IBM Cloud

Evoluzionismo digitale: il Cloud come fattore abilitante per la competitività

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Do you speak "cloud"?

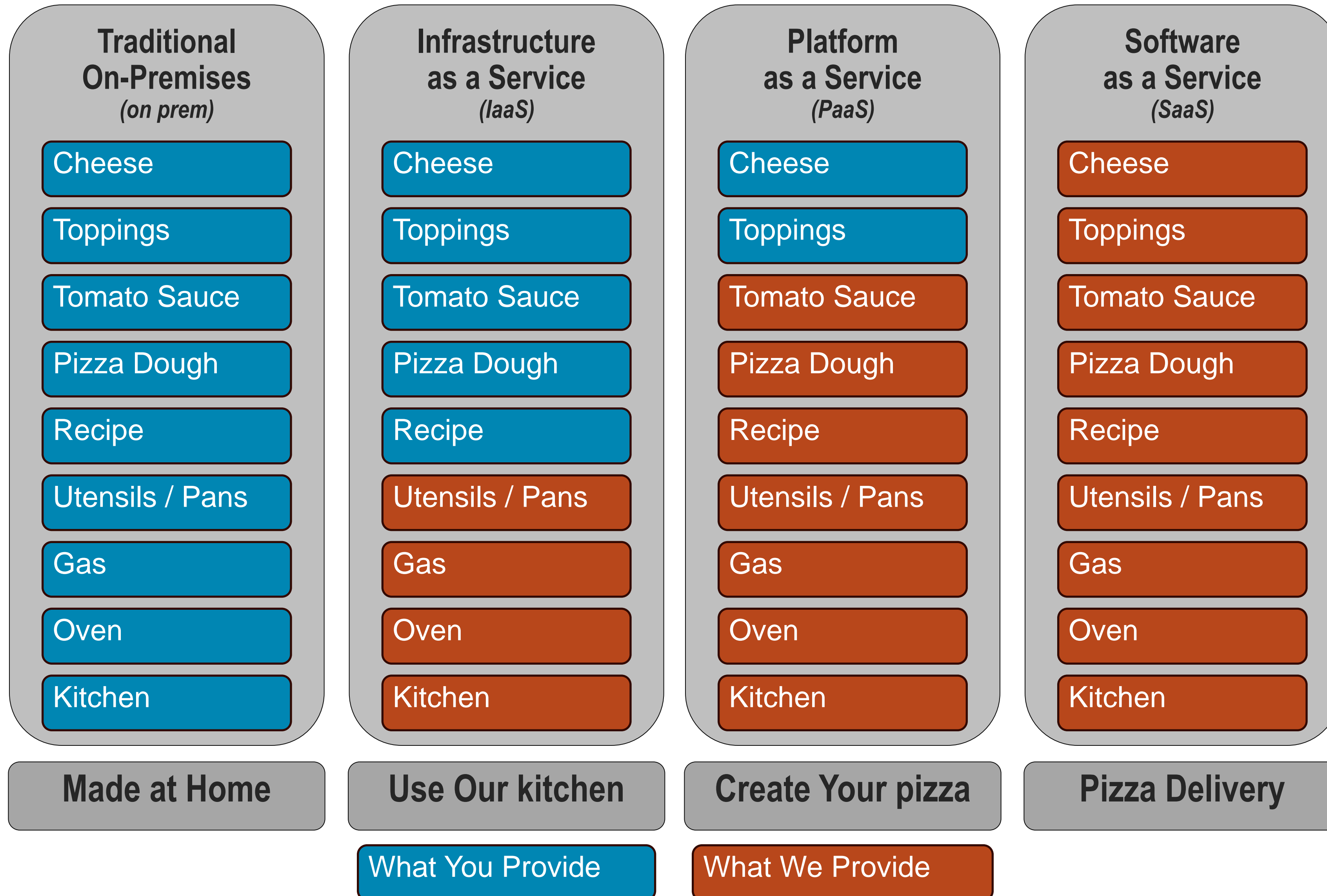Perche' il cloud e' importante per te e **per il tuo business**?

Pizza as a Service

| Traditional On-Premises *(on prem)*	Infrastructure as a Service *(IaaS)*	Platform as a Service *(PaaS)*	Software as a Service *(SaaS)*
Cheese	Cheese	Cheese	Cheese
Toppings	Toppings	Toppings	Toppings
Tomato Sauce	Tomato Sauce	Tomato Sauce	Tomato Sauce
Pizza Dough	Pizza Dough	Pizza Dough	Pizza Dough
Recipe	Recipe	Recipe	Recipe
Utensils / Pans	Utensils / Pans	Utensils / Pans	Utensils / Pans
Gas	Gas	Gas	Gas
Oven	Oven	Oven	Oven
Kitchen	Kitchen	Kitchen	Kitchen
Made at Home	**Use Our kitchen**	**Create Your pizza**	**Pizza Delivery**

What You Provide

What We Provide

Il trend inarrestabile dell'IT…

Cloud

Web

PC / Client-Server

Mainframe

Cloud Computing trasformera'
(sta trasformando)
il delivery dei servizi IT
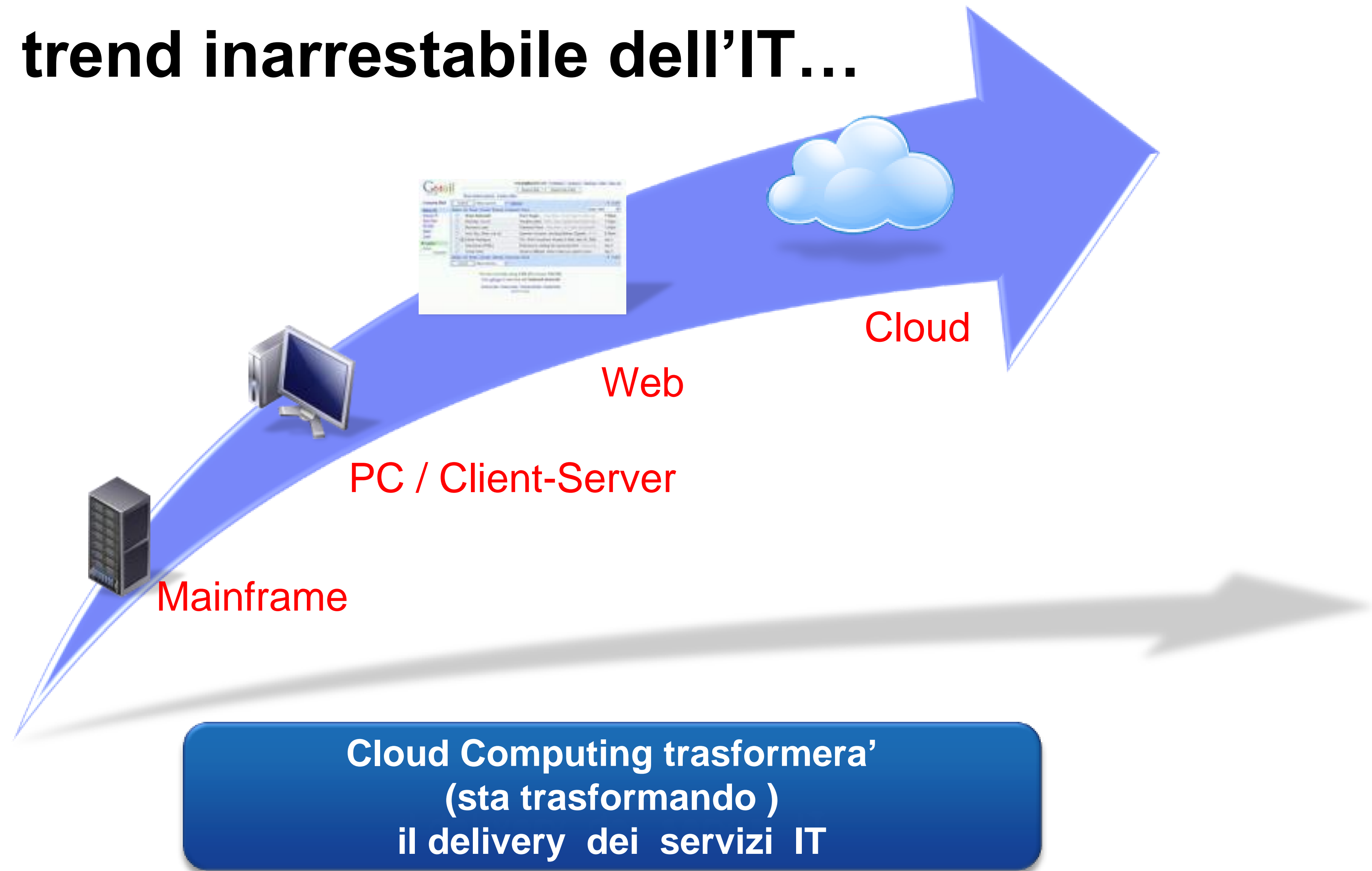
«…La «perturbazione tecnologica» di oggi è universale, la tendenza verso
la trasportabilità dei dati,
la rivoluzione del cloud,
il *passaggio generazionale dal possesso della tecnologia verso l'esperienza delle soluzioni*
creerà notevoli divergenze, nei prossimi anni, tra investimenti vincenti e fallimentari...»
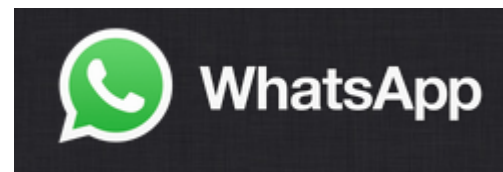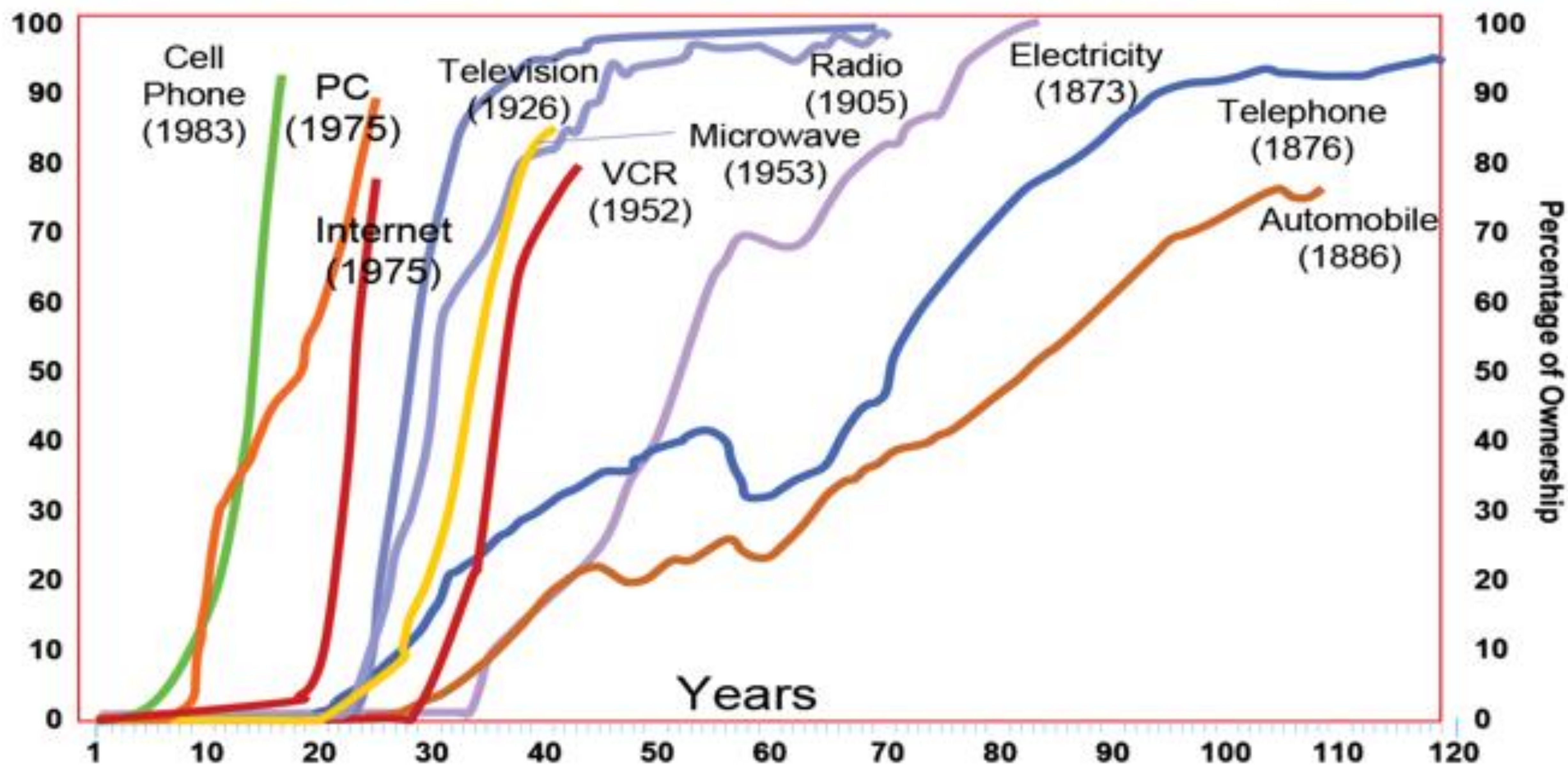
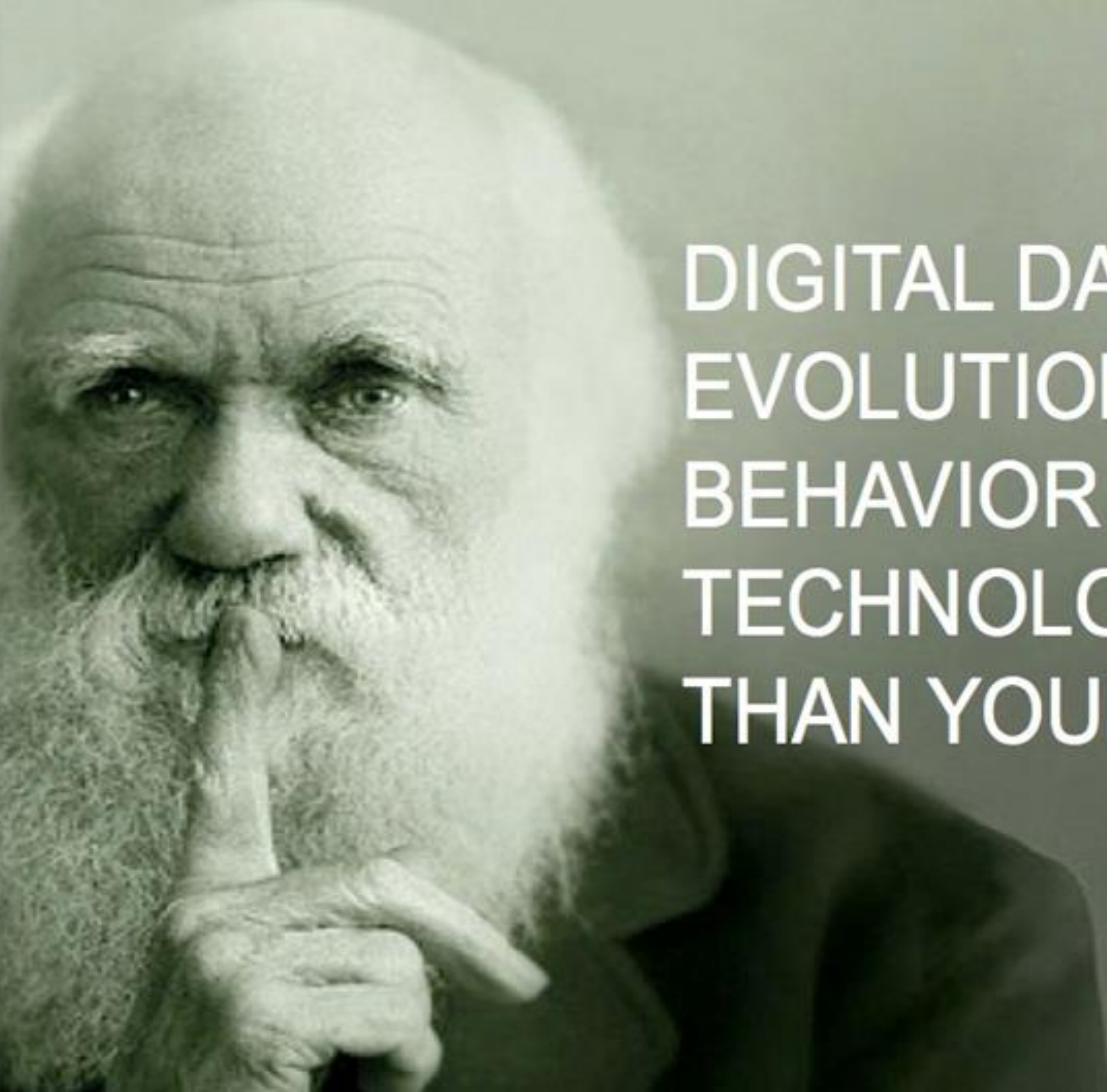Da economia di possesso

A economia di «esperienza»

Commoditization - Change comes faster than ever

Cell Phone (1983)

PC (1975)

Internet (1975)

Television (1926)

VCR (1952)

Microwave (1953)

Radio (1905)

Electricity (1873)

Telephone (1876)

Automobile (1886)

Years

Percentage of Ownership

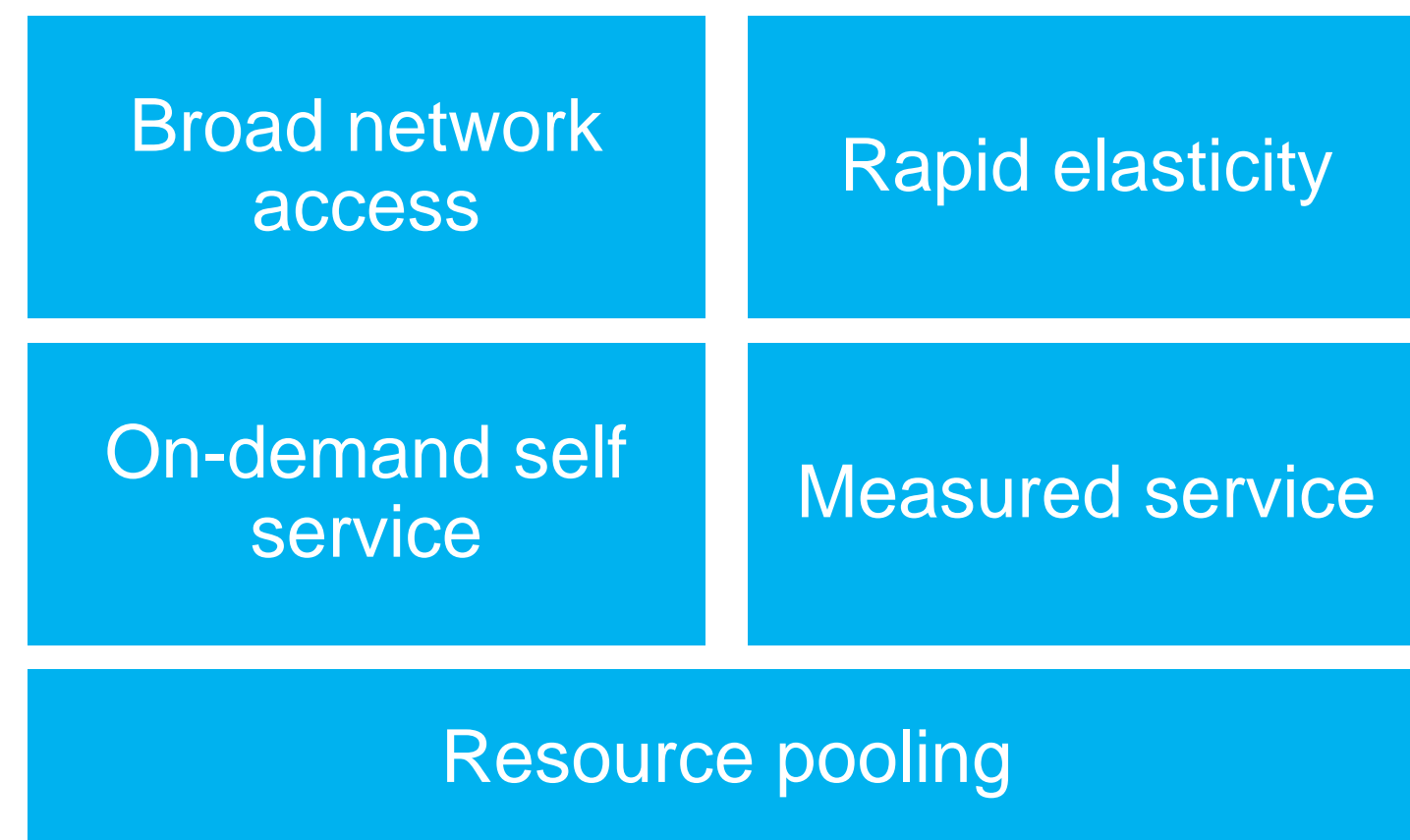E il profilo degli sviluppatori sta cambiando...

DIGITAL DARWINISM IS THE EVOLUTION OF CONSUMER BEHAVIOR WHEN SOCIETY & TECHNOLOGY EVOLVE FASTER THAN YOUR ABILITY TO ADAPT
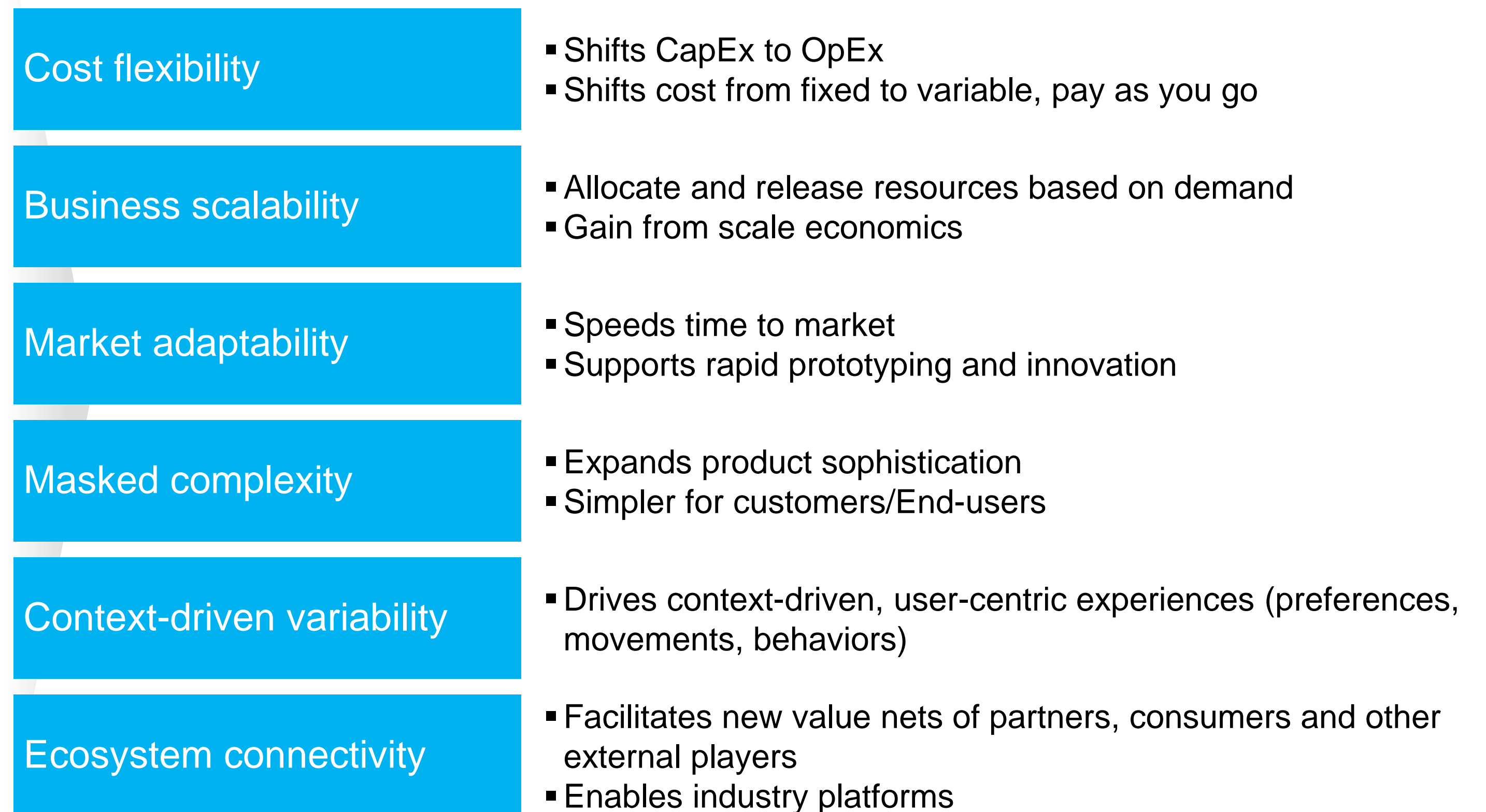
Il Cloud cambia le regole del gioco .
Un motore per l'innovazione

Cloud computing is a pay-per-use consumption and delivery model that enables real-time delivery of configurable computing resources (for example, networks, servers, storage, applications, services)

Cloud empowers six potentially **"game changing"** business enablers

Cloud's essential characteristics

Broad network access	Rapid elasticity
On-demand self service	Measured service
Resource pooling	

Cost flexibility	▪ Shifts CapEx to OpEx ▪ Shifts cost from fixed to variable, pay as you go
Business scalability	▪ Allocate and release resources based on demand ▪ Gain from scale economics
Market adaptability	▪ Speeds time to market ▪ Supports rapid prototyping and innovation
Masked complexity	▪ Expands product sophistication ▪ Simpler for customers/End-users
Context-driven variability	▪ Drives context-driven, user-centric experiences (preferences, movements, behaviors)
Ecosystem connectivity	▪ Facilitates new value nets of partners, consumers and other external players ▪ Enables industry platforms

Source: NIST, IBM IBV Power of cloud study

Buy it or Cloud it?

CLOUD IT
SOFTLAYER an IBM Company

Lead time	Utilization	Maintenance	Access	Management	Security	Finance	Costs
15 minutes – 4 hours	**Typical** usage **70-90%** Pay per use monthly or hourly - Switch off - No pay post project anymore	No network downtime - No cloud portal downtime - Redundant infrastructure - 2 hour HW replacement - 24x7	Any place - Any time - Any device	Management tools included	Physical Security and basic data security free	OPEX	cost / time

BUY IT
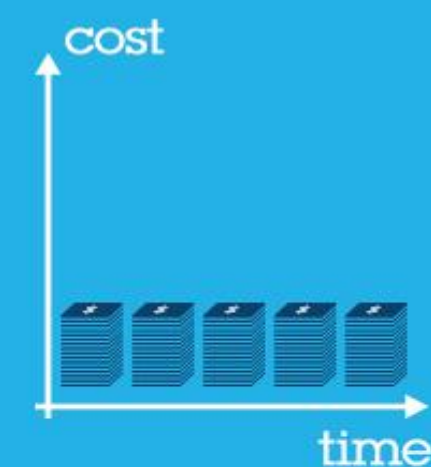
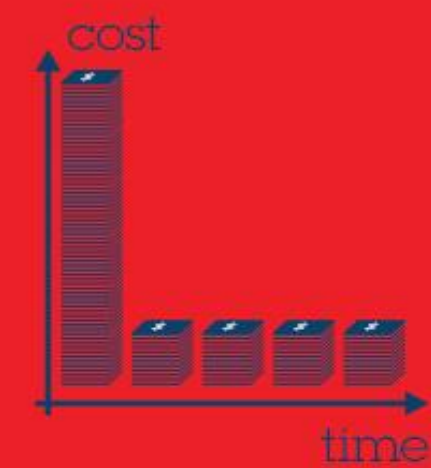| Lead time	Utilization	Maintenance	Access	Management	Security	Finance	Costs
4 - 6 weeks+	**Typical** usage **10-20%** 100% unused post-project - It stay in the inventory	Manual - Additional expense - Requires downtime	Network investment required	It might require additional software	Physical and Data Security Investment	CAPEX + OPEX	cost / time

©2015

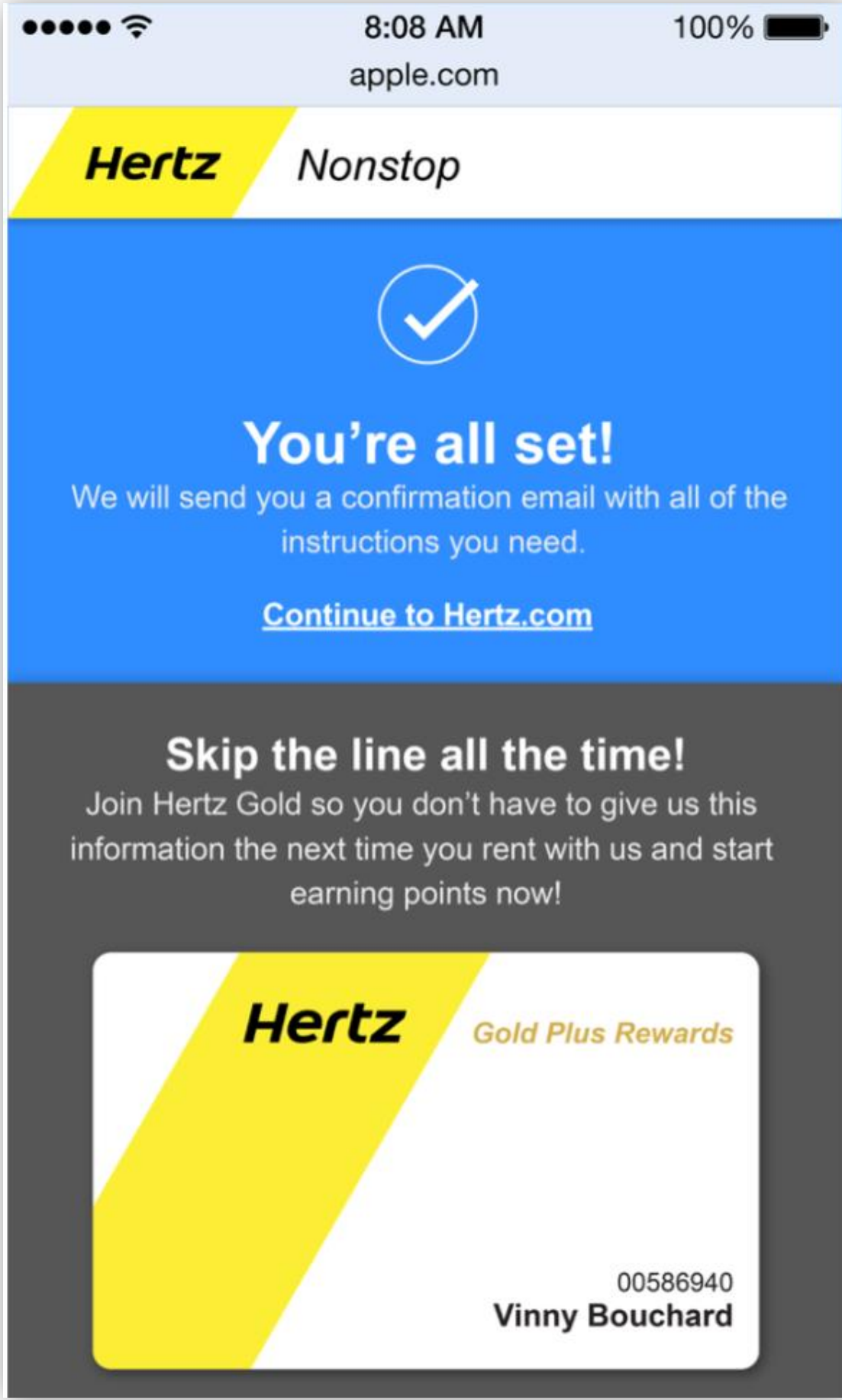# Cosa cercano i clienti ? ....RISULTATI !

Ma questo richiede approcci diversi per diversi tipi di applicazioni

New App
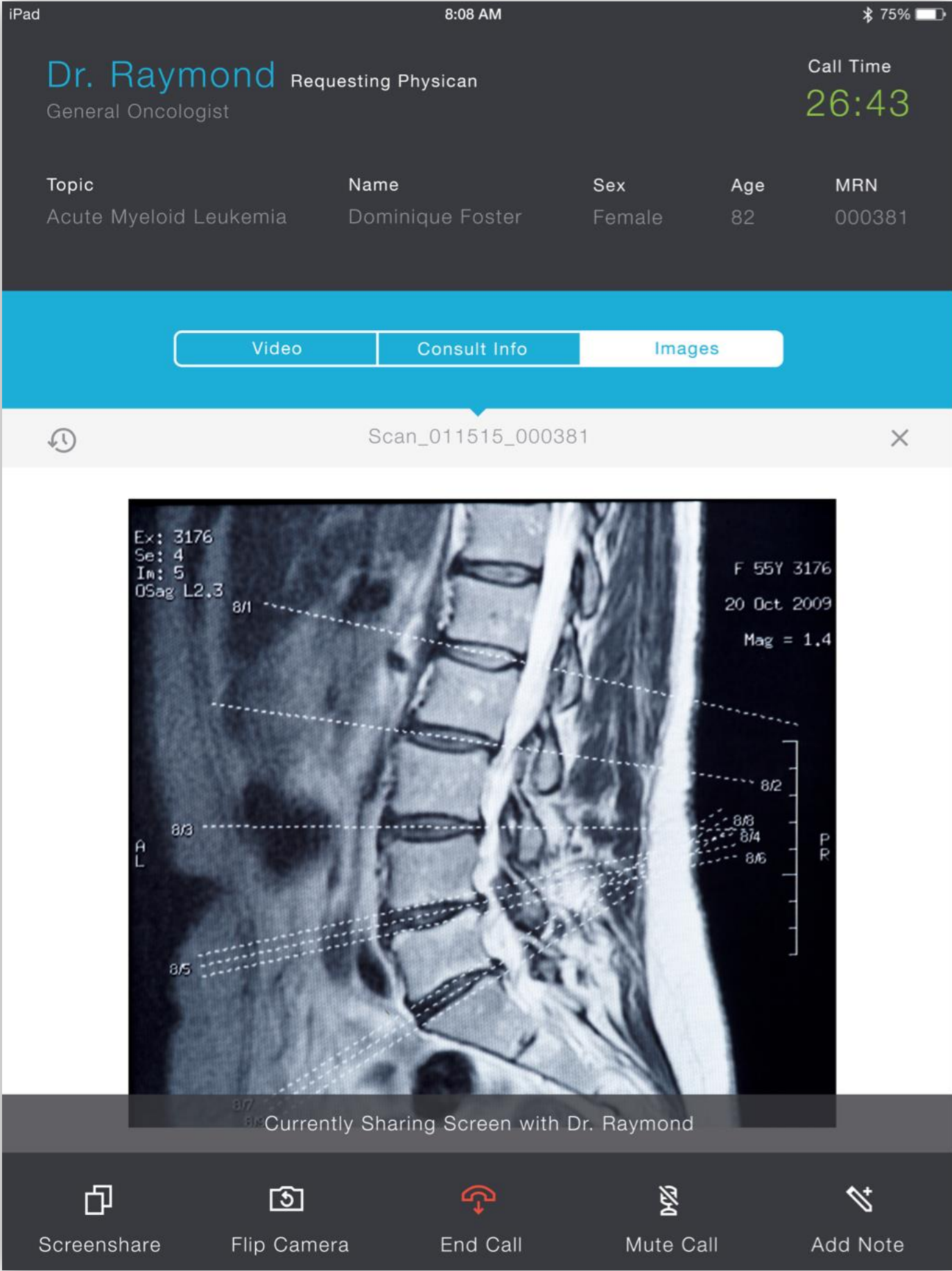
Transitional

Legacy Extension

Will you disrupt or be disrupted?

1/3 of the top 20 companies in every industry will be disrupted over the **next 3 years**
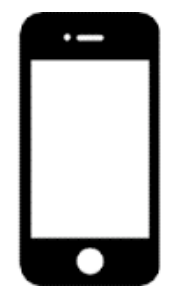
- IDC FutureScape, Nov 2015

Cosa cercano i clienti come risultati ?

La necessita' di velocita' in mercati in rapido cambiamento

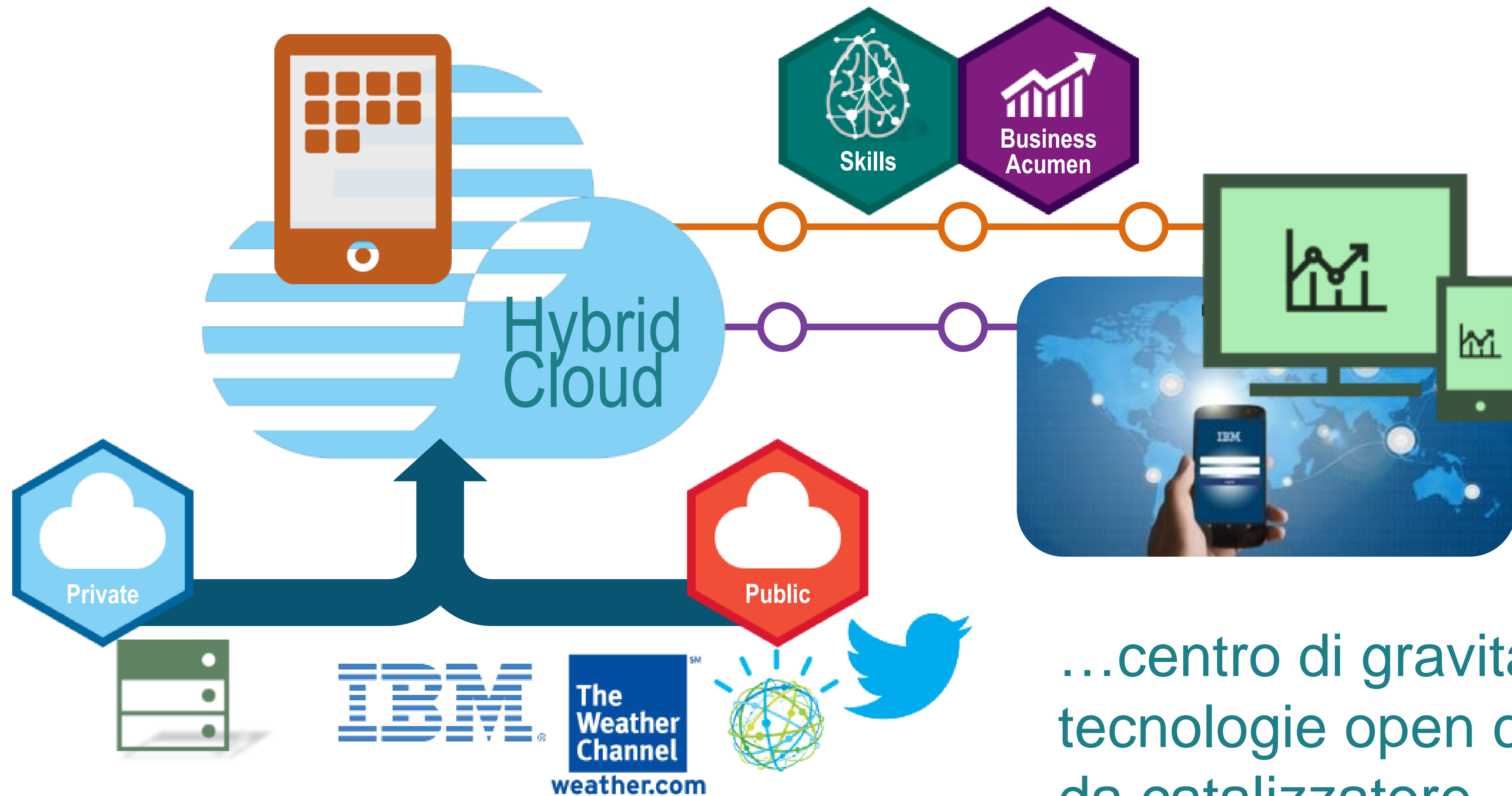Nuovi modelli di business dai concorrenti "born on the cloud"

Aspettative dei consumatori circa il modello di "digital engagement"

Pressione del mercato per ridurre i costi dell'IT

La tecnologia e' abilitante a una nuova era di innovazione ...

Hybrid Cloud

Skills

Business Acumen

Private

Public

IBM

The Weather Channel
weather.com

...centro di gravita' sono le tecnologie open che fanno da catalizzatore

Cosa rende **SOFTLAYER** diverso ?

SOFTLAYER®
an IBM Company

Performance
Consistent
compute power
and a high performance
global network
for self-service IaaS.

Flexibility
A range of options -
**bare metal, virtual
server instances and
private clouds**
support a dynamic hybrid
cloud strategy.

Control
Self service or
fully managed with a full
featured **Infrastructure
Management System
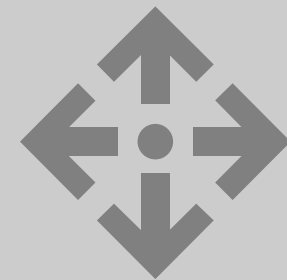and robust APIs**
to support a dynamic
cloud strategy.

SoftLayer una scelta a parte….fuori dalla mischia !

The initial cloud revolution was based on assumptions such as:

All resources are **virtualized**
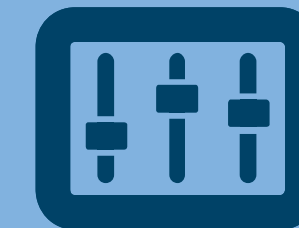
All resources are **shared**

But cloud computing needs have evolved.

SoftLayer® embraces the idea that:

... virtualization is a choice with a flexible set of options

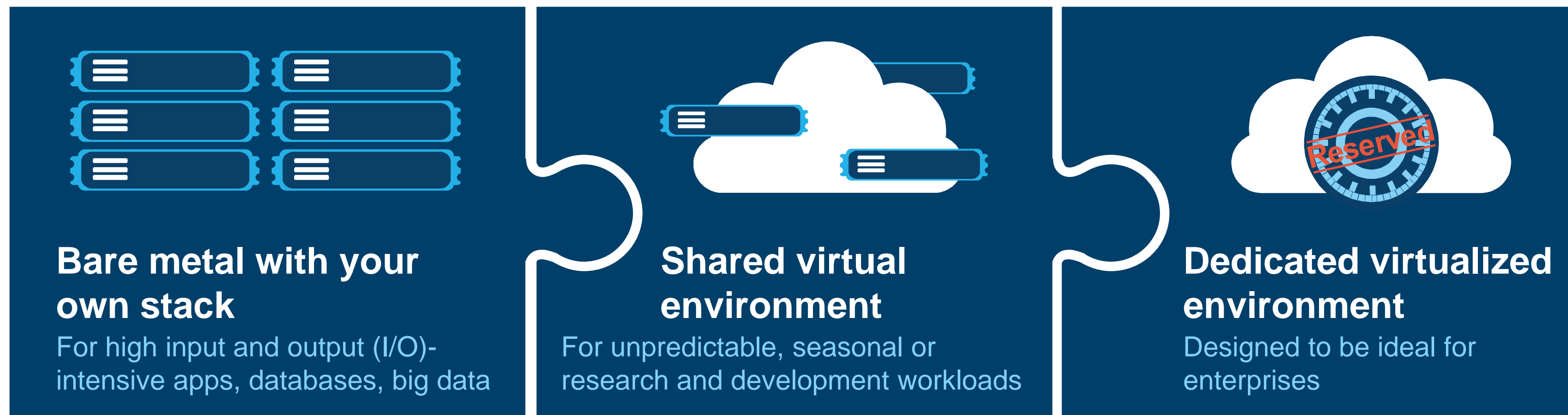… resources can be **shared, dedicated** or **mixed**

But you have the ultimate CHOICE

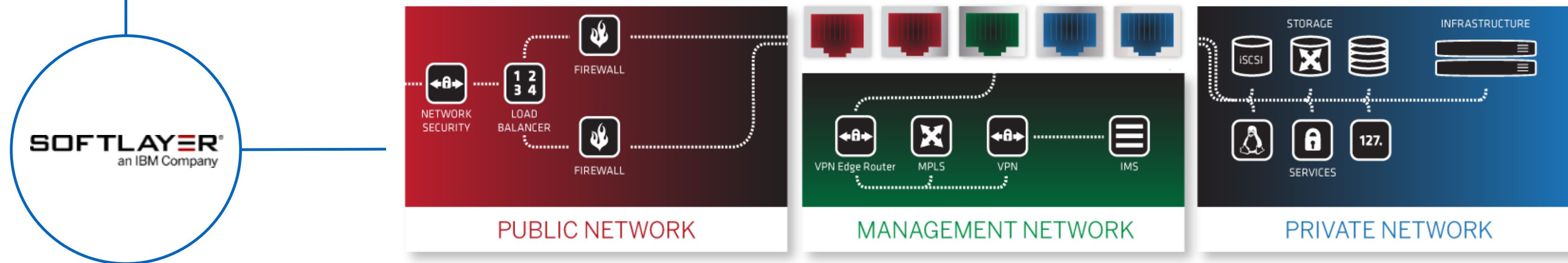**SoftLayer offers a broad portfolio of infrastructure choices to help you achieve greater business agility.**

Any compute and storage combination at any time is available in three models.

Bare metal with your own stack

For high input and output (I/O)-intensive apps, databases, big data

Shared virtual environment

For unpredictable, seasonal or research and development workloads

Dedicated virtualized environment

Designed to be ideal for enterprises

Reserved

- Build and customize the environment based on what you want to achieve
- Fine-tune to meet changing business needs or respond to competitive pressures
- Additional services for compute, storage, network, security, platform management and big data are available

At its core, SoftLayer is comprised of a unique, triple-network architecture

- High-performance public network with transit from multiple tier-1 carriers
- Secure out-of-band (OOB) management via VPN
- Private network for intra-application and inter-facility communications, access to shared services
- Native IPv6 support
- Virtual racks for integrated management
- Complete suite of network services

SOFTLAYER® an IBM Company

PUBLIC NETWORK

NETWORK SECURITY
LOAD BALANCER
FIREWALL
FIREWALL

MANAGEMENT NETWORK

VPN Edge Router
MPLS
VPN
IMS

PRIVATE NETWORK

STORAGE
INFRASTRUCTURE
iSCSI
SERVICES
127.

IBM SoftLayer:
Total Access, Control and Transparency
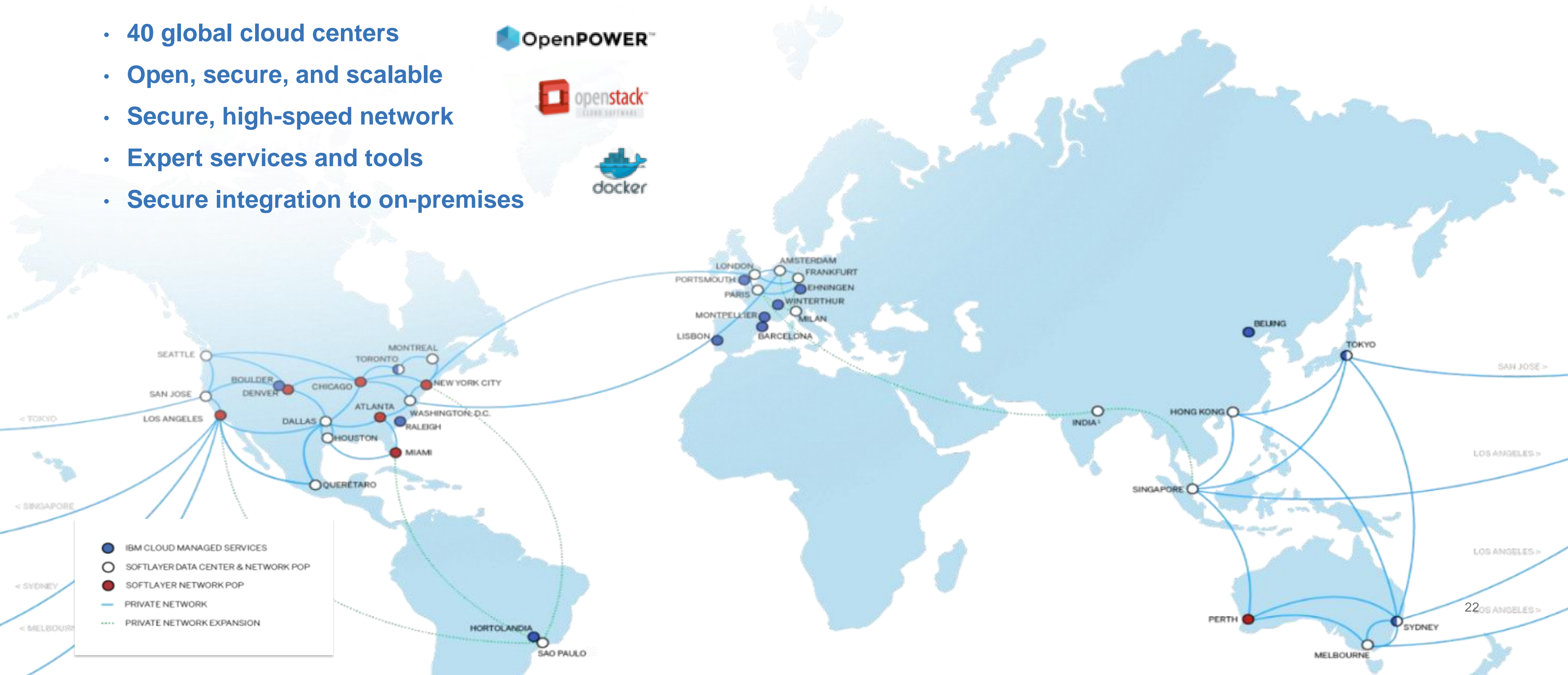
- 40 global cloud centers
- Open, secure, and scalable
- Secure, high-speed network
- Expert services and tools
- Secure integration to on-premises

SoftLayer supports deployment of regulated workloads through extensive compliance and clear delineation of roles and responsibilities

- SoftLayer cannot access customer data
  - Only customers control movement of their data
- SoftLayer offers comprehensive security services, across the IT infrastructure
- Dedicated and private clouds are well suited for regulated workloads
- Strict physical and operational security controls are in place in data centers
- SoftLayer is compliant with major industry and regulatory standards

US Government standard SP800-53

PCI SAQ

PCI ROC
PCI AOC

SoftLayer is designed to offer complete transparency from network topology down to the hardware

With other cloud providers, you may only know:

Zone

Maybe the data center

With SoftLayer, you know:

- Data center
- Pod
- Rack
- Rack unit
- Power port
- Network port
- Server
- NIC controllers
- Firmware
- Serial numbers

Plus

- Audit trail of all actions and access to resources

The resulting **visibility** means you can have more **control** over your application and its performance—as well as security and compliance management

Infrastructure Services

Focus on Price-to-Performance, Private Network, Data Locale and Control

YCSB Performance - Ops/Second
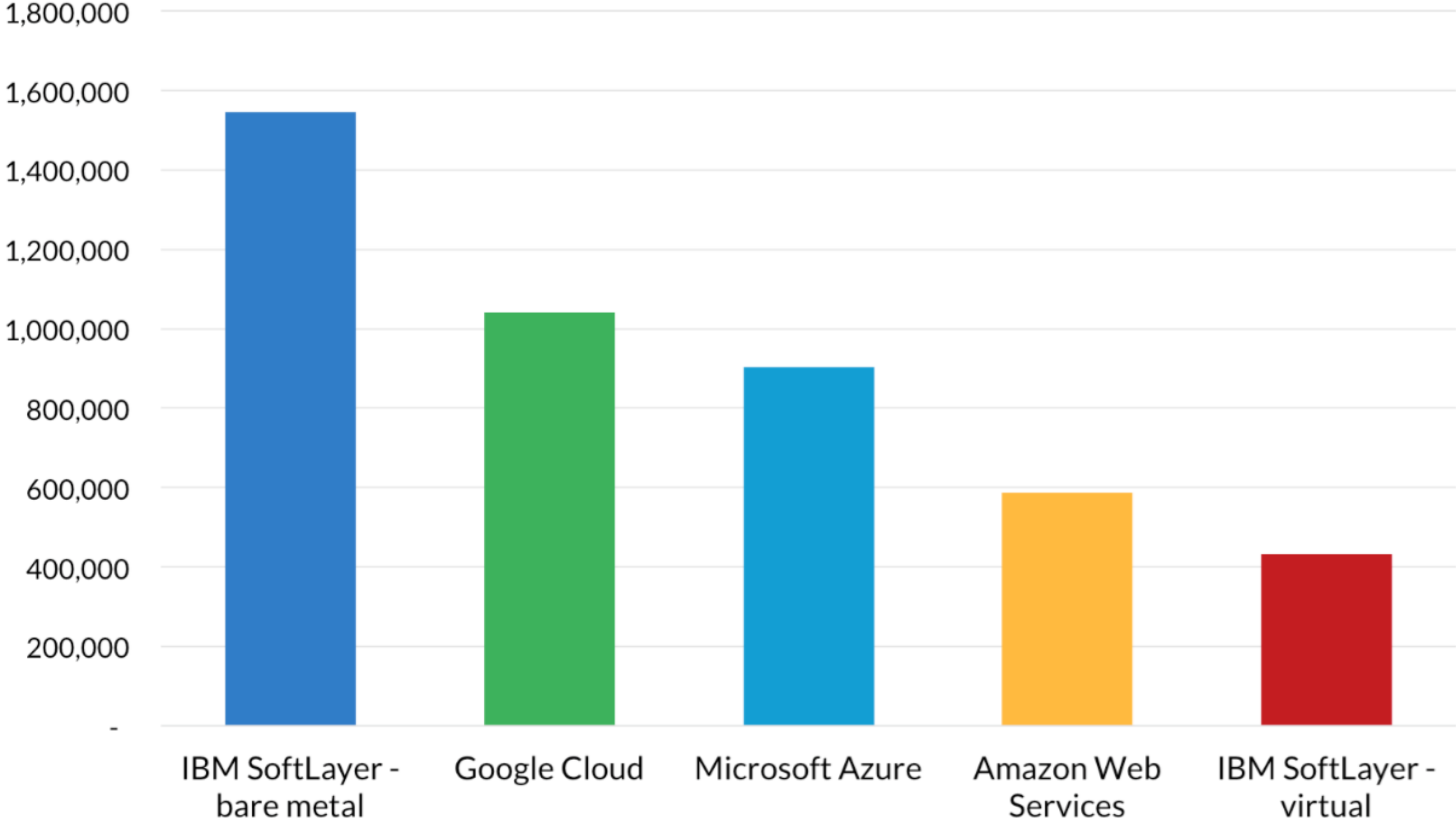
3x Faster Than AWS

"For Second Year in a Row, Cloud Benchmark Reveals IBM SoftLayer Nearly Three Times Faster than Amazon Web Services"

–VoltDB Jan 2016

30% Cheaper at Scale Than AWS

Provider	Instance	Cost/Hour
Amazon AWS	c4.8xlarge	* $1.31
Microsoft Azure	G5	** $7.82
Google Cloud	n1-standard-32	$1.12
IBM SoftLayer "Bare Metal"		*** $1.20
IBM SoftLayer "Virtual"		**** $0.91

Source : VoltDB.com https://voltdb.com/news/second-year-row-cloud-benchmark-reveals-ibm-softlayer-nearly-three-times-faster-amazon-web

Uno sguardo al 2015 del «cloud IBM»

IBM **Bluemix**™

SOFTLAYER®
an IBM Company

bluebox
AN IBM COMPANY

Partnerships:

box   (twitter)   CSC   (apple)

Acquisitions:

cleversafe®
an IBM Company

USTREAM

15k
**New Users
Per Week**

20m
**Active
Domains**

300+
**BlueBox
Customers**

StrongLoop

clearleap®
an IBM Company

AlchemyAPI™
An IBM Company

125k+
**New App
Starts / Month**

130m
**Active Gamers on
SL Infrastructure**

COMPOSE
AN IBM COMPANY

Gravitant
an IBM Company

The
Weather
Company

Accelerate il business e migliorate l'agility con security, visibilita' e controllo

Hybrid cloud

Selezionate il mix ottimale per il vs business…l'ultima scelta quella che conta e' la vostra!

On- or off-premises

Off-premises

On-premises IT

Private

Public
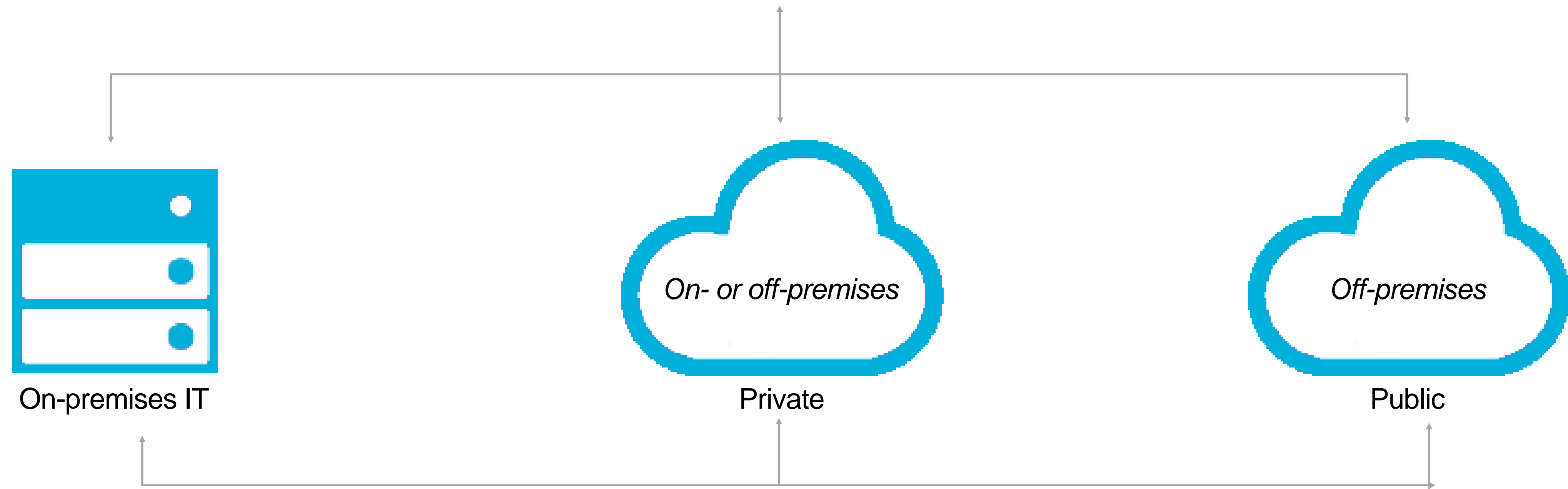
Keep in touch!

Vuoi rimanere aggiornato su novità ed eventi?

@IBMItalia

@maurilio99

Softlayer Italy User Group (quelli del cloud)

GRAZIE !!!.....

.....per il tempo che ci avete dedicato.