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## **Virtual Client Services**

**The New Reality in Virtual Computing: Delivering Desktops & Applications as a Cloud Service**

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# Infrastructure Needs to Become More Dynamic ...

## *Business and IT Workloads*



**Mobility  
Infrastructure**



**Facilities  
Infrastructure**



**Production  
Infrastructure**



**Technology  
Infrastructure**



**Communications  
Infrastructure**



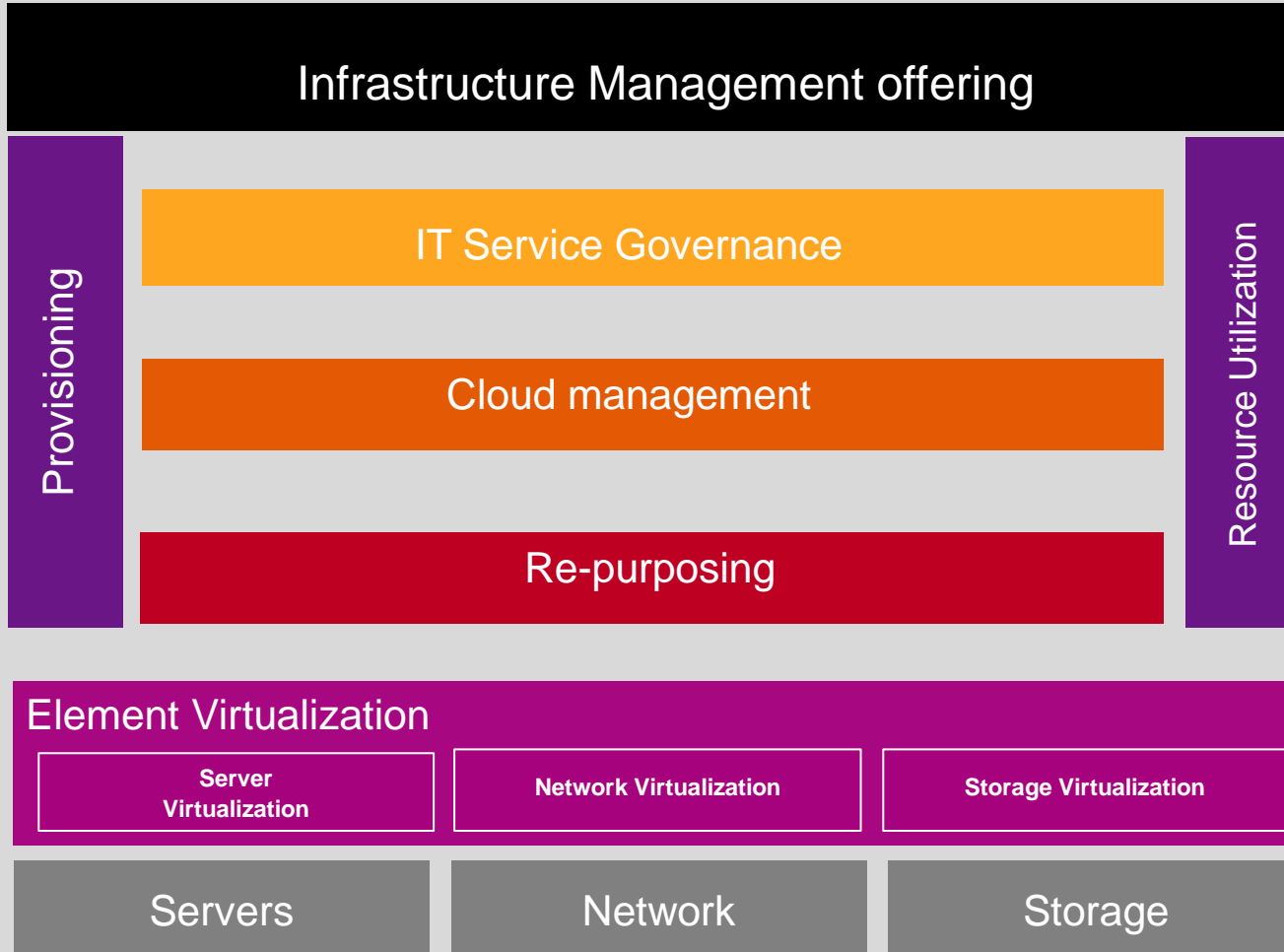
... to free budget for new investment and speed deployment of new capabilities.

# The Change Is Coming Fast

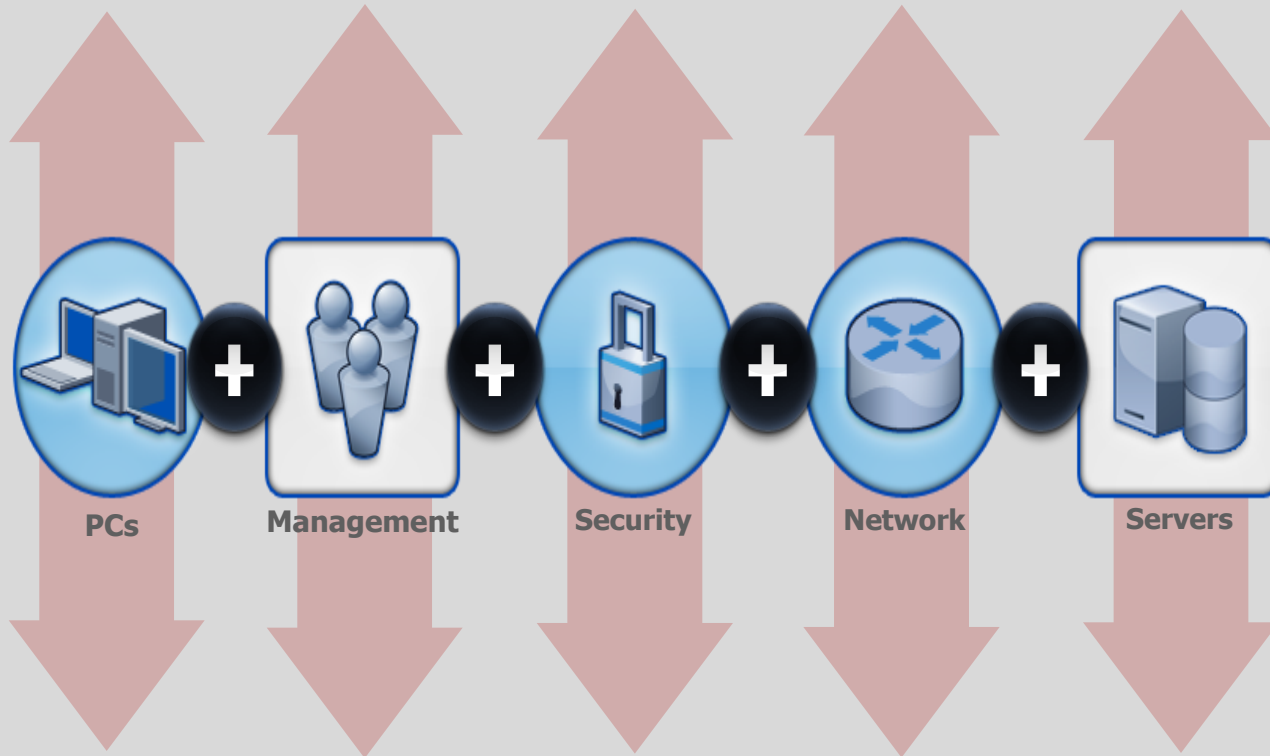
- Private & Hybrid clouds & Public clouds transforming how we think about IT
- As a service
- Considerable impact to businesses
- Exploit new economics with confidence
- Clear and logical pathway
- Preserve existing investment in applications and information
- Each step delivers immediate value, and builds for the next



# Uni Systems Data Center Transformation Offering



# Conventional Approach



# New CIO Challenges

## Consumerization

“I want to use my iPad!”

## Distributed Computing

“Why don’t my old apps work?”



## Cloud Services

“I want *everything* in the cloud.”

## Standardization

“I want to save 5% on PCs!”

# Consumerization



# Drivers for Desktop & App Virtualization

## The Evolving Workplace



Bring Your Own Device

Security



Mobile Workforce

Windows 7 Migration



Branch Office and Mergers & Acquisition

Data Intensive



Reducing IT Operations Costs vs. Increasing Resources to Drive Business Innovations

Expected to Grow to 70 Million Seats in Next Few Years

2/3 of Enterprises Are Deploying Virtual Desktops

Actual Penetration Only Reached 3% in 2011



A hand holding a wooden mallet over an open hand. The background is a blue sky with white clouds. The mallet is positioned as if about to strike the open hand.

**PC Era**

**Cloud Era**

# Client Virtualization Delivery Models

## Device-centric

- Restrict devices and locations
- Manage complex, distributed desktops



Distributed Management

## People-centric

- Enable virtual work style
- Simplify security and compliance
- Lower cost of desktop ops
- Simplify desktop & app management
- Deliver usage-based services
- Simplify IT support with self-service



Centrally Delivered



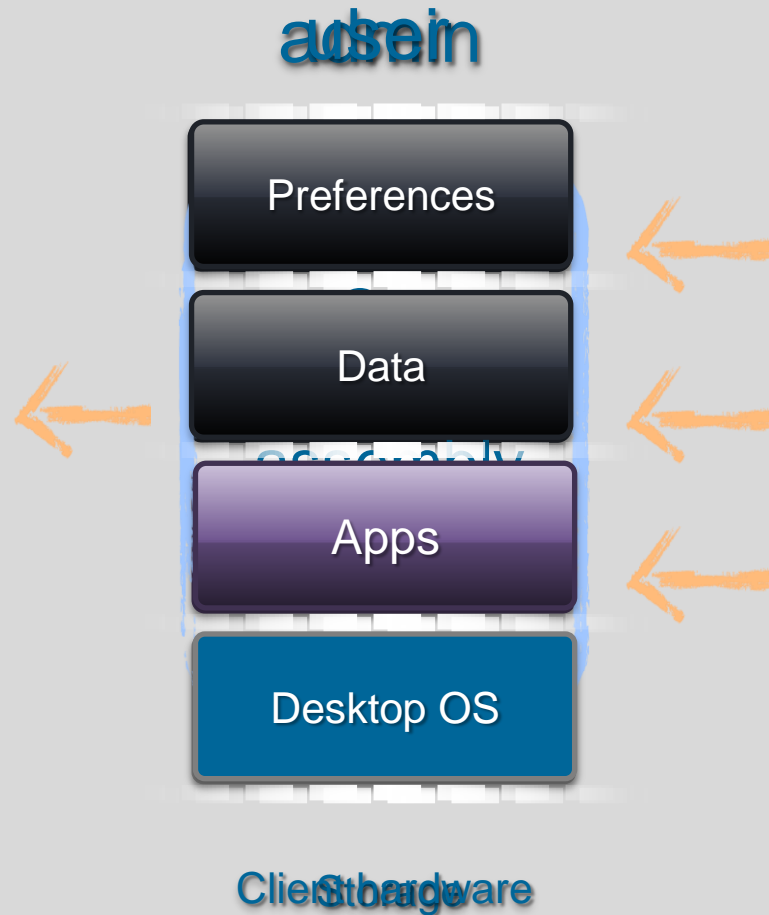
Optimally Managed



Transformed Service

# Desktop Virtualization

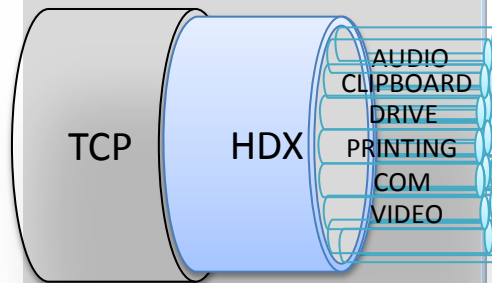
Separate the layers of the desktop experience



# Heavy Lifting Kept in the Data Center



My Device



Data Center

# Virtual Client Services Private Cloud

Access  
Devices



## Virtual Client Services (VCS)

*Integrated Private & Public Cloud Desktop Apps:*

- Identity Management & User Personalisation
- File Storage & Printing
- App-Store, App & Desktop Presentation
- Commercial Terms & Charging
- Reporting

Virtual  
Desktop &  
Applications  
Private Cloud

Internet  
Secure  
Access

Cloud  
Services

SaaS

PaaS

IaaS

# Large Market Problem



## Performance

- different networks
- support of rich media
- data-intensive applications

## Complex Inflexible Costly

- maintain
- manage
- secure

## Data is outside of the corporate network

- different devices
- compliance regulations
- security concerns

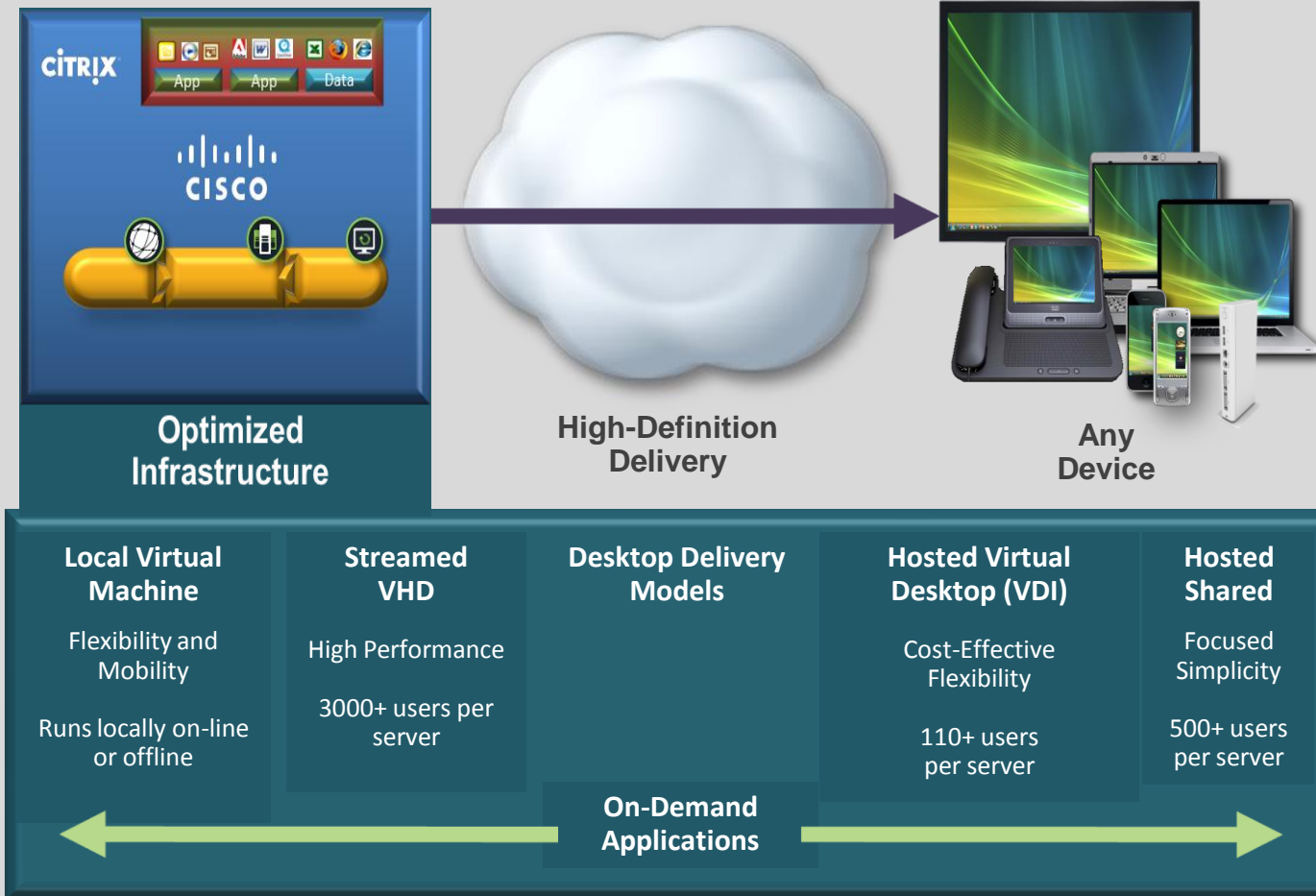
## Proliferation of devices



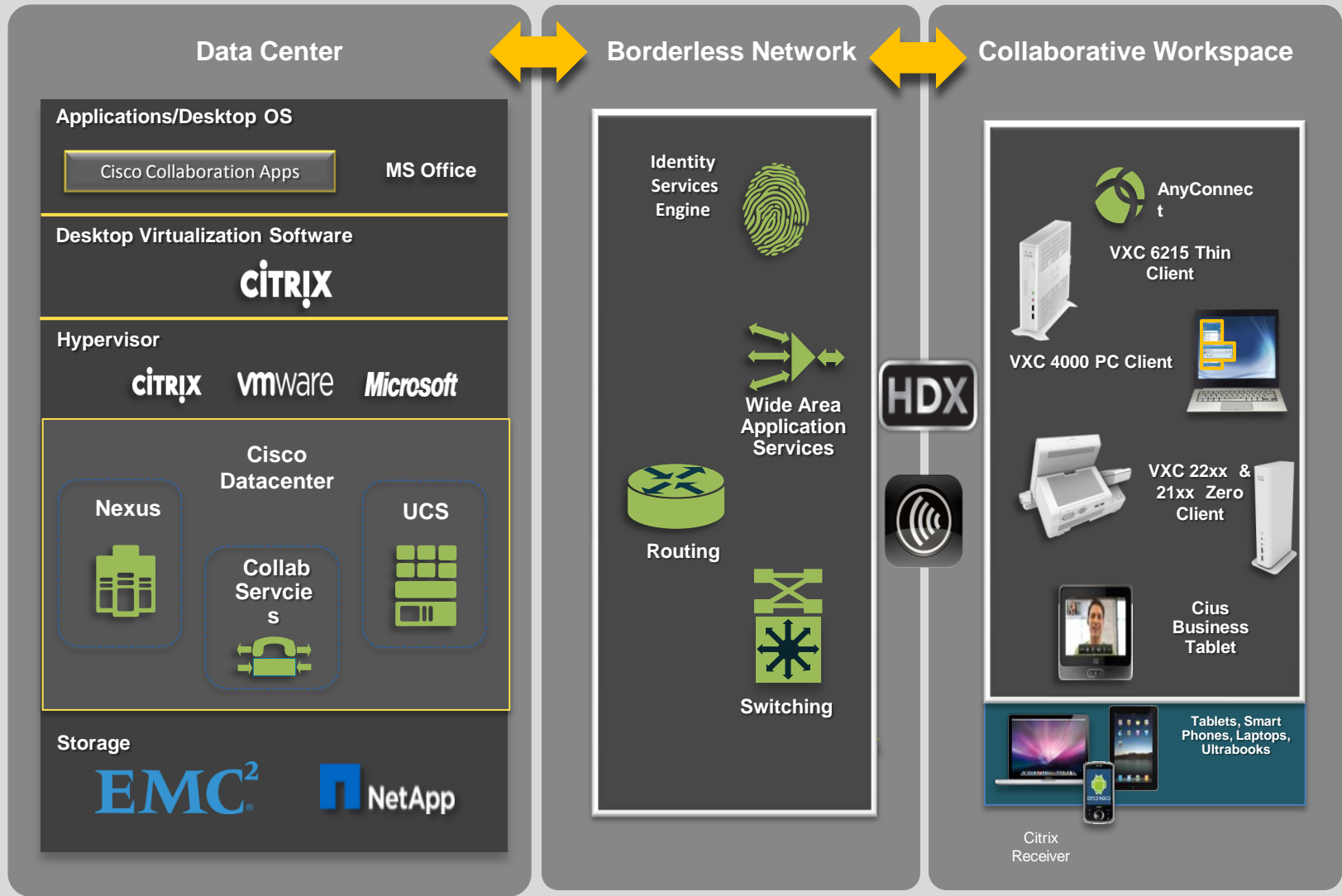
## Existing IT infrastructures

- not optimized for desktop virtualization
- limited performance
- low scalability

# FlexCast, a Powerful Key Differentiator



# Unified Workspace Platform



Deploy Once, Access Anywhere, On Any Device

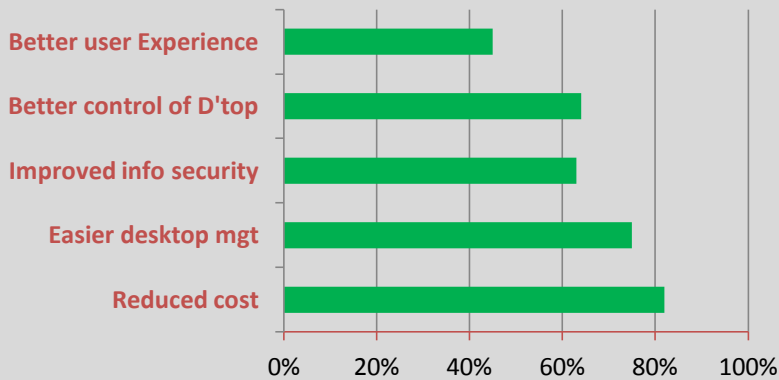


# Desktop & App Virtualisation CIO challenge

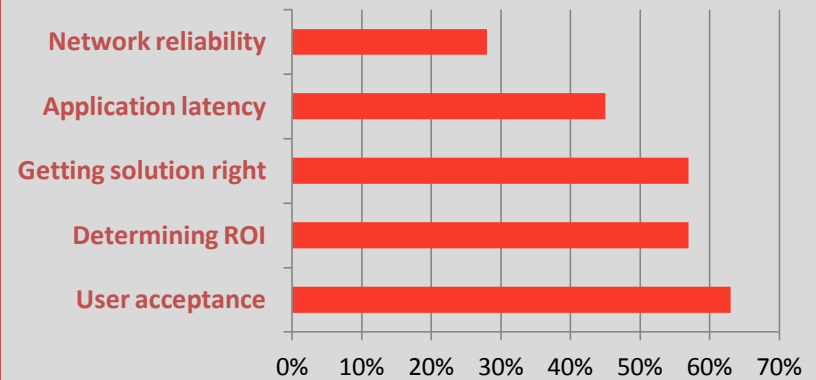
Benefits well understood, yet...

**CIO challenge is about how to make the business case and keep the users onside**

## Expected benefits



## Concerns / blockers



Source: Gartner

**Our approach delivers a technical solution that provides:**

- Wider user adoption and faster deployment
- Improved user experience
- Quicker Return on Investment

# Cost Effective Business Agility

## Role-based blended service – reflecting user types and service needs

### Offline User

- Require the ability to work offline
- Road Warriors



### Process Worker

- Using one or few applications e.g. data entry
- LoB applications to carry work in structured manner
- E.g. Clerks, Call Centre, Administration



### Knowledge Worker

- Policy and strategy workers
- Senior roles or specific technology functions



### Power User

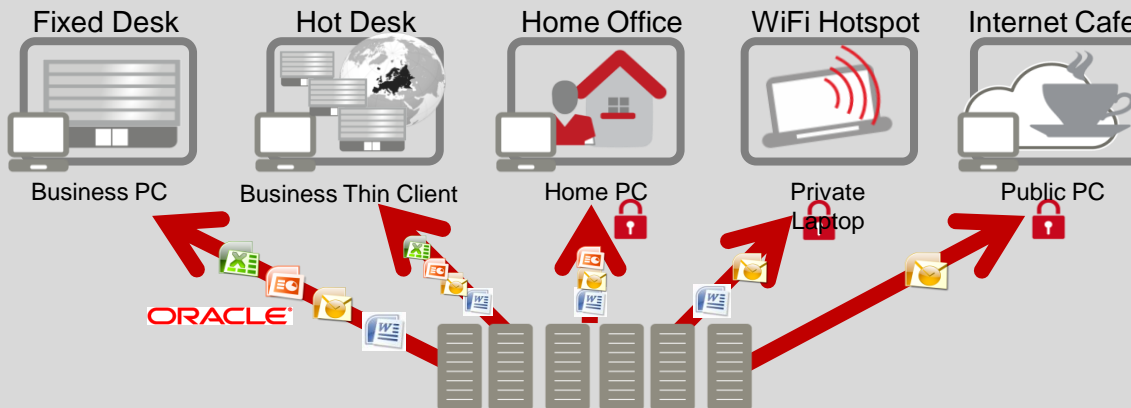
- Requires dedicated compute resource
- May require specific non standard devices
- May be part of a particular needs group



Segmenting users:

- What apps
- What locations
- What devices

## Device and location-aware... any time, any device, any where working



- Presentation of Windows desktop to device
- Apps streaming based on security policies and device type
- Data held in secure Data Centres
- Seamless user transit between multiple devices
- Simplifying future updates / migrations

# Significant Return on Investment

## Major Benefits of Application & Desktop delivery

<b>Improves User Productivity Significantly</b>	<b>Extends the Life of Custom Applications</b>
<b>Faster, efficient and zero cost application deployment</b>	<b>Allows Consolidation/Centralization of Remote Office Servers</b>
<b>Extends the Life of Client Hardware and of OS</b>	<b>Centralizes and Simplifies Application Administration</b>
<b>Reduces Testing Complexity for Enterprise Applications</b>	<b>Enhances Security Model to Protect the Telco's Environment</b>
<b>Energy cost saving</b>	<b>Centralization backup</b>
<b>Mobility</b>	<b>Efficient WAN network usage</b>
<b>Business Continuity of all users</b>	<b>Less helpdesk effort (self service password resets, shadowing, etc)</b>

# The Business Case Challenge for Financial

- **Cost Effective & Efficient Client Devices Supported**

Lower Support Costs, Less Laptops, Longer Life, Power Savings

- **Centralisation of Applications & Data**

More Security, Easier to Manage & Evolve, Easier Workplace Recovery

- **Office Space Optimisation and Consolidation**

Hot Desk Model (Without Laptops), Home Working

- **Flexible Working**

Easier Use of Part Time and Temporary Employees

- **Home Working**

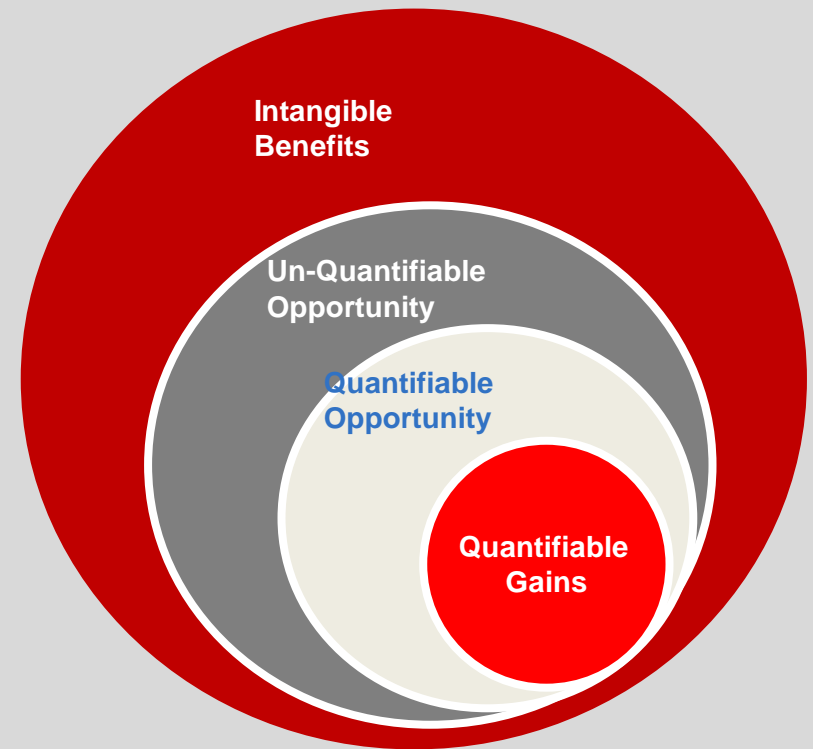
Fuel Savings, Sick, Absenteeism, and Maternity Return Improvements

- **Own Equipment Use**

Gen 'Y' And Above Attraction, Less Resources, Easier Partner Working



Every 1 euro of Benefit can be Guaranteed  
Business case is safe



**Published Desktops**

**Application  
Virtualization**

**Cloud  
Desktops**

**Desktops as a  
Service**

**Hosted Shared  
Desktops**

**Remote Desktop  
Services**

- Redundant Power
- N+1 Uninterruptible Power Systems
- N+1 Redundant Generator System
- Ability to handle high density power requirements
- N+2 Cooling
- Multi-Layer Security
- 24x7 On-Site Staffing to Assist with Remote Hands or Installation
- Access to Multiple Carriers
- Environmental Control
- File Detection
- Fire Suppression
- Building Management System
- CCTV
- Access Control
- Physical Security

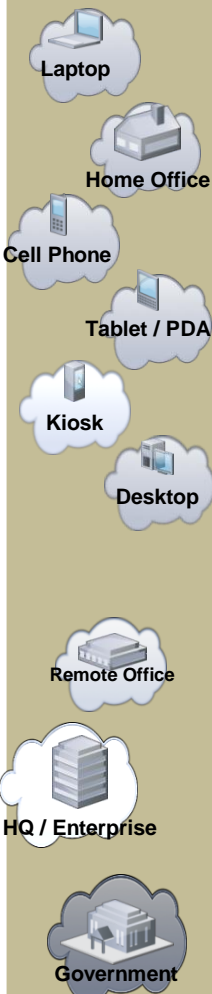
ISO 9001:2008  
ISO/SEC 27001/2005  
Cabling TIA 568B



# Uni Systems Cloud Architecture



## End-Points & Offices



## MULTI-TENANT SaaS / DaaS

### Window Based DaaS & SaaS

**Virtualization Farm 1**

Virtualization Farm 1 contains four server racks, each with a red and a blue bar representing virtual machines. To the right are vertical bars for **Data Store** and **AppCenter**.

**Virtualization Farm N**

Virtualization Farm N contains four server racks, each with a red and a blue bar representing virtual machines. To the right are vertical bars for **Data Store** and **AppCenter**.

### IaaS & PaaS Solutions

- Test & Dev aaS
- Desktop aaS
- On Demand Apps
- Cloud Backup
- Monitoring aaS

### WEB SaaS

- CRM aaS
- HCM aaS
- E-invoicing
- Payroll aaS

### Back Office Servers

- ERP V1
- ERP V2
- ERP V3
- CRM V1
- Messaging Platform
- RDBMS Farm

### White Label SaaS

- CITRIX go-to-meeting
- CITRIX go-to-training
- CITRIX go-to-webinar
- Microsoft Office 365
- 3rd part CSP

### Virtual Provisioning

Provisioning Services	Power & Capacity mgnt.
Server Virtualization	Uni Systems Cloud Portal

### Provisioning

- Application Provisioning
- Storage Provisioning

### Physical Provisioning

Unattended Installations  
Physical Installations and Updates

### Network Infrastructure & Remote Access

CITRIX NetScaler	Uni Systems Cloud Portal	Active Directory Parent Forest	DNS	VLAN
CITRIX Branch Repeater	Vyatta Virtual Firewalling			
CITRIX Access Gateway	Cloud Backup			

DHCP

## Dashboard & Management

- Citrix Delivery Services Console
- Smart Auditor Console
- User Experience Monitoring
- Applications Performance Monitoring
- Cloud Backup & Storage Management
- Virtualization Manager
- Bandwidth Management
- Security Management
- SLA Management

## IaaS

- **Uni | Workplaces:** Test & Development environment as a Service
- **Uni | Root:** Monitoring as a Service
- **Uni | Vault:** Backup & Business Continuity as a Service
- **Uni | Desktop:** Desktop as a Service
- **UNI | Apps:** Cloud on demand apps
- **UNI | On-Board:** Cloud on boarding

## SaaS

- **Uni | PAYaaS:** Payroll as a Service
- **Uni | HCMaaS:** HCM as a Service
- **Uni | eInvoicing**

## PaaS

- **Uni | DBaaS:** RDBMS as a Service
- **Uni | MaaS:** Middleware as a Service



# Uni | Desktop

## Desktop as a Service



- Personal desktops no longer reside on a specific piece of localized hardware (i.e. a desktop PC or laptop) but are instead hosted by Unisystems Dynamic Services and delivered to enterprises
- End-users remotely access their individual desktops from any terminal with an internet connection. As such, Hosted Desktops are far more mobile yet more secure than traditional PCs.
- **Complete hosted experience**
- **Any device, anywhere**
- **Integrated SaaS apps**



### Fitting Delivery of Desktop Apps to the Cloud

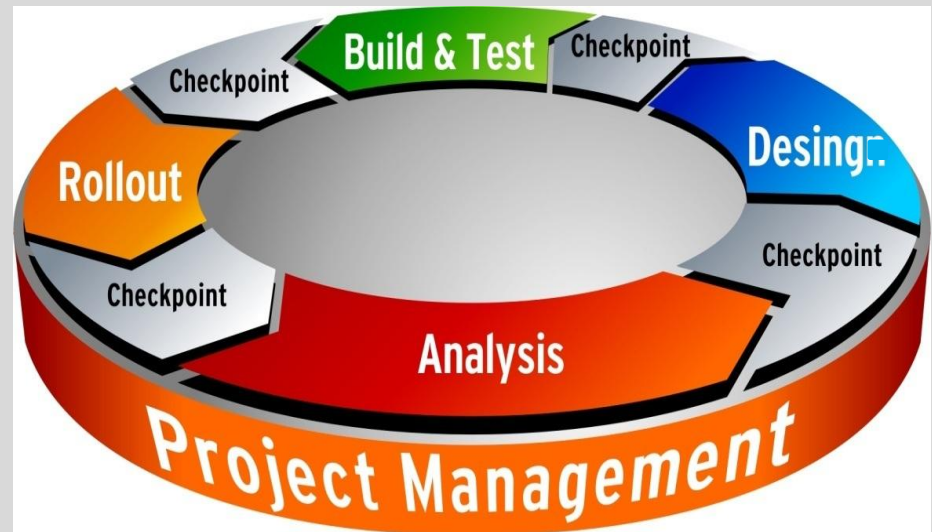
- On-demand application delivery from the cloud addresses the shortcomings of traditional techniques and tools and accounts for a wide range of other important enterprise objectives
- Enabled by Citrix® XenApp, this ideal combination of capabilities is based on **managing applications in the data center** and **delivering them as an on-demand service** to users anywhere using virtually any device including PCs, Macs, Linux, thin clients and smartphones



# Implementation methodology

Uni Systems together with our Technology Partners can assist you to:

- Analyze your current infrastructure (Server, Desktop & Application Delivery Readiness Assessment)
- Help evaluate the Desktop & Application delivery technology
- Design the new Data Center architecture (end to end)
- Implement, manage and support the new virtual infrastructure



# Justify it

Saves  
\$\$\$

Leverages  
existing  
infrastructure

Aligns  
multiple  
projects

Increases  
Application  
Control

Improves  
App and  
Data  
Security

Proven Solution with more than 70 M desktops worldwide

**Uni Systems implemented**

**more than 500 customers in Greece & SE Europe and 60K desktops**

# App & Desktop Virtualization Success Stories

- OTE Group | Cosmote & OTE Shops, Cosmote & OTE Call Centers support for **4 countries, 6K+ users**
- Piraeus Bank | **7K+ users**
- Cyprus Bank | **2000+ users**
- Eurobank | Application virtualization & Thin Branch
- Alpha Bank | Supporting multiple application virtualization access scenarios
- Geniki Bank (Piraeus Group) | Thin branch **2K+ users**
- ING | **1200 +users**
- NBG, Wind, Comsote | Secure Remote Access solution
- CCHBC | **2K users in more than 15 countries**
- Vodafone, Archirodon, ICAP | **500 + customers, 60K+ users**

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