



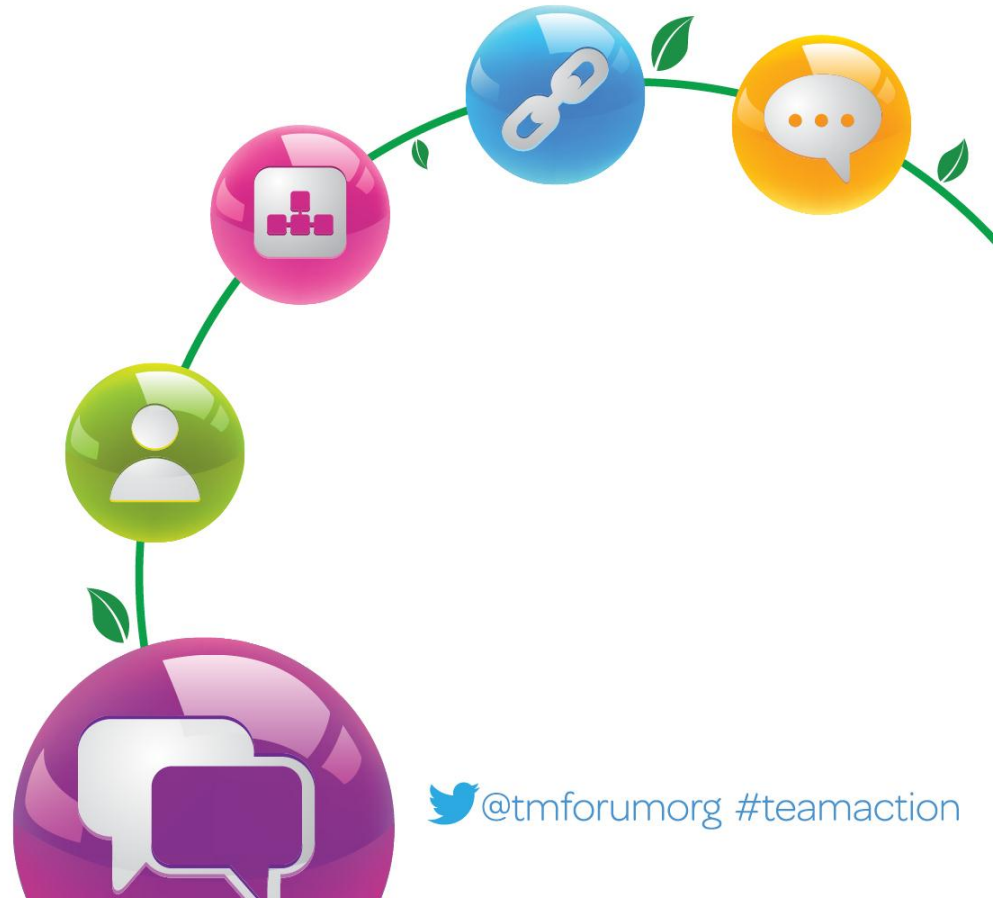
tmforumactionweek

February 10-14, 2014 • Madrid, Spain

Shape the future of the digital world

Staying Ahead of a rapidly changing industry

Joann O'Brien
VP, Collaborative R&D



 @tmforumorg #teamaction



9:00am: Joann O'Brien, VP, Collaborative R&D

Welcome & Evolving Collaboration to meet current and future Industry needs

Bill Ahlstrom, President & COO, TM Forum

9:10 – 9:25am: Nik Willetts, CSO, TM Forum

9:25 – 9:50am: Jesús Romero, Corporate Strategy Director, Telefonica

How he sees the industry shifting and the impacts this is having on the telecommunications strategy

9:50am – 10:05am: Laurent Leboucher, Vice President APIs and Digital Ecosystems, Orange & Chair TM Forum Strategy & Adoption Sub-Committee

Outlining how the changes in the industry impact on Forum activities

10:05 – 10:15am

Eric Troup, Chief Technical Officer, Worldwide Communications & Media Industries

10:15am – 10:30am: Ken Lipnickey, Director Project Management

TM Forum Action Week Logistics





Welcome

Bill Ahlstrom
President & COO
TM Forum





inform innovate accelerate optimize

Action Week 2014

Good morning!
February 10, 2014



TM Forum is a global trade association for enterprises, service providers and their suppliers.

We're trusted by the world's largest companies to help them continuously transform and succeed in the digital economy.



85,000+
Member
Professionals

900+
Member
Companies

Global
Coverage

1 Forum

agile
fast
efficient
innovative
customer centric
software centric
partner centric
data-driven
secure
mobile

Is your business a digital native?





Collaborate

Enjoy!

Share

Create

Learn



Network

Telefonica

Telecoms sector Time to invest in long term sustainability

Corporate Strategy

Telefónica, S.A.

10 February 2014

BE MORE

Executive summary

- ❑ **#1: Revenue growth is the main TSR driver; must focus on customer needs**
Investors reward sustainable revenue growth, ahead of margin trends

- ❑ **#2: Dividend yield was not a key TSR driver in 2013; higher capex and M&A**
Telco average TSR +27.2% (5.8% DY), ICT average TSR +48.2% (1.6% DY)

- ❑ **#3: Growth outlook in 2014 remains stronger for ICT players ...**
... but long term sustainability is the key issue for all (AAPL -8% post Q4)

- ❑ **#4: IT plays a critical role in the required transformation for all telcos**
Overcome complexity using standards to facilitate interaction with 3rd parties

1. The big picture - revenue growth forecasts

2. ICT Hypersector - 2013 TSR performance

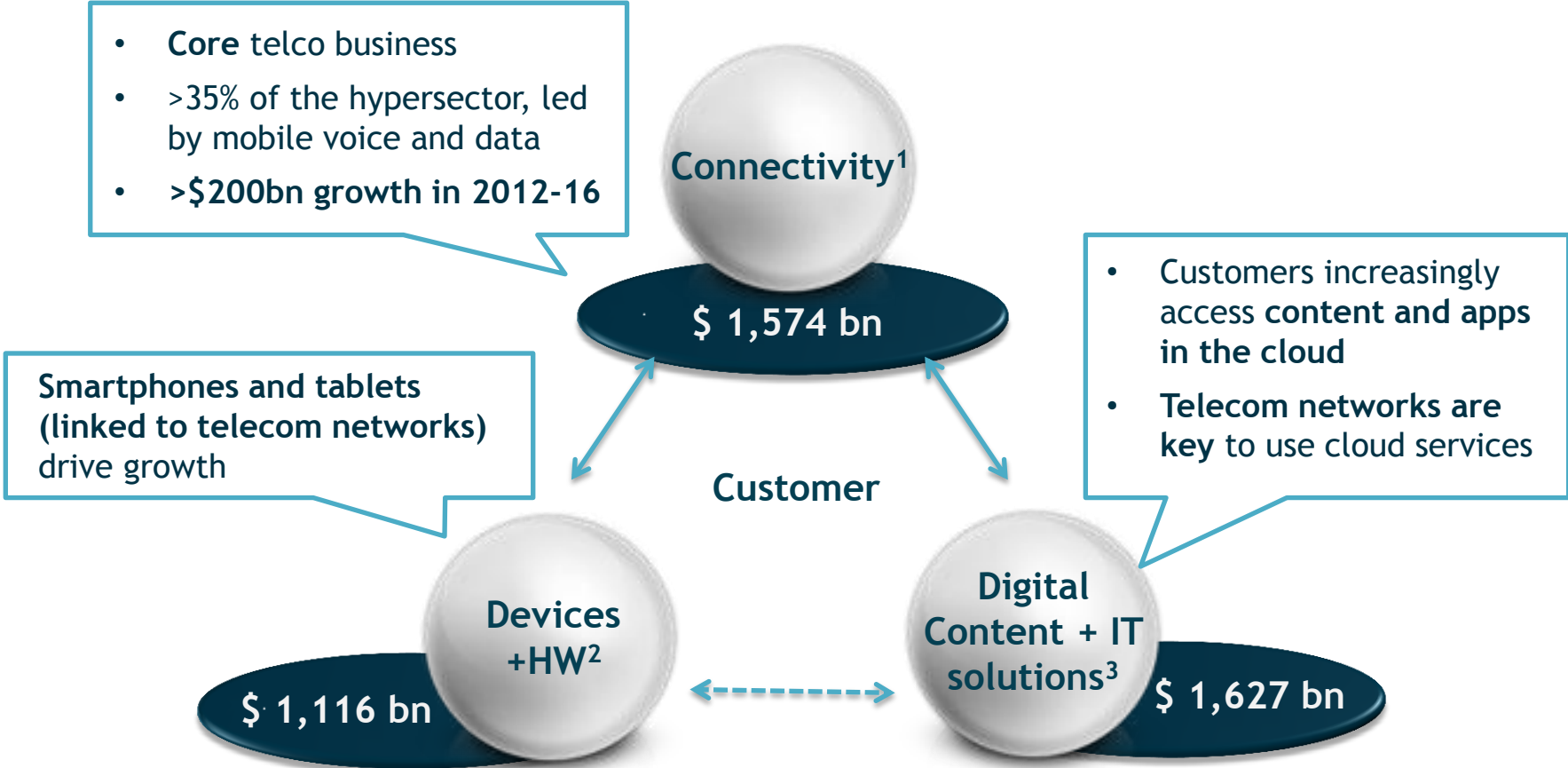
3. Growth outlook, sustainability and bundling

4. IT plays a critical role in our transformation

Telcos are in a key position in the ICT industry

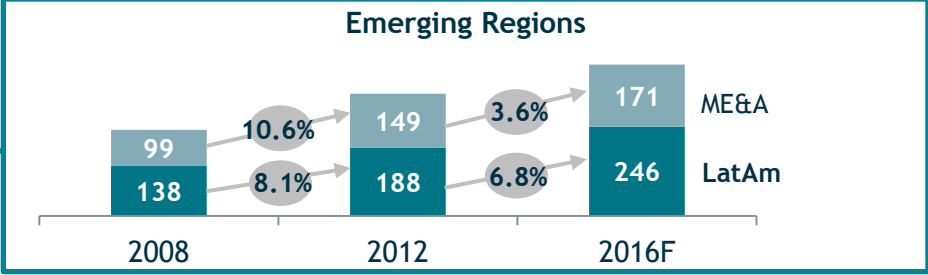
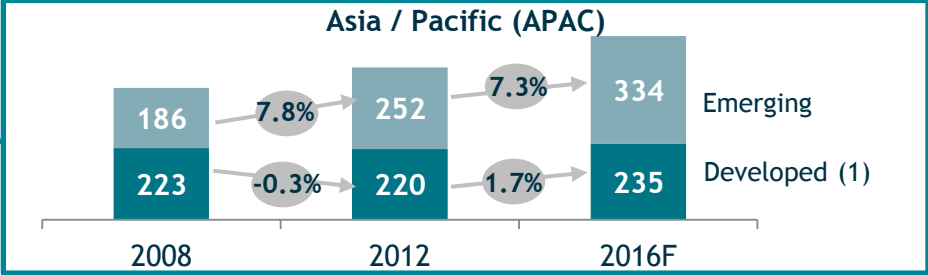
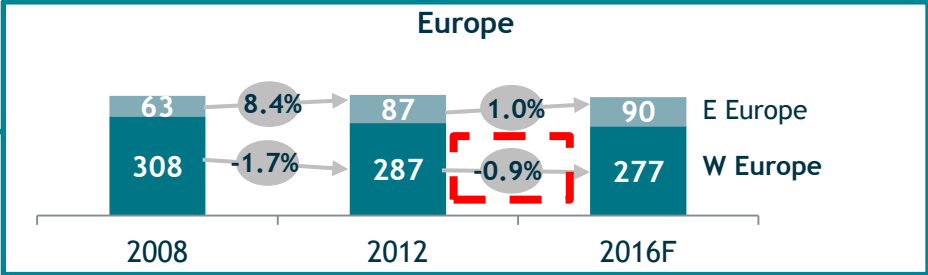
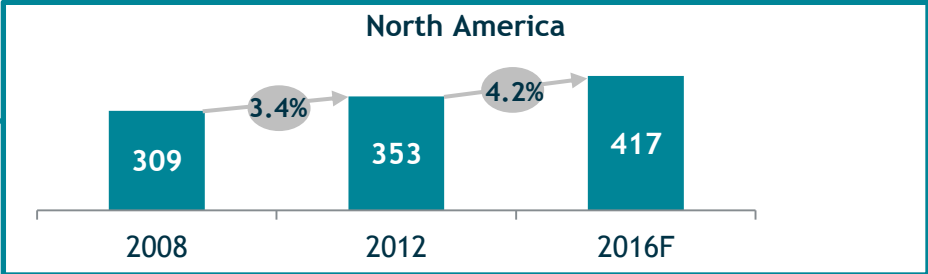
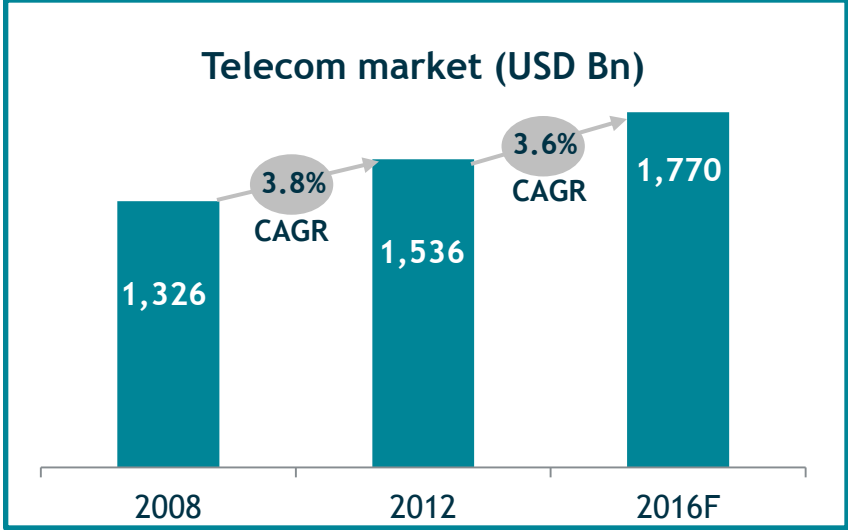
Total size of the ICT Hypersector (2012)

\$ 4,317 bn



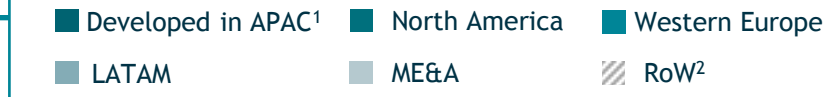
1. Includes Mobile voice and data, fixed voice and data. 2. Includes Consumer Electronics & mobile devices contributing \$788Bn (phones, PCs, tablets, game consoles, Flat panel TVs, and other CE) + hardware and telecom equipment. 3. Includes Information Technology (IT services, software) + Digital contents (TV/Filmed, B2B, internet advertising, video games, radio/music, newspapers/magazines/books)

Global Telecom revenues forecast (+\$234bn by 2016F)

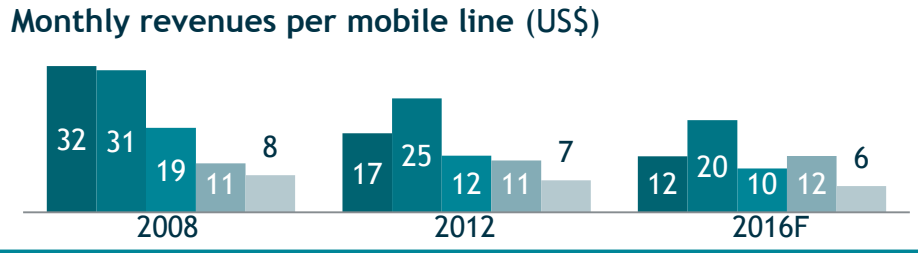
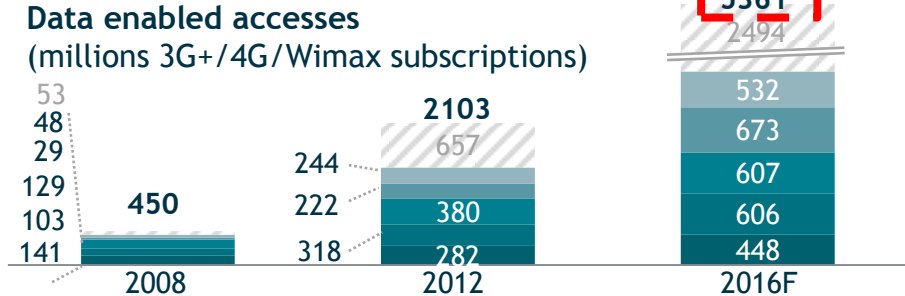
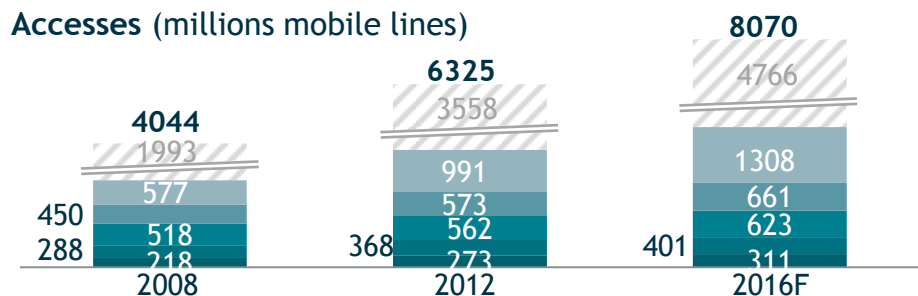
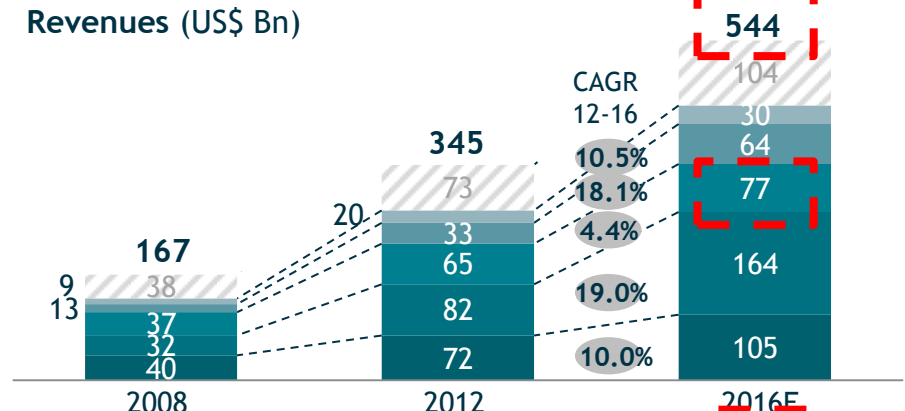
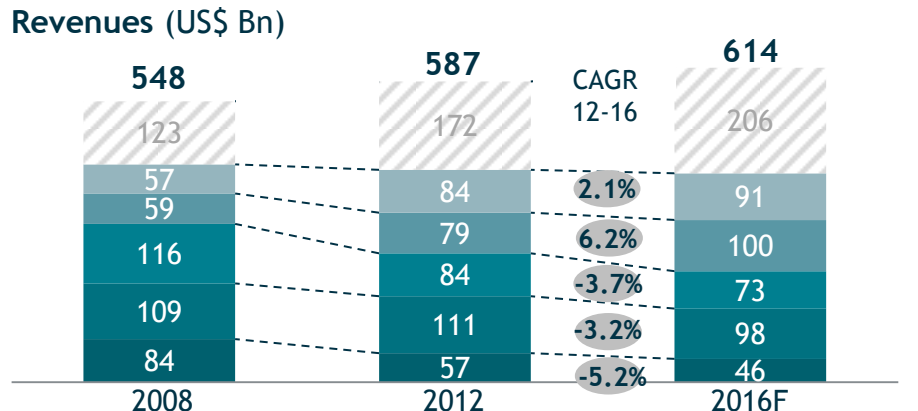


Mobile revenues and KPI forecast (EU estimates are low)

Mobile Voice



Mobile Broadband



Source: IDC, Pyramid Research (Sept-13), Yankee Group (Dec-12)

1 - Developed countries in Asia / Pacific: Australia, Honk Kong, Japan, Korea, Singapore, Taiwan
 2 - Rest of the World: Emerging countries in Asia / Pacific (China, India...) and Eastern Europe

What are industry analysts missing? Three main points

- ✓ **European telecoms are currently experiencing a triple-bottom** in the economic, regulatory and product cycles. Key highlights include:
 - **Economy** - After two years of negative GDP growth (-0.7% and -0.3% in 2012-13), a recovery is on the way (2014 +1.0% and 2015 +1.5%)
 - **Regulation** - The tide could be turning in Brussels. A stable investment framework and in-market consolidation are expected.
 - **Product** - The need to provide best-in-class customer experience and superior network quality applies to Europe as well (FTTH/LTE)
- ✓ **Fixed broadband customer experience will radically improve** with superior network speeds and beyond connectivity bundles.
- ✓ **Rapidly declining prices for smartphones** will drive mobile data penetration much higher than currently anticipated across all markets.

Industry forecasts extrapolate for the next few years the main trends from the recent past. Revenue growth in Europe should be higher.

1. The big picture - revenue growth forecasts

2. ICT Hypersector - 2013 TSR performance

3. Growth outlook, sustainability and bundling

4. IT plays a critical role in our transformation

Coverage universe (100 stocks)

TELCO

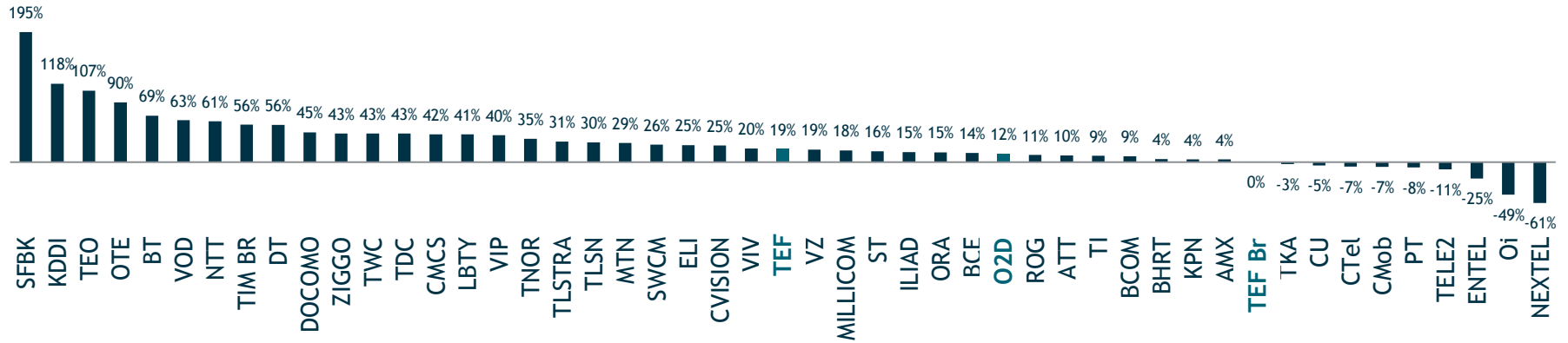
1.AMERICA MOVIL	26.OTE
2.AT&T	27.PORTUGAL TELECOM
3.BELGACOM	28.ROGERS
4.BELL CANADA	29.SINGTEL
5.BHARTI	30.SOFTBANK
6.BT	31.SPRINT
7.CABLEVISION	32.SWISSCOM
8.CHINA MOBILE	33.TDC
9.CHINA UNICOM	34.TEF BRAZIL
10.CHINA TELECOM	35.TEF DEUTSCHLAND
11.COMCAST	36.TELE2
12.DEUTSCHE TELEKOM	37.TELECOM ARGENTINA
13.ELISA	38.TELECOM ITALIA
14.ENTEL	39.TELEFONICA
15.ILIAD	40.TELEKOM AUSTRIA
16.KDDI	41.TELENOR
17.KPN	42.TELIASONERA
18.LIBERTY	43.TELSTRA
19.MILLICOM	44.TIM Br
20.MTN	45.TIME WARNER
21.NEXTEL	46.VERIZON
22.NTT	47.VIMPELCOM
23.NTT DOCOMO	48.VIVENDI
24.Oi	49.VODAFONE
25.ORANGE	50.ZIGGO

INTERNET, MEDIA AND TECHNOLOGY

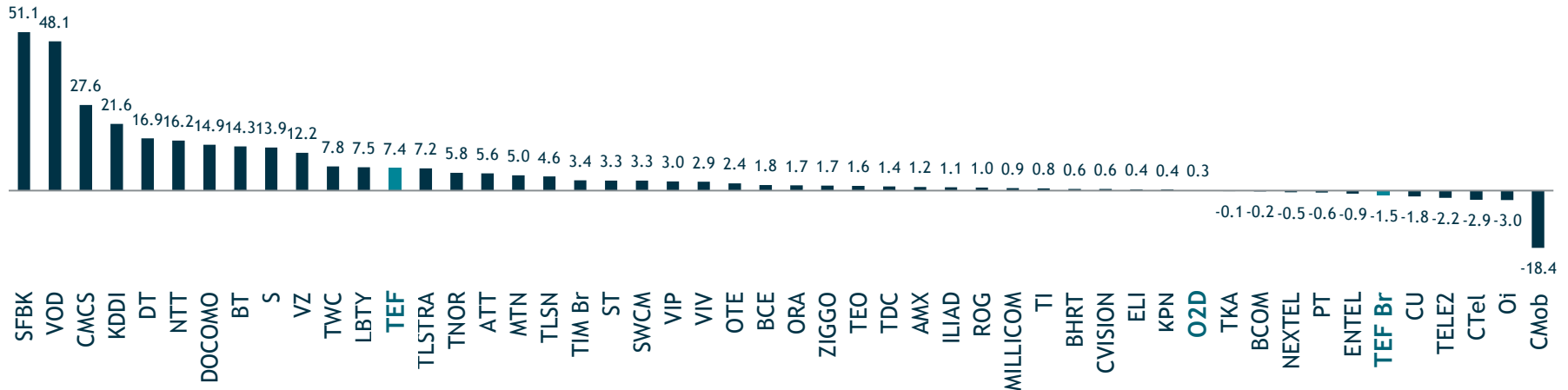
1.21C FOX	26.IBM
2.ACCENTURE	27.INTEL
3.ADOBE	28.JUNIPER
4.ALCATEL	29.LENOVO
5.AMAZON	30.LINKEDIN
6.APPLE	31.MICROSOFT
7.ARM HOLDINGS	32.NASPERS
8.ASML	33.NETFLIX
9.BAIDU	34.ORACLE
10.BLACKBERRY	35.PRICELINE
11.BROADCOM	36.QUALCOMM
12.BSKYB	37.SAMSUNG
13.CANON	38.SAP
14.CISCO	39.SONY
15.CORNING	40.TAIWAN SEMI
16.CRM	41.TELEVISA
17.DIRECTV	42.TENCENT
18.DISCOVERY	43.TEXAS INSTR.
19.EBAY	44.TIME WARNER
20.EMC	45.VIACOM
21.ERICSSON	46.VMWARE
22.FACEBOOK	47.WALT DISNEY
23.GOOGLE	48.WPP
24.HONHAI	49.YAHOO
25.HP	50.ZTE

Telcos 2013 - TSR +27.2% (only 5.8% from dividend yield)

TSR performance in TELCO companies in 2013 (%)

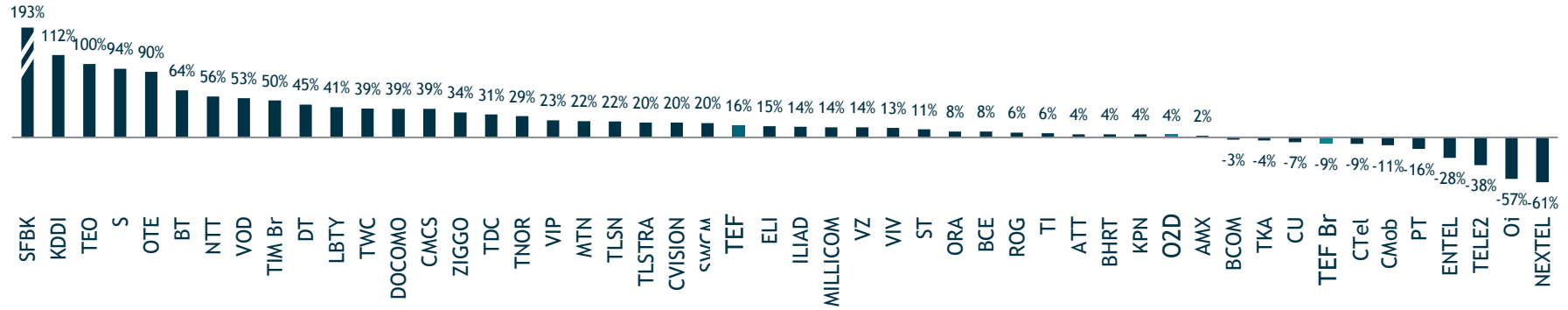


Capital appreciation in 2013 (EUR bn)

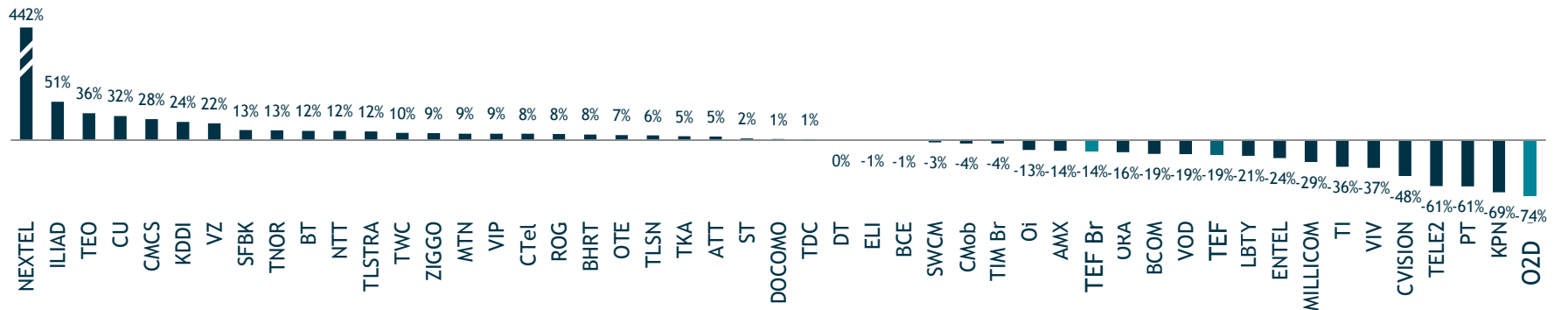


Average 12M FWD EPS declined 5% but PE re-rated by +40%

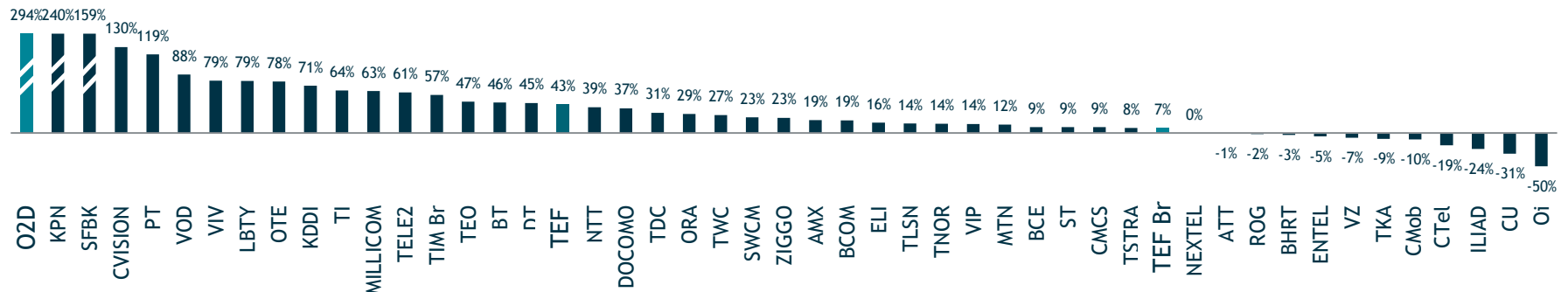
Capital Return (%)



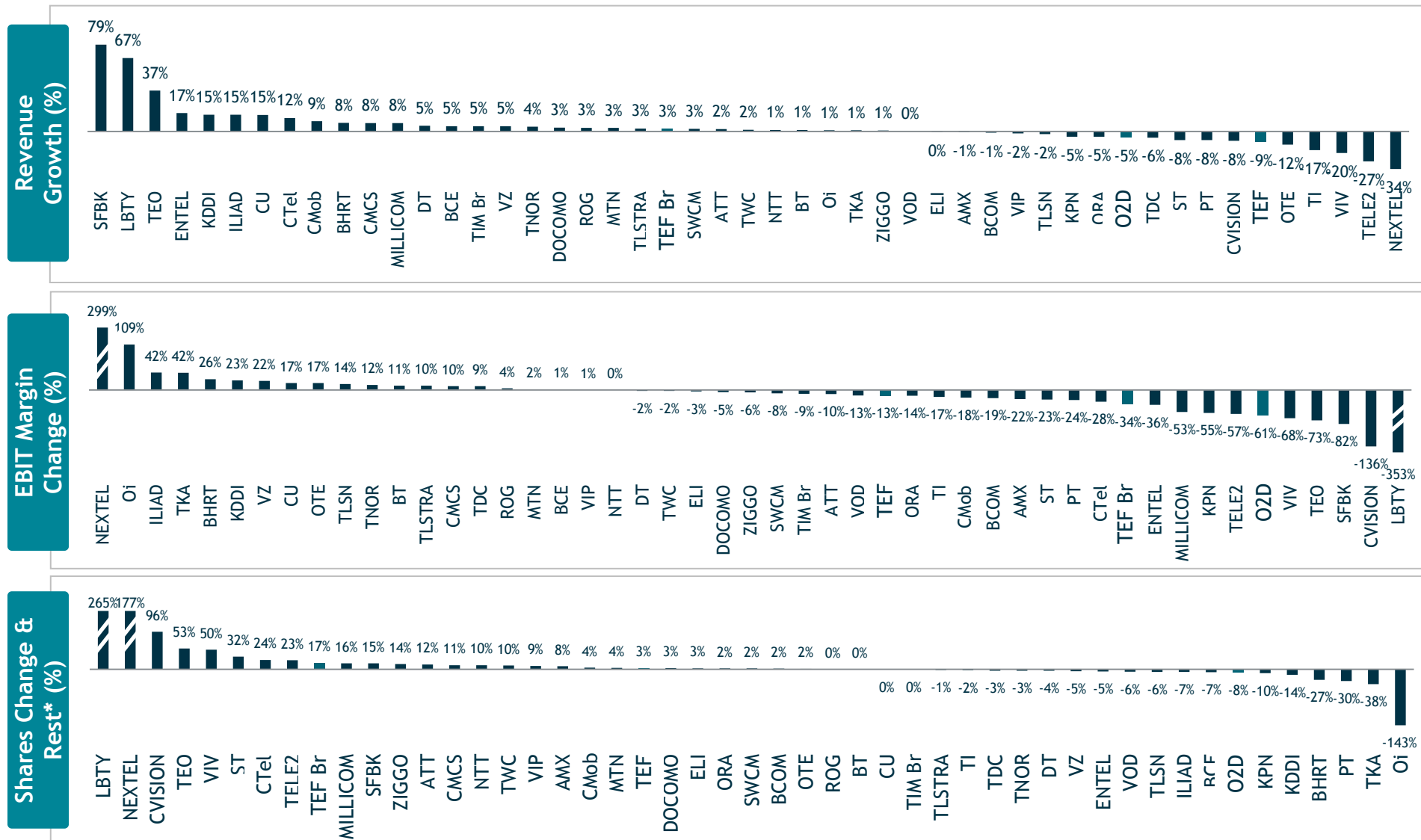
Δ 12m FWD EPS



Δ 12m FWD PE

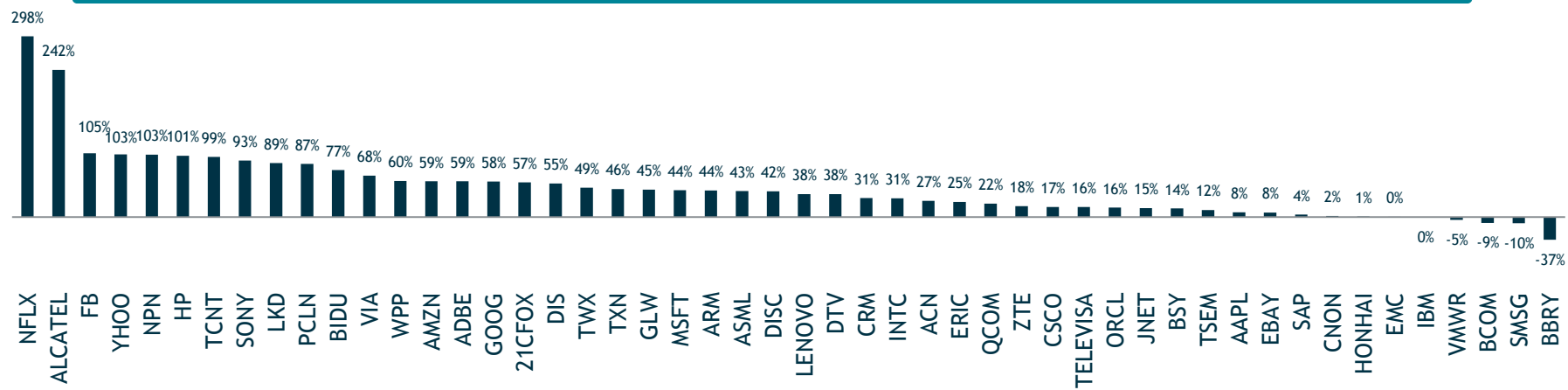


EPS cuts driven by weak revenues and lower margins

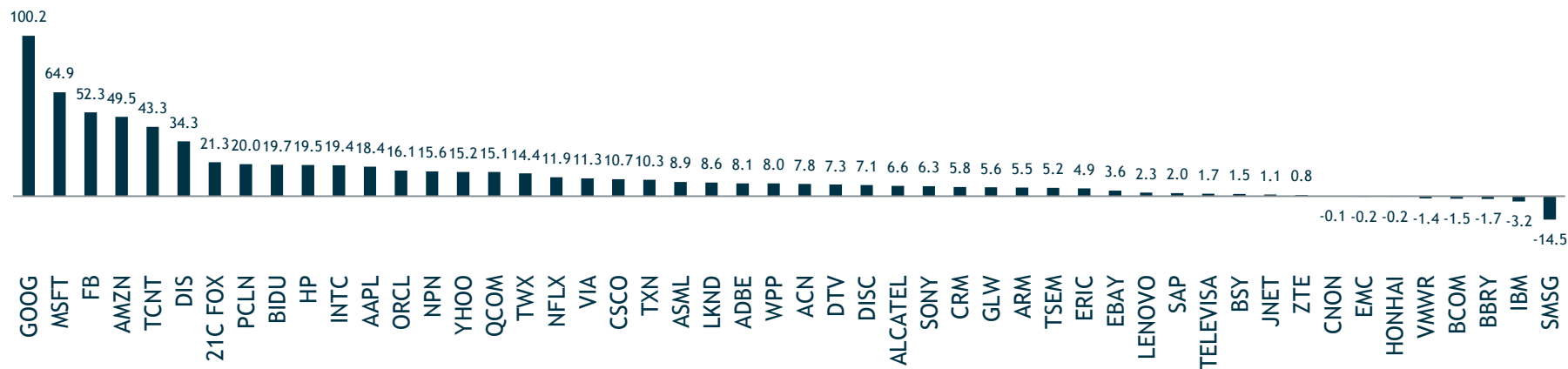


ICT (ex Telcos) 2013 - TSR +48.2% (1.6% dividend yield)

TSR performance in ICT (Ex Telcos) companies in 2013 (%)

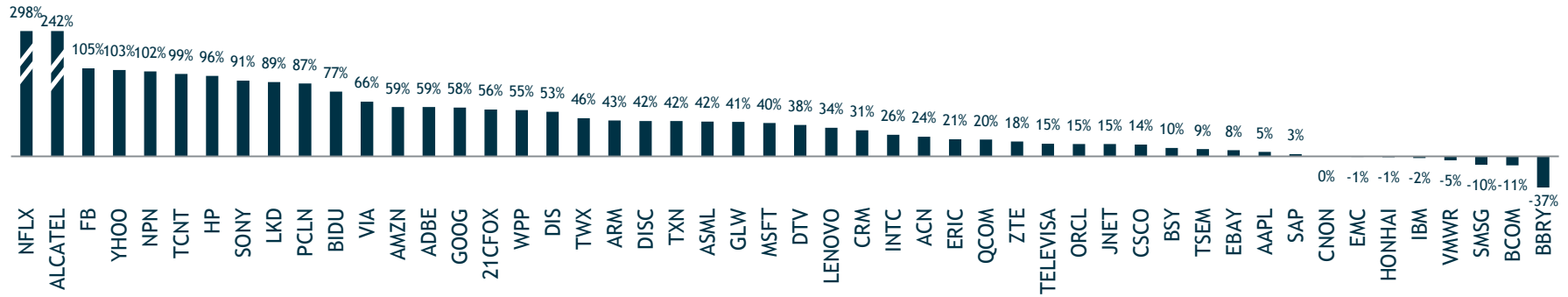


Capital appreciation in 2013 (EUR bn)

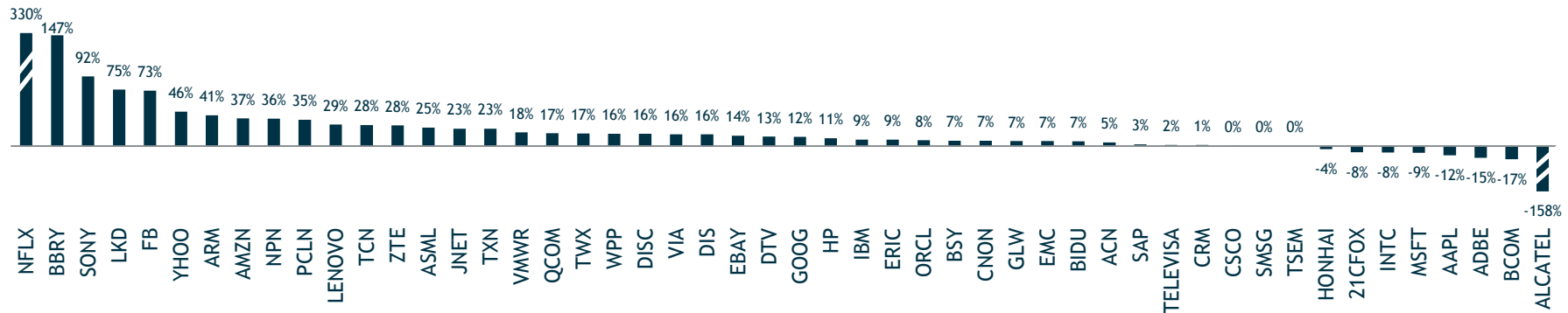


12M FWD EPS growth (>20%) and PE re-rating (>30%)

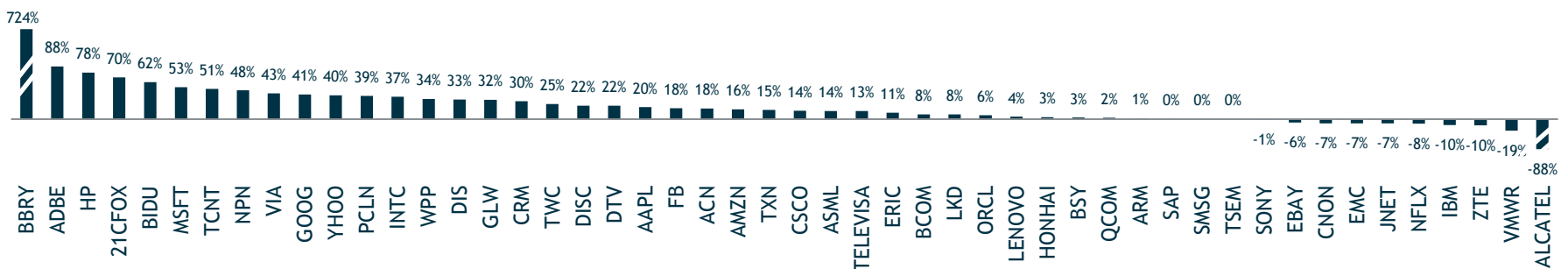
Capital Return (%)



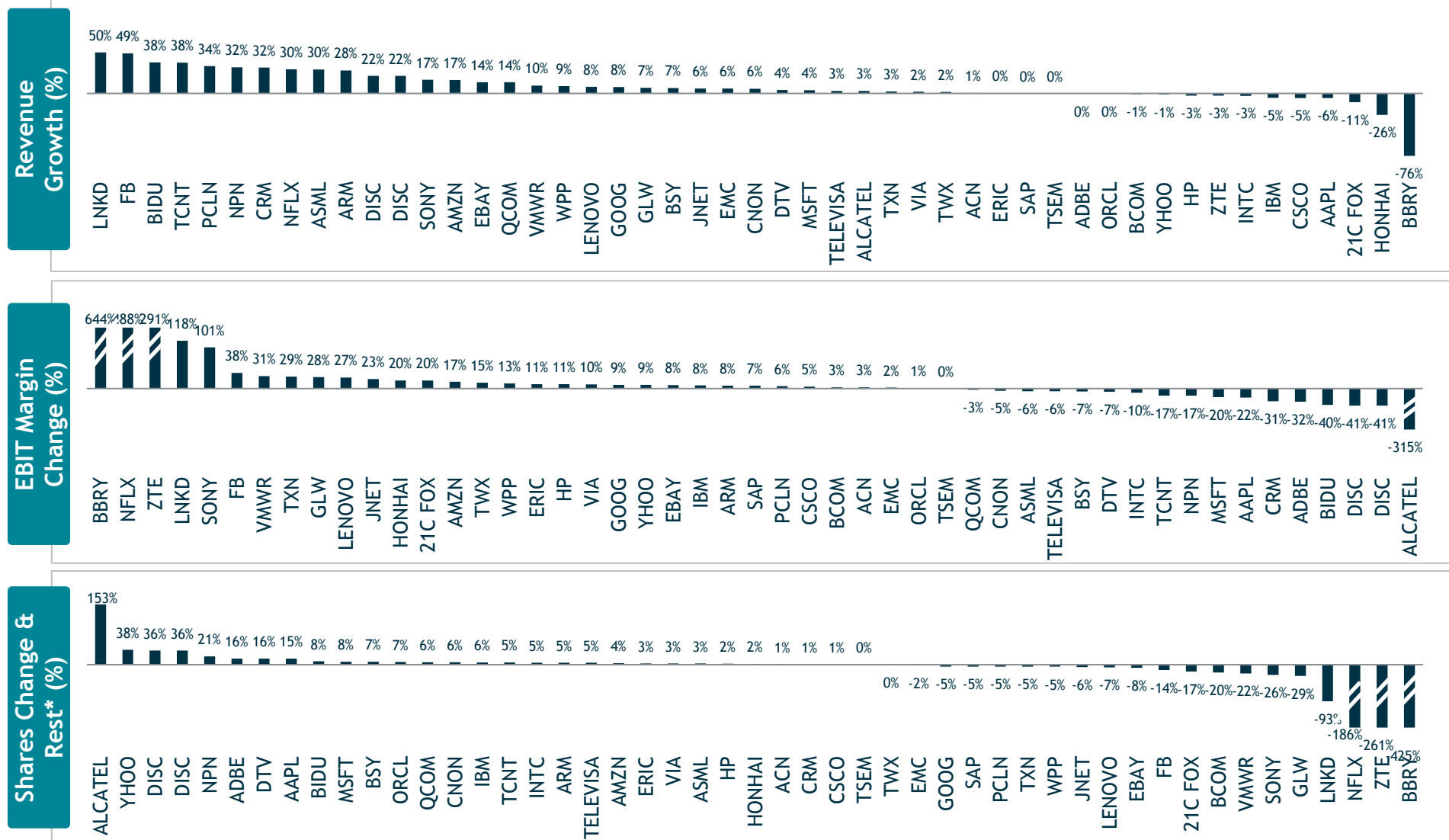
Δ 12m FWD EPS



Δ 12m FWD PE



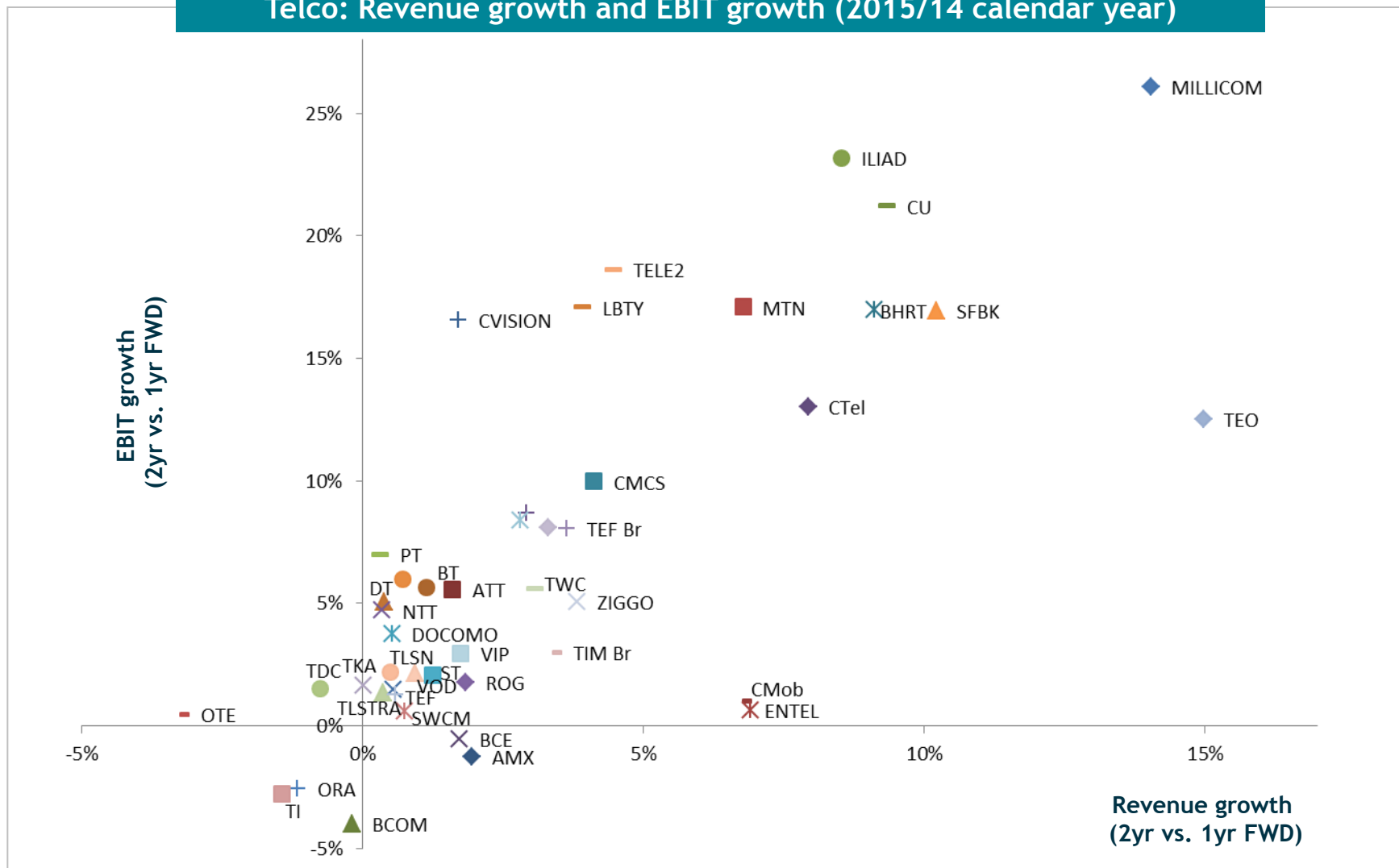
EPS growth driven by strong revenue growth and margins



1. The big picture - revenue growth forecasts
2. ICT Hypersector - 2013 TSR performance
- 3. Growth outlook, sustainability and bundling**
4. IT plays a critical role in our transformation

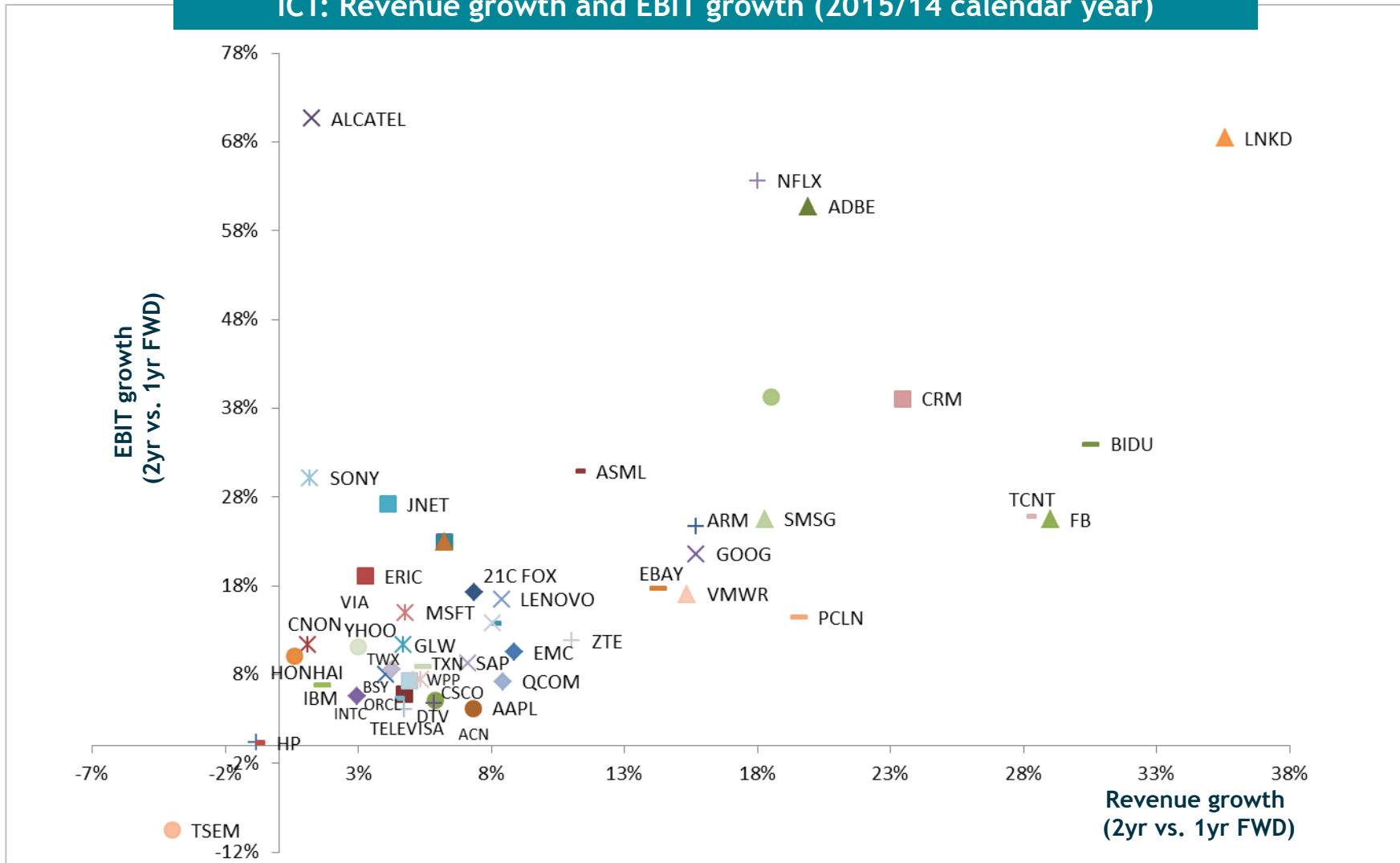
Telco: Revenue growth and EBIT growth

Telco: Revenue growth and EBIT growth (2015/14 calendar year)



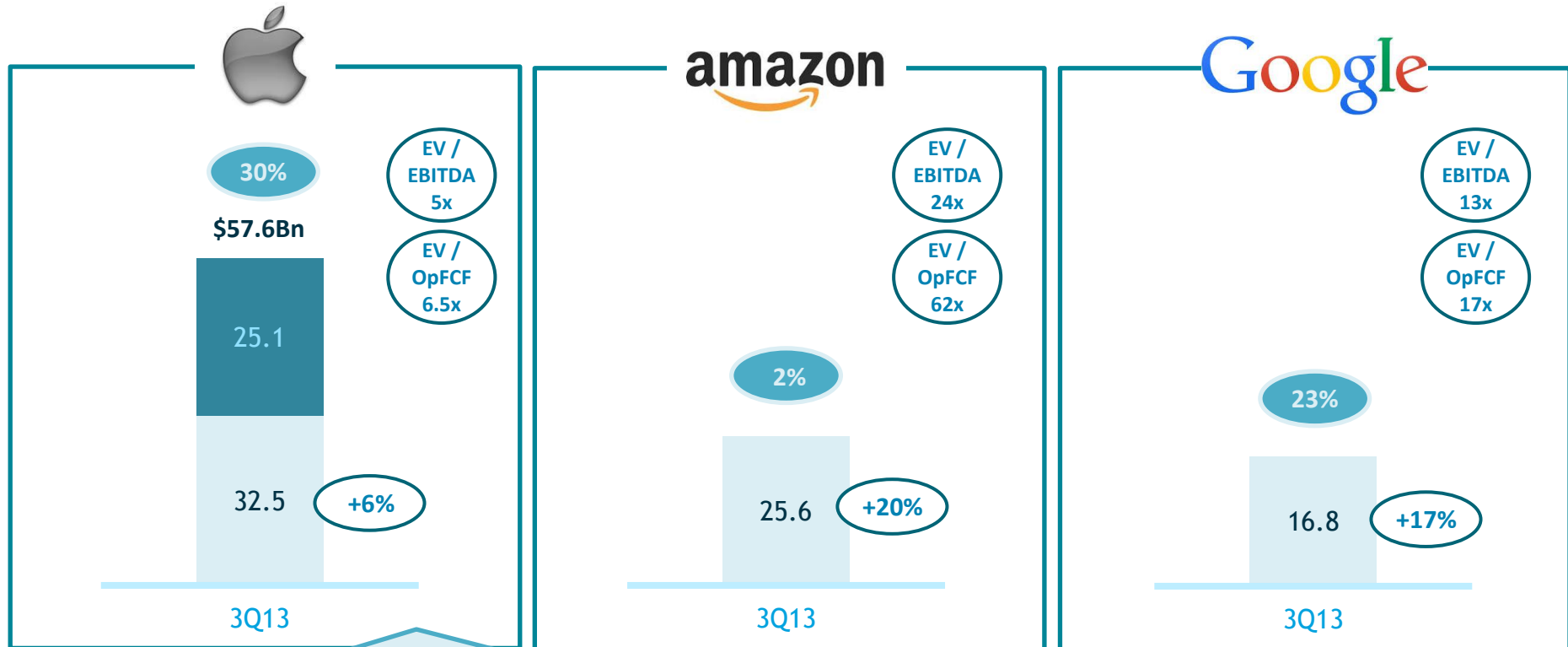
ICT: Revenue growth and EBIT growth

ICT: Revenue growth and EBIT growth (2015/14 calendar year)



Long term sustainability is critical - AAPL vs. AMZN/GOOG

Revenues Q4 2013 calendar (\$Bn)

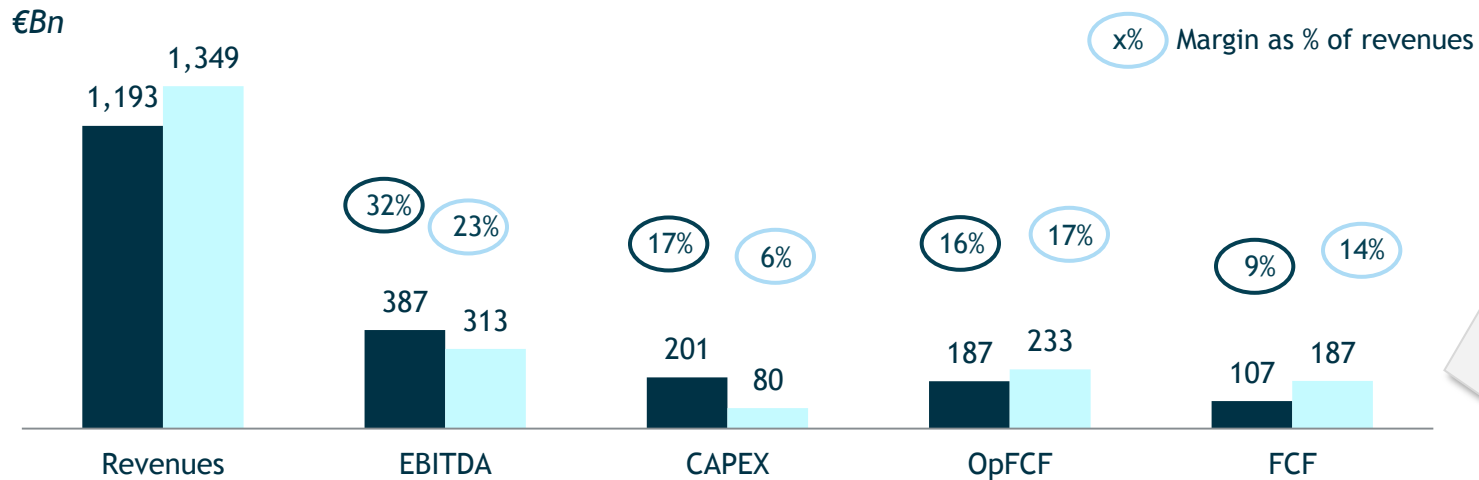


- iPhone revenues are larger than all of Amazon or Google but they are growing less and there is no certainty about the long term
- What if average prices per unit fall below current \$600+ level? What if units sold peak in the future?

x% Crec. anual ing
 x% EBIT %

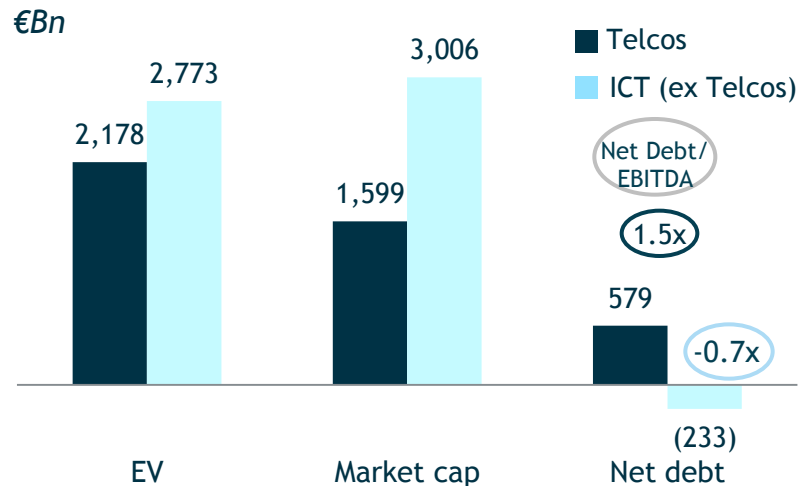
Telcos less profitable and lower growth, same multiples

Big Picture Comparison

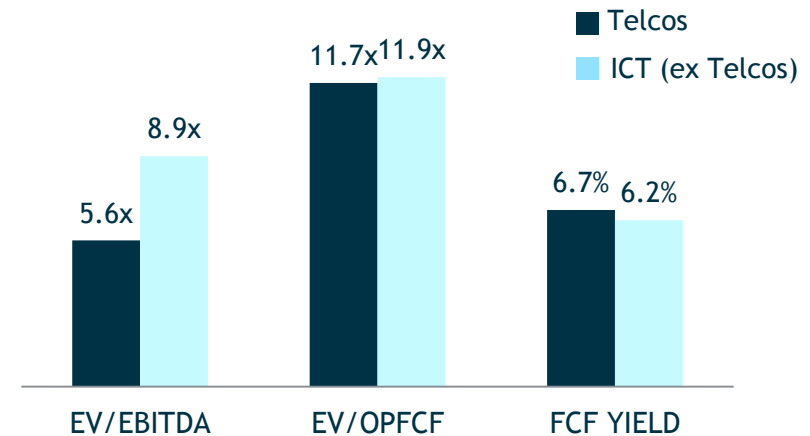


We track the top 100 stocks in the ICT Hypersector (50 telcos and 50 from the Internet, Media and Technology space). For full details see TSR and Consensus Tracker - ICT Hypersector (31st Dec 2013).

Absolute Valuation



Multiples Comparison



Follow three rules for sustainable exceptional performance

Deloitte researched 25,000 listed companies over a 45 year period (1966-2010) and concluded that only 344 (1.4%) generated **sustained exceptional performance based on three rules:**

- ❑ **Rule #1: Better Before Cheaper**

Compete on differentiators other than price

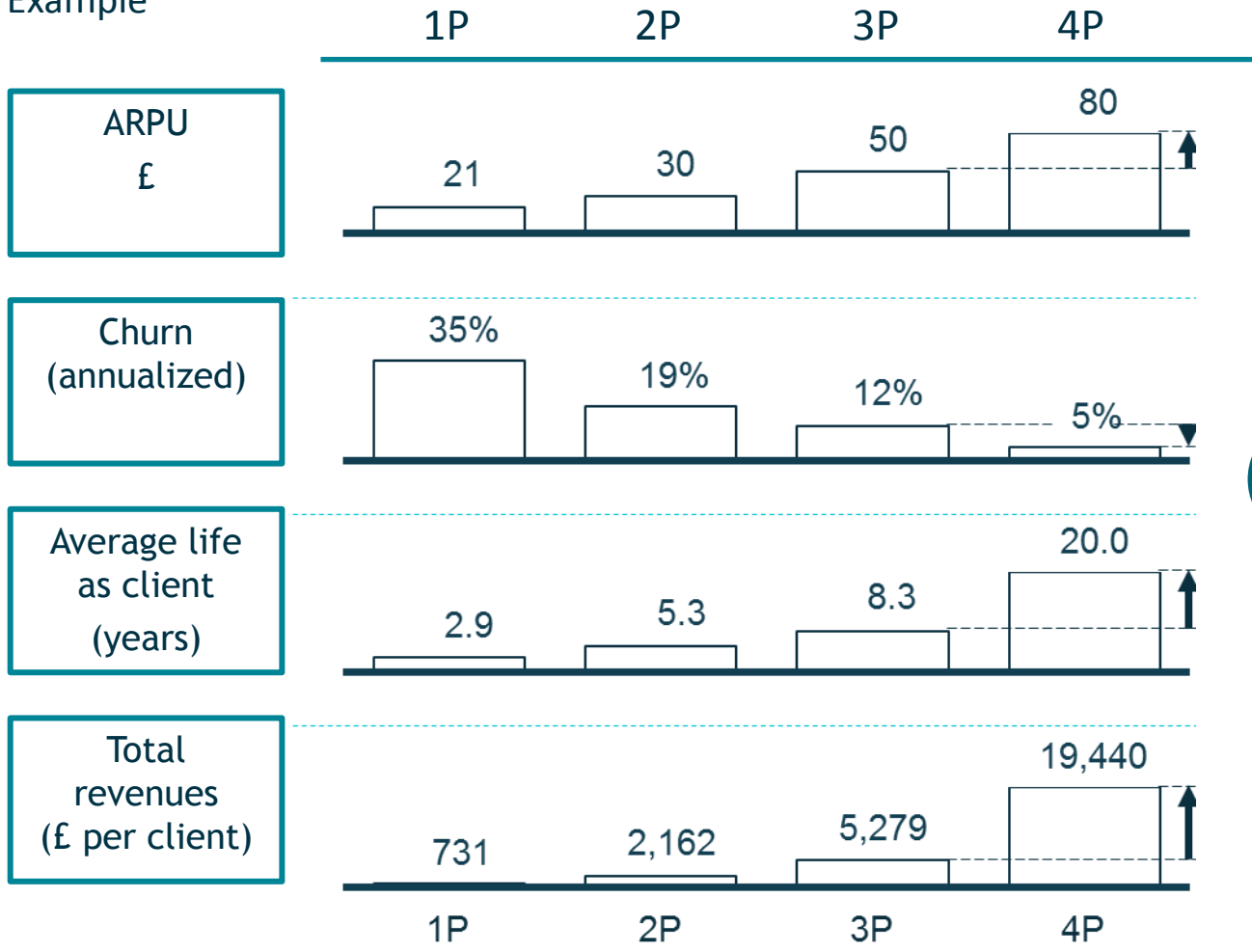
- ❑ **Rule #2: Revenue Before Cost**

Prioritize increasing revenue over reducing costs

- ❑ **Rule #3: Change anything to follow rules 1 and 2**

Client life time value - bundle connectivity plus services

Example



B2C

- EVERNOTE
- Dropbox
- Spotify
- McAfee
- Aquí estoy Cuidamos de lo que más te importa.

B2B

- EMC²
- ORACLE
- SAP
- hp
- Instant Servers & Storage

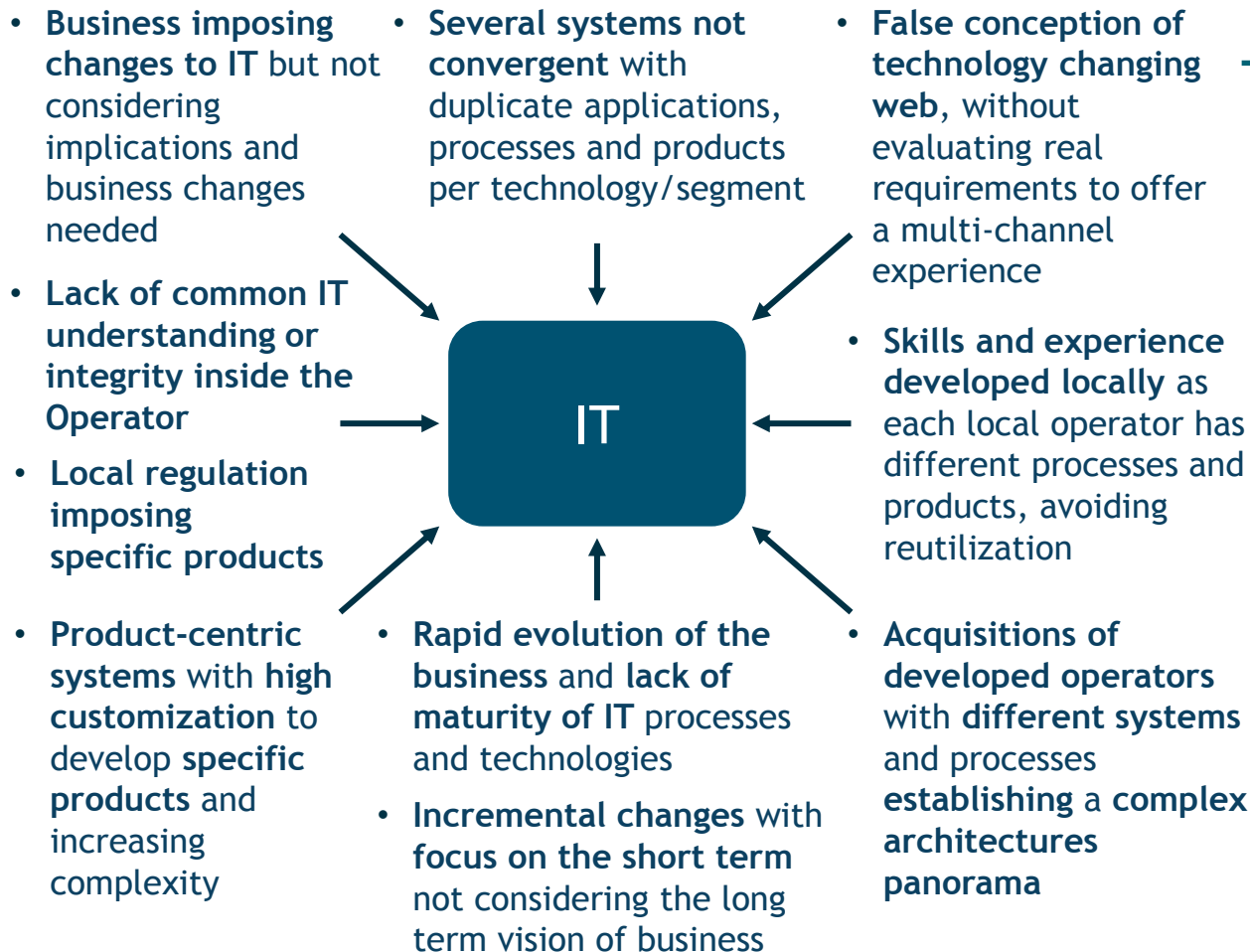
Focus on long term sustainability and superior TSRs



1. The big picture - revenue growth forecasts
2. ICT Hypersector - 2013 TSR performance
3. Growth outlook, sustainability and bundling
4. IT plays a critical role in our transformation

To be able to respond in this market, Global Telcos need to overcome their current intrinsic complexity

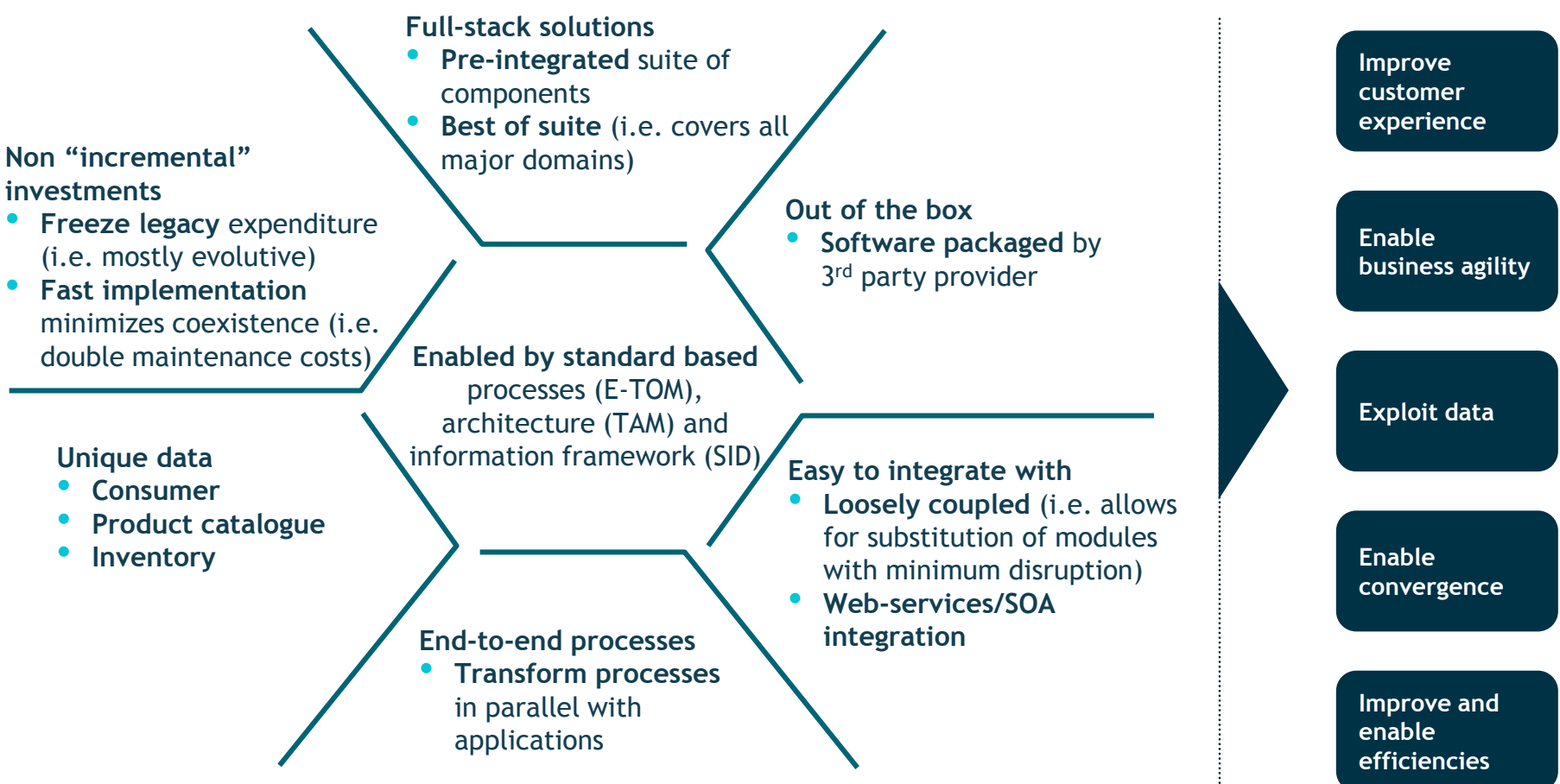
Drivers of Complexity



Impact

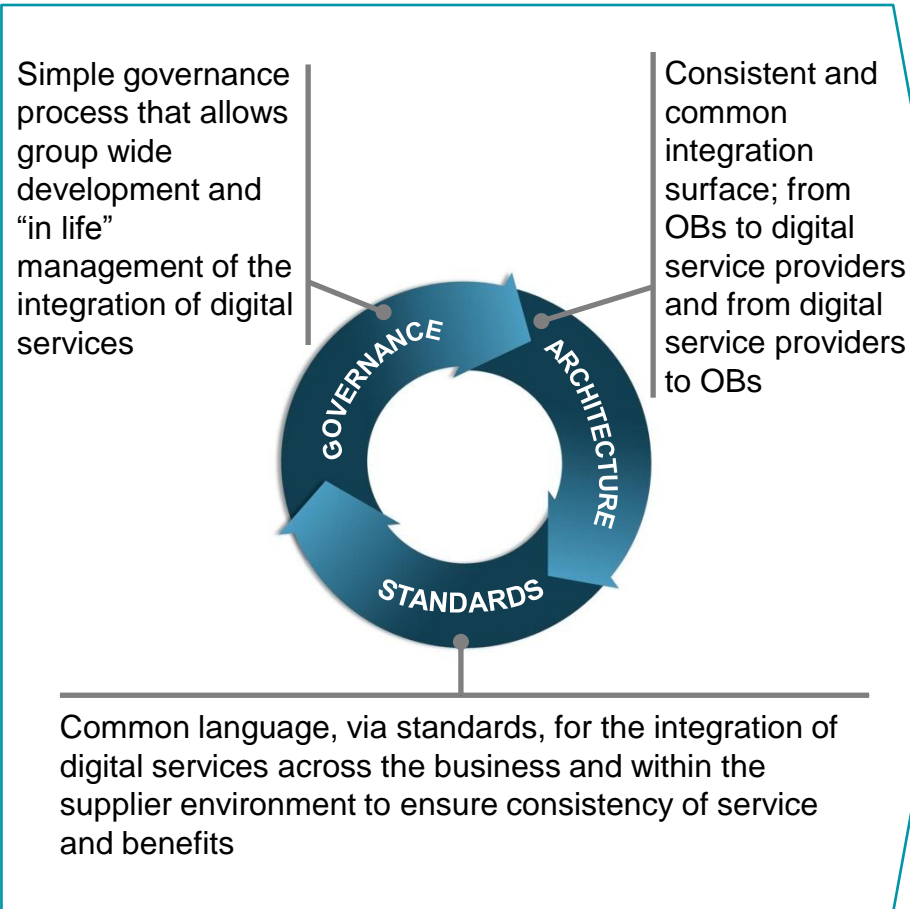
- SLOW in responding to business needs
- High COST of IT solutions
- Complex USE OF DATA and difficulty to obtain CUSTOMER INSIGHTS
- Difficulty in BEING DIGITAL

Mature industry standards allow for a business led transformation that will enable significant business benefits

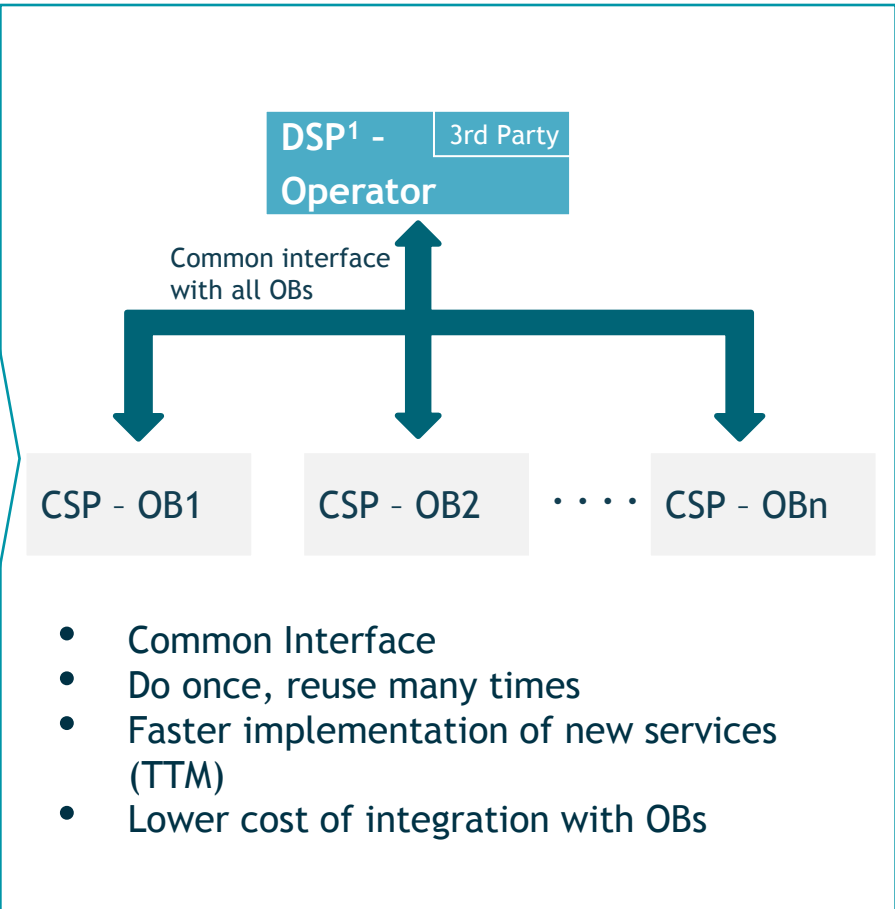


Integration will enable seamless interaction with Digital Services Providers

Standards are a key enabler...



... to the homogeneous integration of services and reusable capabilities in OBs² (via APIs)



1) DSP: Digital Service Provider; 2) OB: Operating Business

Telefónica



inform innovate accelerate optimize

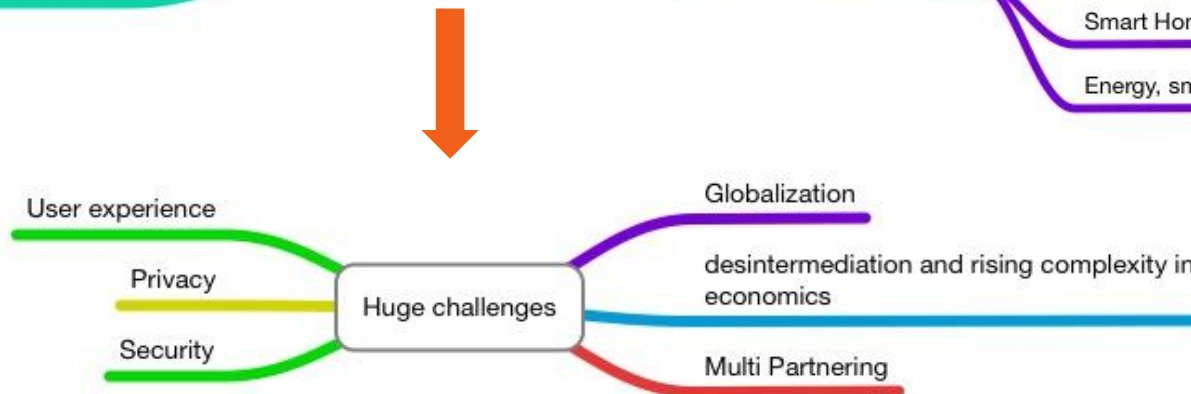
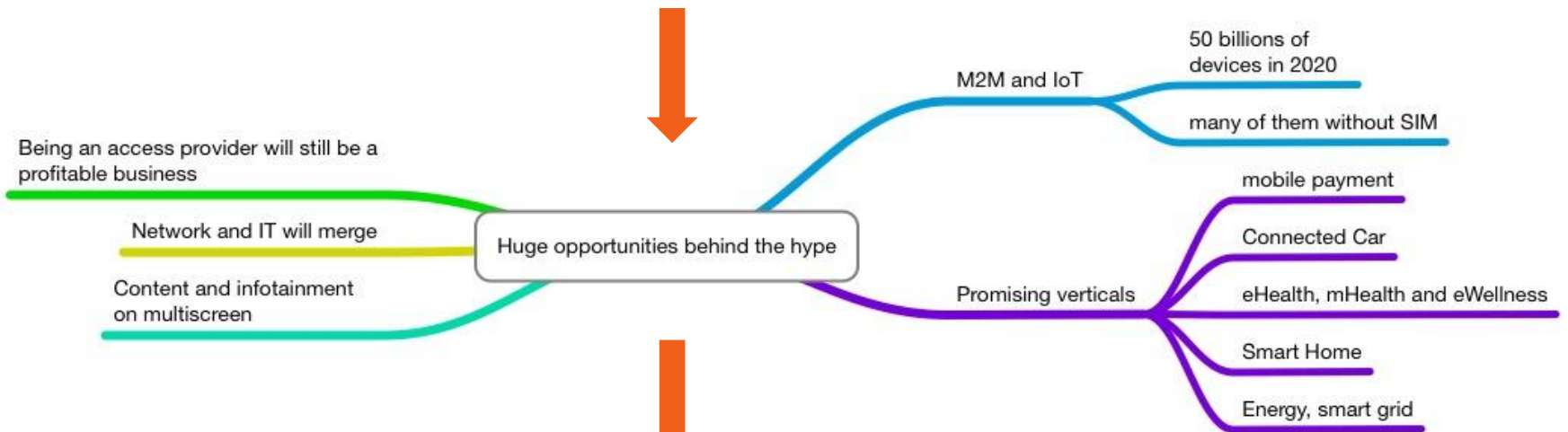
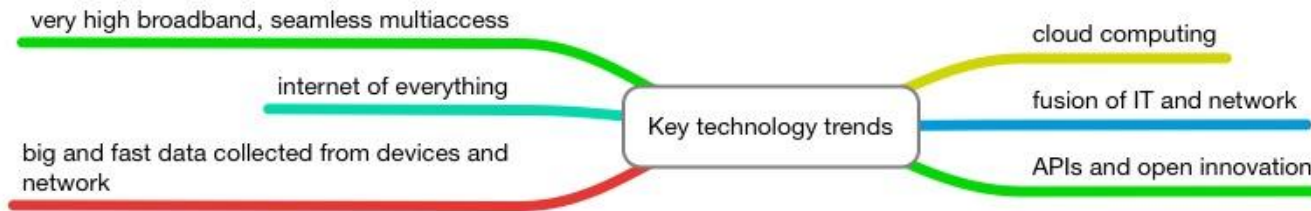
How does the digital wave impact TMForum activities

Laurent Leboucher
TMForum SAS chair
Orange VP APIs and Digital Ecosystems

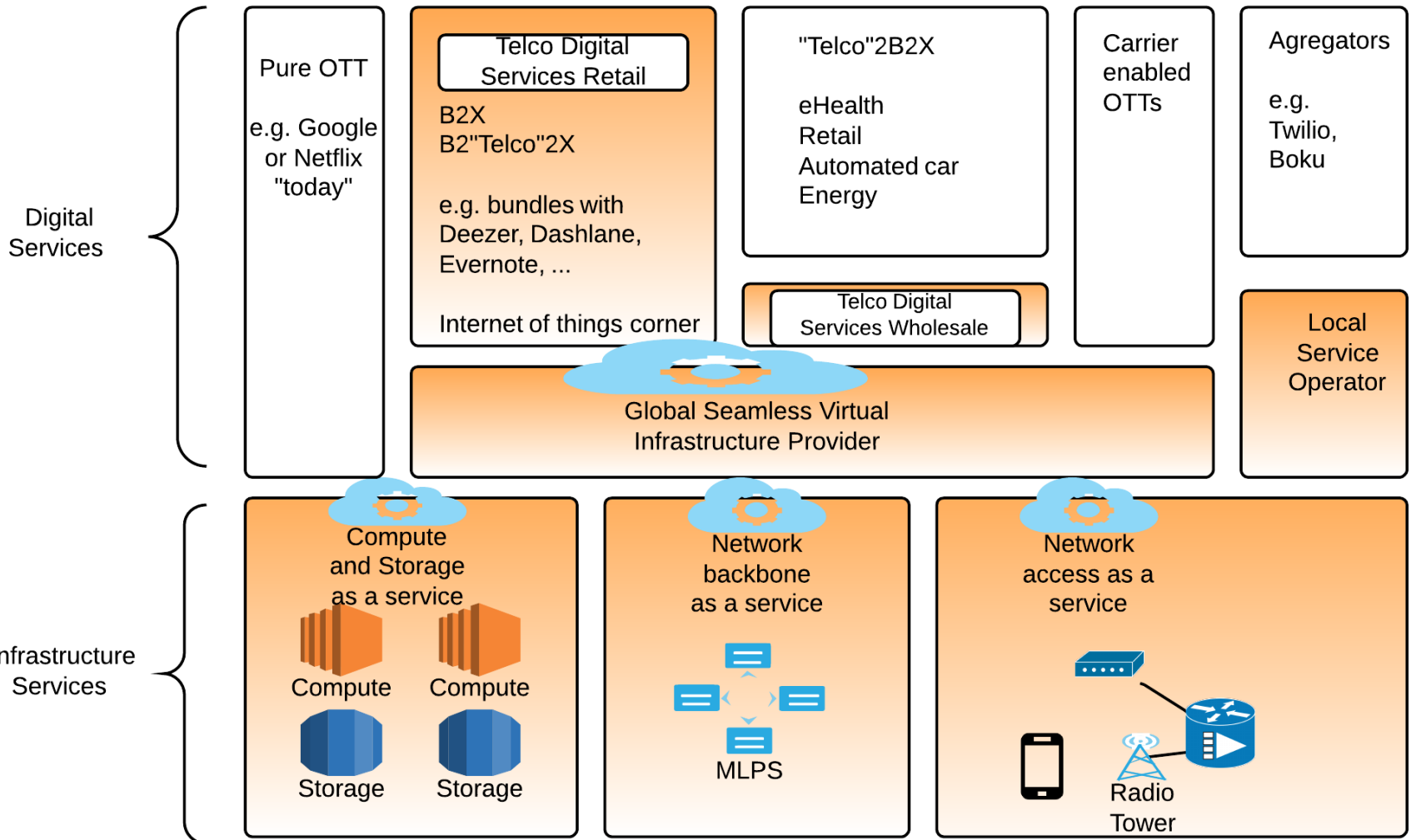
February 10th



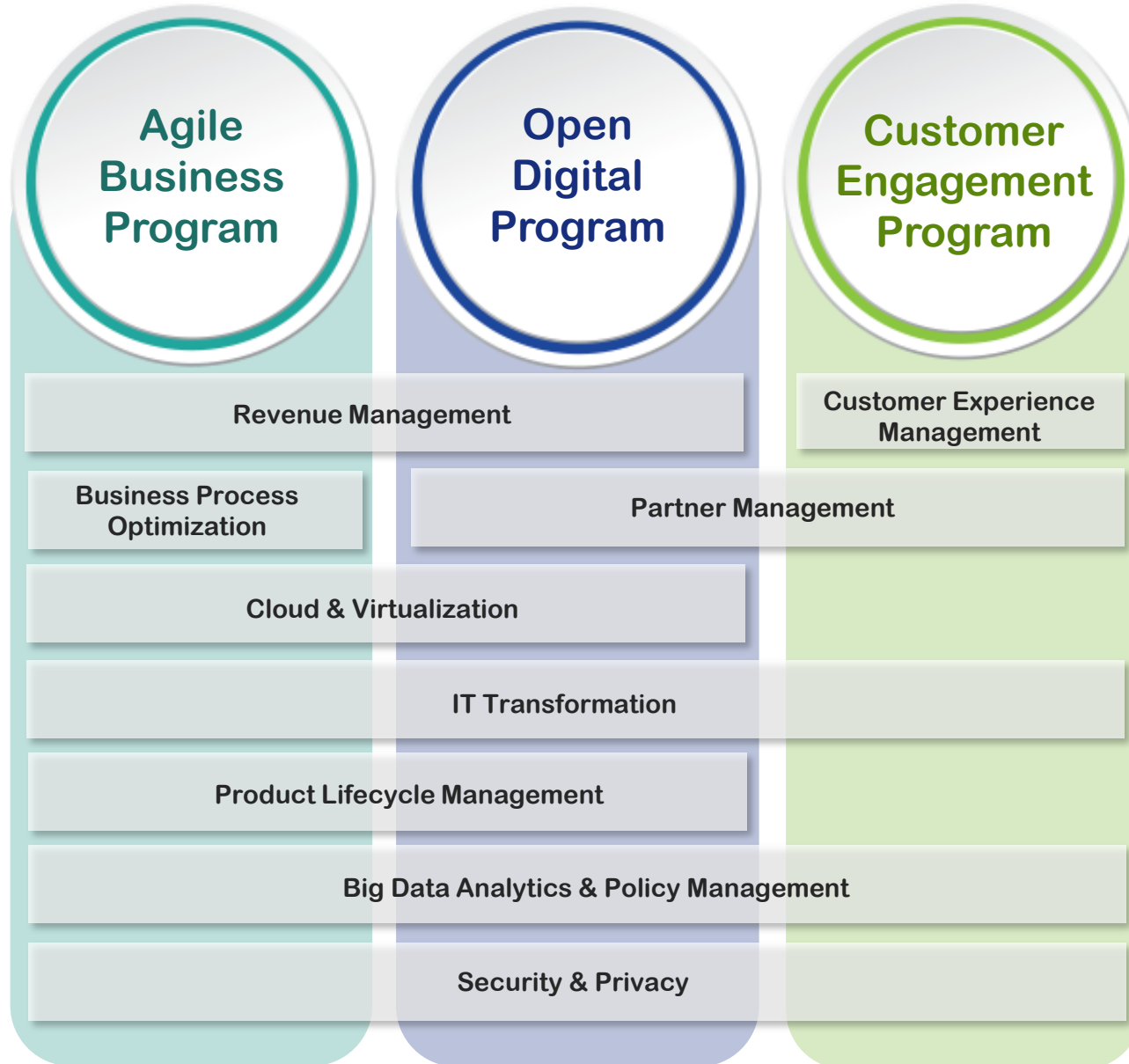
The digital economy brings new opportunities and new challenges ...



... and will lead very fast to new roles and new combinations



The digital transformation is at the core of TMForum programs ...



... but it stresses the importance of the following deliverables for Framework 14 (this is not exhaustive)



- NFV, SDN: impact on processes, impact on “OSS”
- Digital Services Reference Architecture
- Digital management APIs roadmap (trouble ticket, SLA management, ordering, product catalog, product lifecycle, service catalog, billing account, party, ...)
- Big Data Analytics: from uses cases to proof of concepts
- CEM index and maturity model
- Digital security and privacy management
- And of course a solid set of frameworks which addresses all these impacts without overspecifying!





BAE SYSTEMS

booz&co.

apigee

 **Symantec.**

 **Lebara**
money

 **TURKSAT®**

 **Hydro**
Québec

NetworkRail




MTG
MODERN TIMES GROUP





Thank You!





tmforumactionweek

February 10-14, 2014 • Madrid, Spain

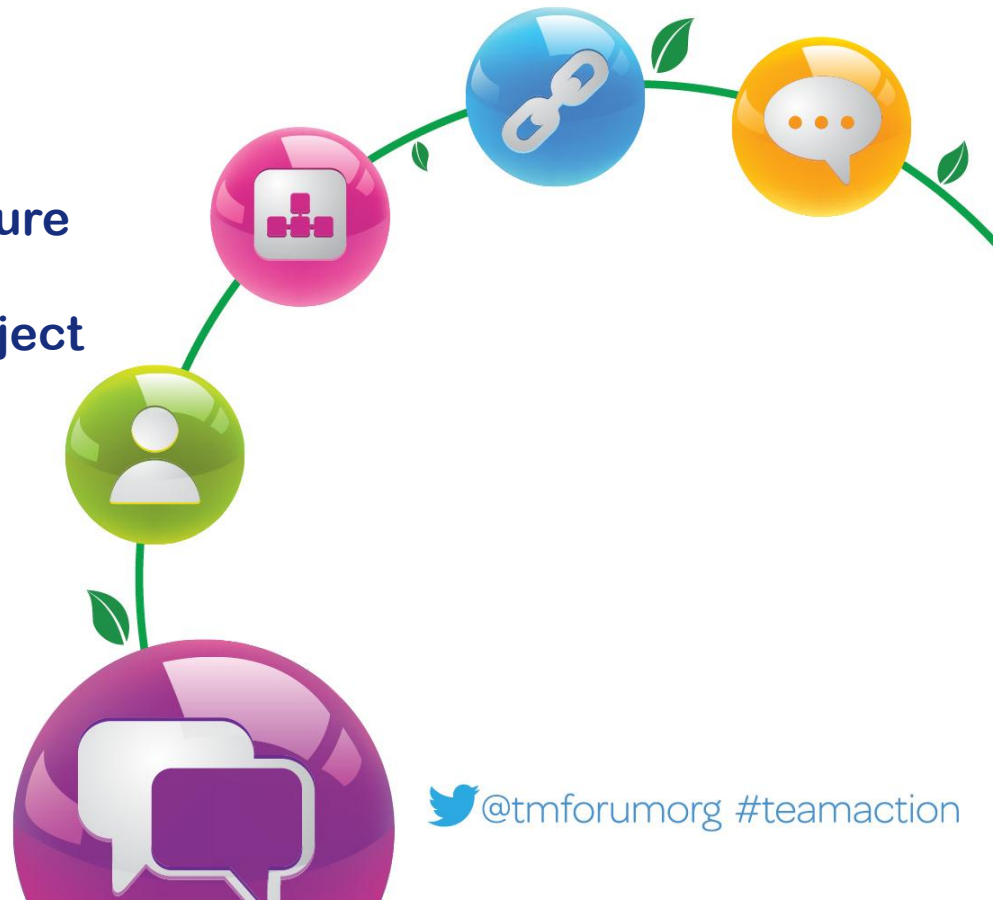
Shape the future of the digital world

DSRA Update

Digital Services Reference Architecture

Part of the Open Digital Initiative Project

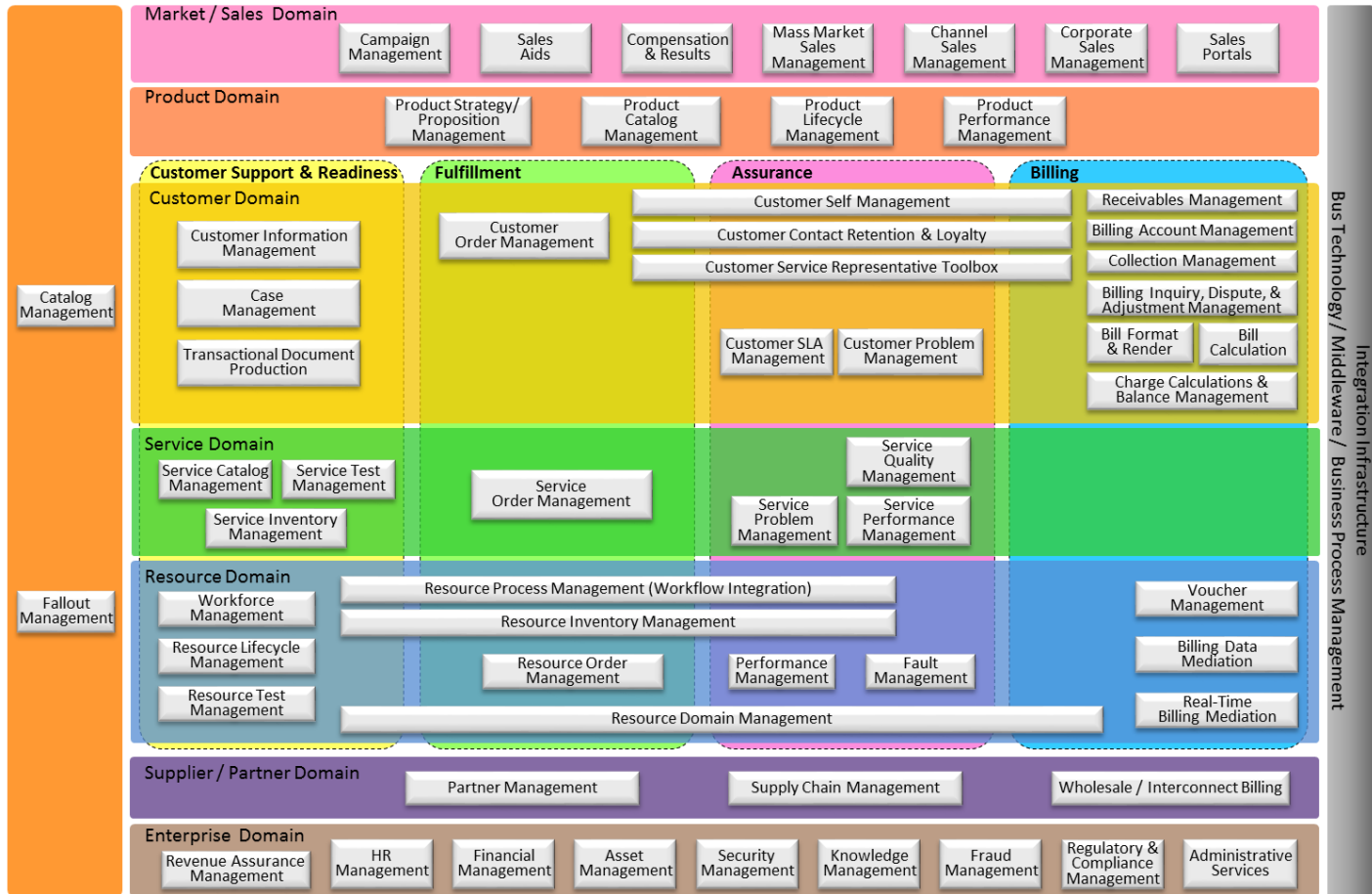
Eric Troup – Microsoft
etroup@microsoft.com



 @tmforumorg #teamaction

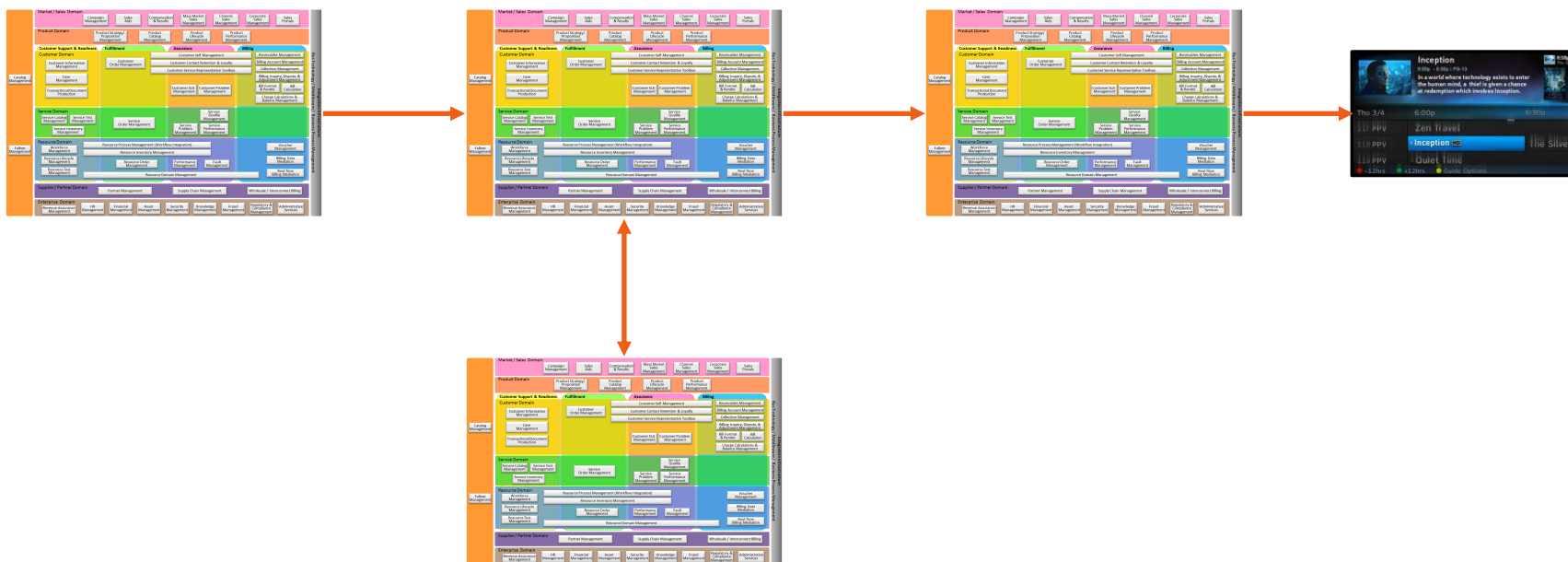


Relationship to Frameworks



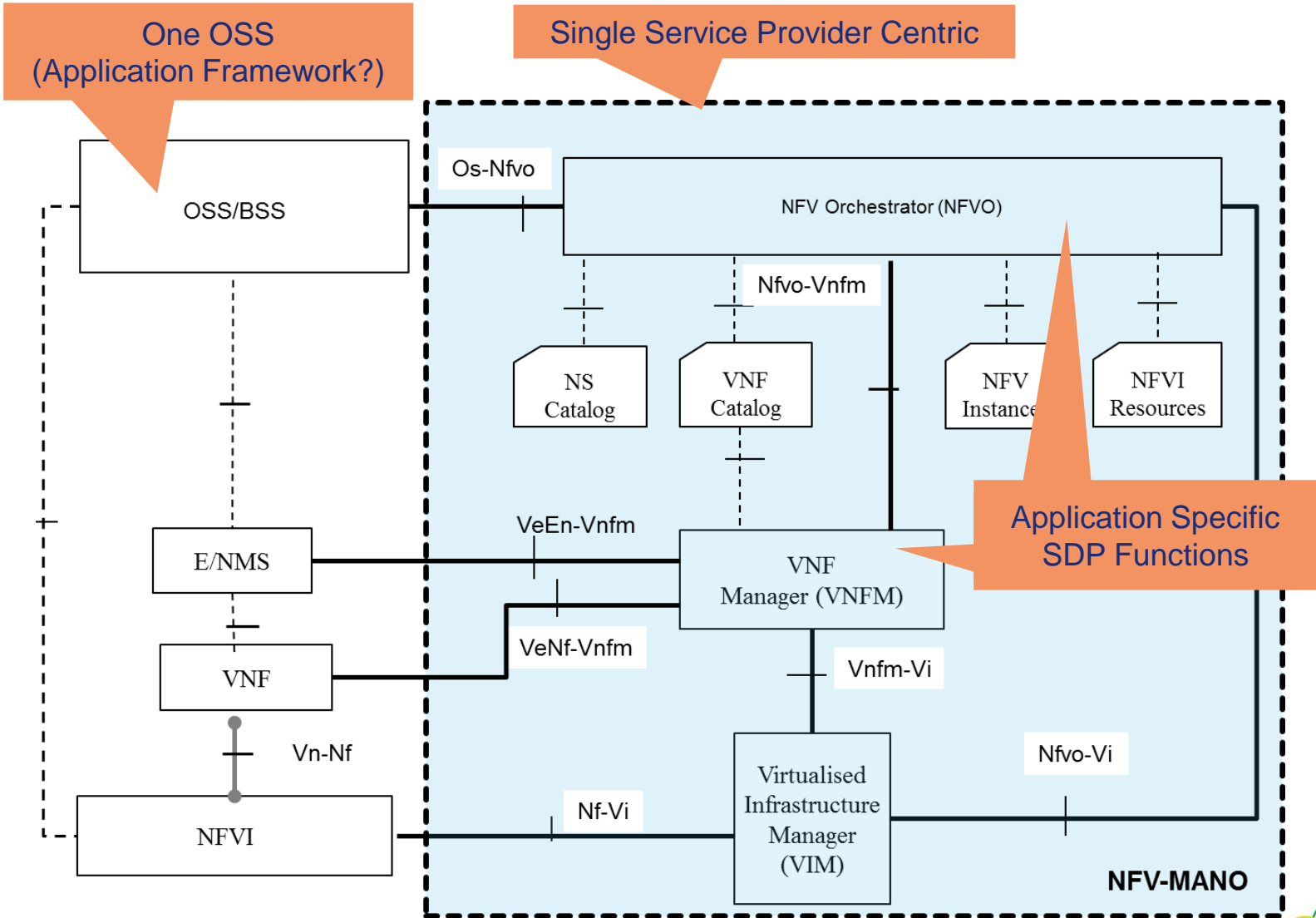


Application Framework (TAM) challenged by Open Digital Services Ecosystem requirements



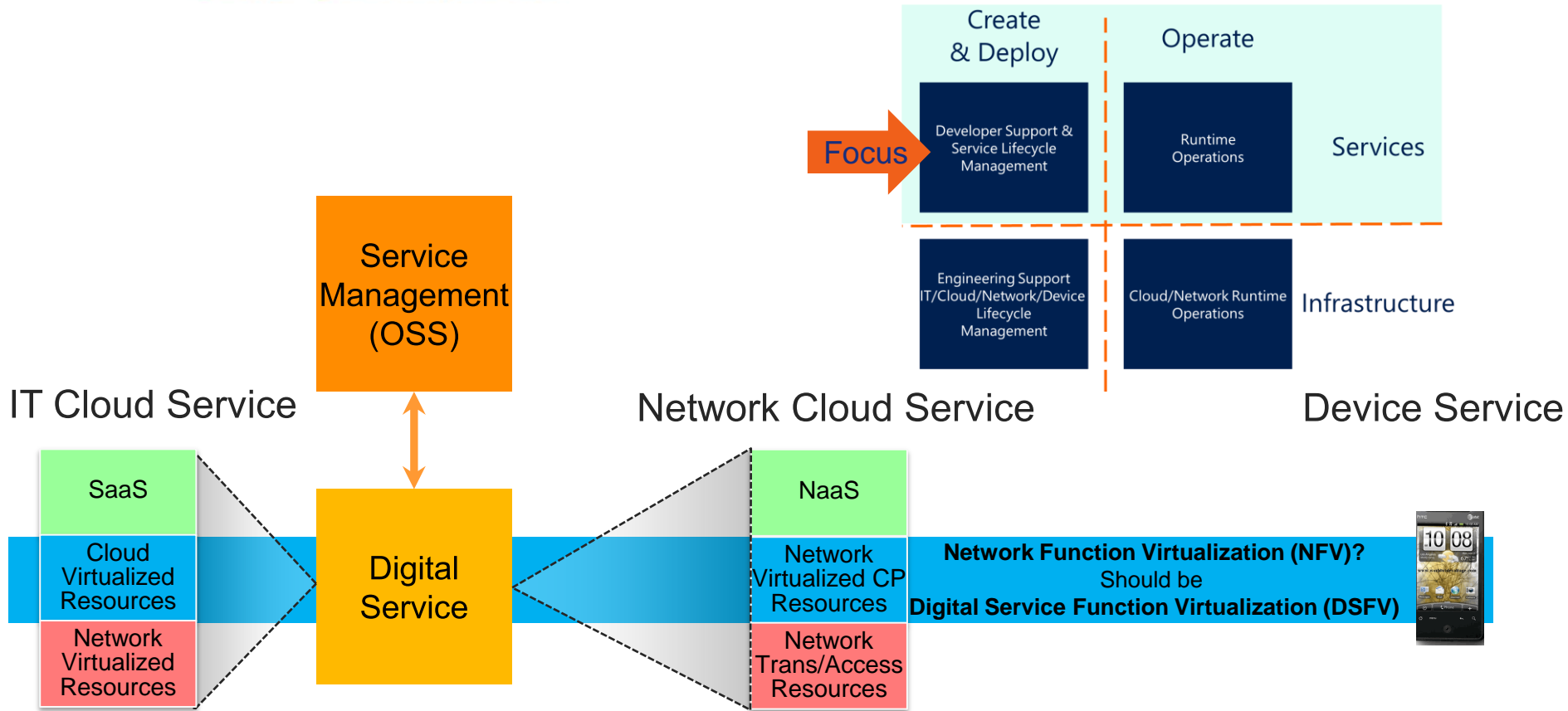


ETSI NFV Example San Jose Workshop





A Common Architecture for Digital Service Management

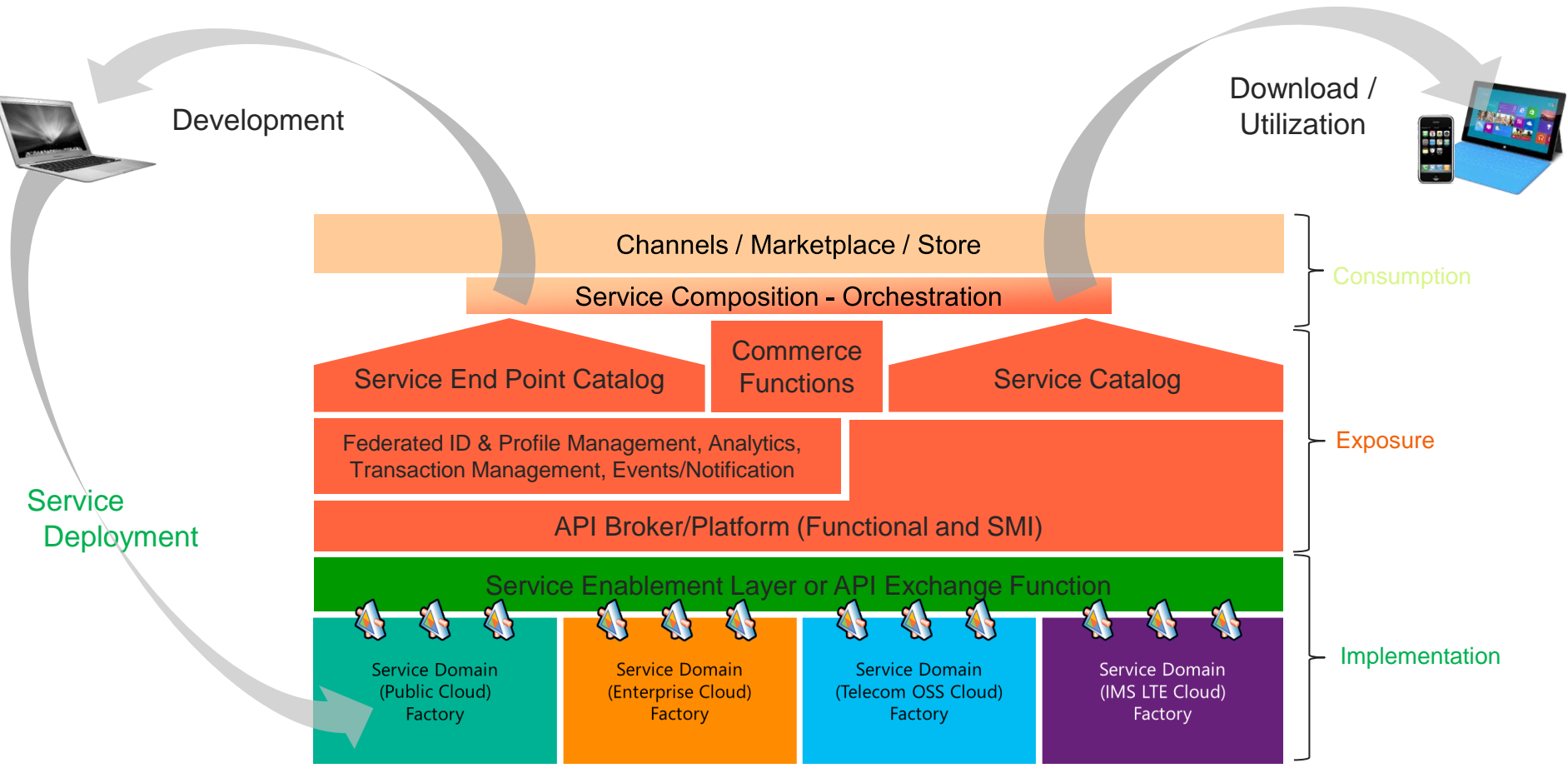


DSRA goal is a common set of reusable service lifecycle management capabilities for use across virtualized data centers, networks and devices. DSRA enables many different industry vertical scenarios such as Connected Car, Home, Media, Healthcare, Government and Energy etc.





Digital Services Reference Architecture



Application Map for the new Open Digital Services Economy





DSRA Key Characteristics

Key Pillars

1. Federated Identity &
2. Profile Management
3. Distributed (Multi-Cloud) Transaction Management.
4. Service Event Notification & Management
 - SMI API
5. Analytics

Key Features

1. Transaction Traceability across Multi-Cloud
2. Eventing
3. Federated Identity / Data Security
4. Runtime Management in Multi-Cloud/Multi-Tenant
5. Service Broker Model
6. Developer Support
7. Service Composition / Runtime Orchestration
8. Change Sets, Data Driven Architecture
9. End-to-End Analytics
10. Commercial Management of Services / Partners
11. High Level CxO DSRA Positioning Message

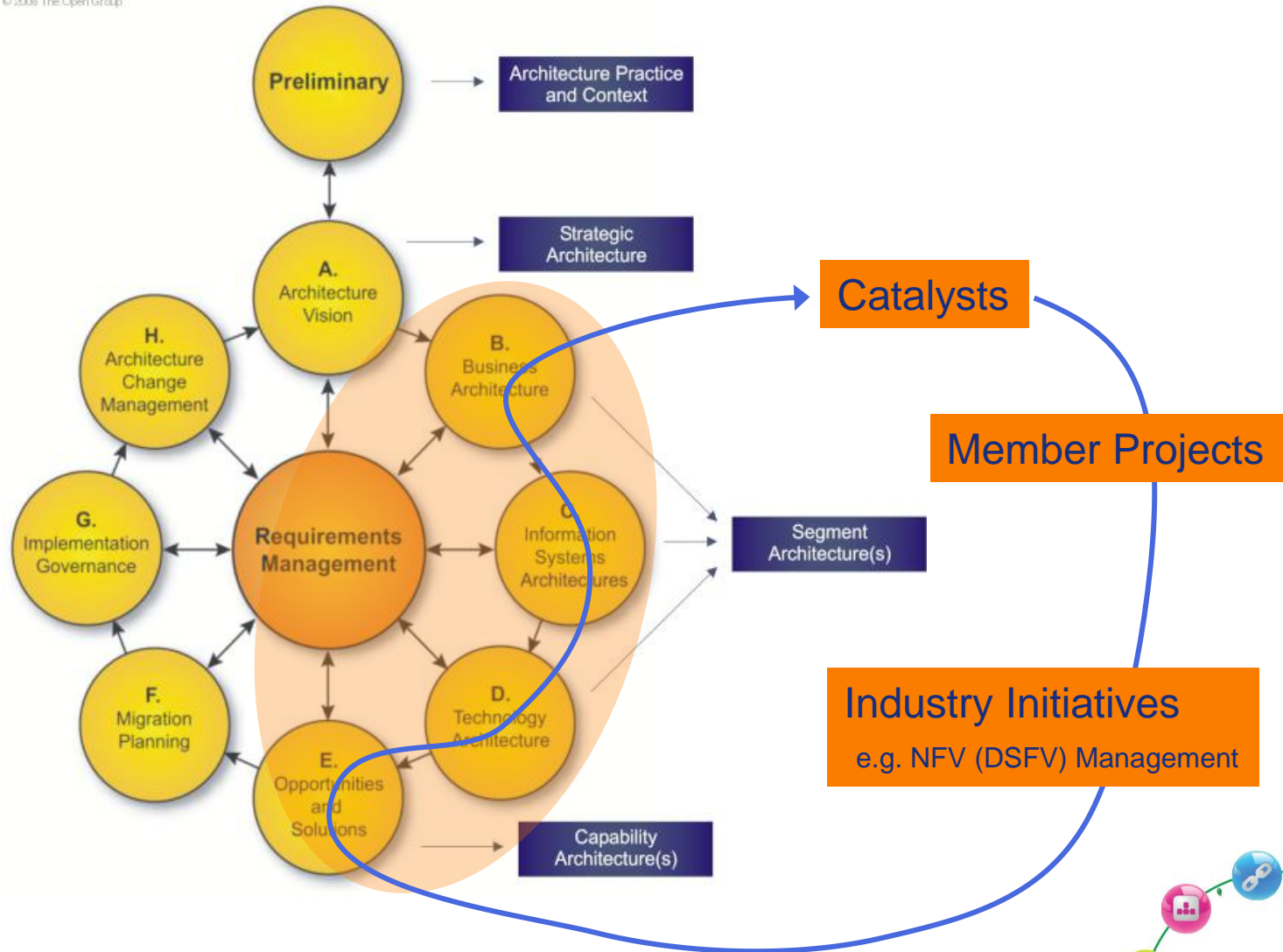
Infrastructure Abstraction / Virtualization





Leveraging TOGAF Architecture Development Model

© 2008 The Open Group





Need your Help to get this Right



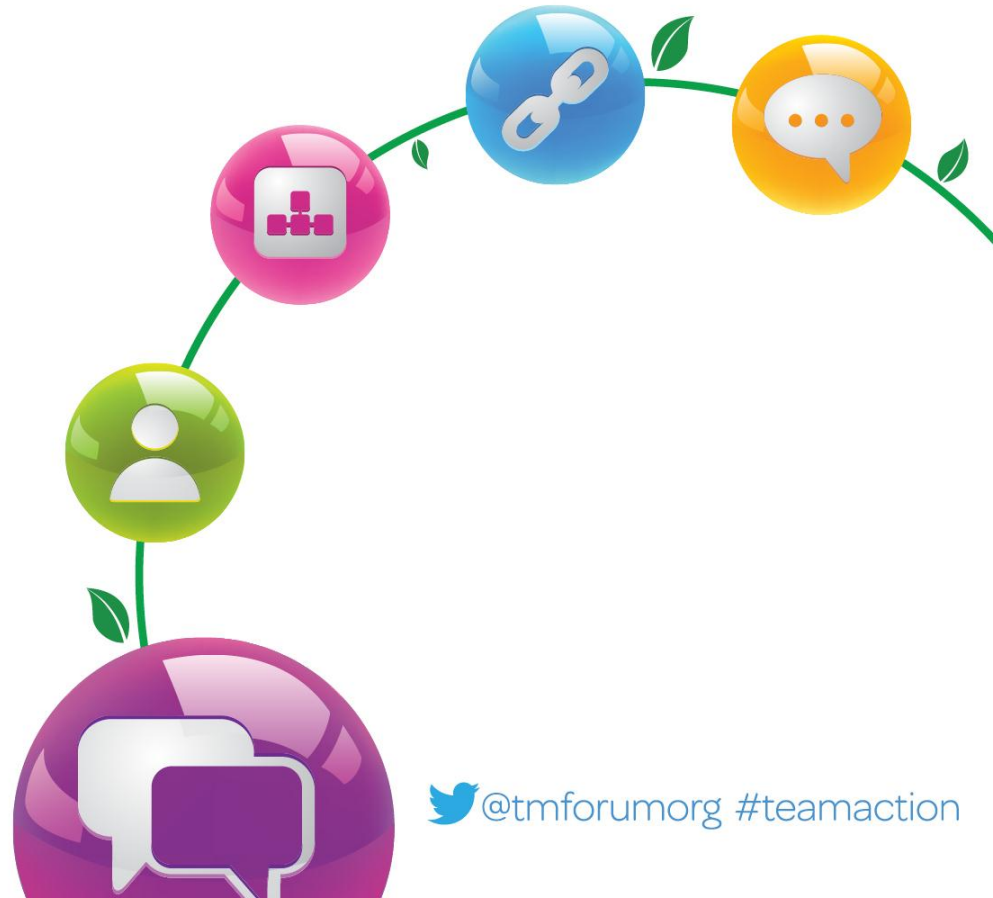


tmforumactionweek

February 10-14, 2014 • Madrid, Spain

Shape the future of the digital world

Logistics



 @tmforumorg #teamaction



- Emergency meeting location
- Meeting rooms
- Break schedule
- Lunch schedule
- Daily Agendas
- General Sessions
- Help and information
- IPR statements for meetings

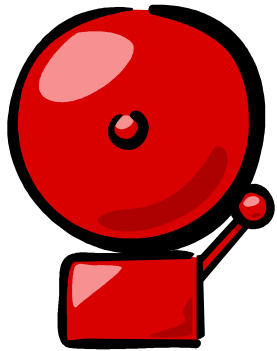




Event Wi-Fi

- Network – Swisscom
- User – EVENT/TMFORUM
- Password – TMFO3UM



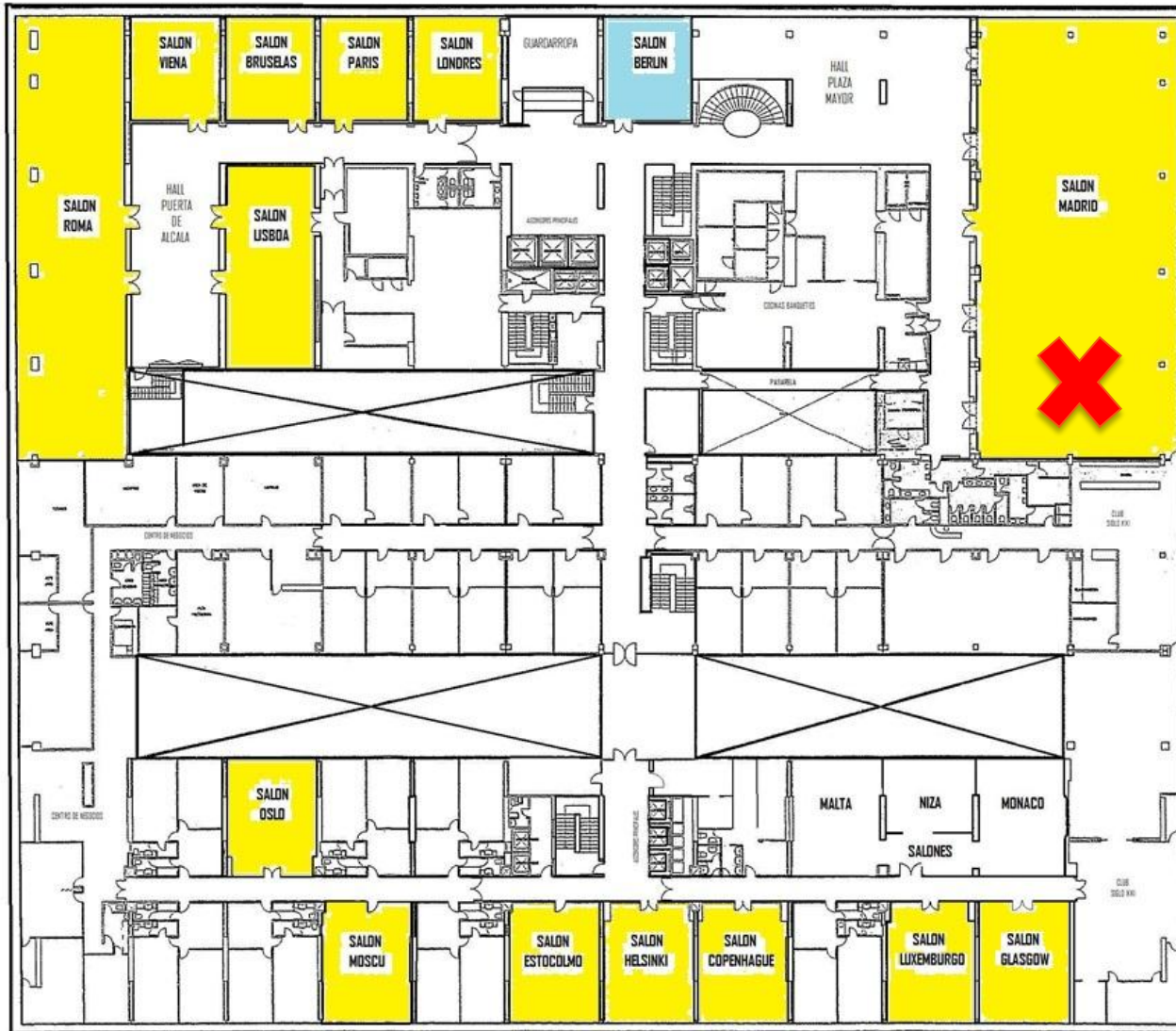


Meeting Location – The Blue Building
directly across the street from the main
hotel entrance.
c/ Padre Damian, 21





Logistics Meeting Rooms





Morning Coffee Break
10:30am – 11:00am

Lunch 12:30pm - 1:30pm

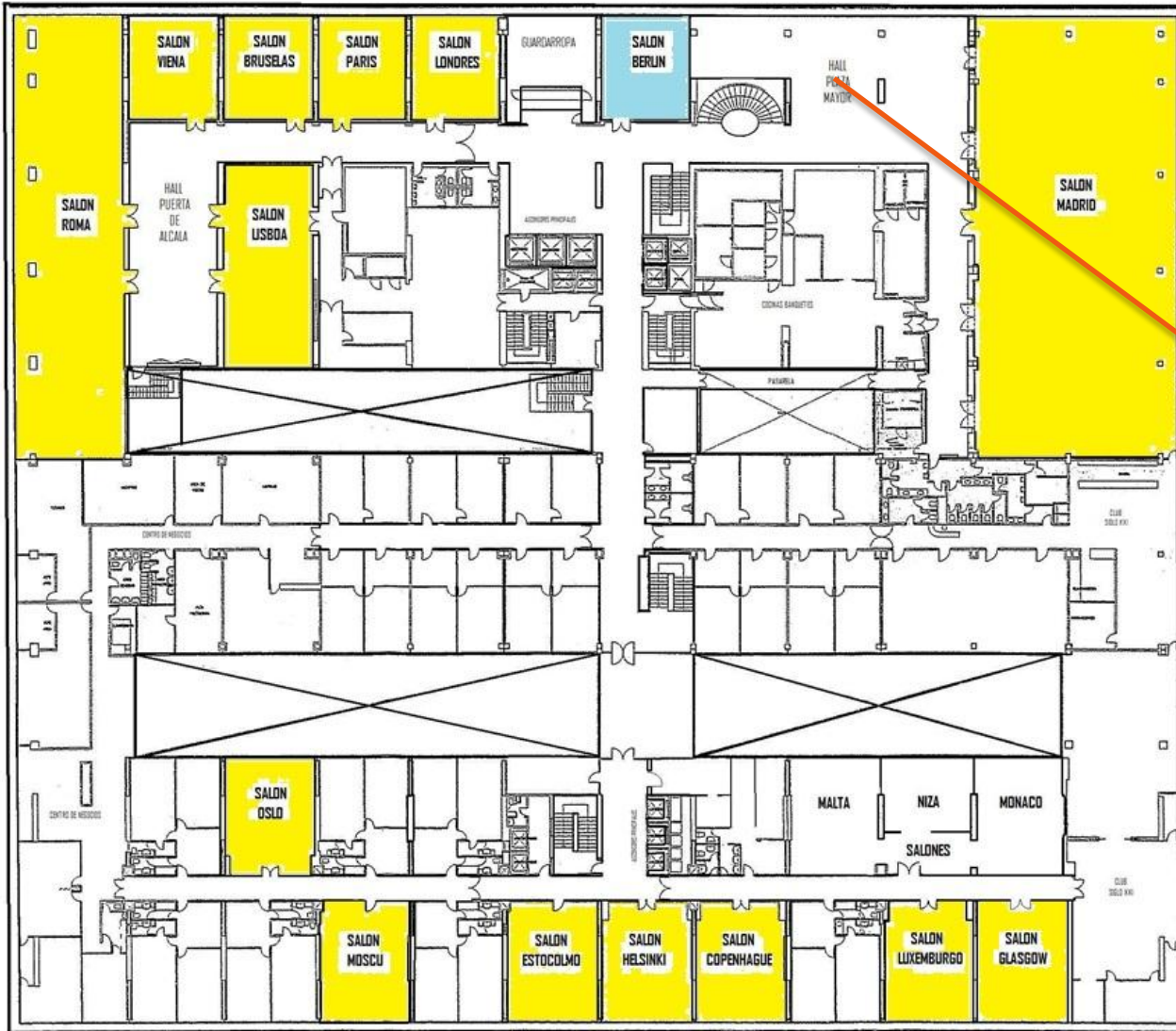
Afternoon Coffee Break
3:00pm – 3:30pm

Activities with prizes at many of the break sessions





Logistics Break Locations



Coffee Friday

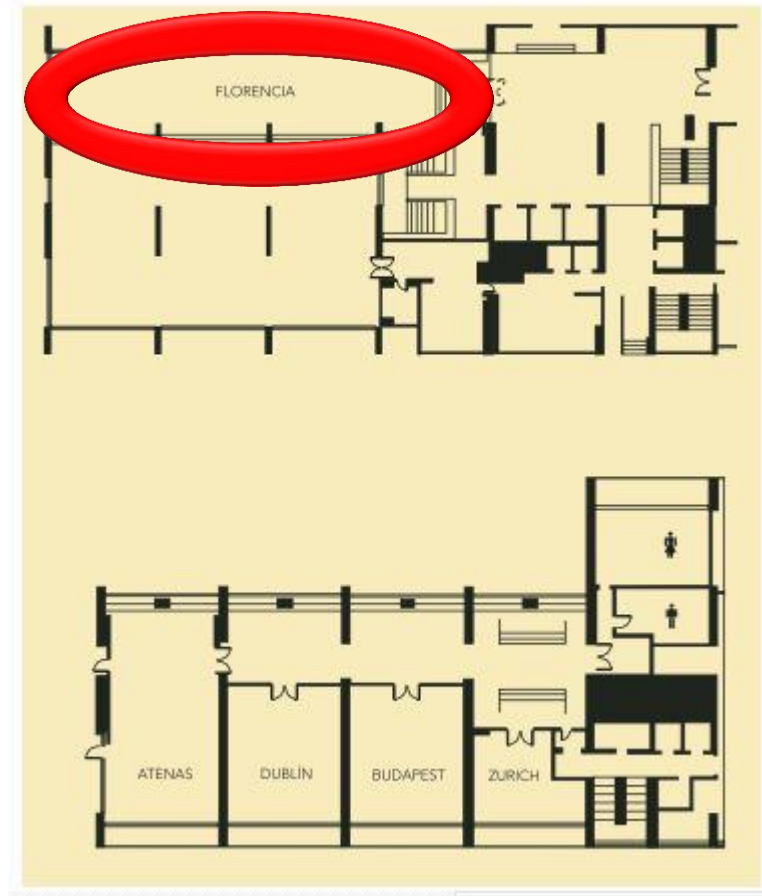
Coffee Monday - Thursday

Praga





- Monday – Thursday in the upstairs restaurant, Florencia
- Friday in Praga





Monday: February 10, 2014

Time	Room	Meeting
9:00am – 10:30am	Madrid 2	Welcome - Action Week Opening General Session : Open
11:00am		
11:00am		

Registration Area



- Liaison Program on Tuesday
- Internet of Things Panel Discussion on Wednesday evening
- Wrap up session on Thursday (reception following)
- Future Collaborative Environment and Tools





Logistics Help and Information

- Blue shirts
- Orange ties
- Orange accessories
- TM Forum name badges





- Project Meetings
- Cross-Project Meetings
- Informational Meetings



Project Meetings (Open to Project Participants Only)

- This meeting is being conducted under the terms of IPR Mode “xxxx” as defined in the By-laws Annex 1: Policy on Intellectual Property Rights. All IPR should be declared.



Cross-Project Meetings **(Open to Eligible Persons Only, those who are members of at least one project that is meeting)**

- This meeting is being conducted under the terms of IPR Mode RAND as defined in the By-laws Annex 1: Policy on Intellectual Property Rights. All IPR should be declared.





Informational Meetings (Open Meetings, anyone can attend)

- This is an open information meeting in which no information or materials furnished or provided by the attendee shall constitute or contain intellectual property and will not be treated or protected as such. All attendees understand and accept this statement.





Thank You!

