

Forecast Alert: IT Spending, Worldwide, 1Q16 Update

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Gartner's forecast for worldwide dollar-valued IT spending growth in 2016 has been revised to negative 0.5%, down from last quarter's 0.5%. Currency fluctuations are chiefly responsible for the change as, in constant-currency terms, forecast growth for 2016 is virtually unchanged at 1.6%.

What You Need to Know

The Gartner forecast for worldwide IT spending in U.S. dollar values is a decline of 0.5% in 2016 compared with 2015. This is compounded by the 6.0% decline in IT spending in 2015. This is not a crash, even if it looks like one; the rapid rise in the value of the U.S. dollar against most currencies during the past couple of years has put a currency shock into the global IT market. While some currencies, such as the euro, improved against the U.S. dollar during the fourth quarter of 2015, none have recovered back to 2014 levels. Taking out the impact of exchange rate movements, the corresponding constant-currency growth figure for 2016 is virtually unchanged at 1.6% (see Note 1 for an explanation of current dollars versus constant dollars). Such are the illusions that large swings in the value of the dollar versus other currencies can create.

There is only one segment with significant revisions to its 2016 constant-currency growth rate (devices):

- The device segment has revised 2016 constant-currency growth of negative 0.5% (down 0.9% from the 4Q15 update) to its new projected growth of negative 1.4% in 2016.

Overall, IT spending results vary greatly by region. The largest region for total IT spend in 2016 remains North America, with \$1.23 trillion. However, the fastest-growing region is Emerging Asia/Pacific, with 2016 constant-currency growth of 5.9% (unchanged from 4Q15). The next best region for growth is the sub-Saharan Africa, with 2016 constant-currency growth of 5.6%, down 0.6 percentage points from 4Q15. The remaining regions are facing anemic growth rates between negative 0.2% and 3.3%.

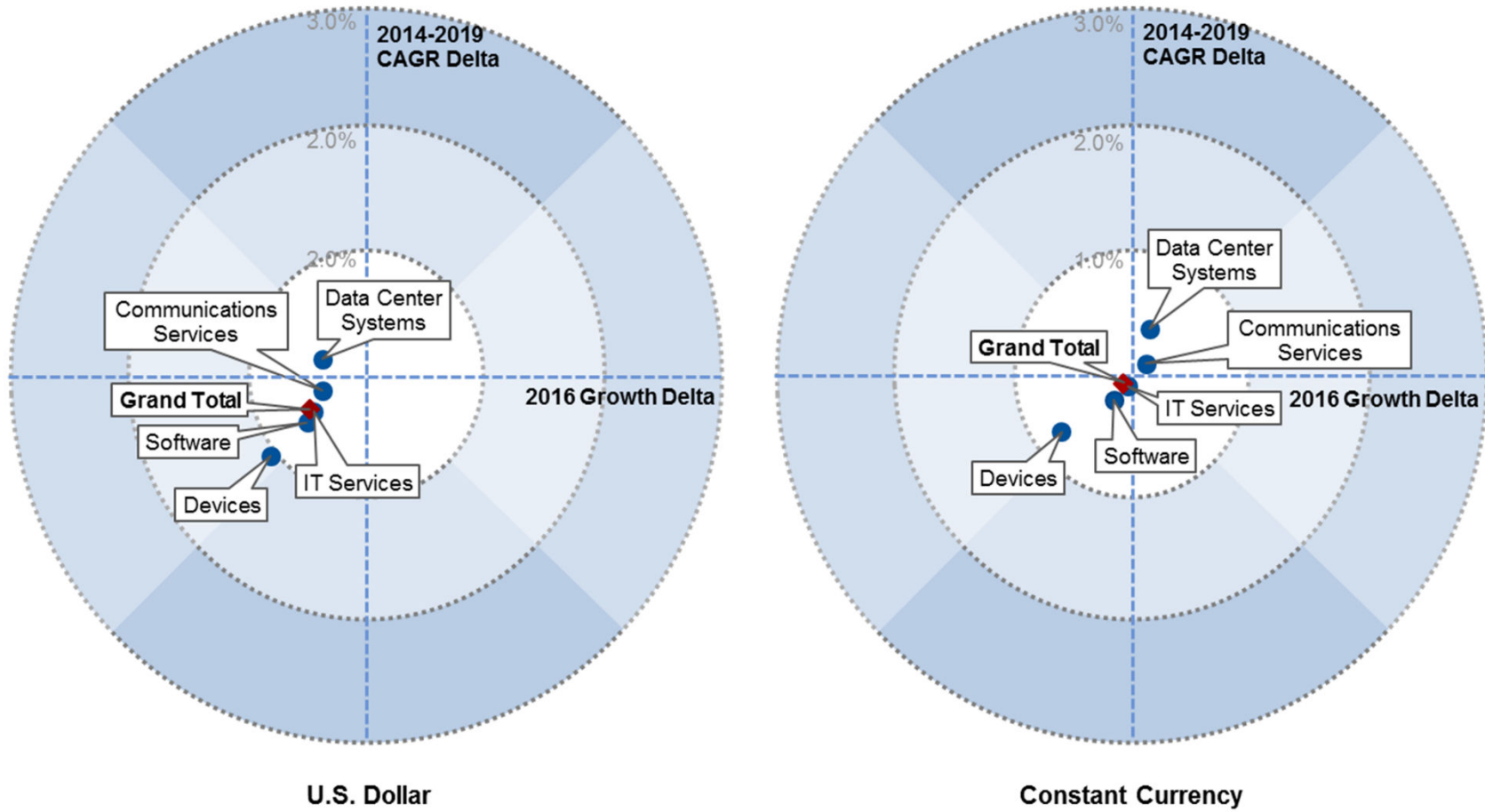
Overall, the global growth rates for 2016 is virtually unchanged; however, there are a few material changes in the market sector forecasts. China, Brazil, Russia and Western Europe all play prominent roles in the revisions by segment, being responsible for up to 0.2% of the global update, as these countries and regions have had economic expectations worsen in the last six months. However,

there are many market-driven changes that are worth paying attention to, as they signal that these markets are in transition.

Findings: Top-Line Results

Figure 1 illustrates the overall changes in the forecast this quarter (see Note 2 for an explanation of the bull's-eye chart).

Figure 1. Changes in Growth Rates From 4Q15 Through 1Q16 in Current U.S. Dollars and Constant Currency



Source: Gartner (April 2016)

There have been material changes to the market sector forecasts; the most notable are highlighted below.

Data Center Systems

The constant-currency growth rate for data center systems in 2016 has been slightly increased from 3.7% to 4.0%. This top-level relative stability masks some changes within the segments: Enterprise network equipment (ENE) and unified communications (UC) were increased by 1.9% and 0.2%, respectively. External controller-based (ECB) storage and servers were both down by 1.3% and 0.4%, respectively.

The ENE segment experienced a stronger-than-anticipated 2015 as a result of network upgrades, which are expected to carry on into 2016 — hence, the upward revision.

The ECB segment has had another revision downward, as the segment continues to suffer from ongoing challenges from disruptive technologies, such as software-defined storage and hyperconverged integrated systems, as well as storage as a service. As well as this 2016 downward revision, the longer-term outlook continues to be one of steady spending declines for the ECB market.

The outlook for printing devices in 2016 was slightly upgraded to 0.4% growth in constant currency, a 1 percentage point improvement over the forecast in 4Q15. Despite a downgrade in volume shipments to a 1% decline, the shift in demand from low-value inexpensive printers and multifunction products (MFPs) that come with costly aftermarket supplies to higher-value better-featured devices with lower aftermarket cost will see a net effect in a rise in constant currency spending.

Global UC end-user spending for 2016 was revised down by 0.9% — the result of an investment slowdown in many emerging markets — while projections were edged up between 0.1% and 2.1%, respectively, through the 2017 through 2020 time frame as organizations replace premises-based/dedicated architectures with cloud-based solutions at a higher cost per user (on average).

The server forecast has seen a slight downward revision in 2016, although this comes on top of a particularly strong 2015. While the demand from hyperscale buyers that was strong in 2015 is expected to continue to be strong throughout the forecast period, enterprise demand is expected to drop in 2016, particularly in regions that are suffering from economic challenges, such as Eurasia. The mainframe refresh, which also benefited the market in 2015, is expected to abate in 2016, also inhibiting the overall growth figures.

The long-term forecast for the data center market remains consistent, with structural challenges from disruptive technologies and delivery models weighing on each of the technology segments, adding up to the overall market having very low growth levels throughout the forecast period.

Enterprise Software

Deteriorating economic conditions in key markets, such as Brazil, led to modest, across-the-board reductions to the Latin American growth forecast. In the OS and virtualization software markets, we made additional downward revisions on a global level, reflecting new, lower assumptions around

buying expectations for these technologies. Overall, the enterprise software market revenue is forecast to grow by 5.9% in 2016 in constant currency in this iteration compared with growth of 6.1% in the 4Q15 update.

The forecast growth for OSs was downgraded again this quarter, reflecting an expectation of further delays in the adoption of Windows 10 and Windows Server 2016. In all, downward revisions shaved 2 percentage points of growth in this market in 2016, and another 1.5 percentage points in 2017, bringing currency-adjusted growth down to negative 2.5% and negative 1.4%, respectively. These adjustments reflect changes in the monetization model of Windows 10 (Client) and cautious adoption of Windows Server 2016.

New assumptions around hypervisor-based server virtualization have caused us to reduce our constant U.S. dollar growth from 6.3% to 5.7% in 2016 and from 6.1% down to 5.5% in 2017. While not as significant a change to the overall infrastructure software growth as the OS adjustment, this reflects an important change to the expectations for adoption of virtualization technology by smaller organizations, a key "greenfield" market for these technologies.

Devices

The device market will see a decline in 2016 of end-user spending, down 1.4% compared with 2015. Shipment volumes for most device types have been reduced, with the unit and constant-dollar end-user CAGRs between 2015 and 2020 now 1.3% and 0.6%, respectively, down slightly from the last iteration.

The smartphone unit growth forecast has been reduced from 12.4% to 7.1% in 2016. The smartphone market is approaching global saturation, and hence, during the next five years, we expect only single-digit growth year over year because the double-digit growth era has come to an end with the closure of 2015. The slowing smartphone market is due to a combination of factors and is geography-specific, pertaining to market saturation, slowing replacement speed of iOS phones and removal of communications service provider (CSP) subsidies. However, the worsening economic conditions in many countries only serve to amplify the impact of these factors. The emerging markets will provide new user growth from countries such as India, with a CAGR of 21% through 2020; however, the move to smartphones is expected to slow. India, while growing, will not grow at the same rate as China did, as pervasiveness of networks will mean feature phones on 2G will remain popular until price and functionality of utility smartphones improve. In the meantime, smartphone growth in emerging markets will be pushed out during the forecast.

Dollar end-user spending in 2016 for PCs was negative 3.7%, with ultramobile (basic and utility) even weaker at negative 6.2%. Significantly, after the phones' average selling price (ASP) increased in 2015 by 7%, they will reverse course and decline in 2016 by 1.6%. Since the previous forecast, the economic conditions have worsened, with total unit and total end-user spend forecasts weakening — in particular, for Russia, Brazil, China and Japan. Collective unit growth for these countries is now negative 1.64%, and end-user spend is also forecast to decline by 1.84% in 2016. In the 1Q16 iteration, China's total device end-user spending has turned negative, and Brazil's end-user spending decline has doubled from negative 3% to negative 6%.

IT Services

The worldwide IT services market will grow by 3.8% in 2016 in constant currency (2.1% in U.S. dollars), with a longer-term 2015 through 2020 CAGR of 4.2% in this 1Q16 update, compared with a 2014 through 2019 CAGR of 4.1% in the 4Q15 forecast. Consulting opportunities in Japan are strengthening, as buyers are beginning to recognize they need to pay for consulting to best leverage new technologies that can transform their businesses; as a result, we have increased the outlook for consulting in Japan to a CAGR of 5.7%, up from 4.7% in the prior forecast. The outlook for IT outsourcing (ITO) in India has also improved, driven by unexpectedly rapid adoption of public cloud services and strong government support for technology initiatives. We are now forecasting a CAGR of 15.9% for ITO in India, up from 13.4% in the 4Q15 forecast.

The stronger outlook for Japan and India is nearly balanced by a weaker outlook in Brazil, China and South Korea, based on challenging economic and political conditions in Brazil, as well as government actions and weakening economic conditions in China and South Korea. The IT services forecast for Brazil has been reduced for the second consecutive quarter, from a 2014 through 2019 CAGR of 7.0% in the 4Q15 forecast to a 2015 through 2020 CAGR of 5.6% in this forecast. Our forecast for China has been modestly reduced to a CAGR of 6.7% in this update compared with 7.2% in the prior quarter. The outlook for South Korea has been reduced to a CAGR of only 1.5%, down from an already modest 2.8% CAGR in the 4Q15 forecast.

Communications Services

In 2015, end-user spending on communications services dropped 8.4% (in current dollars), due chiefly to currency fluctuations in many national markets; last quarter, this drop was estimated at 8.3%. In constant dollars, we see modest growth of 0.5% to \$1.66 trillion (unchanged from our view in 4Q15).

Changes to the consumer forecasts since 4Q15 derive from continuing economic downturns in major markets, such as Russia and Brazil, which are dampening spending in both fixed and mobile voice, as well as a slight slowdown in China's growth, affecting consumer confidence and eroding spend in fixed voice services. In enterprise services, conditions in these same three major markets are leading to consolidation among businesses (reducing connections and spending), but mobile data spending is a bright spot, with accelerating growth driven by improved pricing on bandwidth, mobile apps and 4G/Long Term Evolution (LTE) network availability.

Findings: 1Q16 Forecast Summary

Table 1 shows worldwide dollar-valued spending by sector from 2014 through 2020. For worldwide IT spending growth by sector in 2015 and 2016 (1Q16 forecast versus 4Q15 forecast), see Table 2. For the equivalent information in constant currency, see Tables 3 and 4.

Table 1. IT Spending by Sector, Worldwide, 2014-2020 (Current U.S. Dollars)

	2014	2015	2016	2017	2018	2019	2020	CAGR 2015-2020
Spending (Billions of Dollars)								
Data Center Systems	166	171	175	179	180	183	185	1.6%
Enterprise Software	314	308	321	341	361	384	409	5.8%
Devices	694	650	626	632	634	636	637	-0.4%
IT Services	955	910	929	966	1,006	1,052	1,103	3.9%
Communications Services	1,604	1,470	1,441	1,470	1,494	1,514	1,541	0.9%
Overall IT	3,734	3,509	3,492	3,586	3,676	3,769	3,875	2.0%
Growth (%)								
Data Center Systems		2.9%	2.1%	2.2%	0.7%	1.7%	1.0%	
Enterprise Software		-1.9%	4.2%	6.0%	6.1%	6.3%	6.5%	
Devices		-6.4%	-3.7%	0.9%	0.4%	0.3%	0.0%	
IT Services		-4.7%	2.1%	4.0%	4.2%	4.5%	4.8%	
Communications Services		-8.4%	-2.0%	2.0%	1.6%	1.4%	1.8%	
Overall IT Growth		-6.0%	-0.5%	2.7%	2.5%	2.5%	2.8%	
Note: Numbers may not add up to totals shown because of rounding.								

Source: Gartner (April 2016)

Table 2. IT Spending Growth by Sector, Worldwide, 2016 and 2017 (1Q16 Forecast Versus 4Q15 Forecast)
(Percentage Point Change in Current U.S. Dollars)

	2016			2017		
	4Q15 Forecast	1Q16 Forecast	Change	4Q15 Forecast	1Q16 Forecast	Change
Data Center Systems	3.0%	2.1%	-0.8%	1.6%	2.2%	0.5%
Enterprise Software	5.3%	4.2%	-1.1%	6.2%	6.0%	-0.2%
Devices	-1.9%	-3.7%	-1.8%	0.9%	0.9%	0.0%
IT Services	3.1%	2.1%	-1.0%	4.1%	4.0%	-0.1%
Communications Services	-1.2%	-2.0%	-0.8%	1.8%	2.0%	0.2%
Overall IT	0.6%	-0.5%	-1.0%	2.6%	2.7%	0.1%
Note: Deltas have been rounded.						

Source: Gartner (April 2016)

Table 3. IT Spending by Sector, Worldwide, 2014-2020 (Constant Currency)

	2014	2015	2016	2017	2018	2019	2020	CAGR 2015-2020
Spending (Billions of Dollars)								
Data Center Systems	169	189	196	200	202	205	207	1.9%
Enterprise Software	319	337	357	378	402	427	456	6.2%
Devices	709	719	709	716	720	723	723	0.1%
IT Services	970	1,003	1,041	1,082	1,128	1,178	1,235	4.2%
Communications Services	1,646	1,655	1,664	1,695	1,722	1,745	1,776	1.4%
Overall IT	3,814	3,903	3,967	4,073	4,173	4,279	4,397	2.4%
Growth (%)								
Data Center Systems		11.3%	4.0%	2.1%	0.7%	1.7%	1.0%	
Software		5.7%	5.9%	6.0%	6.2%	6.4%	6.6%	
Devices		1.4%	-1.4%	1.0%	0.5%	0.4%	0.0%	
IT Services		3.4%	3.8%	4.0%	4.2%	4.5%	4.8%	
Communications Services		0.5%	0.5%	1.9%	1.6%	1.3%	1.8%	
Overall IT Growth		2.4%	1.6%	2.7%	2.5%	2.5%	2.8%	
Note: Numbers may not add to totals shown because of rounding.								

Source: Gartner (April 2016)

Table 4. IT Spending Growth by Sector, Worldwide, 2016 and 2017 (1Q16 Forecast Versus 4Q15 Forecast)
(Percentage Point Change in Constant Currency)

	2016			2017		
	4Q15 Forecast	1Q16 Forecast	Change	4Q15 Forecast	1Q16 Forecast	Change
Data Center Systems	3.7%	4.0%	0.2%	1.7%	2.1%	0.5%
Enterprise Software	6.1%	5.9%	-0.2%	6.2%	6.0%	-0.2%
Devices	-0.5%	-1.4%	-0.9%	1.0%	1.0%	0.0%
IT Services	3.8%	3.8%	-0.1%	4.0%	4.0%	-0.1%
Communications Services	0.3%	0.5%	0.2%	1.7%	1.9%	0.2%
Overall IT	1.7%	1.6%	-0.1%	2.6%	2.7%	0.1%

Note: Deltas have been rounded.

Source: Gartner (April 2016)

This document is based on an updated forecast published in "Gartner Market Databook, 1Q16 Update." The market roll-ups are presented as follows:

- Data center systems — Servers, ECB storage, ENE and UC
- Devices — PCs and tablets, mobile phones, and printers
- Enterprise software — Enterprise application software and infrastructure software
- IT services — Business IT services and IT product support
- Communications services — Consumer fixed services, consumer mobile services, enterprise fixed services and enterprise mobile services

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Gartner Market Databook, 1Q16 Update"

"Market Definitions and Methodology: IT Markets"

Note 1 Current Dollars Versus Constant Dollars

Current dollars represent the dollar revenue that IT vendors can expect to realize from IT spending, given projected exchange rates. Constant dollars represent dollar-equivalent IT spending, assuming exchange rates fixed at a level in a given year, where the given year is referred to as the base year for the resulting constant dollars. The constant-dollar figures reported here are based on average 2013 exchange rates. When foreign currencies appreciate against the dollar (that is, foreign rates versus the dollar decline numerically), forecast dollar-valued growth is automatically increased, even if there has been no change in the underlying forecast. Exactly the opposite happens when foreign currencies depreciate against the dollar (that is, foreign rates versus the dollar increase numerically). We routinely examine our forecasts in both current and constant dollars to distinguish changes that simply reflect exchange rate movements from those that represent intended changes to our forecasts.

Note 2 Bull's-Eye Chart

The bull's-eye chart represents changes in growth in each spending segment in current and constant currency. The graphic is a simple scatter diagram with added circular overlays or bands. The vertical axis represents changes in 2014 through 2019 CAGRs. An increased CAGR in this forecast compared with the previous iteration represents a positive change and is shown above the horizontal axis. A downward revision represents a negative change and is shown below the horizontal axis. Similarly, the horizontal axis represents changes in 2016 growth rates. An increased 2016 growth rate in this forecast compared with the previous iteration represents a positive change and is shown to the right of the vertical axis. A downward revision represents a negative change and is shown to the left of the vertical axis. The bands are simply a visual aid and represent a change of roughly 0.5%. The relative distance from the center of the chart gives an indication of the relative amount that a forecast has been revised within the quarter.

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