Executive Summary

Cloud adoption is growing, but relatively few organizations have advanced cloud strategies.

Achieving greater levels of cloud adoption allows organizations to materially improve strategic allocation of IT budgets, lower IT costs, reduce time to provision IT services, increase revenue, and improve ability to meet SLAs.

Private cloud adoption is greater than public cloud. Additionally, private cloud/OpenStack adopters are more likely to expect better business outcomes.

IDC sees web-scale public cloud making way for enterprise-class “provider-based cloud.”

Cloud Adoption Strategies

- 44% Opportunistic/Ad Hoc
- 25% Optimized/Managed/Repeatable
- 32% No strategy

See page 5 for definition of cloud adoption levels.

Using or Firm Plans to Implement

- 44% Private cloud
- 37% Public cloud
- 83% Want to work with their major incumbent provider to carry current operations to the cloud.

Figures may not add to 100% due to rounding.
Study Methodology

IDC’s 2014 CloudView study interviewed Director-level and above respondents from a global sample of 19,080 enterprise executives responsible for IT decisions. Of this sample the full survey was conducted on the 3,463 respondents actively using cloud for multiple workloads.

**Job Title**
- 12% LOB VP/Director
- 35% IT VP/Director
- 53% C-Level Executive

**Geography**
- 27% Asia/Pacific
- 12% Latin America
- 28% North America
- 33% EMEA

**Employee Size**
- 28% 1,000-9,999
- 10% 10,000
- 40% 100-999
- 22% 1-99

Figures may not add to 100% due to rounding.
Nearly Half of Organizations Are Using or Planning to Implement Private Cloud

Q: How would you best describe your organization's current or near-term plans to use public cloud or private cloud solutions to support production workloads and services?

Figures may not add to 100% due to rounding. N=19,080 (Overall sample universe, full survey was conducted on the 3,643 respondents using cloud for more than 1-2 small workloads.) Source: CloudView Survey, IDC, 2014.
IDC Categorizes Organizations Using Five Levels of Cloud Adoption

Lower Adoption

**Ad Hoc**
- Beginning the process to increase awareness of cloud technology options
- Turning to cloud because of immediacy of need, often unauthorized

Opportunistic
- Experimenting with short-term improvements in access to IT resources through cloud
- Consider cloud for new solutions or isolated computing environments

Repeatable
- Enabling more agile access to IT resources through standardization and implementation of best practices
- Relying on self-service portals to access cloud services

Managed
- Implementing a consistent, enterprise-wide best practices approach to cloud
- Orchestrating service delivery across an integrated set of resources

Optimized
- Delivering innovative IT-enabled products and services from internal and external providers
- Drive business innovation through transparent access to IT capability, based on value to business, and transparent cost measures

<table>
<thead>
<tr>
<th></th>
<th>% Using</th>
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<th>% Using</th>
<th>% Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public cloud</td>
<td>85%</td>
<td>72%</td>
<td>80%</td>
<td>89%</td>
<td>94%</td>
</tr>
<tr>
<td>Private cloud</td>
<td>60%</td>
<td>56%</td>
<td>67%</td>
<td>91%</td>
<td>95%</td>
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</table>
Don’t Get Left Behind
The Business Benefits of Achieving Greater Cloud Adoption

Most Organizations Are Still Attempting to Improve Their Cloud Strategies

Cloud Adoption Level

- 32% Ad Hoc
- 16% Repeatable
- 11% Opportunistic
- 8% Managed
- 1% Optimized
- 32% No strategy

Only 25% of organizations have repeatable, managed, or optimized cloud strategies.

Figures may not add to 100% due to rounding. N=19,080. (Overall sample universe, full survey was conducted on the 3,643 respondents using cloud for more than 1-2 small workloads.) Source: CloudView Survey, IDC, 2014.
Companies Expect Cloud to Drive Key Business Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Positive impact</th>
<th>No change</th>
<th>Negative impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic allocation of IT budget</td>
<td>54%</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>Increase revenue</td>
<td>53%</td>
<td>28%</td>
<td>20%</td>
</tr>
<tr>
<td>Meet service level agreements</td>
<td>29%</td>
<td>56%</td>
<td>16%</td>
</tr>
<tr>
<td>Cost of IT operations</td>
<td>28%</td>
<td>46%</td>
<td>26%</td>
</tr>
<tr>
<td>Customer experience</td>
<td>25%</td>
<td>51%</td>
<td>24%</td>
</tr>
<tr>
<td>Agility</td>
<td>25%</td>
<td>54%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Greatest expected future impact on strategic business outcomes

Expectations for operational and cost-control KPIs have already been baked in

Q: Which of the following best describes your belief about these Key Performance Indicators (KPIs) within the next 2 years from your use of public, private or hybrid cloud services?

Increasing Cloud Adoption Can Yield Significant Benefits

**Average KPI Benefit of Moving Up Levels of Cloud Adoption**

<table>
<thead>
<tr>
<th></th>
<th>Ad Hoc to Opportunistic</th>
<th>Ad Hoc to Repeatable</th>
<th>Ad Hoc to Managed</th>
<th>Ad Hoc to Optimized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue Growth</td>
<td>0.1%</td>
<td>1.4%</td>
<td>4.0%</td>
<td>10.4%</td>
</tr>
<tr>
<td>IT Cost Reduction</td>
<td>13%</td>
<td>29%</td>
<td>48%</td>
<td>77%</td>
</tr>
<tr>
<td>Strategic Allocation of IT Budget</td>
<td>16%</td>
<td>56%</td>
<td>100%</td>
<td>200%</td>
</tr>
<tr>
<td>Time to Provision</td>
<td>27%</td>
<td>47%</td>
<td>76%</td>
<td>99%</td>
</tr>
<tr>
<td>Meeting SLAs</td>
<td>43%</td>
<td>63%</td>
<td>69%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Even moving from Ad Hoc to Opportunistic yields immediate benefits; however the benefits accrue, the higher you move up the cloud adoption curve.

Source: 370 responses from 15 IDC Business Value Research studies from 2012 to 2015 covering cloud maturity levels, adoption of private cloud, implementation of private cloud and converged infrastructures in support of cloud, as well as 15 respondents from a specialized study of optimized/managed cloud maturity organizations for Cisco in December 2014.
Greater Cloud Adoption Leads to Millions of $$ in Benefits

**Annual Benefit per Cloud-Based Application**

- **$1.6 million**
  - 7% Enablement of Internet of Things
  - 93% Additional revenues

- **$1.2 million**
  - 5% Open Source benefits
  - 8% Risk mitigation
  - 28% Infrastructure cost savings
  - 49% Increased employee productivity
  - 49% Improved agility
  - 28% Improved innovation

Figures may not add to 100% due to rounding. Source: 370 responses from 15 IDC Business Value Research studies from 2012 to 2015 covering cloud maturity levels, adoption of private cloud, implementation of private cloud and converged infrastructures in support of cloud, as well as 15 respondents from a specialized study of optimized/managed cloud maturity organizations for Cisco in December 2014.
64% of Cloud Adopters Are Using Some Form of Hybrid Cloud

% of Cloud Adopters Saying Their Strategy Includes:

- **48%** Workload portability across public/private cloud resources
- **50%** A mix of public cloud, private cloud and dedicated/traditional IT resources

Q: Under which of the following definitions of “hybrid cloud” has your organization adopted a hybrid cloud strategy? (Multiple responses allowed.)

Private Cloud Adopters Expect Better Business Outcomes

Q: Which of the following best describes your belief about these Key Performance Indicators (KPIs) within the next 2 years from your use of public, private, or hybrid cloud services?


NDC Analyze the Future
OpenStack Is Important and Correlates with Better Expected Outcomes

65% of cloud adopters say OpenStack is important to their cloud strategy (via open source and/or commercial distributions)

Respondents for whom OpenStack is a more important part of their cloud strategy had higher expectations for cloud to improve key KPIs than those for whom OpenStack was less important

OpenStack is “important”

OpenStack is “not important”

Q (IDC Business Value Custom Survey): Which of the following best describes your belief about these Key Performance Indicators (KPIs) within the next 2 years from your use of public, private, or hybrid cloud services?

Q (CloudView Survey): How important are the following Open Source and standards projects to your organization’s cloud strategy? [OpenStack] (Top-2 box and bottom-2 box scores shown.)

Hybrid Cloud Requires Workload Portability, Security, and Policy Automation

- 33% Have portable workloads that can automatically burst and load balance across public and private cloud.
- 47% Have security concerns about adopting public cloud; security was the #1 concern.
- 67% Expect workloads to automatically migrate between providers based on locations, policies, and governance principles.

Q: Under which of the following definitions of “hybrid cloud”, has your organization adopted a hybrid cloud strategy?
Q: Which of the following best describes your organization’s main concerns about cloud and are IMPORTANT INHIBITORS for your organization in considering services or technologies?
Q: Please note the extent to which you agree with the following statements about your organization’s use of external cloud vendors (5-point scale, strongly agree to strongly disagree, top 2 box shown.)

Most Organizations Expect to Act as IT Service Brokers

% of Respondents that Expect:

- **70%**
  The ability to migrate applications and data from our data center to a public cloud and among multiple cloud providers

- **64%**
  To have 2 or more major cloud providers (Infrastructure, Platform, and Applications) to meet our needs

- **64%**
  To act as brokers of IT services and dynamically aggregate, customize, and integrate public and private cloud services

Q: Please note the extent to which you agree with the following statements about your organization’s use of external cloud vendors (5-point scale, strongly agree to strongly disagree, top 2 box shown.)

N=3,463. Source: CloudView Survey, IDC, 2014

Most organizations expect to act as IT service brokers to retain control over workload placement while diversifying their choice of cloud providers.
Companies Trust Their IT Incumbents as Cloud Providers

IDC foresees the emergence of “Provider-Based Cloud,” in which trusted IT infrastructure vendors emerge as cloud providers of choice

83% of organizations think it is important to work with their major incumbent provider to carry current operations into the cloud

Q: Please note the extent to which you agree with the following statements about your organization’s use of external cloud vendors: “It is important for my organization to work with our major incumbent provider to carry forward our current operations into the cloud” (5-point scale, strongly agree to strongly disagree, top 2 box shown)

N=3,463. Source: CloudView Survey, IDC, 2014
Key Takeaways

Cloud adoption is growing, but few companies have advanced cloud strategies in place

• 57% of respondents are using or are planning to implement some form of cloud, but only 25% have repeatable, managed, or optimized cloud adoption strategies. There is significant room for improvement

Cloud adoption is driving significant benefits

• Achieving greater levels of cloud adoption yields dramatically improved revenue growth, more strategic allocation of IT budgets, lower IT costs, reduced time to provision IT services, and increased ability to meet SLAs. The benefits begin immediately and accelerate as you move up the adoption curve

• Respondents believe cloud will allow them to more strategically allocate IT budgets and improve revenue

Organizations studied are realizing $1.6 million in revenues and $1.2 million in reduced costs per cloud application
Key Takeaways (continued)

**Private and hybrid cloud are a critical part of the mix**

- Private cloud adoption is even more prevalent than public. 65% of cloud adopters say that OpenStack is an important part of their strategy.

- Private cloud and OpenStack users are more likely to believe their use of cloud improves revenue growth, strategic allocation of IT budget, and ability to meet SLAs.

**Hybrid cloud requires workload portability, security, and policy-based control**

- Most respondents expect to migrate data between public and private clouds, and have high security and policy requirements. Most expect to act as IT service brokers and need solutions that support these requirements.

**Web-scale public cloud is making way for enterprise-class “provider-based clouds”**

- Respondents trust incumbent providers with their cloud services. IDC sees a growing potential for IT incumbents to deliver feature-rich cloud services fully managed by the enterprise with features such as mobile asset management, directory integration, and customer-managed encryption keys.