

Cloud Computing with Windows Azure

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Agenda

About Active Web Solutions

Cloud Computing

Microsoft Windows Azure

Case Studies

Getting Started

Q&A

Active Web Solutions

- Leading edge software development:
 - Windows Azure specialists
 - Web application development
 - RNLI sea safety project
 - Windows Phone 7
- Offices in Ipswich & Prague
- www.aws.net



Windows Azure

intextra.web



Lifeboats



2010 PARTNER OF THE YEAR
Windows Azure Platform
Finalist

Microsoft
GOLD CERTIFIED
Partner

National
Business
Regional Awards
2009
Winner

Awards
SPONSORED BY

WINNER
BCS
IT
PROFESSIONAL
AWARDS
ComputerWeekly



Element79

Element79 required a design that complimented a company rebrand, focusing on strategic marketing in the world of motorsport sponsorship.



intextra.web content management system creates stunning, dynamic and customer focused websites that help to improve Search Engine rankings and Conversion Rates. A unique blend of advanced features and functionality, combined with unrivalled usability ensures that intextra.web remains ahead of the competition.

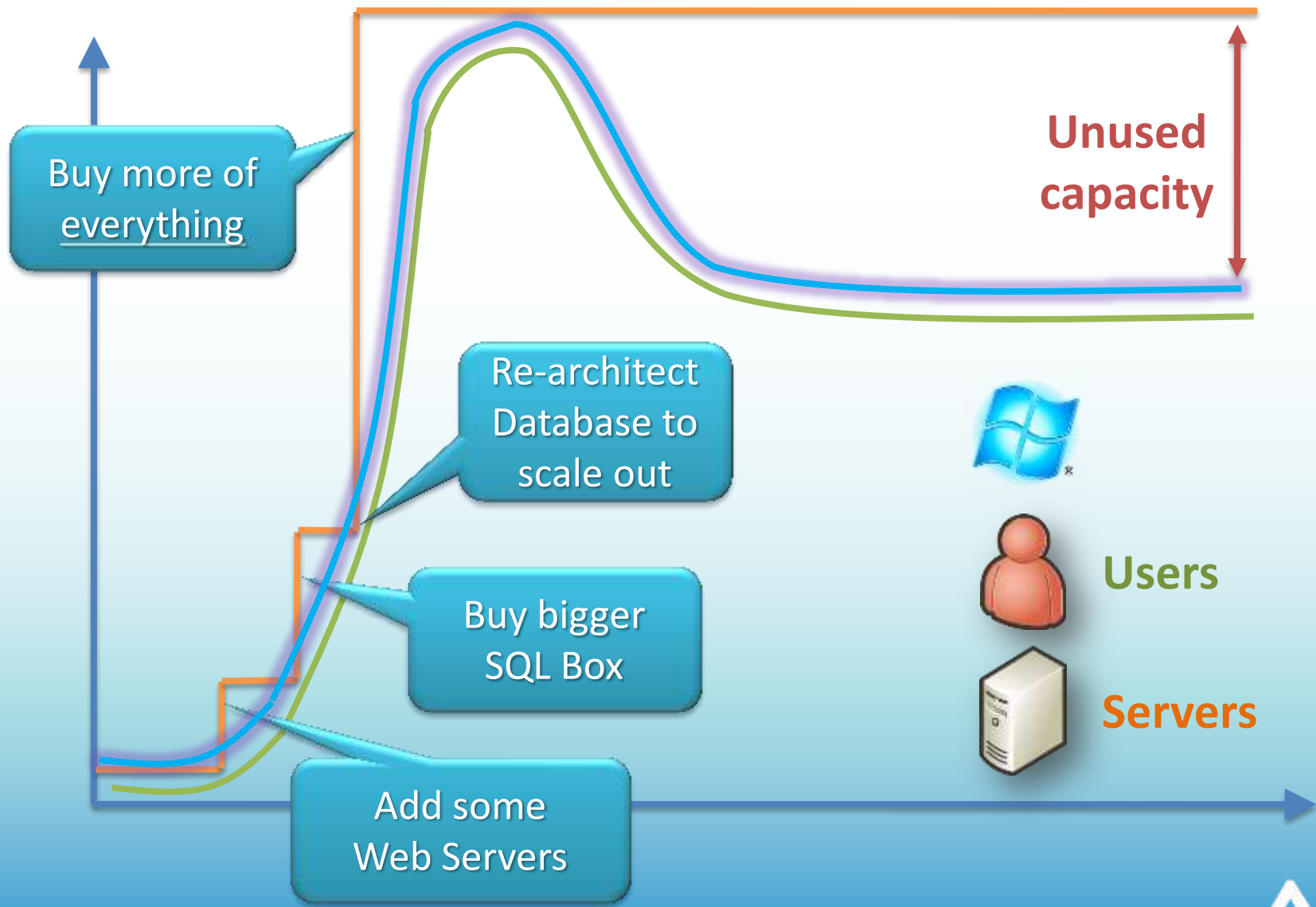
CLOUD COMPUTING



We no longer need windmills for power, so why do we need rooms full of servers for computing?

Photo Courtesy Franklin Hunting, Flickr

The Scale up, Scale out Problem



Buy more of everything

Re-architect Database to scale out

Buy bigger SQL Box

Add some Web Servers



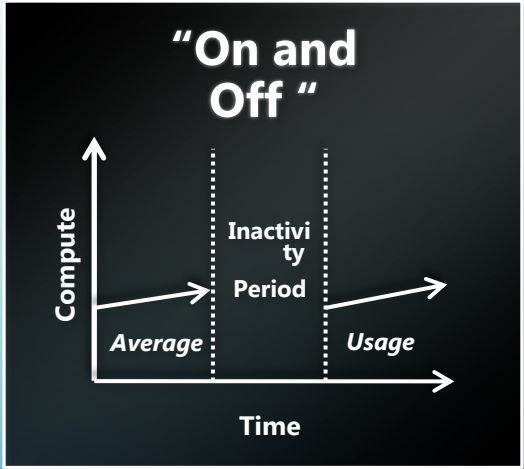
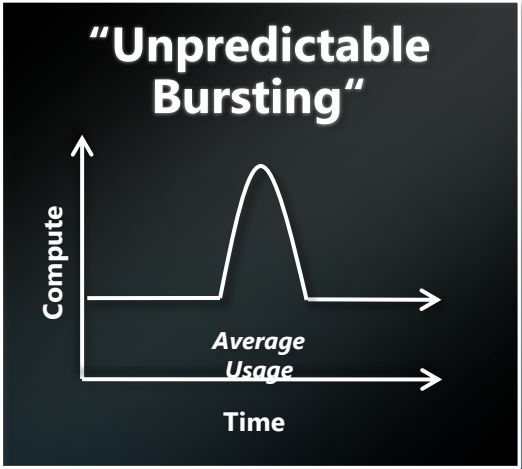
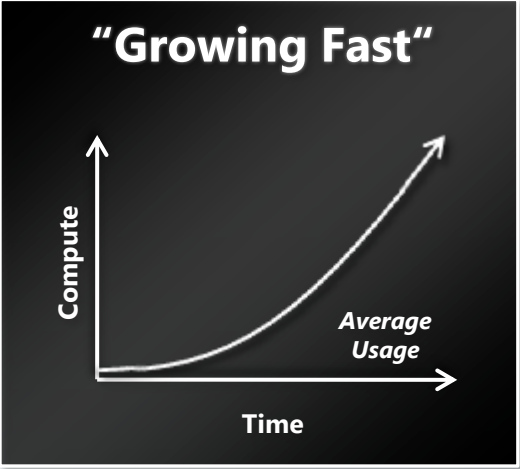
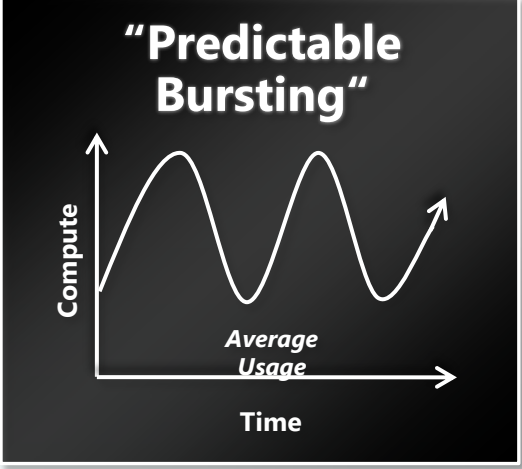
Users

Servers

Cloud Computing in a Nutshell

- Compute and storage provided via multiple, large-scale datacentres
- You upload your apps and data via the Internet
- You access resources “on demand”
- You only pay for what you use
- It’s quick and easy to scale up or scale down
- You save money and don’t have to run your own infrastructure

Scenarios for cloud computing



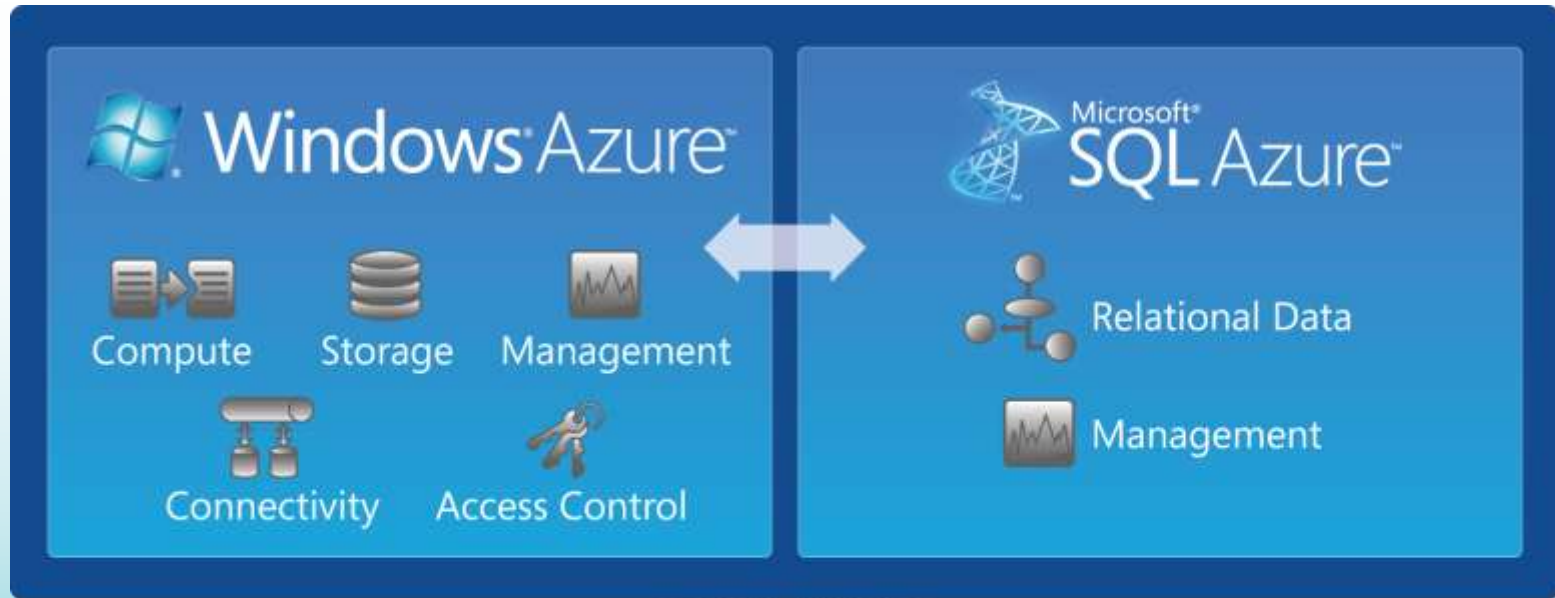
Software as a Service

- Salesforce.com
- Google Apps
- BaseCamp
- Microsoft Exchange Online
- Office 365

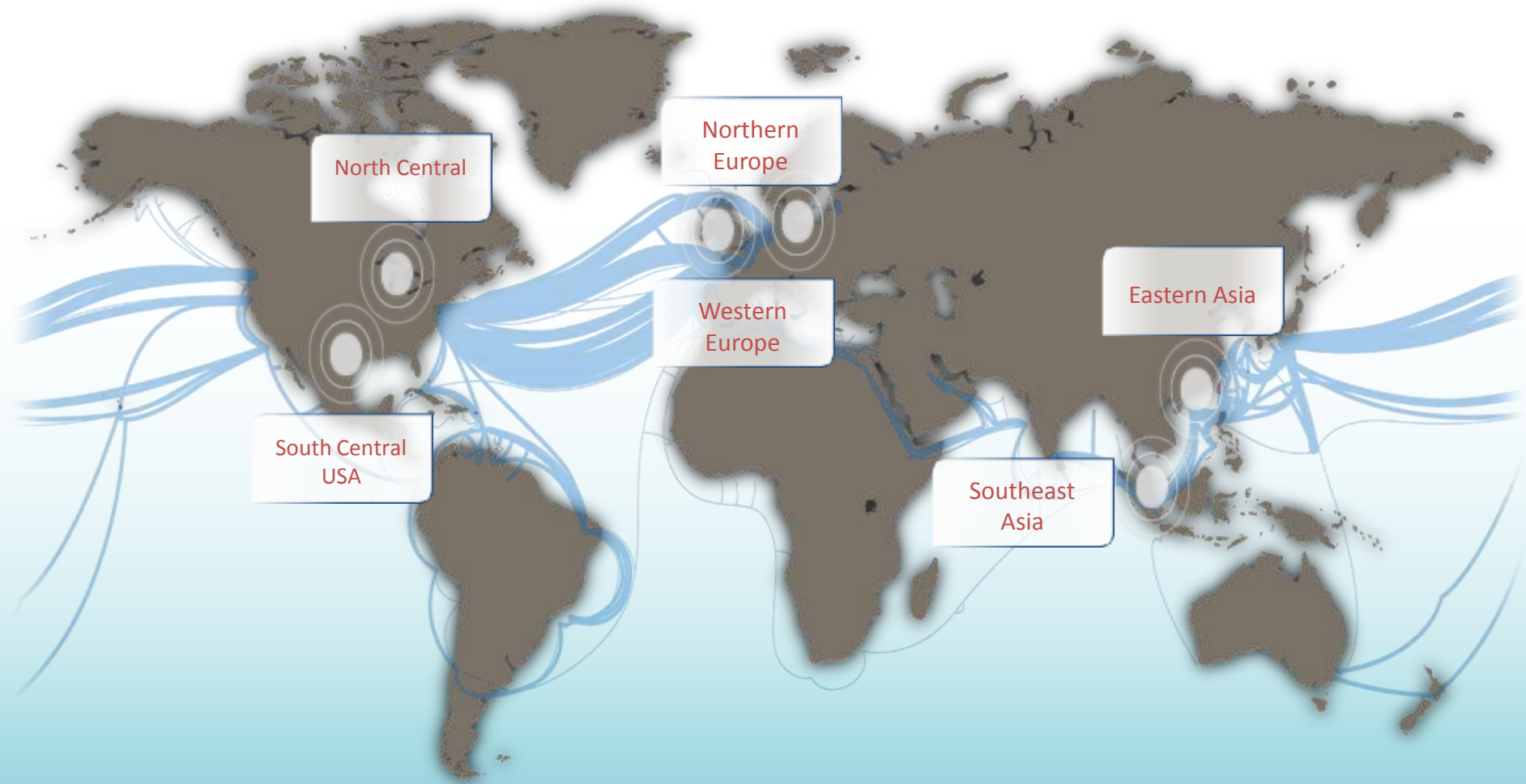
.. often per user per month billing

Introducing Windows Azure

Windows Azure is an internet-scale cloud services platform hosted in Microsoft data centers around the world, proving a simple, reliable and powerful platform for the creation of web applications and services.



Windows Azure Data Centres



Dublin Data Centre

- First Mega Datacentre built outside the US, on-line on July 2009
 - Cost \$500 million, 303+sq ft facility and growing
 - EU Datacenter Best Practice Award Winner
 - Stand-alone Server Pods
 - Environmentally Sustainable
 - Free Air-Cooling via Air-Side Economization
 - 50% less energy use vs. traditional facilities
 - 1 % water use vs. traditional facilities
 - 1.25 PUE
 - 5.4 MegaWatts today, 22.2 MW for future use
 - ISO 27001:2005 Accreditation
 - SAS 70 Type I and II Attestations





Developing Applications for Windows Azure

- ✓ No up-front costs for massively scalable computing infrastructure
- ✓ Pay for what you use, when you use it
- ✓ Eliminate utilization concerns
- ✓ Add compute power as business grows or demand spikes
- ✓ No ongoing depreciation and maintenance costs



Migrate Legacy Applications to Windows Azure

- ✓ Maintain existing Line of Business applications
- ✓ Maximize existing investment and skill set
- ✓ Improve availability and performance of existing applications
- ✓ Avoid continual hardware upgrades

Deployment Options

Store Data in
the Cloud

Extend Applications
to the Cloud

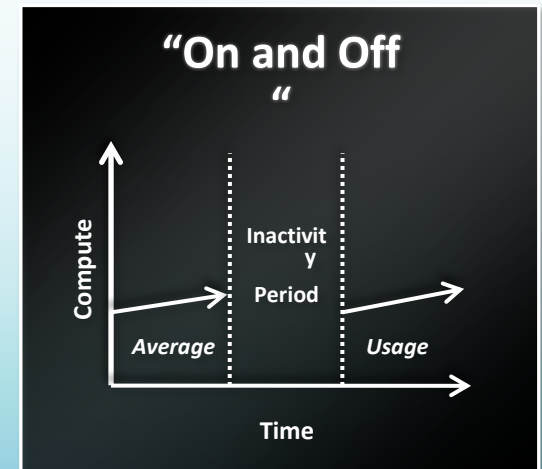
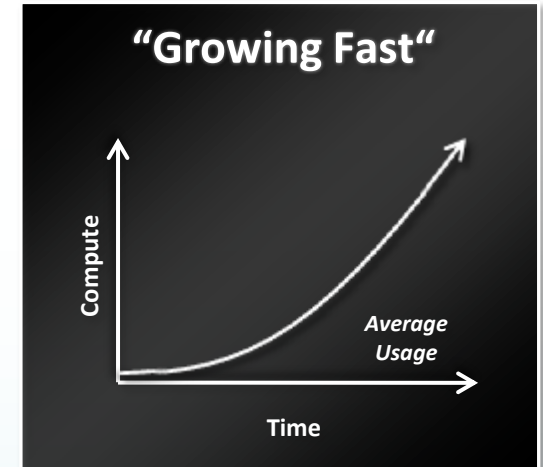
Move Applications
to the Cloud

Create New
Cloud Services

Create New Solutions
by Combining
Cloud Services

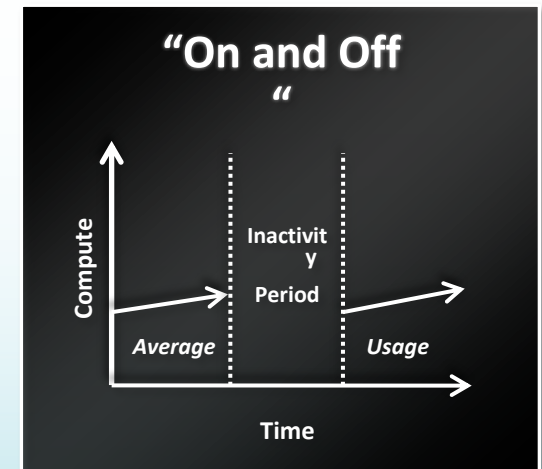
Financial Services

- Banking software in the cloud
 - Faster to bring on new bank branches
 - Micro finance and community banks
- E-commerce
- Value at Risk Calculations
 - High compute for short periods



Bioinformatics

- Cloud platform for Pharmas
- Secure storage for annotated DNA sequences
- BLAST, PlasMapper on demand
- Java and Perl support
- Cost effective research with reduced capital expenditure



Global Alerting Platform

GAP is a global hub for satellite messaging devices providing location tracking, emergency alerting, message routing and storage.



Travel Advisor

- Data from the Foreign and Commonwealth Office exposed via Windows Azure DataMarket
- Consumed as OData on the phone.
- Up to date travel advice anywhere in the world ..



Conclusions

- Cloud computing is here and it's changing the economics of Information Technology
- Consider Software as a Service
- Think about the impacts and opportunities for your own business

Active Web Solutions

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Any questions?