Enterprise Cloud appears to be becoming more and more mainstream

Top trending searches indicate adoption interest

- Cloud computing basics
- Cloud computing training
- Cloud computing certification
- Cloud computing advantages

“Enterprise Cloud” interest over time shows an upward trend

Source: Google Analytics, February 2012
A focus on late/opportunistic adopters will become more important in the coming years.

Early adopters make up only 10% of total companies today.

Late adopters will go from generating 10% of Cloud spend today to 40% in 2013.

Source: Bain Cloud Computing Survey, April 2011
How to get medium-large size enterprises to adopt the Cloud?

- Where is the market opportunity?
  - Enterprise Cloud segments
  - Segment maturity and growth

- What are the key drivers of adoption?
  - Adoption drivers
  - Cost vs. Innovation/Competitiveness
  - Mobility trends

- What are the key inhibitors of adoption?
  - Key inhibitors
  - Security vs. Complexity/Interoperability

- A summary of key points
How to get medium-large size enterprises to adopt the Cloud?

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- **A summary of key points**
The Enterprise Cloud market consists of three distinct segments:

- **SaaS** (Software)
  - Email
  - CRM
  - Office productivity
- **PaaS** (Platform)
  - Dev tools
  - Frameworks
  - Server management
- **IaaS** (Infrastructure)
  - Storage
  - Compute
  - Network
IaaS is reaching adoption maturity while SaaS continues to mature

Enterprise Cloud market will be dominated by SaaS and IaaS in the coming years

Source: Deloitte Cloud computing – Forecasting change, 2011
Medium and large enterprise are on the verge of adoption

“First they ignore you, then they laugh at you, then they fight you, then you win.”
- Mahatma Gandhi

- Enterprise software firms:
  - 10 years ago they didn’t care
  - Today, we see a host of activity

<table>
<thead>
<tr>
<th>Increase in Cloud-related M&amp;A (2011-2012)</th>
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</thead>
<tbody>
<tr>
<td><strong>Oracle</strong></td>
</tr>
<tr>
<td>Taleo</td>
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<tr>
<td>RightNow</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
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</table>

So, how can Cloud providers capture these medium/large opportunistic and late enterprise adopters?

Source: Team analysis, 2012; Deloitte Cloud computing – Forecasting change, 2011
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Reported drivers of Enterprise Cloud adoption today are as expected.

- **Cost**, agility and scalability benefits are currently driving Enterprise cloud adoption.
Cloud driven enterprise cost reductions are not straightforward

AWS TCO advantages driven by operation costs

<table>
<thead>
<tr>
<th>Operation Costs</th>
<th>Storage Costs</th>
<th>CPU Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$35,000</td>
<td>$20,000</td>
<td>$5,000</td>
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<tr>
<td>$30,000</td>
<td>$15,000</td>
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<td>$25,000</td>
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<td>$5,000</td>
<td>$5,000</td>
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</table>

But, only 14% of firms reduce headcount

- Decreased 14%
- Increased 20%
- No impact 66%

Cost savings are real, but small; 60% of surveyed enterprises reported <$20K in savings

Source: AWS website, 2012; Team analysis – see appendix (to do), 2012; CSC Computing Survey, 2011
The Enterprise Cloud has **real** implications on implementation timelines and investment strategy.

**Time to develop, test and deploy will decrease**

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
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</thead>
<tbody>
<tr>
<td>Development time (weeks)</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Testing cycle time (days)</td>
<td>42</td>
<td>4</td>
</tr>
<tr>
<td>Deployment of apps (days)</td>
<td>11</td>
<td>3</td>
</tr>
</tbody>
</table>

**IT Investment focus will shift**

<table>
<thead>
<tr>
<th></th>
<th>Invest</th>
<th>Run</th>
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<tbody>
<tr>
<td>Before</td>
<td></td>
<td></td>
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<tr>
<td>After</td>
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</tbody>
</table>

Improved time to market

Increased focus on higher value-add investments

A new focus on **innovation** and **competitive** flexibility

Source: Team analysis; Deutsche Bank; Bain Cloud Computing Survey, April 2011
Mobility will play an important roll in Enterprise Cloud adoption

For the first time, US adult smartphone users surpassed “basic” cellphone users

84% of firms already have or are likely to deploy smartphones

More companies are using mobile for customer engagement

• “73% of companies are planning an investment in mobile channels in 2011, with almost half planning to move into mobile commerce.”

Enterprise’s mobile strategies could play an important role in Enterprise cloud usage

Source: Pew Cellphone Survey, February 2012; Global Trends in Enterprise Mobility, February 2012; Econsultancy’s Customer Engagement Report
Drivers of Enterprise Cloud adoption in ~5 years will be different than today’s drivers

Innovation, competitive and mobility will become critical adoption drivers

Source: Manual forecast (numbers selected for display purposes)
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As expected, security currently tops the list of Enterprise Cloud adoption inhibitors

Source: CSC Computing Survey, 2011
Security will not be the main inhibitor of Cloud adoption in the coming years

“Security is a matter of perception and comfort; many cases Cloud provides better security than existing on-premise implementations; its just getting decision makers comfortable with that.”
- Distinguished Engineer and VP, Amazon.com

- Security is listed as the top inhibitor of adoption in most Cloud surveys (60%, Symantec)
- Yet, the majority of respondents (87%, Symantec) also believe the Cloud will not impact or will actually improve their security posture

In terms of security, enterprises are close to comfort, but not quite ready. So, if not security, what will inhibit adoption?

Enterprise Cloud, an ecosystem perspective

- Universities: train
- Developers/Admins
- Consultants: influence
- Traditional Software Providers: influence
- Cloud Service Software Providers: influence
- Government: regulate
- Corporate Decision Makers: sell/buy
- Peers
- IT Managers: influence
Corporate Decision Makers’ concerns can be addressed

<table>
<thead>
<tr>
<th>Who are they?</th>
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<tbody>
<tr>
<td>• Individuals that make the decision to adopt cloud technologies</td>
</tr>
<tr>
<td>• Executive level (CEO, CIO, CTO) to middle management (IT Director)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What are they thinking about?</th>
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</thead>
<tbody>
<tr>
<td>• Cost vs. innovation flexibility</td>
</tr>
<tr>
<td>• Competitive flexibility (competitors gain an advantage: T2M and investment strategy)</td>
</tr>
<tr>
<td>• Business interruptions</td>
</tr>
<tr>
<td>• Existing software implementations (switching costs)</td>
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<td>• Existing relationships with software vendors</td>
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<tr>
<td>• Employee skillset/resistance</td>
</tr>
<tr>
<td>• Loss of a competitive advantage (outsourcing critical functions)</td>
</tr>
<tr>
<td>• Compliance (e.g. ITAR, Sarbanes)</td>
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<table>
<thead>
<tr>
<th>Insights</th>
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<tr>
<td>• Legacy systems are critical and difficult to port to cloud technologies</td>
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<tr>
<td>• Staff preferences matter; people resist change</td>
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<tr>
<td>• Regulations changed IT’s investment focus, cloud technologies could change it back</td>
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<table>
<thead>
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<th>Tactical Recommendations</th>
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<tbody>
<tr>
<td>• Reduce adoption complexity:</td>
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<tr>
<td>• Simplify migrations; provide stage-able migrations tools (piece-by-piece)</td>
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<tr>
<td>• Develop Cloud adoption roadmaps and best practices</td>
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<tr>
<td>• Allow mobility/interoperability</td>
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<tr>
<td>• Provide data freedom functionality</td>
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<tr>
<td>• Partner with institutions to expose students to cloud technologies</td>
</tr>
<tr>
<td>• Develop ITAR/Sarbanes compliant offerings</td>
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Implementation **complexity** and **interoperability** will become dominate inhibitors of adoption
Inhibitors of Enterprise Cloud adoption tomorrow will be different than today’s drivers

Complexity and interoperability will become critical inhibitors

Source: Manual forecast (numbers selected for display purposes); CSC Computing Survey, 2011
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Summary of key points

- Mainstream cloud adoption is around the corner
- SaaS and IaaS are the most attractive segments to target moving forward
  - IaaS will display the fastest growth
- Innovation and competitive flexibility and mobility will be more important than simple cost benefits
- Security will soon be a given; more focus will be put on making the migration to cloud technologies less complex and thus interoperable with existing systems
The end
Stuff to add

- Deeper look at lock-in and compliance
- Analysis of competitive offerings
- Ecosystem
  - Co-innovation risk, adoption chain risk, minimal viable footprint
  - How would a firm adopt cloud (staged migration, one piece at a time, all at once)
- Analysis of other players in the ecosystem
- Other players in the ecosystem
- Partnerships (vertical systems providers, informatica)
- Types of enterprise software