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Latest Trends in IT & Engineering Staffing and Solutions

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Predictions for future IT spending are mixed

After a weaker than projected first half of 2014 for IT spending, a report by International Data Corporation (IDC) says that worldwide IT spending will improve in the second half of the year and is now projected to grow at 4.5 percent for 2014. This growth is being driven by a "significant PC refresh cycle" in the U.S. and other mature economies, improving business confidence driving moderate infrastructure upgrades, and accelerating investments in software and services. IDC sees a significant portion of the growth being driven by smartphones; they project a 2014 IT spending increase – excluding mobile devices – of just 3.1 percent.

In contrast, Gartner Inc.'s mid-year forecast for 2014 sees IT spending slowing to 2.1 percent growth for the year from an earlier projection of 3.2 percent. In 2014, Gartner forecasts enterprise software to grow 6.9 percent, IT services to rise 3.8 percent, devices to increase 1.2 percent and data center systems to expand by only 0.4 percent.

However, Gartner predicts better growth in 2015 with overall IT spending rising 3.7 percent. Gartner expects enterprise software to be the top category with 7.3 percent growth in 2015, followed by devices rising 5.8 percent, IT services increasing 4.1 percent, and data center systems expanding by 2.9 percent.

Forrester Research also reduced its mid-year global IT market growth projections for 2014 to 3.9 percent growth from the 5.5 percent increase projected in January. Analysts there believe that customer-driven tech such as CRM, SaaS, mobile apps, and big data analytics will outperform the overall IT market with spending rising 10.5 percent in 2014; back-office systems to run businesses are expected to lag overall market growth with an increase of only 3.4 percent.

Forrester also tamed its earlier prediction for 2015 from an overall increase of 8.1 percent to 5.6 percent growth. It expects the customer-driven portion to grow 11.1 percent in 2015 and the back-office portion to increase 6.7 percent.

In a separate report focused on big data, IDC estimates that the big data technology and services vertical will grow at an annual compound growth rate of 26.4 percent to 2018, or about six times the growth of the overall IT market.

IT jobs continue to grow at healthy rate

The number of IT jobs continues to grow at a healthy pace in Q2 2014 after relatively slow growth throughout most of 2013. In comparison, the growth in the number of engineering jobs, although fewer in number, continues to be more stable.

Source: TechServe Alliance, Alexandria, VA | www.techservealliance.org
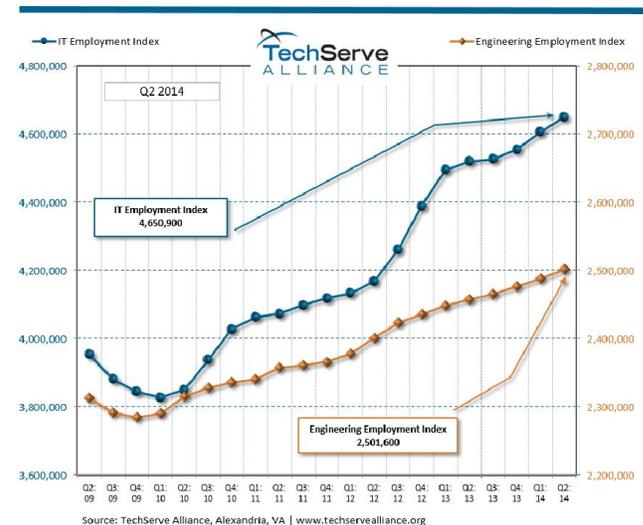
IT and engineering workers unemployment rates remain well below the national average

The national unemployment rate continued to move downward and ranged from 6.1 to 6.3 percent in Q2 2014. However, the news for those in IT and

engineering professions was almost universally better with unemployment rates generally ranging between 1 percent to under 5 percent. Only one engineering profession – nuclear engineers – came in above the national unemployment rate.

IT Occupations (Q4 2013)	
Computer hardware engineers	2.2%
Computer and information systems managers	3.0
Computer network architects	1.9
Computer programmers	3.4
Computer support specialists	4.6
Computer systems analysts	2.1
Database administrators	1.0
Information security analysts	1.1
Network and computer systems administrators	5.8
Software developers, applications and systems software	4.3
Web developers	4.5
Engineering Occupations (Q4 2013)	
Aerospace engineers	1.5
Civil engineers	2.8
Electrical and electronic engineers	3.2
Engineering technicians, except drafters	3.5
Industrial engineers, including health and safety	0.6
Materials engineers	3.0
Mechanical engineers	2.4

Source: unpublished tabulations of Current Population Survey data furnished by the U.S. Bureau of Labor Statistics

As 'hardware is becoming the new software,' 3-D printing forming the basis for the return of the 'garage inventor.'

Many tech industry pioneers including Amazon, Apple, Google, Hewlett-Packard, and others started in garages. In light of new and more accessible technologies including 3-D printers, as well as funding

trends, the age of the garage inventors could be returning.

Min-Liang Tan, co-founder and CEO of gaming hardware and software producer Razer, explains on TechCrunch.com, "Software, once expensive and complicated to make, has become relatively easy. … two guys in a garage can inexpensively create an application … . [and] Like software, hardware is getting easier."

One reason for the renaissance in hardware is that start-ups have direct access to "low-cost pre-fab components…[that are] very sophisticated…powerful enough to run real software…[and]…there are a lot of bottled up ideas like drones and robots that just did not get developed in the last 15 years," tech legend Marc Andreessen explained at an event sponsored by tech publisher Pando.

3-D printing is at the forefront of this "hardware is the new software" trend. Making prototypes and actual hardware is much, much faster and cheaper with 3-D printers compared to the conventional methods.

And when crowdsourcing is used to directly fund these new products and ventures, as Joi Ito, director of the MIT Media Lab, said in a *Think with Google* article, "The whole ecosystem around hardware has increased in viability."

Latest views on datacenter management favors contractors and solution companies

Tech Cocktail, a media company focused on start-ups and tech enthusiasts, reports that as IT teams / departments are placed under pressure to "meet internal delivery date and SLA requirements on their projects," they are "being looked at more and more as contractors."

Consistent with this perspective, Tech Cocktail reports that "large corporations will often bring in talent from outside IT consulting firms in order to perform datacenter administration build outs and management tasks."

Growing Importance of Information security creates new opportunities

Information security continues to be a hot button issue and more resources – budget dollars and positions – are being allocated to this area.

In the Global State of Information Security Survey® 2014, a worldwide study by PricewaterhouseCoopers LLP, *CIO Magazine*, and *CSO Magazine*, survey respondents reported a 25 percent rise in detected incidents globally in the past year and a security budget increase of 51 percent.

Growing budgets translate to more security-related IT positions, both inside an enterprise as well as with IT providers and vendors.

Analysts at Gartner, Inc. are seeing a new senior management role emerging to handle what is being called "digital risk." According to its latest 2014 CEO and Senior Executive Survey, more than 50 percent of the CEOs responded that they will have a senior digital risk leader by the end of 2015 and "one-third of large enterprises engaging in digital business models and activities will also have a digital risk officer (DRO) role or equivalent" by 2017.