Restructure in the Telco and Media industry – wrong time for “business as usual”

Conference Presentation

Vienna, June 27, 2017
The telco sector has to restructure – a challenging journey but with an enormous value creation potential

Abstract

• Dramatic need for restructuring - Old paradigms do not prevail anymore
• Now : customers enjoy better, more innovative services from digital players
• For telcos: Costs are exploding, but returns are not
• Operators have to re-invent themselves: either as a lean data transportation company, or they participate in the competition for customers
• Irrespective of the option: operating model of the past does not fit. OM needs to be leaner, more agile, more customer centric, more digital
• Not every telco player can do this - some will! With better digital services, better customer experience, generating good returns
• Public telcos are disadvantaged, not being listed is a virtue and brings rigor for: (1) Digitizing the core operations (covering factory as well as customer interface), (2) Winning market share by superior marketing (learning from the un-carrier success), (3) Tapping into digital revenue streams
• No question this can be done - market leaders show the path
• Following is possible within 3-4 years: (1) Up to 50% lower Opex, (2) Traditional revenue increase of 20-30%, (3) Digital revenue share of 20-30% on top

Source: AlixPartners
The root cause for the digital revolution is the persistence of Moore’s law: GPU processing power ramp continues.
Hence, exponential growth in data traffic shows no sign of abating – in fact it is set to grow in multiples to 2020.

By 2020:
- 60 terabytes of data per second... via fixed and mobile networks
- 10x more mobile data... compared to current levels
- 25 billion connected things... a 5-fold increase from today

Source: Cisco
The Situation

Exponential growth leads to an acceleration of new business realities – paradigms are not stable

Acceleration of Paradigm Shifts


Era of the "Smart Cloud"

Era of “Working Nomads”

Era of the “Sensor Economy”

Era of the “OnLife”

Era of the "Internet of Things"

“Semantic Networks”

Companies cannot afford to optimize over years
Correspondingly, value creation happens within the US/Chinese Tech-Hardware/Software/Internet scene – not within telco.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Region</th>
<th>Industry Segment</th>
<th>Current Market Value ($B)</th>
<th>2016 Revenue ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Apple</td>
<td>USA</td>
<td>Tech – Hardware</td>
<td>$801</td>
<td>$218</td>
</tr>
<tr>
<td>2</td>
<td>Google / Alphabet</td>
<td>USA</td>
<td>Tech – Internet</td>
<td>680</td>
<td>90</td>
</tr>
<tr>
<td>3</td>
<td>Microsoft</td>
<td>USA</td>
<td>Tech – Software</td>
<td>540</td>
<td>86</td>
</tr>
<tr>
<td>4</td>
<td>Amazon</td>
<td>USA</td>
<td>Tech – Internet</td>
<td>476</td>
<td>136</td>
</tr>
<tr>
<td>5</td>
<td>Facebook</td>
<td>USA</td>
<td>Tech – Internet</td>
<td>441</td>
<td>28</td>
</tr>
<tr>
<td>6</td>
<td>Berkshire Hathaway</td>
<td>USA</td>
<td>Financial Services</td>
<td>409</td>
<td>215</td>
</tr>
<tr>
<td>7</td>
<td>Exxon Mobil</td>
<td>USA</td>
<td>Energy</td>
<td>346</td>
<td>198</td>
</tr>
<tr>
<td>8</td>
<td>Johnson &amp; Johnson</td>
<td>USA</td>
<td>Healthcare</td>
<td>342</td>
<td>72</td>
</tr>
<tr>
<td>9</td>
<td>Tencent</td>
<td>China</td>
<td>Tech – Internet</td>
<td>335</td>
<td>22</td>
</tr>
<tr>
<td>10</td>
<td>Alibaba</td>
<td>China</td>
<td>Tech – Internet</td>
<td>314</td>
<td>21</td>
</tr>
<tr>
<td>11</td>
<td>JP Morgan Chase</td>
<td>USA</td>
<td>Financial Services</td>
<td>303</td>
<td>90</td>
</tr>
<tr>
<td>12</td>
<td>ICBC</td>
<td>China</td>
<td>Financial Services</td>
<td>264</td>
<td>85</td>
</tr>
<tr>
<td>13</td>
<td>Nestlé</td>
<td>Switzerland</td>
<td>Food / Beverages</td>
<td>263</td>
<td>88</td>
</tr>
<tr>
<td>14</td>
<td>Wells Fargo</td>
<td>USA</td>
<td>Financial Services</td>
<td>262</td>
<td>85</td>
</tr>
<tr>
<td>15</td>
<td>Samsung Electronics</td>
<td>Korea</td>
<td>Tech – Hardware</td>
<td>259</td>
<td>168</td>
</tr>
<tr>
<td>16</td>
<td>General Electric</td>
<td>USA</td>
<td>Industrial</td>
<td>238</td>
<td>120</td>
</tr>
<tr>
<td>17</td>
<td>Wal-Mart</td>
<td>USA</td>
<td>Retail</td>
<td>237</td>
<td>486</td>
</tr>
<tr>
<td>18</td>
<td>AT&amp;T</td>
<td>USA</td>
<td>Telecom</td>
<td>234</td>
<td>164</td>
</tr>
<tr>
<td>19</td>
<td>Roche</td>
<td>Switzerland</td>
<td>Healthcare</td>
<td>233</td>
<td>51</td>
</tr>
<tr>
<td>20</td>
<td>Bank of America</td>
<td>USA</td>
<td>Financial Services</td>
<td>231</td>
<td>80</td>
</tr>
</tbody>
</table>

Total: $7,207, $2,497

Source: CapIQ. Market value data as of 5/26/17
Note: For public companies, colors denote current market value relative to Y/Y market value. Green = higher, red = lower.
Why do telcos not benefit from the data explosion?
Why do telcos not benefit from the data explosion? It is the operator paradox: costs go up, revenues are flat

The network operator paradox

- **Costs**: Infrastructure costs continue to spiral to meet exponential traffic growth and the need to deploy latest technology
- **De-coupling/margin erosion**
- **Revenues**: Revenues plateau in saturated, competitive connectivity markets with ‘all-you-can-eat’ packages and as customers shift to OTT services

*Source: AlixPartners*
The Situation

Investors are not favouring telco stocks – no wonder, as growth is in the “GAFA segment”

Telco stocks performance versus GAFA

Revenue change 2011 to 2015

NOTE: Indexes rebased to be 100 on the 09/03/2009 (Market Bottom post financial crisis of 2007/2008);
Source: Bloomberg, statista, company reports, Citybank, AlixPartners analysis
The Situation

As a consequence, investors are shying away to finance future networks but it is clear, future investment is essential.

EV/Revenues (multiple)                Capital (% of EV)

<table>
<thead>
<tr>
<th>Company</th>
<th>EV/Revenues</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deutsche Telekom</td>
<td>1.9</td>
<td>6.2</td>
</tr>
<tr>
<td>Telefonica</td>
<td>2.3</td>
<td>8.6</td>
</tr>
<tr>
<td>Vodafone</td>
<td>2.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Orange</td>
<td>1.6</td>
<td>9.4</td>
</tr>
<tr>
<td>Apple</td>
<td>3.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Google</td>
<td>5.3</td>
<td>2.1</td>
</tr>
<tr>
<td>Amazon</td>
<td>2.7</td>
<td>1.8</td>
</tr>
<tr>
<td>Facebook</td>
<td>12.6</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Investment need is evident

A large scale FTTP programme would cost billions on top of that already invested in FTTC by DT

One kilometre of glass fibre costs approximately €70,000

Nearly $48 billion will be spent globally in the next 10 years upgrading the LTE network

Forecast for building and deploying 5G networks will cost $56 billion in addition to LTE upgrades

Source: Capital IQ, AlixPartners
We are seeing more and more telcos pursuing structural cost reduction

Telco cost cutting announcements

VimpelCom to Cut Thousands of Jobs in Russia Amid Recession

VimpelCom Ltd, a phone network provider based in Russia, has announced a restructuring of its Russian operations. This comes amid ongoing economic challenges in the country, which have led to a reduction in consumer spending and a fall in its mobile and fixed-line revenues.

KPN tweaks corporate strategy in favour of further cost savings

KPN, a Dutch telco giant, is adjusting its corporate strategy in an effort to reduce costs and improve its financial performance. The move follows a significant drop in revenues and profits over the past few years.

Eircom to cut costs by up to €80m over the next three years

Eircom, Ireland's leading telco provider, has announced plans to cut costs by up to €80m over the next three years. The move is part of a broader strategic plan to improve the company's financial health.

Telecom Italia Raises Cost-Cut Target to $1.8 Billion by 2018

Telecom Italia, Italy's largest telco provider, has revised its cost-cutting targets in light of the ongoing economic challenges in the country. The company now plans to cut costs by $1.8 billion by 2018.

Source: Press
Some carriers have already lowered the cost base substantially – even -50% is possible

Telco cost base transformation: the opportunity

Case study 1: US mobile operator

Case study 2: European mobile operator

Source: AlixPartners analysis
However, aggressive marketing in a commodity market can make a huge difference – a typical weakness in the telco industry

The Un-carrier success of T-Mobile in the US

Key Elements of the Un-Carrier Strategy

- Creating a new market reputation that is anti-telco
  - By leveraging celebrities' brand values
  - By surfacing incumbents unfair and mediocre services via an aggressive communication strategy
  - By taking no business paradigm for granted
  - Changing the traditional marketing thinking by introducing new products/tarif schemes
    - Simple choice – no service contracts
    - Upgrades for All
    - Simple Global
    - Carrier Freedom
    - Binge On
  - Direct communication to customers by extensive use of social media
  - Focus on superior and fair customer service

Financial Performance of the Un-Carrier Strategy

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Operating Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>20.6bn $</td>
<td>-4.3bn $</td>
</tr>
<tr>
<td>2012</td>
<td>29.4bn $</td>
<td>7.4bn $</td>
</tr>
<tr>
<td>2013</td>
<td>32.1bn $</td>
<td>15.8bn $</td>
</tr>
<tr>
<td>2014</td>
<td>35.7bn $</td>
<td>22.2bn $</td>
</tr>
<tr>
<td>2015</td>
<td>38.8bn $</td>
<td>28.6bn $</td>
</tr>
</tbody>
</table>
Content moves will be another way to change the rule of the game – bringing media and telco closer together

SFR Content Moves

SFR, the French telco group owned by global giant Altice, is ramping up its investment in French content, leveraging SFR’s international presence — notably in the U.S. via Cablevision — to export French cinema and series abroad. However, under the current regulation, SVOD services like SFR’s Zive (and also Netflix) can’t have access to first-run movies even if it co-finances or co-produces them.

“I’m ready to finance French content. What we’ve started doing modestly with sports (launching sports channels, buying sports rights) we want to start doing with French series and films,”

“Subscribers want local content, on top of international content. In order to rival against services like Netflix which have a global strategy, SFR is opting to become a multi-local player and invest in homegrown content wherever we’re established.”

Michel Combes, CEO SFR

Telefonica Spain Content Moves

Telefónica’s content investment is fueling its convergence strategy. The Spanish market is dominated by multi-play. This triggered Telefónica Spain to increase investment in local content to boost its TV business.

It plans to invest €70m (about $75m) to produce 14 original Spanish drama series over the next two years. The Spanish business is built around convergence offerings sold under the company’s Movistar Fusión brand. Its purchase of pay TV operator Canal Plus in 2014 fueled this strategy. There was a recent slowdown in sales of its TV product, however. Between June and September 2016, Telefónica’s pay TV customer base declined by 44,000 due to a price increase in the bundled service offering and for the stand-alone TV service. But Telefónica remains committed to TV and multi-play, and its ambition is to be the largest producer of Spanish TV content globally.

Source: 451 Research

Many telcos extend their FMC activities by introducing multi-play content bundles – see also BT’s sports rights acquisition...
BT’s acquisition of TV sports rights aims to target key household individuals through bundling

**Case Study: BT Sport**

**Rationale**
- Growing customer demand for triple play offers...
- Sport rights seen as key factor to win/retain customers against competition
- Live football as a key way to attract pay TV subscribers

**Business Model**
- BT Sport venture launched in summer 2013
  - Annual £550m investment in Premier League and European football – £740m for share of Premier League rights for three seasons and £900m for Champions League and Europa League rights
  - Free subscriptions to sport channels with selected internet connections – targeting men in the household for their BB products
  - Additional revenue streams: Extra charge for European soccer and live TV in pubs/clubs, plus extra advertising income

**Synergies**
- Success in supporting core business (BB, fibre, fixed voice) via bundling of sport content, either for free or as premium triple play bundles

**Initial Results**
- ~5m subscribers of BT Sport (9 months after launch)
- +179k BB subscribers in Q1 2014 (+3%)
- Smallest drop in landlines in five years
- B2C sales +4% in 2013
- Positive impact on customer perception of BT (‘created a buzz’)

**Fixed Voice**
- Unlimited landline weekend calls

**Mobile**
- N/A

**TV**
- Free BT Sport

**Fixed Data**
- Unlimited usage Up to 76 Mb/s

**Initial Results**

**Sources:** BT releases; Press; Expert interviews;
Telco operators can generate a digital revenue stream in two fundamentally different plays

### Digital telco archetypes

<table>
<thead>
<tr>
<th>Model</th>
<th>Connectivity Play</th>
<th>Enabler/Platform Play</th>
<th>Experience/Service Play</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market positioning</strong></td>
<td>Efficient provider of secure, reliable connectivity bundles</td>
<td>Enable seamless access to an array of ICT/digital services</td>
<td>Comprehensive best-in-class digital service provider</td>
</tr>
<tr>
<td><strong>Sector focus</strong></td>
<td>Primarily B2C</td>
<td>Mass market</td>
<td>All sectors</td>
</tr>
<tr>
<td></td>
<td>Focus on value-seekers</td>
<td>Scalable B2C and B2B</td>
<td>Focus on high-spenders</td>
</tr>
<tr>
<td><strong>Product and service mix</strong></td>
<td>100% Connectivity</td>
<td>Services: 80% Connectivity</td>
<td>Services: 60% Connectivity</td>
</tr>
<tr>
<td><strong>Innovation level</strong></td>
<td>Minimal/defocus</td>
<td>Enabling focus</td>
<td>Leading-edge innovation</td>
</tr>
<tr>
<td></td>
<td>Selected partners only</td>
<td>Broad partner approach</td>
<td>Proprietary and partners</td>
</tr>
<tr>
<td><strong>Financial metrics</strong></td>
<td>30%+ EBITDA</td>
<td>20 to 40%+ EBITDA</td>
<td>Approximately 20% EBITDA</td>
</tr>
<tr>
<td><strong>Example operators</strong></td>
<td>Tele2, 3</td>
<td>TDC, Deutsche Telekom</td>
<td>SK telecom, NTT docomo</td>
</tr>
</tbody>
</table>

*Source: AlixPartners*
But is the integrated telco model combining network and customer business fit-for-purpose? Most likely not...

Telecom operators are composed of two businesses with different dynamics

**ServCo**
- Trading & Customer relationship management
  - Fully digital Journeys and interfaces – buy, pay and consume digitally
  - Full self-service
  - Real-time, cross-device
  - Personalized interaction based on history and preferences (Big-Data effect)
  - Socially networked consumption
  - Plug-and-play services

**NetCo**
- Infrastructure management
  - Always-on – always available
  - 100% network coverage - available everywhere
  - Top quality – e.g., data speeds, latency sufficient for service consumption
  - Make Big-Data available for analytics
  - Ability for online, self-configuration of network services (e.g. leveraging SDN)

Source: AlixPartners
Hence, we expect the telco model to dis-integrate and horizontalize...

...allowing for different investor types per horizontal layer

Source: AlixPartners
The dis-integration of the telco value chain will also foster the development of a new culture

Cultural transformation to a digital telco

<table>
<thead>
<tr>
<th>Typical Telco Culture Today</th>
<th>Digital Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer focus</strong></td>
<td>• Customer centric</td>
</tr>
<tr>
<td>• Focus on educating the customer</td>
<td>• Pull ideas from the market</td>
</tr>
<tr>
<td>• Inability to use customer insights and customer data (regulation)</td>
<td></td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>• Fast decision making</td>
</tr>
<tr>
<td>• Slow decision making</td>
<td>• Data used for issue identification and solution development</td>
</tr>
<tr>
<td>• Process and task orientation</td>
<td></td>
</tr>
<tr>
<td>• Data used for justification</td>
<td>• Mixed teams on a needs-basis with clear tasks and responsibilities</td>
</tr>
<tr>
<td><strong>Ways of working</strong></td>
<td>• Personal interest in overall success</td>
</tr>
<tr>
<td>• Big teams who want to be consulted</td>
<td></td>
</tr>
<tr>
<td>• Reluctance to achieve company targets</td>
<td>• Develop, pilot, correct → focus on rapid launch and learn</td>
</tr>
<tr>
<td><strong>Product development</strong></td>
<td>• Adaptability and scalability count</td>
</tr>
<tr>
<td>• Long go-to-market duration (month/years)</td>
<td></td>
</tr>
<tr>
<td>• Inability to adapt ‘on the go’</td>
<td>• Modular system interface with customer focus</td>
</tr>
<tr>
<td><strong>System infrastructure</strong></td>
<td>• ‘IT enables business’</td>
</tr>
<tr>
<td>• Legacy SAP/ERP systems</td>
<td></td>
</tr>
<tr>
<td>• Lack of flexibility and adaptability; ‘business to follow IT’</td>
<td></td>
</tr>
</tbody>
</table>

Source: AlixPartners analysis
However, all stakeholders have a part to play in order for successful restructure in the telco industry to be achieved

Key stakeholder roles

- **Management**: …must embrace the urgent need for digital transformation, ensure distractions are minimized, and retain focus on delivery

- **Staff**: …must accept the need for change and new ways of working, helping to develop new capabilities

- **Shareholders**: …must encourage change, accepting different financial metrics and approving transformation investments

- **Regulators**: …should review applicability of USO, pricing regulation and understand that the digital era requires new regulatory policies

- **Governments**: …should support and encourage new regulatory policies (including review of pricing for new spectrum)

- **Competition authorities**: …should be more open to enabling telco scale via consolidation
No matter which strategy will be picked, it will be a huge challenge - in particular for larger telcos

John Chambers (ex-Cisco CEO) on digital revolution: "...This digital era will dwarf what’s occurred in the information era and the value of the Internet today. As leaders, if you don’t transform and use this technology differently - if you don’t reinvent yourself, change your organization structure; if you don’t talk about speed of innovation - you’re going to get disrupted. And it’ll be a brutal disruption, where the majority of companies will not exist in a meaningful way 10 to 15 years from now....

...How do you change your culture to be able to think in terms of outcomes for your customers...The majority of companies will be digital within five years, yet the majority of their digital efforts will fail, which speaks to what a CEO has to do differently..."

The Digital Revolution will be a challenge for any (large) Telco!
The best advice we can give: plan the digital re-structuring!

Only do when you have prepared the ground („Digitization of the core business“)
For telcos this leads to a clear roadmap: before focusing on new business streams they first need to restructure the telco core

Operator transformation priorities

1. Simplify: Step-change cost of operations by radically simplifying product and services portfolio
2. Digitize Channels: Transform CX with personalized, differentiating digital-first interactions
3. Digitize Factory: Leverage digital technology to streamline processes, automate operations
4. Rationalize: Focus ongoing investments on cost-effective infrastructure, rationalizing legacy
5. Re-organize: Define a digital operating model to support digital talent and ways of working
6. In parallel: Aggressive “uncarrier” type of marketing
7. LASTLY... Innovate: Tap into the digital service revenue pool

Source: AlixPartners analysis