

# China's New Telecommunications Landscape: Who Will Win?

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With the restructuring of China's telecommunications industry, some analysts are betting that China Mobile will dominate. We take a different position: Dominance by any single player is not a forgone conclusion. With the right business designs, focus on the right customers, meticulous execution of strategy, and careful attention to the rewards and challenges that will come with being an integrated (and possibly converged) operator, other players will also have the opportunity to succeed.

In our view, the ability to achieve profitable and sustainable growth—not simply capture the biggest revenues or customer base—will define the ultimate winners.

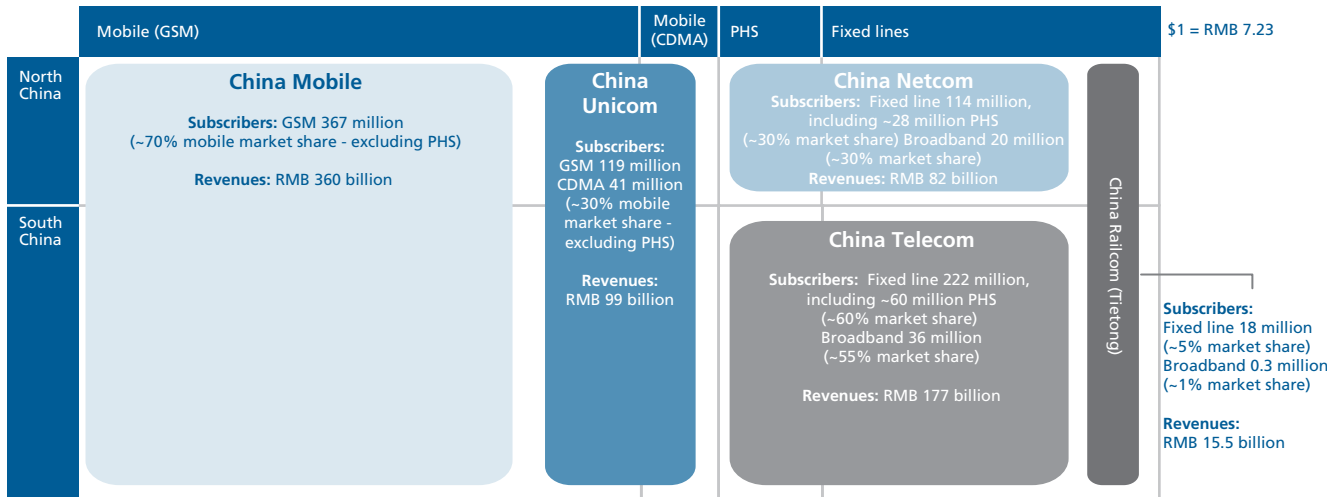
## The Government's Big Decision

In May, China's Ministry of Industry and Information, National Development and Reform Commission, and Ministry of Finance jointly announced the long-awaited restructuring of the country's telecommunications industry. Six telecommunications operators will be merged into

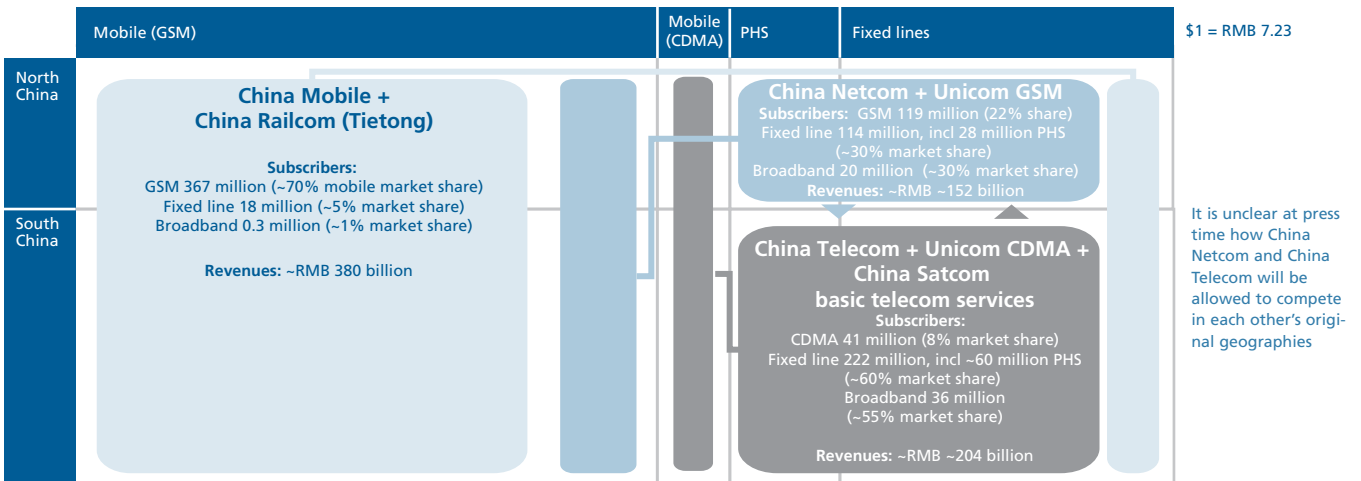
three. Without giving a timetable, the government plans to issue 3G licenses after the mergers are completed, to allow all three operators to run fixed-line and mobile services.

Each of the three new telecom giants will have hundreds of millions of customers (see Exhibits 1 and 2):

Exhibit 1 Players in China's telecom industry, before restructuring...



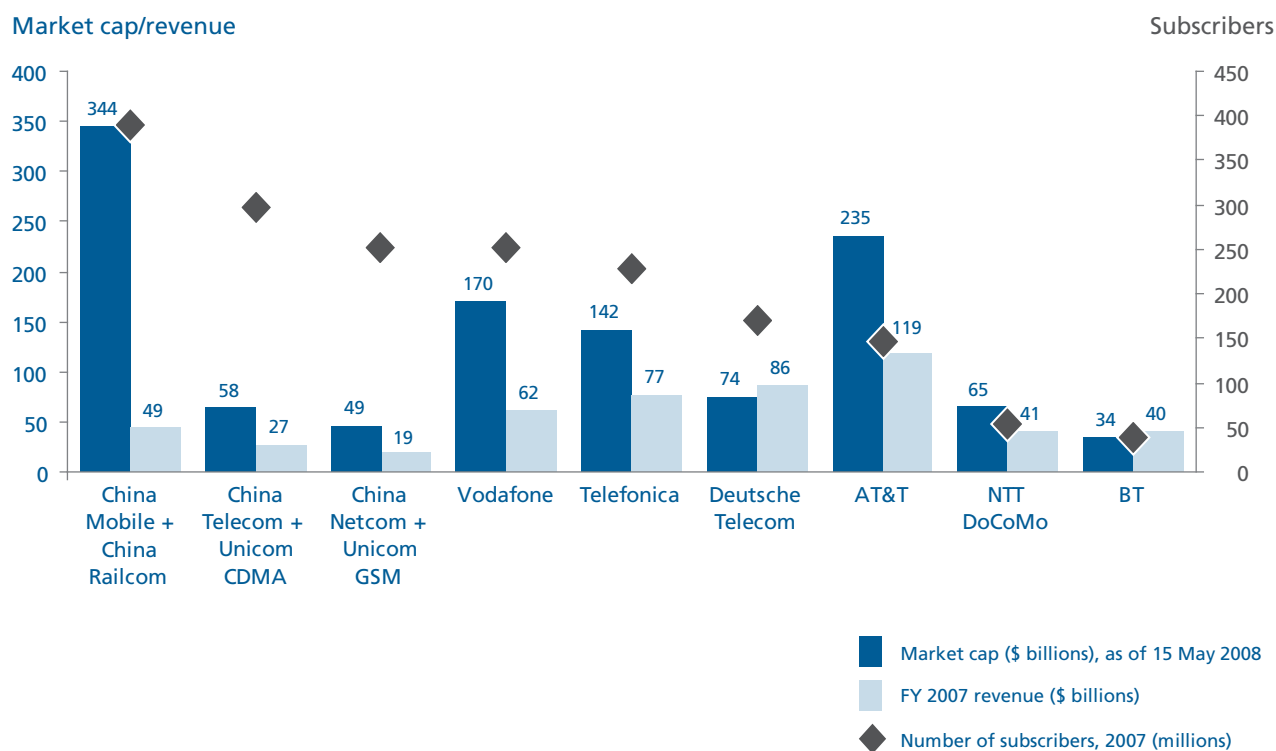
## ...After restructuring



Source: Oliver Wyman analysis.

Note: China Satcom's revenue of basic telecom services is not included in the post-restructuring revenue of China Telecom.

## Exhibit 2 Comparison of operators



Source: Oliver Wyman analysis.

- **China Mobile Communications Corp.—China Mobile**—the country’s largest mobile operator, will merge with the small fixed-line operator, China Tietong Telecommunications Corp.
- **China Telecommunications Corp.—China Telecom**—the nation’s largest fixed-line operator, will acquire a CDMA-based mobile network from China United Telecommunications Corp. (China Unicom), the smaller of the country’s two mobile operators, and take up the basic telecommunications services of China Satellite Communications Corp.
- The remainder of China Unicom (a network based on the GSM standard) will merge with China Network Communications Group—**China Netcom**—the country’s second-ranked fixed-line operator.

The government’s decision aims to optimize the allocation of fixed and mobile resources among operators and create a level playing field. By awarding mobile licenses to the fixed incumbents, the government may help strengthen these companies, thus increasing the value of their state-

owned assets. The restructuring could allow the three reconfigured competitors to take advantage of the lessons learned by telecom firms in other major markets around the world that already restructured, thereby improving their management expertise and transforming their business designs and operating models.

In addition, the government hopes to encourage autonomous innovation, which means promoting China’s homegrown 3G technology, TD-SCDMA, and using it as a springboard to enhance China’s competitiveness and influence in the global telecommunications arena.

Regardless of the reasons behind the restructuring, many experts believe that the post-restructuring scenario will favor China Mobile disproportionately. Mobile telephony still has significant growth potential in China, because mobile penetration stood at just over 40% at the end of 2007—half the level of many developed markets. Oliver Wyman’s recent *State of the Industry* report finds that mobile communications in emerging markets is the largest value-creation sector in the worldwide communications, media, and technology (CMT) industry.

Moreover, other evidence supports China Mobile being in the best position to continue dominating this space after the restructuring. For example, the company will possess the largest mobile market, the most extensive business and operations expertise, and the strongest brand and customer base. Mobile composes more than 60% of the total telecom market in China, a share that is still growing. Many observers also maintain that China Mobile is years ahead of its competitors in its readiness to launch mobile Internet services, which is a major growth opportunity. Owing to its integration with the much smaller Tietong, the company also may face fewer post-merger distractions. In addition, it boasts abundant financial resources with which to invest in new growth areas. Although fresh subscribers often provide less value as penetration rates increase, China Mobile can serve them with lower incremental costs, thanks to its massive scale and infrastructure.

Of course, government actions will influence each company's fate in this highly regulated sector. To achieve a level playing field, for instance, the government plans to implement "asymmetric regulatory tools," which could include imposing a market-share cap to prevent any player from becoming a *de facto* monopoly; implementing asymmetric mobile number portability; mandating preferential tariff treatment; or opening a 2G network.

Despite these facts, we maintain that a telecom landscape dominated by China Mobile is not a forgone conclusion. The remainder of this white paper addresses the key strategic questions:

- How will China's telecom industry evolve over the next three to five years?
- What are the biggest opportunities for profitable growth for the three new operators?
- What business design would best help them capture those opportunities?
- How might they execute that business design successfully?
- What risks can they expect to encounter, and how can they mitigate those risks?

## Mobile Is the Wellspring of Growth

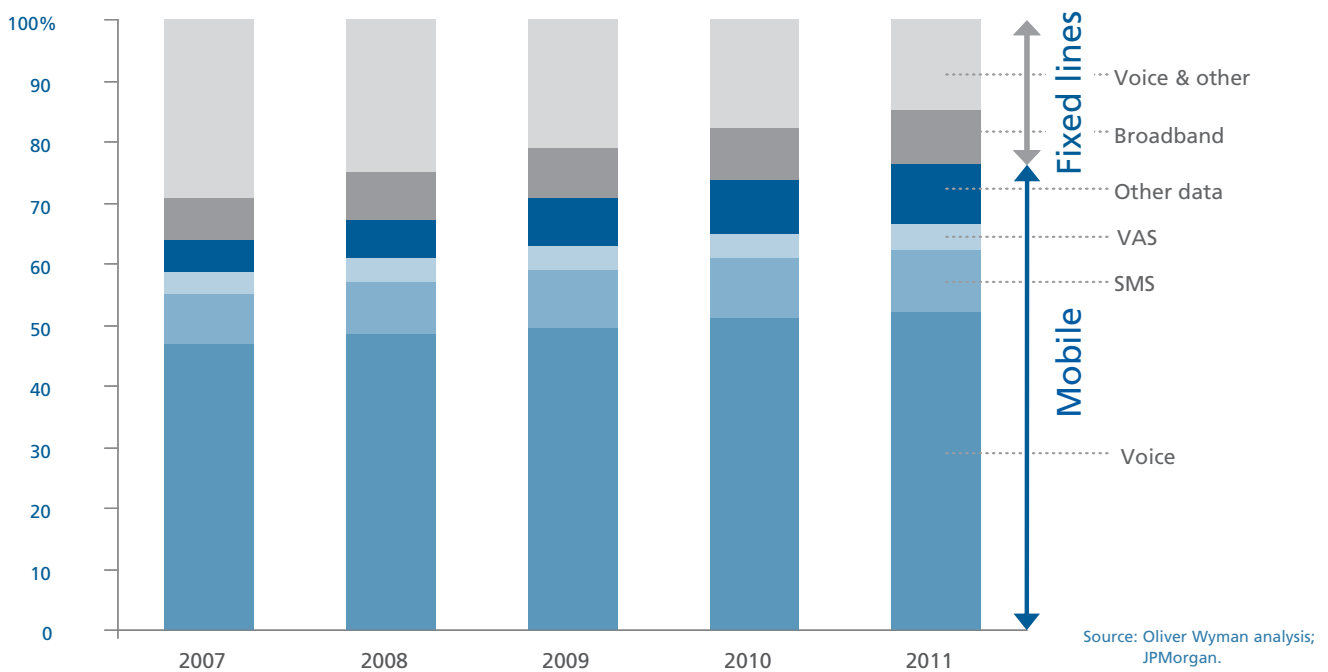
The Chinese telecom market is poised to enter a tremendous growth cycle in the next several years. Consensus market forecasts predict that by 2011, as many as 500 million new mobile subscribers will bring mobile penetration to over 70% of China's population. In addition, as many as 80 million new broadband customers could increase broadband penetration to 30% of Chinese households. Meanwhile, the consensus predicts that the fixed-line subscriber base will shrink by around 10% of households in the next four years. This rate of shrinkage is substantially slower than that in other highly penetrated markets, in part because of modest growth of fixed-line access in some rural areas.

Nevertheless, we expect that value in this industry will continue to migrate to mobile services in the next three to five years, with mobile likely contributing over 75% of the industry's revenues and earnings in 2011. Mobile revenues will continue to rise thanks to higher penetration, with voice and SMS remaining the dominant contributors. Moreover, revenues and profits from mobile TV, mobile broadband, mobile games, and m-commerce will constitute a larger percentage of total spending by consumers and may become critical means of differentiation for operators.

Developments in the fixed-line realm will further improve mobile's promise (see Exhibit 3). Value-added services (such as ring tones) are the current growth engines for fixed-line operators, driving revenue growth of 35-40%. But growth will probably taper off as the market saturates and mobile substitution eats into the subscriber base. Fixed broadband has compensated for losses in fixed voice but has not driven overall growth. If the pattern seen in other penetrated markets (think acceleration of fixed-voice decline) occurs, fixed-line players in China will come under even greater pressure to replace this revenue and this portion of their customer base.

Finally, consensus anticipates that Internet Protocol Television (IPTV) could become a growth platform in China. However, China's State Administration of Radio, Film, and Television has not merged with the Ministry of Information Industry into the newly created Minister of Industry and Information. For

Exhibit 3 Telecom industry revenues in China



the near term, ambiguity about the new regulatory body could constrain IPTV’s growth.

**Dynamics of the New Markets**

How will the larger market dynamics play out in China’s restructured telecom industry? We foresee a competitive landscape containing three large local players. Owing to the ambiguous regulatory environment, we see no game-changing new entrant (such as Google, mobile virtual network operators, foreign operators, or cable companies) encroaching on the scene. Cable companies will remain highly fragmented, still governed by national and provincial authorities. After the dust has settled from the restructuring, the government may seek to facilitate integration of the telecom and media industries, but not in the next few years.

On the other hand, Internet portals, such as Google, could continue trying to gain more control over Chinese operators’ customers as the network becomes more open (that is, as consumers use it to access a broader array of services from a wider range of providers) and as new devices, such as the iPhone, gain popularity. Other players along the value chain (for example, Tencent, TOM Group, and Sina) will likely thrive in adjacent sectors such as social networking, location-based services, or mobile payments. The three operators, to capture

their fair share of customer value and maintain strategic control over consumers, may need to forge savvy partnerships with these companies or enter the Internet space. For example, China Mobile recently established an Internet business division, signaling confidence in the growth potential of this sector.

Customers in China, for their part, may prefer fixed-mobile bundled offers, if such offers come at the right price. To take advantage of this opportunity profitably, carriers will need to weigh the volume and price tradeoffs. Even in most developed markets, demand for true convergence offers (service delivered across multiple access technologies and devices) has been weak. Price has driven customers’ purchase decisions to date, and we expect this pattern to play out in China as well.

We also anticipate further segmentation and polarization of customer preferences. At the high end, early adopters will demand bundled offers and a rich customer experience (for example, high-definition video and the inclusion of roaming minutes in the basic plan). And they will be willing to pay a premium. At the low end (for example, in rural regions), consumers will look for basic services at low prices on last-generation high-coverage networks.

As in most other markets, purchase occasions for fixed and mobile offers are separate in China. Fixed is usually a household-based decision (often instigated by a move) that, to date, has entailed minimal, if any, options in voice. Mobile is a personal decision, often driven by a desire for a new handset or by promotions. Hunger for bandwidth will intensify, fueled by increasing consumption of data and video content through broadband (fixed or mobile) access. Finally, while Chinese consumers show interest in offerings such as one-stop-shopping, integrated billing, and multi-domain devices, they are not willing to pay extra for them.

The lesson for China's three new operators: To score short-term wins in the new environment, companies will need to build business designs that quickly reap the benefits of combining the mobile and fixed-line businesses. These benefits include cost savings and improvements in customer acquisition and retention, with an emphasis on increasing share of wallet, not necessarily on more closely aligning cross-domain customer relationships. Given the size of the mobile opportunity alone, operators will likely compete intensely to protect (or gain) profit share and attract the most profitable new customers.

In the medium term, companies can profit from the continued growth in the number of mobile and broadband users by deepening cross-domain relationships. For example, they can encourage the purchase of multiple products with value bundles, or reward regular high spending with loyalty benefits and create a more seamless experience for customers. In the long term, they can further secure their success by creating all-encompassing convergence offers, such as multi-platform access to the same content and services for multi-mode devices. This may call for strategic partnering with or acquisition of companies in other parts of the telecom value chain, such as content developers and aggregators.

### **What It Takes to Thrive**

China's restructuring of the telecom industry is unprecedented in the scope and scale of change involved. No other nation's or region's entire telecom sector has been restructured in a single sweeping initiative. To thrive (never mind survive) in this reshaped landscape, the new operators will have to address several challenges in addition to convergence:

- Post-M&A integration
- Issuance of 3G licenses
- Building mobile capabilities
- Geographic expansion into rural areas and (for the fixed-line incumbents) expansion north and south
- Extreme market growth

We anticipate seeing a significant land grab in the first year following restructuring, as each player moves to secure the best customers in each domain and across domains. The race to deploy 3G infrastructure and to sign up leading-edge users will further intensify the pressure on each new company's early operations.

Each player has both strengths and challenges, as well as the opportunity to create innovative business designs and operating models that address attractive customers' needs in fresh ways. Keys to success fall into several categories, shown in Exhibit 4 on the next page.

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In the new telecom landscape that's about to take shape in China, large local operators will encounter a number of enticing opportunities, including a rapidly expanding mobile market. At the same time, they will face fresh challenges, such as the need to lead organizational change in a convergent world and to protect their market share from rivals. Competition will stiffen as each seeks to stake a claim in the mobile market.

To capitalize on the best opportunities and avoid falling prey to the worst risks, Chinese telecom companies can leverage lessons learned by their counterparts in other countries that have successfully navigated a similar transformation. Though much remains uncertain, including what actions the Chinese government may take in the coming years, we believe that telecom operators in China stand an excellent chance of not only surviving but also thriving in their new landscape. ❖

## Exhibit 4 Keys to success for Chinese operators

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### Category

### Points of focus

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#### Organizational structures and talent management

- Manage the post-M&A process carefully, including allocating roles and responsibilities to people from different legacy organizations, reinventing processes, blending different company cultures, and aligning governance structures and policies.
  - Understand that the mobile business differs from the fixed business. Acquire and train staff at all levels in needed skills. For example, in the short run, this may mean training front-line salespeople to sell both mobile and fixed offers.
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#### Customers

- Integrate customer bases inherited from legacy organizations, including mobile, personal handset, fixed-line, broadband, residential, and enterprise customers.
  - Gain a single view of which products are bought by which customer groups across multiple service domains.
  - Beef up customer-analytics and database marketing capabilities. Use analytics to increase share of wallet and develop bundled offerings that increase penetration and stickiness without requiring new development efforts.
  - Understand customer profitability, and target efforts at the most profitable customers. For example, acquiring PHS subscribers and migrating them to mobile may be inexpensive, but these are mainly low-value customers.
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#### Technology and networks

- Quickly build out a mobile network with high-quality coverage (for example, in rural areas) to tap into the mobile opportunity.
  - Consider network sharing (at least of sites and possibly of passive infrastructure or active networks) for new (3G) deployment. Sharing can accelerate rollout, mitigate rollout risk, and lower costs.
  - Consider network outsourcing to decrease costs, step up acquisition of mobile-network operations and maintenance skills, and free executives' attention for more strategic matters (such as convergence).
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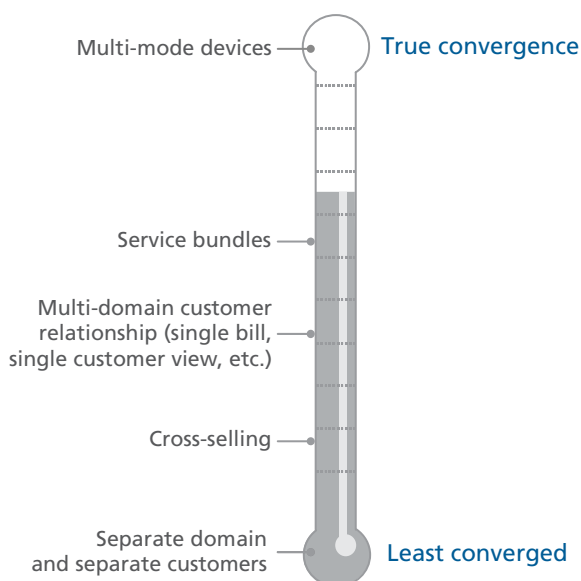
#### Convergence

- Formulate a strategy to manage all four dimensions of convergence: organization, products/services, front-end processes, and back-end processes.
  - Develop converged offers that deliver cost and efficiency benefits in the short term.
  - Plan, but do not rush, to move toward the holy grail: truly converged offers.
  - Test converged offers' impact on market share and profitability with interactive scenario-playing.
  - Launch high-impact marketing campaigns and loyalty programs.
  - Regularly verify customer preferences for converged offers, and design offers around the company's existing strengths (for example, broadband).
  - Carefully weigh the implications of participating in content for winning in the convergent world. For example, explore how the company can use content to sell services across platforms.
  - Explore ways to work with other value-chain players (device manufacturers, content providers, and aggregators) to assemble attractive converged offerings.
  - Assess global best practices and lessons learned to ease transition to convergence.
  - Consider how convergence can help mitigate risks such as attacks on market share or customer base.
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# Convergence: What, Why, and How?

While there is little doubt that technologies, offers, and customer needs are converging, the term “convergence” means different things to different people. Moreover, there are different degrees of convergence (see Exhibit 5).

Exhibit 5 **Degrees of convergence**



“True convergence” provides a unique customer experience across the telecom value chain. It requires three things: multi-platform devices that have features as good as or better than those offered by the best single-platform devices; content (such as news, sports information, or networking communities) that customers want to receive on several different platforms; applications that give customers access across the platforms.

Few, if any, successful examples of true convergence exist today. One recent offer by France Telecom, Unik, may have come closest. Unik is a converged handset that works on both mobile and Wi-Fi networks. After a heavy marketing campaign to promote it, only 600,000 customers had subscribed to the offer by the end of the first year. In Germany, Deutsche Telekom launched a similar offer, but it, too, has fallen short of anticipated market acceptance. Pricing and device adjustments will likely be necessary to accelerate takeup of these offers.

The most successful converged offers to date have been bundled or “triple-play” offers selling multiple fixed-line-based products (for instance, voice, broadband access, and video) at a discount. Telefónica’s TRIO (voice, broadband, and IPTV under the Imagenio brand) and Neuf’s Twin are apt examples. Adding mobile to the mix (think AT&T’s Quad Pack, which includes fixed telephony, TV, fixed broadband, and mobile telephony) has been a harder sell. Given the prevalence of single-domain operators in China and the widespread acceptance that China’s mobile space alone offers staggering potential, this difficulty of fixed-mobile offer development may arise in China as well.

Yet the lack of wide acceptance of cutting-edge products does not necessarily mean that convergence is not worth pursuing. A converged operating model contains many dimensions, not just the offer itself (see Exhibit 6), and companies employing such a model are garnering some important benefits.

## Why Convergence?

A converged operating model can yield significant cost savings as well as deeper and stickier customer relationships, because customers spend more across more domains and stay loyal. It can also enhance organizational efficiency and decision-making. Finally, it can enable a company to put in place the infrastructure required to offer truly differentiated products and services in line with customer demand.

Most operators are moving down the convergence path in some form. Given the momentum of the mobile sector worldwide and the increasing substitution by mobile for pure fixed and fixed/mobile offerings, management teams and capital markets alike have made convergence a priority. For some companies, the initial objectives behind converging have been to achieve cost savings and integrate technologies to provide a platform for future offers; other companies have been more focused on bundling and packaging.

Pure-mobile operators have demonstrated less urgency overall (even downright reluctance) about the move toward convergence. Some view conver-







