The Journey to Anything-as-a-Service

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Agenda

- Market trends & Business drivers
  - The journey to Anything-as-a-Service
    - Building the Foundation
    - Guiding the Transformation
    - Enablement of cloud based services
  - Questions
Cloud computing continues to rise

Cloud Adoption – Business

Source: Optus Future of Business Report 2013

Legend:
- Software as a Service
- Private On-Premise Cloud
- Hybrid Cloud (a combination of in-house and outsourced services)
- Infrastructure as a Service
- Public Cloud
- Platform as a Service
- None of these

CURRENT

- 50
- 41
- 29
- 27
- 19
- 15
- 21

EXPECTED IN 3–5 YEARS

- 48
- 46
- 45
- 41
- 32
- 30
The Goal of Anything as a Service

“Allowing you to become a service provider to your business, where cloud works for you (not the other way around) enabling competitive edge and elevating IT within your organisation”
# The journey to Anything-as-a-Service

<table>
<thead>
<tr>
<th>Past</th>
<th>Present and future</th>
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<tbody>
<tr>
<td>CAPEX model</td>
<td>OPEX – Predictable cost &amp; consumption model</td>
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<tr>
<td>Lacks scalability</td>
<td>Agility and flexibility to scale up and down</td>
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<tr>
<td>IT services &amp; business apps on disparate</td>
<td>Centralised IT services and business apps on-demand</td>
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<tr>
<td>infrastructure</td>
<td></td>
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<td>Tedious to manage and maintain</td>
<td>Simplifies management and maintenance</td>
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<tr>
<td>Cumbersome to deliver IT services</td>
<td>Accelerated deployment of IT services</td>
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The Journey Towards ‘Anything as a Service’

- **Virtualize**
  - Launch initial private cloud
  - Improve asset utilization and ROI
  - Defer data center build outs

- **Private Cloud**
  - Self-service access and on-demand provisioning
  - Compressed SDLC and tool chain automation
  - Policy-driven cloud governance

- **Hybrid Clouds**
  - Fully transparent and auditable service usage
  - Redundant service options with low switching costs

- **Anything-as-a-Service IT**
  - Broadly adopt utility cost model with chargeback
  - Optimize variable-to-fixed costs by project
  - Transparent linkage of demand, capacity, and costs
  - IaaS and PaaS standardization
  - Transparent linkage of demand, capacity, and costs

Source: Service Mesh 2013
The Journey to Anything as a Service...
Building the Foundation
Building the foundation - Business steps

- Executive Sponsorship is essential at foundation stage
- Plan and design the journey to cloud in terms of business outcomes and risks
- Identify business and IT stakeholders that need to be on board
- Building the financial business case, Make the CFO your friend
- Building the justification
  - How do planned Cloud services integrate with current IT environment and applications
  - Carefully decide what workloads are suitable for Cloud
  - Identify application footprint
Building the Foundation – Improve ROI

- Capex & Organically grown infrastructure makes cost modeling difficult

- Legacy environment represents an opportunity to improve ROI, instigate an as ‘as a service’ cost model or delivery method

  - Applications – Usually non consolidated
    - Consolidation, Centralization and standardization of applications

  - Infrastructure examples – Usually well consolidated but can be enhanced
    - Virtualization of Tier 1 app’s
    - Tape based backup vs de-dupe
    - Automation
Building the foundation – Private Cloud

- Private Cloud isn't just a new name for infrastructure; it is:

  - Virtualised by default – Makes all resources portable for the cloud

  - Built on a transparent infrastructure costs base – allows simple as a service cost modeling and grows via Opex Pay as you grow

  - Built to be operationally efficient through optimized process and Automation

  - Ran leveraging ITSM principles, Capacity management etc.

- Monitored, managed and tested against the SLA’s that are being demanded

- Finally easy to consume via Portals, stores or process..
The Foundation – Prepare for Hybrid Cloud

IT Store for Services and Enterprise Application Store for Access

Operational Cloud Management

Financial | Service Catalogue | Service Management | Orchestration

As You Scale, Scale out with Cloud optimized private infrastructure

Retain Control & Automate

Your IT

Virtual Network

Virtual Storage

Virtual Compute

Subscription Software

Pay as you Grow Hardware

Migrate to the ITaaS Platform

Recycle current environment

Singtel / Optus Hybrid Services

SaaS Solutions

Third Party Cloud

IT Infrastructure & Network

 alphawest
The Journey to Anything as a Service...
Guiding the transformation
Change the thinking

- Cloud is about optimising application workloads - not infrastructure.
- Focus on the right workload placement to improve the SDLC and get the best ROI from Cloud.
- Financial impact of moving application workload to the cloud instead of infrastructure is higher.
A few years on.. What our customers are saying

- How to measure and monitor my business differently
- How to transform my business to become an IT service provider leveraging several federated clouds

Business Transformation

Internal Process

- Internal
- Billing
- SLA Management
- Incident / Problem / Change
- IT as a Service
- Legacy Infrastructure
- Multiple Relationships
- Migrate initially
- Move between providers
- Manage & Report on multiple SLA’s Common Billing

Legacy Applications

- Managed Applications
- Migration / Lifecycle
- SLA Management
- Legacy Applications
- Multiple Relationships
- Modernise Applications
- Migrate Data and Applications
- Manage & Report on multiple SLA’s Common Billing

Service Providers Process

- On Premise Infrastructure
- Cloud Native Infrastructure
- X as a Service
- Utility Infrastructure
- Legacy Infrastructure
- Infrastructure as a Service
- Cloud hosted applications
- Cloud Native Applications

Outsourced

Infrastructure Federation

- Software Federation
The Biggest Challenge

- Managing different service provider ‘colours’
- Alignment of internal ideology to external
- Process Interlock between internal & external clouds

Transparent Message Bus
Implement enterprise governance cross cloud providers

**Without Policies:**
- Wrong Permissions
- Unsecured Data
- No Audit Trail
- Approval Delays
- Wrong Environment

**With Policy-Driven Governance and Orchestration:**
- Policies optimize placement of workloads
- Governance and Lifecycle Management
- Policies control access to self-service resources

Source: Service Mesh 2013
Implement a standardised portfolio of “as-a-service” offerings

**Plan**
- Existing Tools
  - Self-service portal
  - REST API
  - Unified governance
  - Federated identity management

**Governance Framework**

**Develop**
- Common Application Platforms
  - MS SQL Server DBaaS
  - MS IIS.NET
  - Red Hat Enterprise Linux
  - webLogic
  - others...

**Test**
- Standardized Packages
  - VPN clients
  - Monitoring agents
  - HIDS
  - Anti-virus
  - Virtual Firewalls
  - others...

**Release**
- 3rd-Party PaaS/SaaS
  - Cloud Foundry
  - Salesforce.com
  - Intuit
  - Google Apps
  - others...

**Operate**
- Custom PaaS
  - Preferred platforms and infrastructure customized to specific enterprise needs
  - Elastic, portable, and secure

Sample “as-a-service” portfolio:
The Journey to Anything as a Service...

Enablement of cloud based services – Realising the benefits
Realising the benefits

- You have reached your destination as an agile, cloud based service provider to your business, you now need to measure the operational efficiencies of:
  - Commoditisation economics
  - Standardisation economics
  - Multi-tenant economics
- This allows you to run your ship as optimally as possible i.e cost optimisation and happy CFO.
Change your team thinking

- SaaS, managed IaaS and PaaS move team away from managing infrastructure to managing outcomes

- IT Savvy Service Delivery Managers

- Treat your IT as a service provider, invest in IT ‘Product Managers’…
Agility Benefits

- Leveraging anything as a service allows IT to rapidly launch new solutions to market to be more competitive but remember:
  - Lean principles of product management
  - Sell the dream
  - Identify most efficient way to get product to market
  - POC and test on one customer
  - Grow your product once proven
  - Ultimately – let projects fund IT and demonstrate the ROI!
Measure your outcomes

- Measure the success of your IT products and Services
- Establish IT Commercials and Vendor Management
- Ensure you have tested and audited SLA Management
- Adoption of managing Services and products focuses the business on commercial outcomes not technology drivers
Summary

- Get stakeholder buy in from top down
- Think about application workloads vs Infrastructure
- Be clear about desired outcomes
- Put a robust governance model in place
- Keep measuring and demonstrating ROI
Questions?