The Digital Home Sector in Europe
Consolidation and Scale—Impact on the Digital Agenda
Contact Information

Amsterdam
Steven Pattheyews
Senior Executive Advisor
+31-6-22791964
steven.pattheyews@booz.com

Beirut
Bahjat El-Darwiche
Partner
+961-1-985-655
bahjat.eldarwiche@booz.com

Ramez Shehadi
Partner
+961-1-985-655
ramez.shehadi@booz.com

Berlin
Hannes Gmelin
Principal
+49-30-88705-881
hannes.gmelin@booz.com

Delhi
Ashish Sharma
Principal
+91-124-499-8705
ashish.sharma@booz.com

Dubai
Karim Sabbagh
Senior Partner
+971-4-390-0260
karim.sabbagh@booz.com

Olaf Acker
Partner
+971-4-390-0260
olaf.acker@booz.com

David Tusa
Partner
+971-4-390-0260
david.tusa@booz.com

Düsseldorf
Roman Friedrich
Partner
+49-170-2238-165
roman.friedrich@booz.com

Thomas Künstner
Partner
+49-211-3890-143
thomas.kuenstner@booz.com

Michael Peterson
Partner
+49-211-3890-140
michael.peterson@booz.com

Helsinki
Santeri Kivelä
Principal
+358-9-6154-6666
santeri.kivel@booz.com

Houston
Kenny Kurtzman
Senior Partner
+1-713-650-4175
kenny.kurtzman@booz.com

Joseph Sims
Partner
+1-713-650-4105
joseph.sims@booz.com

Madrid
José Arias
Partner
+34-91-411-5121
jose.arias@booz.com

Mexico City
Carlos Navarro
Partner
+52-55-9178-4209
carlos.navarro@booz.com

Milan
Luigi Pugliese
Partner
+39-02-72-50-93-03
luigi.pugliese@booz.com

New York
Christopher Vollmer
Partner
+1-212-551-6794
christopher.vollmer@booz.com

Paris
Pierre Pélaudeau
Partner
+33-1-44-34-3074
pierre.peladeau@booz.com

Riyadh
Hilal Halaoui
Partner
+966-1-249-7781
hilal.halaoui@booz.com

São Paulo
Ivan de Souza
Senior Partner
+55-11-5501-6368
ivan.de.souza@booz.com

Shanghai
Andrew Cainey
Partner
+86-21-2327-9800
andrew.cainey@booz.com

Stockholm
Roman Friedrich
Partner
+49-170-2238-165
roman.friedrich@booz.com

Tokyo
Toshiya Imai
Partner
+81-3-6757-8659
toshiya.imai@booz.com

Vienna
Klaus Hübbling
Partner
+43-1-518-22-907
klaus.hoebbling@booz.com

Zurich
Alex Koster
Principal
+41-43-268-2133
alex.koster@booz.com

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EXECUTIVE SUMMARY

The digital home sector in Europe, along with the broadband, telecom, and TV distribution industries that serve it, is entering a new phase of competition. Now that first-generation broadband is widely deployed, the sector’s growth rate is slowing and the basis of competition is shifting from acquiring new customers to upgrading networks and penetrating existing customer bases.

In this stage of market development, industry consolidation typically accelerates as companies seek to capture the benefits of scale. But this prospect has triggered an intense debate among the stakeholders in the digital home sector. The debate centers on what type of industry structure will best serve companies and consumers. The core issue in the debate is scale: whether it is necessary for the health of the sector and, if so, how it can be achieved.

To better understand the effects of scale and the consolidation necessary to attain it, Booz & Company developed an Infrastructure Scale Index and used it to analyze Europe’s digital home sector. Our research reveals a positive correlation between scale in the sector’s communication infrastructure and broadband penetration and speed, and no quantifiable relationship between scale and the abuse of market power. In short, a digital home sector populated by competitive, financially healthy players operating at scale is likely to raise the level of digitization in Europe, with all of the associated economic benefits that entails.

Assuming that consolidation is the best course for achieving scale in the digital home sector, network operators should consider their future positions and develop strategies for attaining scale. Concurrently, policymakers and regulators should begin developing a vision for the digital home sector that can serve as a guide as they create its regulatory framework and that can help them avert the risk of inadvertently creating barriers to the achievement of their own digital objectives.
Digitization—the mass adoption of connected digital technologies and applications by consumers, enterprises, and governments—is an important driver of economic, political, and cultural progress in mature and emerging economies. A state-of-the-art communication infrastructure is a key enabler of digitization.

In the past decade, digital infrastructure—and the broadband, telecom, and TV distribution companies that provide it—has made a significant contribution to Europe's economy. Digital home, e-commerce, and other digital services are flourishing, and more and more industries are benefiting from the proliferation of advanced digital technologies. The European Commission estimates that gains associated with broadband alone annually result in 0.71 percent of the European gross value added (from the base year 2006). Even more broadly, a joint study by the World Economic Forum (WEF) and Booz & Company has revealed a large range of additional socioeconomic benefits of digitization.

The next wave of growth in the digital home sector promises to create more wealth. Much of this wealth will be produced by innovative services, such as cloud computing and machine-to-machine solutions. These services will also contribute to an explosion in data traffic. (Cisco expects a yearly increase of 29 percent in global IP traffic through 2016.) To fully capture the benefits of the next wave of digital growth and handle the increased demand for bandwidth, Europe will need super-broadband networks with high penetration rates (see Exhibit 1).
The need for upgraded infrastructure in the digital home sector is well recognized, but how will it be funded? Many operators, even those that are already very large, are struggling to fund their capital expenditures. The fact that incumbent operators such as France Télécom and Deutsche Telekom have cut back on their fiber rollout plans and are entering co-investment deals, and that mobile assets are being traded across Europe, is a sure sign that capital is scarce and operators must be increasingly selective about where and how to spend it.\(^4\)

Changes within the digital home sector are contributing to the scarcity of capital. The merging of formerly distinct services, such as broadband and TV, is creating a convergence of competition. Competition is further intensified by slowing growth rates and occasional declines in specific markets, such as voice. This is causing operators to expand into adjacent revenue pools along the entire value chain. In addition, new competitors, such as Google and Facebook, are entering the digital home sector (see Exhibit 2).

At the same time, consumers and governments are pushing for step changes in service levels. Witness the exploding penetration rates of smartphones and tablet computers and related apps, such as Skype and WhatsApp; the demand for LTE and Wi-Fi mobile broadband networks; and the speed and availability of connection required by new services, such as cloud computing. The European Commission’s digital agenda is also driving demand. For instance, one of its key targets is 100 percent population coverage with 30+ Mbps broadband by 2020.\(^5\) To meet these demands, the pace of innovation and the level of investment required in the digital home sector are steadily rising.

In short, Europe’s digital home sector faces a dilemma. The communication infrastructure must be continually improved in order to capture the benefits of digitization, but the infrastructure operators are finding it increasingly difficult to find the funding needed to undertake these improvements. That is why infrastructure development should be a high-priority issue among corporate decision makers, policymakers, and regulators.

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\(^{4}\) Bubble diameter represents annual revenues in € for most players in 2011 (Primacom is 2010) in Germany (worldwide revenues for Astra, Netflix, Apple, Google).

\(^{5}\) To meet these demands, the pace of innovation and the level of investment required in the digital home sector are steadily rising.

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**Exhibit 2**

**Competitive Pressure in the Digital Home Sector Is Intensifying**

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### DIGITAL TV MARKET PLAYERS IN GERMANY

- **Internet Based**
  - Apple (Global)
  - Hulu (Global)
  - Google (Global)

- **Telco Based**
  - Deutsche Telekom
  - Vodafone
  - Telefonica
  - Net Cologne

- **TV/Video Based**
  - Unitymedia
  - Primacom
  - Astra (Global)

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### Revenues 2011 in Germany\(^*\)

- **National Revenues**
- **Global**
- **Traditional TV Market Arena**

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\(^*\) Source: Annual reports; Booz & Company analysis
SCALE MATTERS

Booz & Company research reveals that the most developed communication networks in Europe tend to be those in markets characterized by robust competition among a few financially healthy companies that are operating at scale. Further, industry, consumer, and macroeconomic trends suggest that scale will be increasingly essential for infrastructure operators in the years ahead:

• **Industry trends:** The same trends that are causing a scarcity of capital among operators—the merging of networks and new entrants in markets—support the drive for scale. As operators are forced by the dictates of competition to offer a wider variety of services and products, they will have to fund expanded portfolios and provide the fiber, LTE, and DOCSIS 3.0 build-outs necessary for robust communication networks. They will also need to cope with increasing complexity in technology, sales, and service.

• **Consumer trends:** Two of every five Europeans are buying communication and video services in bundles. Further, the demand is growing among consumers, who want higher bandwidth to facilitate the use of video and communication services like YouTube and Skype and integrated, multiscreen/multi-device services like Facebook and eBay.

• **Macroeconomic trends:** The digital home sector will need to generate many innovative advances to thrive economically and deliver on the targets of the digital agenda, including increased penetration rates of infrastructures and services, lower price points, and higher usage rates. But the R&D spend of even the largest telecom incumbents is dwarfed by the R&D resources of new competitors in the sector (see Exhibit 3). Google alone spends more on R&D annually than the four largest European telecom operators combined.
Scale can help infrastructure operators attain the synergies and the operating economics necessary to compete effectively in the fast-changing digital home sector. We believe that the advantages of scale will become ever more important for operators as the sector’s growth rate slows, consumers become more demanding, and new sector players with business models that confer global scale enter the sector and drive competition.

Exhibit 3
Success in the Digital Home Sector Depends on the Ability to Innovate

ANNUAL INNOVATION SPEND (IN € MILLIONS)

<table>
<thead>
<tr>
<th>Company</th>
<th>Annual Innovation Spend (in € millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft</td>
<td>6,566</td>
</tr>
<tr>
<td>Google</td>
<td>2,835</td>
</tr>
<tr>
<td>Apple</td>
<td>1,343</td>
</tr>
<tr>
<td>Telefónica</td>
<td>983</td>
</tr>
<tr>
<td>Deutsche Telekom</td>
<td>200</td>
</tr>
<tr>
<td>Vodafone</td>
<td>350</td>
</tr>
<tr>
<td>Orange</td>
<td>845</td>
</tr>
</tbody>
</table>

Source: Booz & Company Global Innovation 1000 Study, 2011; annual reports and public interviews; Oanda.com for exchange rate (average 2010 = US$1.3271/€); Booz & Company analysis
The ability to measure scale gains importance as markets within the digital home sector converge, infrastructure operators increasingly compete head-to-head, and scale becomes more and more important. Booz & Company’s Infrastructure Scale Index was created to answer this need.

Typically, the Herfindahl-Hirschman Index is used to measure the consolidation and amount of competition in an industry. But industry concentration—the number and size of players within each infrastructure—is not the only measure that determines scale. The absolute size of the network must be taken into account. This is based on the customer reach of an infrastructure’s footprint. (Other factors, such as the number of subscribers and the magnitude of revenue in the marketplace, play a role in determining scale as well, but these attributes of success in the marketplace can change rather quickly and are influenced by marketing or pricing capabilities in addition to the infrastructure itself.)

To measure infrastructure scale, Booz & Company considers two key attributes:

1. Industry concentration: the combined market share of the top two players in a particular type of infrastructure, such as cable or mobile

2. Infrastructure footprint: the absolute number of customers encompassed in a specific infrastructure type in a defined geographic area, such as mobile network coverage in Germany or homes passed by cable in France

Since an infrastructure’s footprint is harder to change and has more impact on the overall competitive dynamics in a market, we assign it a greater weight than industry concentration. Thus, the resulting score for each of four digital home infrastructures—cable, DSL, mobile, and satellite—is an accurate reflection of the extent of scale in that infrastructure network and, by implication, the benefit that could be realized from greater scale.

Booz & Company’s Infrastructure Scale Index ranges from 0 to 100, with 100 indicating the highest level of scale. In calculating the index scores in Europe, we assessed the extent of scale in the four digital home infrastructures in the 11 countries that account for more than two-thirds of all TV households in the European Union.

The countries are Austria, Belgium, France, Germany, Hungary, Ireland, the Netherlands, Poland, Spain, Switzerland, and the United Kingdom.

Our analysis revealed five distinct levels of digital infrastructure scale:

- **Low scale—fragmented:** Infrastructures with a scale index between 0 and 25, in which networks are fragmented among many small players and in which only small portions of the population have access

- **Low scale—consolidated:** Infrastructures with a score between 0 and 25 with a higher degree of consolidation but low levels of customer access

- **Medium-low scale:** Infrastructures with a score between 26 and 50, indicating that initial consolidation has taken place within silos and reach is relatively limited

- **Medium-high scale:** Infrastructures with a score between 51 and 75, which exhibit a high degree of consolidation and relatively high population coverage

- **High scale:** Communication infrastructures with scores ranging from 76 to 100. They are largely consolidated with one or two players that enjoy broad, sometimes nationwide, reach.
THE CURRENT STATE OF SCALE

The Infrastructure Scale Index reveals variations in scale at the national level (see Exhibit 4). In Poland, for example, the cable infrastructure is fragmented and has low scale, whereas the DSL infrastructure has medium-low scale. The scale of the mobile infrastructure is medium-high, due to the existence of four players of largely comparable size. Satellite is the most consolidated infrastructure in Poland, largely because satellite networks have an inherently large footprint.

The index also assesses the overall variation in infrastructure scale for Europe as a whole. Europe’s satellite infrastructure has achieved the highest overall level of scale. Its infrastructure footprint is broad by definition, and there is also a high degree of industry concentration. There are two principal satellite operators—Astra and Eutelsat—that are active across the whole of Europe. Cable, in contrast, ranks lowest in scale across Europe, driven by the comparatively limited footprints of its networks.

Exhibit 4
Europe’s Mobile and Satellite Infrastructures Have Attained High Relative Scale
Exhibit 5
Belgium, the Netherlands, and Switzerland Have the Greatest Scale

Source: ScreenDigest; Booz & Company analysis

Infrastrucure Scale Index (showing in-country consolidation and infrastructure footprint)

Low Scale—Fragmented
Low Scale—Consolidated
Medium-Low Scale
Medium-High Scale
High Scale

Source: ScreenDigest; Booz & Company analysis
Europe’s mobile and DSL networks have both achieved medium-high index scores. The footprints of both types of networks are national in most instances. But their levels of industry concentration tend to lower their index scores because the top two players usually have a combined market share below 70 percent. In Germany, for example, Vodafone and Deutsche Telekom control 64 percent of the mobile market. (Fiber is not measured: It is still in its infancy, often available only in major cities, and typically not marketed as a separate service to the consumer.)

In Europe, parallel infrastructures are common in both mobile and satellite. In mobile, for example, there are as many as four nationwide networks per country. From the consumer’s perspective, this characteristic has no great significance (only one network is used at a time), but from an operator’s perspective, parallel infrastructures suggest the possibility of network sharing as a means of driving down cost.

The Infrastructure Scale Index can also be used to compare countries. To measure national infrastructure scale, we aggregated the scores of each country for all digital home platforms and normalized the index (see Exhibit 5). The aggregate score for Poland, for example, reveals that the country is ranked at the bottom of the National Infrastructure Scale Index. The Netherlands, in contrast, achieves much higher scale for each of its individual communication infrastructures and thus has a higher National Infrastructure Scale Index score.

Differences among countries in the National Infrastructure Scale Index are driven primarily by variations in network coverage and secondarily by variations in national economic maturity. Satellite, mobile, and DSL networks already have high relative scale in many countries, but their National Scale Indexes could be raised by a greater degree of industry concentration within mobile and DSL networks. The cable sector still has low or medium-low scale almost everywhere, except the Benelux countries. This is a consequence of the limited footprint and comparatively high fragmentation in cable networks.

In the mobile market, the current challenge facing the industry is the development and marketing of next-generation LTE networks. Scale could help mobile companies better manage this transition. This is why mobile players in countries such as Austria, Belgium, and the Netherlands are pursuing consolidation (and selling off assets that they cannot scale). Similarly, scale could accelerate the upgrading of cable networks to DOCSIS 3.0 and the rollout of an entirely new fiber infrastructure.

In addition to benefits of consolidation within infrastructure silos, cross-network consolidation would enhance scale and create more integrated national infrastructures. The convergence of fixed and mobile networks is the most common pattern of cross-network consolidation. Other network integration plays, such as combining DSL and cable infrastructures, are probably less likely. But they, too, could enable sector players to better leverage economies of scale, broaden their product portfolios, and innovate more effectively.
THE EFFECTS OF SCALE

What are the effects of scale on the companies and markets in the digital home sector? Would scale foster or hinder infrastructure development and broadband penetration? These are questions that each of Europe’s governments should seek to answer as it considers raising its National Infrastructure Scale Index score.

We believe that the consolidation of digital networks is a primary and highly effective lever to achieve the next level in national digital home infrastructure. Analysis of the National Infrastructure Scale Index reveals that countries with higher scale tend to be more advanced in terms of broadband penetration and speed than countries with lower scale (see Exhibit 6).

Witness the Benelux countries, which stand out from their European peers. These three countries score high on the National Infrastructure Scale Index and have a high penetration of high-speed broadband. Poland, in contrast, scores low on the national index and achieves only low uptake with slower-speed broadband.

Booz & Company’s recent work for the WEF also suggests that a digital industry operating at scale tends to produce benefits for consumers and the economy at large. In Europe, performance indicators of economic and societal well-being, such as GDP growth and the Better Life Index of the Organisation for Economic Co-operation and Development (OECD), are positively influenced by greater ubiquity, reliability, and

Exhibit 6
Broadband Penetration and Speed Rise with Infrastructure Scale

![Graph showing broadband penetration and speed rise with infrastructure scale](image)

Infrastructure Scale Index (showing in-country consolidation and infrastructure footprint)

Source: TeleGeography, European Commission, Booz & Company analysis
speed of digital services. These characteristics of digital services are, in turn, closely correlated with increased infrastructure scale. Thus, the higher a country scores on the National Infrastructure Scale Index, the higher it is likely to rank in dimensions such as the OECD’s life satisfaction score (see Exhibit 7).

The negative effects of low levels of scale on infrastructure development are also evident in the digital home sector. In fact, every attempt to foster industry competition by focusing on small players that we studied failed to yield sustainable benefits.

In the U.K., for example, the number of broadband ISPs soared in the early 2000s. By the end of 2005, there were 35 players competing in the market. But the thin margins and the lack of differentiating features that resulted soon gave way to waves of cost reductions, takeovers, and shutdowns. Consumer satisfaction declined, and the industry was unable to fund network development and invest in next-generation access.

The proliferation and collapse of free dial-up Internet access services in the Netherlands in the late 1990s is another example of the consequences of low scale. Lower interconnection fees, the lack of adjacent revenues, and the end of the Internet bubble quickly led to a full-scale consolidation among providers. Such models typically create lots of competitive froth in the short term but are rarely sustainable.

The Indian mobile market exemplifies the negative effects of low scale on industry performance and consumer experience. As a result of excessive license issuance, there are more than 15 active players in India, the largest of which, Bharti, has a market share of less than 20 percent.

The Indian mobile market is plagued with suboptimal outcomes. In densely populated areas, there are unhealthy levels of competition and operators struggle to earn a profit. Unsustainable cost structures are causing the deterioration of service levels among the majority of operators. Further, because of the poor financial returns, the sector as a whole is reluctant to invest in infrastructure development. Under these conditions, the paths to 4G and rural networks are unclear, and Indian consumers will suffer in the long run.

Exhibit 7
Life Satisfaction Corresponds with Scale of Infrastructure

Source: Infrastructure scale: Eurostat; Life Satisfaction: Surveyed consumers’ ratings on OECD Better Life Index; Booz & Company analysis
VIABLE STRATEGIES FOR ACHIEVING SCALE

The consolidation of fragmented markets is a key means of capturing the benefits of scale. But to capture them, infrastructure operators will need to develop and successfully execute a consolidation strategy that enables them to compete not only with other operators, but also with infrastructure-independent, multi-service providers, such as Google, and device manufacturers, such as Apple. Four viable consolidation strategies are already evident in Europe’s digital home sector.

In-country M&A within a single infrastructure:
In-country M&A, which we are already seeing among the mobile operators and fixed-line players in the cable and fiber markets in many European countries, can level playing fields within and vis-à-vis competing communication infrastructures. This form of consolidation yields immediate synergies because networks can be fully integrated, marketing and brands can be combined, and support functions such as HR and purchasing can be better leveraged. Liberty Global’s merger of Kabel BW with Unitymedia in Germany is a prominent example of in-country M&A, as is the currently contested merger of Orange and Three in Austria.

Fixed/mobile convergence:
The consolidation of fixed and mobile assets enables operators to more fully serve the communication needs of their subscribers—increasing their share of wallet and reducing churn. Many large telecom incumbents, such as Deutsche Telekom, are already pursing this strategy in their home countries. The takeover of Cable & Wireless by Vodafone’s U.K. arm and rumors of an investment involving Virgin Media and Everything Everywhere exemplify this strategy.

Cross-border consolidation and integration:
Cross-border consolidation is commonly practiced by large telecommunications groups, including Deutsche Telekom, France Télécom, and Vodafone. Typically, it is driven by corporate strategic goals, such as the improvement of business results. Capturing synergies can be challenging when consolidating across national borders. Basic IT systems and purchasing can usually be aligned, but many strategic and operational decisions still have to be made at the national level, limiting value realization. That is why operators such as France Télécom and Telefónica are in the process of better aligning their international footprints.
Joint ventures and partnerships: In situations in which mergers are not possible, operators can still realize synergies using network-sharing agreements. Joint ventures and partnerships that enable network sharing can ease an operator’s financial commitment to network build-up while expanding its footprint. In Poland, operators Orange and T-Mobile are sharing a radio access network (RAN) as a means of managing the cost of mobile infrastructure. In the U.K., Orange and T-Mobile’s Everything Everywhere joint venture is a case of two operators reducing their cost base and extending their reach by combining their marketing efforts. The estimated savings from this joint venture should exceed €4 billion (US$5.1 billion).13

Operators can use the Infrastructure Scale Index to help choose among these consolidation strategies. Small niche players, such as city carriers, will continue to exist, but the strategies of telecom incumbents like Deutsche Telekom and long-term strategic investors like Liberty Global, as well as the entry of América Móvil in Europe, clearly support the general trend toward consolidation. A more thorough study of the state of the digital infrastructures in the various countries in which operators do business can enhance their understanding of their competitive positions. It can also help them to better anticipate the impact of their actions in an increasingly competitive environment.
THREE
BENEFITS OF
CONSOLIDATION

As networks become more consolidated, the digital home sector benefits in three ways: economies of scale within the industry, enhanced consumer access and experience, and higher levels of innovation.

Economies of scale:
Economies of scale enlarge the value pool of the industry. Operators can fund network upgrades and expansions. They can offer consumers better pricing, invest in other forms of marketing, and build their subscriber bases. And they can provide more attractive returns to shareholders. In these regards, economies of scale are crucial for sustainable financial performance and growth.

We have not found any evidence for negative effects caused by greater economies of scale, such as systematic price increases. On the contrary, broadband prices in the E.U. have fallen significantly—nearly 30 percent annually between 2002 and 2011—during that market’s consolidation.14 So far, no single player has become large enough through consolidation to abuse its market power in the broader digital home, and inter-infrastructure competition remains a significant factor in all E.U. countries.

Consumer benefits:
Only large-footprint operators will be able to achieve sufficient household coverage to provide the majority of the European population with reliable and affordable broadband connectivity. If players can operate at scale, they can lower the cost per subscriber associated with network build-out, upgrades, and service delivery. This will enable policymakers and companies to work together to extend coverage to more people in ever more remote areas. Consider the German LTE spectrum auction in 2010, in which the Federal Network Agency obliged all bidders to first build out the network in rural areas before they could fully follow their commercial interests or invest in larger agglomerations. By signaling its support for a consolidated market structure, Germany was able to leverage the financial power of large players to develop underserved areas.

Large operators are also much more likely to be able to provide the funding and capabilities needed to upgrade to super-broadband, thereby opening new horizons for commercial and residential broadband customers. In high-scale the Netherlands, for instance, broadband speeds of 100 Mbps were widely available as early as 2005; those speeds are only now becoming the norm in medium-scale Hungary.

Across Europe, declining broadband prices and higher broadband speeds are already clear trends (see Exhibit 8). Ongoing consolidation in cable and mobile and cross-platform competition have not slowed down these trends.

Innovation:
As basic telecommunications offerings become commodities, innovation is rising in importance as a differentiating factor in the digital home sector. Because innovation tends to be a resource-intensive process, larger

Exhibit 8
Consolidation Hand-in-Hand with Prices Decline and Speed Increase

RESULTS OF INTER-INFRASTRUCTURE COMPETITION

<table>
<thead>
<tr>
<th>Broadband Speed Growth, EU-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2 Mbps</td>
</tr>
<tr>
<td>2008</td>
</tr>
<tr>
<td>25%</td>
</tr>
<tr>
<td>62%</td>
</tr>
<tr>
<td>13%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Broadband Price Development, EU-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly price per Mbps</td>
</tr>
<tr>
<td>€80</td>
</tr>
</tbody>
</table>

-28% CAGR

Source: European Commission DG INFSO; AnalysysMason; Booz & Company analysis
Europe’s digital home sector is at a critical juncture. It needs to migrate to the next generation of networks, including LTE, fiber, and cable. Formerly distinct infrastructures are converging. New competitors are entering the sector. Consumers are demanding better products and services at affordable prices.

To succeed in this fast-moving environment, existing players will need to carefully consider how to best position themselves in the competitive landscape. Every digital infrastructure operator will have to make a conscious choice about its way to play. Should it seek to become an internationally integrated company or a local champion? Should it pursue a fixed/mobile convergence strategy or focus on a single infrastructure setup?

No matter what strategy an operator decides to adopt, it will have to seek consolidation and scale. Our analysis of infrastructure scale shows that companies and countries with higher scale index scores are more advanced with respect to broadband penetration and speed. More consolidated operators can better invest in the building of infrastructure and the marketing of services. Larger players operating at scale also foster healthy cross-infrastructure competition.

In these respects, the development of the digital home sector in Europe is likely to echo the development of this sector in more advanced markets, such as the U.S. and several countries in Asia. These markets are typified by strong competition among a number of large players that have attained sufficient scale to sustain and advance themselves. There is also a continuing drive for consolidation, as illustrated by the attempted merger of T-Mobile and AT&T in the U.S. in 2011, which would have resulted in the creation of the largest mobile phone company in the country if the antitrust division of the Department of Justice had not blocked it.

For these reasons, it is critical that European operators proactively determine the overall structure of the digital home sector and position their companies within it. Further, each company will have to consider

Supporting existing players as they seek to innovate is becoming ever more important as new players, such as Facebook, Hulu, Netflix, and Skype enter the competitive landscape of the digital home sector. Communication infrastructure players are not just facing inter-and intra-platform competition on a national level; they are now confronting online players with global scale that are competing in the same service markets. The innovation power and infrastructure-independent services of these new players will further exacerbate the competition and could seriously threaten the quality of Europe’s digital infrastructure.
where and how to consolidate in its quest for scale: inter-infrastructure or intra-infrastructure, in-country or cross-border.

The advantages of consolidation are clear, but it will take savvy regulation to avoid any potential downsides. Regulators are already starting to adjust to the emerging landscape in the digital home sector. In the U.K., for instance, the Competition Commission recently reversed its initial stance that Sky Movies holds an unfair advantage in the pay TV movie space. Given the emergence of over-the-top services such as Lovefilm and Netflix, competition in the pay TV movie space is not prevented, restricted, or distorted according to the new ruling. Against this background, European policymakers and regulators need to develop a holistic view of the communication infrastructures in their respective countries. It may also become clear that the number of operators is not necessarily indicative of the level of competition in a dynamic marketplace, especially when scale is an essential defense against new competitors that are infrastructure-independent and have few financial limitations.

This suggests that the commission is very likely to continue fostering cross-infrastructure and service competition in its approach to regulating the U.K.’s digital home infrastructure.

The digital home sector is undergoing substantial change, and this change will affect industries, consumers, and countries as a whole. Now is the time to proactively plan for a market structure that enables the emergence of a number of large-scale players that can compete effectively. It is the only way that Europe will be able to unlock and capture the full potential of digitization.
About the Authors

Dr. Roman Friedrich is a partner with Booz & Company based in Düsseldorf and Stockholm. He leads the firm’s global communications, media, and technology (CMT) practice, and specializes in corporate strategic transformation and digitization.

Thomas Künstner is a partner with Booz & Company based in Düsseldorf. He leads the firm’s digital media practice in Europe, and assists leading telecommunications and media companies as they seek to define winning strategies for the digital future.

Dr. Hannes Gmelin is a principal with Booz & Company based in Berlin. Within the firm’s CMT practice, his focus is on market development and convergence in the digital sector and its corporate implications.
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