What's in a Cloud?

# Agenda

- Industry transformation & trends
- Cloud computing & Windows Azure
- Combining Public & Private Cloud
- Service Provider Roles
- Next steps

# The Industry Debate

- **Security & Privacy**
  - **Customizability**
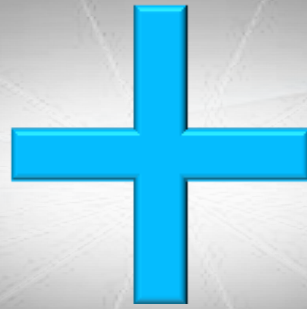    - **Visibility & Control**
      - **Data Accessibility**

- **Global Reach**
  - **Ease of Provisioning**
    - **Business Agility**
      - **Deployability & Manageability**

# Software + Services

- **Best of both worlds**
  - **User in control**
    - **Deployment choices for IT**

**+**

- **Extending tools and platform to cloud**
  - **Experience across multiple devices**
    - **Best-in-class SLAs and IT governance**

# Cloud Computing opportunity

$150B

$46B

2009

2013

Graph created by Microsoft based on Gartner data.
Source: Gartner, Inc. "Forecast: Sizing the Cloud, Understanding the Opportunities in Cloud Services", by Ben Pring et al, March 18, 2009

# Service Providers: Key to Cloud Growth

**20k+ WW Hosters\*\***
**~15% YoY Growth\*\***

**All 'In-house' hosting falls below 50% in 2008 \***

**Enterprises, ISV's, Public Sector see the value of 3rd party hosting**
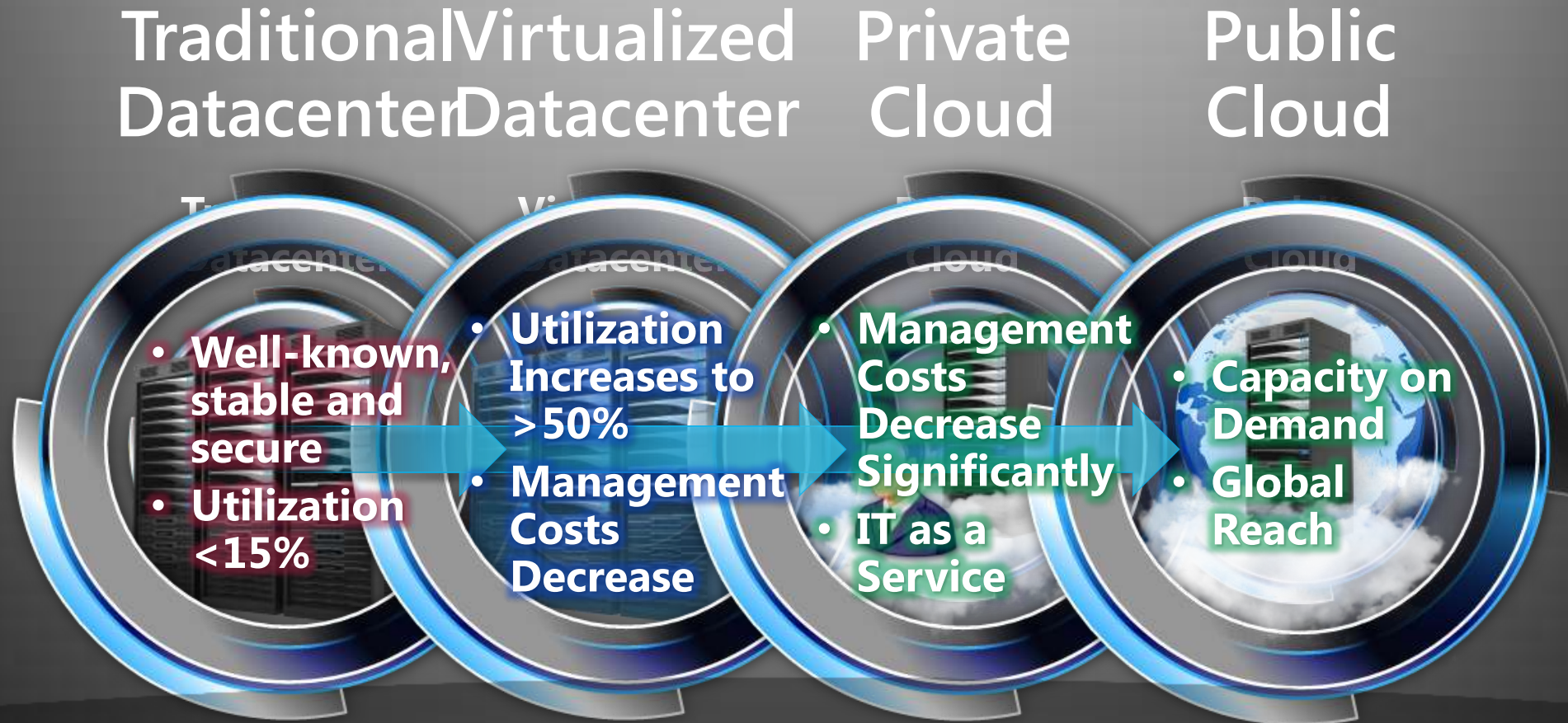
FUTURE AHEAD 3156-3175

*\* IDC Survey 2008*
*\*\* Tier1 Research on Managed Hosting*

Still early ...

# Adapting to Change: Datacenter Evolution

| Traditional Datacenter | Virtualized Datacenter | Private Cloud | Public Cloud |
|---|---|---|---|
| • **Well-known, stable and secure**<br>• **Utilization <15%** | • **Utilization Increases to >50%**<br>• **Management Costs Decrease** | • **Management Costs Decrease Significantly**<br>• **IT as a Service** | • **Capacity on Demand**<br>• **Global Reach** |

# Non-Cloud inefficiencies
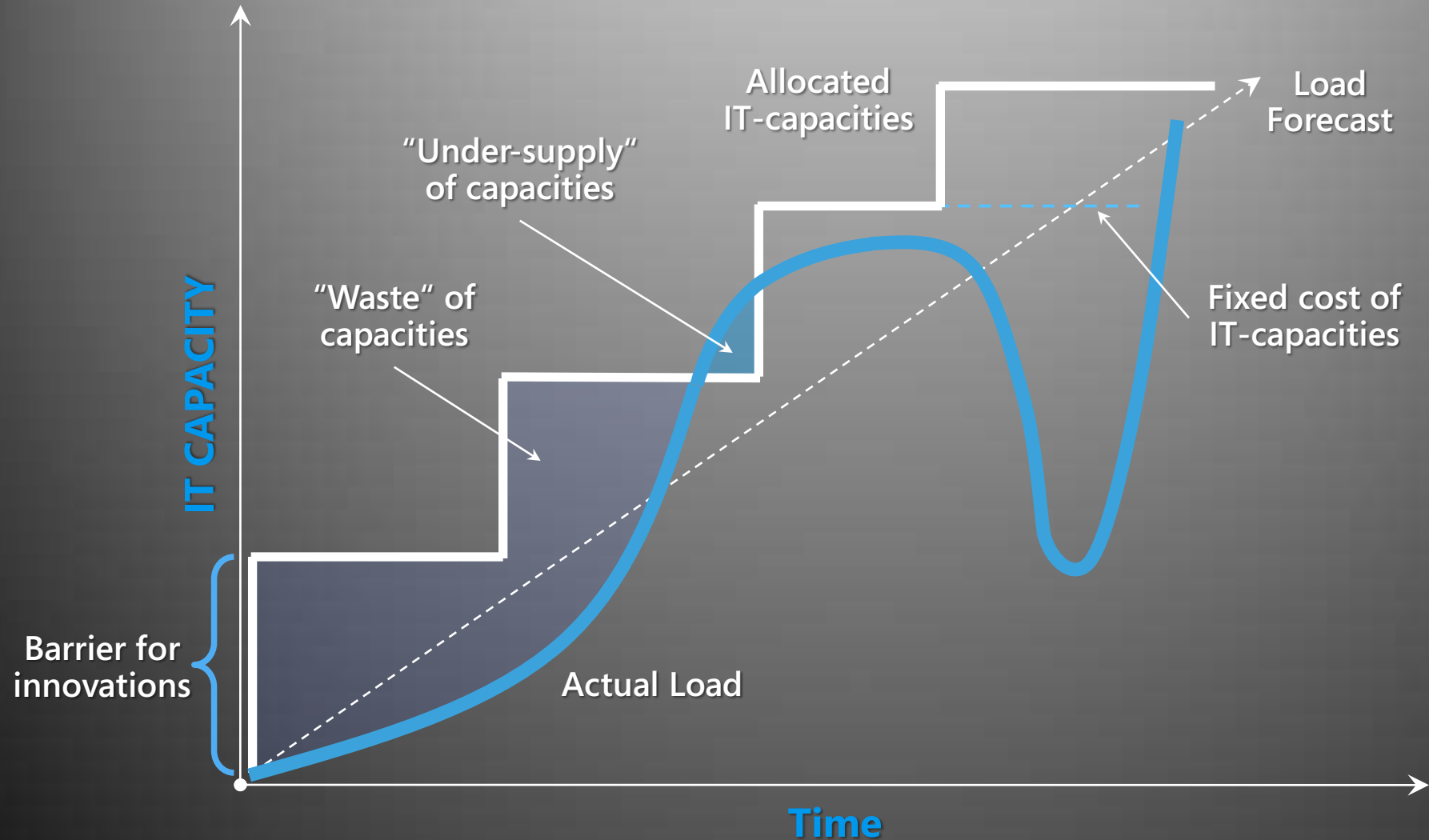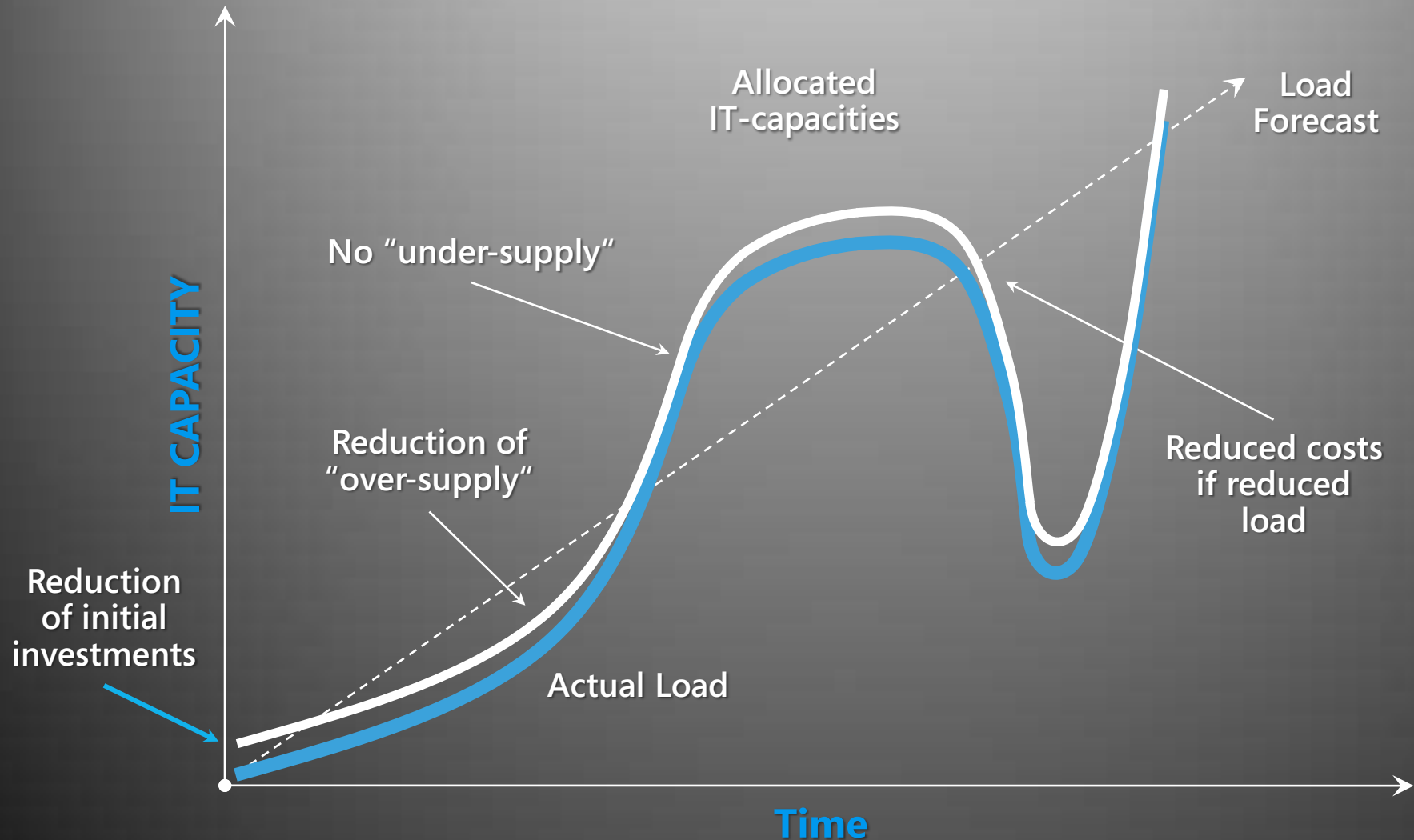
# The Cloud Computing Continuum
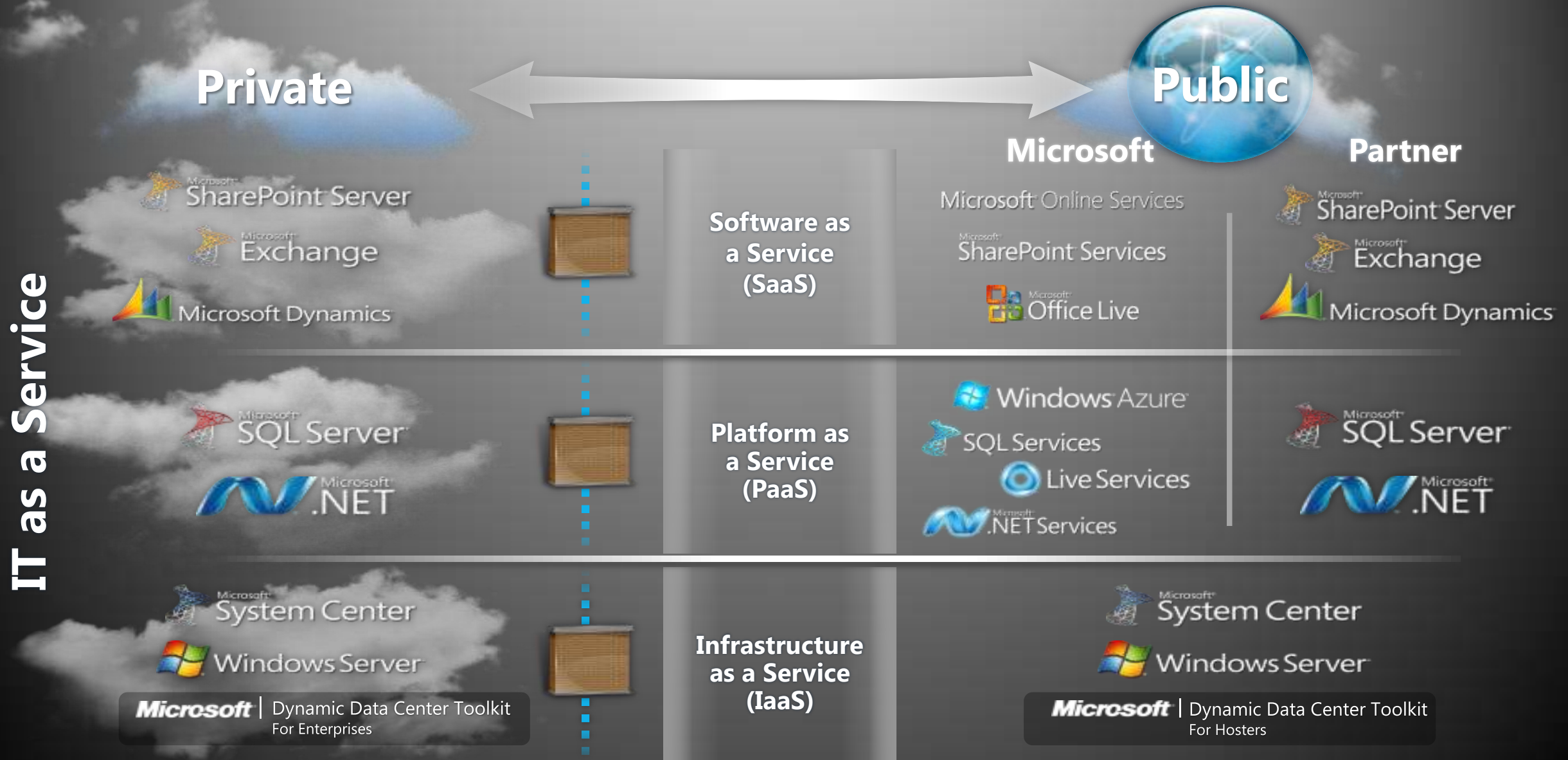
A high-level view
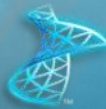
# Azure Services – Purchasing Models

## CONSUMPTION
*"Pay as you go and grow"*
**Available at PDC* launch**

- Low barrier to entry and flexibility
- Optimized for cloud elasticity

## SUBSCRIPTION
*"Value for a commitment"*
**Select offers at PDC***
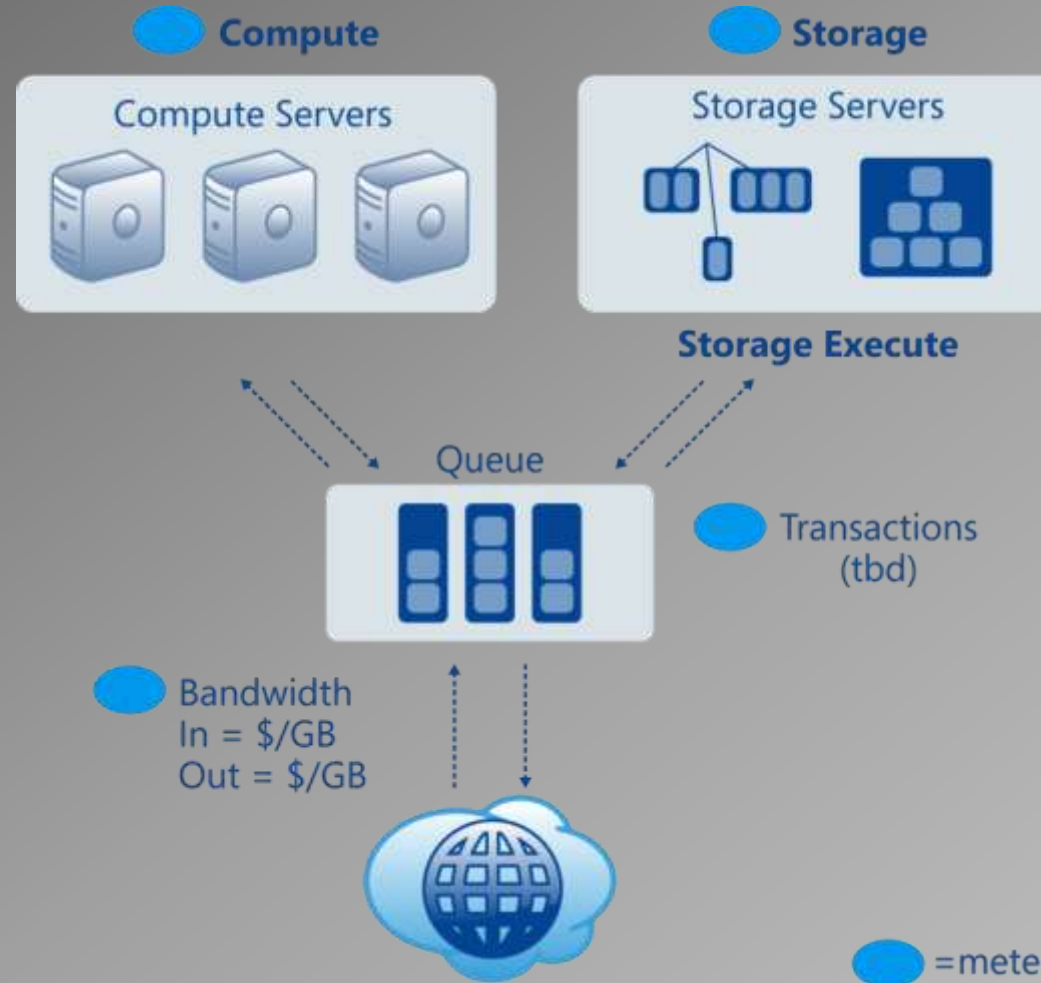
- Discounts for commitment
- Plans for payment predictability

## VOLUME LICENSING
*"Coordinated purchasing"*
**Planned for post PDC***

- Unified purchasing through EA
- Introduction to volume discounts

**Compute**

Compute Servers

**Storage**

Storage Servers

Storage Execute

Queue

Transactions (tbd)

Bandwidth
In = $/GB
Out = $/GB

⬤ =meter

KILOWATTHOURS

Metered usage

# Combining Private & Public Cloud

Windows Server 2008 Hyper-V

Windows Azure

| | **Managed Hosting** | |
|---|---|---|
| Provide managed services on top of your own private cloud | **Managed Hosting** | Offer integrated management of solutions across your private cloud and Azure |
| Offer access to shared and dedicated services through your control panel | **Mass Market Hosting** | Integrate your control panel with Windows Azure and resell access to Azure-hosted applications |
| Offer web and email delivered over your network | **Network Providers** | Offer innovative Azure services that connect data and devices over your network |

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Be the first

# Managed Hosting examples

## Disaster Recover

An ITIL compliance service where the customer backs up critical system data to SQL Azure. In emergencies systems are restored from Azure, backup to virtual servers at the Service Provider

**Customer**

**Hoster**

**Back up on-premise data**

**Azure**

**Fail over to hosted servers**
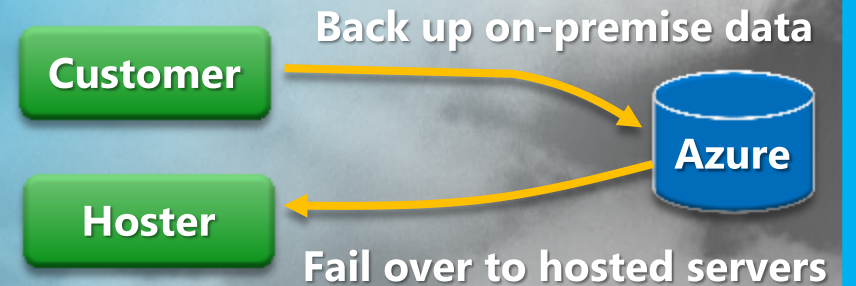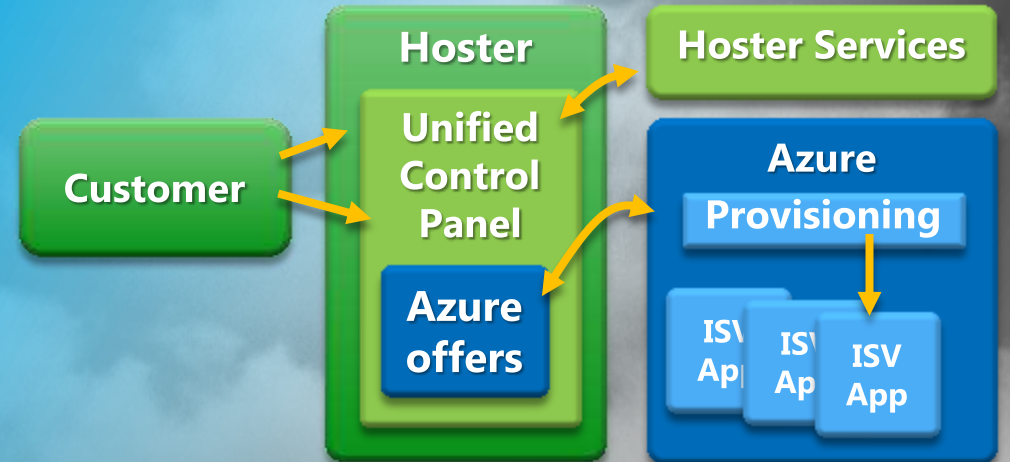
## "Burstable" server capacity

A hoster offers "burst hosting" – temporary development, test and data processing environments for high usage over short periods. By using Azure the customer pays only for the time and capacity used.

**Customer**

**Hoster**

Dedicated servers

Hoster servers

Burst servers
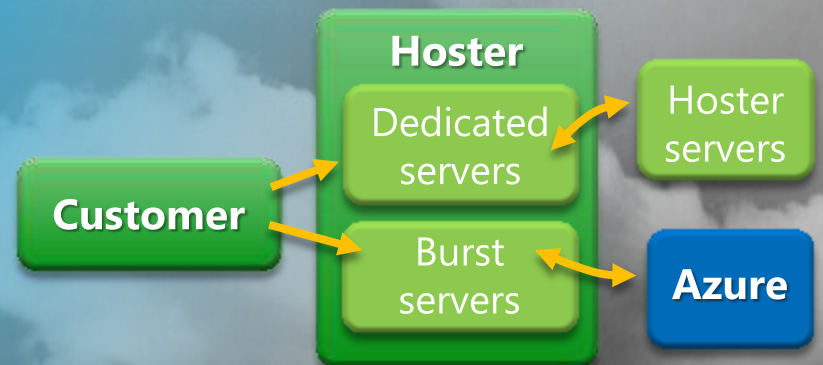
**Azure**

# Mass Market Hosting examples

**For Windows hosters:**

Integrate your control panel with Azure and resell access to SaaS applications running on Windows Azure

**Customer**

**Hoster**

**Unified Control Panel**

**Azure offers**

**Hoster Services**

**Azure Provisioning**

**ISV App**

**ISV App**

**ISV App**

**For Linux hosters:**

Integrate your control panel with Azure and offer Windows hosting without having to run Windows

**Customer**

**Hoster**

**Unified Control Panel**

**Hoster Linux servers**

ASP.NET, SQL, DotNetNuke, on Azure
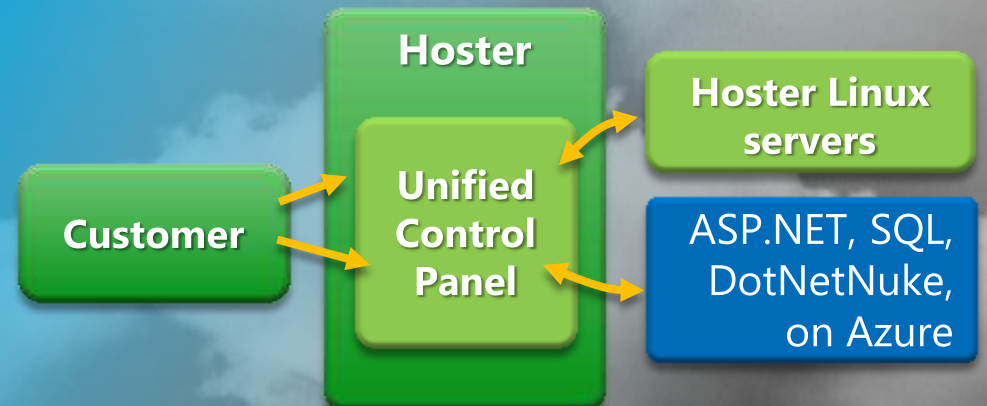
Bright future ahead

# In Summary

- We are still far from the time when <u>everything</u> goes in the Public cloud

- Private and Public Cloud <u>fedaration</u> will unleash a huge opportunity to win Enterprise IT

- Service Providers should invest in a <u>dynamic infrastructure</u> to optimize cost and create new offerings, use the Dynamic Data Center toolkit to get started