

## Corporate Datacenter Trends

### Improving Existing IT Asset Utilization – Top Datacenter Priority

**About This Report.** A February survey of 817 members of the 451 Global Digital Infrastructure Alliance focused on key enterprise datacenter trends – including spending, top priorities and budgets.

**IT Infrastructure Spending – Next 90 Days.** IT infrastructure spending over the next 90 days is expected to increase for 34% of respondents – down 3-pts from the December 2016 survey. Another 12% expect a decrease, which is improved 4-pts from the previous survey.

**Datacenter vs. IT Infrastructure Spending.** A comparison of datacenter facility and IT infrastructure spending over the next 90 days shows that IT infrastructure spending will continue to increase at a higher rate (13-pts) compared to datacenter spending.

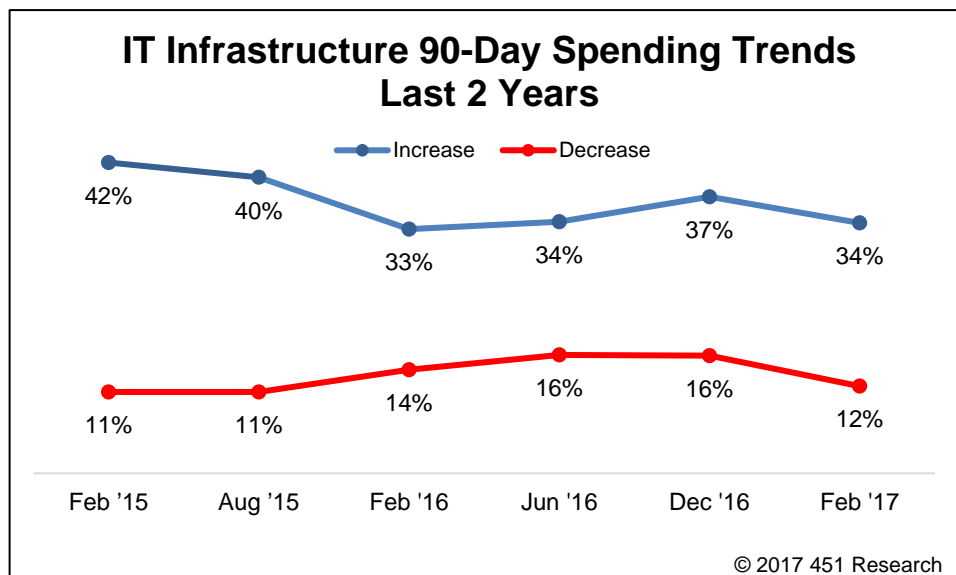
**IT Pain Points.** According to 48% of respondents, *Cost/Budget* is the chief IT pain point, followed closely by *Responding Effectively to Changing Business* (45%) and *Security Issues/Concerns* (41%).

**Adding Capacity.** Respondents were asked how they would address a shortage of floor space or power capacity within their datacenters. *Utilize Off-Premises Public Cloud Providers* (37%) edged out *Consolidate IT Infrastructure to Accommodate Power and/or Space Availability* (34%).

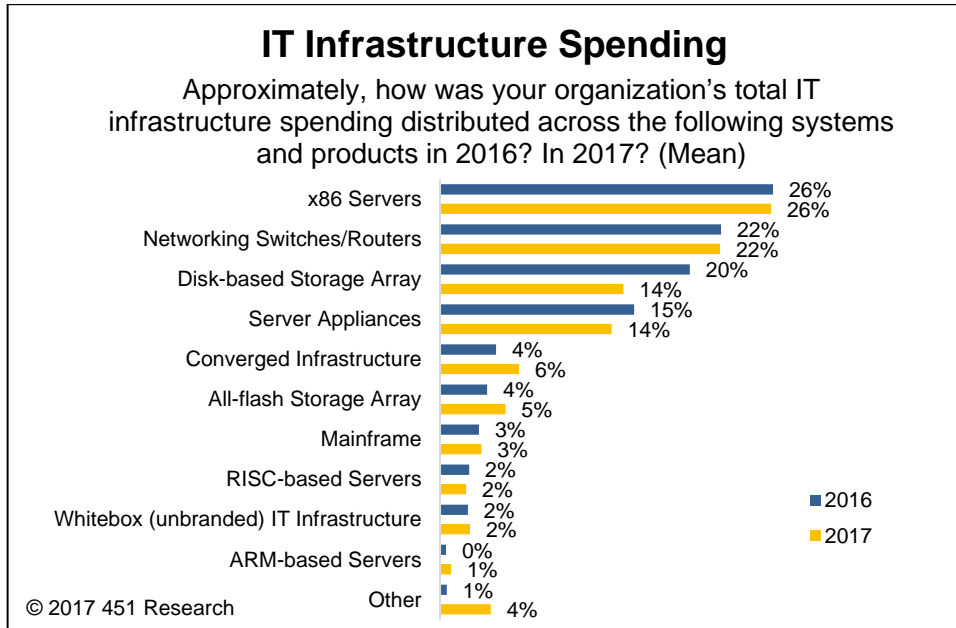
By Tracy Corbo

### IT Infrastructure 90-Day Spending Trends

We asked respondents about their organizations' IT infrastructure spending and found 34% expect it to increase over the next 90 days – down 3-pts from the December 2016 survey. Another 12% expect a decrease, which has improved 4-pts from the previous survey.



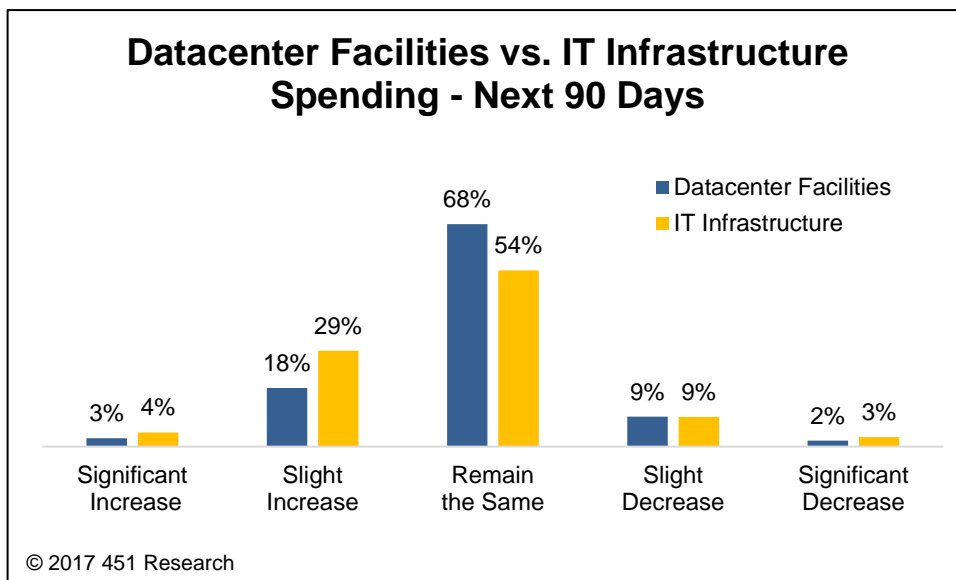
**Spending Distribution.** A look at IT infrastructure spending across systems and products indicates that on average almost half of the total IT infrastructure spending went towards *x86 Servers* (26%) and *Networking Switches/Routers* (22%) in 2016, and that trend appears to be holding steady into 2017.



In contrast, respondents anticipate a slighter lower percentage of IT infrastructure spending on *Disk-based Storage Array* (14%, down 6-pts) in 2017.

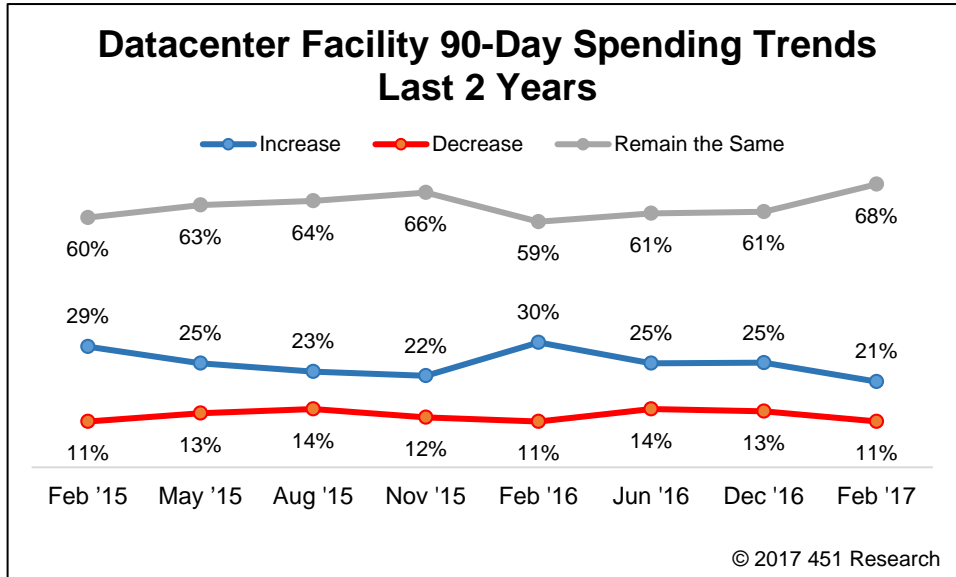
## Datcenter 90-Day Spending Trends

**Datcenter vs. IT Infrastructure Spending.** A comparison of datacenter facility and IT infrastructure spending over the next 90 days shows that IT infrastructure spending will continue to increase at a higher rate (12-pts) compared to datacenter spending.



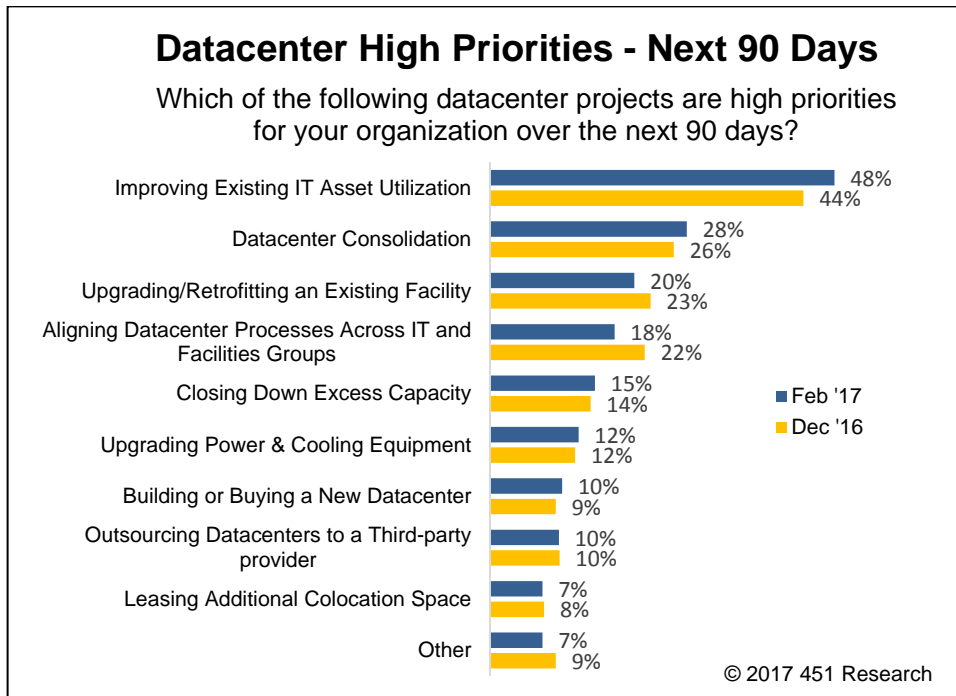
**Datcenter Spending Trends.** A longitudinal look at datacenter 90-day spending trends over the last two years shows a flattening out of datacenter spending. Although

increases are down 4-pts from the December 2016 survey, the number of respondents that report datacenter spending will remain the same (up 7-pts from previous). Decreases in spending have improved 2-pts.



## Datacenter Priorities and Pain Points

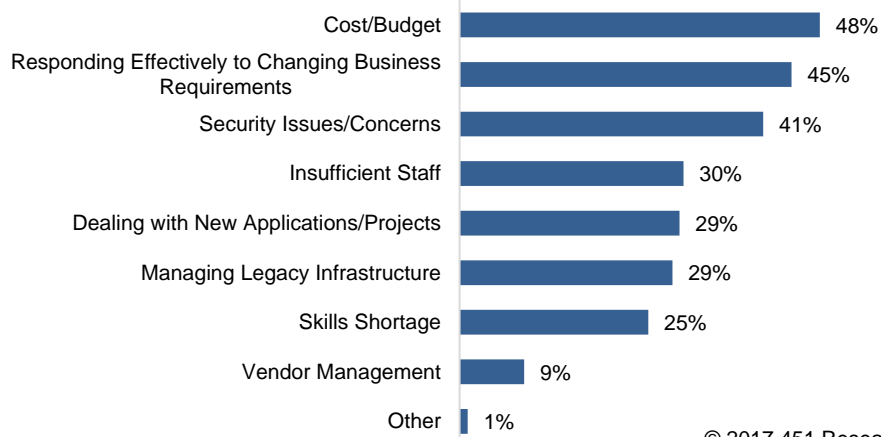
**Priorities.** Respondents were asked about their highest-priority projects for datacenters, and *Improving Existing IT Asset Utilization* (48%, up 4-pts) remains at the top of the list. *Datacenter Consolidation* (28%, up 2-pts) is a second. *Upgrading/Retrofitting an Existing Facility* (20%, down 3-pts) is in third place.



**Pain Points.** According to 48% of respondents, *Cost/Budget* is the chief IT pain point, followed closely by *Responding Effectively to Changing Business* (45%) and *Security Issues/Concerns* (41%).

## Top IT Pain Points

What are the top IT pain points in your organization?



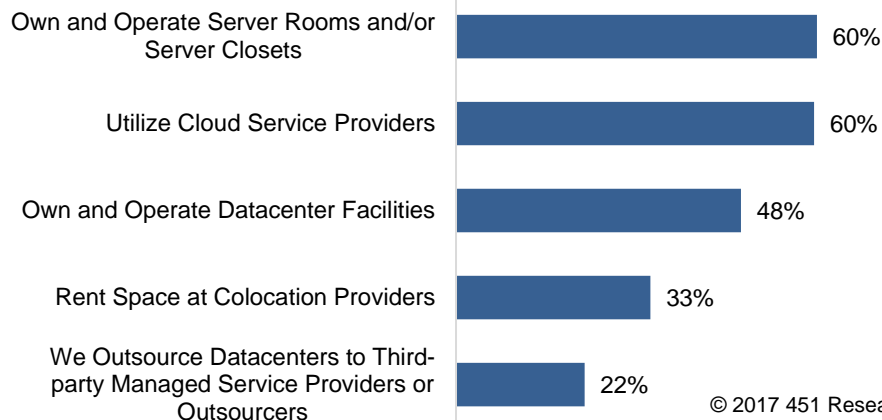
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## IT Environments

Respondents were asked which of the following IT environments they were using to support their organizations. The two most common are *Own and Operate Server Rooms and/or Closets* (60%) and *Utilize Cloud Service Providers* (60%). *Own and Operate Datacenter Facilities* (48%) and *Rent Space at Colocation Providers* (33%) are a more distant second and third.

## IT Environments In Use

Which of the following IT environments are in use to support your organization?

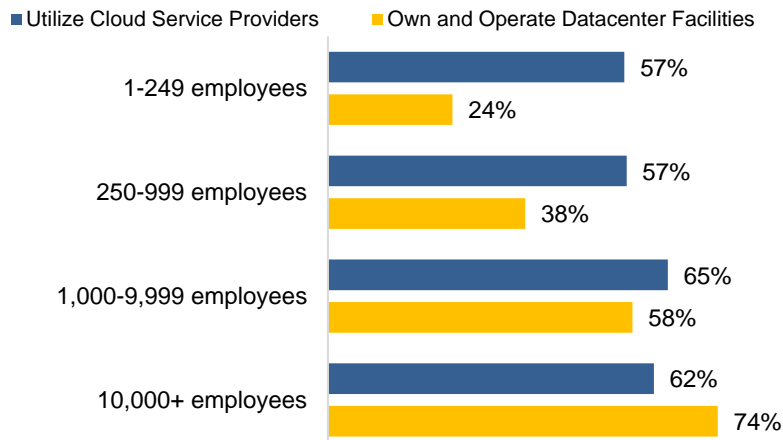


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A closer look at the two most common IT deployment environments by company size indicates that while nearly three quarters (74%) of very large organizations with more than 10,000 employees own and operate their own datacenters that numbers drops dramatically for smaller organizations.

Conversely, utilization of cloud services is nearly on par across companies of all sizes.

## Own and Operate Datacenter Facilities

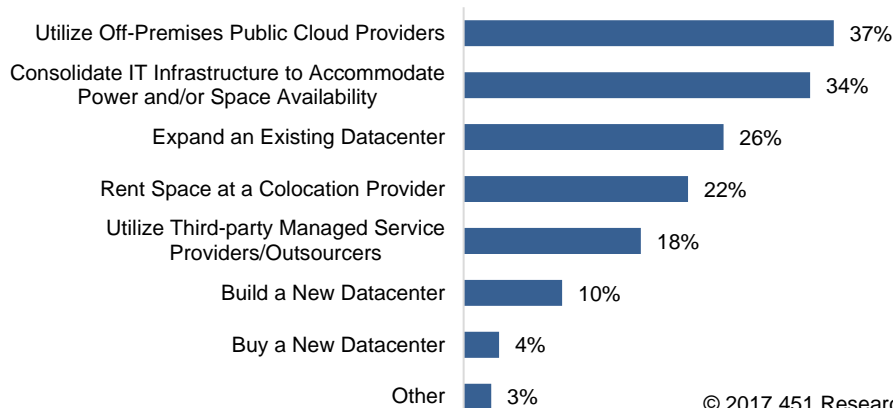


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**Adding Capacity.** Respondents were asked how they would address a shortage of floor space or power capacity within their datacenters. An external fix *Utilize Off-Premises Public Cloud Providers* (37%) topped the list, followed by two internal initiatives *Consolidate IT Infrastructure to Accommodate Power and/or Space Availability* (34%) and *Expand an Existing Datacenter* (26%).

## Adding Capacity

What will your organization most likely do if it runs out of either floor space or power capacity at its datacenters?



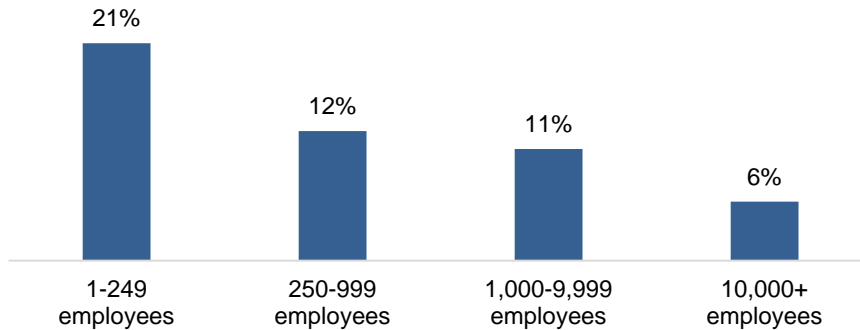
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## Budgets

**Budget Changes.** On average, total IT budgets are expected to change 13% from 2016 to 2017. A closer look by company size shows that the mean is much higher for companies with less than 250 employees (21%), and notably lower for very large organizations with more than 10,000 employees (6%).

## Total IT Budget Changes - 2017 vs. 2016

By what percentage do you expect your organization's total IT budget to change in 2017 compared to 2016?  
(Mean)

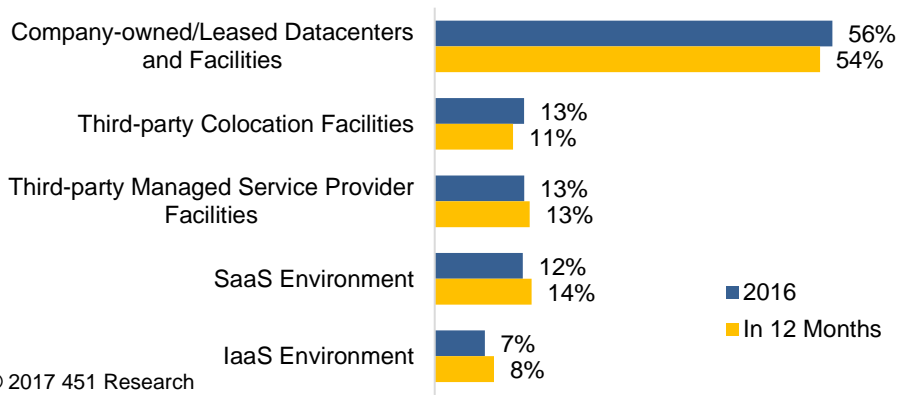


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**Allocation by Location.** For more than half of the respondents, *Company-owned/Leased Datacenters and Facilities* (56%) is the top budget item by location and will remain so in 2017.

## IT Budget Allocations by Location

Approximately how was your organization's overall IT budget distributed across the following locations in 2016? In 12 Months?  
(Mean)



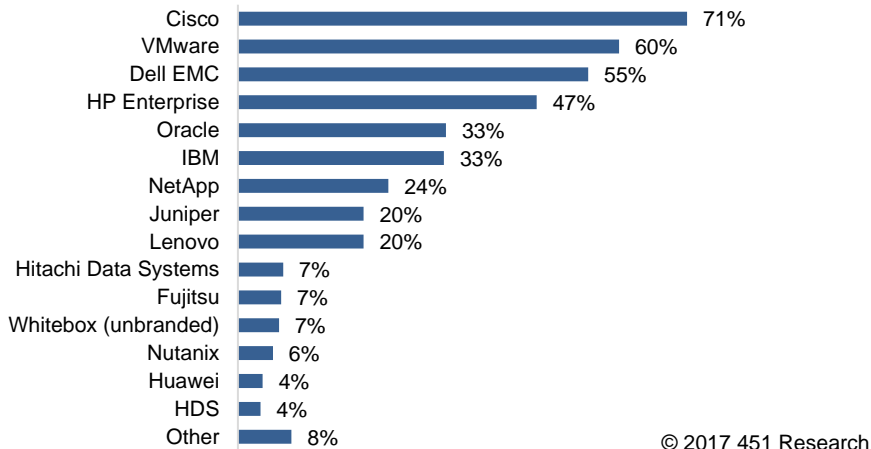
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## IT Infrastructure Vendors

Finally, respondents were asked to select which vendors are currently deployed in their infrastructure environment. Cisco (71%), VMware (60%) and Dell EMC (55%) topped the list.

## IT Infrastructure Vendors

Which vendors are currently in your IT infrastructure environment?



The **451 Global Digital Infrastructure Alliance** is a group of highly qualified enterprise technology and IT professionals who work in leading companies of select industries. The 451 Alliance regularly surveys its members on a range of business and IT topics, and converts the information into proprietary quantitative and qualitative reports.

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## Appendix: Definitions

Premium Centralized Datacenter	Considered a mission-critical, purpose-built facility that typically centralizes IT systems providing services across an entire organization. Many levels of redundancy for power and cooling, with few or no single points of failure.
Regional Datacenter	Facility for housing IT systems typically providing services for a defined organizational purpose, and often for a regional presence. Multiple power and cooling sources, often with multiple single points of failure.
Local Datacenter	Facility for housing IT systems providing services for a small number of users. Significant redundancy for power and cooling distribution. Singular source of power and cooling.
Server Room	Dedicated computer room with some power and cooling; typically within an office environment. Minimal redundancy for power and cooling distribution.
Server Closet	Small room or closet with little to no redundancy power and cooling distribution. Singular source of power and cooling.

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