Embracing The Power Of Cloud for National Competitiveness

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EWBRACING WARNET TRANSITIONS

FUTURE 2011 & Beyond

NUI, Natural Language, HTML/ JavaScript, ARM, Single Platform



CLOUD Mid 2000s

Cloud Computing, Social Networks, Software + Services



INTERNET Mid '90s

Browsers, Email, eCommerce, Hosting, Wi-Fi, Web 2.0



Distributed Computing, Knowledge Workers



PC & APPS Early '80s

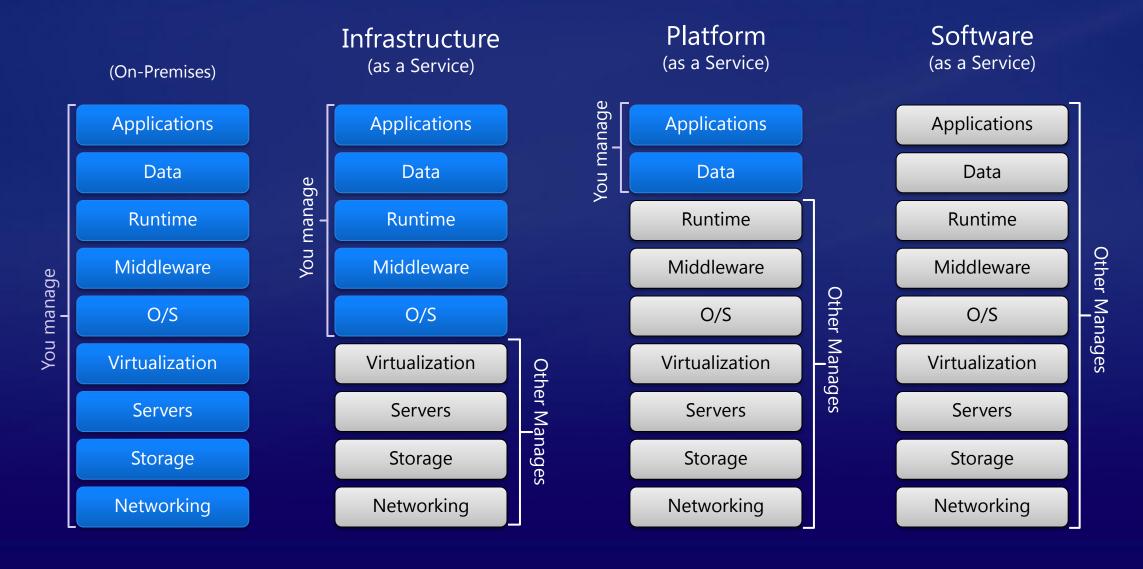
Word Processor, Spreadsheets, DOS, GUI, Windows



Cloud Computing Defined

- Providing IT resources, as a service, in a dynamic and scalable manner over a network
- Five essential characteristics of the Cloud
 - 1. On-demand self-service
 - 2. Broad network access
 - 3. Resource pooling
 - 4. Rapid elasticity
 - 5. Measured service

Types of Cloud Services Services taxonomy





And the term "cloud computing"? Introduced to IT around 2006. So we've been building innovative, scalable, secure cloud services for 15 years - they just didn't call it "cloud" when we started.

Why All the Fuss About the Cloud?

New Economics

- Pay for what you use
- Lower and predictable costs
- Shift from capex to opex
- Accelerate speed to value

Simplicity

- No patching or maintenance
- Faster deployment
- Robust multi-layered security
- Reliability and fault-tolerance

Agility and Innovation

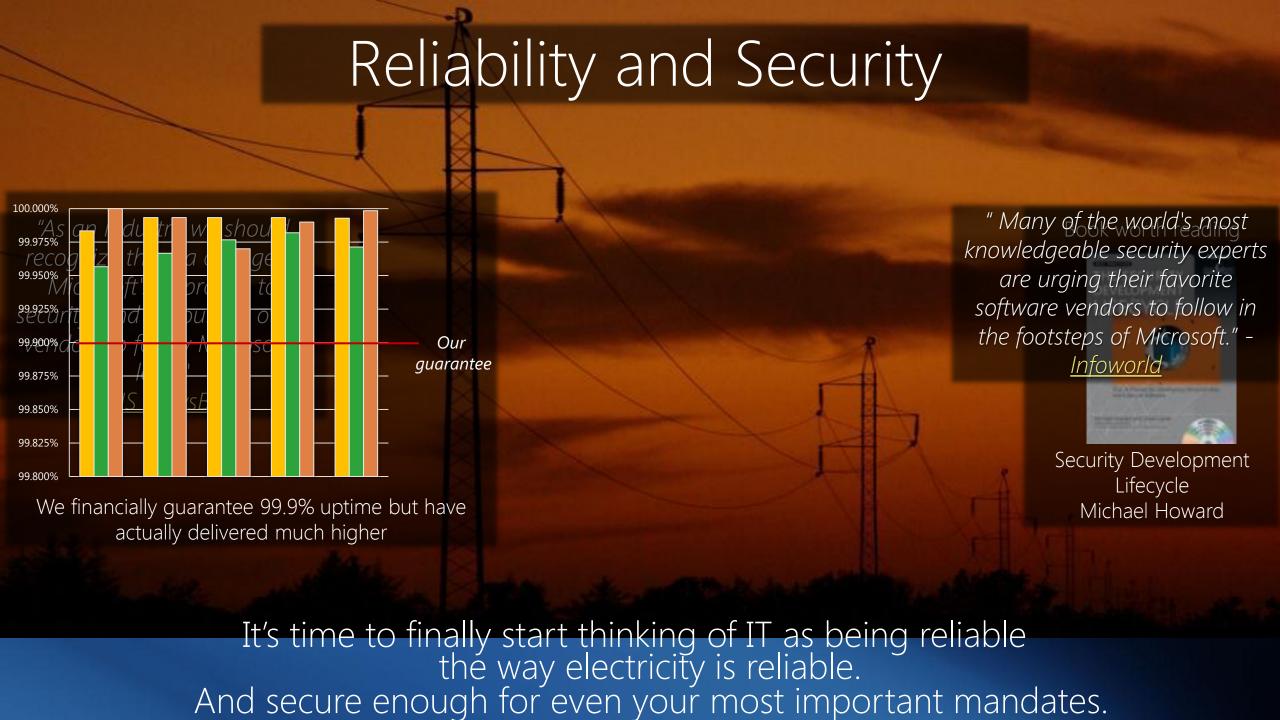
- Latest software for users
- Internet collaboration
- New apps and services

"By 2012, 80% of Fortune 1000 enterprises will be using some cloud computing services, 20% of businesses will own no IT assets."

Gartner

"The bottom line: Early adopters are finding serious benefits, meaning that cloud computing is real and warrants your scrutiny as a new set of platforms for business applications."





Cost savings = economies of scale + orders of magnitude...

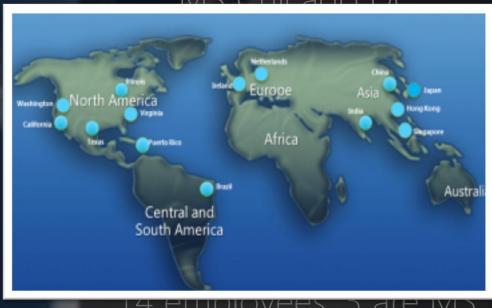
"With Online Services, we're able to reduce our IT operational costs by (Proughly 30% of what we're spending) now"

- Ingo Elfering, VP of IT Strategy, Industiglaxosmithkline: 2.0

Gen 3 MS DC: 1.2

Gen 4 MS DC: 1.0

Datacenter Locations



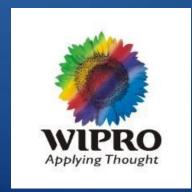
14 employees, 5 ale ivis

Pooling resources and reducing redundancy makes financial sense. But at Internet scale, it makes even MORE sense. Because the number of users justifies getting into the datacenter R&D business.

Many Organizations in India Already On Cloud With MS



















GODREJ INDUSTRIES









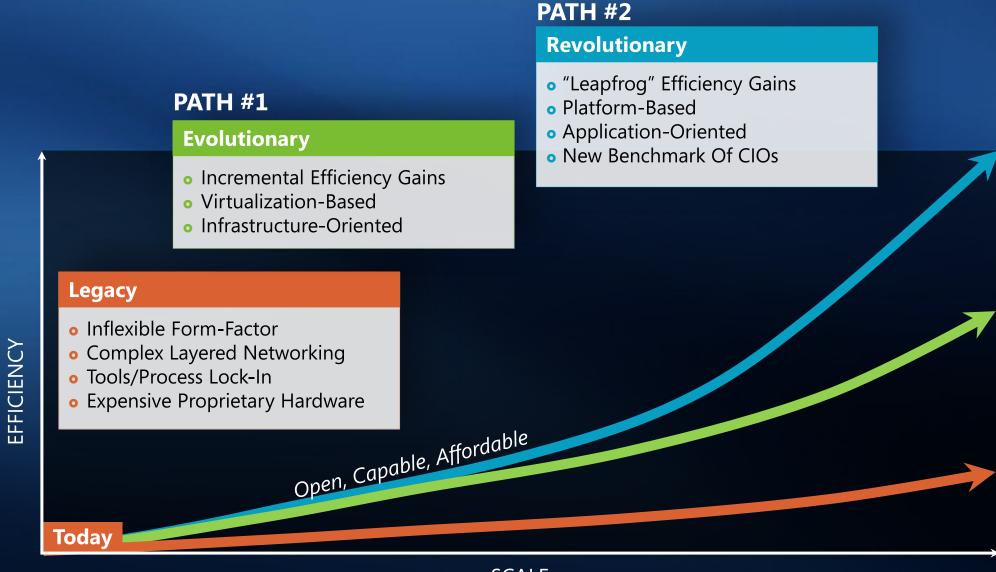




Many Organizations Are Already On Both Paths Today



For Your IT Infrastructure – There Are Two Paths To The Future!



Microsoft is Invested in the Cloud

S aa

Paa

Microsoft[®] Online Services

- Business Productivity Online Suite
- Exchange Online
- SharePoint Online
- · Office Communications Online
- Office Live Meeting
- Exchange Hosted Services
- Dvnamics CRM Online
- System Center Online Desktop Manager



Online companions to:

→ Windows

Update

🥰 Windows Intune

- Word
- Excel
- PowerPoint
- OneNote



Outlook Live

Live@edu



Microsoft Office Live

Microsoft Pinpoint

- Registration & Search
- Companies
- Applications
- Professional Services

Tellme.

- VXML Platform
- Speech Recognition

Windows Live

- Hotmail
- Messenger
- Photo Gallery WL Spaces
- SkyDrive
- Profile
- Photos Mesh (beta)

- Mail
- Calendar Groups
- Toolbar Family Safety
- Writer
- Movie Maker
- LiveID

3rd Party Cloud Services

Windows Azure **AppFabric**

Compute Service

· Web Role

Worker Role

- AppFabric Service
- Connectivity
- Access Control



Windows Azure

Storage Service

Blobs

Tables

Oueues

- RDBMS Service Relational Data
- Management

Fabric Controller

• Agent 1

• Agent 2

Agent n



Virtual Network Overlay



 Application Lifecycle Management

Windows Azure Marketplace

- Data Subscription Service
- Discover, Purchase
- Management



- Open Source SDK
- Interactive data access
- API data access



- User Data APIs
- WL Messenger SDKs
- WL SDK
- Microsoft Advertising APIs
- Silverlight Streaming SDK
- WL Admin Center SDK
- WL Spaces SDK
- WL Client Extensibility APIs

3rd Party Cloud Services







Windows Server[®]



Windows Server Hyper-V[™]



Windows Server **AppFabric**



System Center



System Center
Virtual Machine Manager









Windows Server 2008

Microsoft^{*}

Dynamic Data Center Toolkit For Hosters

Microsoft^{*}

Dynamic Infrastructure Toolkit For System Center (Beta)



The Cloud Changes The Future Of Computing for Users

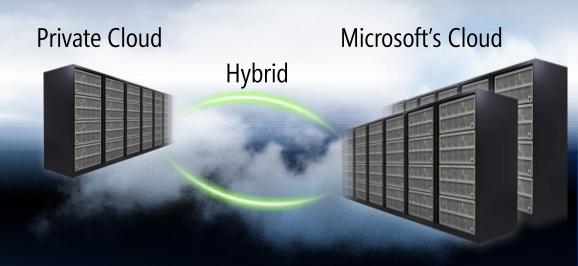
Best Productivity Experience Across PC, Phone, And Browser Microsoft Delivers
The Cloud On Your Terms











Unified Communications





Business Intelligence





Enterprise Content Management



Collaboration



Enterprise Search



