

Vínculo TIC

eGov

Tendencias Tecnológicas

Carlos González G.

Hewlett Packard México – Dir. Sector Público

Septiembre 3, 2013

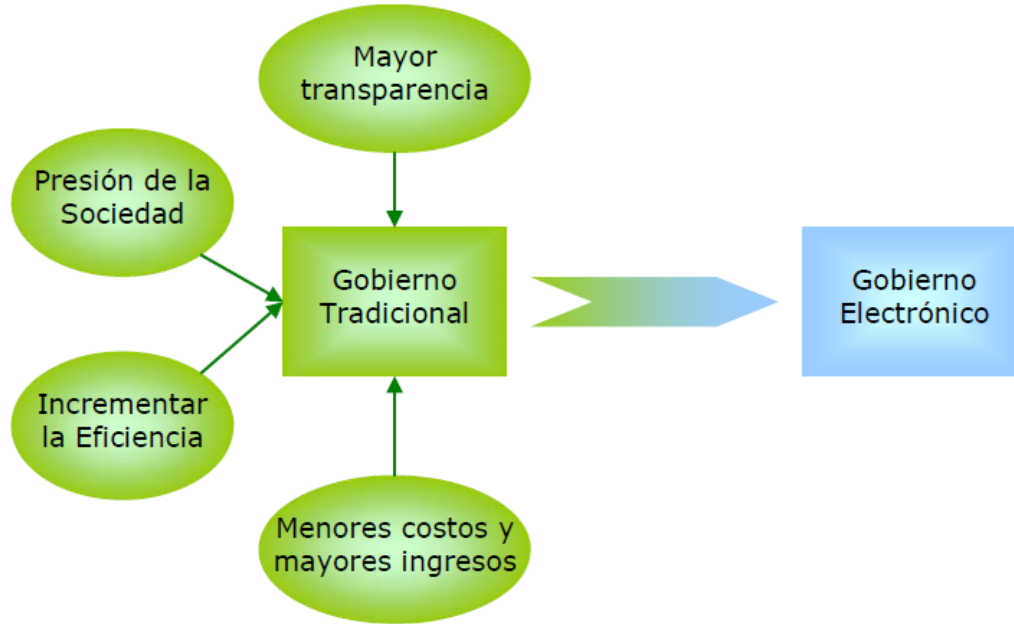


Agenda

- Porqué Hp y el Gobierno Digital
- Visión HP
 - Converged Cloud & Infraestructure
 - Security and Risk Management
 - Big Data
 - Application Transformation
 - Mobility

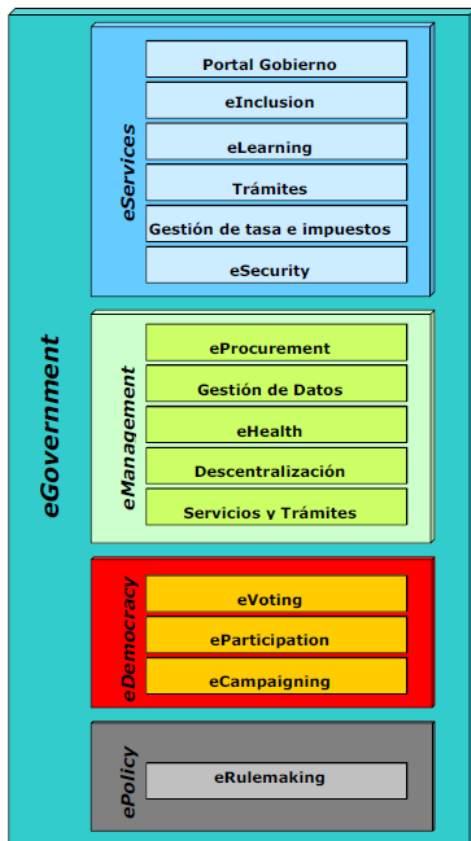


eGovernment : Alcances y enfoques



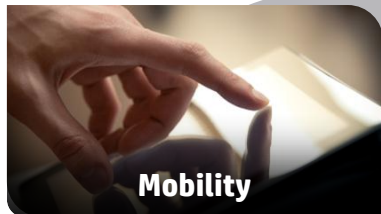
- ✓ G2C – Government To Citizen
- ✓ G2E - Government To Employee
- ✓ G2B – Government To Business
- ✓ G2G – Government To Government

eGovernment : Alcances y Factores de Exito

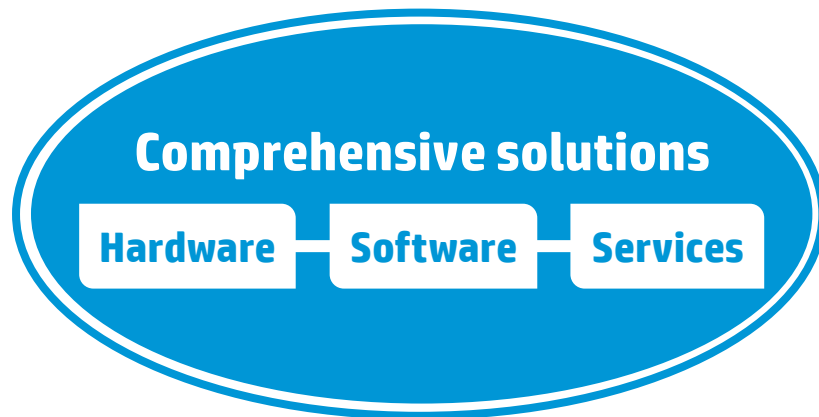


- Presiones Externas
- Deseos Políticos Internos
- Visión y Estrategia Global
- Efectiva Gestión del proyecto.
- Efectiva gestión del Cambio
- Diseño Efectivo
- Competencias Necesarias
- Adecuada Infraestructura tecnológica

A new style of IT is emerging...



...accelerating market
growth and driven by
HP technology



...opening new
product and business
opportunities

A new era of accelerated innovation

Forever changing how consumers and businesses interact, enabling new opportunities

Growing Internet of Things (IoT)



Pervasive
Connectivity

Smart Device
Expansion

Explosion of
Information

A new style of IT required for IoT solutions

2013

 **416,340** tweets

 **23,148** apps
downloaded

 **400,710** ad
requests

**60
sec**



 **2000** lyrics played
on Tunewiki

 **1,500** pings
sent on PingMe

 **208,333** minutes
Angry Birds played

By 2020

 **30
Billion**⁽¹⁾
Devices

40
Trillion GB⁽²⁾
DATA

 **10
Million**⁽³⁾

**... for 8
Billion**⁽⁴⁾

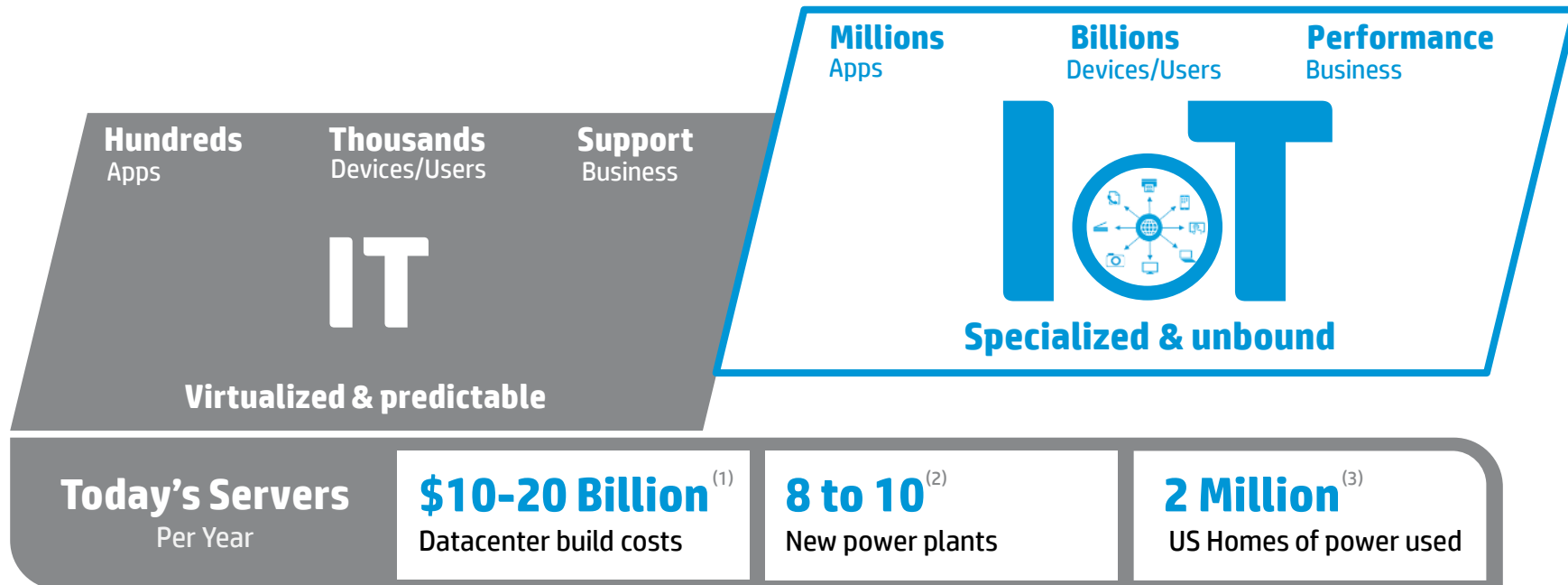


(1) IDC Directions 2013: Why the Datacenter of the Future Will Leverage a Converged Infrastructure, March 2013, Matt Eastwood ; (2) & (3) IDC Predictions 2012: Competing for 2020, Document 231720, December 2011, Frank Gens; (4) <http://en.wikipedia.org>



New style of IT required for IoT solutions

Extreme scale and optimal efficiency needed for unique, differentiated IoT solutions



Source: HP internal analysis

IoT solutions drive new architecture requirements

Opportunity for competitive advantage serving more customers with unique offerings

Scale



Millions of apps and
billions of devices and users

Speed



Adapt at the speed of business
to gain competitive advantage

Specialized



Tailored & optimized for the
specific needs of each workload

CIO 20/20

II.1 Outlook

II.2 Challenges and Opportunities

II.3 The IT Department of 2020



5 Acciones en la Agenda : CIO 20/20

1

Virtualización en la empresa
– Centrarse en la prestación de servicios no cajas

2

Democratización de IT
– Llegar a la nube o quedarse

3

Bring Your Own Device (BYOD)
– Traiga sus “dispositivos” a trabajar

4

Consolidación de Centros de Datos – Con menos hacer mas

5

Globalización de la Organización – Colaboración a través de geografías

4 Segmentos de Inclusión eGov

AMITI – MAPA DE RUTA 2025

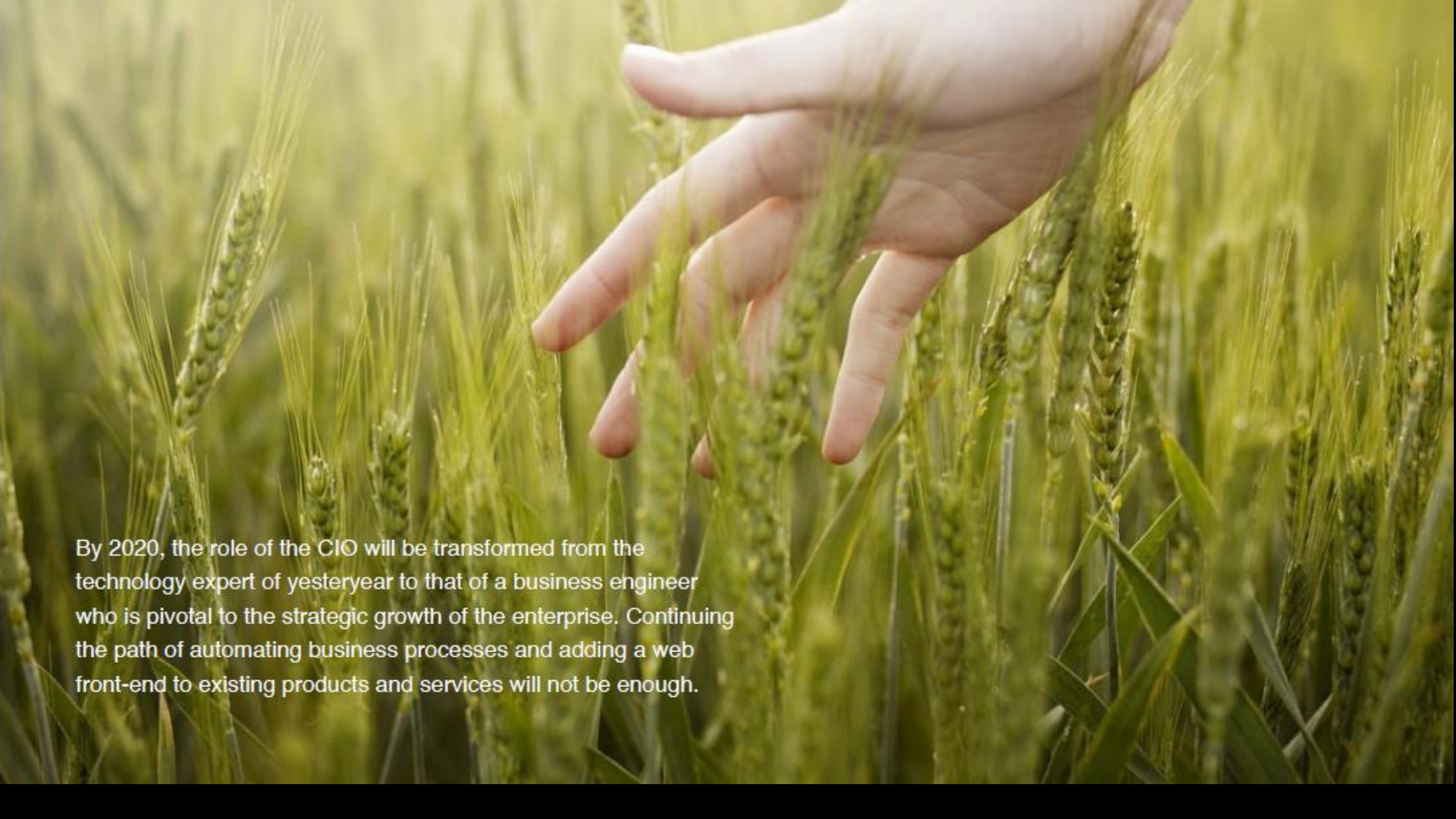
A. Las interacciones del sector público con ciudadanos, lo que se conoce como *e-gobierno*

B. El uso de las TIC en la educación (la principal fuente de educación en México es pública, 78% de los estudiantes en México acuden a escuelas públicas)

C. El uso de TIC en la provisión de servicios de salud (aproximadamente 94% de los mexicanos que reciben servicios de salud lo hacen en clínicas y hospitales públicos)

D. La utilización de TIC en Seguridad (el Estado es el responsable último de mantener la seguridad del país o de una ciudad)



A close-up photograph of a hand reaching out to touch a stalk of wheat in a field. The hand is positioned in the upper right, with fingers gently touching the wheat. The wheat stalks are green and yellow, and the background is a soft-focus field of similar crops.

By 2020, the role of the CIO will be transformed from the technology expert of yesteryear to that of a business engineer who is pivotal to the strategic growth of the enterprise. Continuing the path of automating business processes and adding a web front-end to existing products and services will not be enough.

Challenges and Opportunities for the CIO of 2020

A number of concurrent trends are shaping the IT department of the future, presenting both challenges and opportunities for CIOs. To stay relevant, CIOs must take action, and:

- Innovate with the business.
- Jettison all that's not core.
- Support mosaics of small companies and free agents.
- Create solutions that optimize mega-systems.
- Focus on the "I" in "IT."
- Balance privacy and security with personalization and access.
- Manage IT performance versus risk.



1 Innovate with the business

To ensure that the business doesn't sideline the CIO, the entire IT department needs to take an active part in the innovation agenda and provide the enterprise with new points of differentiation.



La Tecnología transformando el Consultorio

**Sociedad Médica -
Hospital Ángeles del
Pedregal**

Info & Training

Windows® 7. Su PC, más fácil de usar.



Soluciones para el Sector Salud

La tecnología ha evolucionado, la comunicación instantánea, virtual y a distancia es ya una realidad.

Dentro del sector salud, la evolución tecnológica es una herramienta constante para agilizar trámites, servicios y automatizar procesos. Conscientes de esta necesidad HP, eCareSoft y Humanscale, ofrecen las soluciones más completas de tecnología que transforman a las instituciones médicas en modernas plataformas de información. Lo que permiten ofrecer al paciente una mejor y más rápida atención y un diagnóstico acertado.

Los invitamos a conocer las soluciones más innovadoras que le darán un valor agregado a su consultorio.



La Tecnología transformando el Consultorio

Sociedad Médica
Hospital Ángeles del
Pedregal

Product & Solution
Selection

Solución Consultorio digital

Con este paquete de información, el escritorio le proporciona...

El paquete incluye:

- 1 Software eCareSoft 1 año de suscripción Incluye eCareSoft BUVS3LA
- 2 Banco Humant Polym B6246
- 3 HP Core LCD 19 EM885

Solución Estación de consulta

Un paquete ideal para realizar procedimientos administrativos...

El paquete incluye:

- 1 Software eCareSoft 1 año de suscripción Incluye eCareSoft BUVS3LA
- 2 Banco Humant Polym B6246
- 3 HP Core LCD 19 EM885

Solución Médico móvil

Una solución ideal que optimiza el tiempo del médico, ya que permite llevar la historia clínica y un control de cada paciente de forma digital, al momento de realizar la visita en cada habitación.

El paquete incluye:

- 1 Software eCareSoft Nimbo eDoctor 1 año de suscripción Incluye expediente electrónico BUVS3LA
- 2 HP Slate 2 Z670 8.9 32GB/32 PC AGN1AABAB

Costo del paquete:

\$

Opcionales:

- Esterilizable
- Disponible en core i3 y i7
- Disponible con código de barras y RFID

Tableta MotionC C5v 13-480 128GB SSD 2GB Win7 B6A70AABAB

Por sólo:

\$

Opcionales:

- Incluye chip de seguridad TPM y teclado resistente a derrame de líquidos
- Windows® 7 Professional original de 64 bits
- Intel Core i5-2467m
- Memoria 4GB
- Disco Duro 128 GB y memoria en estado sólido (mSSD)
- Conectividad Bluetooth

HP Folio13 Ultrabook BONDOLABAB

Por sólo:

\$

Convierta su HP Slate en una PC con los accesorios:

- HP Slate case
- Cable de Alimentación HP Slate
- HP Slate Dock
- Adaptador de Alimentación HP Slate 30W

Windows® 7. Su PC, más fácil de usar.

Trabaje de modo profesional Windows 7

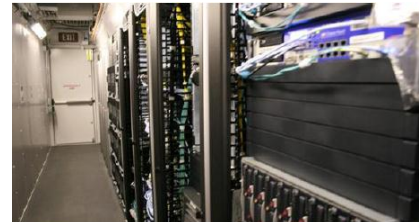
ecaresoft Humanit



Flujo sobre Plan Sectorial

Grupos de trabajo a incorporarse

- Sistemas de Información
- Sistemas de Misión Crítica
- Datacenter



- Soluciones Verticales (Hospitales, Seguridad, Procesos de Negocio, HPC, etc.)



is subject to change without notice.



2013-2027

Programa Estratégico Tecnológico

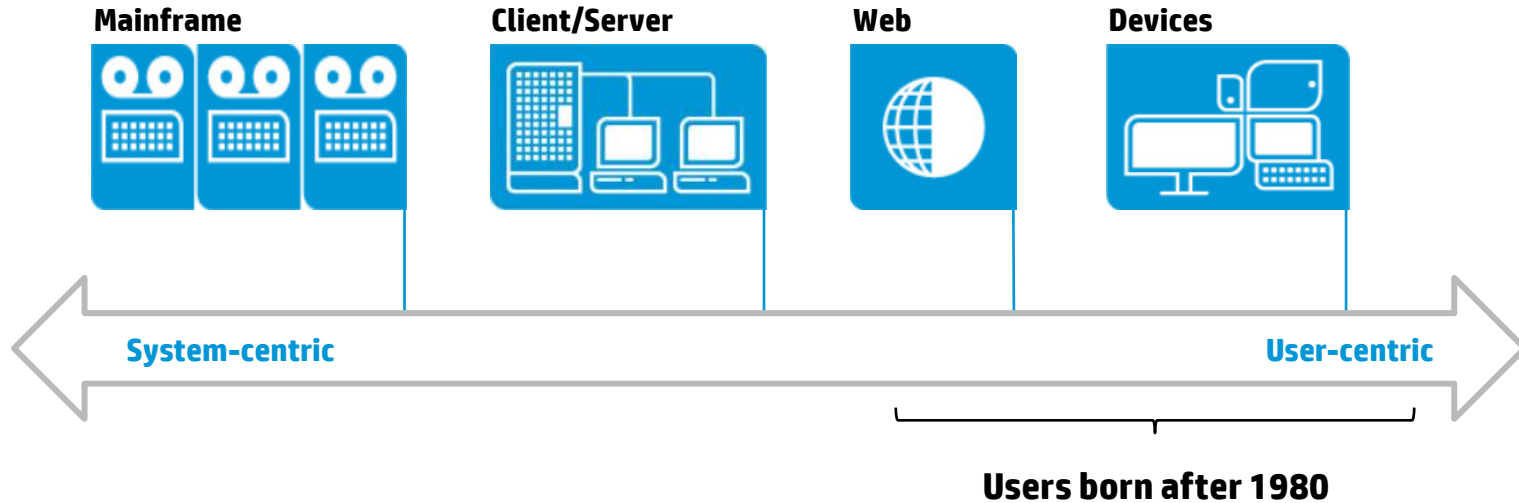
Petróleos Mexicanos y sus Organismos Subsidiarios

PEMEX

www.pemex.com

PEMEX Exploración y Producción
PEMEX Refinación
PEMEX Gas y Petroquímica Básica
PEMEX Petroquímica

A radically different kind of user

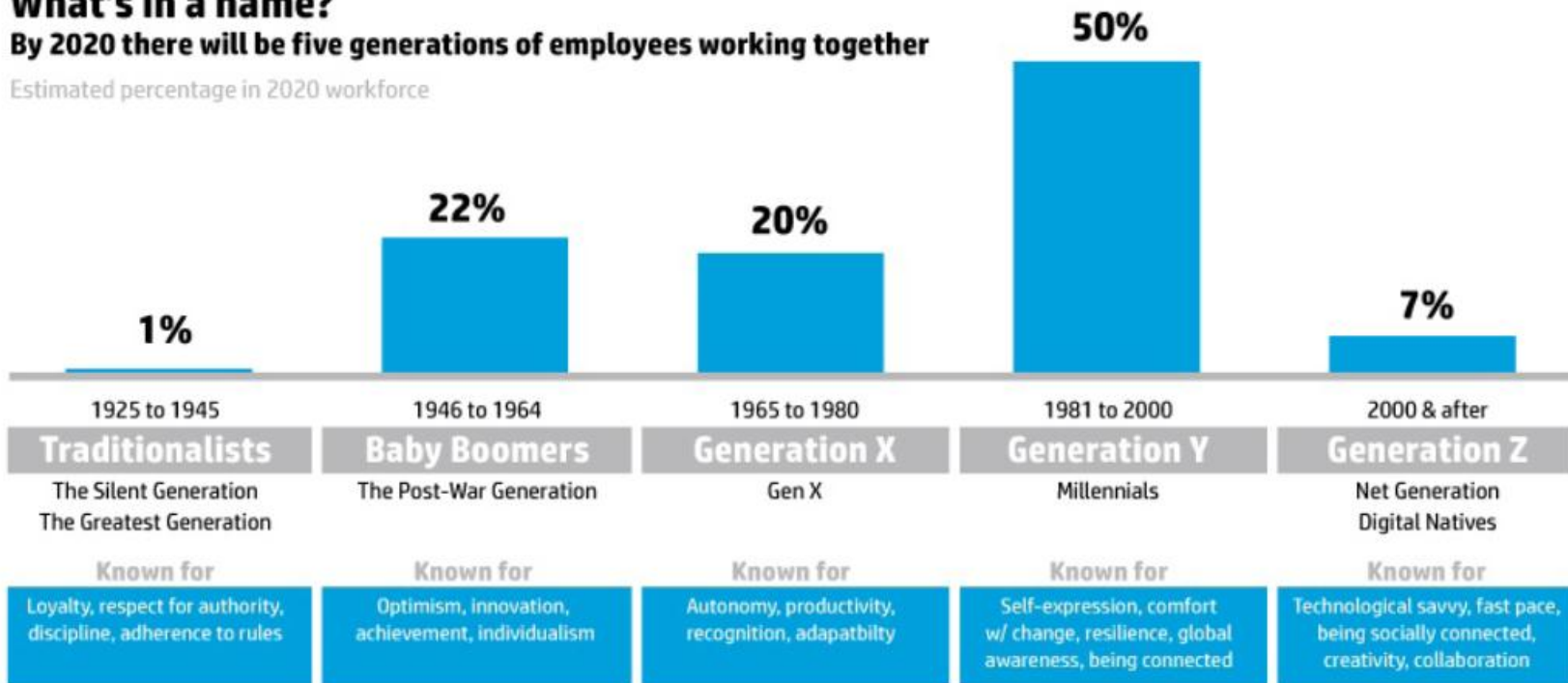


La fuerza de trabajo 2013-2020

What's in a name?

By 2020 there will be five generations of employees working together

Estimated percentage in 2020 workforce



Source: Future Workplace Survey



Where to start and how to get there

Tactical: current forward 
 **Strategic:** future back

Current state

- Analyze
- Define strategy, objectives and metrics
- Build roadmap (supported by business-cases/ROI)



people-process-technology-data

Transition agenda

ROI

Sub-projects

Desired state

- Architecture to satisfy your business drivers
- Validate results/value



people-process-technology-data

2 Jettison all
that's not core

5 Focus on the “I”
in “IT”

“Divest yourself of non-core processes.”

- Geoffrey Moore, author, *Crossing the Chasm* and *Inside the Tornado*

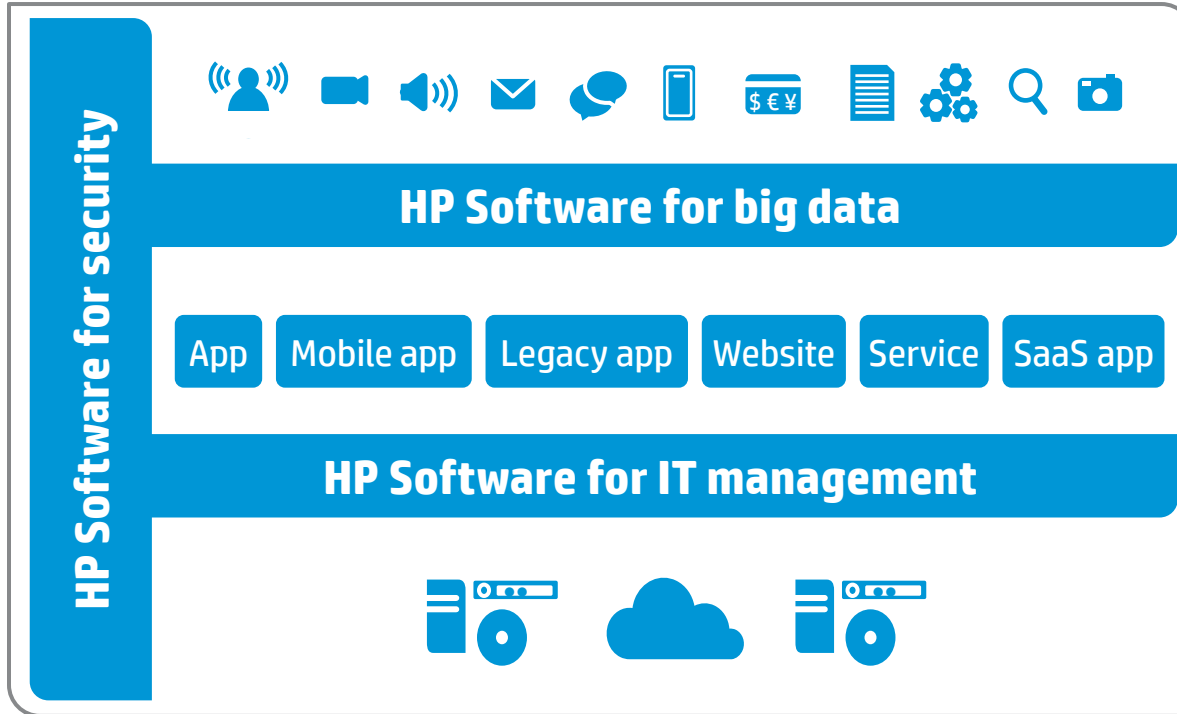
Automation



Making information and applications work for you

The confidence, insight, and agility to perform better

Proactively
protect your
digital
assets



Get faster answers
from all your
information

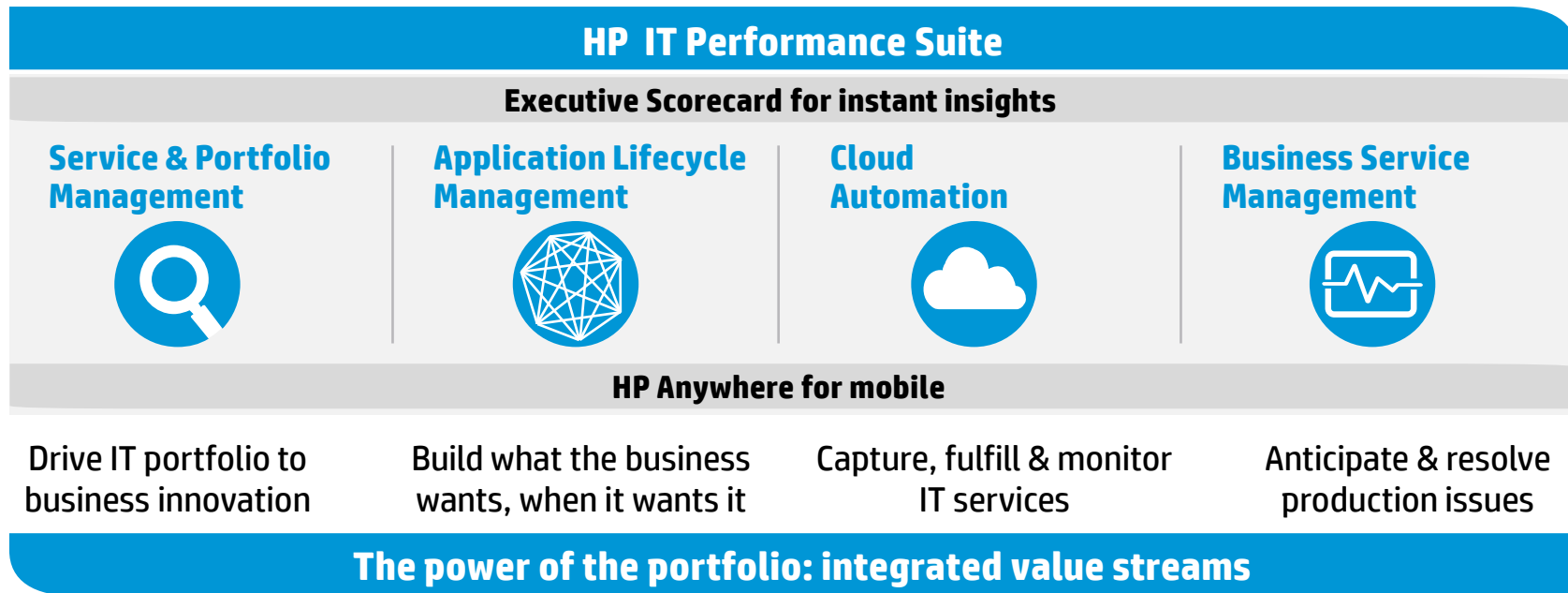
Deliver applications
that perform to
your standards

Automate and
accelerate your
enterprise



Optimize your value

Driving value throughout the IT lifecycle



From monoliths to mosaics

System-centric

User-centric

Information



Business intelligence
Structured data



Real-time analytics
Voice & video

Teams & plans



Single source
Gradual & procedural



Collaborative ecosystems
Quick & continuous

Apps & architectures



Feature bloat
Closed & siloed



Targeted, precise
Open & interconnected

Infrastructure



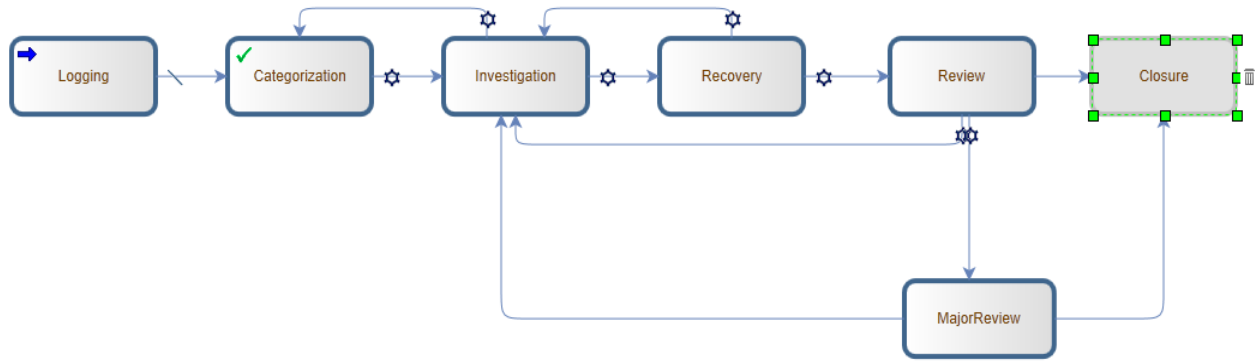
Centrally planned & procured
Dedicated



Instant & elastic
Shared

Workflow: Incident_Custom

Save Zoom in Zoom out Add phase Delete Workflow properties



Phase - Closure

Details Forms Rule Sets Actions Approvals Alerts

On enter On exit Initialization On display On update After successful update

+	Add	🗑️ Delete	👁️ View
☐	Rule Sets		
☐	im.fields.validation		
☐	im.standard.mandatory		
☐	im.close.mandatory.common		
☐	im.close.mandatory		
☐	im.close.update.status		

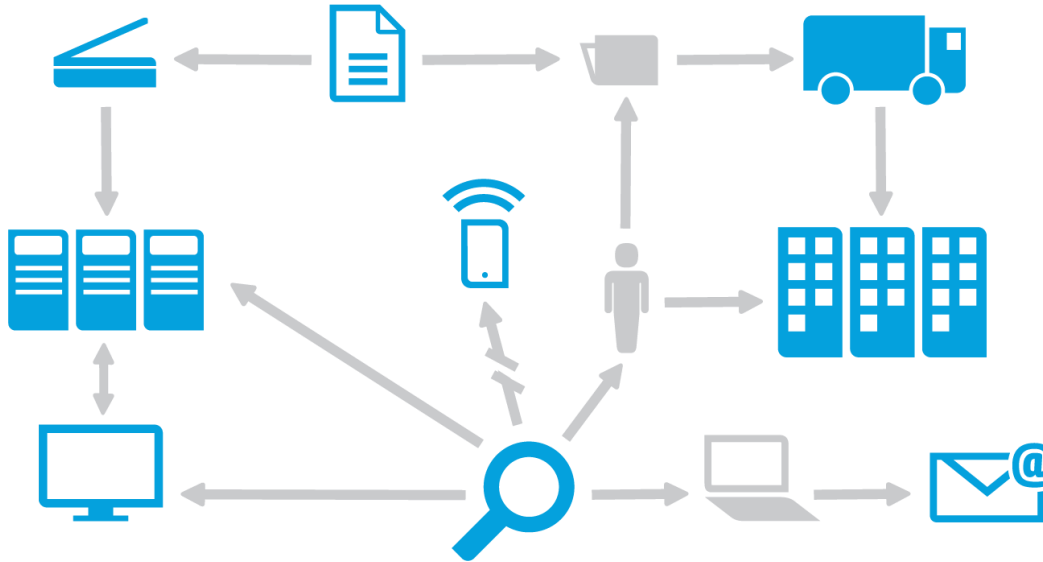
How the average company manages content

Extracting, classifying, and using content

- Time-consuming manual file sorting
- Inconsistent information use

Sharing files and collaborating

- Unpredictable communications
- Version control problems
- Difficulty searching paper documents



File storage and record-keeping

- Disconnected storage sites
- High cost of physical storage space

Accessing and searching files

- Inconsistent, **limited** search methods
- Often unusable rich media files

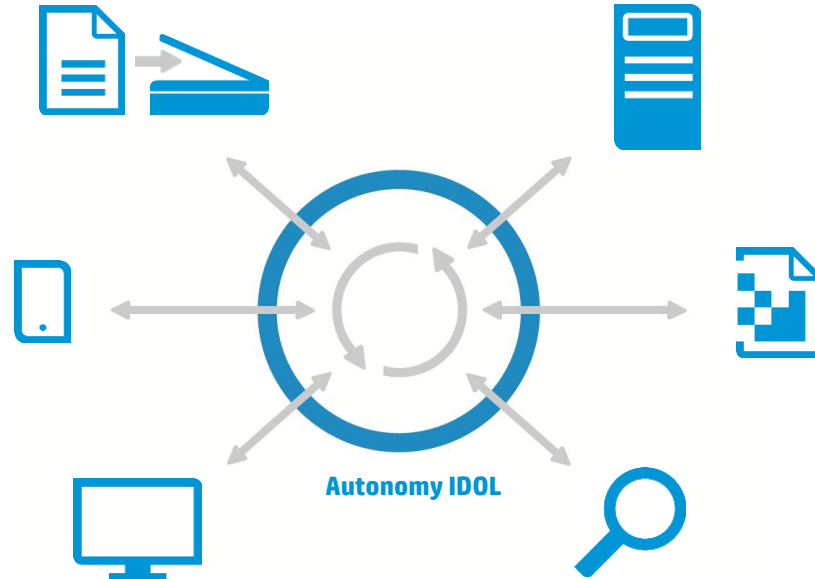
A closer look at HP Flow CM Enterprise

What is Autonomy IDOL?

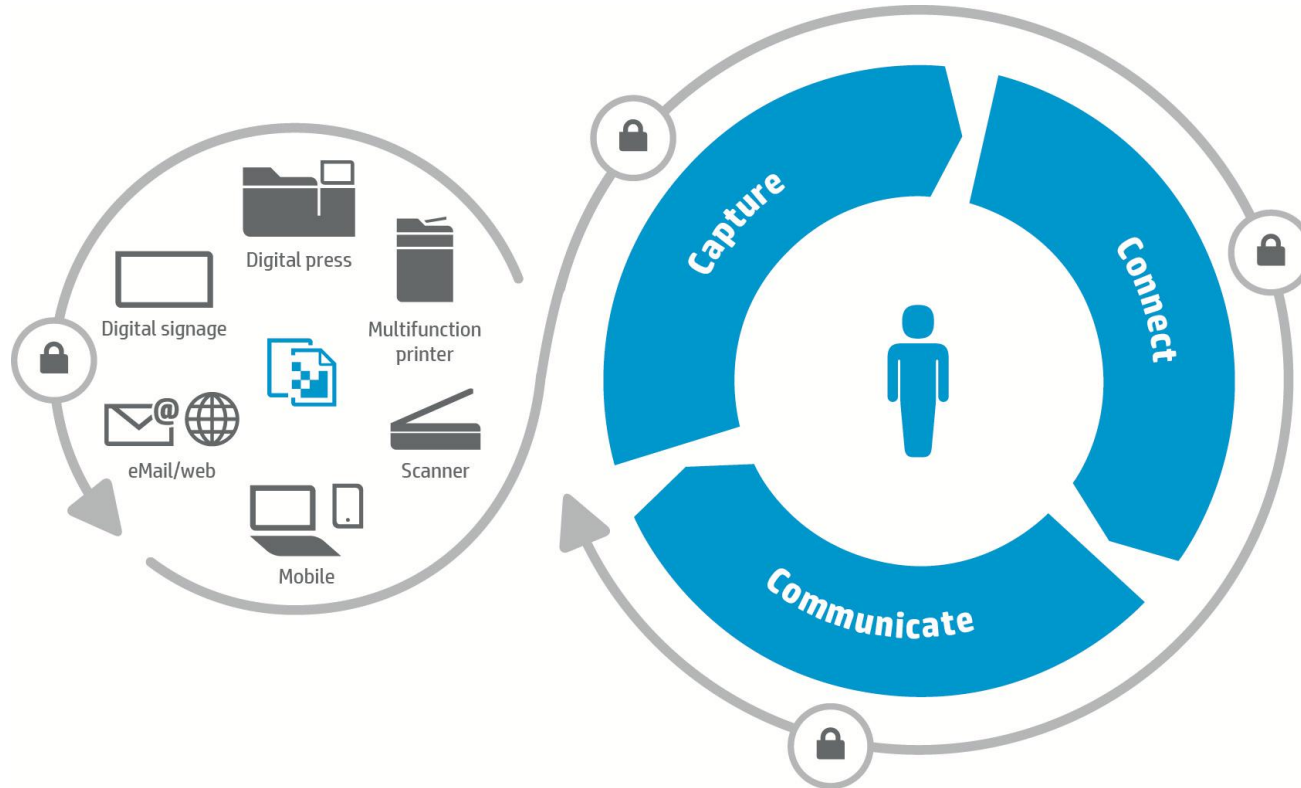
Autonomy Intelligent Data Operating Layer (IDOL) is the powerful technology engine that runs the HP Autonomy solutions.

It enables you to:

- Quickly understand information in more than 1,000 file types, 150 languages, and 400 repositories
- Search for information by meaning and context
- Intelligently locate, extract, index, and archive information



HP Autonomy

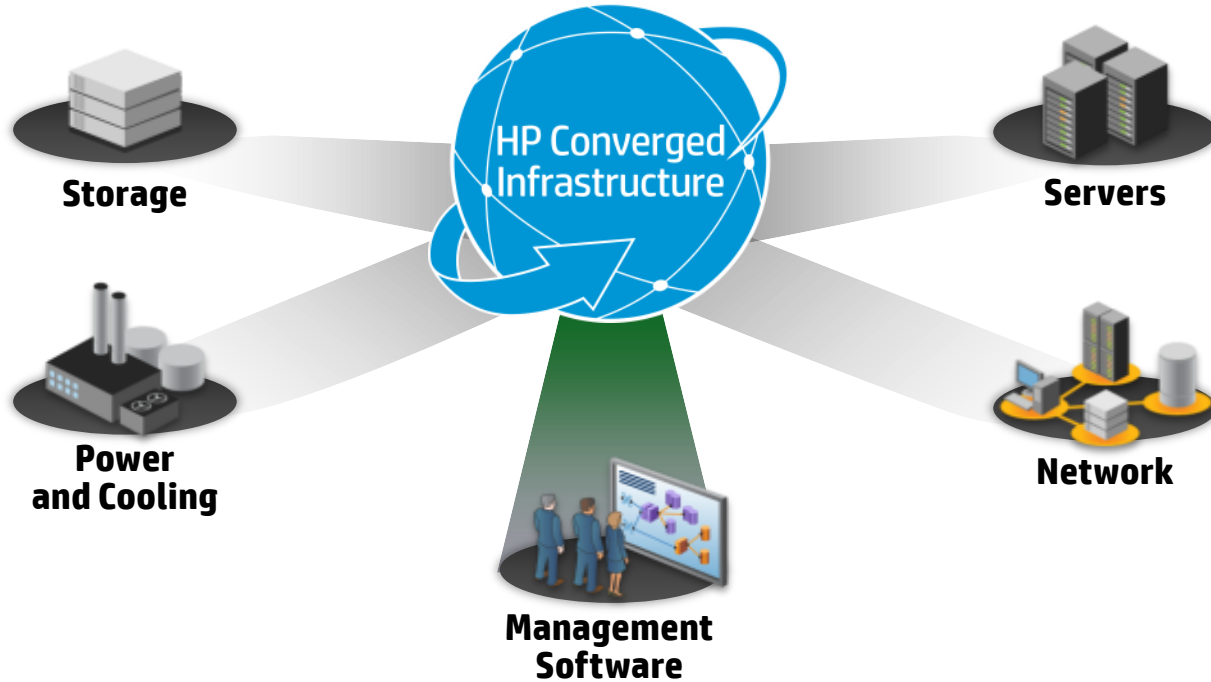


4 Create solutions that optimize mega-systems

The CIO of 2020 will need to create solutions that optimize transportation, utilities, policing and crime prevention in cities as well as mobile payments, supply chains, factories and buildings. Accordingly, the best IT shops will be world-class integrators and enablers of this technology.



The power of convergence

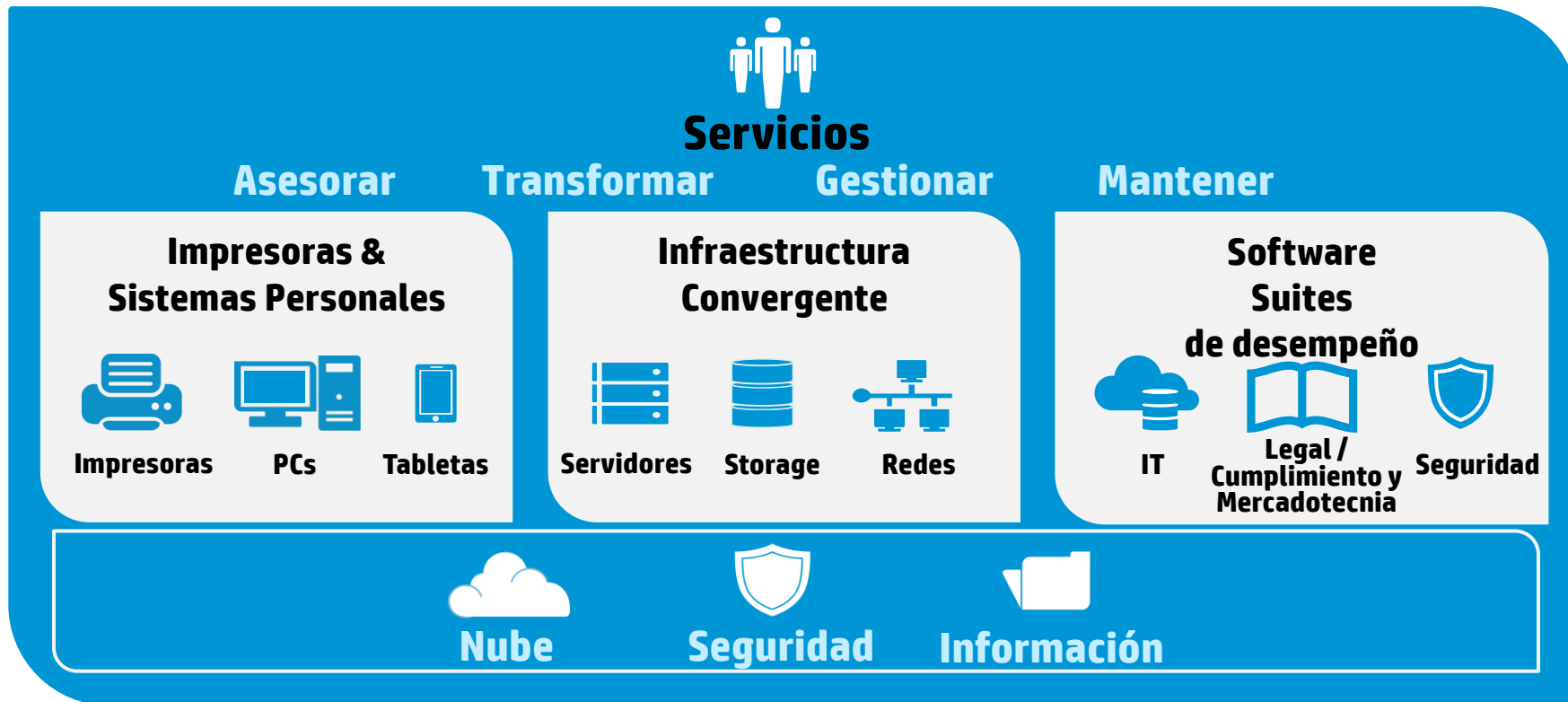


Data Center 20/20

The innovation and revenue engine
of the enterprise



Soluciones para el Nuevo estilo de IT



Vemos tres grandes tendencias de Infraestructura

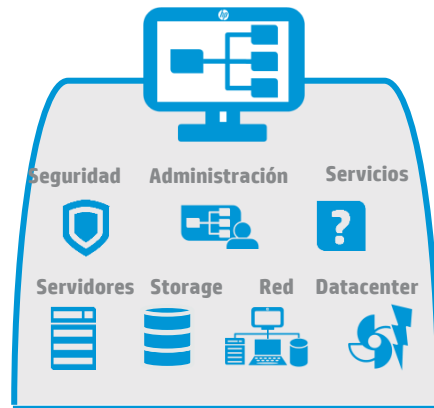
Infraestructura Convergente



Nube Convergente



Software Defined Data Center



Manejando menos la infraestructura...
dedicar mas tiempo conectando
usuarios a las aplicaciones

Transformando la industria de infraestructura

HP Servers

Lanzamiento de nuevas categorías de servidores



HP Storage

Nueva visión de la industria de Almacenamiento



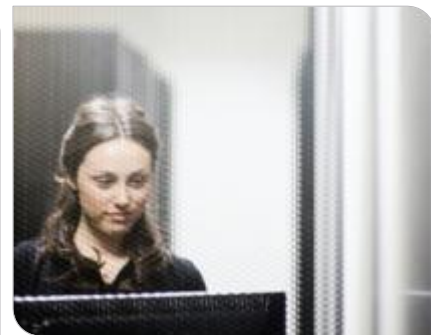
HP Networking

Simplificación de la red



HP Technology Services

Revolucionando el soporte y los servicios de consultoría



Desde servidores, almacenamiento, redes y servicios
todo el camino a la nube

Software Define el Centro de Datos

Software Define Servidores



Project Moonshot

Software Define Almacenamiento



HP StoreVirtual VSA

Software Define Redes



HP SDN

Evolución de la tecnología de la industria del servidor



Servidores

Mainframe	Mini Computer	Unix	x86			ARM and Atom (Cloud/Hyperscale)
			Rack and Tower 	Blades 	Density Optimized 	

Nueva Categoría
Software define
el servidor

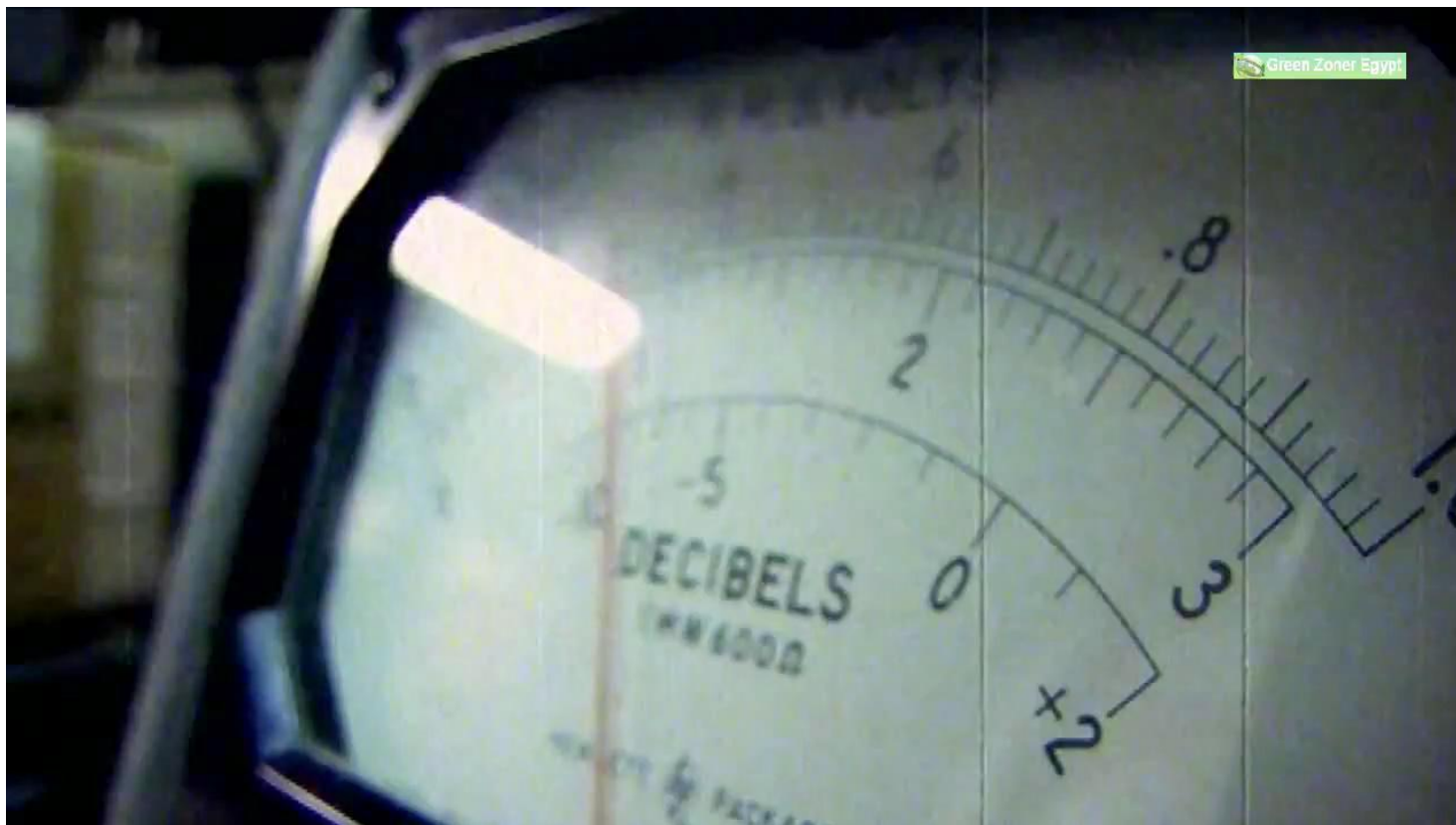


HP Moonshot System

**Designed for the data center,
built for the planet**

The world's first software-defined server
accelerating innovation while delivering
breakthrough efficiency and scale





HP Moonshot System

The world's first software defined server



HP Moonshot 1500 Chassis

Supports shared components including power, cooling, and management and fabric

Software defined servers

45 individually serviceable hot-plug cartridges

80%
Less space

77%
Less cost

89%
Less energy

97%
Less complexity

Source: HP internal analysis



HP Moonshot 1500 Chassis front view

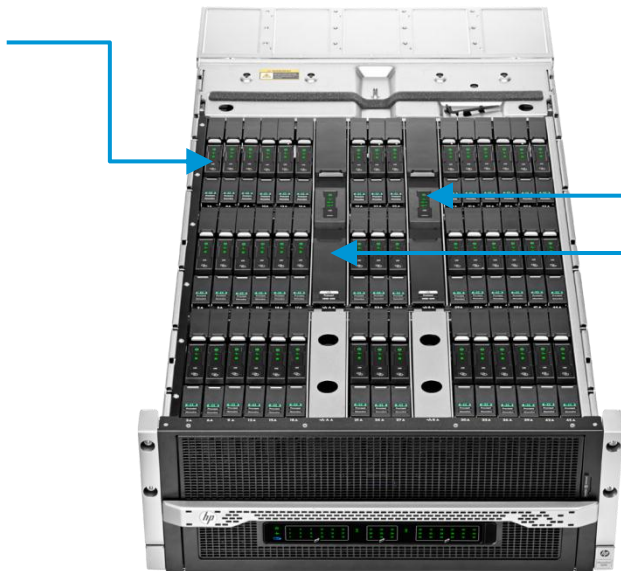
The essential foundation for the new style of IT

45 hot-plug cartridges

- Single-server = 45 servers per chassis
- Quad-server = 180 servers per chassis (future capability)



Compute, Storage, or Combination
x86 , ARM, or Accelerator



Dual low-latency switches

- HP Moonshot-45G Switch Module (45 x1Gb downlinks)



Simplified delivery of optimized solutions with software defined servers

Growing library of application-optimized servers

- Multiple partners, workload focused
- Enables rapid development of servers



Dedicated
hosting



Modular
disk sharing



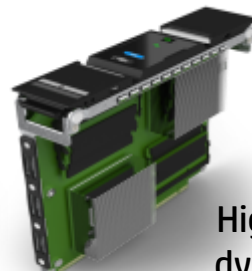
Telco
Desktop Inf
Web front end



Memory
caching



Web
accelerator



High density
dynamic web



Dynamic
web

Project Moonshot: nueva era

Infraestructura Convergente de escala extrema



Servidores

‘Gemini’

Segunda generacion



La reducción de la brecha en la densidad,
la energía, el costo y la simplicidad



89%

Menos
Energía

94%

Menos
Espacio

63%

Menos
Costo

97%

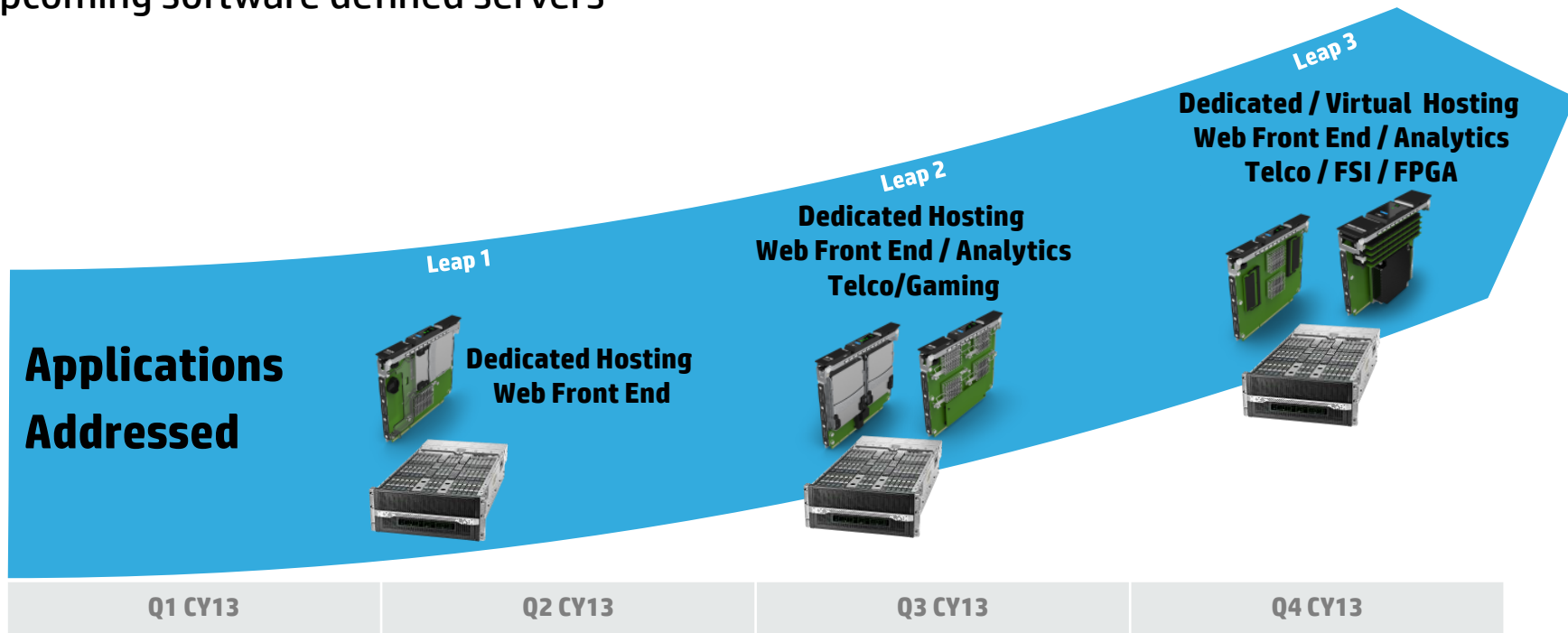
Menos
Complejidad

*HP internal analysis of publicly available data., internal testing, and future performance modeling



Faster innovation unlocking new opportunities

Upcoming software defined servers



Estrategia de Almacenamiento Convergente de HP



Storage

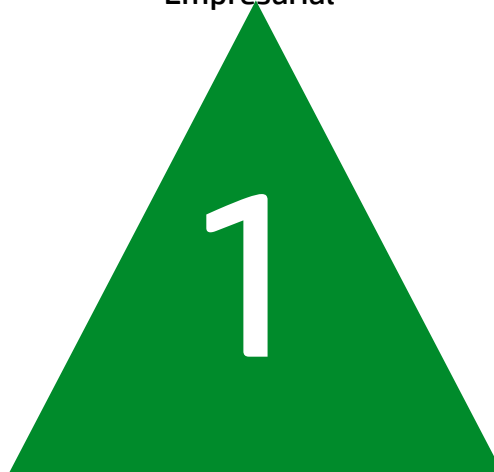
La transformación de almacenamiento empresarial con arquitecturas simplificadas de próxima generación



HP 3PAR StoreServ
Almacenamiento Primario

Simple • Eficiente • Ágil

Empresarial



Entrada



HP StoreOnce
Protección de Información



HP StoreAll
Retención de Información
& analítica



Implementar redes virtuales de aplicaciones



Arquitectura FlexNetwork

Virtual application networks



Plano de control de extremo a extremo

FlexFabric



Routing

Core

Access

FlexCampus



Routing

Core

Access

FlexBranch



Routing

Switching

Wireless

FlexManagement



Innovations in new data center models



HP ECOPOD

HP EcoPod

World's most efficient data center

Lightning fast

Quarter of the cost

Near perfect PUE

up to **88%**
Faster deployment

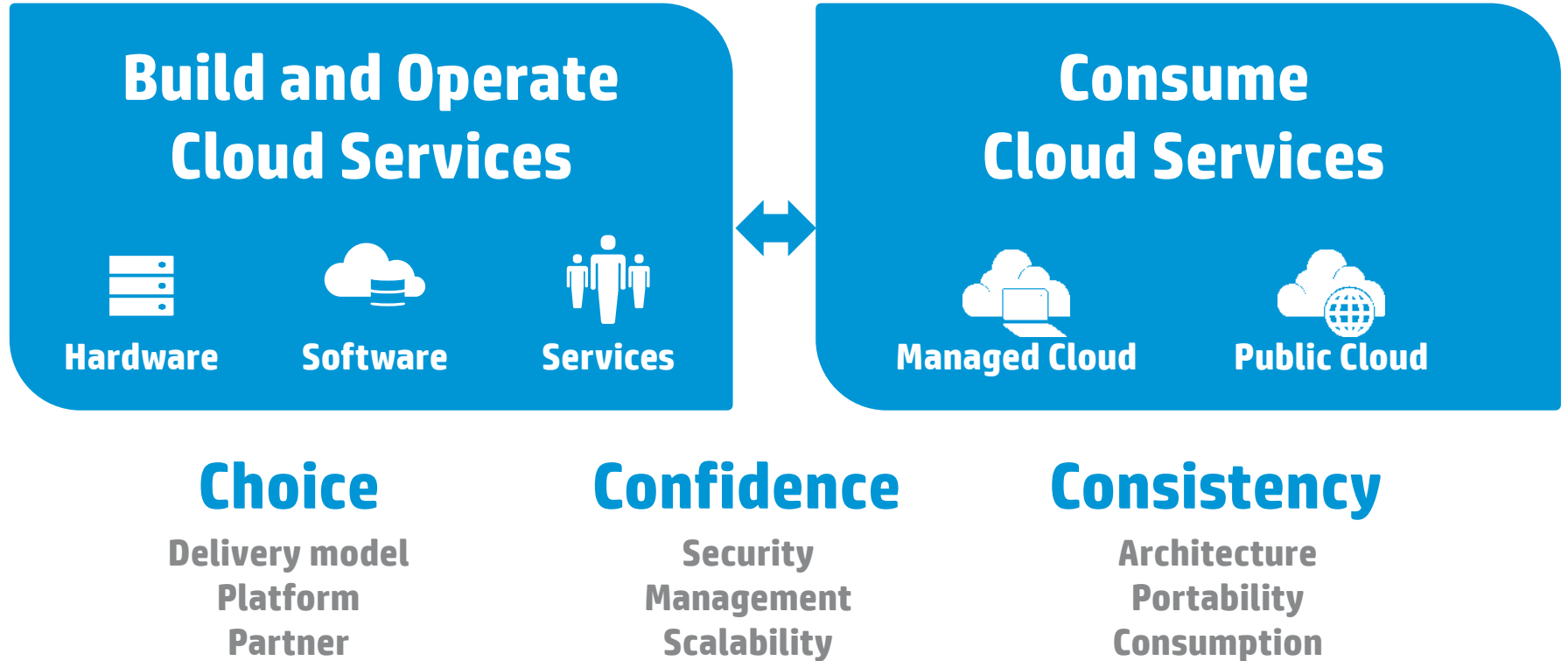
up to **75%**
CAPEX savings

up to **95%**
Less facilities energy





HP Converged Cloud: Strategy



Innovación para la nube

El sistema más completo, abierto e integrado

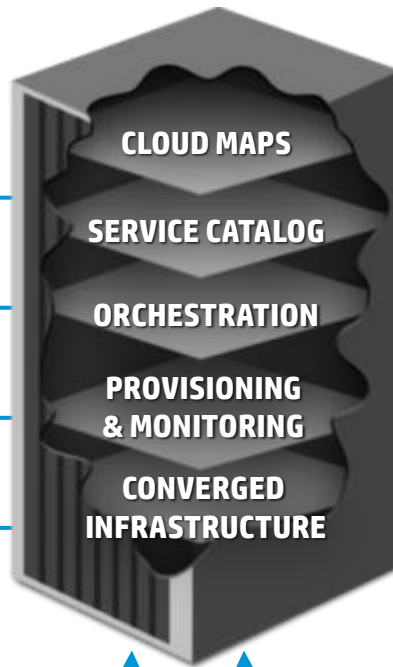
HP CloudSystem

Vista única de servicios a través de la nube híbrida

Multi-hypervisor, multi-OS, infraestructura heterogénea

Automatización Inteligente y orquestación

Despliegue rápido de aplicaciones e infraestructura



HP Enterprise Servers
Storage and Networking

HP Software



Cerca
1,000
Clientes
HP CloudSystem



Leverage the strengths of HANA leaders

SAP and HP co-innovation



"HP and SAP have been a winning combination for more than 20 years. We are truly proud of this partnership."

Bill McDermott, Co-CEO, SAP, June 2011



A common Database Approach for analytical and transactional processing using an In-Memory Column Database

Hasso Plattner, Sapphire, 2013



Mobility 20/20

Looking toward the era when everyone
— and everything — is connected

II.1 Outlook

II.2 The personal cloud

II.3 Bigger data

II.4 Managing what you can't secure

II.5 Assessing enterprise mobility

II.6 Your mobility dream team

II.7 References



Security 20/20

Preparing today for tomorrow's threats

I.1 Outlook

I.2 Threats

I.3 Innovation

I.4 Risk management

I.5 Regulation

I.6 Strategies

I.7 References



Managing what you can't secure

Security

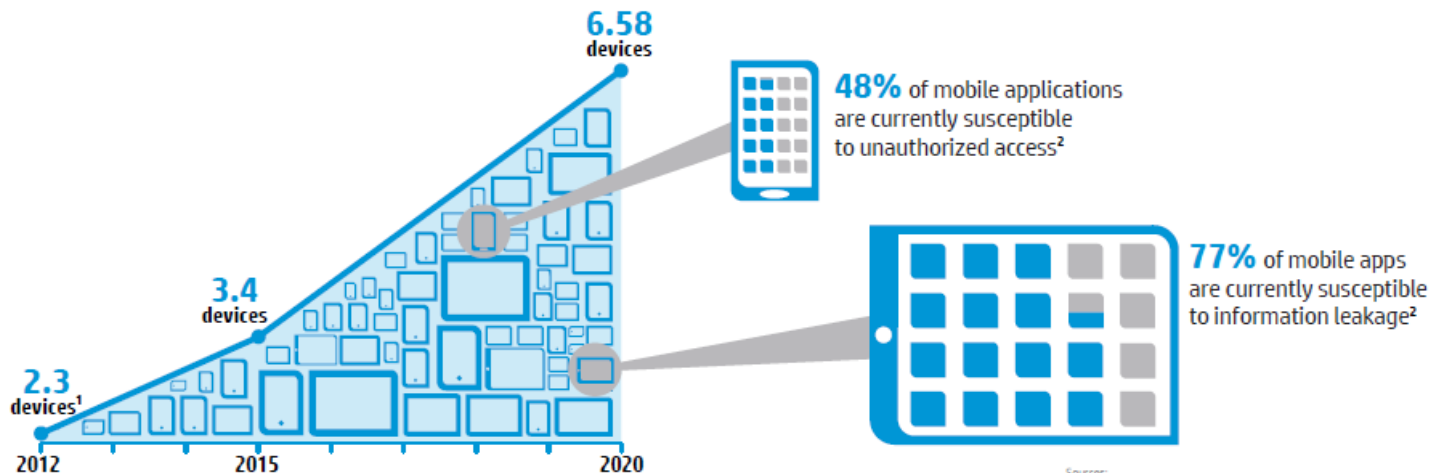
“Security is a weakest-link problem and applications are filled with vulnerabilities, so a company can have plenty of network-based security but still be exposed.”



John Diamant, secure product development strategist and distinguished technologist, HP

Growing number of employee devices a threat to enterprise security

Organizations are at the mercy of mobile applications and their persistent vulnerabilities



BYOD will only grow, with the number of devices per employee due to bypass 6 by 2020

Sources:

¹Cisco Internet Business Solutions Group, "Internet of Things," July 2011

²Hill, "2012 Cyber Risk Report," February 2013

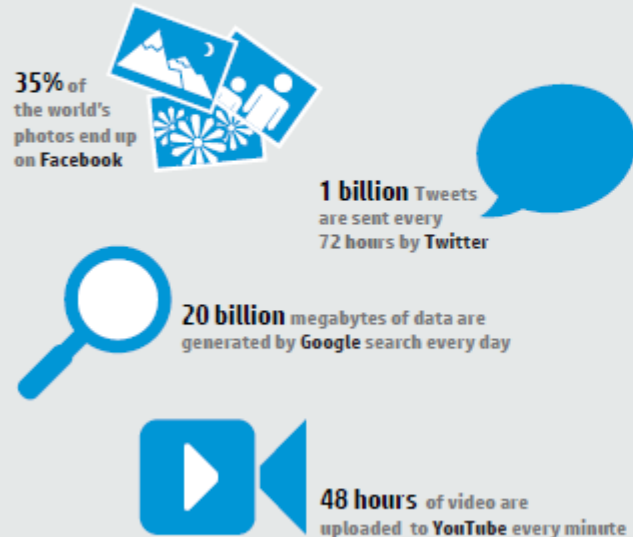


Security

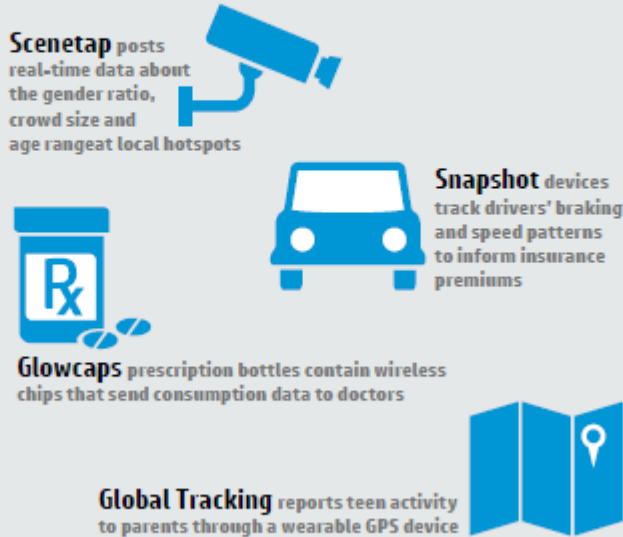
Consumer privacy vs. Big Data

Despite privacy concerns, individuals are quick to provide personal information¹

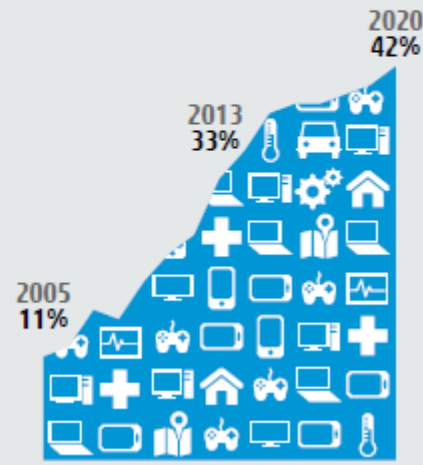
Individuals quick to volunteer information¹



Third parties profit from machine-generated data



Machine-generated data is estimated to reach 42 percent by 2020²



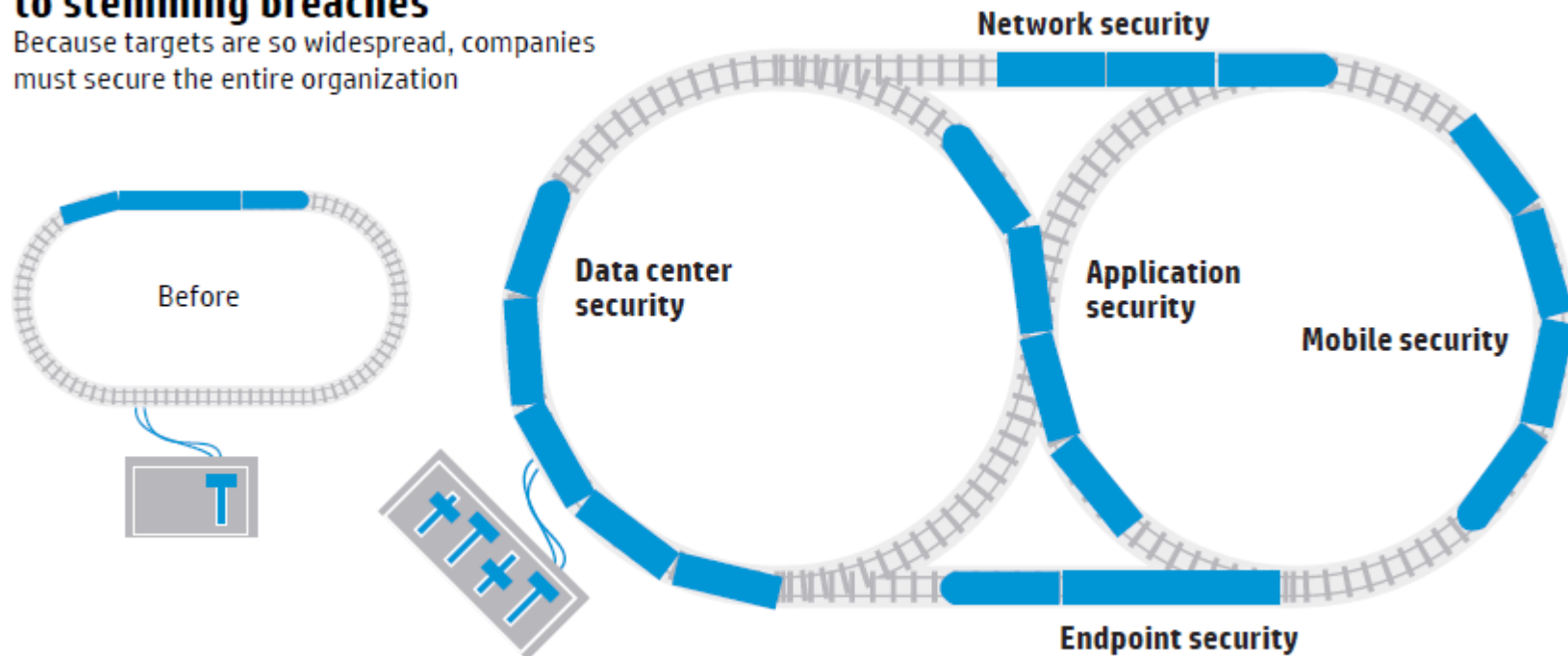
¹ IDC, "Digital Universe 2020," December 2012

² Rick Smolan and Jennifer Erwit, "The Human Face of Big Data," November 2012

Security

End-to-end security is key to stemming breaches

Because targets are so widespread, companies must secure the entire organization



Source: HP Comprehensive Applications Threat Analysis (CATA), September 2012

61 © Copyright 2013 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice.



Gracias

