



# **Internet and Next-Generation Networks: shaping new models**

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# The Digital Evolution forces shaping Digital Transformation

## Global Internet users

- 2 billion World Internet users  
28.7% of world population online  
(March 30, 2011 [www.internetworldstats.com](http://www.internetworldstats.com))
- 21% of Internet users are from China (420 million)
- 42% of Internet users are in Asia

## USA Internet users

- 240 MM users in USA 77% of population (Apr 2011 Nielsen)
- Internet penetration hits 90%  
100 MM USA household
- 67% are broadband connections

## Global eMail

- 90 trillion sent on the Internet in 2010
- 294 billion email messages per day
- 1.9 billion email users worldwide
- 100 million new email users last year
- 74% email accounts consumers  
26% email accounts corporate

## Social Media

- 7 new Internet users per second versus 2.3 births per second globally
- 184 million blogs on the Internet
- 346 million people globally read blogs  
(comScore March 2008)
- 84% of social media sites have more women than men
- 177 million tweets on Twitter per day  
(March 2011)
- 57% of Twitter's users located in USA
- 517 million on Facebook (March 2011)
- 30 billion Facebook photos shared each month globally
- 80% of Gen Y versus 20% of Boomers connect with people on Social Media  
(Accenture 2008)
- 25% of search engine results for top 25 brands link to user generated content
- 78% trust peer recommendations
- 14% trust advertisements

## Media Consumption

- 8 to 18 year old spend 7 hours and 38 minutes each day consuming media
- 57% of Americans watch TV and surf Internet simultaneously
- 1/3 Internet traffic is video in 2009

## eCommerce

- USA Web sales \$253 billion in 2010
- Forecast \$1 trillion globally by 2013
- 30% of offline sales are influenced online
- 267 million websites (Dec 2010)

## Mobile

- 4.3 billion mobile subscribers worldwide  
(Portio Research)
- Asia has half the world's mobile subscribers
- Revenue from mobile data will overtake fixed voice by 2013 in the USA
- \$500 million in 2009 globally from mobile Internet advertising

## Digital Advertising

- \$25.7 billion in 2010 (USA)
- Online surpassed Cable TV ad spending in 2007 (USA)
- Online is 9% of ad budget today (USA)
- Financial Services 31% online versus 1.5% online for CG&S (USA) (Ad Age 2009)
- \$71 billion globally in 2010
- By 2014, USA online spend \$40 billion  
(ZenithOptimedia Group)

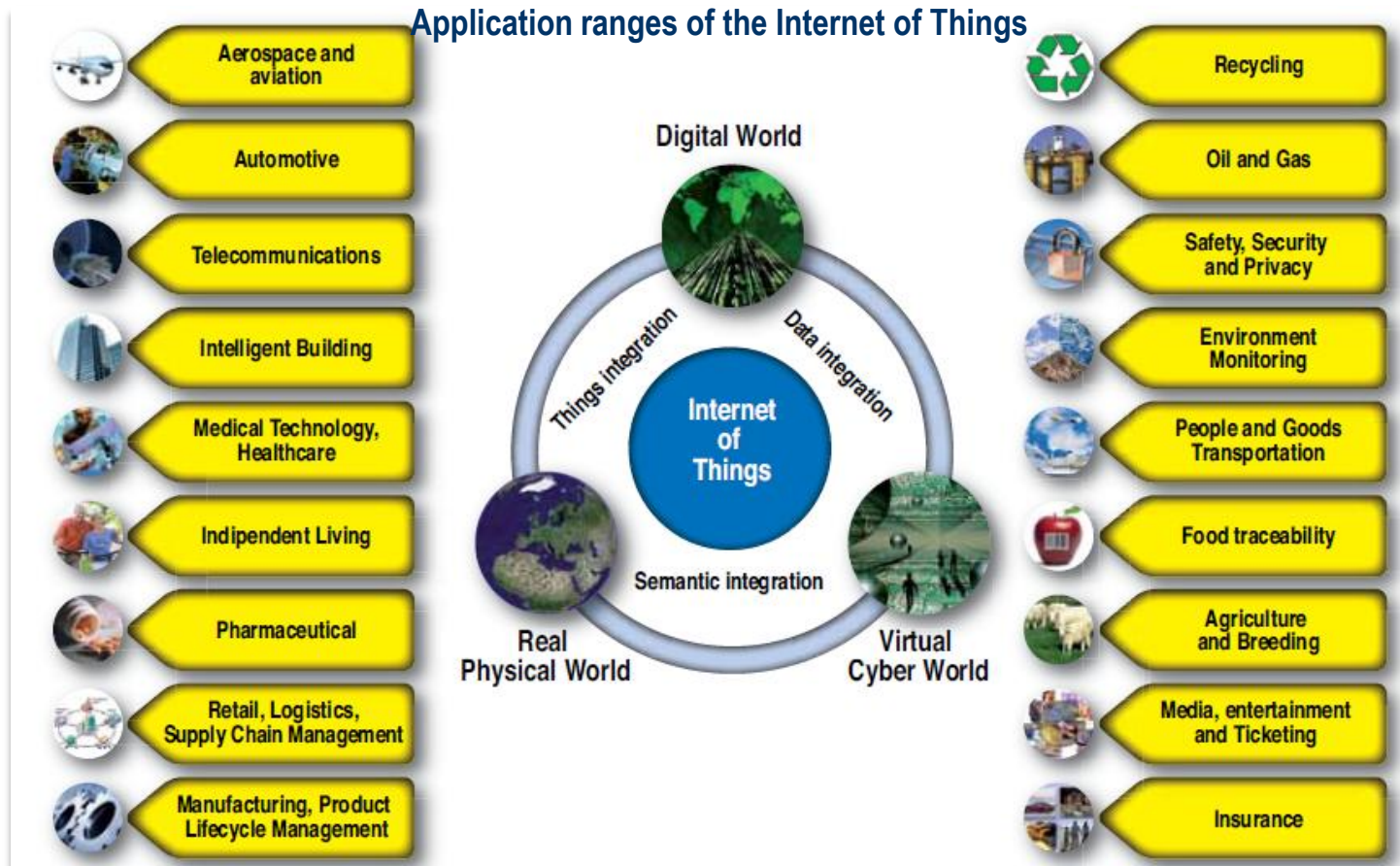
# Everything Becomes Connected



400M devices connected today - cars, buildings, hospitals, schools, government...everything is connected!



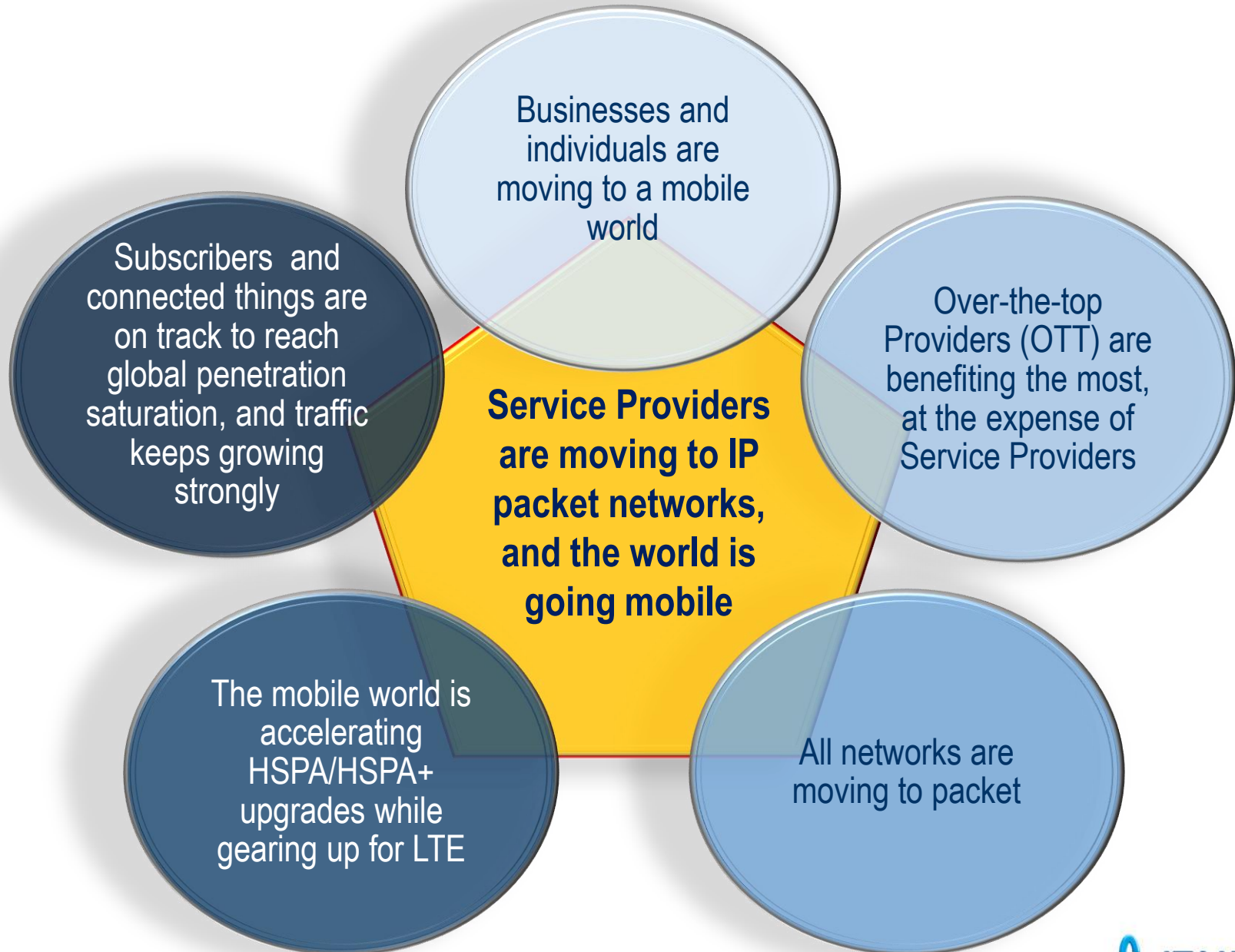
# Towards the “Internet of Things”



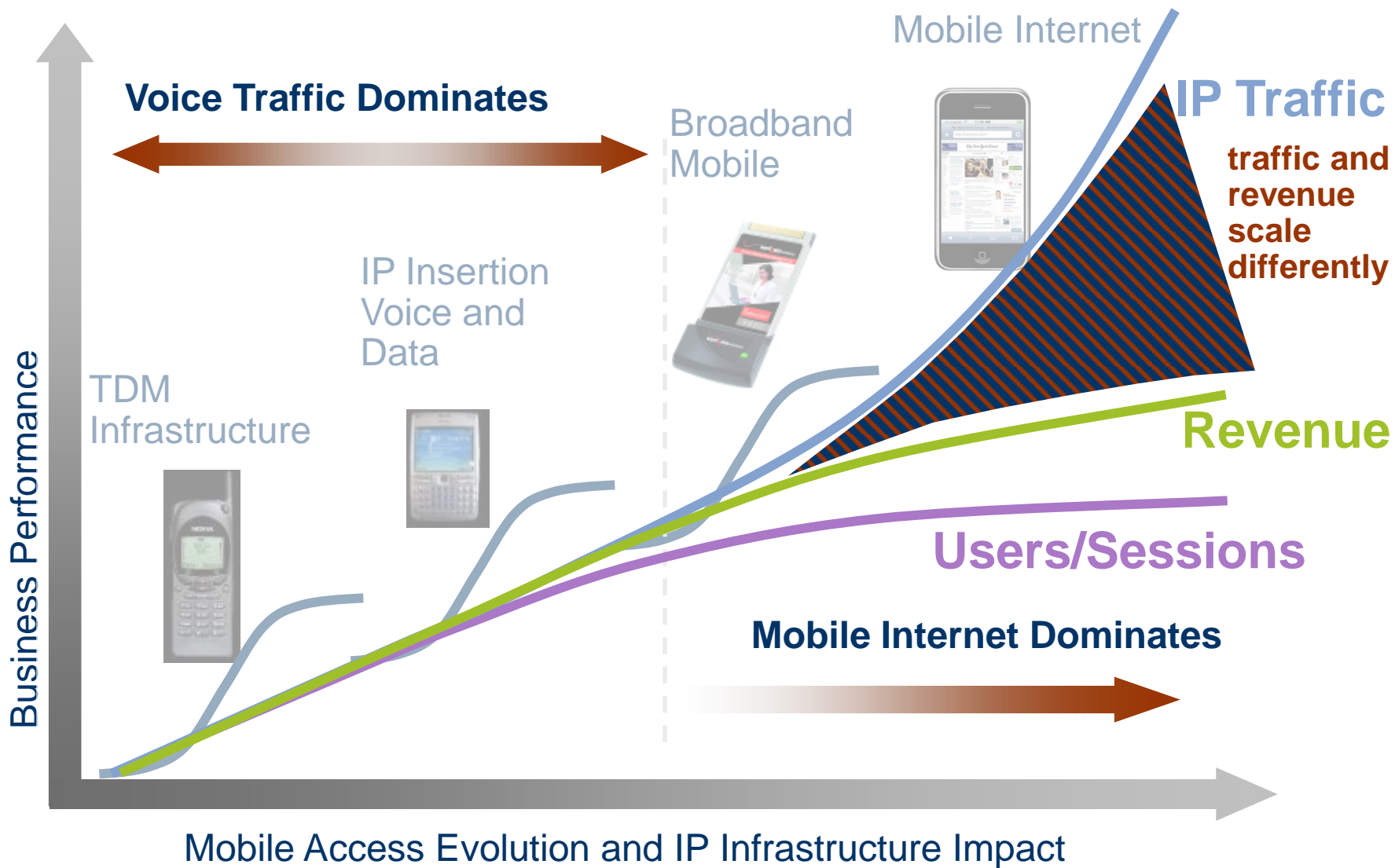
Source: European Center on IOT, Vision and Challenges for Realising the Internet of Things, 2010

In the future the Internet of Things may be a non-deterministic and open network in which auto-organized or intelligent entities, virtual objects will be interoperable and able to act independently (pursuing their own objectives or shared ones) depending on the context, circumstances or environments





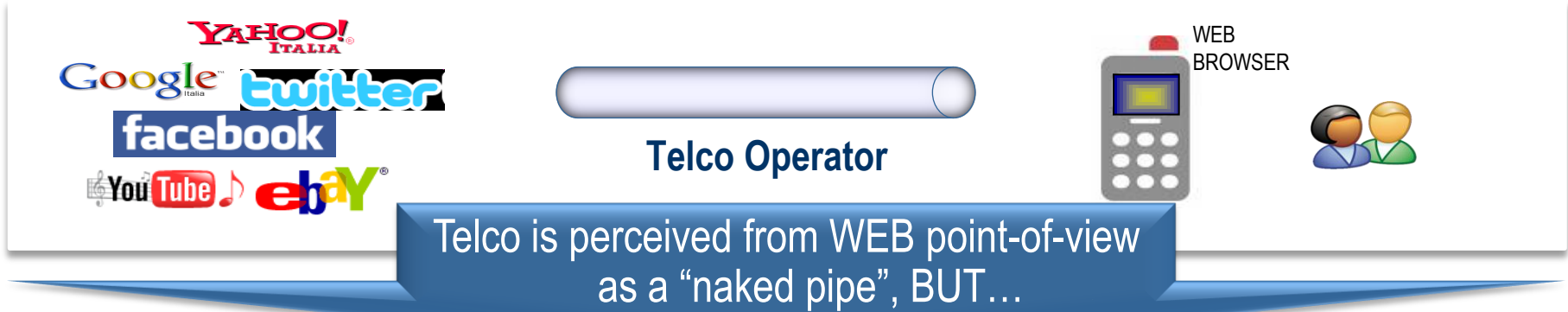
# New challenges for Service Providers



# Where is the money?



# Transformation of Telco business and Tech environment



## Telco positioning' strengths

1. Bandwidth control
2. Quality control
3. Service Continuity control for any network (IMS,PLMN,PSTN,EPS)
4. Identity control

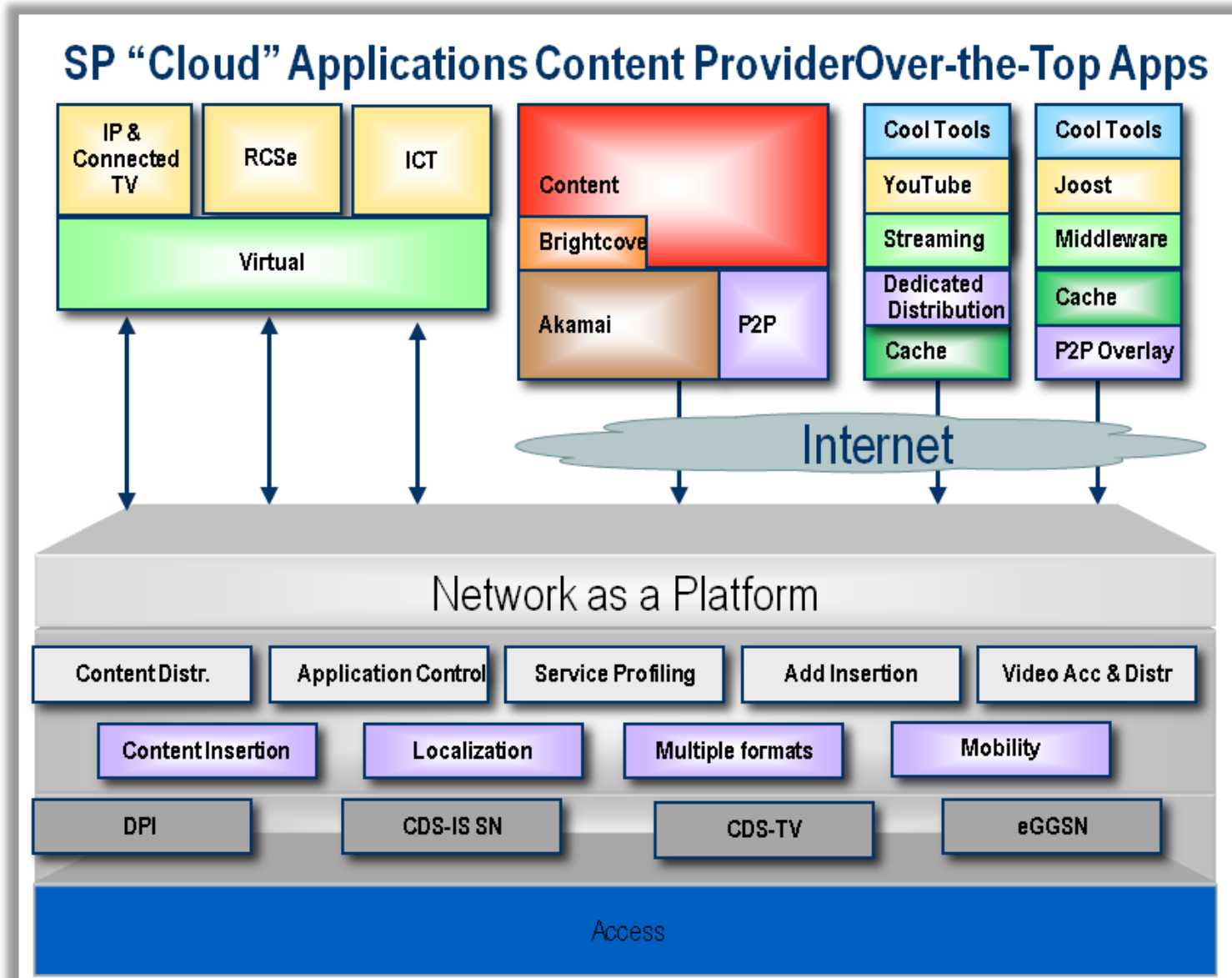
## OTT positioning' strengths

1. User-friendly, Pervasive and worldwide applications from Apps Store
2. Strong Revenues from Advertising
3. Time to Market
4. Strong Users Community

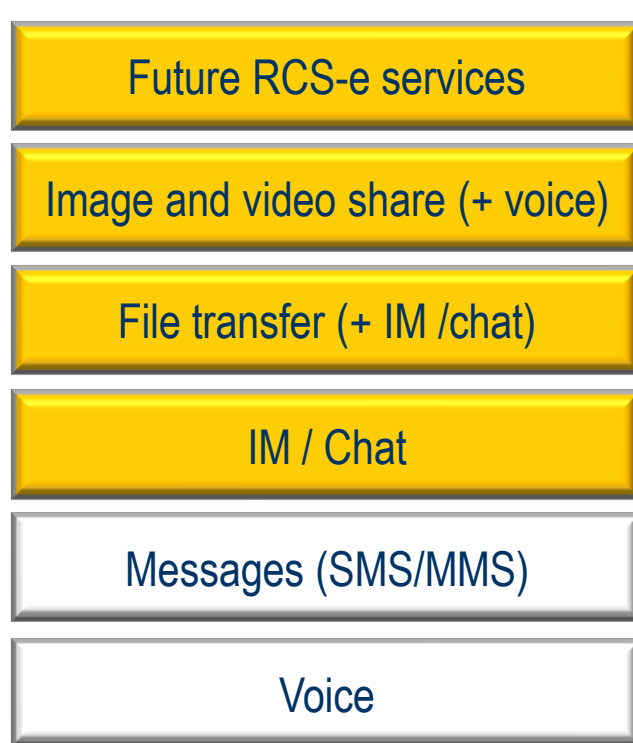
... WEB success is strictly related to Telco role: if WEB wins, wins together with Telco



# Adoption of “Network as a Platform” approach to enable Cloud Computing



## RCS-e industry Proposition – 'extending the comms stack' in the IP World





**90s and 2000s: Italtel completes the transformation of Telecommunication Network Control Centers**

**Today: Italtel develops products and solutions for the new Multimedia Communication**



1921

80s

90s

2000s

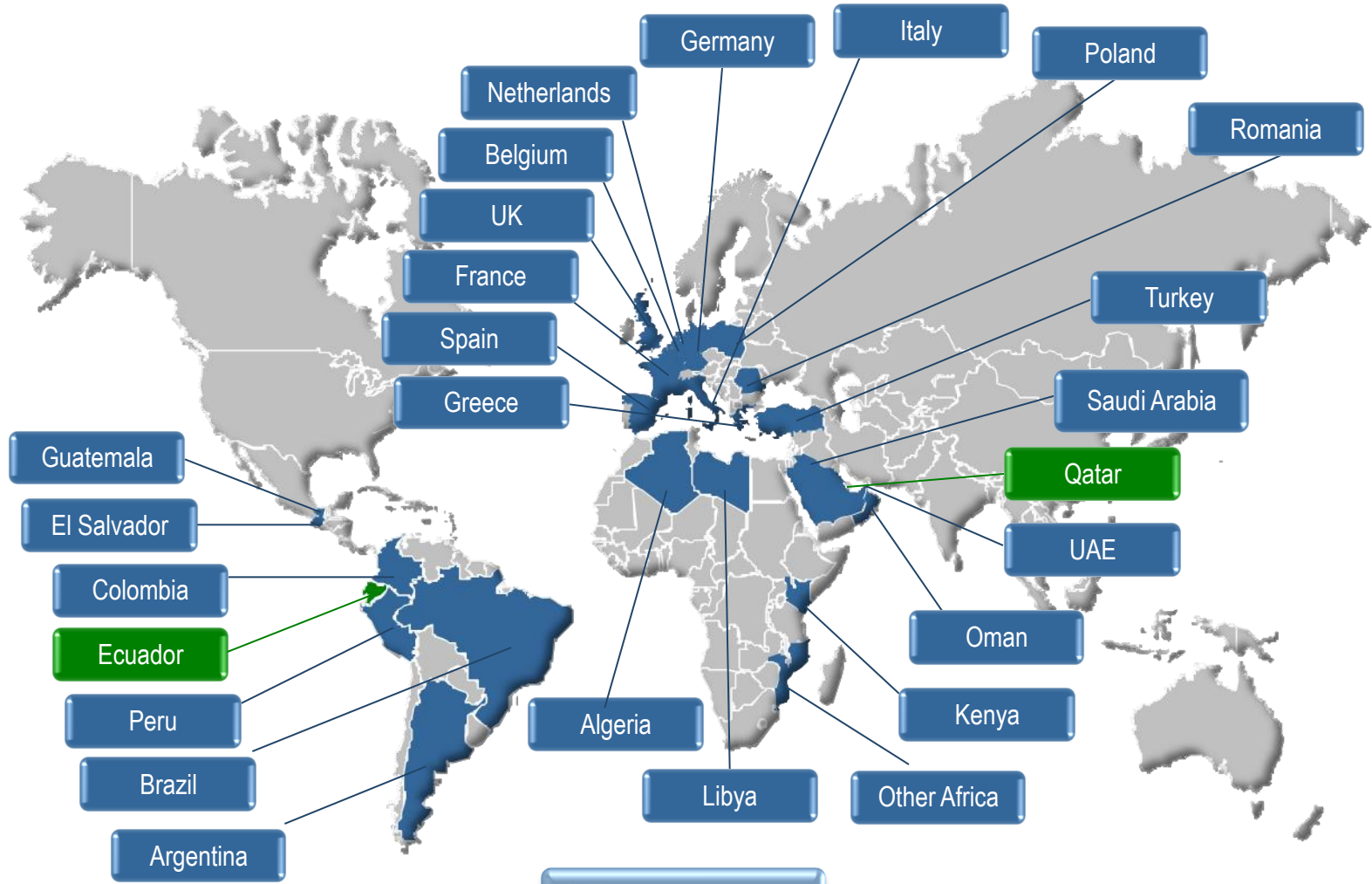
2004-2007

2008-2011

**80s and 90s: for twenty years Italtel has been the protagonist of Italian Telephony digitalization**

**2000s: Italtel realizes the transformation of Telephony over the Internet Protocol**

# Italtel presence worldwide



■ Operations in place  
■ Operations in development

Offices in Italy

- Milan - Settimo Milanese
- Rome
- Palermo - Carini



# Italtel offer: Integrated Solutions & Proprietary Products...

IMS Core e Services

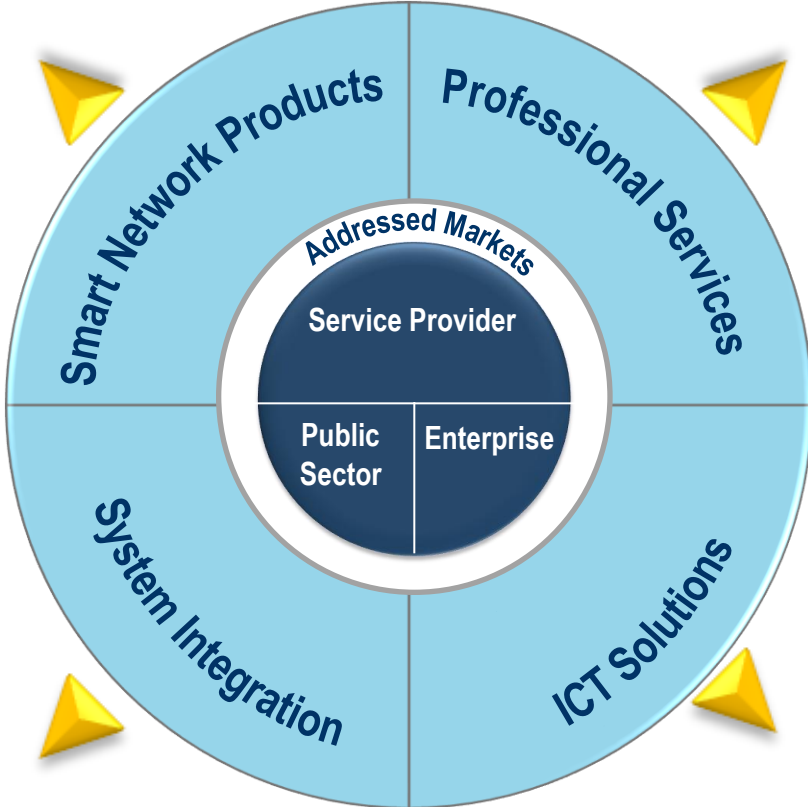
HSS e Subscriber Data Management System

Session Border Controller & Media Gateway

OSS

ICT Security

Network Management System



Engineering & Testing

Consulting & Assessment

Managed Services

IP Borderless Networks

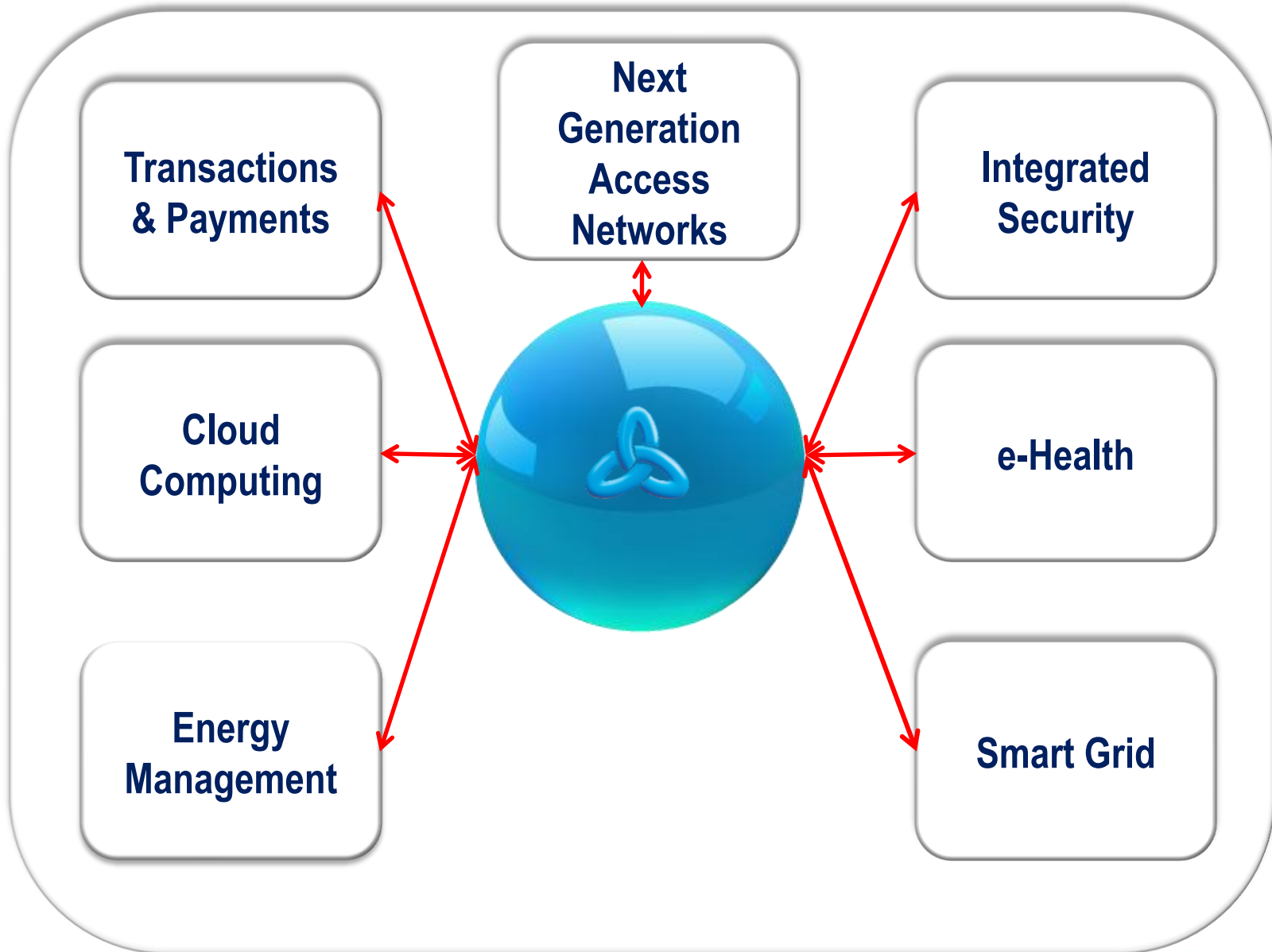
Unified Communication & Collaboration

HD Video Networks

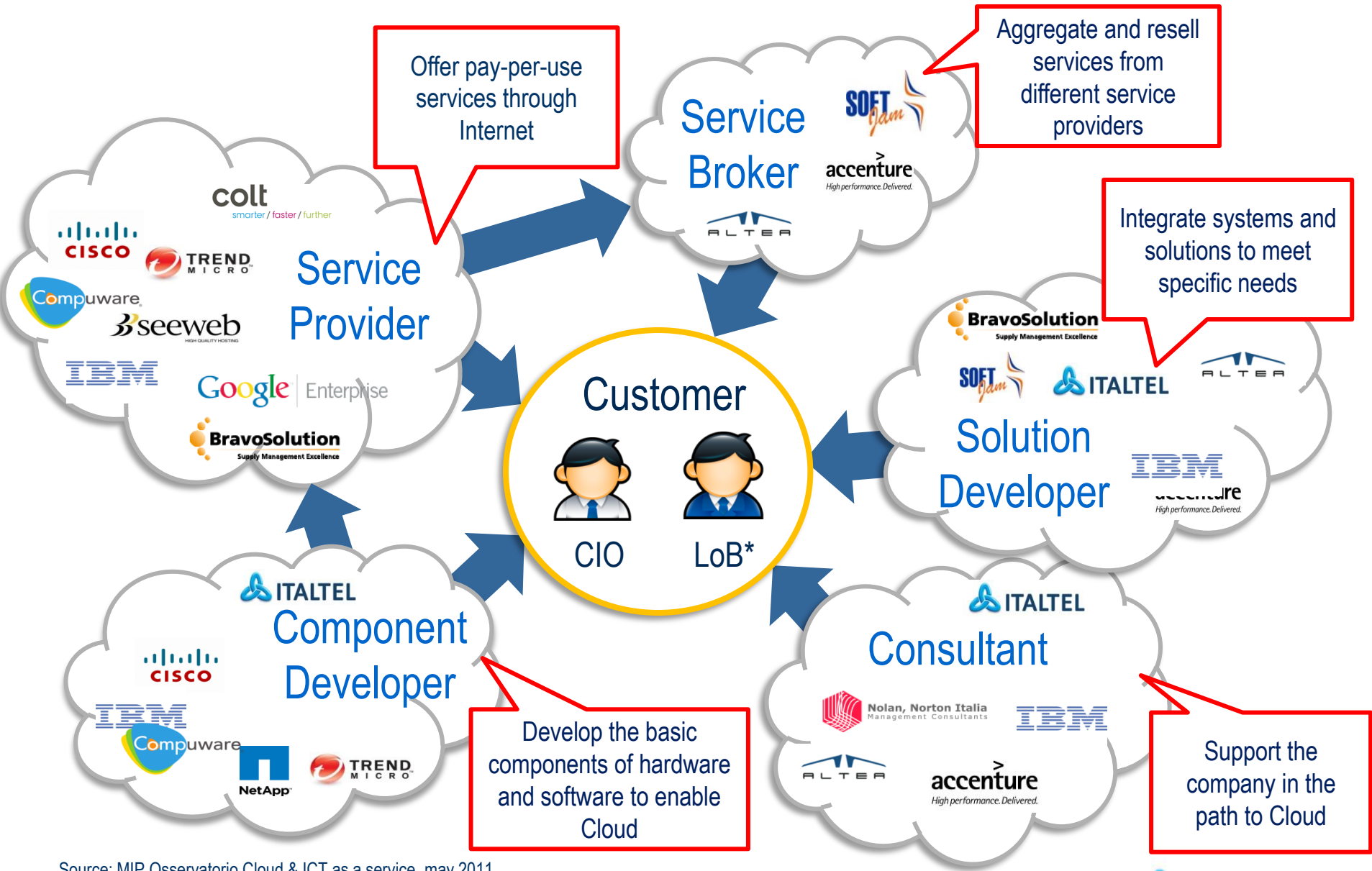
Intelligent Traffic Management

NG Data Centers

NGMN: Packet Core



# The Role of Italtel in the Cloud Market



Source: MIP Osservatorio Cloud & ICT as a service, may 2011

\* LoB – Line of Business

# Italtel Energy Service Center in Palermo

## Services

## Solutions


**ITALTEL ESC**  
 Energy  
 Service  
 Center

Palermo

Green Consulting

- Analysis of energy loads
- Identifying inefficiencies
- Measuring and sampling environmental parameters
- Dashboard for monitoring, analyzing and assessing environmental sustainability over time

### Smart Energy

Solutions to support enterprises to rationalize consumption through an effective management of energy



### Smart Building

Solutions for the coordinated management of technological systems (air conditioning, water, gas and energy, security systems) and houses (meters, sockets and programmable thermostats, ...)



### Green Data Center

Energy efficiency solutions designed specifically to optimize Data Center environment



### Smart Grids

Solutions for intelligent Communication Networks (Distributed Generation, Electric Vehicles, Remote control, Remote reading - Smart Metering, ...)

