



History and overview of the sector

Evolution of business models

Media Seminar on the Telecoms Sector

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From Telephones to Tablets

Evolution of the Telecommunications Sector

Fixed



Before the 90's

- Monopol
- Voice & Fax
- Switchboard
- Business model: One-sided
- Value chain complexity: Low

Mobile & Internet



90's

- Competition in mobile
- Mobility & Messaging
- Internet & Email
- Business model: One-sided
- Value chain complexity: Low to medium

Cloud & Social



Late 00's

- New eco-systems
- Steve Jobs (10 → 400)
- Other disruptors: Google, Twitter, FB, Mxit, ...
- Data & Apps
- Business model: „Two- sided”
- Value chain complexity: High

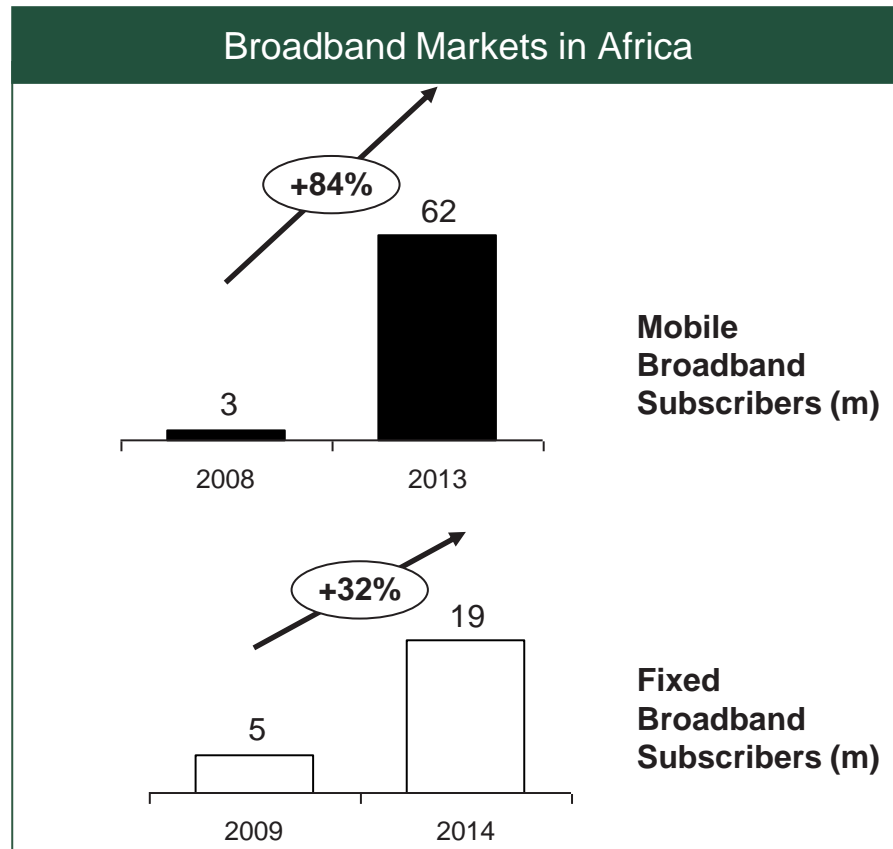
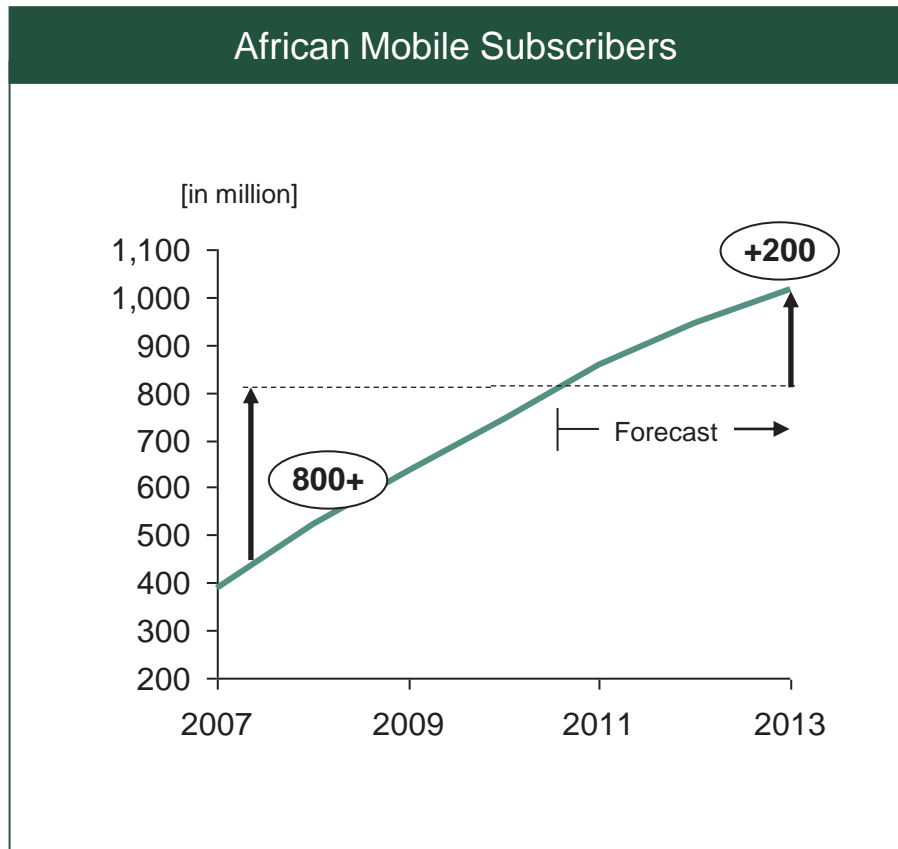


African Telecommunications Landscape

African Telecommunications Landscape

Market Development

Telecommunications in Africa is all about growth. The next 200 million mobile subscribers are to come. However, growth will come increasingly from low/ultra-low income segments.

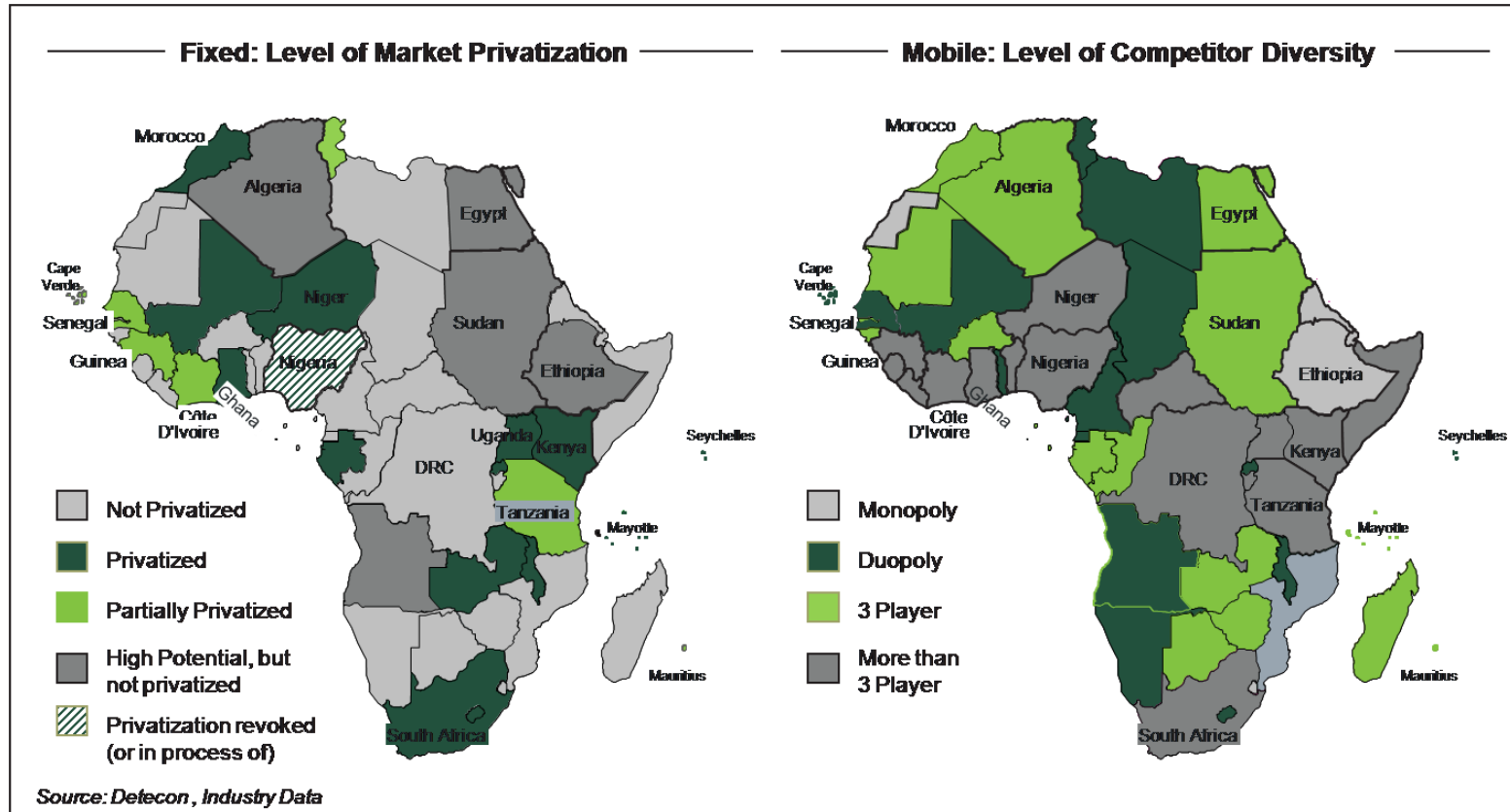


Source: Industry Data, Informa 2009

African Telecommunications Landscape

Privatization Level and Competitor Diversity

In Africa < 10 fixed markets are fully privatized. Nevertheless, in most mobile markets multiple competitors are operating.



African Telecommunications Landscape

Infrastructure sharing deals

Infrastructure sharing is becoming more common in Africa's mature and/or competitive markets. Tower, optical-fibre and data centre-sharing between different players is driven by economics.



Towers

- Co-location
- Managed Service
- Sale and lease back
- Main tower companies in Africa: Helios, American Towers, Eaton
- Total towers sold by cellco's (MTN, Vodafone, CellC, Millicom) in Africa by end 2011: 9.877 (total deal size \$1.3bn)
- Total towers in Africa: about 120k



Data Centres

- Carrier-neutral data centres/ CoLo has been successful in the past in northern hemisphere
- Increasing broadband/ internet penetration & demand for rich media content has resulted in data centre space demand outstripping supply.
- African pioneers: Teraco
- Today: a lot of activity across the continent, multiple players inv'ld.



Fibre

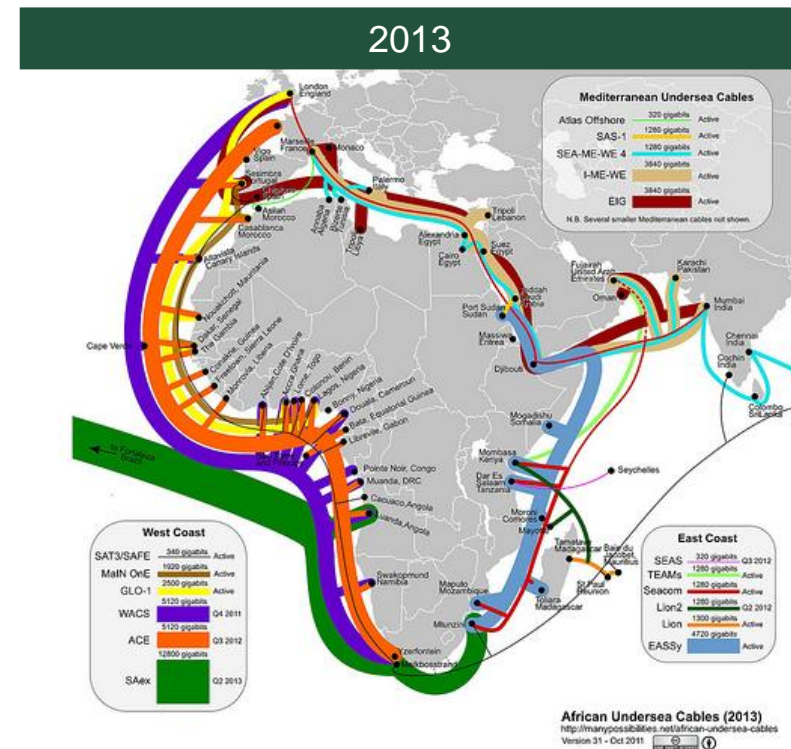
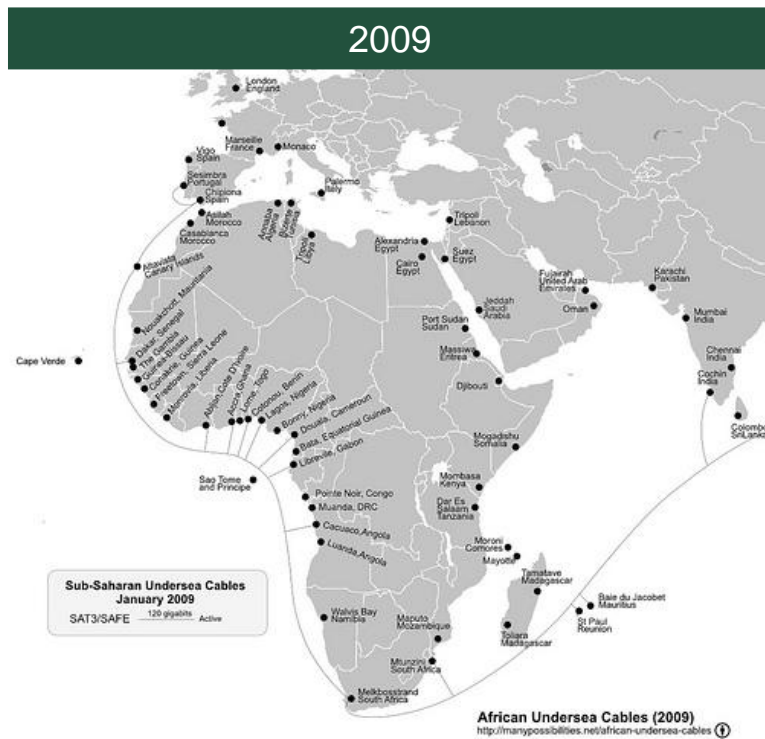
- Submarine cables
- Terrestrial fibre
 - Long Distance
 - Metro
 - Dark
 - Last Mile / Fttx

Source: Industry Data

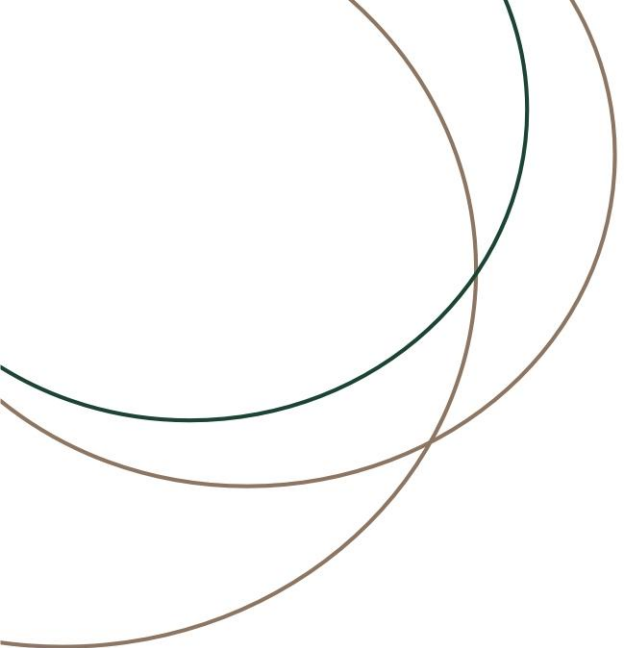
African Telecommunications Landscape

African submarine cable development

The highest-impact development in African telecoms infrastructure in the last few years has been the roll-out of submarine cables, driving down wholesale international connectivity prices by over 80%. For the first time Sub-Saharan Africa now has an abundance of international bandwidth, going from 120 (2009) to 5.460 (2010) and to 37.980 gigabits (2013).



Source: Steve Song, manypossibilities.net

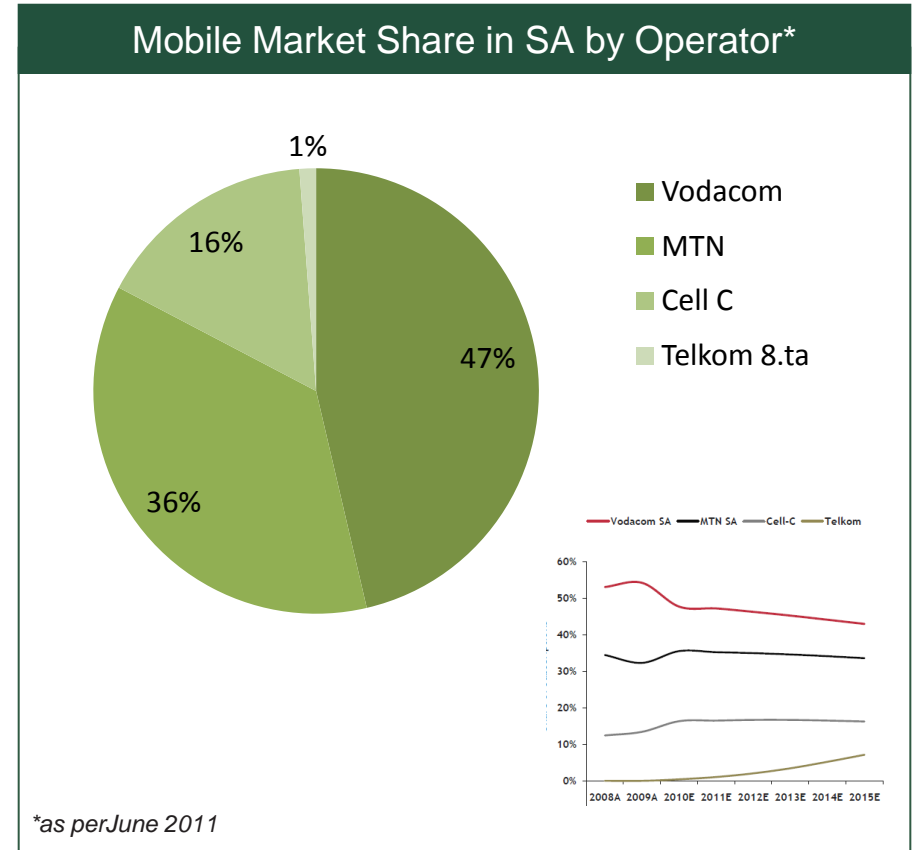


South African Telecommunications Landscape

South African Telecommunications Landscape

Market Development

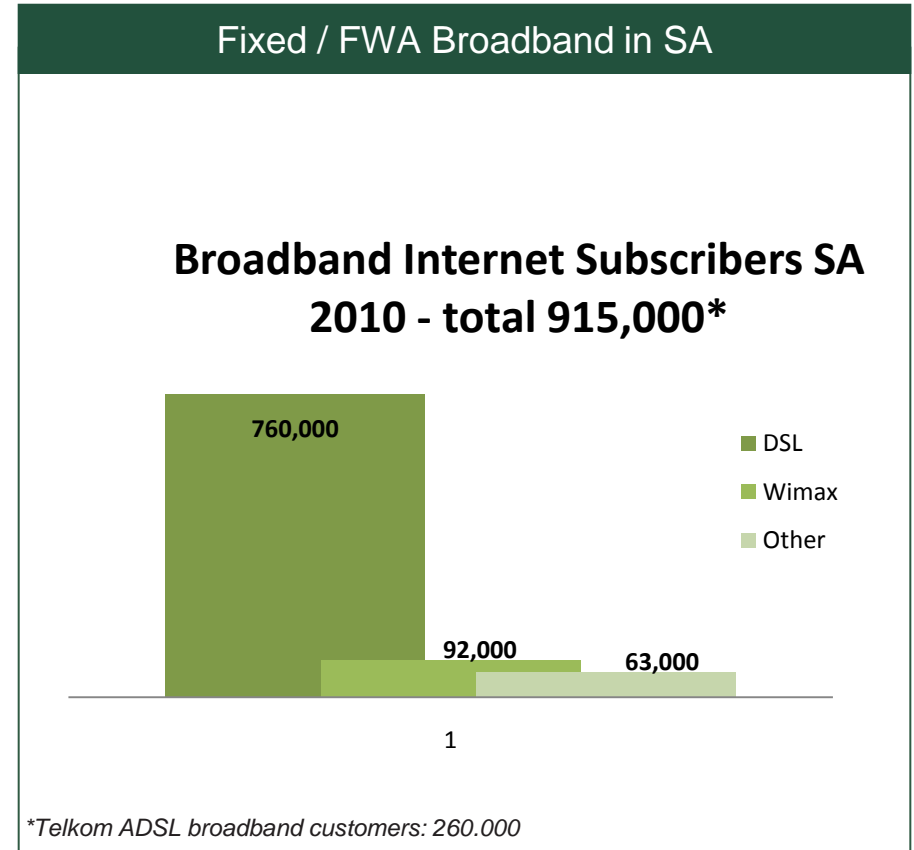
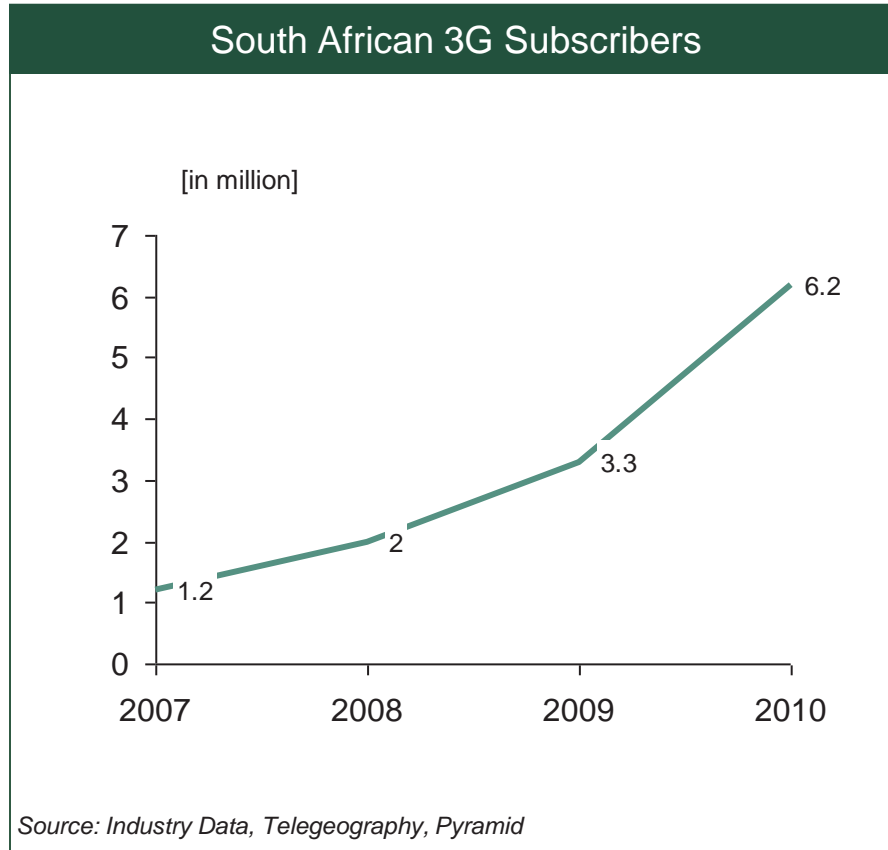
The South African mobile sector has reached saturation, with > 100% penetration. Unique user penetration is approx. 70%. With about 15% postpaid, SA compares favourably in Africa.



South African Telecommunications Landscape

Market Development

Mobile broadband via 3G exploded in SA in the last few years, with reportedly over 10m users in 2011. Fixed broadband is still low at < 2%. It is estimated to increase to 3.6% by 2015.

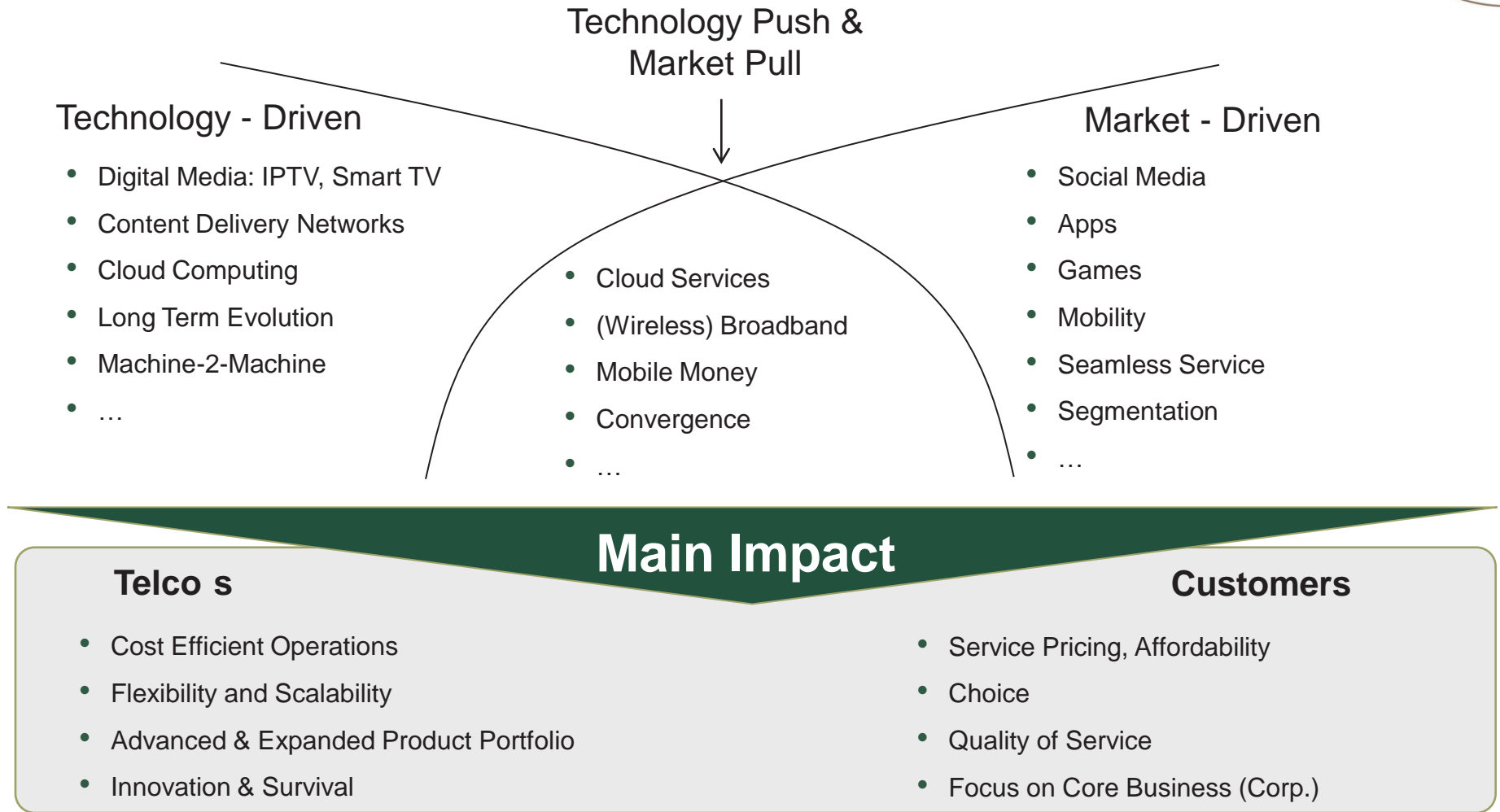
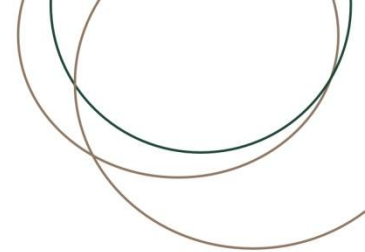




Major Trends in Telecommunications

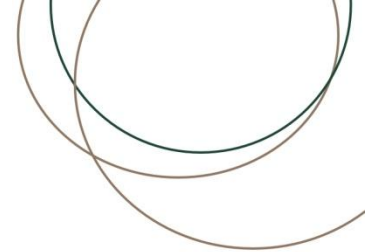
Major Trends in Telecommunications

Technology push and market pull are increasingly difficult to distinguish

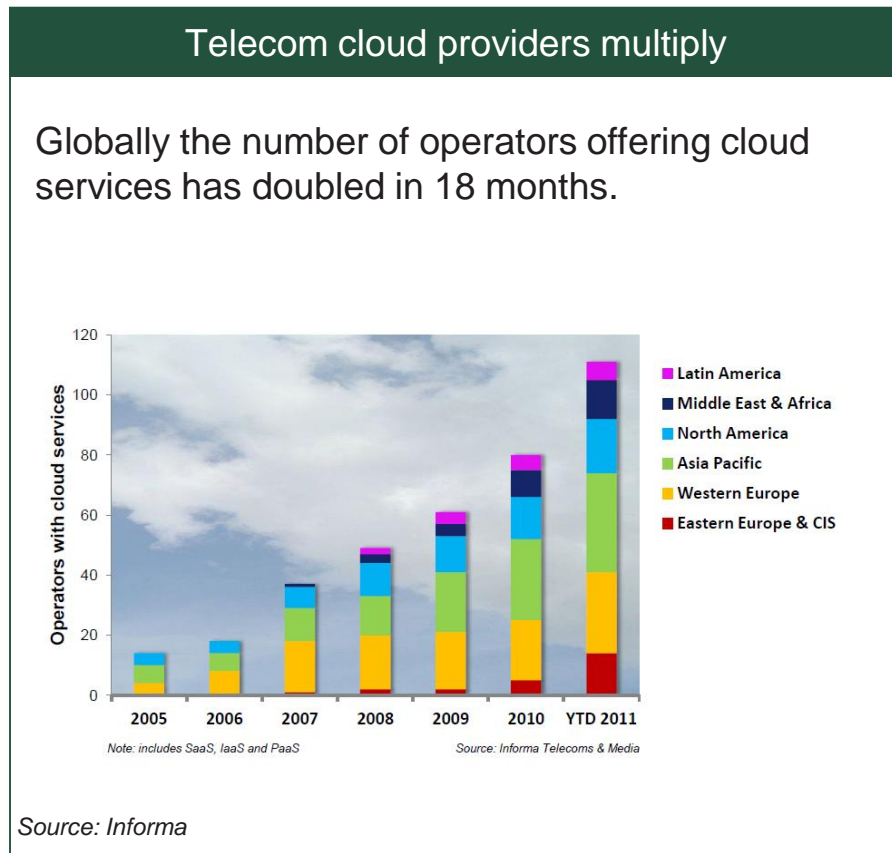


Major Trends in Telecommunications

Telecom Operators and the Cloud



Operators chasing tomorrow's blue skies and position themselves for stakes in future cloud revenue. All major SA operators launched cloud offerings.



Remarks

Telcos have committed US\$11 billion to cloud pursuits in 2011

- Eight out of 10 transactions involve data centre assets

Service differentiation remains poor

- 122 new services, 70% mass-market offers, heavy SaaS usage

Telco strengths are underplayed

- Security and cloud mobility aren't pushed hard enough

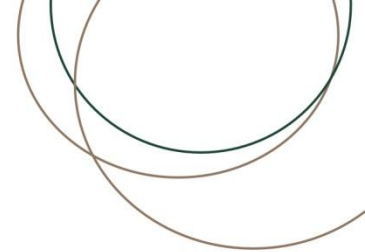
ROI will come, but it's a long game

- Cloud services contribute a single-digit percentage of telco revenues today

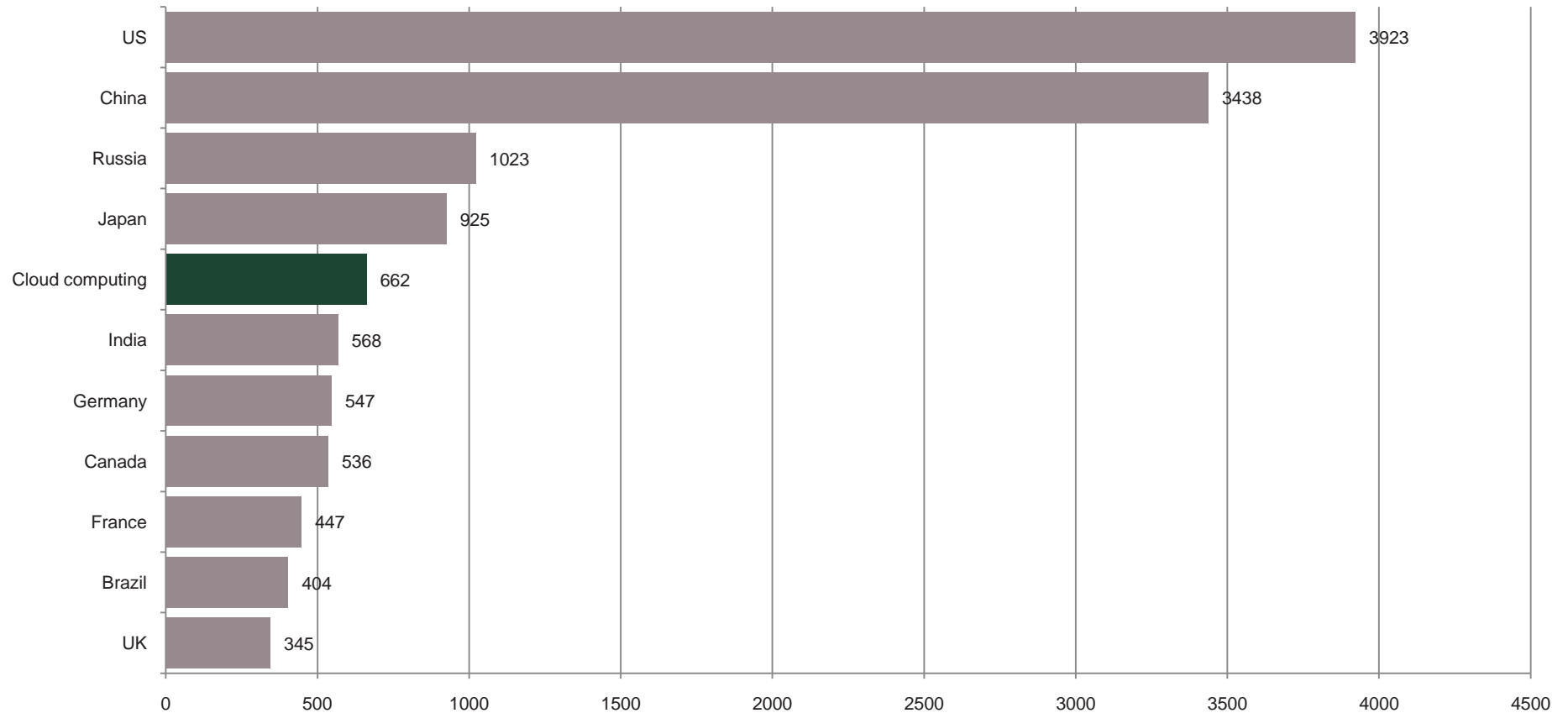
Better margins in CoLo (50-70%), Managed hosting requires more Investment in terms of hardware, skills, etc.

Major Trends in Telecommunications

Internet a major polluter



2007 electricity consumption, Billion kWh



Source: <http://www.greenpeace.org/international/Global/international/publications/climate/2011/Cool%20IT/dirty-data-report-greenpeace.pdf>

Major Trends in Telecommunications

Leading operators are committed to CO₂ reduction

Examples



- MTN Group is signatory to the Copenhagen Communiqué on Climate Change.
- Tri-generation plant opened



- Telefónica commits to reducing 30% its energy consumption in network by 2015
- O2 Eco rating for handsets



- Vodafone to cut own emissions by 50% by 2020 (from the 2006/07 baseline).



- Reduce CO₂ emissions for Deutsche Telekom Group by 20% below 2006 levels by 2020



- Reduce CO₂ emissions for FT Group by 20% below 2006 levels by 2020



- Reduce UK CO₂ emissions in absolute terms by 80% below 1996 levels, by December 2016

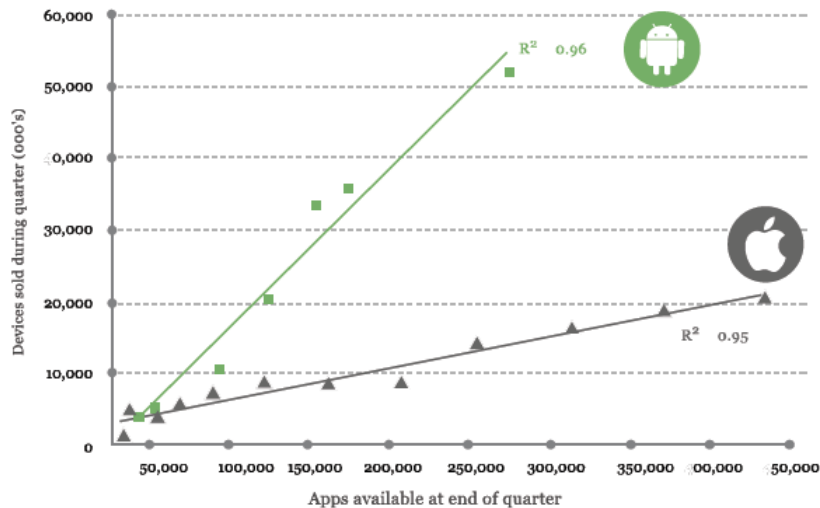
Major Trends in Telecommunications

Mobile Platforms

iOS and Android are winning not only by virtue of technological sophistication, but primarily by the strength of their application ecosystems. Nokia, MS and RIM seem to be nowhere.

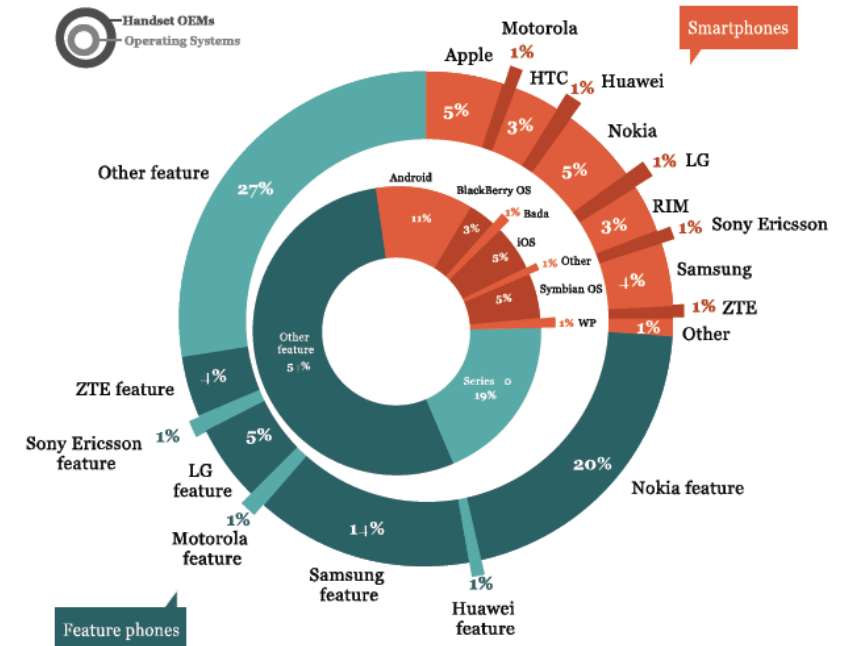
Android, iOS show strong network effects

Devices sold vs. apps available in native app store



Global smartphone penetration at 27%

Mobile handset manufacturer vs Platform market share (H1 '11)



Source: Visionmobile "The clash of Ecosystems", Nov 2011

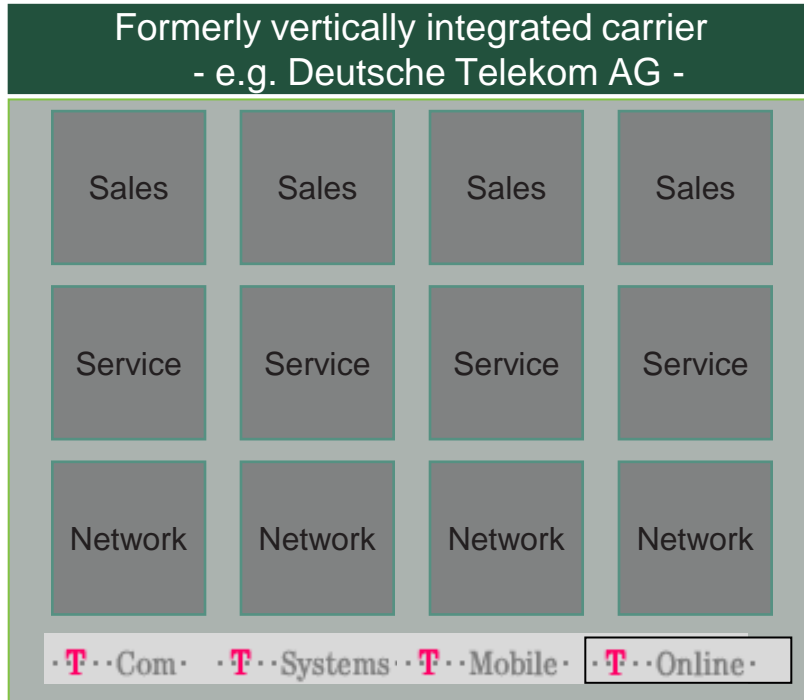


Business Model Evolution

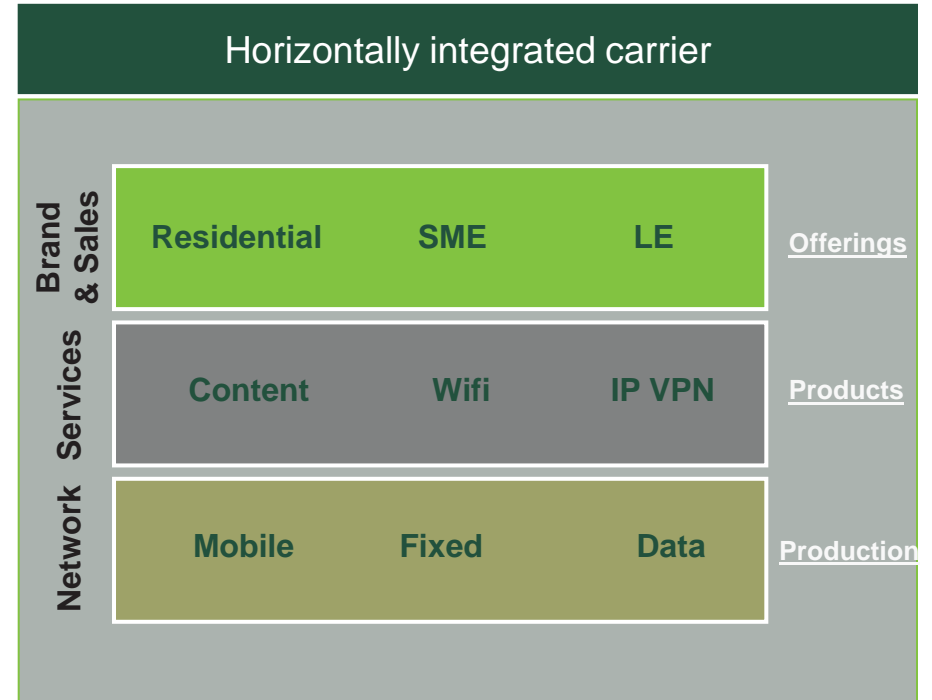
Business Model Evolution

Yesterday: From vertically to horizontally integrated carrier models

Until recently business model changes in the provider segment have mainly been motivated by the requirement to overcome the strategic dilemma of cost-leadership and differentiation.



Source: Detecon

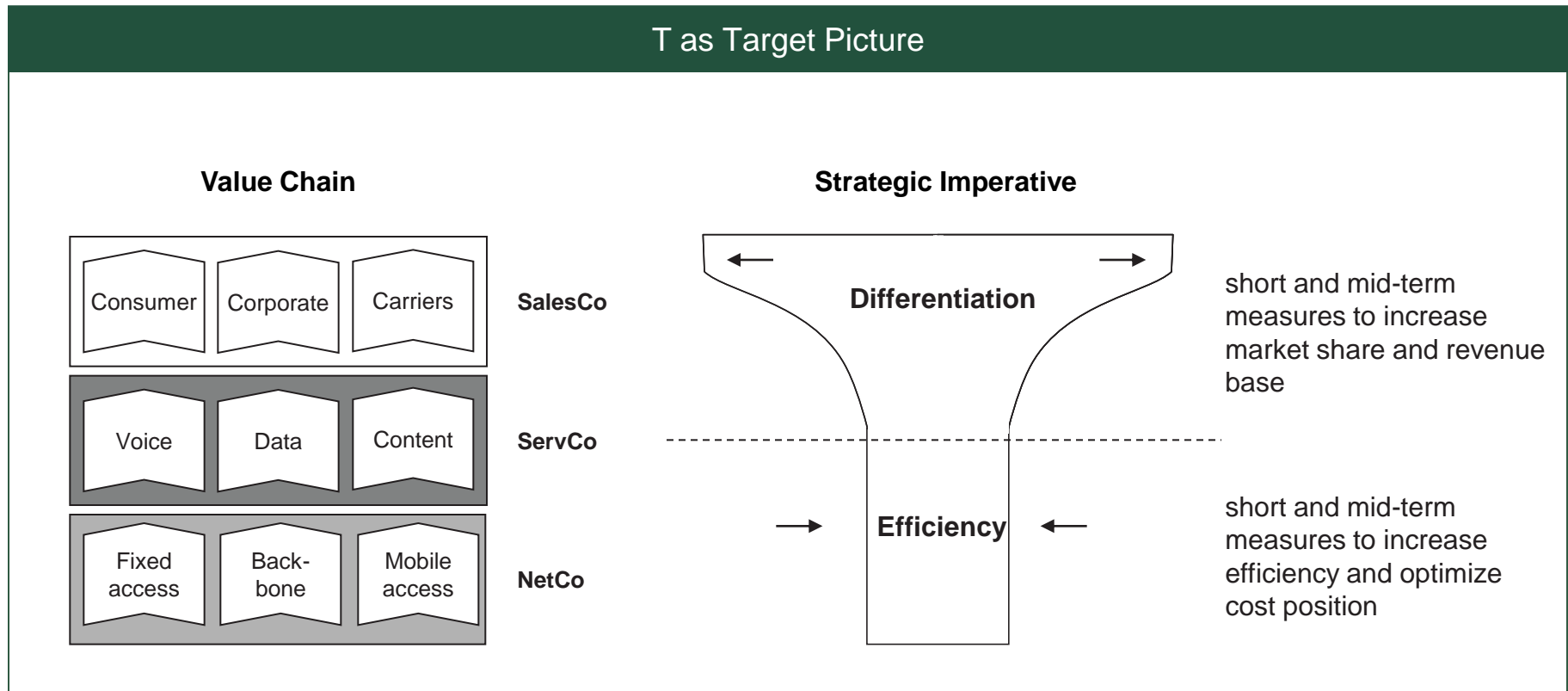


Those restructurings are expected to deliver large potentials for increased profitability and competitiveness against value chain specialists.

Business Model Evolution

Stretched-T Strategy

Maturing markets call for a management paradigm shift towards a Stretched-T Strategy, pursuing differentiation and efficiency goals in parallel.

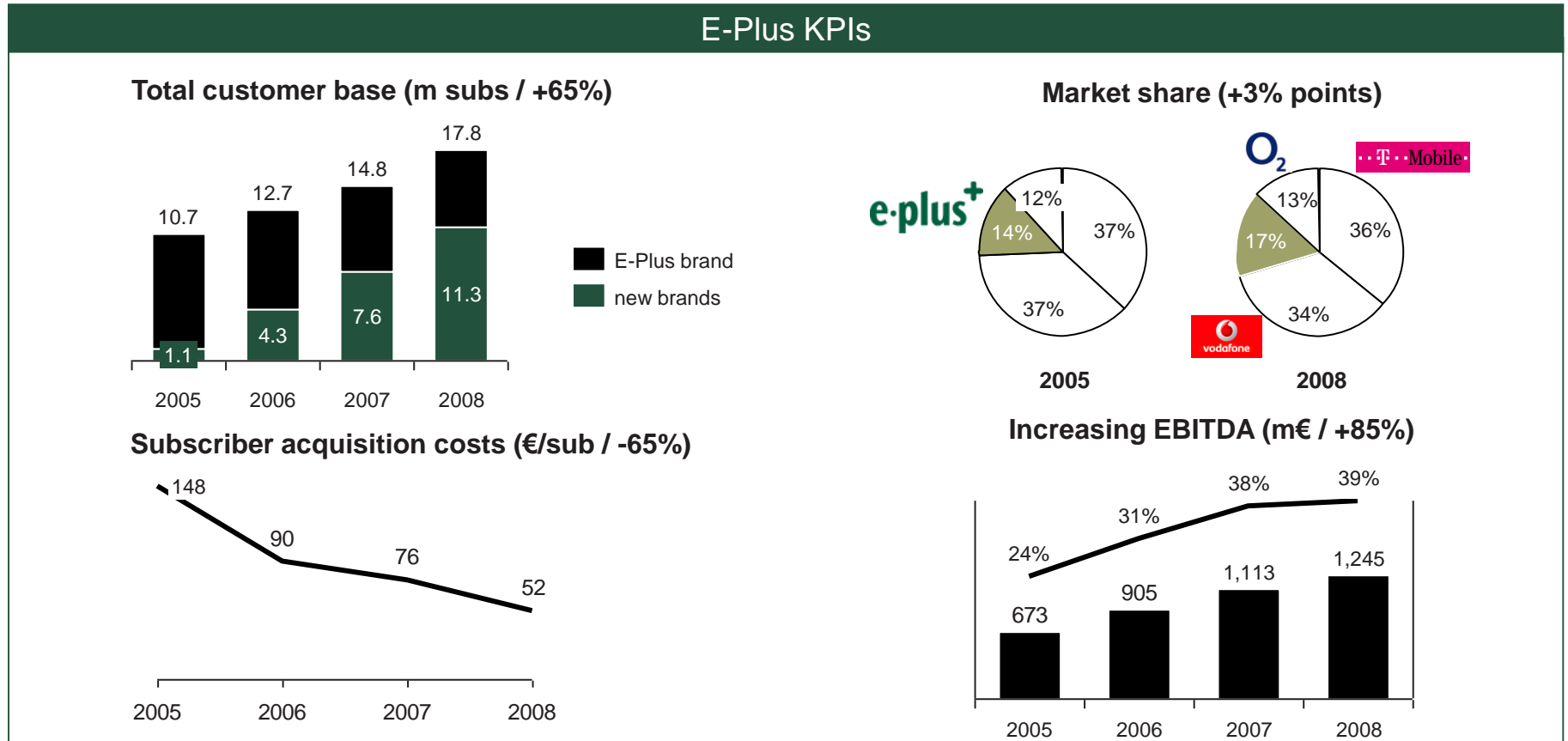


Source: Detecon

Business Model Evolution

Stretched-T Strategy - Case Study E-Plus, Germany

By strengthening differentiation in sales and increasing efficiency in production and network, E-Plus continuously improved EBITDA.

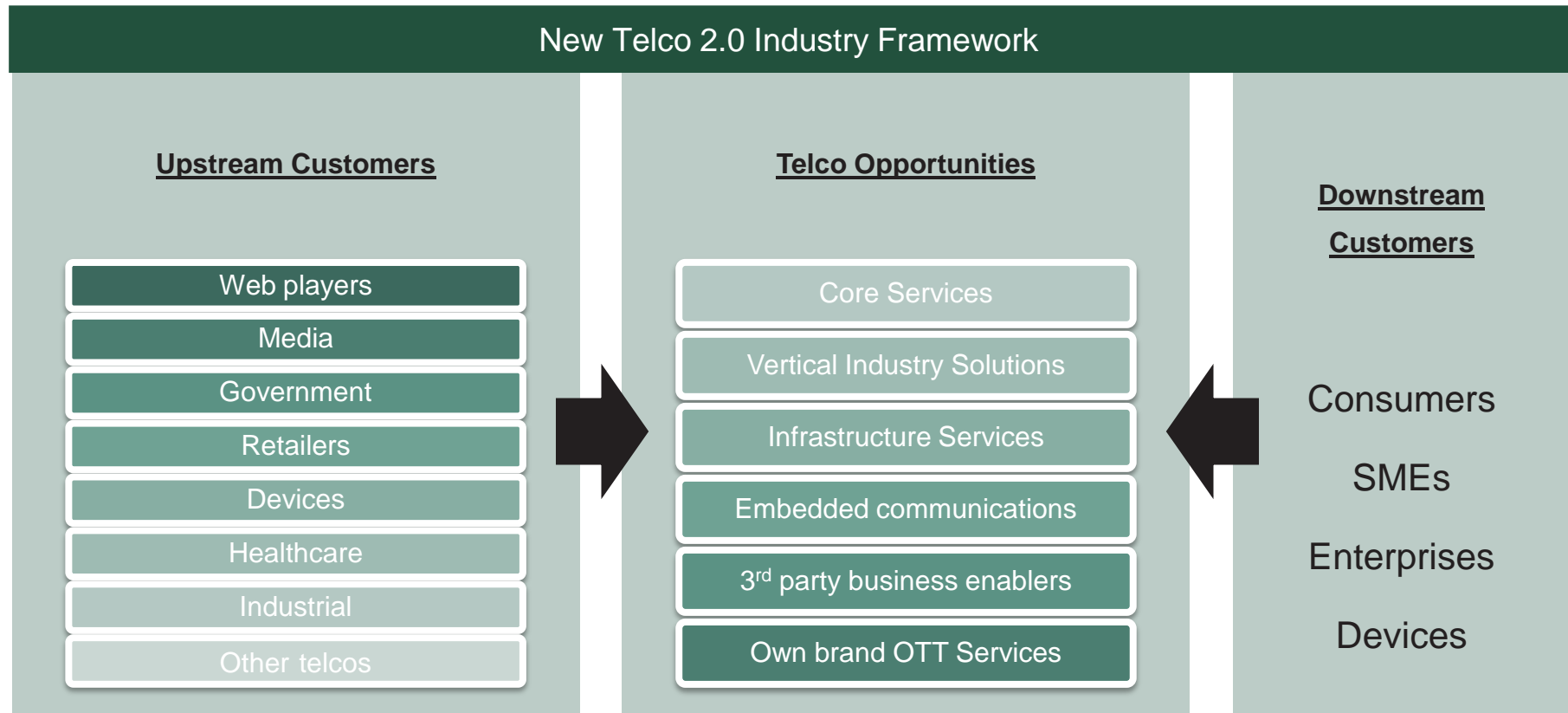


Source: E-Plus, Detecon analysis

Business Model Evolution

Tomorrow: Telco 2.0 “two/multi-sided” business model

The Telco 2.0 industry initiative evaluates how operators can extend and solidify their roles in the future ecosystem, while making themselves a cornerstone of a new structure.



Source: Telco 2.0, STL

Business Model Evolution

Tomorrow: Telco 2.0 “two/multi-sided” business model



The multi-sided business model provides operators with many revenue opportunities from upstream and downstream customers. Further decreasing margins in “pure” voice and data products supports shift towards more “transactional” revenues and the brokering of services between potentially thousands of parties.

Opportunity Area	Brief Description
Core Services	Redefinition of the customer experience for retail and wholesale telecoms services, e.g. via bundling, app stores, leveraging sales channels
Vertical Industry Solutions	Extension from telecoms into IT and networking for corporate and public sector clients via more ‘verticalised’ solutions
Infrastructure Services	Provision of infrastructure services such as data centre capabilities, network sharing, IAAS etc. to other operators and to corporate customers
Embedded communications	Communications-enabled business processes, voice and messaging integrated with games (e.g.), M2M and embedded mobility connectivity, content delivery
3 rd party business enablers	Provision of (latent) telco capabilities to 3 rd party service providers: Identification & authentication; marketing & advertising; payments; customer care, PAAS
Own brand OTT Services	Development of network-independent applications and services → Copy internet players and provide valuable applications and services ‘OTT’ – free or paid-for

Source: Telco 2.0, STL

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