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 in the United States is 52%, compared to 41% for 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 Level

- 34% Optimized/Managed/Repeatable
- 29% No strategy
- 37% Opportunistic/Ad hoc

Using or Firm Plans to Implement

- 52% Private cloud
- 41% Public cloud

89% Want to work with their major incumbent provider to carry current operations to the cloud.

See page 5 for definition of cloud adoption levels.
Study Methodology

IDC’s 2014 CloudView Survey 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 global respondents, including 800 U.S. respondents, actively using cloud for multiple workloads.

Survey Participant Profile – United States

**Job Title**
- 10% LOB VP/Director
- 37% IT VP/Director
- 53% C-Level Executive

**Employee Size**
- 44% 100-999
- 30% 1,000-9,999
- 11% 10,000+
- 16% 1-99

N=800 (U.S. respondents)
Source: IDC’s CloudView Survey, 2014
Note: All numbers in this document may not be exact due to rounding
Many U.S. 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?

- Currently using: Private cloud: 36%, Public cloud: 31%
- Firm plans to implement: Private cloud: 16%, Public cloud: 10%
- Educating/evaluating: Private cloud: 24%, Public cloud: 24%
- No interest/don’t know: Private cloud: 25%, Public cloud: 35%

62% of U.S. organizations are using or planning to implement some form of cloud

Source: IDC’s CloudView Survey, 2014

N=3,222 (Overall sample universe, full survey was conducted on the 800 respondents using cloud for more than 1-2 small workloads)
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>Cloud Type</th>
<th>% Using* Public cloud</th>
<th>% Using* Private cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>88%</td>
<td>42%</td>
</tr>
<tr>
<td>Private</td>
<td>74%</td>
<td>65%</td>
</tr>
<tr>
<td>Managed</td>
<td>82%</td>
<td>84%</td>
</tr>
<tr>
<td>Optimized</td>
<td>88%</td>
<td>90%</td>
</tr>
</tbody>
</table>

N=682 (North American respondents)
Source: IDC's CloudView Survey, 2014
*Percentage of North American respondents using
Most U.S. Organizations Are Still Attempting to Optimize Their Cloud Strategies

Only 34% of organizations have repeatable, managed, or optimized cloud strategies.

- 29% have no cloud strategy
- 28% Ad hoc
- 10% Opportunistic
- 13% Managed
- 1% Optimized

N=3,222 (Overall sample universe, full survey was conducted on the 800 respondents using cloud for more than 1-2 small workloads)
Source: IDC's CloudView Survey, 2014
U.S. Companies Expect Cloud to Drive Key Business Outcomes

Expected Cloud Impact Over Next 2 Years

<table>
<thead>
<tr>
<th>Business Outcome</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>53%</td>
<td>34%</td>
<td>13%</td>
</tr>
<tr>
<td>Increase revenue</td>
<td>51%</td>
<td>30%</td>
<td>19%</td>
</tr>
<tr>
<td>Meet service level agreements</td>
<td>26%</td>
<td>58%</td>
<td>16%</td>
</tr>
<tr>
<td>Cost of IT operations</td>
<td>24%</td>
<td>49%</td>
<td>27%</td>
</tr>
<tr>
<td>Customer experience</td>
<td>22%</td>
<td>57%</td>
<td>22%</td>
</tr>
<tr>
<td>Agility</td>
<td>20%</td>
<td>59%</td>
<td>21%</td>
</tr>
</tbody>
</table>

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?

N=552 (U.S. respondents)
Source: Sponsored Business Value Extension to IDC’s CloudView Survey, 2014
Increasing Cloud Adoption Can Yield Significant Benefits

**KPI Benefit of Moving Up Levels of Cloud Adoption (Global Data)**

<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%</td>
<td>4%</td>
<td>10%</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 accelerate and 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 Dollars in Benefits

Annual Benefit per Cloud-Based Application (Global Data)

- Additional revenues: $1.6 million
- Reduced costs: $1.2 million

- 7% Enablement of Internet of Things
- 93% Improved innovation
- 5% Open source benefits
- 8% Infrastructure cost savings
- 9% Risk mitigation
- 28% Increased employee productivity
- 49% Improved agility

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.
75% of Cloud Adopters Are Using Some Form of Hybrid Cloud

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

- Workload portability across public/private cloud resources: 57%
- A mix of public cloud, private cloud, and dedicated/traditional IT resources: 61%

Percentage of U.S. Cloud Adopters Saying Their Strategy Includes

N=800 (U.S. respondents)  
Source: IDC’s CloudView Survey, 2014
Regionally, Private Cloud Adopters Expect Better Business Outcomes

Expect Cloud Improves KPIs for

- Strategic allocation of IT budget
  - Not using private cloud: 46%
  - Using private cloud: 55%
- Revenue growth
  - Not using private cloud: 47%
  - Using private cloud: 53%

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?

Private cloud users are more likely to expect their cloud investments to have a positive impact on revenue and IT budget allocation than non-private cloud users.

N=682 (North American respondents)
Source: Sponsored Business Value Extension to IDC’s CloudView Survey, 2014
OpenStack Is Important and Correlates with Better Expected Outcomes

57% of U.S. respondents 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.

Q (IDC’s 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 (IDC’s 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

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)

Have **portable workloads** that can automatically burst and load balance across public and private cloud

Have **security concerns** about adopting public cloud

Expect workloads to automatically migrate between providers based on **locations, policies, and governance** principles

40% 52% 72%

N=800 (U.S. respondents)
Source: IDC’s CloudView Survey, 2014
Many U.S. Organizations Expect to Act as IT Service Brokers

Percentage of Respondents that Expect

- **76%**
  - The ability to migrate applications and data from our data center to a public cloud and among multiple cloud providers

- **72%**
  - To have 2 or more major cloud providers (Infrastructure, Platform, and Applications) to meet our needs

- **68%**
  - To act as brokers of IT services and dynamically aggregate, customize, and integrate public and private cloud services

Many organizations expect to act as IT service brokers to retain control over workload placement while diversifying their choice of cloud providers.

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=800 (U.S. respondents)
Source: IDC’s CloudView Survey, 2014
U.S. 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.

89\% 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=800 (U.S. respondents)  
Source: IDC’s CloudView Survey, 2014
Key Takeaways

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

- Sixty-two percent of U.S. respondents are using or are planning to implement some form of cloud, but only 34% 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 but accelerate as you move up the adoption curve.

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

Globally, 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**

- Forty-one percent of U.S. organizations are using or planning to use public cloud, and 52% are using or planning to use private cloud. Fifty-seven percent of U.S. 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**

- Seventy-two percent of U.S. organizations expect to migrate data between public and private clouds, and respondents have high security and policy requirements. They 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 cloud”**

- Eighty-nine percent of U.S. respondents trust incumbent IT 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.
# Comparison Table

<table>
<thead>
<tr>
<th>Cloud adoption level</th>
<th>United States</th>
<th>North America</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimized/Managed/Repeatable</td>
<td>34%</td>
<td>29%</td>
<td>25%</td>
</tr>
<tr>
<td>Opportunistic/Ad hoc</td>
<td>38%</td>
<td>42%</td>
<td>44%</td>
</tr>
<tr>
<td>No strategy</td>
<td>29%</td>
<td>29%</td>
<td>32%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Using or firm plans to implement</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Private cloud</td>
<td>52%</td>
<td>48%</td>
<td>44%</td>
</tr>
<tr>
<td>Public cloud</td>
<td>41%</td>
<td>38%</td>
<td>37%</td>
</tr>
<tr>
<td>Any cloud</td>
<td>62%</td>
<td>59%</td>
<td>57%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wants to work with major incumbent provider for cloud operations</th>
<th>United States</th>
<th>North America</th>
<th>Global</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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