Grow Your Business with Cloud – Are You Ready?
helping partners succeed using the Windows Azure Platform

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Agenda

- The Cloud – Opportunities & Market
- Customer Challenges
- Benefits of the Cloud
- Windows Azure Platform – 5 Scenarios
- Success Stories
- Q&A
The Cloud - Opportunities

SOFTWARE as a Service
- Empower Users

PLATFORM as a Service
- Develop Apps

INFRASTRUCTURE as a Service
- Manage Machines
By 2014, cloud computing services will grow to a $45 billion industry a year (IDC)

Traditional IT services will transfer to the new cloud model, with lots of potential revenue in new businesses and revenue streams (Gartner)
IT Services Related to Cloud Computing to Accelerate to 35.6%  

Cloud IT services are expected to more than triple over the next three years.

Cloud Computing Revenue Growth Projections (2009-2013)

<table>
<thead>
<tr>
<th>Year</th>
<th>Consulting</th>
<th>Implementation</th>
<th>Management</th>
<th>Total IT Services Related to Cloud Computing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>508</td>
<td>1,555</td>
<td>323</td>
<td>2,386</td>
</tr>
<tr>
<td>2010</td>
<td>763</td>
<td>2,086</td>
<td>436</td>
<td>3,286</td>
</tr>
<tr>
<td>2011</td>
<td>1,023</td>
<td>2,774</td>
<td>593</td>
<td>4,390</td>
</tr>
<tr>
<td>2012</td>
<td>1,365</td>
<td>3,735</td>
<td>323</td>
<td>5,907</td>
</tr>
<tr>
<td>2013</td>
<td>1,798</td>
<td>5,154</td>
<td>1,114</td>
<td>8,066</td>
</tr>
</tbody>
</table>

CAGR 2009-2013:
- Consulting: 37.2%
- Implementation: 34.9%
- Management: 36.2%
- Total IT Services Related to Cloud Computing: 35.6%

70% of all SaaS business applications will potentially use PaaS (as the platform) for offering the customer-facing application. [Forrester]***

SaaS Growth

IDC Cloud Market Sizing → From 2009 to 2013*:
- SaaS to grow at 21% CAGR to touch $17.6 billion

ISV Opportunity**
- ‘ISV on PaaS’ segment to grow from $0.02 billion to $3.18 billion at a CAGR of 175%
- Up to 20% of all business applications offered by ISVs will be in an SaaS deployment by 2016.

* Source: IDC (March 2010) Bringing the Private Cloud to the Data Center
*** Forrester (July 2009) Platform as a Service Market Sizing
Facing an unprecedented economic environment...

business has responded by transforming ...

causing new technologies to emerge.

**ECONOMIC CHALLENGES**
- Reduction of operating and capital expenditures
- Increased competition for fewer resources
- Do more with less

**BUSINESS CHALLENGES**
- Focus on core value-add activities
- Improve agility to stay competitive
- Leverage existing assets to expand

**TECHNOLOGY CHALLENGES**
- Shift from information technology to business technology
- Technology erases infrastructure complexity
- Globalization

Worldwide and business challenges are forcing organizations to optimize IT efforts
With cloud computing businesses can

- Focus IT resources on developing the business, not maintaining its infrastructure
- Create new applications with minimal up front provisioning costs
- Reduce costs and maintenance of current infrastructure
- Increase IT capacity dynamically
- Provide transparent ROI for IT
- Extend current application capabilities, without new infrastructure

Optimize uptime, agility and efficiency
Optimize uptime, agility and efficiency

With cloud computing businesses can:

- Focus IT resources on developing the business, not maintaining its infrastructure.
- Create new applications with minimal up front provisioning costs.
- Reduce costs and maintenance of current infrastructure.
- Increase IT capacity dynamically.
- Provide transparent ROI for IT.
- Extend current application capabilities, without new infrastructure.

Cloud Optimized:
- Run a Business - P&L
- LOB Functionality
- Business Tools
- Advanced Infrastructure
- Data Center/Infrastructure Hardware
- Servers Deployment/Mgt
- Desktop Installation/Mgt
- Networks
- Connectivity/Cabling

Time / Resources
Benefits apply across the company

**DIRECTOR, OPERATIONS**

“I need operational transparency so that we can align our investments with the business needs.”

**SALES ACCOUNT MANAGER**

“I need solutions that scale with our customers and provide greater mobility for more devices.”

**CEO**

“I need the organization to become more agile to take advantage of changing market dynamics.”

**CFO/CIO**

“We need to reduce our total cost of ownership and prioritize business initiatives rather than IT imperatives.”

**PRODUCT MANAGER**

“I can’t wait for IT to procure capacity, we need to take our product to market now.”

**IT ADMINISTRATOR**

“I need to reduce the amount of time my team is spending keeping systems operational and maintained.”

**SALES ACCOUNT MANAGER**

“I need solutions that scale with our customers and provide greater mobility for more devices.”
Windows Azure Platform
5 Scenarios

- Application Migration & Maintenance
- Data Center Extension
- New Application Development
- Application Extension
- Storage as a Service
New Application Development

Use familiar technology and tools to minimize development lifecycle – maximize TCO benefits.

PAIN POINTS
- In flexible development resource environment (non scalable resources)
- Traditional application development serves as barrier to entry, with little experimentation due to financial risk

WINDOWS AZURE PLATFORM BENEFITS
- Min. dev. cycle
- Low TCO
- Low barrier new market entry
- Low risk
- Improved collaboration
- Time to Market

TARGET SCENARIOS
- Digital marketing and social networking
- Digital syndication
- Internal collaborative applications
- Scalable websites: low-cost option for product launches, M&As, or customer loyalty programs
Application Extension refers to the ability for our customers to run applications both on premise and in the cloud.

<table>
<thead>
<tr>
<th>PAIN POINTS</th>
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<tbody>
<tr>
<td>• While scalability is very attractive, sensitive data requirement to stay secure on premises</td>
</tr>
<tr>
<td>• High Performance Computing: Parallel Processing and/or Grid Computing application are constrained by fixed capacity</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>WINDOWS AZURE PLATFORM BENEFITS</th>
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</thead>
<tbody>
<tr>
<td>• Low-cost access to massive compute capacity</td>
</tr>
<tr>
<td>• Critical components on premises, extend others to cloud</td>
</tr>
<tr>
<td>• Enabling smart endpoints</td>
</tr>
<tr>
<td>• Improved competitive advantage with new application extensions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TARGET SCENARIOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Credit card risk scoring</td>
</tr>
<tr>
<td>• Monte Carlo simulation</td>
</tr>
<tr>
<td>• High-performance Computing</td>
</tr>
<tr>
<td>• B2B supply chain management</td>
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**Storage as a Service**

*Storage in the Cloud for rapidly growing data repositories and mature data governance.*

<table>
<thead>
<tr>
<th>PAIN POINTS</th>
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</thead>
<tbody>
<tr>
<td>• Active archiving</td>
</tr>
<tr>
<td>• Data distribution</td>
</tr>
<tr>
<td>• Performance and spike capacity</td>
</tr>
<tr>
<td>• High bandwidth costs to move data</td>
</tr>
<tr>
<td>• Constant need to update applications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WINDOWS AZURE PLATFORM BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Host, distribute, monetize proprietary data</td>
</tr>
<tr>
<td>• Multi-party global data collaboration</td>
</tr>
<tr>
<td>• Data archiving</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>TARGET SCENARIOS</th>
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<tr>
<td>• Archived Data with low access rate</td>
</tr>
<tr>
<td>• Content Delivery: Media distribution of video and documents</td>
</tr>
<tr>
<td>• Data Backup and Recovery</td>
</tr>
</tbody>
</table>
Data Center Extension

Solve data center capacity issues and minimize new capital investments.

**PAIN POINTS**
- Reduction of operational overhead in on-premises data-center
- Data center capacity constraints
- CapEx constraints

**WINDOWS AZURE PLATFORM BENEFITS**
- Defers investment in new hardware
- Access to burstable capacity on a demand basis

**TARGET SCENARIOS**
- Low risk applications (non-mission critical and/or no PII implications)
- Marketing campaigns/events
- Disaster response/recovery
- Centrally managed LOB applications
Move application management to the cloud – focus on mission critical application development.

**PAIN POINTS**

- Uptime and maintenance of physical servers
- Manually intensive routine application maintenance consumes resources needed for mission critical tasks

**WINDOWS AZURE PLATFORM BENEFITS**

- Auto provisioning, load balancing, and patch management allows IT to focus on more mission critical tasks
- Lower resource costs, reducing CapEx

**TARGET SCENARIOS**

- Web portal with high growth and scalability requirements
- Marketing campaigns with burst workloads
- Payroll portal with variable workload patterns
Further enabled with VM Role (CY10 Beta)
Cumulux

Software Developer Focuses on Innovation, Extends Cloud Services Value for Customers

“Simply by optimizing the number of instances according to performance and application metrics captured by ManageAxis, customers can reduce their operational costs by 40 percent.”
—Paddy Srinivasan, Chief Executive Officer, Cumulux

Company Profile:
Founded in 2009, Cumulux is a software development company with a focus on helping businesses take advantage of the benefits of cloud computing, specifically the Windows Azure™ platform.

Benefit Drivers:
- **Efficiency**
  - Avoided capital expenditures—six-fold—by using Windows Azure
  - Helps customers lower IT management costs
- **Focus**
  - Renewed focus on innovation and core business logic—not on managing infrastructure

Situation/Solution:
After identifying challenges that customers faced with monitoring and managing cloud applications, Microsoft Registered Partner Cumulux developed ManageAxis, which helps customers manage Windows Azure–based applications.

Key Advances:
By hosting its solution on Windows Azure, Cumulux avoided capital expenses and is able to focus its resources on innovating new services that extend cloud services value for customers.

Lockheed Martin

Lockheed Martin Merges Cloud Agility with Premises Control to Meet Customer Needs

“Our customers believe that, by using cloud computing, they can save between 40 and 60 percent of the infrastructure cost that they would normally spend in order to achieve the same capabilities.”
—Melvin Greer, Chief Strategist, Cloud Computing, Information Systems and Global Solutions, Lockheed Martin

Company Profile:


Benefit Drivers:
• Efficiency
  • Enhanced infrastructure at lower costs
  • On-demand, usage-based model
• Agility
  • Ubiquitous access

Situation/Solution:
Lockheed Martin wanted to deliver the performance and flexibility of cloud computing to its customers, while enabling them to balance security, privacy, and confidentiality.

Lockheed Martin used the Windows Azure™ platform to develop the Thundercloud™ design pattern, which integrates on-premises infrastructures with computing services in the cloud.

Key Advances:
Delivering computing power, business agility, and reduced costs, while providing customers full control of their data and security processes.
## Selling Scenario

### Data Center-Extension

<table>
<thead>
<tr>
<th>Business Problem</th>
<th>Windows Azure Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Under-utilized server capacity</td>
<td>• Software-plus-services model</td>
</tr>
<tr>
<td>• A need to scale quickly</td>
<td>• Moved Web site to the Windows Azure platform</td>
</tr>
<tr>
<td>• Inefficient resource use</td>
<td></td>
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</tbody>
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## Benefits

- Reduced capital expenditures with flexible scalability
- Improved operational cost flexibility
- Improved ability to deliver new services
- Reduced data center and hosting costs saving $100,000 annually
- More strategic use of IT resources, improving IT efficiency
- Dynamic application environment

## Identification and Qualification of Opportunity

- Kelley Blue Book was suffering from sudden surge in traffic during “Cash for Clunkers”. It sought a an efficient cost-effective solution for peak and nonpeak times
- Through their trusted advisor relationship, Microsoft proactively reached out to Kelley Blue Book’s Strategic Technical Architect to make the company aware of the latest cloud opportunities and provided an implementation strategy for the Windows Azure Platform
- Over a three month duration, Kelley Blue Book evaluated various options and decided on Azure. After six months Kelley Blue Book was fully operational in the cloud
### Associated Press

<table>
<thead>
<tr>
<th>Selling Scenario</th>
<th>Business Problem</th>
<th>Windows Azure Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage as a Service</td>
<td>• Create a scalable application programming interface (API) that developers worldwide can use to incorporate news</td>
<td>• Deployed using Windows Azure Platform</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• SQL Azure stores news data metadata</td>
</tr>
</tbody>
</table>

#### Benefits

- Elimination of the planning and costly hardware investment traditionally required when creating a highly scalable product
- Customers do not have to worry about capacity planning with Windows Azure
- Straightforward development and faster time-to-market utilizing developer’s current expertise
- Application provides new business opportunities and revenue stream

#### Identification and Qualification of Opportunity

- AP reached out to the Developer and Evangelism group (DPE) after hearing the Windows Azure Platform announcement in 2008
- DPE and Windows Azure Technology Adoption Program (TAP) team were engaged in assisting the AP team with technical guidance, development and deployment
- Microsoft Consulting Services (MCS) were also engaged to support development
- AP was on the platform from Day 1
The Windows Azure Platform

Developer Experience
Use existing skills and tools

- Microsoft Visual Studio
- Eclipse
- Python
- PHP

Windows Azure

- Compute
- Storage
- Management

SQL Azure

- Database as a service
- Self Managing

Windows Azure AppFabric

- Connectivity
- Access control

Platform
References

- Kelley Blue Book case study
  http://www.microsoft.com/casestudies/Case_Study_Detail.aspx?CaseStudyID=4000005874

- Cumulux case study
  http://www.microsoft.com/casestudies/Case_Study_Detail.aspx?CaseStudyID=4000007947

- Lockheed Martin case study
  http://www.microsoft.com/casestudies/Case_Study_Detail.aspx?CaseStudyID=4000007971

- Associated Press case study