Enabling the OTT revolution

How telecom operators can stake their claim
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This report was originally published by Booz & Company in 2013.

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As over-the-top (OTT) companies like Netflix, Skype, and Google encroach on the telecom industry, operators need to find ways to counter the threat. That means defending their territory against these new players or finding ways to work with them. Doing so requires that telecom companies put to use their distinct assets and capabilities: their ubiquitous fixed and wireless networks, their millions of customers, and the fully integrated customer data, logistics, and other services they can offer.

In our view, operators can employ three possible strategies. The first involves developing advanced connectivity services in order to defend their core networking and infrastructure business. The second requires that they create new services such as data analytics and billing, which they can sell to businesses in different verticals. The third, and the toughest of all, is to develop new apps and other services and offer them directly to consumers. None of these options are exclusive — operators need to consider and experiment with all of them. In all cases, the key is not for operators to fight against the OTT players but rather to find and develop the profit pools where their particular capabilities offer the greatest chances of success.
The OTT battleground

The explosion of e-commerce, advertising, and digital media content that now travels over the networks of telecom players has created significant new value, but telecom companies themselves have been unable to benefit. Instead, that value has been largely captured by digital newcomers that have built successful business franchises “over the top” of the telecom operators’ networks. Think Skype, Google, Facebook, Amazon, Netflix, and PayPal, among many others.

Can operators turn this situation around? So far, their record is poor. Not one of them has been able to create an over-the-top (OTT) business that moves the needle on its top and bottom lines. A few companies, including Orange, Telefónica, and AT&T, have managed to build content and digital media franchises, yet these are still dwarfed by their core telecom businesses. And operators have been even less successful at capturing value in new services such as social media and apps.

At the same time, lean and nimble communication-over-IP (CoIP) players such as Skype are leveraging their “freemium” business models to capture the operators’ core voice and messaging revenue. Adding insult to injury, operators have had to make considerable investments in upgrading their networks to handle the ever-increasing flood of data created by the very OTT players that are cannibalizing their revenue. For instance, Netflix competes with operators’ IPTV/cable TV services, and is estimated to consume as much as a third of total network bandwidth in the U.S. during peak times.

Rather than looking for a solution within the traditional telecom business model and value chain, operators must ask themselves how they can capture a larger share of the value pools now being opened up through new technologies and business models in a variety of industry verticals. In doing so, they need to think carefully about the role they can best play in this fast-changing space.
If telecom operators are to develop a successful strategic response to the rise of OTT competitors, they must first take stock of the considerable assets and capabilities they already possess, and determine how they can leverage them in order to compete against, or work with, the OTT players. These strengths fall into two main categories.

First, operators excel at providing ubiquitous connectivity over both fixed and wireless networks — a capability that has cost them huge sums of money to develop, and that no one else possesses — and ongoing upgrades to their next-generation networks will give them the ability to provide a variety of advanced services. These include upgraded traffic management and tiered quality of service, “big data” and customer analytics, advanced security and location-based services, and sophisticated cloud computing.

Second, they maintain a dense, fully integrated, and scaled-up distribution footprint. This includes their strong retail network, with the ability to reach millions of users; supply chain and logistics services; an established billing and CRM relationship with their customers; and the ability to collect huge amounts of demographic, behavioral, and usage information about their customers. These assets allow operators to offer selected OTT companies access to their distribution footprint and to the customer relationships they have already established.

At the same time, however, operators are typically siloed organizations, structured to focus on subscriber and revenue growth within a specific product or channel. Their inherent focus on short-term profitability, coupled with the conflicting priorities across the various business silos, makes it difficult to achieve consensus on a consistent strategy.

This is in distinct contrast to how OTT players operate. Because they don’t have to worry about maintaining and investing further in basic technology infrastructure, OTT companies can concentrate on quickly building out and bringing to market highly innovative products and services through rapid prototyping, a “good enough” perspective, and frequent new releases.
Amazon is a case in point. Having piggybacked on telecom networks around the world in building up its retail business, it has since turned to digital media delivery, including e-books and the streaming of music and videos, and more recently to cloud computing, all enabled by the telecom networks. This also gives Amazon the luxury of spending considerable portions of its revenues on continuing innovation — not an area of strength for the large operators — to keep developing new ways to take advantage of faster and more sophisticated next-generation networks.

Despite the OTT players' advantages in focus and innovation, the assets and capabilities that operators possess should enable them to take part — to some degree — at every level of the OTT opportunity. However, their success will depend in large part on their ability to shore up their current business and then focus their strengths on the pools of value where they have a real chance of gaining ground. Where might that lead them, strategically? We think there are three principal options (see Exhibit 1, next page).

**Protect the core**

The first strategic option focuses on offering advanced networking services to consumers and companies in every industry vertical in which OTT players are becoming active. With voice and messaging revenue stagnating or shrinking, and revenue growth from data merely compensating for their core revenue losses, operators must look for new ways to grow their traditional network offerings, if only incrementally. This involves a continued focus on connectivity-related services, with value-based pricing approaches and bundled offers designed to drive incremental average revenue per user and customer acquisition. Operators can also consider differentiating themselves from the OTT companies by implementing new offerings for high-end segments, such as rich communication services — a combination of advanced IP-based voice, messaging, and video — and high-definition voice services.

This is an essentially defensive strategy, yet every operator must pursue it in some form, even if it is unlikely to deliver meaningful long-term growth.

**Enable other businesses**

In the second option, operators expand their technological expertise and the products and services they offer to businesses. This strategy requires operators to build intelligent and open networks that let them deliver advanced network services such as tiered quality of service, security, and identity services. It could also encompass platforms and open programming interfaces to make data analytics, payments, and

With voice and messaging revenue stagnating or shrinking, operators must grow their traditional network offerings.


**Exhibit 1**

Telecom operators have a range of options in how they compete — and collaborate — with OTT players in industry verticals.

<table>
<thead>
<tr>
<th>End-user services</th>
<th>Platform and enabler services</th>
<th>Network and infrastructure services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content/service aggregation, curation, and personalization</td>
<td>Data analytics</td>
<td>Storage/computing housing and hosting</td>
</tr>
<tr>
<td>Point apps</td>
<td>Customer care and CRM</td>
<td>Data transport</td>
</tr>
<tr>
<td>Point solutions</td>
<td>Payments and billing</td>
<td>Messaging connectivity</td>
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<td></td>
<td>Value-added networking and infrastructure (e.g., security, identity, quality of service)</td>
<td>Voice connectivity</td>
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| | Communication (audio, messaging, data) | | Entertainment (music, video, gaming) |
| | Travel and leisure | Advertising and information services | Retail and commerce |
| | | Utilities | Financial services |
| | Automotive, telematics, and logistics | Healthcare and wellness |

- **Avoid**
- **Opportunistic/distribution only**
- **Only to seed initial experience creation**

Source: Strategy& analysis
billing accessible to third parties. Services such as customer analytics could be sold on a wholesale basis to companies in any industry. Or they could be tailored for specific verticals — for example, a highly secure and reliable connectivity service bundled with a payment engine for financial services or retail.

One promising emerging play involves big data. Telecom operators possess large amounts of customer data — not just demographic, but also usage, online behavior, location, and the like. Operators could package anonymous versions of this data and sell it to businesses in retail, travel, and other consumer-facing industries; these businesses, in turn, could use the data to refine their customer understanding and improve their marketing efforts through behavioral targeting, personalized marketing, targeted location-based ads, and other services. Operators could also use this data to offer “single-sign-on” services to their own retail customers, enabling them to access services from OTT players from within the security of the operator’s ecosystem.

Offering enabling services to companies in less complex industries such as entertainment and publishing will likely become a staple of most large operators’ business models. It’s in the more complex industries that operators have an opportunity to distinguish themselves. Verizon Wireless, for example, offers a service to retail, media, and marketing companies that provides detailed data on the nature and real-time location of specific audiences — where they are and what they do, online and offline. The service delivers not just predictive analytics on how consumers behave but metrics on the success of specific marketing campaigns.

**Create new consumer experiences**

The third option is to create entirely new experiences by developing apps and services and offering them directly to consumers — which has proven to be the most challenging model of all for operators, and it will likely remain so. The large software and Internet players, such as Apple, Google, Facebook, Amazon, and Microsoft, have already captured large segments of this market, including music, search, social networking, and the like, and they attract huge volumes of traffic to their sites. Meanwhile, other OTT players have already made significant inroads into the telecom operators’ own territory — Skype in international voice calls, for example, and WhatsApp in text messaging.
Can operators capture portions of the experience creator space? Their efforts so far are not encouraging. Virtually no operator has yet managed to build a truly successful app store, Web portal, or over-the-top service comparable to that of a global OTT household name, though many have tried. Furthermore, creating digital content as a viable consumer proposition has proven elusive to date. The difficulty lies in operators’ inability to innovate in the digital arena — operators simply don’t move quickly enough, and they lack the culture of software and media innovation needed to attract the talent that can design such services.

That said, some adventurous operators are creating platforms that offer innovative customer experiences. In France, for example, Orange has built a successful business working with the healthcare industry to help connect the elderly with their insurance companies, offering remote medical consultation connectivity and services for integrating hospital activities, such as patient monitoring and online medical records. More than half of the independent healthcare professionals in France now send treatment forms through Orange’s systems, which connect more than 12 million customers to their insurance companies.

Another possibility for telecom operators may be to offer an app curation service directly to customers, helping them manage the hundreds of thousands of available apps through dynamic recommendations based on usage data captured directly from the large players’ app stores. Operators might also piggyback point apps on top of the platforms they build for specific industries or customers. (Point apps are those designed to perform a discrete function within an industry, as opposed to those offered to the public at large.) Providing advanced connectivity services for retailers, for example, may give telecom players the opportunity to develop apps enabling consumers to make use of those services directly.
**Success factors**

None of these options is exclusive — it is perfectly feasible for an operator to start out as a network and infrastructure player, and then move up to business enabler and even experience provider as it develops the necessary capabilities. The key is to choose the appropriate strategy given your current capabilities, your mix of products and services, and the markets you serve — shutting down or cutting back in areas that do not align with that strategy — and to make deliberate choices regarding which market opportunities to pursue in the future, and the capabilities you’ll need to invest in to pursue them.

Operators must also be completely clear on how exactly they will be able to monetize their offerings. This requires thinking carefully about who ultimately will be paying for a particular service. Is the service a straightforward B2B play, in which the operator is selling a specific service such as a billing and payments system to a particular company? Or does payment for a service depend on that company’s ability to sell it on to its own customers, as might be the case with a usage-based quality-of-service play?

Finally, operators can no longer rely on their internal capabilities to launch services outside their core expertise. The business enabler play will require that they work together with a variety of strategic partners in their chosen verticals. These partners must be directly involved in the development of appropriate products and services — rapidly creating product prototypes, assessing different business models, and helping acquire key early customers. Operators looking to participate in the healthcare sector, for example, will likely need to bring together an ecosystem of providers, payors, pharmaceutical companies, and even the government in order to ensure success.
The threat to telecom operators posed by OTT players is real, and operators need to consider how they plan to respond. In the long run, however, the two camps must understand that there’s a growing pool of value to be shared and that they need each other. Operators control the networks that enable OTT businesses, and as their core business matures and markets reach saturation, they need new revenue streams to keep funding the network expansion that the OTT companies need to thrive. And in launching the digital businesses of tomorrow, OTT players will need fast, intelligent networks that can form the basis for a wide range of new services and provide their customers with the best possible experience.

That’s why operators looking beyond the desire to protect their core business are best advised to consider the business enabler play, which depends for its success on creating value for OTT players to the benefit of all. Despite the challenges the operators face, they cannot afford to let the situation deteriorate into a win-or-lose proposition. To capture their share of the new value being created through digitization, operators need to adjust their world view, consider their position and preferred way to play in the OTT value chain, and develop the capabilities needed to win. And they need to move now.
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This report was originally published by Booz & Company in 2013.