980	\$1,248	\$1,373	\$1,591	NA	15.8%	68.5%	(29.1%)	8.0x	7.3x	6.3x	NM	33.3x	28.5x	
The Ultimate Software Group	Jun-18	\$322.19	96.9%	\$10,043	\$9,867	\$1,035	\$1,138	\$1,355	21.8%	19.1%	62.6%	10.3%	9.5x	8.7x	7.3x	NM	36.0x	29.4x	
Tableau Software	Jun-18	\$111.74	94.6%	\$9,268	\$8,356	\$993	\$981	\$1,135	12.9%	15.7%	87.1%	(12.5%)	8.4x	8.5x	7.4x	NM	NM	NM	
Twilio	Jun-18	\$86.28	97.1%	\$8,408	\$8,036	\$493	\$589	\$754	51.7%	27.9%	53.2%	(15.8%)	NM	NM	NM	NM	NM	NM	
DocuSign, Inc.	Jul-18	\$52.57	76.9%	\$8,243	\$7,425	\$602	\$686	\$841	NA	22.5%	73.9%	(48.5%)	NM	NM	8.8x	NM	NM	NM	
Okta	Jul-18	\$70.36	93.2%	\$7,682	\$7,410	\$326	\$375	\$499	44.5%	33.1%	70.5%	(37.0%)	NM	NM	NM	NM	NM	NM	
Zendesk	Jun-18	\$71.00	98.3%	\$7,523	\$7,285	\$506	\$586	\$764	37.3%	30.5%	70.0%	(19.6%)	NM	NM	9.5x	NM	NM	NM	
RingCentral	Jun-18	\$93.05	94.8%	\$7,408	\$7,202	\$581	\$654	\$807	31.2%	23.5%	76.2%	(1.5%)	NM	NM	8.9x	NM	NM	NM	
RealPage	Jun-18	\$65.90	99.7%	\$5,964	\$6,190	\$774	\$871	\$1,003	29.5%	15.1%	60.6%	16.8%	8.0x	7.1x	6.2x	47.5x	27.0x	21.8x	
HubSpot	Jun-18	\$150.95	93.1%	\$5,856	\$5,614	\$441	\$499	\$623	34.6%	24.9%	80.2%	(8.0%)	NM	NM	9.0x	NM	NM	NM	
Wix.com Ltd.	Jun-18	\$119.70	98.8%	\$5,787	\$5,437	\$513	\$599	\$759	41.2%	26.8%	81.3%	(6.7%)	NM	9.1x	7.2x	NM	48.7x	30.6x	
Proofpoint	Jun-18	\$106.33	81.6%	\$5,588	\$5,658	\$612	\$708	\$900	39.0%	27.0%	71.5%	(5.9%)	9.3x	8.0x	6.3x	NM	NM	40.8x	
athenahealth	Jun-18	\$133.60	81.5%	\$5,411	\$5,453	\$1,287	\$1,349	\$1,484	11.3%	10.0%	54.2%	18.8%	4.2x	4.0x	3.7x	22.5x	14.5x	12.9x	
New Relic	Jun-18	\$94.23	82.1%	\$5,325	\$4,995	\$383	\$437	\$550	33.4%	25.9%	83.1%	(4.1%)	NM	NM	9.1x	NM	NM	NM	
Pivotal Software, Inc.	Aug-18	\$19.58	62.7%	\$5,040	\$4,369	\$582	\$651	\$804	NA	23.4%	59.9%	(22.1%)	7.5x	6.7x	5.4x	NM	NM	NM	
Xero	Mar-18	\$35.47	93.2%	\$4,953	\$4,899	\$294	\$338	\$441	24.9%	30.7%	81.2%	(4.9%)	NM	NM	NM	NM	NM	NM	
LogMeIn	Jun-18	\$89.10	66.1%	\$4,622	\$4,623	\$1,130	\$1,191	\$1,254	17.4%	5.3%	78.3%	30.2%	4.1x	3.9x	3.7x	13.6x	10.6x	9.8x	
Coupa Software	Jul-18	\$79.10	93.6%	\$4,593	\$4,318	\$219	\$245	\$304	34.7%	24.3%	68.9%	(17.1%)	NM	NM	NM	NM	NM	NM	
Medidata Solutions	Jun-18	\$73.31	82.5%	\$4,372	\$4,346	\$587	\$637	\$757	16.8%	18.9%	76.5%	15.5%	7.4x	6.8x	5.7x	47.9x	28.8x	22.7x	
2U	Jun-18	\$75.19	76.3%	\$4,318	\$3,854	\$347	\$411	\$548	44.2%	33.4%	78.1%	(7.7%)	NM	9.4x	7.0x	NM	NM	NM	
Paylocity Holding Corporation	Jun-18	\$80.32	90.8%	\$4,238	\$4,101	\$378	\$412	\$498	23.8%	20.8%	60.5%	8.5%	NM	10.0x	8.2x	NM	42.0x	28.5x	
Elastic N.V.	Jul-18	\$60.94	82.1%	\$4,235	\$4,383	\$185	NA	NA	NA	NA	73.6%	(27.3%)	NM	NA	NA	NM	NA	NA	
Alteryx	Jun-18	\$57.21	90.6%	\$3,483	\$3,320	\$162	\$193	\$257	50.3%	33.5%	86.5%	(8.6%)	NM	NM	NM	NM	NM	NM	
Qualys	Jun-18	\$89.10	90.6%	\$3,475	\$3,152	\$255	\$279	\$331	21.3%	18.6%	76.8%	26.2%	NM	NM	9.5x	47.1x	30.2x	25.5x	
Box	Jul-18	\$23.91	80.3%	\$3,386	\$3,275	\$555	\$608	\$735	20.0%	21.0%	72.7%	(18.8%)	5.9x	5.4x	4.5x	NM	NM	NM	
Cornerstone OnDemand	Jun-18	\$56.75	95.9%	\$3,335	\$3,233	\$519	\$524	\$568	8.5%	8.3%	71.7%	(2.3%)	6.2x	6.2x	5.7x	NM	38.6x	24.4x	
Ellie Mae, Inc.	Jun-18	\$94.77	81.1%	\$3,283	\$3,040	\$463	\$499	\$582	20.8%	16.7%	59.2%	14.7%	6.6x	6.1x	5.2x	44.7x	23.1x	17.4x	
Smartsheet Inc.	Jul-18	\$31.26	92.0%	\$3,212	\$3,009	\$141	\$168	\$235	NA	39.4%	80.7%	(27.8%)	NM	NM	NM	NM	NM	NM	
BlackLine	Jun-18	\$56.47	97.2%	\$3,046	\$2,931	\$204	\$226	\$280	29.4%	24.2%	77.7%	(9.1%)	NM	NM	NM	NM	NM	NM	
AppFolio	Jun-18	\$78.40	85.7%	\$2,683	\$2,630	\$165	\$185	\$230	30.2%	24.4%	61.9%	12.8%	NM	NM	NM	NM	NM	41.0x	
Cloudera	Jul-18	\$17.65	78.7%	\$2,667	\$2,289	\$411	\$447	\$535	23.3%	19.7%	68.0%	(42.9%)	5.6x	5.1x	4.3x	NM	NM	NM	
Q2 Holdings, Inc.	Jun-18	\$60.55	90.2%	\$2,596	\$2,495	\$215	\$239	\$296	23.1%	23.8%	49.5%	(5.6%)	NM	NM	8.4x	NM	NM	NM	
Five9, Inc.	Jun-18	\$43.69	88.3%	\$2,547	\$2,479	\$226	\$246	\$289	24.9%	17.5%	59.0%	4.8%	NM	NM	8.6x	NM	NM	NM	
Mimecast	Jun-18	\$41.88	89.4%	\$2,501	\$2,424	\$282	\$317	\$381	33.0%	20.0%	73.3%	5.8%	8.6x	7.6x	6.4x	NM	NM	39.2x	
Zuora, Inc.	Jul-18	\$23.11	61.2%	\$2,489	\$2,328	\$206	\$229	\$290	NA	26.4%	50.8%	(26.3%)	NM	NM	8.0x	NM	NM	NM	
Yext	Jul-18	\$23.70	87.2%	\$2,336	\$2,212	\$199	\$228	\$301	33.8%	32.1%	74.4%	(34.2%)	NM	9.7x	7.4x	NM	NM	NM	
Talend S.A.	Jun-18	\$69.74	94.9%	\$2,084	\$1,992	\$176	\$205	\$261	38.1%	27.1%	76.7%	(17.6%)	NM	9.7x	7.6x	NM	NM	NM	
Pluralsight, Inc.	Jun-18	\$32.00	83.4%	\$2,013	\$1,933	\$194	\$224	\$299	NA	33.7%	70.3%	(43.7%)	10.0x	8.6x	6.5x	NM	NM	NM	
Large-Cap SaaS Upper Quartile			94.8%											8.5x	9.1x	8.5x	47.4x	38.6x	38.5x
Large-Cap SaaS Median			90.7%											7.5x	7.6x	7.3x	45.9x	33.3x	29.0x
Large-Cap SaaS Lower Quartile			82.0%											6.1x	6.2x	6.0x	28.0x	27.0x	23.1x

Source: Capital IQ. Financials are calendarized to December year-end.

(1) Market Data including Market Capitalization amounts are based on closing share prices as of September 30, 2018.

(2) Enterprise Value (EV) equals Market Capitalization plus Debt, Preferred Equity, and Minority Interest, minus Cash and Cash Equivalents.

(3) EBITDA equals Earnings before Interest, Taxes, Depreciation, and Amortization.

Global TMT Selected Transactions ⁽¹⁾: Software

Announced Date	Target Name	Target Country	Acquirer Name	Deal Value (\$ mm)	EV / Revenue	EV / EBITDA
27-Sep-2018	SICOM [LLR Partners]	U.S.	Global Payments	\$415	-	-
20-Sep-2018	Marketo [Vista Equity Partners]	U.S.	Adobe Systems	\$4,750	-	-
20-Sep-2018	NewVoiceMedia	U.K.	Vonage Holdings	\$350	14.8x	-
14-Sep-2018	Cinnober Financial Technology	Sweden	NASDAQ Inc	\$190	2.1x	-
6-Sep-2018	Intralinks Holdings [Siris Capital Group]	U.S.	SS&C Technologies Inc	\$1,500	4.6x	-
6-Sep-2018	Episerver AB [Accel-KKR]	Sweden	Insight Venture Partners	\$1,160	8.9x	29.0x
4-Sep-2018	Apttus Inc	U.S.	Thoma Bravo	\$1,600	7.1x	-
4-Sep-2018	relayr Inc	U.S.	Munich Re AG	\$300	-	-
4-Sep-2018	OpsGenie	U.S.	Atlassian Pty	\$295	-	-
29-Aug-2018	Opcity Inc	U.S.	Move Inc	\$210	-	-
27-Aug-2018	CloudHealth Technologies	U.S.	VMware Inc	\$550	-	-
15-Aug-2018	SugarCRM Inc	U.S.	Accel-KKR	\$190	2.0x	38.0x
10-Aug-2018	TravelClick [Thoma Bravo]	U.S.	Amadeus IT Group	\$1,520	-	17.7x
3-Aug-2018	Alchemy Systems [Riverside]	U.S.	Intertek Group	\$480	-	-
2-Aug-2018	AdvancedMD Software [Marlin Equity Partners]	U.S.	Global Payments	\$700	-	-
31-Jul-2018	Accruent [Genstar Capital]	U.S.	Fortive Corporation	\$2,000	-	-
31-Jul-2018	Eze Software [TPG Capital]	U.S.	SS&C Technologies Inc	\$1,450	-	-
31-Jul-2018	SpringCM Inc	U.S.	DocuSign Inc	\$220	8.8x	-
31-Jul-2018	Nexus Vehicle Management	U.K.	Phoenix Equity Partners	\$186	-	-
25-Jul-2018	SCVNGR Inc	U.S.	Grubhub Inc	\$390	-	-
25-Jul-2018	MetaPack Ltd	U.K.	Stamps.com Inc	\$230	4.5x	-
20-Jul-2018	Charles River Systems	U.S.	State Street Corporation	\$2,600	-	-
17-Jul-2018	NAVEX Global [Vista Equity Partners]	U.S.	BC Partners	\$1,400	-	-
17-Jul-2018	PeopleDoc SAS	France	Ultimate Software Group	\$300	-	-
16-Jul-2018	Datorama Inc	U.S.	salesforce.com	\$744	14.5x	-
11-Jul-2018	CA Inc	U.S.	Broadcom Inc	\$18,900	4.3x	12.3x
10-Jul-2018	AlienVault Inc	U.S.	AT&T Corporation	\$600	4.8x	-
9-Jul-2018	LifeWorks Corporation	U.S.	Morneau Shepell	\$325	3.1x	-
2-Jul-2018	SUSE [Micro Focus]	U.S.	EQT AB	\$2,535	7.9x	-
2-Jul-2018	Gordian Group [Warburg Pincus & Co.]	U.S.	Fortive Corporation	\$775	-	-

Upper Quartile

8.8x 31.3x

Median

4.8x 23.4x

Lower Quartile

4.3x 16.4x

(1) Top M&A transactions on the basis of disclosed deal value in Q3'18.

Source: 451research.



Global TMT Coverage Team

Global Coverage. Industry Knowledge. Middle-Market Focus.

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