DRIVE INNOVATION WITH CLOUD AND BIG DATA

Hicham ABDESSAMAD
Executive Vice-President Global Services
CHANGING MARKET LANDSCAPE

RAPID GROWTH OF APPLICATIONS AND MOBILE DEVICES

VIRTUALIZATION IS EVERYWHERE

EMERGENCE OF BIG DATA AND ANALYTICS

DATA LIVES FOREVER BUT IN APPLICATION AND INFRASTRUCTURE SILOS

CLOUD AND CONSUMPTION MODELS

GROWTH OF UNSTRUCTURED DATA
PUBLIC CLOUD HAS GONE MAINSTREAM

Businesses are relying on cloud computing technology more and more these days as a part of their IT infrastructure.

Sources:
http://venturebeat.com/2012/05/10/cloud-services-data/
http://www.cio.com/slideshow/detail/50223#slide1
THE CIO’S CHALLENGES...

Drive core Growth

Respond fast to the business
Be Agile

INNOVATE & TRANSFORM

Reduce CAPEX and Scope fast
CLOUD

Uncover hidden opportunities
Decision making
BIG DATA

The CIO
HITACHI STRATEGY

VISION AND STRATEGY

- Compelling vision beyond storage
- Integrated strategy linking IT infrastructure to Social Innovation

BUSINESS VALUE

- Excellent value for money
- People; trust, integrity, product quality
- Global Hitachi reach, vertical expertise

INNOVATION

- Market leader in virtualization with real ROI today
- Excellent product expansion and software innovation
BIG DATA: BIGGER, FASTER...DIFFERENT

I.T. MUST MANAGE, GOVERN AND ANALYZE MORE DATA WITH MORE COMPLEX RELATIONSHIPS...IN REAL TIME...AT SCALE
HDS VISION AND STRATEGY
REAL-TIME DECISIONS

INTEGRATED INFORMATION STRATEGY, PRIVATE / PUBLIC CLOUD ENABLEMENT

- CONVERGED SYSTEMS (UCP)
- ORCHESTRATION SOFTWARE (STORAGE, COMPUTE, NETWORK)
- PRIVATE / PUBLIC CLOUD (PAAS / IAAS)

DATA/CONTENT
- CONTENT SEARCH, DISCOVERY, PROTECTION
- INTEGRATED METADATA MANAGEMENT
- CONTENT CLOUD

APPLICATIONS
- Laboratory
- Imaging
- Emergency

APPLICATIONS
- Exploration
- Distribution
- Smart grid

INFRASTRUCTURE
- VISUALIZATION
- ANALYTICS
- MOBILITY

APPLICATIONS
- Laboratory
- Imaging
- Emergency

APPLICATIONS
- Exploration
- Distribution
- Smart grid

SAAS

PAAS

IaaS

CaaS
### Key Enablers to Hitachi Social Innovation

<table>
<thead>
<tr>
<th>SMART APPLICATION LOGIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Deep industry expertise</td>
</tr>
<tr>
<td>- Unstructured data analytics</td>
</tr>
<tr>
<td>- Correlation, filtering, decisions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLOUD DATA PLATFORMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Virtualized data platforms (store data independent of application and media)</td>
</tr>
<tr>
<td>- Cloud multi-tenant platforms</td>
</tr>
<tr>
<td>- Discovery, search, index, transcode, correlate</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLOUD INFRASTRUCTURE PLATFORMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Virtualized infrastructure to optimize sharing, efficiency, cost, optimization, operational scale</td>
</tr>
<tr>
<td>- Cloud services, orchestration software and integration</td>
</tr>
</tbody>
</table>
MACHINE TO MACHINE DATA AND HITACHI TRAINLINK SOFTWARE ANALYTICS ENABLES:

- Improved quality of service
- Increased safety – early warning systems
- Reduced costs from proactive maintenance

- Speed
- Humidity, temperature, ambient temperature
- Wear, weight, hydraulic pressure
FINANCIAL SERVICES E-TRADING PROACTIVE MONITORING IMPROVES CUSTOMER EXPERIENCE

**MACHINE-TO-MACHINE SENSOR DATA TO IMPROVE CUSTOMER EXPERIENCE**

**MACHINE-TO-MACHINE DATA AND HITACHI SOLUTIONS ENABLE:**

- Ability to predict and resolve problems before incidents occur.
- Increased volume and performance of trades.
- Improved customer experience.
CLOUD SERVICES IMPROVE ASSET OPERATING EFFICIENCY

SMART APPLICATION LOGIC

Analytics to predict trends across products, regions, maintenance needs

- Equipment position
- Movement
- Breakdown information

Enhanced productivity and reliability
CLOUD – ALL SHAPES AND SIZES
Today, businesses want the benefits of public cloud and architect for hybrid clouds. But they actually deploy private clouds... for now.

SOURCE: ESG
WHAT IS HAPPENING TODAY – SHADOW I.T.

KEY CHALLENGE: GOVERNANCE
I.T. TRANSFORMATION IS NEEDED

**BUSINESS VIEW**

1. Use self-service portal to access catalogue.

2. Select the services desired.

3. Receive services in hours.

4. See or pay for usage monthly.

**I.T. VIEW**

**TEMPLATE-BASED**

- Pair data with infrastructure based on business value and cost.
- Tie to processes, access controls and governance.
- Enact billing, chargeback or showback.

**AUTOMATED PROCESSES**

- Resource build-out
- Monitoring
- Notification
Transform into a service-defined IT organization

Increase business agility with on-demand consumption of infrastructure

**Transform**

Hitachi Services Framework
CONSOLIDATE

VIRTUALIZE

AUTOMATE

SELF SERVE

HELPING YOU EXTEND YOUR ENTERPRISE TO THE CLOUD

HITACHI SERVICES FRAMEWORK

CLOUD ENABLEMENT METHODOLOGY

- Cloud-readiness assessment
- Consumption economics
- Cloud transformation roadmap
- Service catalog and architecture

- Comprehensive transition plan
- Cloud automation implementation

BUSINESS AND ORGANIZATION

TECHNOLOGY AND PROCESS

CONSUMPTION AND DELIVERY

PRIVATE CLOUD AS A SERVICE

- Infrastructure assessment
- Nondisruptive platform migration

- Virtualization architecture
- Physical to virtual migration

- Service catalog and SLA management
- Orchestration deployment

- Public cloud enablement
- Implementation, integration of UCP
PRIVATE CLOUD AS A SERVICE OFFERINGS
MANAGED SERVICES SOLUTION

HITACHI MANAGED SERVICES SOLUTIONS (MSS)
Transformation of a legacy environment into a private cloud within the 4 walls of the enterprise

- Utility based consumption and billing for converged, storage & back-up
- Elastic compute capacity on demand
- Operations out-tasked to HDS
- Assets owned by HDS
- Service levels committed against a Service Catalogue
- Available worldwide
HOSTED ARCHIVE AS A SERVICE OFFERING
CONTENT ARCHIVE ➔ COLLABORATION

HITACHI PRIVATE CONTENT CLOUD

Extension of the Enterprise into a secure off-premise single tenant content cloud

- Single-tenant online storage accessed through a secure Internet connection (VPN)
- Utility-based consumption and billing
- Elastic capacity on demand
- Managed and hosted by HDS in a co-location facility
- Built on enterprise grade storage
- Available worldwide
HITACHI DATA SYSTEMS

- STRONG GROWTH
- SOCIAL INNOVATION
- GLOBAL TRANSFORMATION
- INTEGRATED STRATEGY
- TOP 100 COMPANY
- RESPECTED CULTURE

HITACHI Inspire the Next
THANK YOU