IDC FutureScape: Worldwide Datacenter 2016 Predictions

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By 2018, 65% of new datacenter infrastructure investments are for systems of engagement, insight and action rather than maintaining existing systems of record.

By 2017, next generation converged systems that are optimized for flash and SDI drive >30% consolidations in internal datacenter space and staff.

Datacenter Obsolescence - By end of 2017, 40% of businesses confront facilities mismatches and changed climate risk profiles, reducing spend on upkeep of existing datacenters.

By end of 2017, hyperscale-based infrastructure providers extend dense compute and deep storage to regional gateway facilities to address data sovereignty fears.

By 2018, 65% of companies’ IT assets are off-site in colocation, hosting, and cloud datacenters while 1/3 of IT “staff” are employees of third-party service providers.

By 2018, 60% of companies rely on highly instrumented datacenters that use advanced automation to boost efficiency and tie datacenter and IT spend to business value.

By 2018, 80% of enterprises transform their networks with SDN-based, flexible networking to connect diversified IT environments and facilitate new data flows.

By 2018, cloud, mobile and IoT services providers will own/operate 30% of IT assets in edge locations and micro datacenters, posing major asset and governance challenges.

By the end of 2016, 50% of companies demand payment models based on usage for major IT and datacenter investments, basing vendor decisions on these programs.

In 2018, 8% of new datacenters will be powered by green energy while improvements in cooling technology and rack architectures continue to improve energy efficiency.
1. Geography Matters More Than Ever
   External resources and expertise are critical

2. Taking a Broader View of Agility Matters
   Think datacenter, network, and financing

3. People Matter
   Effectively syncing internal staff and partners is key

To learn more about IDC’s outlook for datacenters, please see the following report, to be published in early November 2015:
IDC FutureScape: Worldwide Datacenter 2016 Predictions
Prediction: Hyperconvergence and SDI — By 2017, next-gen converged systems that are optimized for flash and SDI will drive >30% reductions in internal datacenter space and staff

**IT Impact**

- Radical shift in IT resources used to extend existing datacenters versus use of equipment in third-party datacenters changes datacenter infrastructure and asset management behaviors
- Growing tendency to leverage managed services when onboarding new IT systems versus retraining existing IT staff
- Increased risk of not adhering to asset tracking and management standards prolongs "silied" areas of IT (good management practices only implemented on "new" equipment)

**Guidance**

- Implement aggressive standardization policies for IT hardware and software assets to improve asset management practices and regulatory compliance
- Implement an enterprisewide infrastructure management practice to view available resources and plan for future capacity
- Select converged and software-defined environments that include technology to automate the discovery and location of IT assets

Note: The size of the bubble indicates complexity/cost to address. Source: IDC, 2015
Prediction: Diversified IT — By 2018, 65% of companies' IT assets will be offsite in colocation and cloud datacenters while a third of IT “staff” will be employees of third-party service providers

<table>
<thead>
<tr>
<th>IT Impact</th>
<th>Guidance</th>
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<td>✓ The role of the IT department shifts from procurement to administration and orchestration of internal and externally sourced IT assets with increasing degrees of co-management with third-party service providers.</td>
<td>✓ Develop best practices for service provider selection, governance, and performance while identifying and incentivizing internal staff to minimize reliance on a specific service provider skill set.</td>
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<td>✓ Internal datacenter-based IT assets become increasingly software-defined, providing IT organizations with flexible services-oriented capabilities abstracted from asset ownership and hardware.</td>
<td>✓ Implement a consistent management, security, and governance framework for IT environments.</td>
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<td>✓ Service provider and enterprise datacenters adopt low-cost, modular designs that are energy efficient and offer superior automation and standardization.</td>
<td>✓ Seek service providers that act as digital transformation partners, offering cloud and hosted services with a range of resource tenancy and management options as well as transition assistance related to financing, network changes.</td>
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Note: The size of the bubble indicates complexity/cost to address.
Source: IDC, 2014
Prediction: 3rd Platform Finance — By the end of 2016, 50% of companies will demand payment models based on usage for major IT and datacenter investments, basing vendor decisions on these programs

**IT Impact**
- The new consumption requirements have ignited the demand for new payment models that match the accelerated pace of new business initiatives.
- IT procurement shifts from CIO to line of business impacts sales process and financing requirements.
- Shift to a services-based model has increased the need for flexibility because, typically, the usage will change over the length of the agreement.

**Guidance**
- Require suppliers to offer programs that reduce capex outlay and tie new project expenses into a manageable payment stream that meets the business manager’s budget goals.
- Require new flexible payment programs that remove roadblocks and budget objections that often derail a cloud implementation.
- Look for less complex arrangements that provide details about monthly or quarterly costs and details about usage that can be easily understood.

**Organizational Impact**

<table>
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<th>TIME (MONTHS) TO MAINSTREAM</th>
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<td>Next Gen Power</td>
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Source: IDC, 2014

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Drivers for Datacenter

- DX: Accelerating Business Disruption from Digital Transformation
- Urban Corridors — The Growing Impact of Megacities
- East-West: Shifting Global Economic Power, Balance & Influence
- Rising Tide: The Societal Impact of Climate Extremes
- Data Gravity: Movement of most data into service provider and cloud datacenters
- Data Ethics: Volatility in beliefs and policies about collection, retention, and use of data
- Modular IT: Modularization of IT through convergence, SD(X), hyperscale, and containers

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