Cloud IT Infrastructure Revenues Decline in Q2 2019 Amid a Slow Down in Overall Spending, According to IDC

FRAMINGHAM, Mass., September 25, 2019 – According to the International Data Corporation (IDC) Worldwide Quarterly Cloud IT Infrastructure Tracker, vendor revenue from sales of IT infrastructure products (server, enterprise storage, and Ethernet switch) for cloud environments, including public and private cloud, declined 10.2% year over year in the second quarter of 2019 (2Q19), reaching $14.1 billion. IDC also lowered its forecast for total spending on cloud IT infrastructure in 2019 to $63.6 billion, down 4.9% from last quarter's forecast and changing from expected growth to a year-over-year decline of 2.1%.

Vendor revenue from hardware infrastructure sales to public cloud environments in 2Q19 was down 0.9% compared to the previous quarter (1Q19) and down 15.1% year over year to $9.4 billion. This segment of the market continues to be highly impacted by demand from a handful of hyperscale service providers, whose spending on IT infrastructure tends to have visible up and down swings. After a strong performance in 2018, IDC expects the public cloud IT infrastructure segment to cool down in 2019 with spend dropping to $42.0 billion, a 6.7% decrease from 2018. Although it will continue to account for most of the spending on cloud IT environments, its share will decrease from 69.4% in 2018 to 66.1% in 2019. In contrast, spending on private cloud IT infrastructure has showed more stable growth since IDC started tracking sales of IT infrastructure products in various deployment environments. In the second quarter of 2019, vendor revenues from private cloud environments increased 1.5% year over year reaching $4.6 billion. IDC expects spending in this segment to grow 8.4% year over year in 2019.

Overall, the IT infrastructure industry is at crossing point in terms of product sales to cloud vs. traditional IT environments. In 3Q18, vendor revenues from cloud IT environments climbed over the 50% mark for the first time but fell below this important tipping point since then. In 2Q19, cloud IT environments accounted for 48.4% of vendor revenues. For the full year 2019, spending on cloud IT infrastructure will remain just below the 50% mark at 49.0%. Longer-term, however, IDC expects that spending on cloud IT infrastructure will grow steadily and will sustainably exceed the level of spending on traditional IT infrastructure in 2020 and beyond.

Spending on the three technology segments in cloud IT environments is forecast to deliver growth for Ethernet switches while compute platforms and storage platforms are expected to decline in 2019. Ethernet switches are expected to grow at 13.1%, while spending on storage

platforms will decline at 6.8% and compute platforms will decline by 2.4%. Compute will remain the largest category of spending on cloud IT infrastructure at $33.8 billion.

Sales of IT infrastructure products into traditional (non-cloud) IT environments declined 6.6% from a year ago in Q219. For the full year 2019, worldwide spending on traditional non-cloud IT infrastructure is expected to decline by 5.8%, as the technology refresh cycle driving market growth in 2018 is winding down this year. By 2023, IDC expects that traditional non-cloud IT infrastructure will only represent 41.8% of total worldwide IT infrastructure spending (down from 52.0% in 2018). This share loss and the growing share of cloud environments in overall spending on IT infrastructure is common across all regions.

Most regions grew their cloud IT Infrastructure revenues in 2Q19. Middle East & Africa was fastest growing at 29.3% year over year, followed by Canada at 15.6% year-over-year growth. Other growing regions in 2Q19 included Central & Eastern Europe (6.5%), Japan (5.9%), and Western Europe (3.1%). Cloud IT Infrastructure revenues were down slightly year over year in Asia/Pacific (excluding Japan) (APeJ) by 7.7%, Latin America by 14.2%, China by 6.9%, and the USA by 16.3%.

| Top Companies, Worldwide Cloud IT Infrastructure Vendor Revenue, Market Share, and Year-Over-Year Growth, Q2 2019 *(Revenues are in Millions)*					
Company	2Q19 Revenue (US $M)	2Q19 Market Share	2Q18 Revenue (US $M)	2Q18 Market Share	2Q19/2Q18 Revenue Growth
1. Dell Technologies	$2,355	16.7%	$2,565	16.4%	-8.2%
2. HPE/New H3C Group**	$1,749	12.4%	$1,748	11.2%	0.1%
3. Cisco	$1,101	7.8%	$1,029	6.6%	7.0%
4. Inspur/ Inspur Power Systems* ***	$820	5.8%	$690	4.4%	18.9%
4. Lenovo*	$670	4.8%	$813	5.2%	-17.5%
ODM Direct	$4,059	28.9%	$5,349	34.1%	-24.1%
Others	$3,307	23.5%	$3,473	22.2%	-4.8%
Total	$14,061	100.0%	$15,655	100.0%	-10.2%
IDC's Quarterly Cloud IT Infrastructure Tracker, Q2 2019					

Notes:

* IDC declares a statistical tie in the worldwide cloud IT infrastructure market when there is a difference of one percent or less in the vendor revenue shares among two or more vendors.

** Due to the existing joint venture between HPE and the New H3C Group, IDC reports external market share on a global level for HPE as "HPE/New H3C Group" starting from Q2 2016 and going forward.
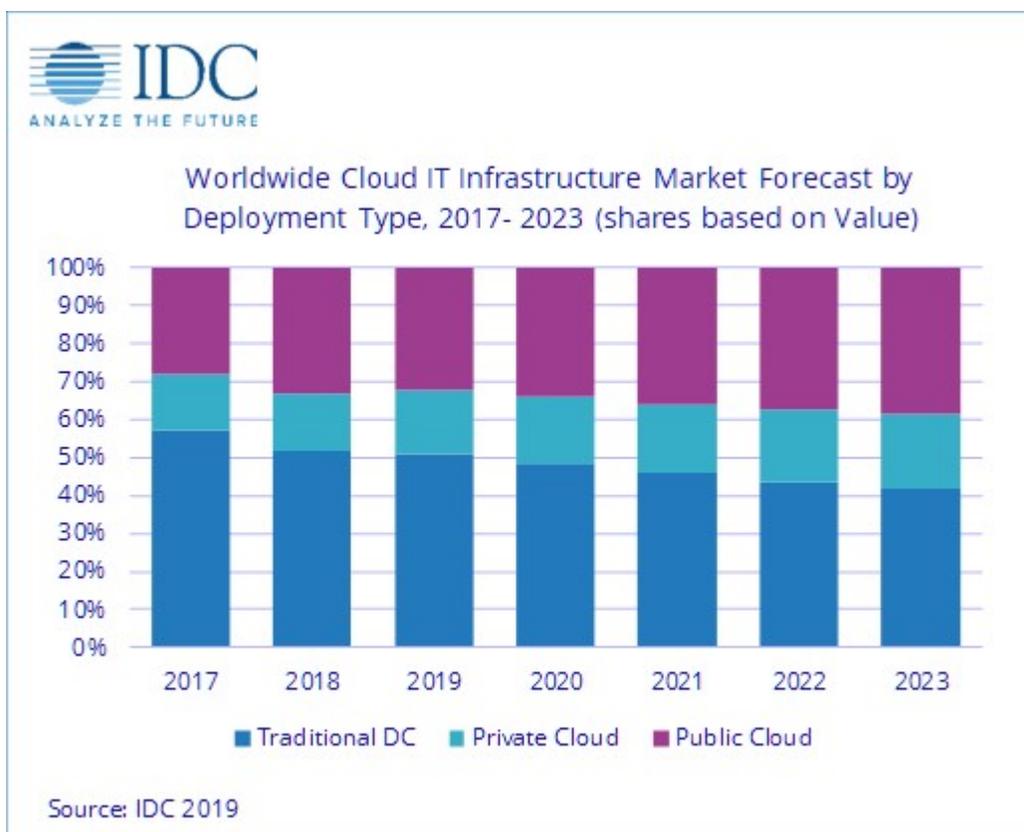
*** Due to the existing joint venture between IBM and Inspur, IDC will be reporting external market share on a global level for Inspur and Inspur Power Systems as "Inspur/Inspur Power Systems" starting from 3Q 2018.

Figure 1
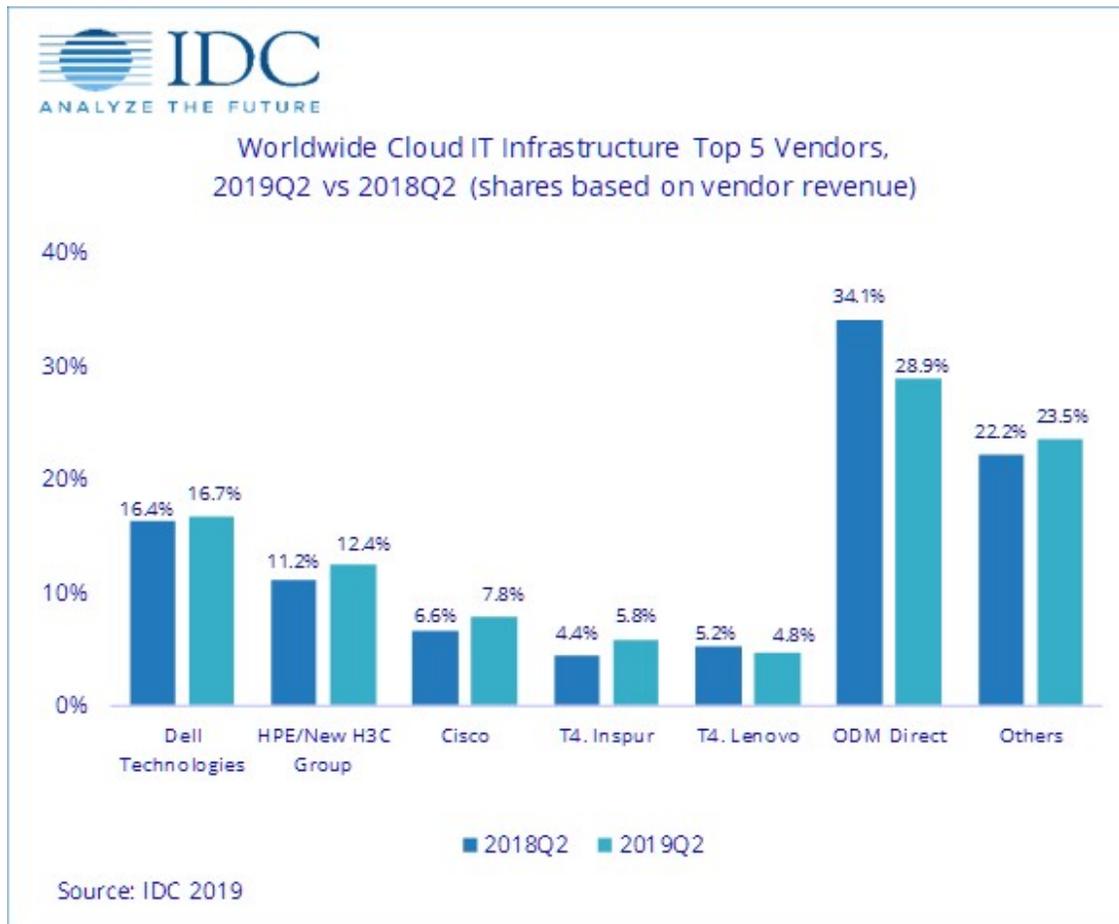
Long-term, IDC expects spending on cloud IT infrastructure to grow at a five-year compound annual growth rate (CAGR) of 6.9%, reaching $90.9 billion in 2023 and accounting for 58.2% of total IT infrastructure spend. Public cloud datacenters will account for 66.0% of this amount, growing at a 5.9% CAGR. Spending on private cloud infrastructure will grow at a CAGR of 9.2%.

Figure 2

Worldwide Cloud IT Infrastructure Market Forecast by Deployment Type, 2017- 2023 (shares based on Value)

Source: IDC 2019

IDC's Worldwide Quarterly Cloud IT Infrastructure Tracker is designed to provide clients with a better understanding of what portion of the server, disk storage systems, and networking hardware markets are being deployed in cloud environments. This tracker breaks out each vendors' revenue by the hardware technology market into public and private cloud environments for historical data and provides a five-year forecast by the technology market.

Taxonomy Notes

IDC defines cloud services more formally through a checklist of key attributes that an offering must manifest to end users of the service. Public cloud services are shared among unrelated enterprises and consumers; open to a largely unrestricted universe of potential users; and designed for a market, not a single enterprise. The public cloud market includes variety of services designed to extend or, in some cases, replace IT infrastructure deployed in corporate datacenters. It also includes content services delivered by a group of suppliers IDC calls Value Added Content Providers (VACP). Private cloud services are shared within a single enterprise or an extended enterprise with restrictions on access and level of resource dedication and defined/ controlled by the enterprise (and beyond the control available in public cloud offerings); can be onsite or offsite; and can be managed by a third-party or in-house staff. In private cloud that is managed by in-house staff, "vendors (cloud service providers)" are equivalent to the IT departments/shared service departments within enterprises/groups. In this utilization model,

where standardized services are jointly used within the enterprise/group, business departments, offices, and employees are the "service users."

IDC defines Compute Platforms as compute intensive servers. Storage Platforms includes storage intensive servers as well as external storage and storage expansion (JBOD) systems. Storage intensive servers are defined based on high storage media density. Servers with low storage density are defined as compute intensive systems. Storage Platforms does not include internal storage media from compute intensive servers. There is no overlap in revenue between Compute Platforms and Storage Platforms, in contrast with IDC's Server Tracker and Enterprise Storage Systems Tracker, which include overlaps in portions of revenue associated with server-based storage.

For more information about IDC's Quarterly Cloud IT Infrastructure Tracker, please contact Lidice Fernandez at lfernandez@idc.com.

About IDC Trackers

IDC Tracker products provide accurate and timely market size, vendor share, and forecasts for hundreds of technology markets from more than 100 countries around the globe. Using proprietary tools and research processes, IDC's Trackers are updated on a semiannual, quarterly, and monthly basis. Tracker results are delivered to clients in user-friendly excel deliverables and on-line query tools.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,100 analysts worldwide, IDC offers global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly-owned subsidiary of International Data Group (IDG), the world's leading media, data and marketing services company. To learn more about IDC, please visit www.idc.com. Follow IDC on Twitter at @IDC and LinkedIn.

All product and company names may be trademarks or registered trademarks of their respective holders.

About IDC

IDC is the premier global provider of market intelligence, advisory services, and events for the information technology and telecommunications industries. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. Over 775 IDC analysts in 50 countries provide global, regional, and local expertise on technology and industry opportunities and trends. For more than 40 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company. You can learn more about IDC by visiting http://www.idc.com/.

IDC is a subsidiary of IDG, the world's leading technology media, research, and events company. Additional information can be found at www.idc.com.

All product and company names may be trademarks or registered trademarks of their respective holders.

For more information contact:

Michael Shirer
press@idc.com
508-935-4200
Kuba Stolarski
kstolarski@idc.com
508-935-4172
Lidice Fernandez
lfernandez@idc.com
305-351-3051
Natalya Yezhkova
nyezhkova@idc.com
508-935-4281