

A look ahead...



Cloud Computing Technology

Microsoft®

Evangelos
Hadjichristodoulou

Consumer Cloud Services



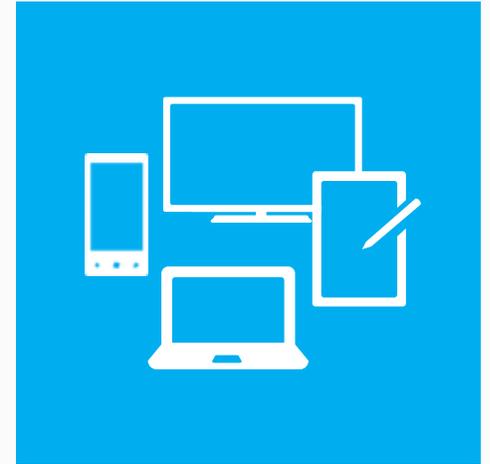
The Modern User is Enabled

“Let me use my phone, my PC, and my favorite tools”

write applications to span device types

secure the data, not the device

provide guidelines for social networks



The Modern User is Mobile

“Let me work
where I want,
when I want”

support virtual presence

provide safe connections
to corporate resources

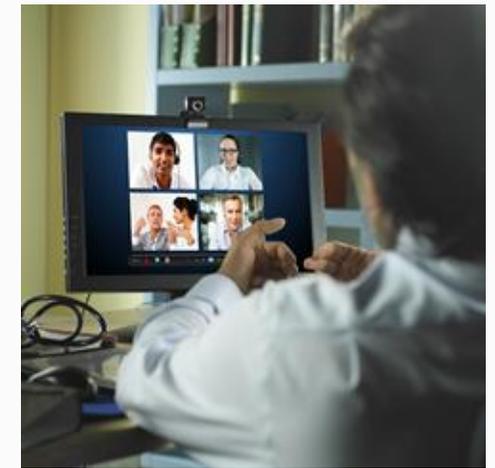
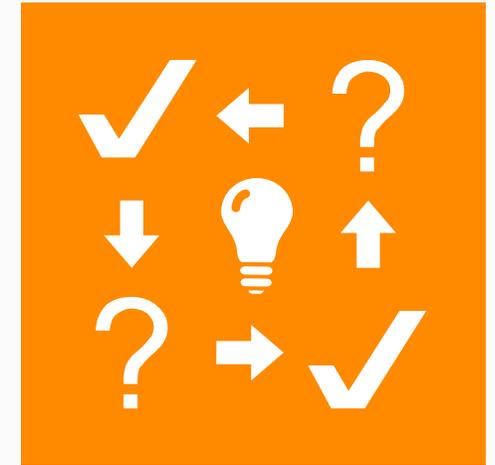
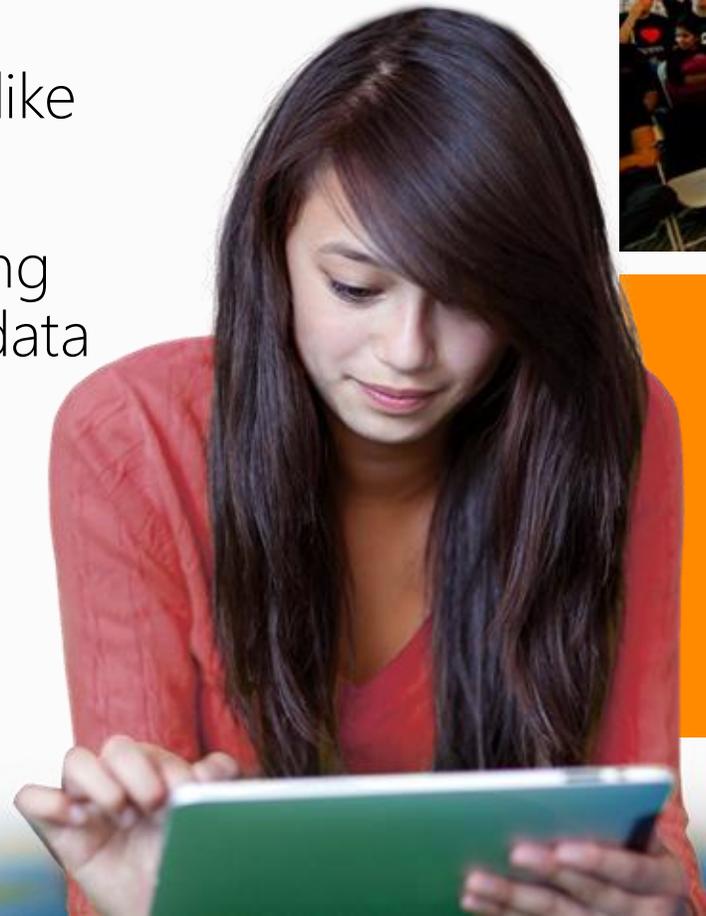


The Modern User is Demanding

“Give me more!”

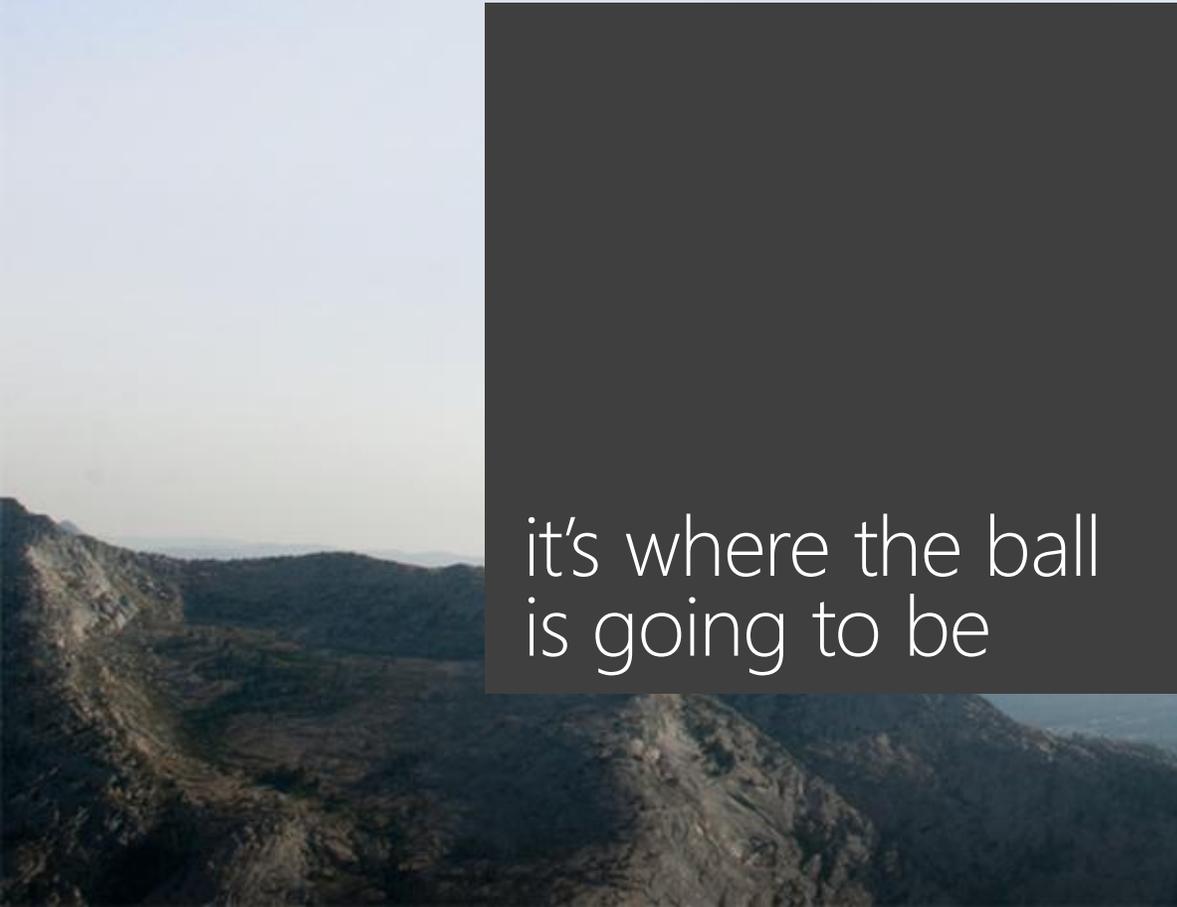
deliver compelling,
always-on, consumer-like
experiences

provide tools for getting
answers, not just raw data



Aim for the Cloud

it's where the ball
is going to be



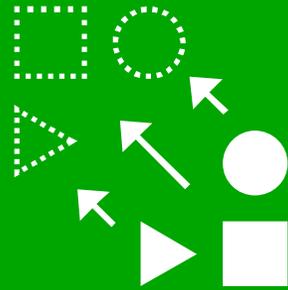
Cloud Drivers



Cloud Considerations



Security



Compliance



Compatibility

Deliver Optimize Classify Prioritize Cloud

Public







Partner






Private










The Microsoft Difference

Private Hybrid support & the "Commons"
 Best experience with most-used apps
 Total cost of ownership

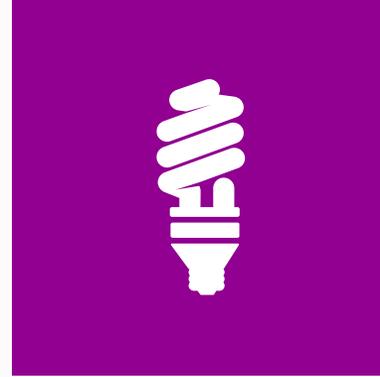
Public Hybrid support & the "Commons"
 Best experience with most-used apps
 Higher-level services

Microsoft Cloud Datacenters



Investments

- ▶ \$2.3B+ in cloud infrastructure
- ▶ 200+ services, delivered 24x7
- ▶ Geo-distributed datacenters
- ▶ Rapid modular model
- ▶ 30,000+ engineers involved in cloud-based activities
- ▶ 2,000+ people in cloud infrastructure engineering & operations



Operational Excellence

- ▶ Federated operations centers 24x7
- ▶ Standardized cost reporting
- ▶ Secure, compliant infrastructure
- ▶ FISMA certified, SAS 70 & ISO 27001 compliant
- ▶ Carbon footprint reduction
- ▶ 99.9% uptime, financially-backed SLAs

Where is the Cloud?



Datacenters Evolution

Datacenter Colocation
Generation 1



2005

Server

Capacity
~2 PUE

San Antonio & Quincy
Generation 2



2006

Rack

Density and Deployment
1.4 – 1.6 PUE

Chicago & Dublin
Generation 3

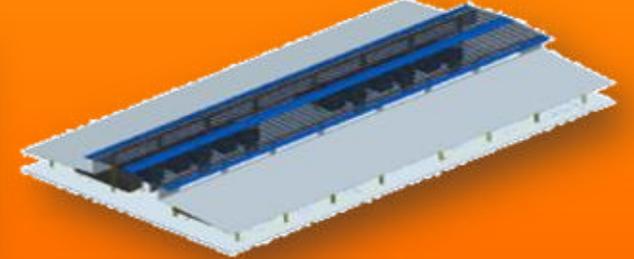


2008

Containers & Pods

Scalability and
Sustainability
1.2-1.5 PUE

Modular Datacenter
Generation 4



2009

2010+

ITPAC

Faster Time to Market
Reduced Carbon
1.05-1.15 PUE

DEPLOYMENT SCALE UNIT

EFFICIENT RESOURCE USAGE



Microsoft[®]