

STRATEGIES FOR SERVICE DELIVERY IN THE CLOUD



Andy Brauer
Chief Technology Officer
Business Connexion



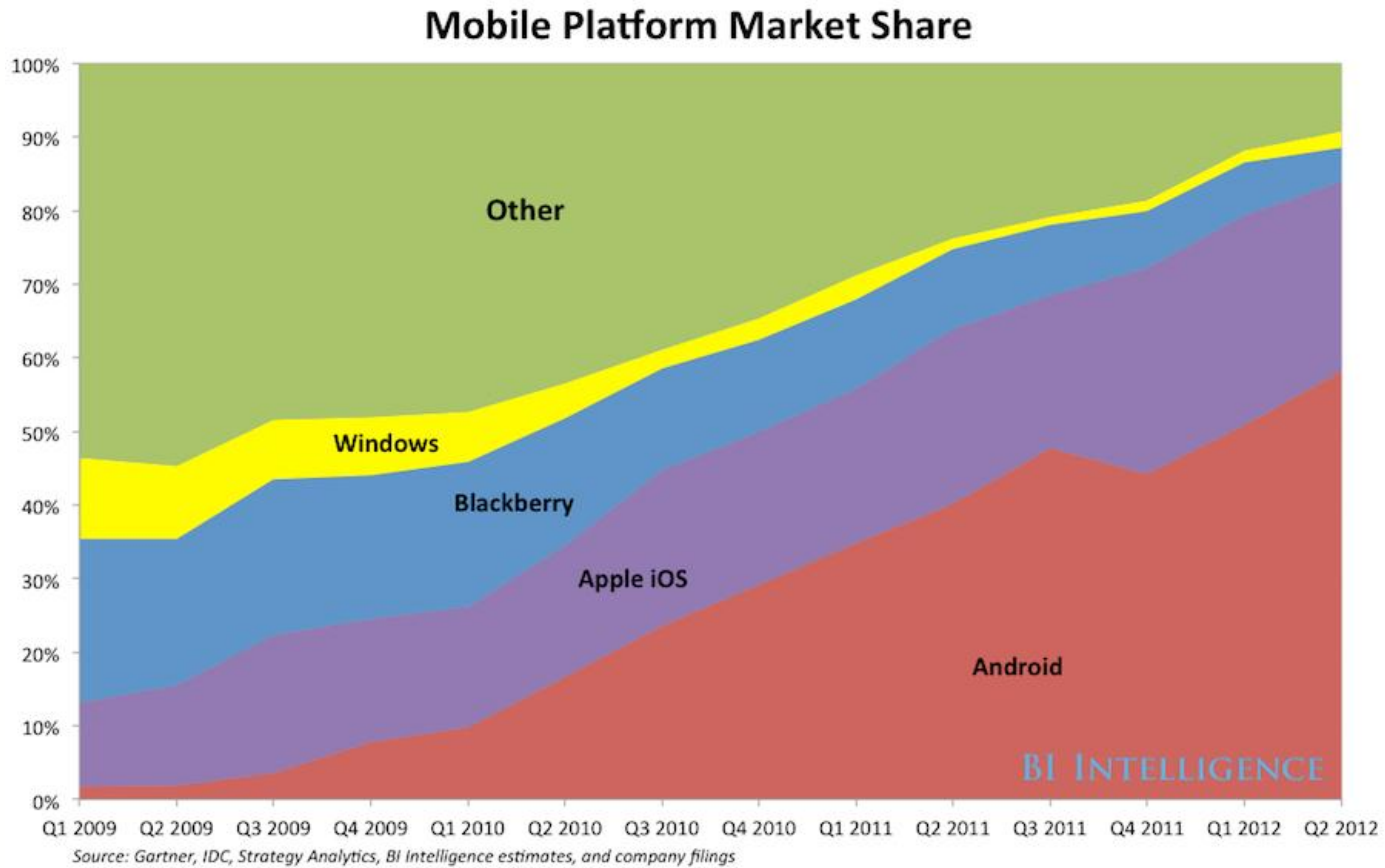
Agenda

Markets
Models
Trends
Money
Tools
Mindsets



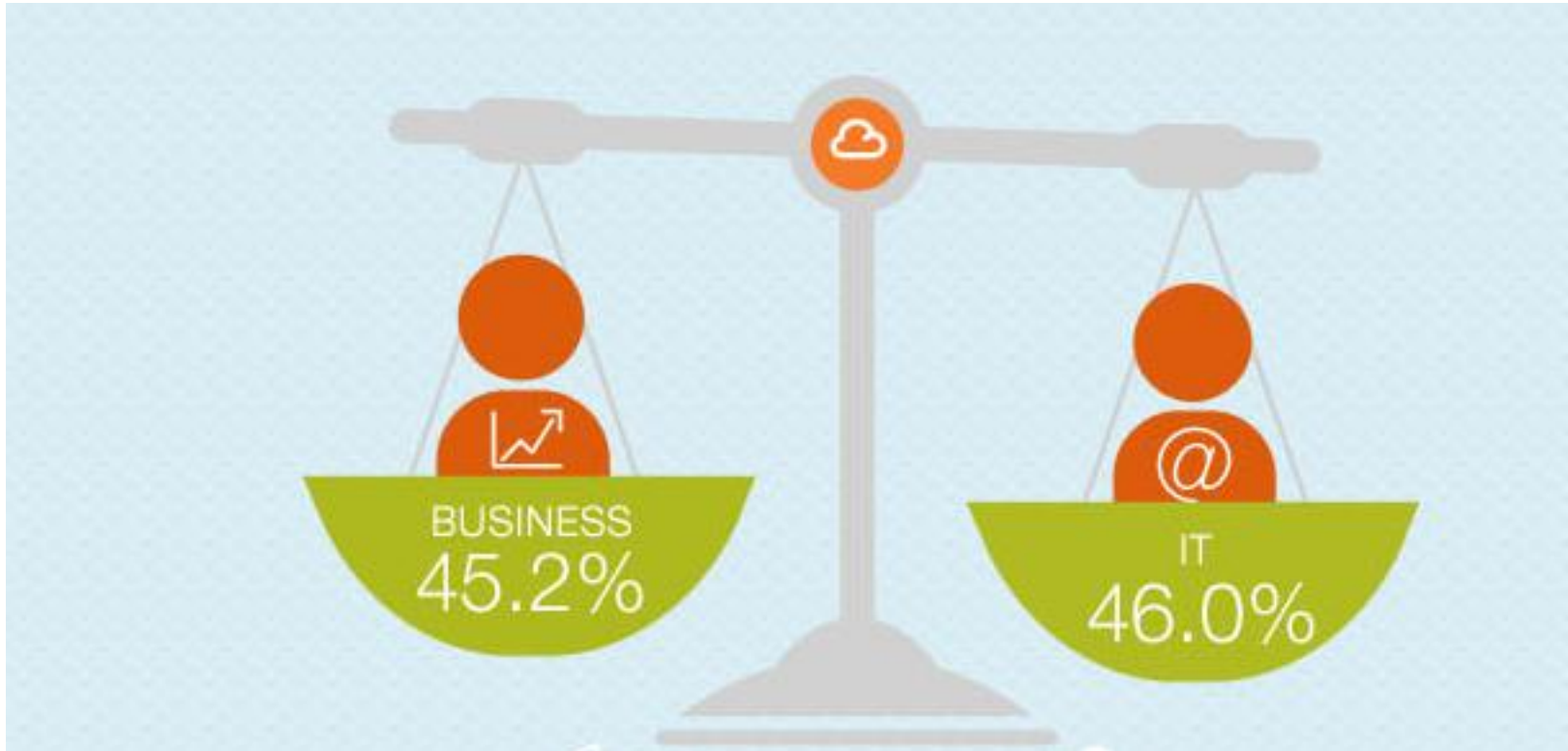
**Hyper Connectivity creating a situation of Hyper-Competition
can result in a market characterized by Hyper-choice for the consumer**

Markets

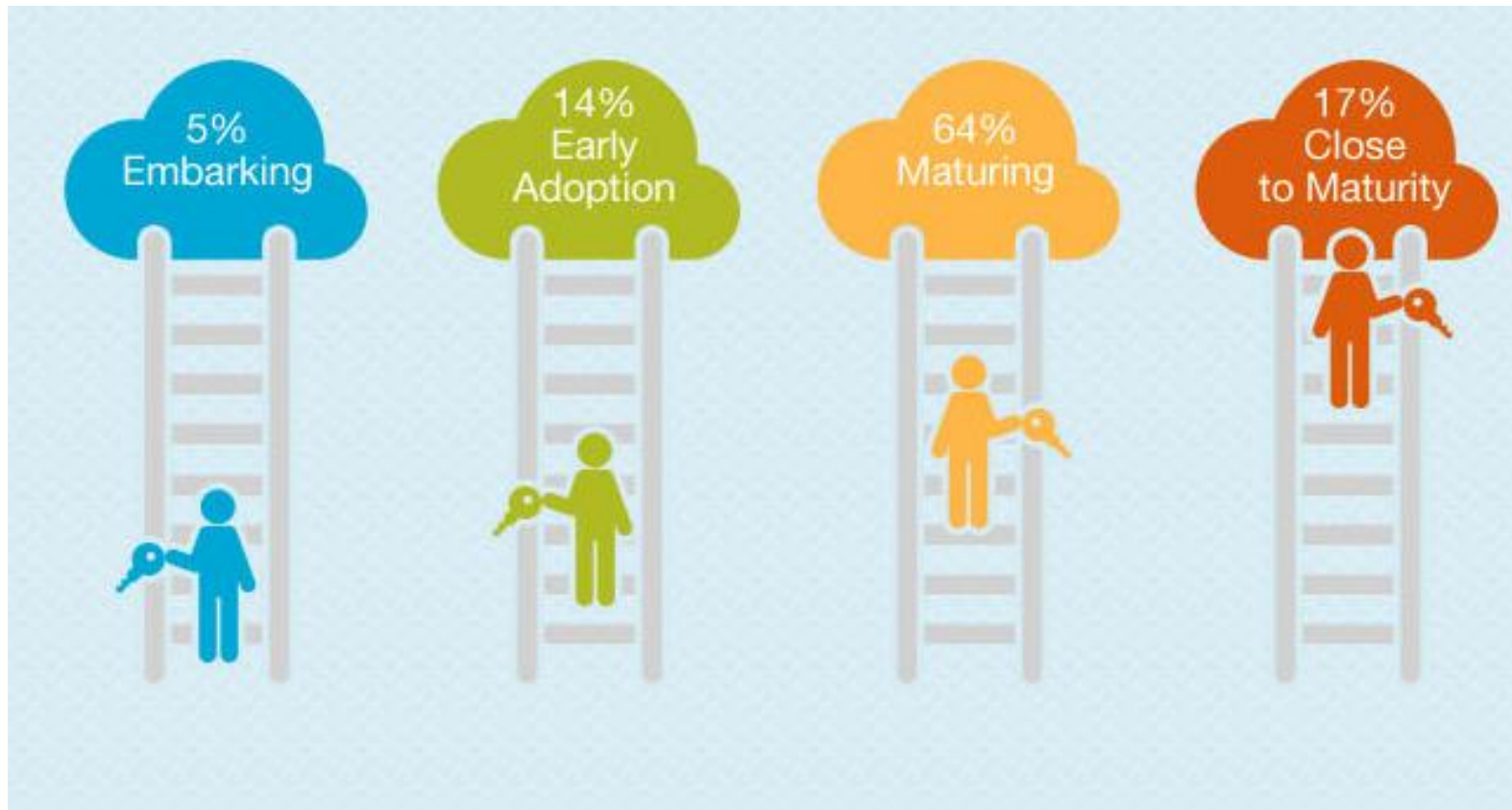


The Tipping Point

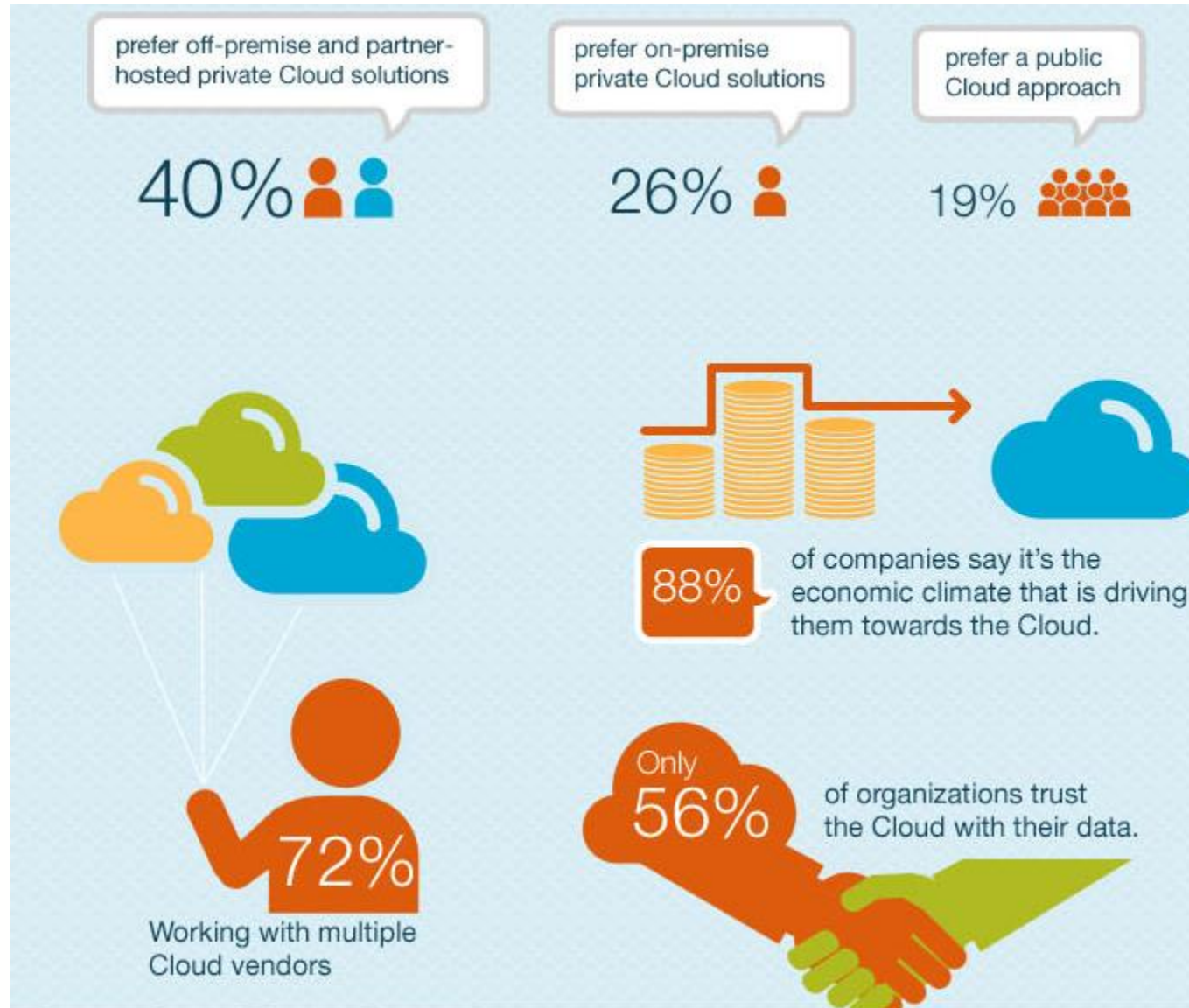
Who makes the decision to use or move to the Cloud



Cloud Maturity

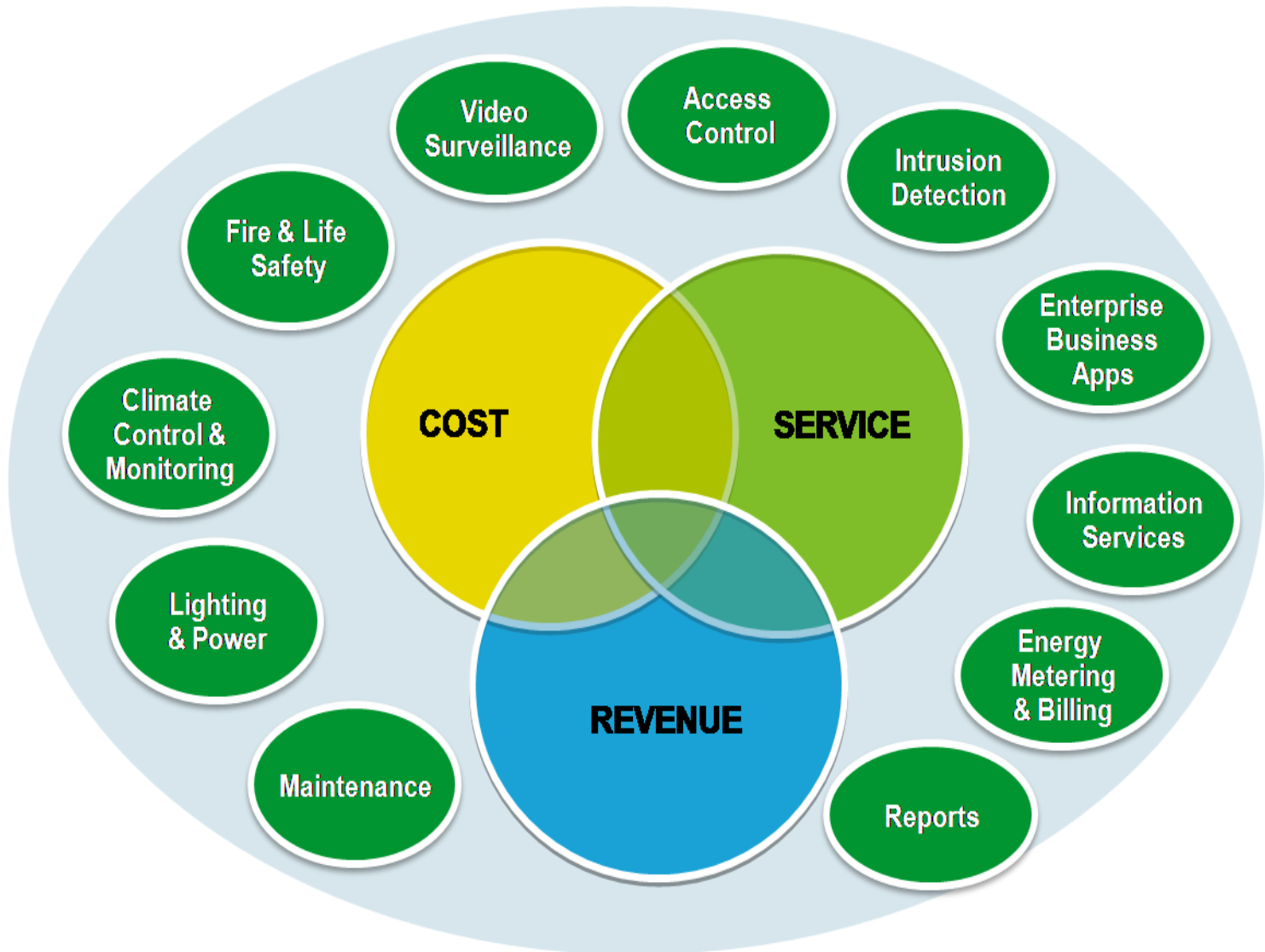


Market Acceptance

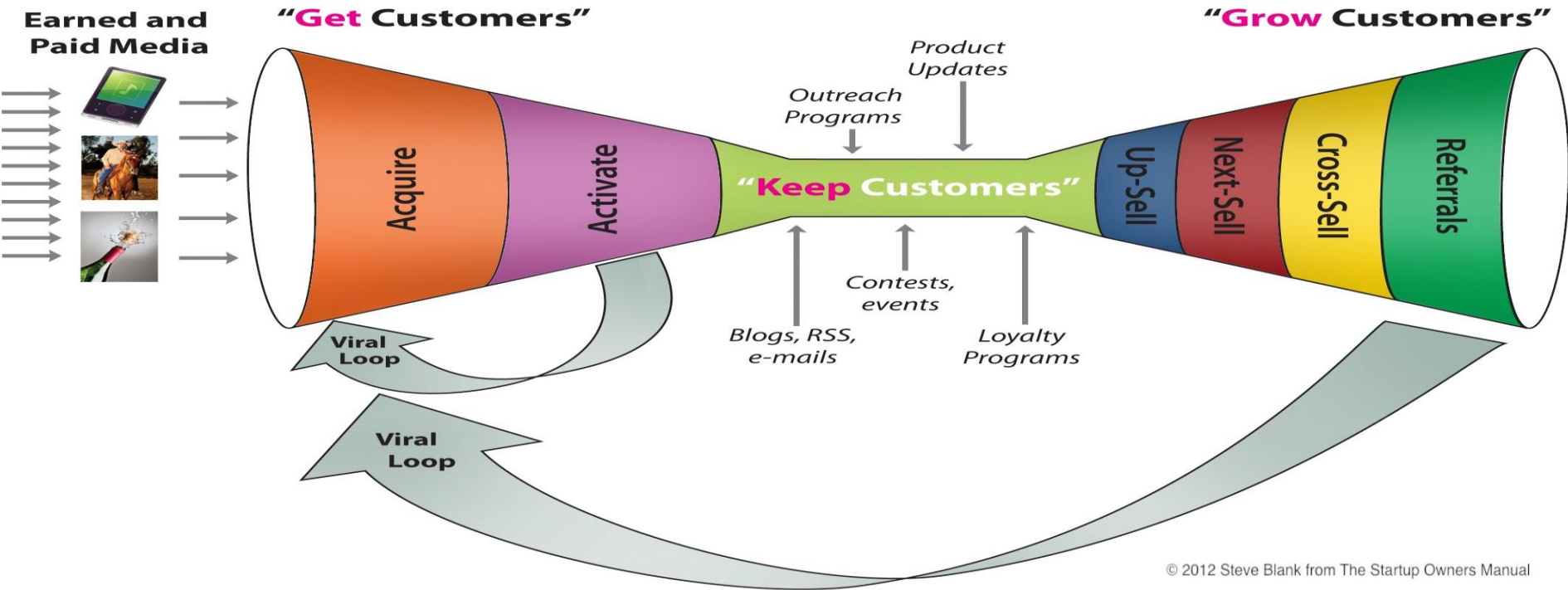




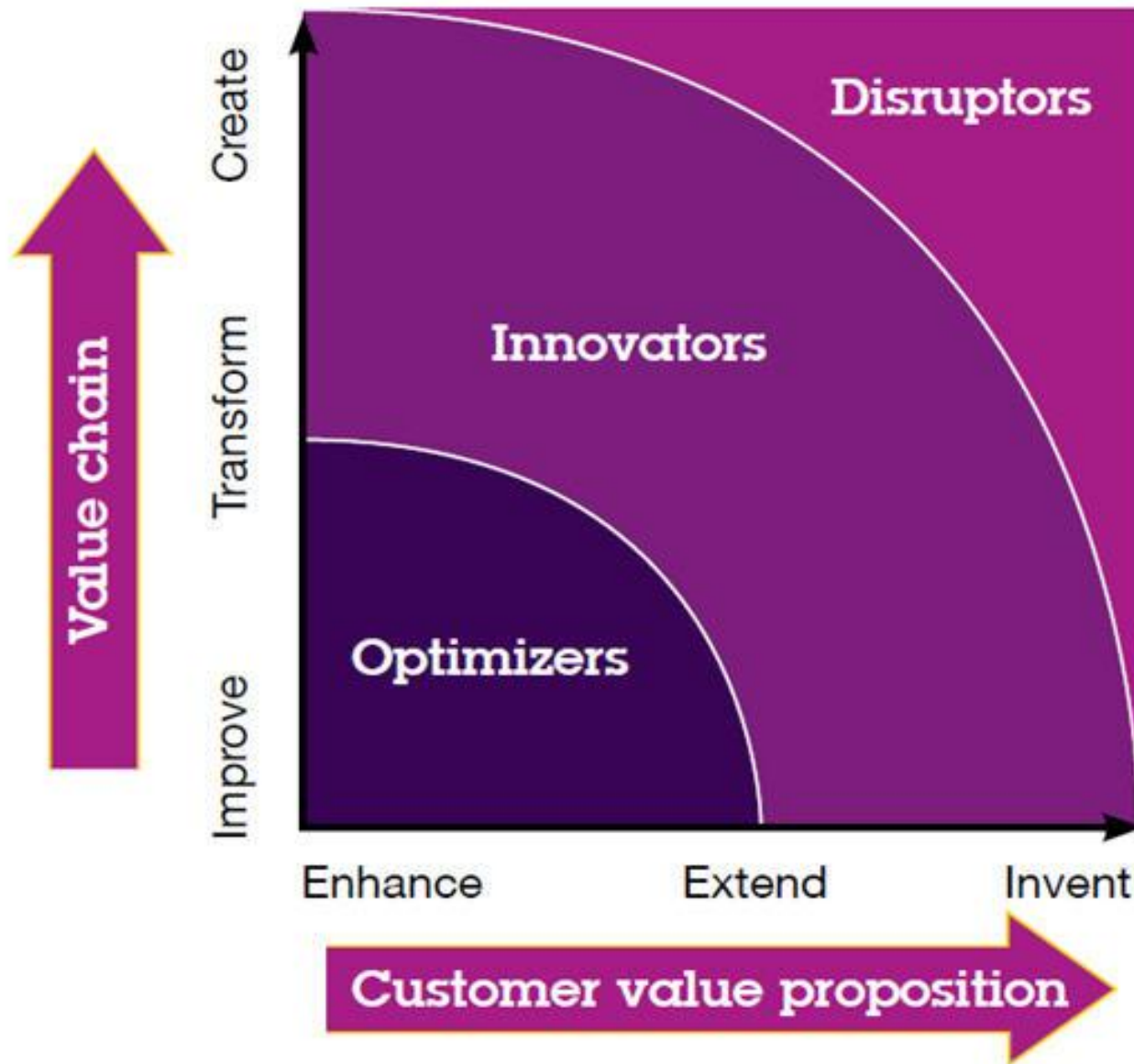
Key Drivers for IP Convergence



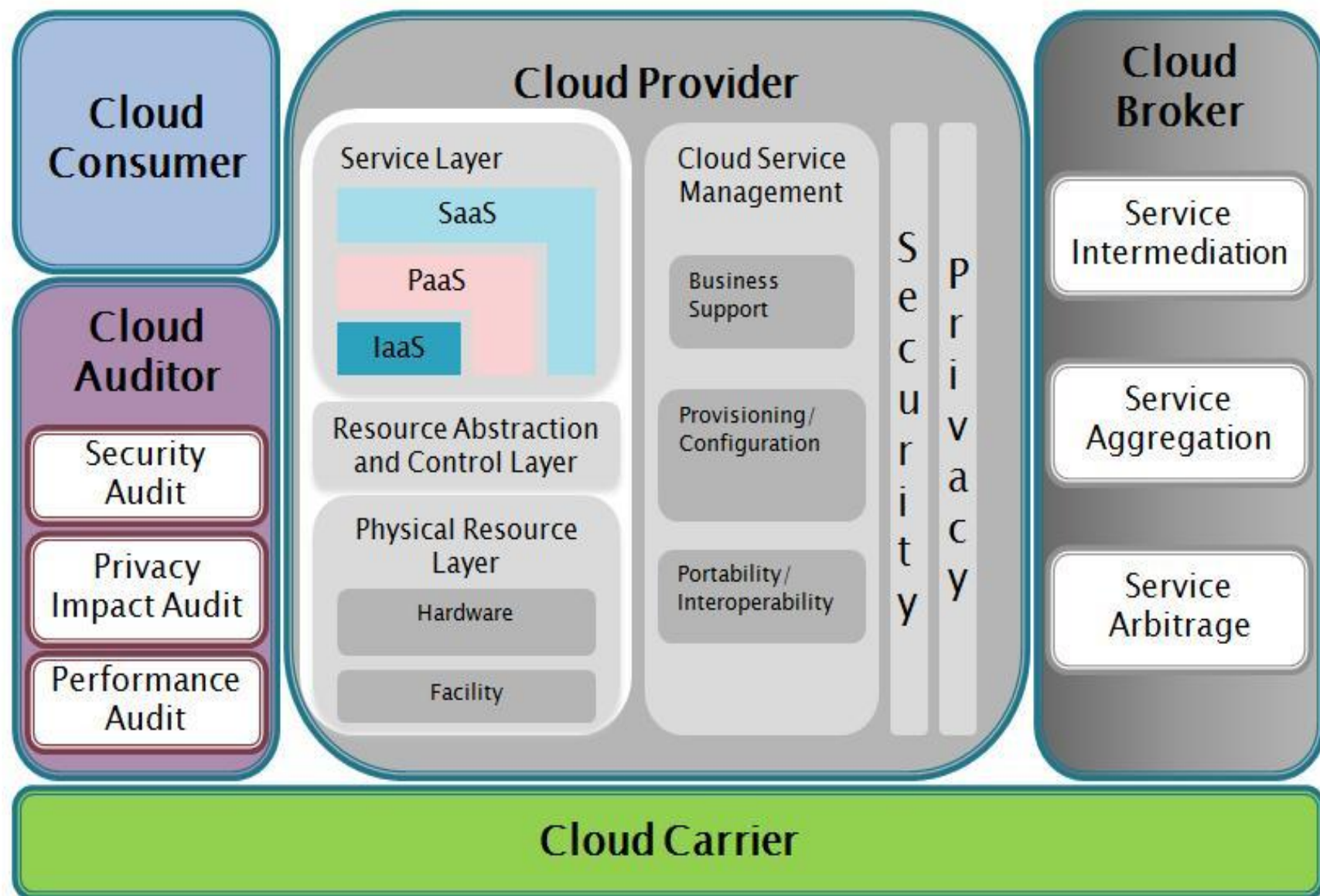
Models



Cloud Enablement Framework



NIST Reference Architecture



Cloud Models

eDaas = everything Digital as a Service

Private Cloud
Public Cloud
Social Cloud
Hybrid Cloud
Media Cloud
Industrial Cloud
Instrumentation cloud
Personal Cloud
Government Cloud
Space Cloud
Network Cloud
Service Cloud
Aggregator Cloud
Military Cloud
Forensic Cloud
Hacker Cloud
Financial Cloud

Sky Clouds

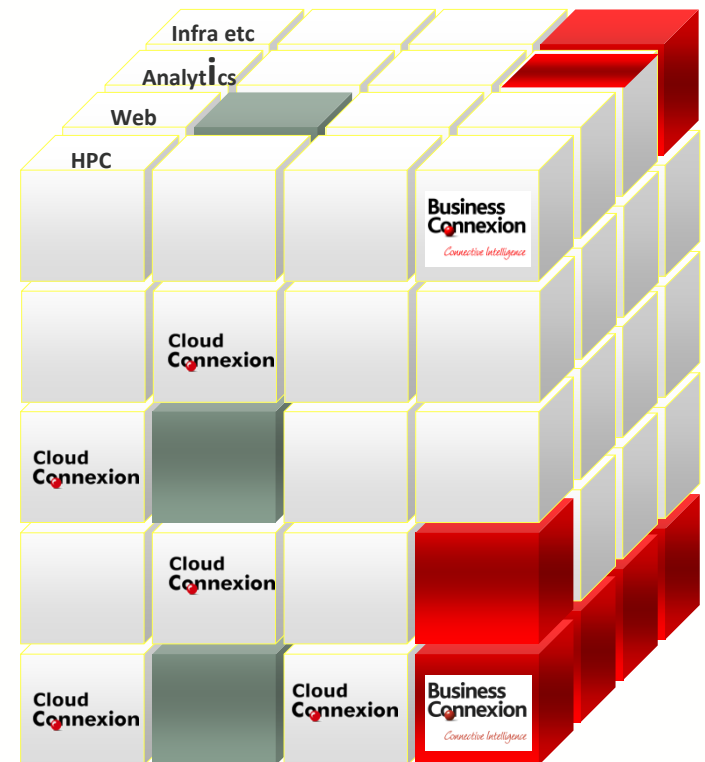
BUSAS

KAAS

SAAS

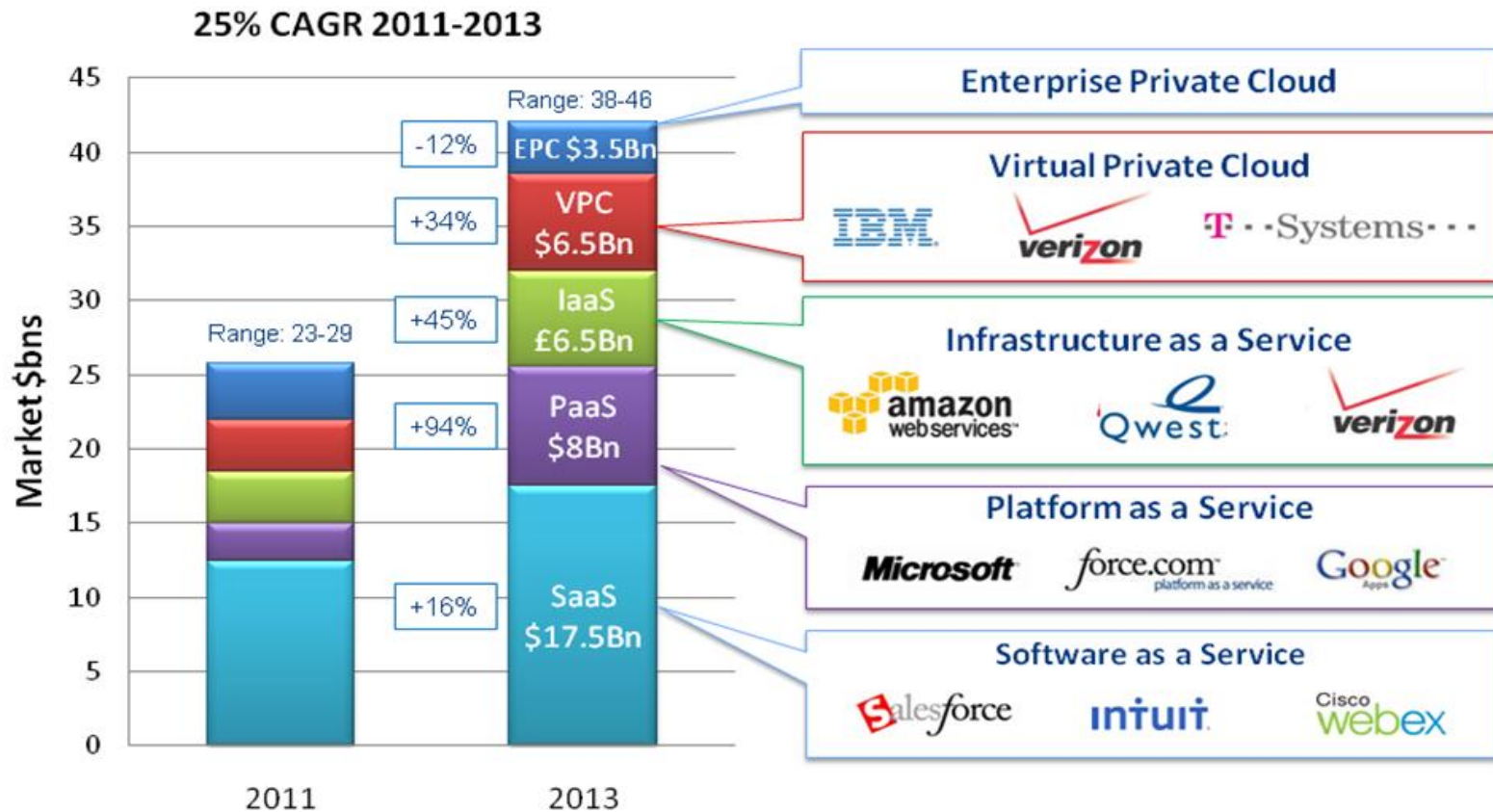
PAAS

IAAS



Social Public Hybrid Private

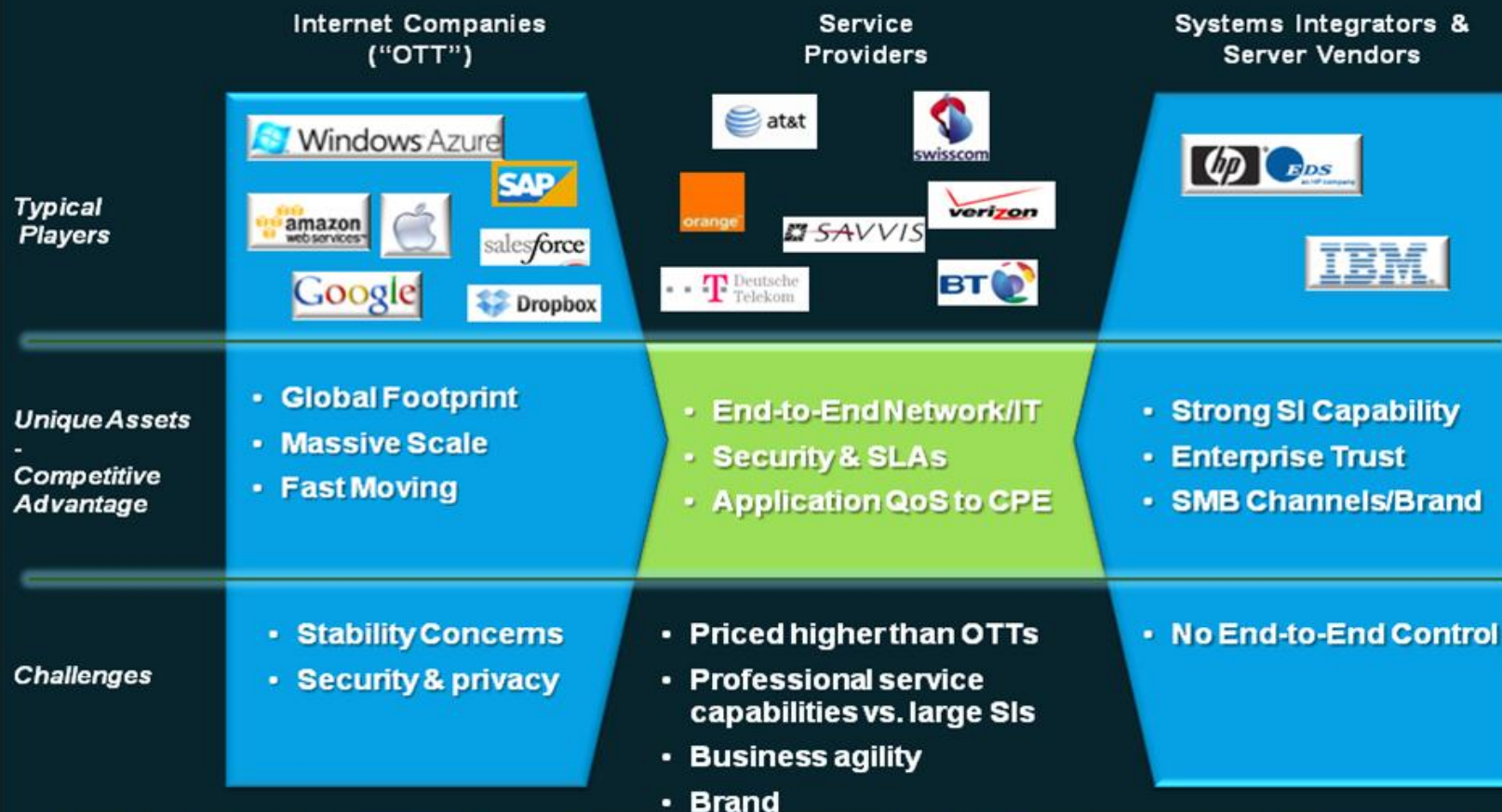
Cloud services: market forecast and current players



Source: Bain Analysis, Forrester, IDC, Gartner, William Blair & Co.



Telco Positioning – Differentiating with Converged Network-IT Cloud services



Trends

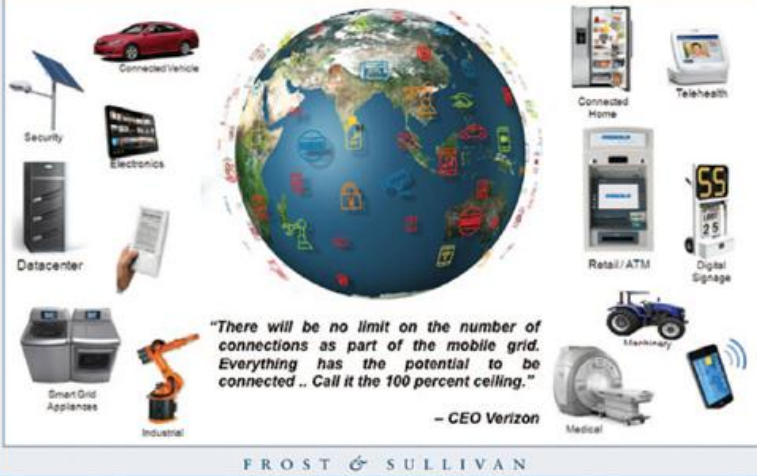


Hyper Connected World

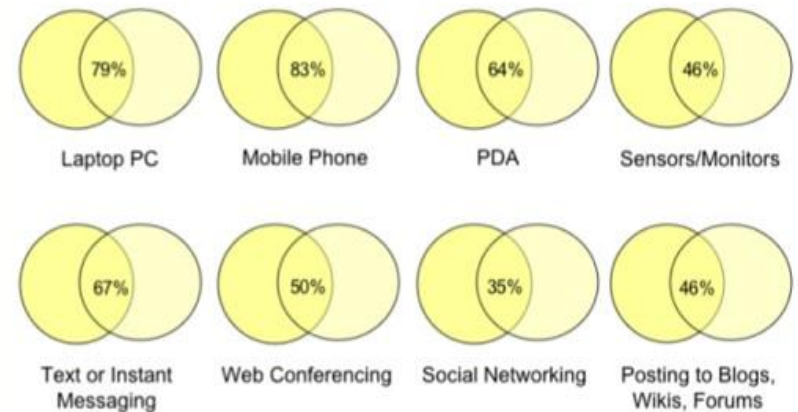


Hyper Connectivity

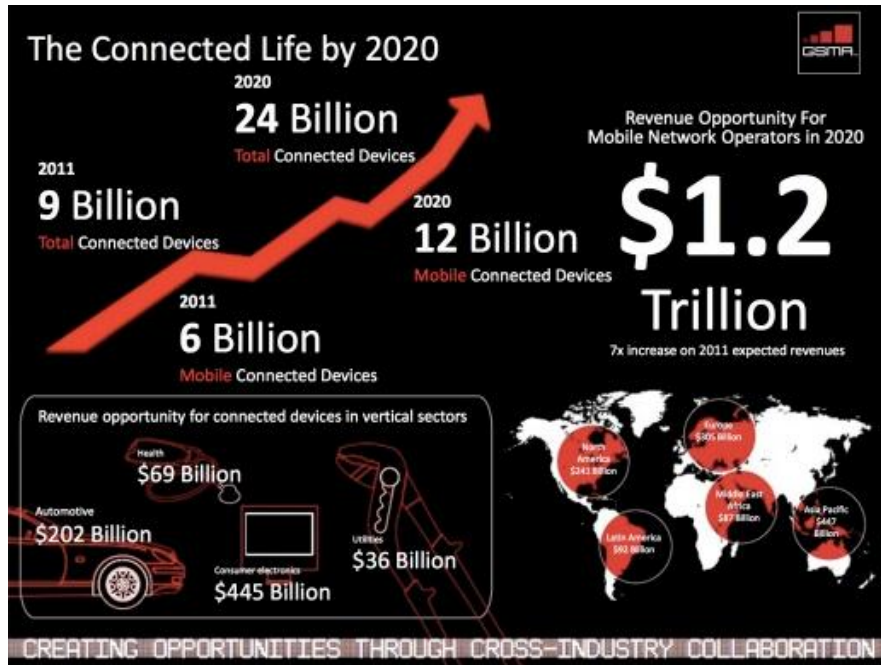
Hyper Connectivity: 50 Billion Connected Devices in 2020



The Blurring Personal and Business Boundary Percent Hyperconnected Both For Business and Personal Use



Hyper Connectivity



Hyper-Connected Home: Real World Example My Home

Computing Devices



Gaming/Streaming Devices



Mobile Devices



Common Applications



Hyper Competition

Work

Artisans - Hierarchies - Networks



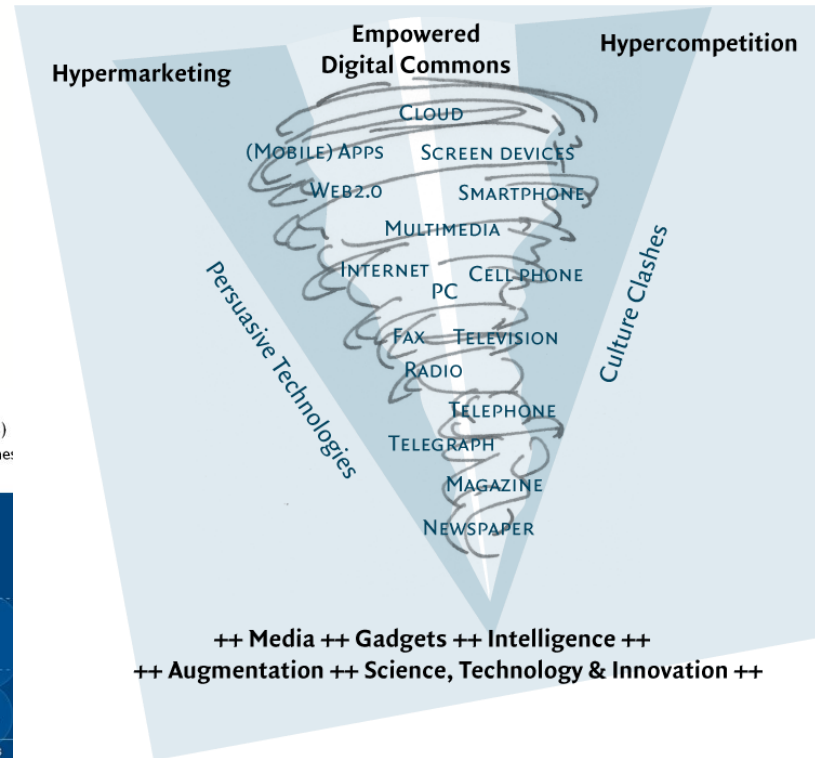
~19th C



+/- 20th C



21st C



Why hyper competition?

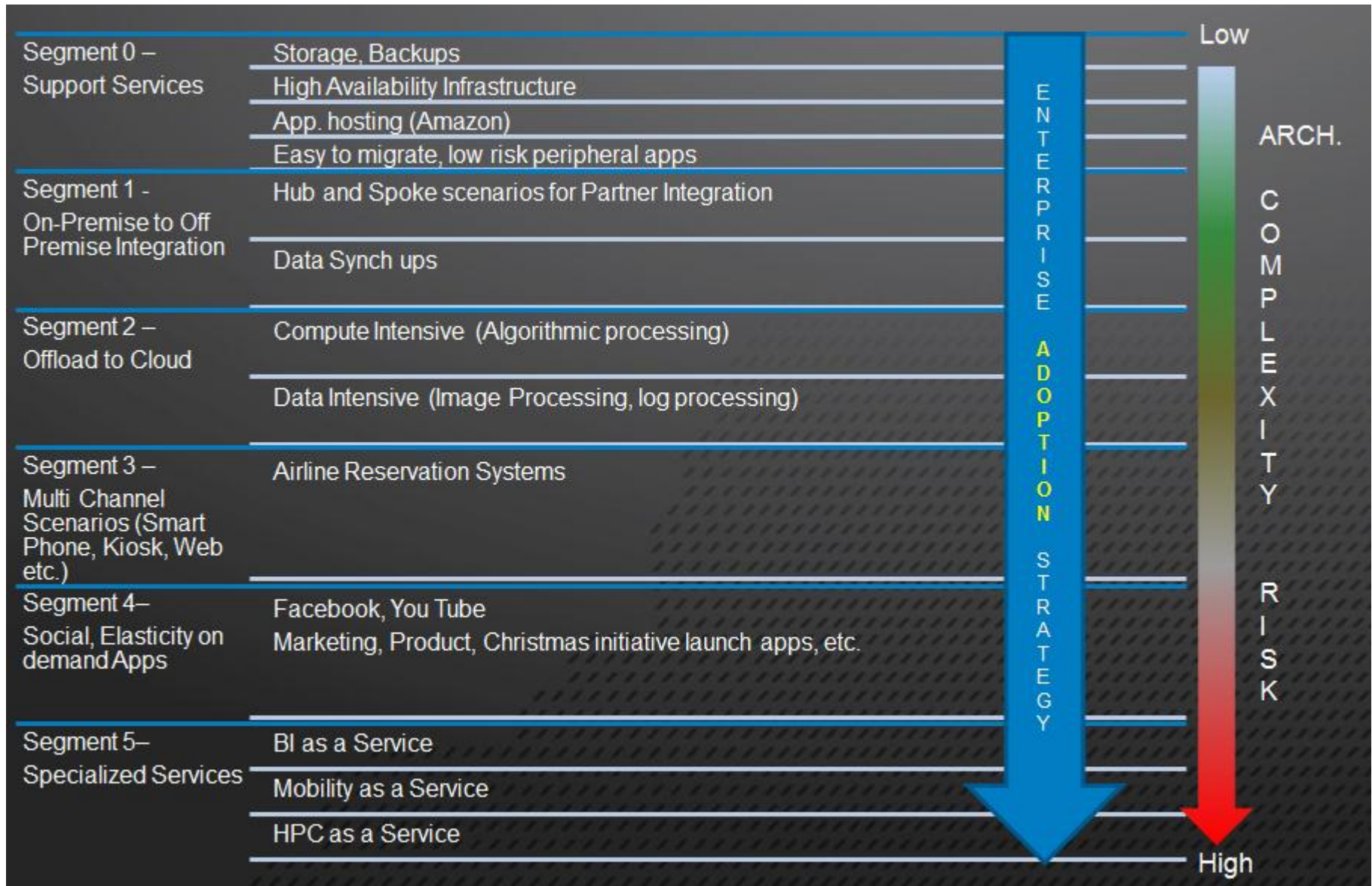
- Globalisation – less trade barriers and efficient transport (e.g. containers)
- Speed of hyper connected communication and the pace of modern business
- Disruptive Technologies



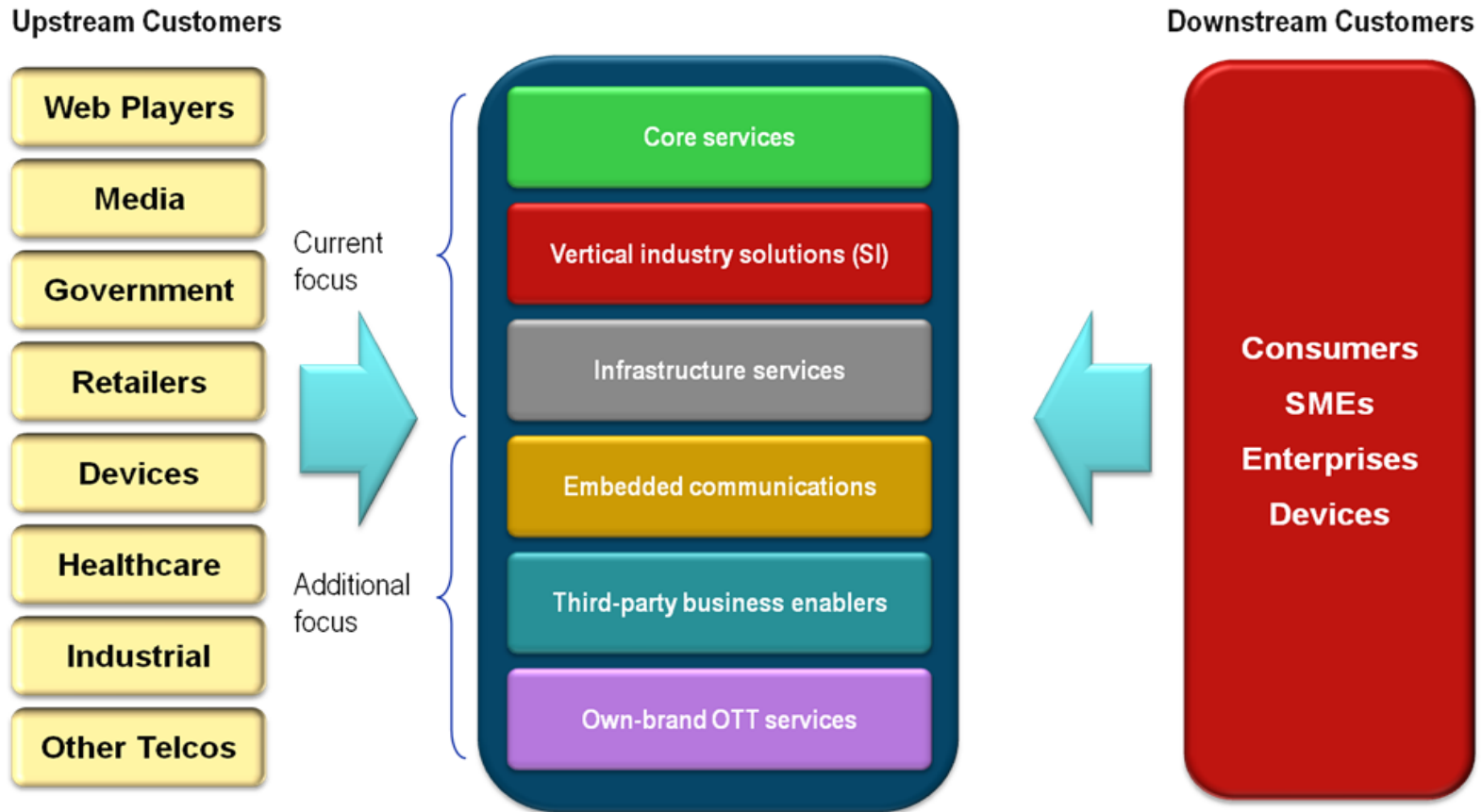
Cloud Job Titles

- The number one position is a Cloud Architect
- Cloud Software Engineer
- Cloud Sales Executive
- Cloud Engineer
- Cloud Developer
- Cloud Systems Administrator
- Cloud Consultant
- Cloud Systems Engineer
- Cloud Network Engineer
- Cloud Product Manager
- DevOps Team Leader

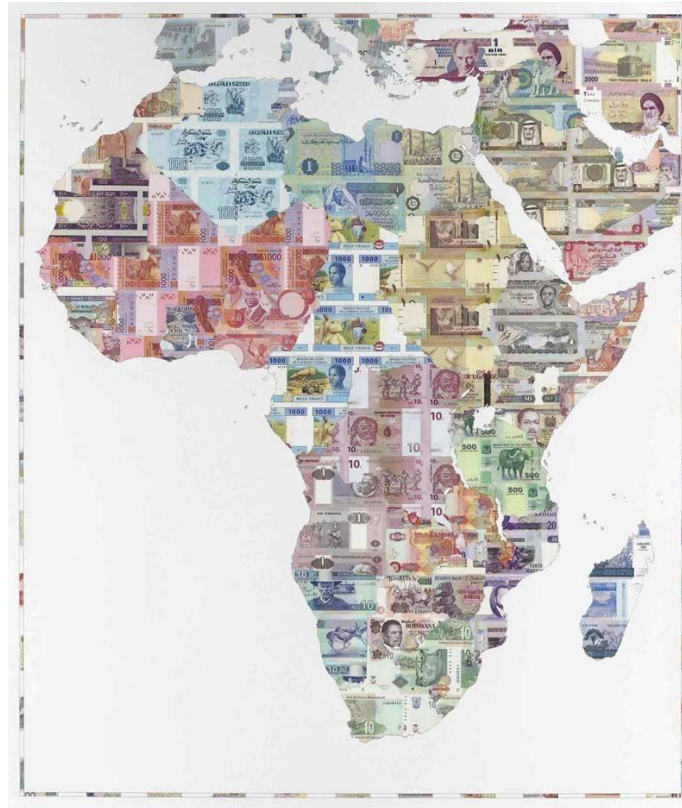
•Specialized Services is still the most profitable model



•Clouds Convergence

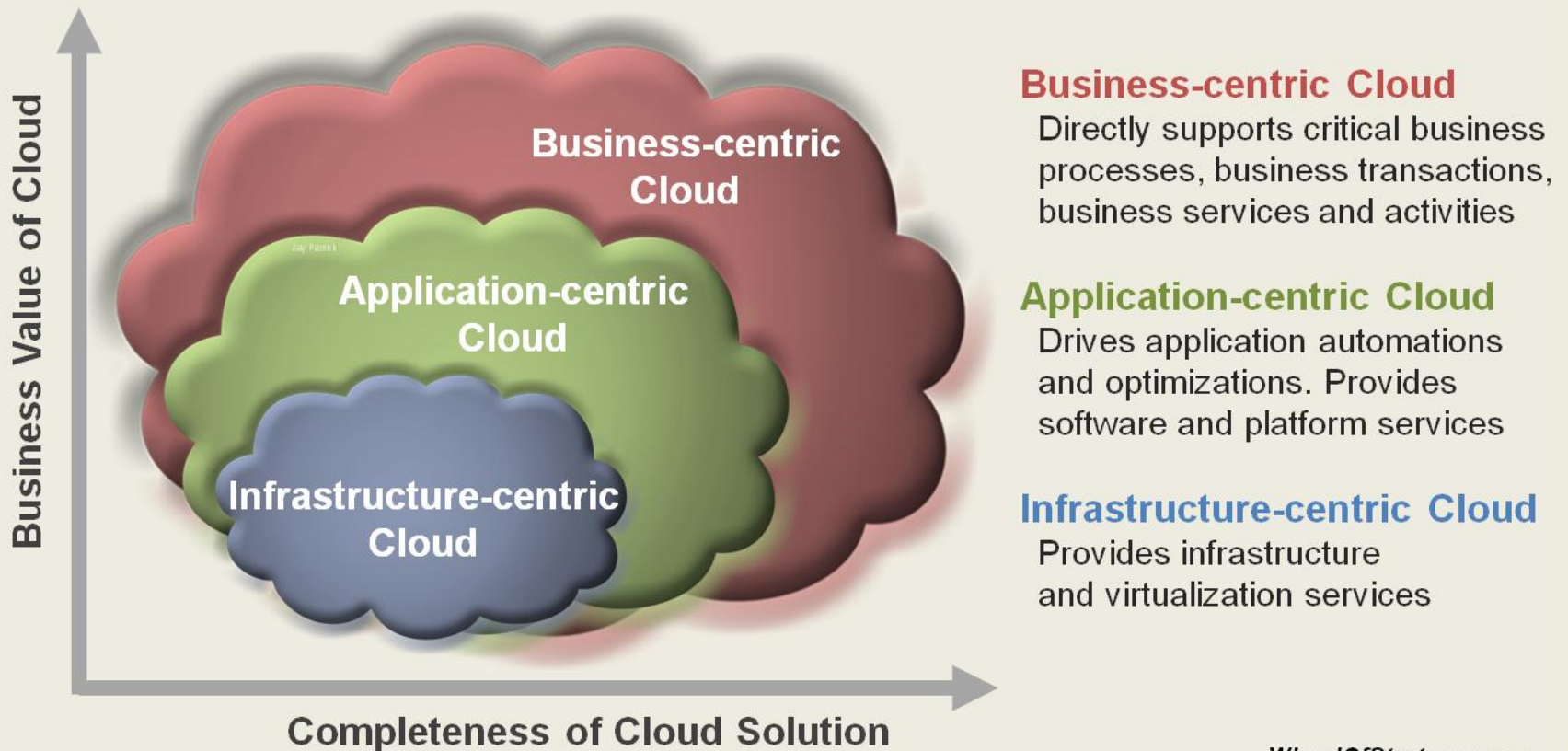


Money



- **The More Business Centric the more likely**
- **to profit from a sustained business**

Value-Based Cloud Maturity Model



The 6 areas have different operational and financial models: need different metrics

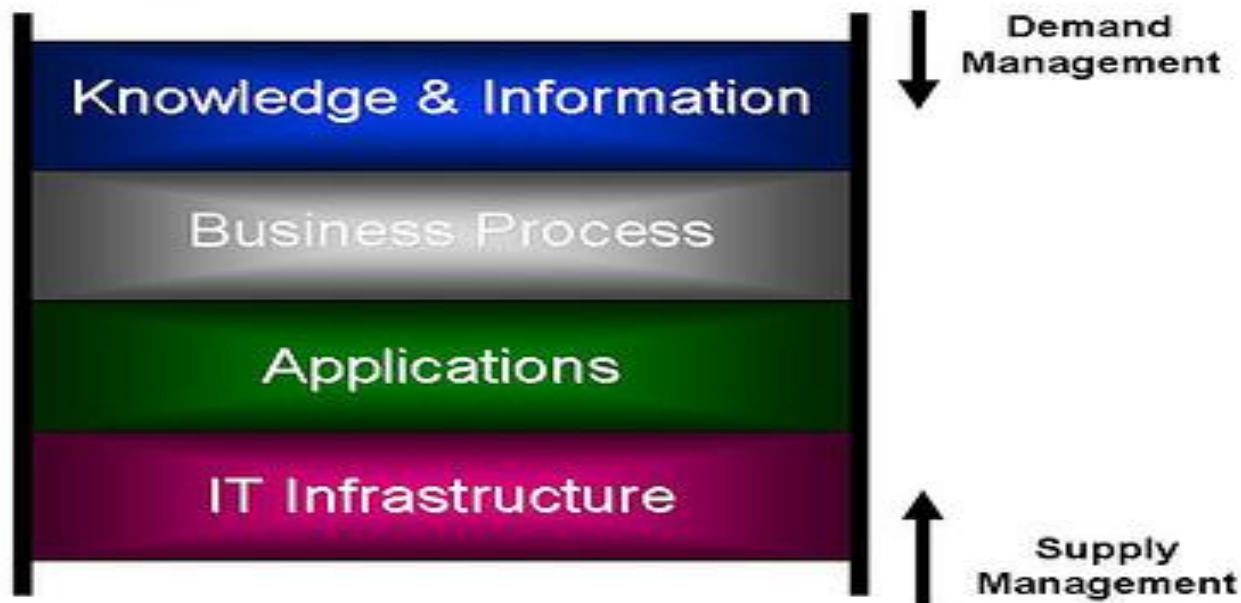
	Invested Capital (IC)	Sales	Sales/IC	EBITDA %	EBITDA	Free Cash Flow	CROIC %
Core services	\$1,000	\$500	0.5	45%	\$225	\$64	6.4%
Vertical industry solutions (SI)	\$500	\$350	0.7	30%	\$105	\$26	5.2%
Infrastructure services	\$500	\$350	0.7	30%	\$105	\$26	5.2%
Embedded communications	\$200	\$200	1.0	28%	\$55	\$21	10.3%
Third-party business enablers	\$100	\$200	2.0	15%	\$30	\$12	12.3%
Own brand OTT services	\$25	\$35	1.4	20%	\$7	\$3	10.7%



Generic and Vertical opportunities



**We are in a Demand world now it has shifted from a supply world
the balance of Supply and Demand is now more critical than ever**



Tools



The challenges our customers are facing

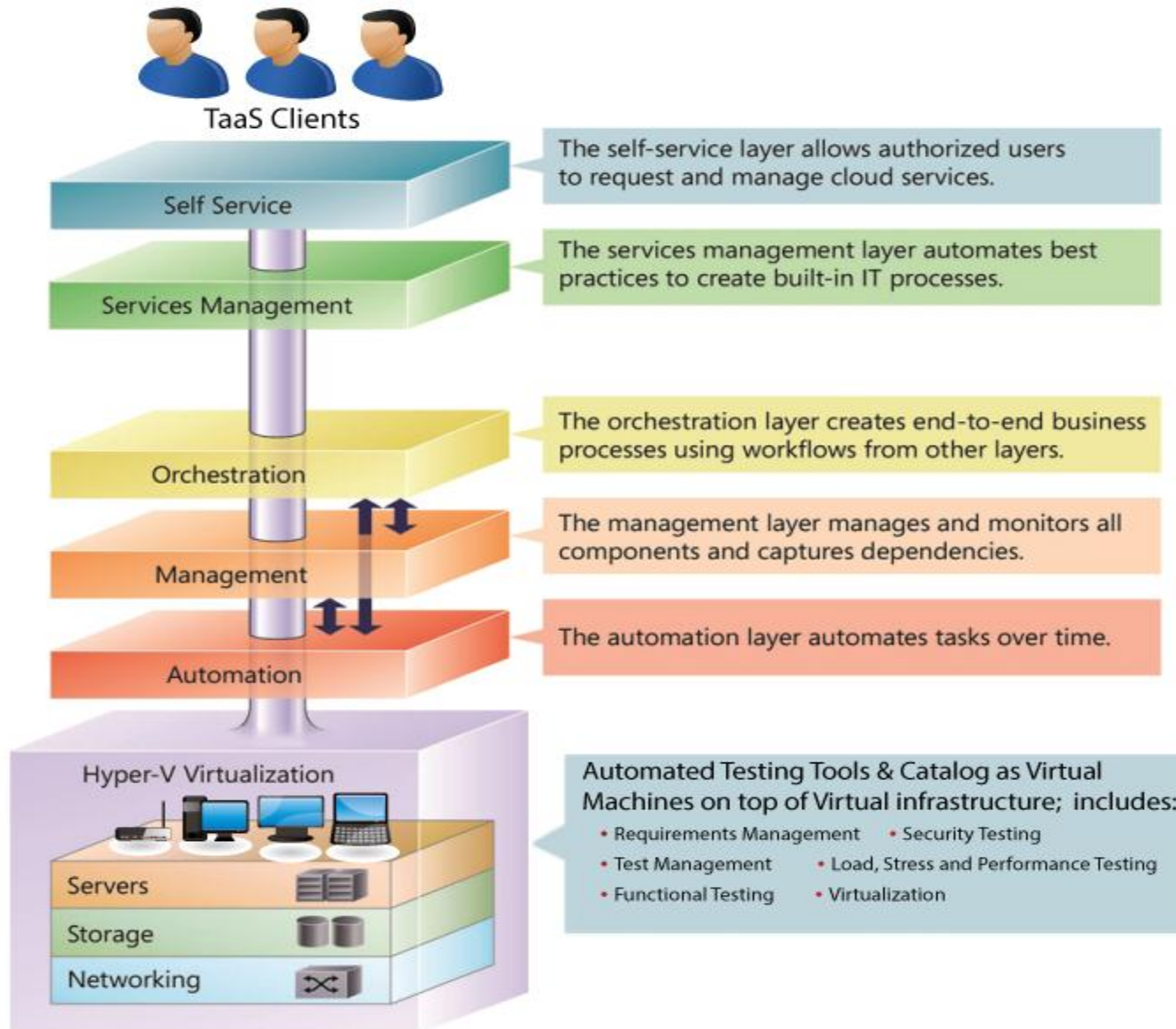
Market discontinuity

Data Sovereignty Latency Privacy
Mobility **Cloud** **Green**
Consumerisation
As-a-Service
Role of CIO Role of IT
Security Proximity
Risk **Big Data** Sustainability

The pressure on IT is growing



•Self Service and underlying tools which ensure Client Experience is key



Cloud Bursts Thunderstorms and Floods Cloud is Here

END USER APPLICATIONS

Software-as-a-Service

CRM	Marketing Demand Generation	Human Resources	Finance & Accounting	Content Management	Vertical
salesforce.com 					
Enterprise Social Media	Marketing Analytics	Retail & E-Commerce	Collaboration	Business Intelligence	IT

DEVELOPERS

Platform-as-a-Service

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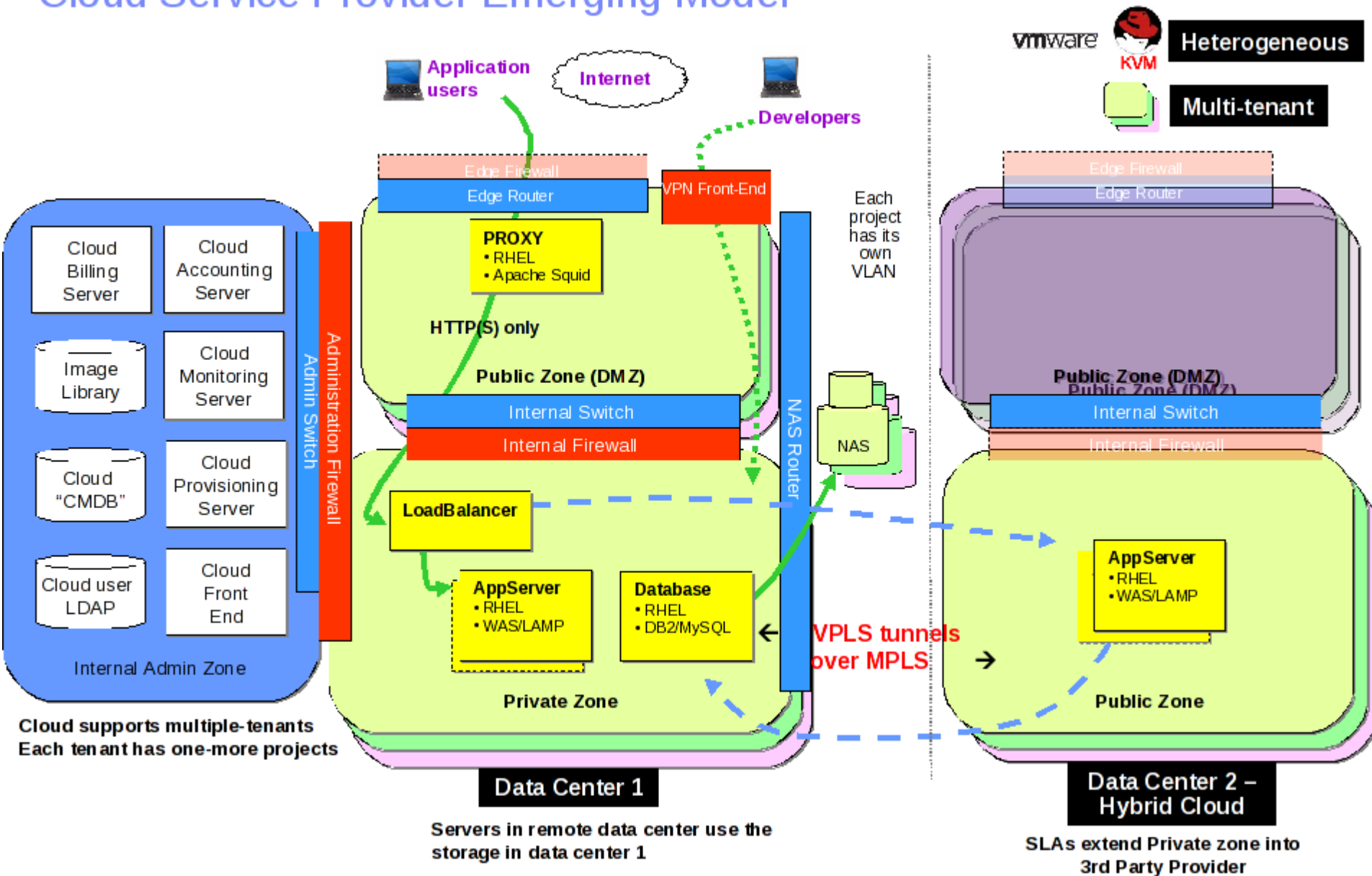
Infrastructure-as-a-Service

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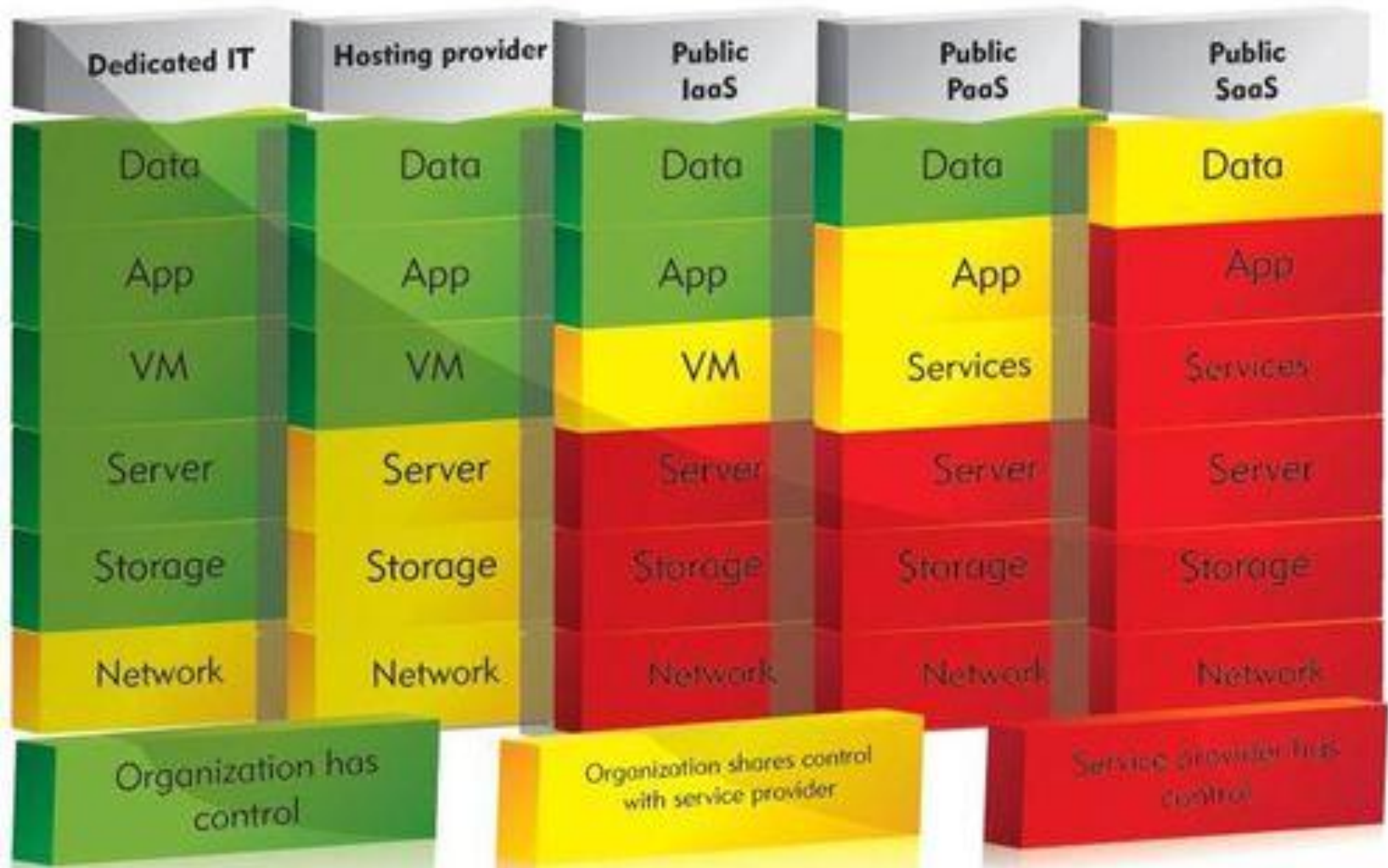
•Cloud Tech Spectrum

Cloud Marketplace	    ...
Cloud Broker Platform	  ...
Cloud Management	       ...
SaaS	    ...
PaaS	    ...
IaaS	      ...
Cloud Platform	        ...
Virtualization Software/Mgmt	         ...
Hardware	     ...

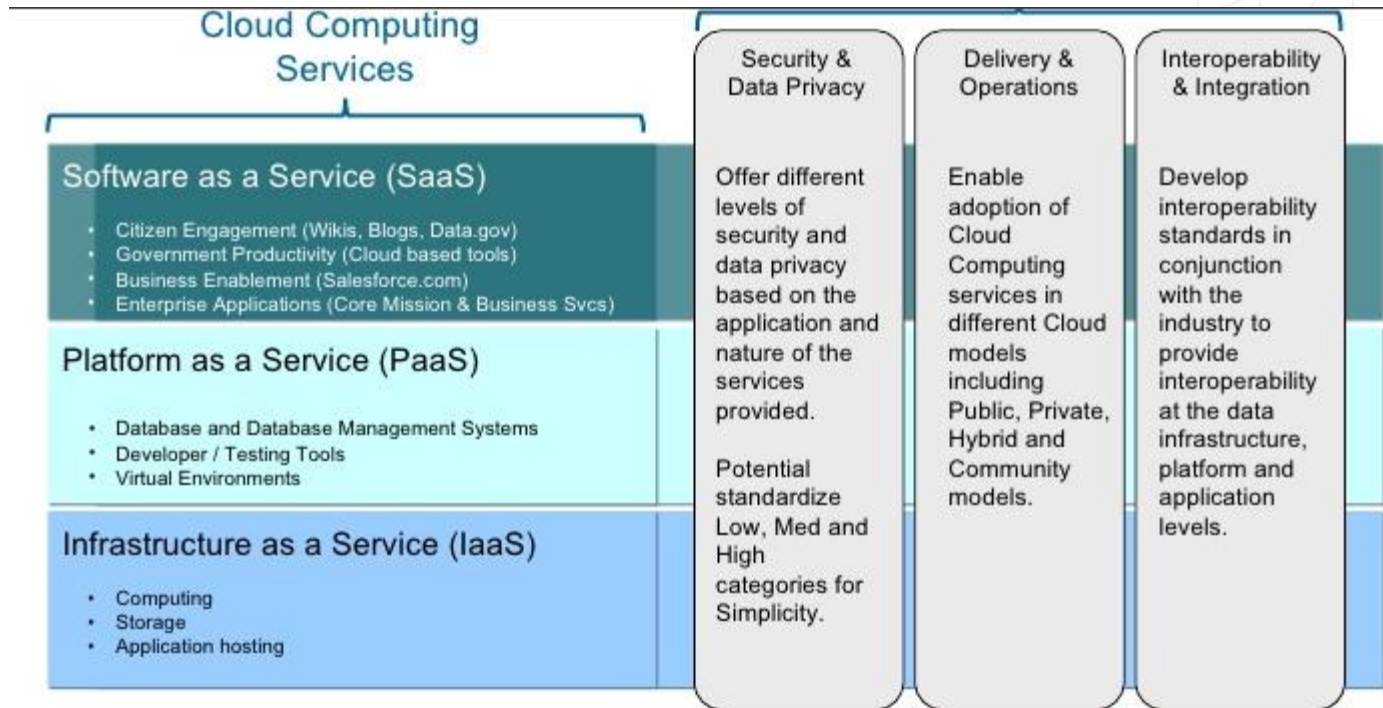
Cloud Service Provider Emerging Model



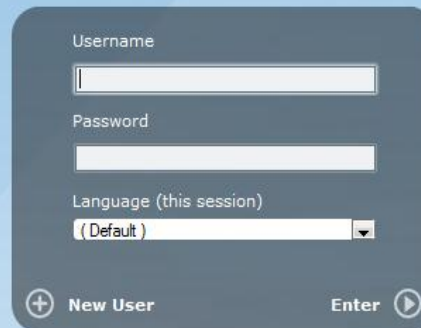
- The Network Design needs to cater for this



Cloud means Service Delivery





Cloud means Web Where ever you are
Self Service Real Time
it is a peer to peer mesh



Username

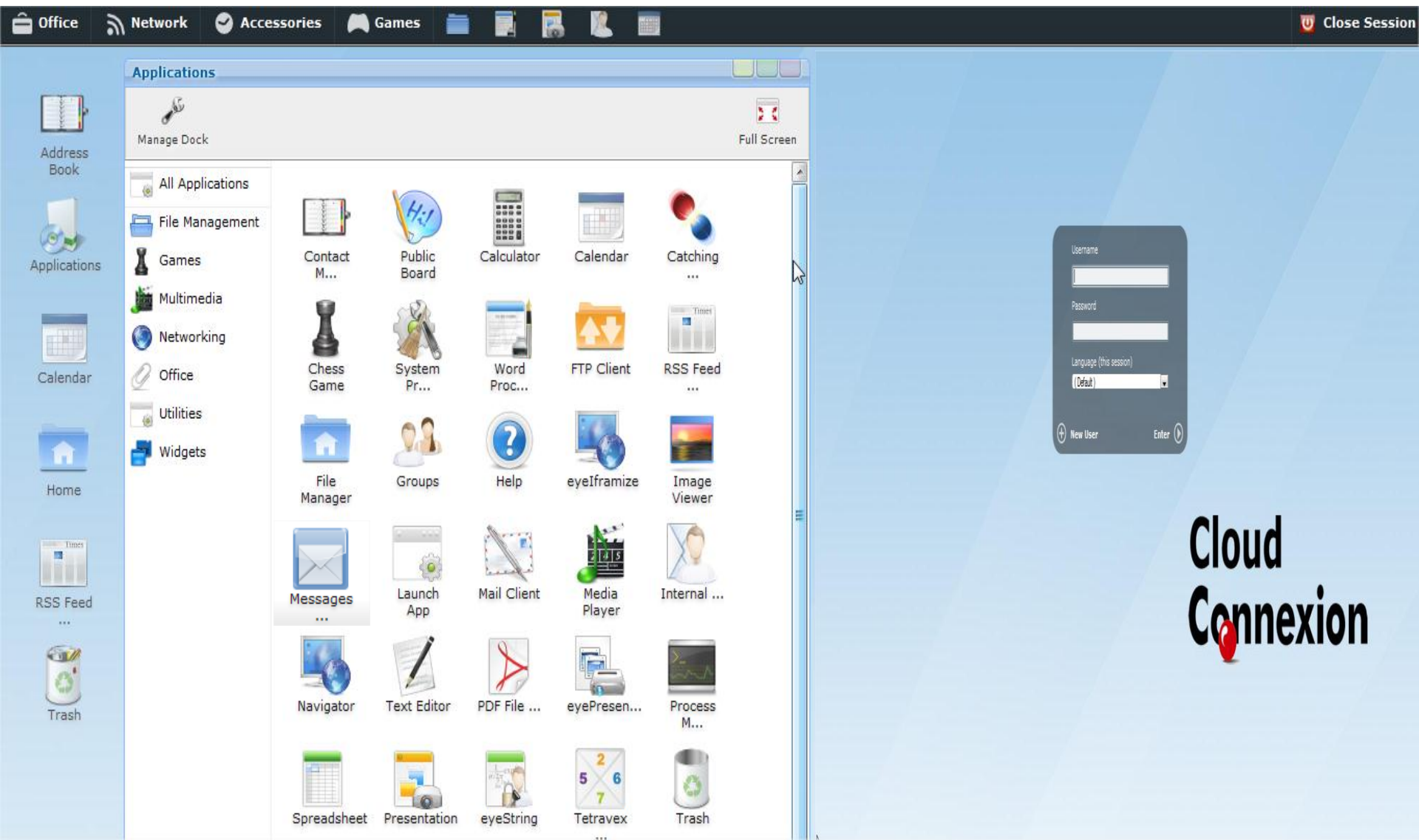
Password

Language (this session)
(Default) ▾

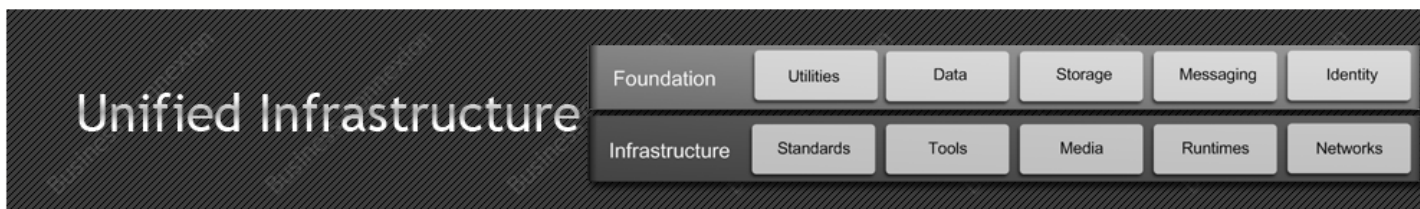
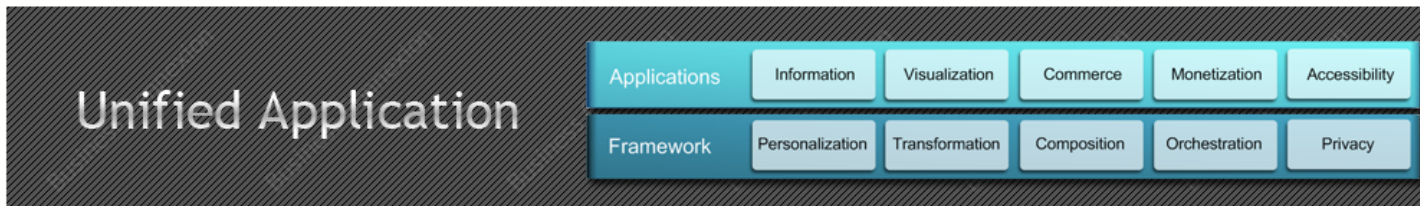
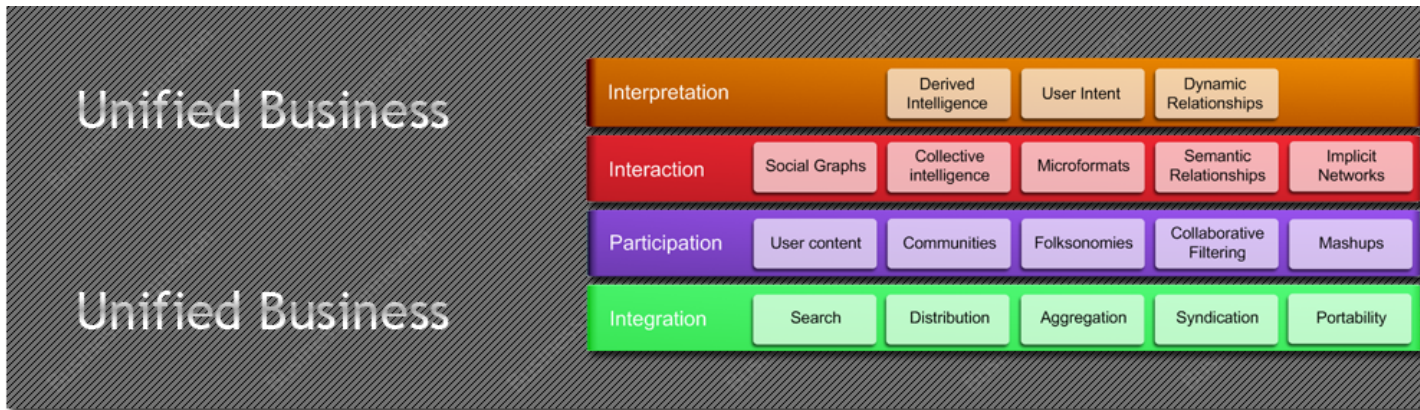
 New User Enter 

**Cloud
Connexion**

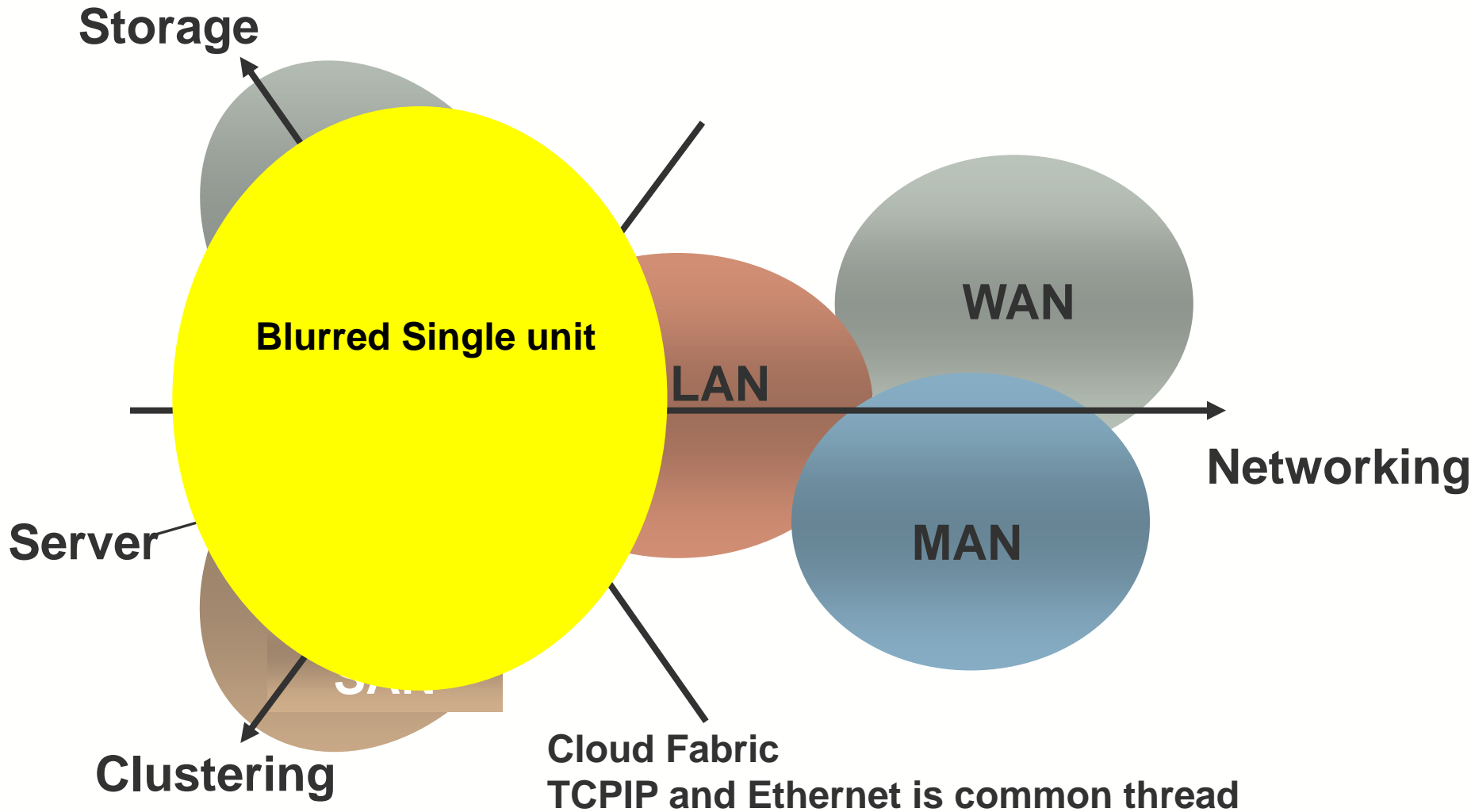
So if it is in the Browser it is on your laptop mobile tv and iPad



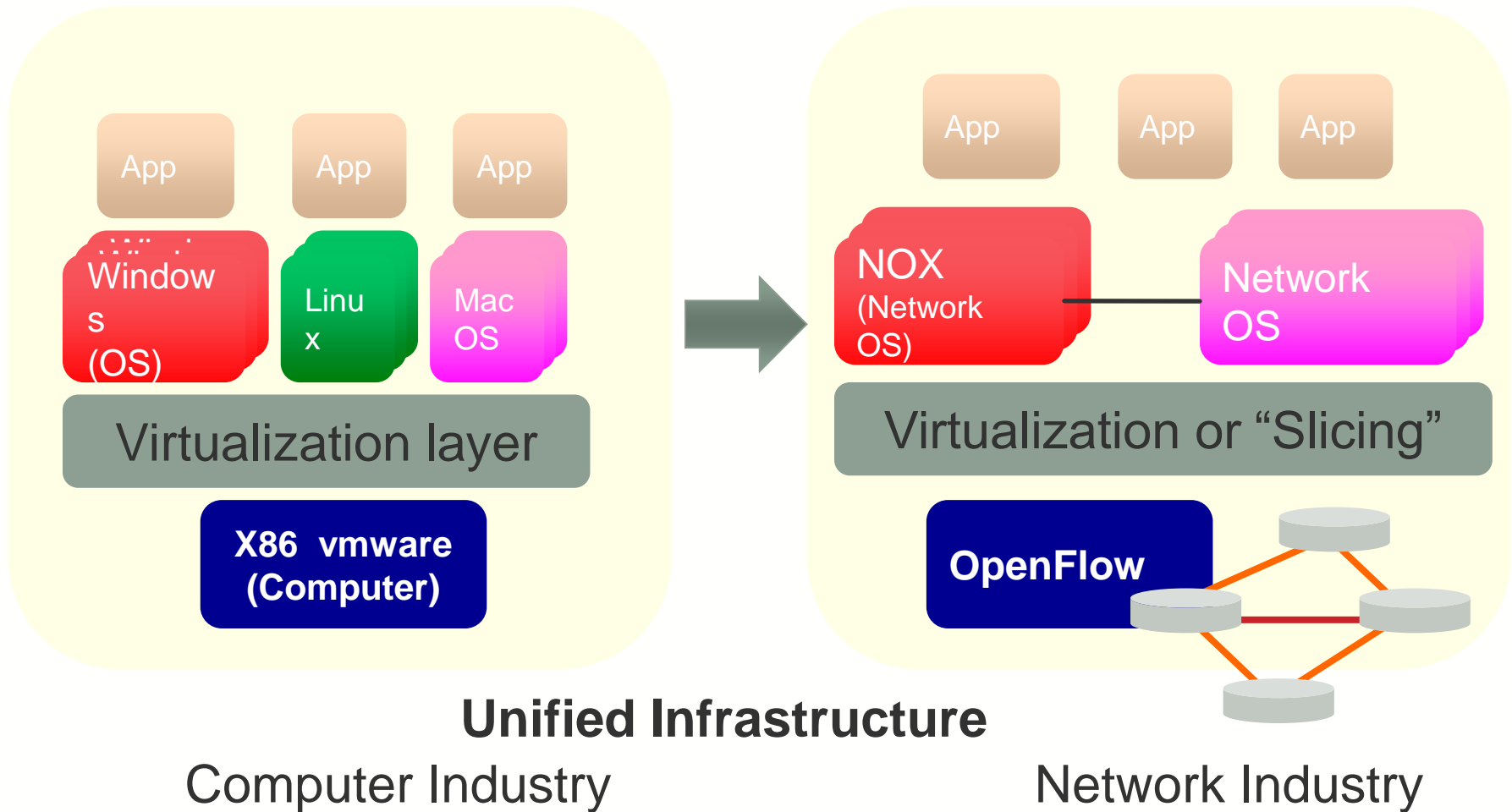
3 Distinct levels of Cloud Change



Unified Infrastructure



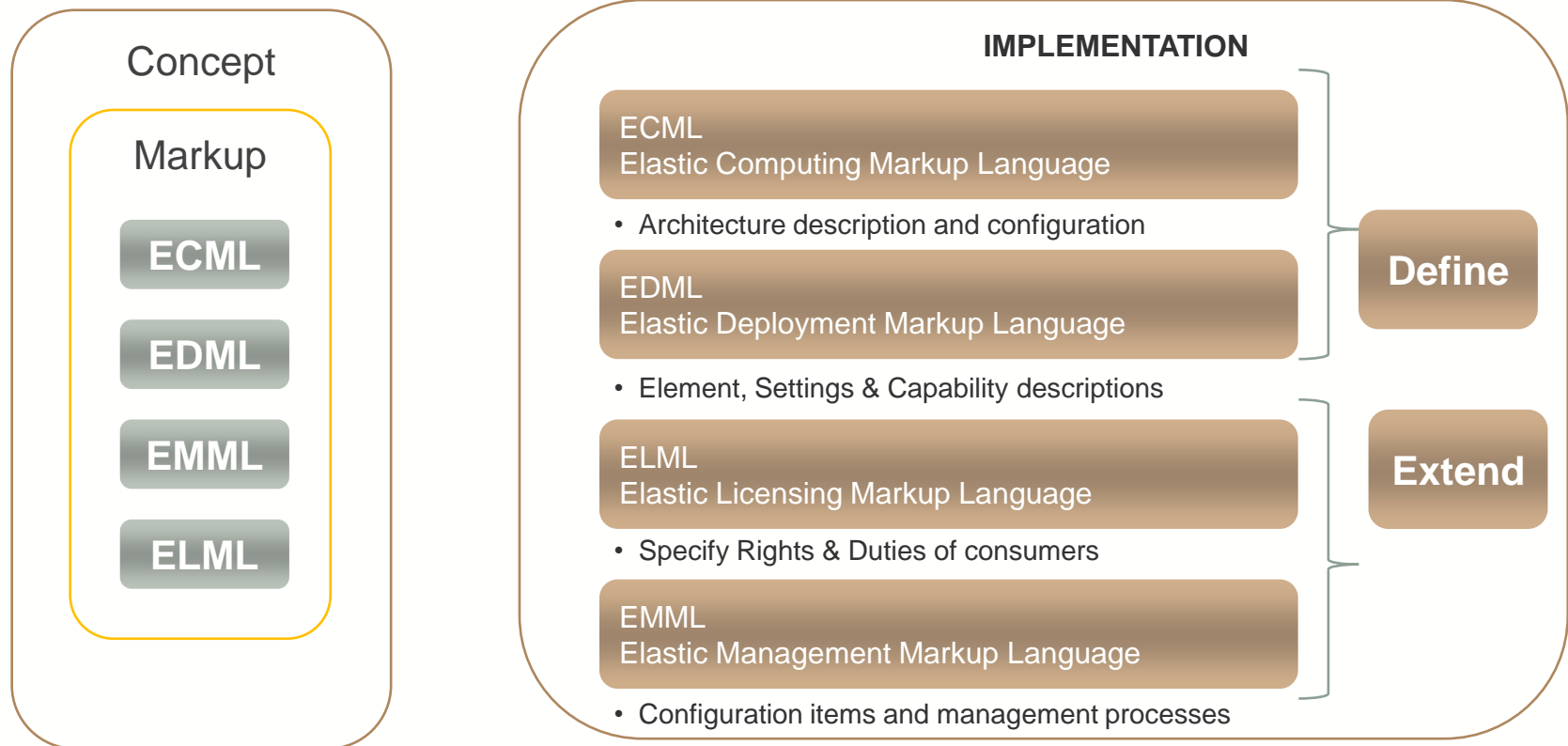
OpenFlow Trend



Simple common stable hardware substrate below+ programmability + strong isolation model + competition above = Result : faster innovation

Unified Applications

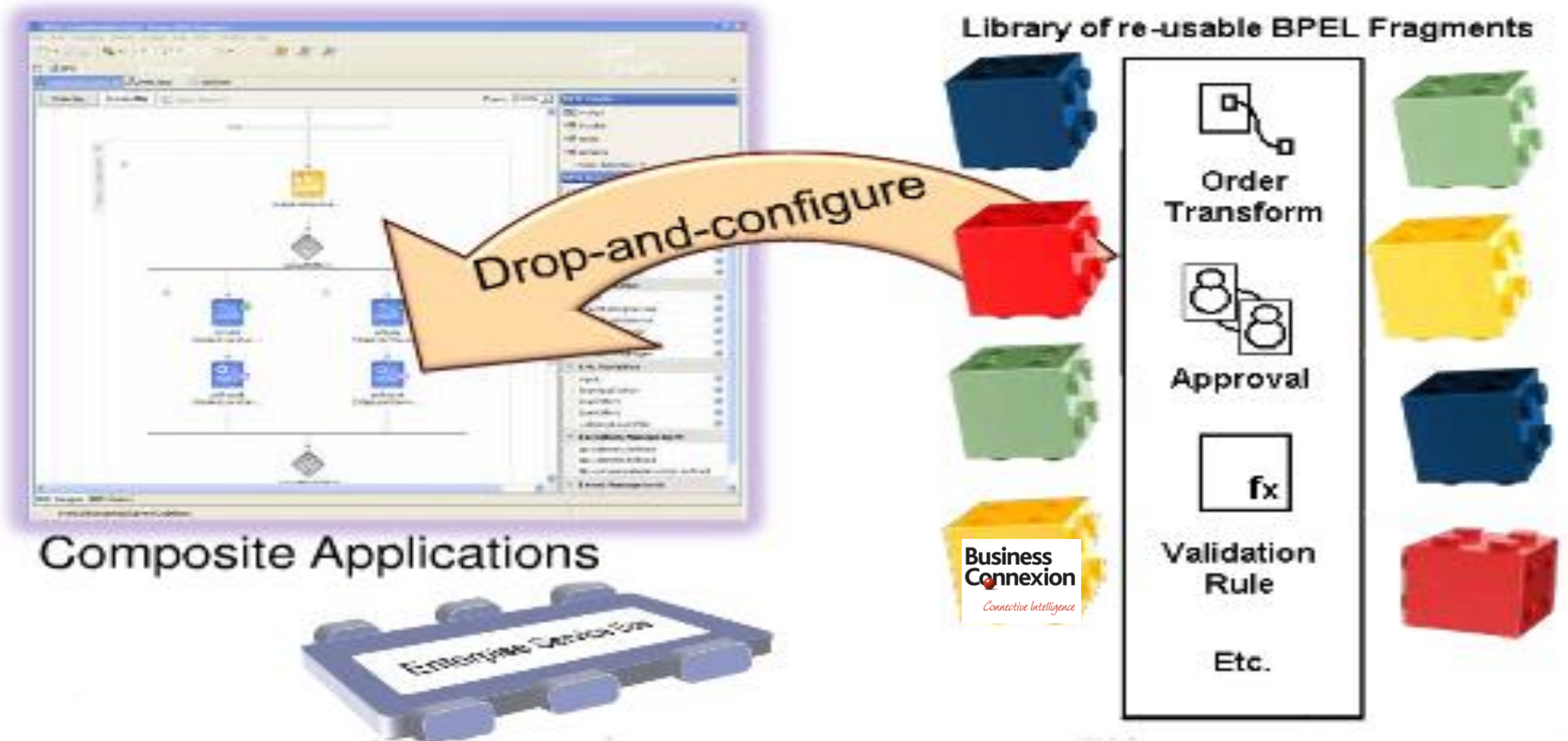
Modular, layered, open-world, “connective tissue”



Interoperable via XML Markup

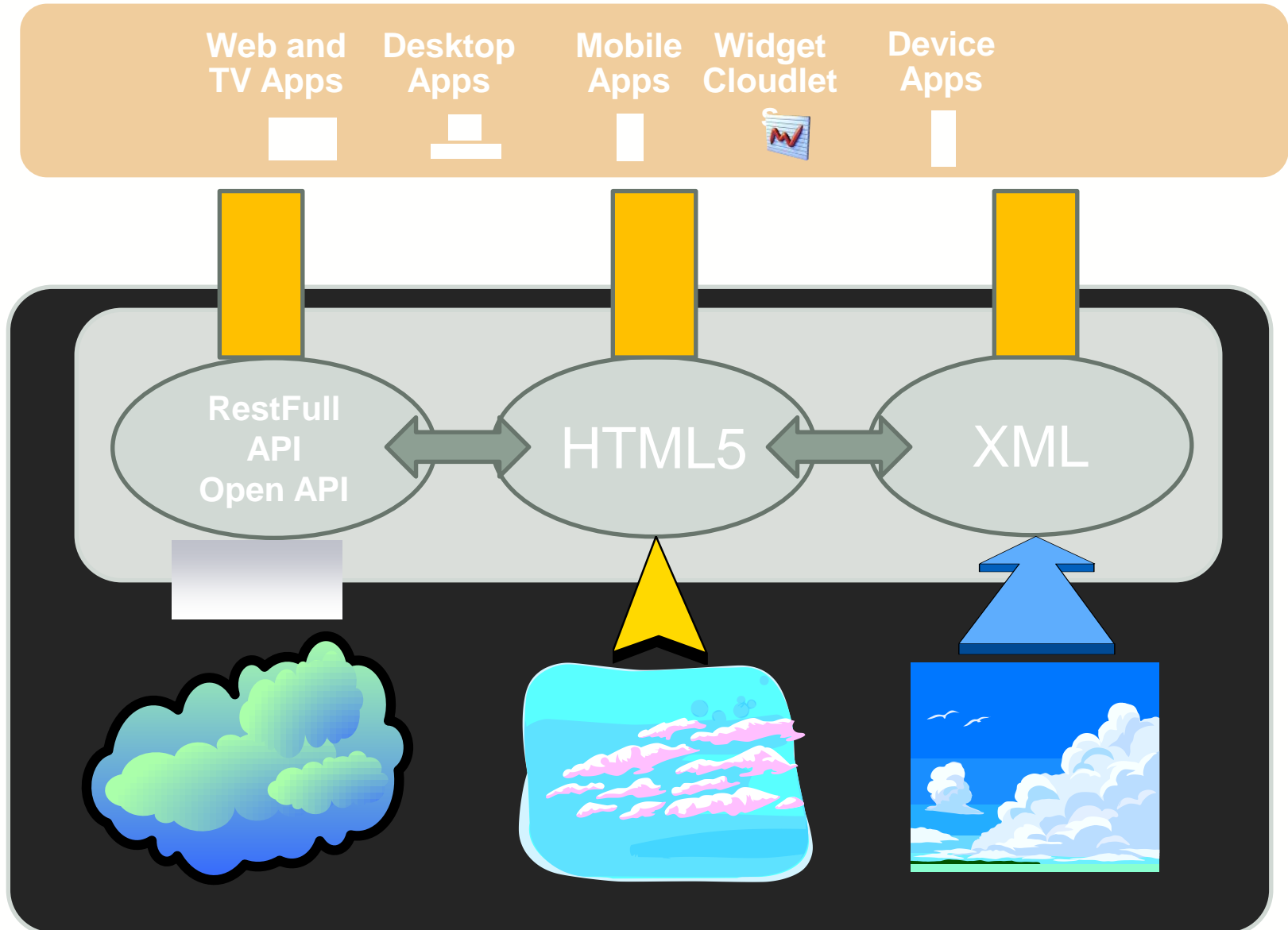
Hyperlinked Cloud Markup Languages

Unified Applications

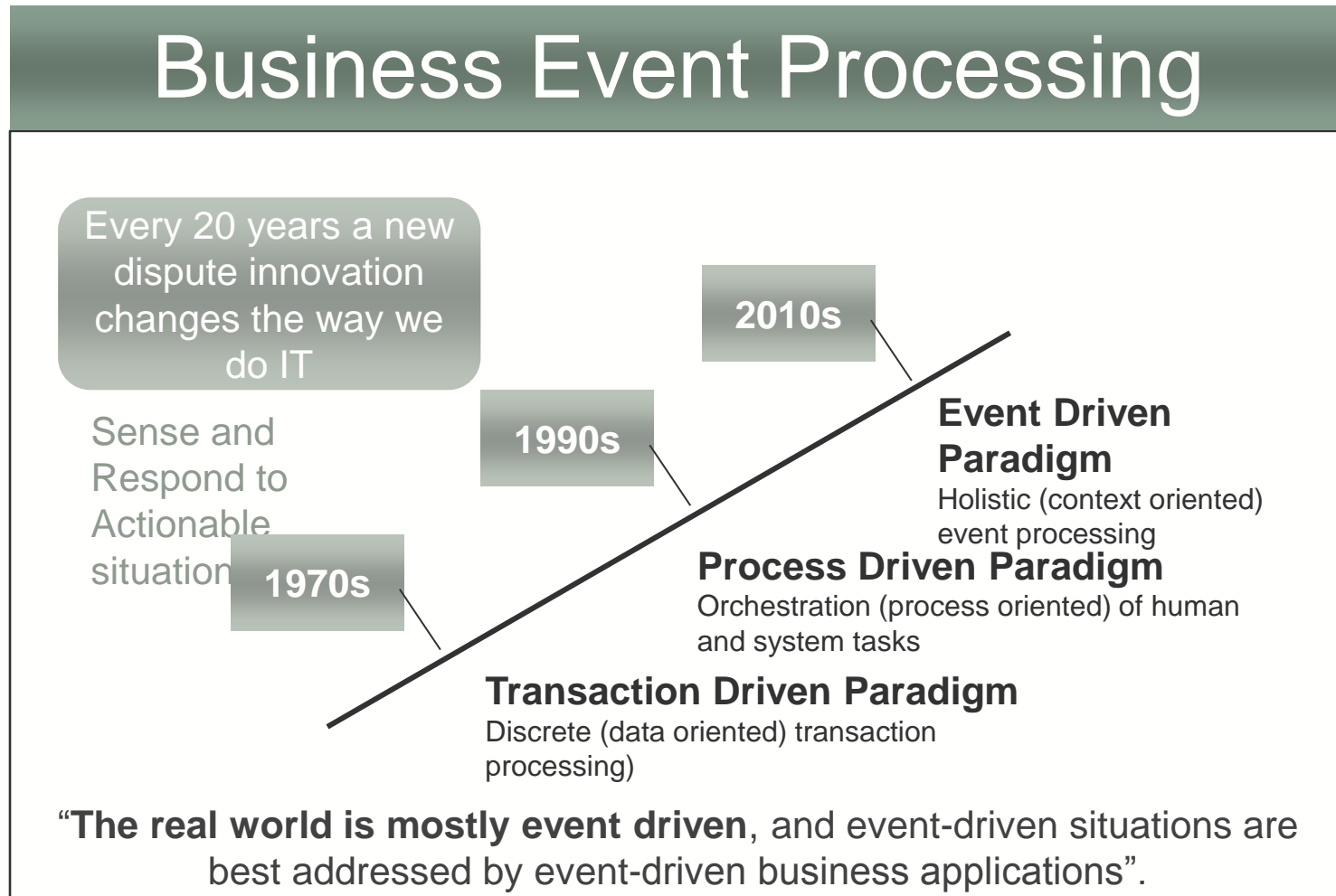


Web Based Composite Apps
The Unified Applications

Unified Applications

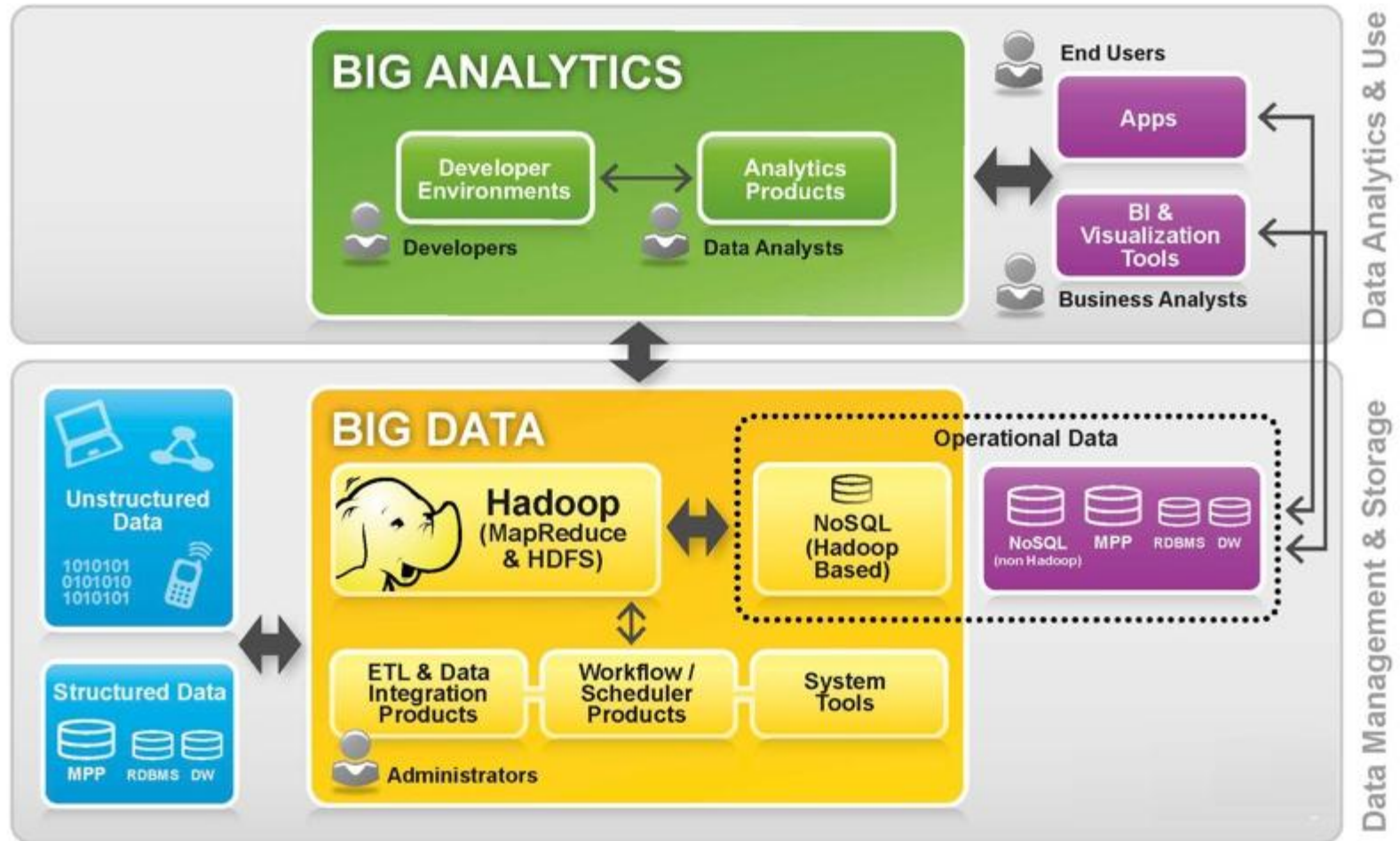


Unified Business



Social Media reflects Events faster than Traditional Business Systems

Big Data Big Analytics Unified Business



Mindset

“Education is the most powerful weapon we can use to change the world, and Mindset Network is a powerful part of that world changing arsenal.” said by Nelson Mandela at the launch of Mindset Network in 2003.

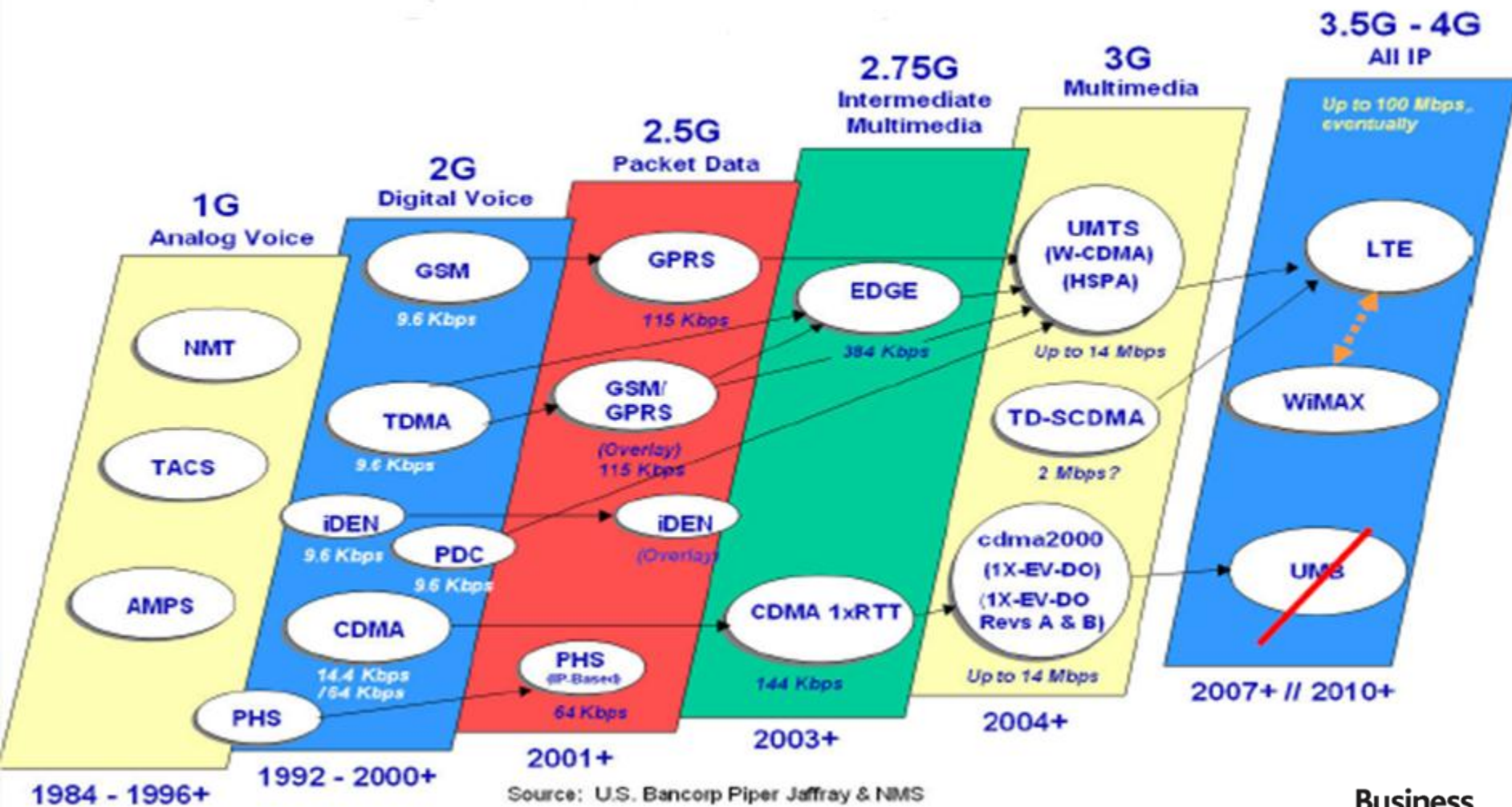
What is Broadband ?

- It used to be the back haul network
- Now it is last mile Where ever you are

But what is it really ?

- Its when you have enough or there is surplus to meet your current requirement.
- If you don't it is a narrow band.

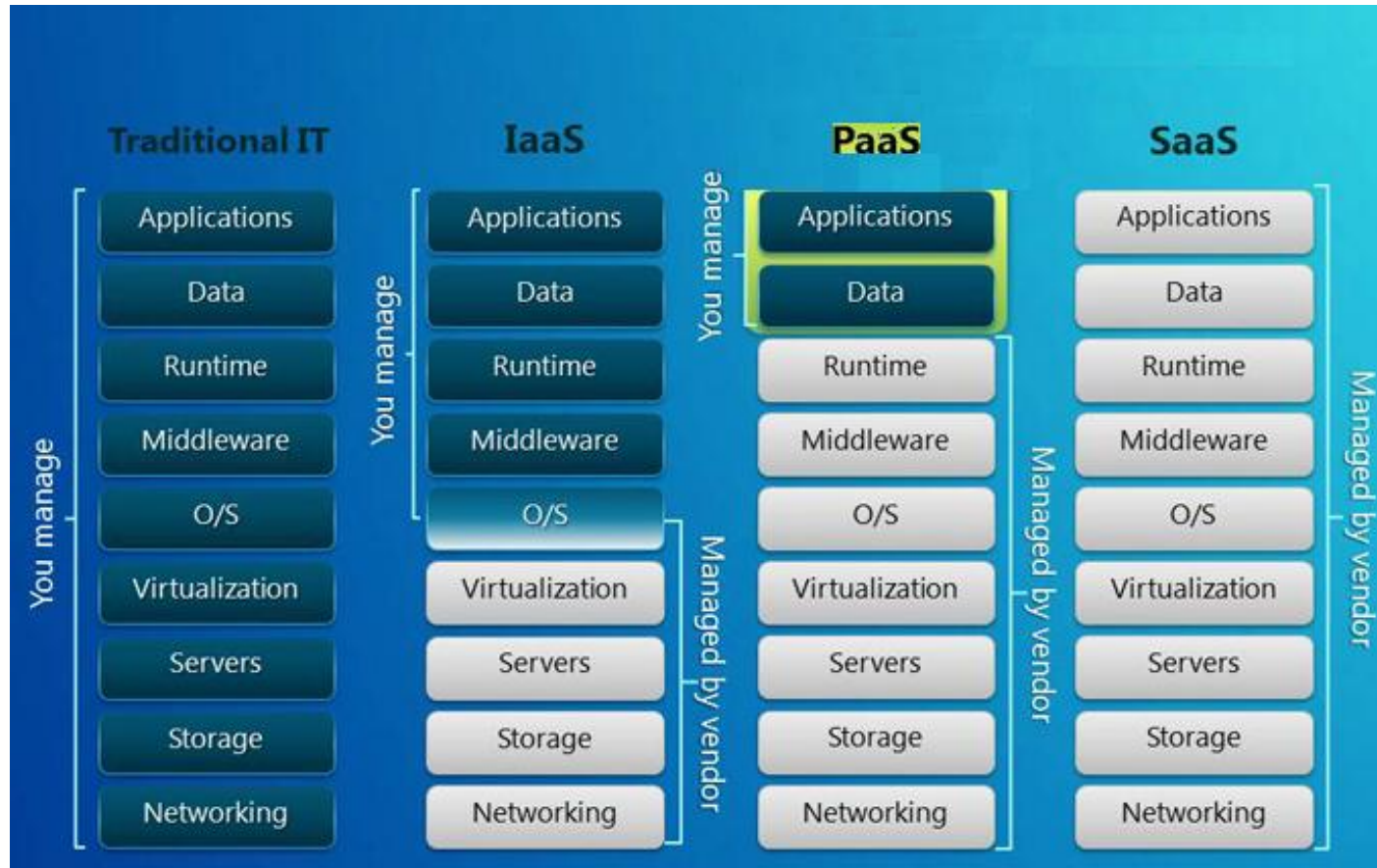
Wireless Migration



Cloud Companies “Many in China”



Security is a factor of what you use



Standards to watch

Federated security (e.g. identity) across Clouds

Metadata and data exchanges among Clouds

Standards for moving applications between Cloud platforms

Standards for describing resource / performance capabilities and requirements

Standardised outputs for monitoring, auditing, billing, reports and notification for Cloud applications and services

Orchestration and middleware tools for creating composite applications across Clouds

Standards for machine-readable Service Level Agreements (SLAs)

The Certificate of Cloud Security Knowledge (CCSK) is quickly becoming the necessary certification for anyone looking to demonstrate their knowledge of cloud security.

P2301 IEEE OpenStack Openflow OpenAPI
Hadoop and HTML5

RetroFitting Cloudwash model Will Fail



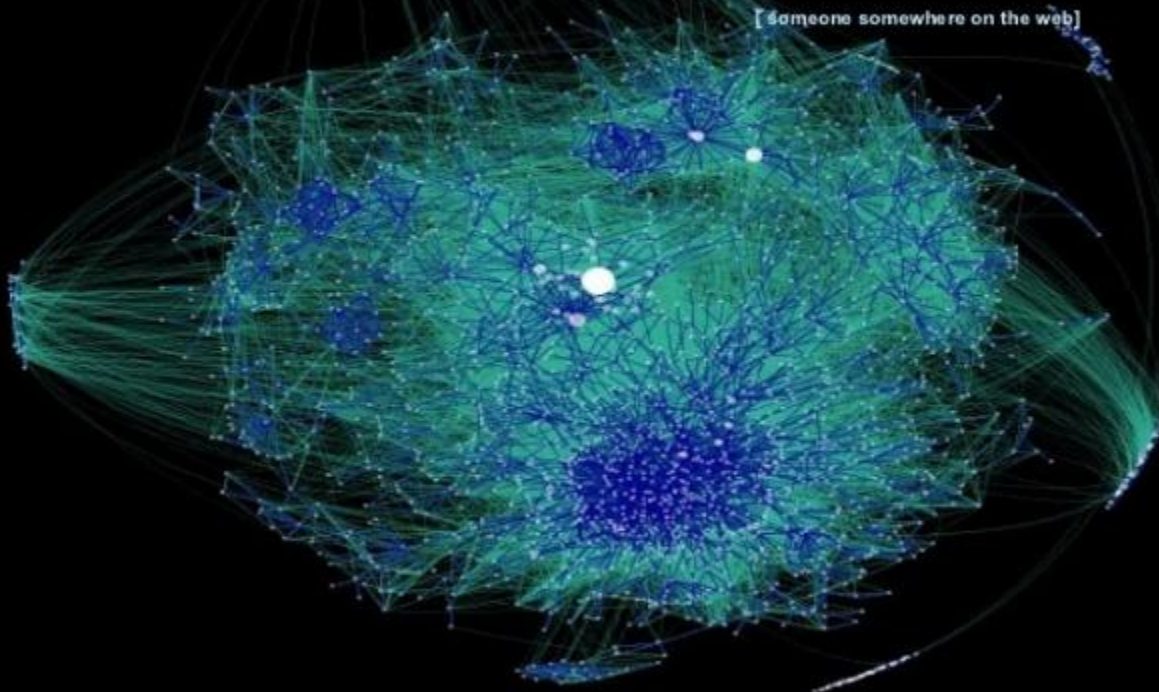
Clouds means work for companies up to the Challenge





"In the old days, brands ~~wanted~~ everybody to pay attention to them.
Now brands need to pay attention to everybody else."

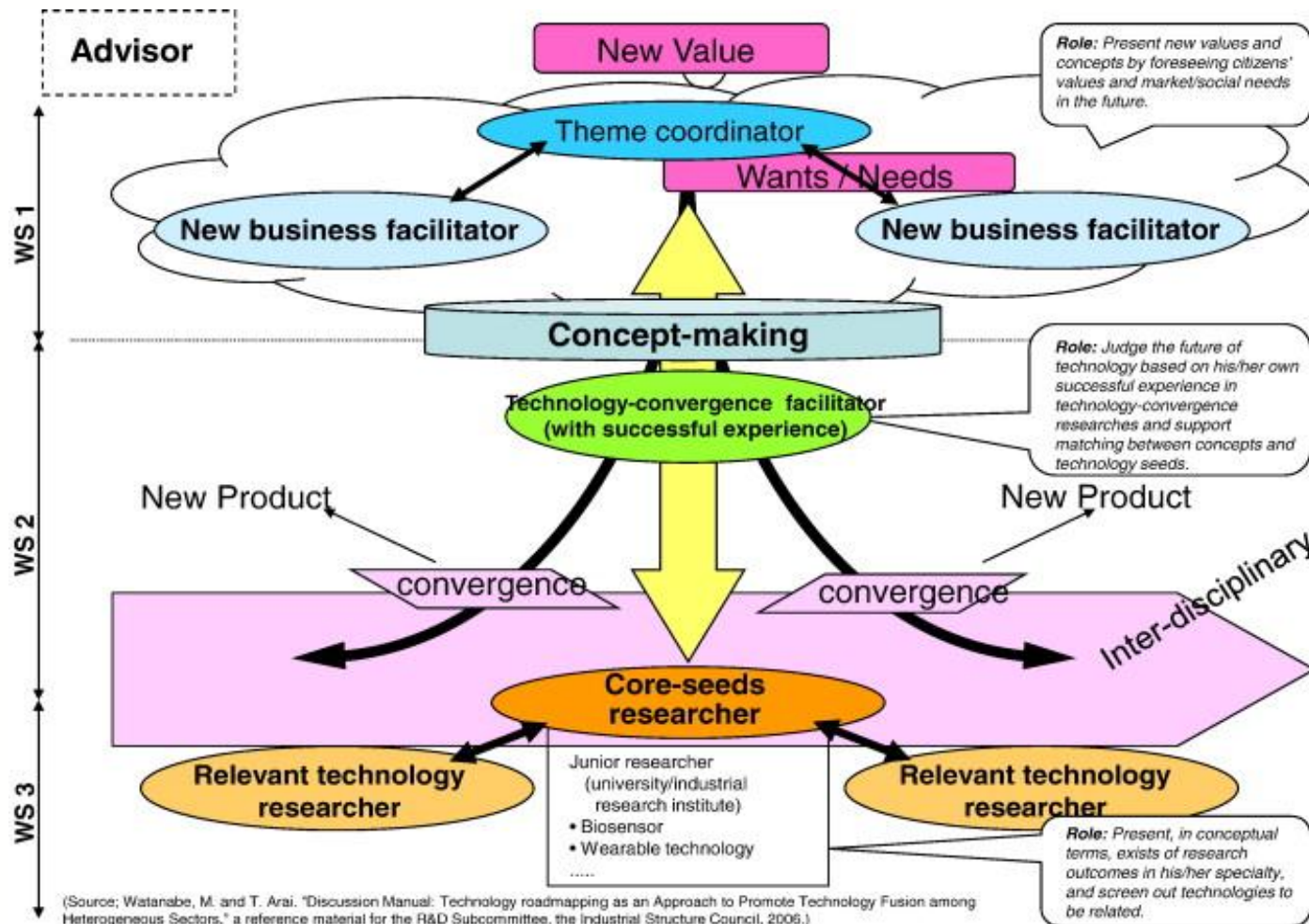
[someone somewhere on the web]



Power shift

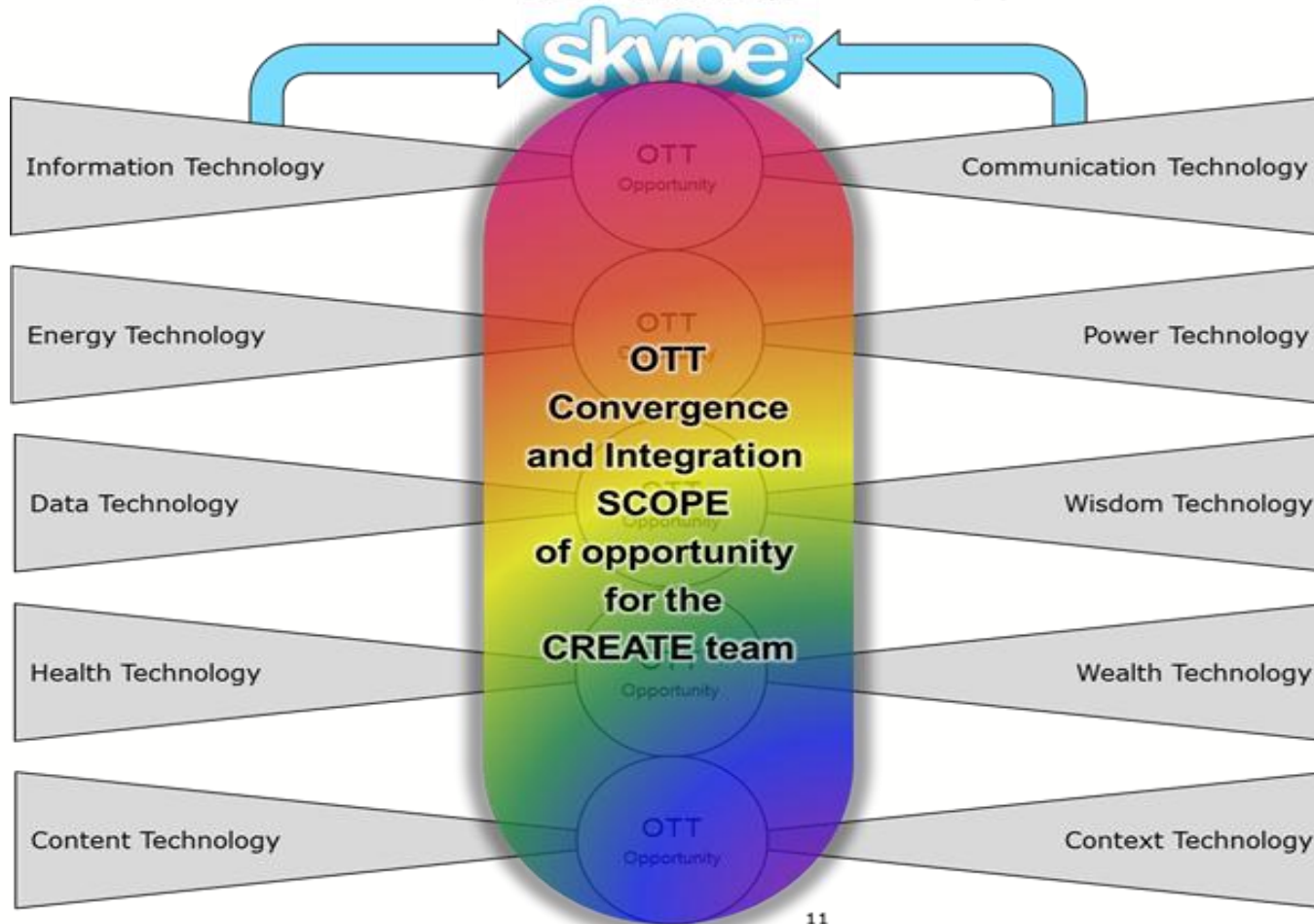


Understand the demand and respond to it and you will succeed



More convergence to come

Solution Areas | Over The Top "OTT" opportunities



Augmented Reality





**Business
Connexion**

Connective Intelligence

Thank you

Andy Brauer
CTO
Business Connexion

Acquisition

Marshalling

Analysis

Action

Data Acquisition



VLDW and BI Appliances



Analytics



BPM & Action



Including Complex Event Processing (CEP) tools

Data Providers



*And all your own data
And your partners data*

No SQL



Content Management



Data Virtualization COMPOSITE SOFTWARE



BI Tools



Data Governance

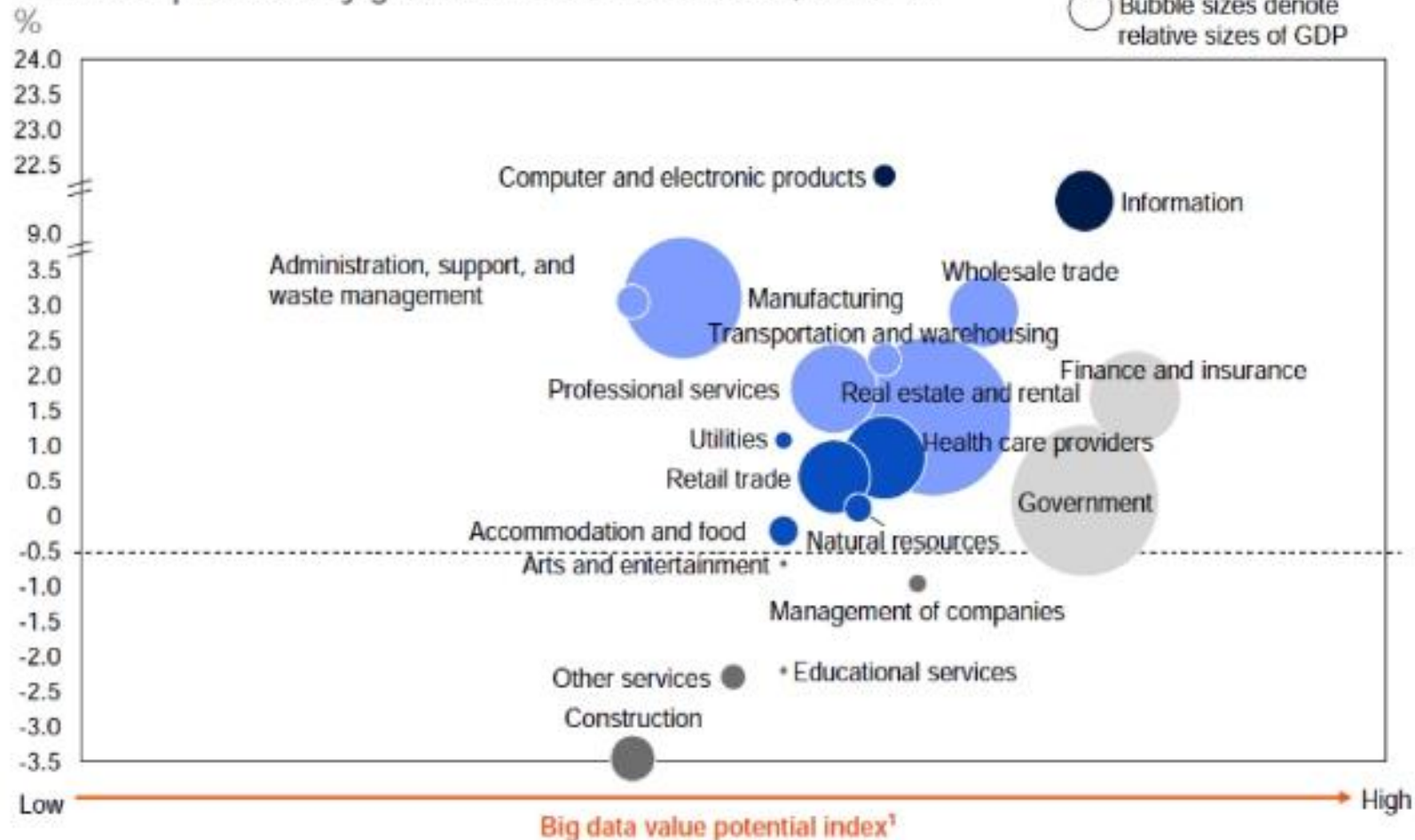


Capgemini - Capping IT off
Manuel Sevilla - 2012



Some sectors are positioned for greater gains from the use of big data

Historical productivity growth in the United States, 2000–08



1 See appendix for detailed definitions and metrics used for value potential index.
SOURCE: US Bureau of Labor Statistics; McKinsey Global Institute analysis

Virtual Lab

It is in the Cloud

