

IPTV Monitor—Issue 2

Produced by Accenture and the
Economist Intelligence Unit



High performance. Delivered.

• Consulting • Technology • Outsourcing

IPTV Monitor—Issue 2

The IPTV Monitor, produced by Accenture and the Economist Intelligence Unit every three months, summarises major trends at work in the global IPTV industry and provides selected examples from around the world to illustrate them.

More operators are moving to commercial IPTV launches, but adoption is developing slowly. Typically, incumbents have the largest share of IPTV customers. Uptake is fastest in those markets where competition from operators has resulted in aggressive marketing and pricing.

- Hong Kong's PCCW leads globally on IPTV deployment, with over 550,000 subscribers, and Taiwan's Chunghwa boasts 120,000. Both operate in small, densely populated islands, however, limiting their usefulness as gauges for how IPTV scales to the larger markets that telcos aim to serve.
- Telefonica's subscription rate of over 200,000 is encouraging, as are France Telecom's 300,000 subscribers to TV over DSL. But an acceleration of growth in large markets such as the US, China, Germany and the UK is awaited.
- The commercial launch of IPTV services from Neuf and Free helped prod France Telecom to lower triple-play prices, develop services and market heavily, turning it into a European IPTV leader.
- UK market growth should benefit from the competition that BT, which plans an IPTV launch in September, will face from digital broadcasters BBC and ITV, as well as from satellite provider BSkyB and Italian-owned ISP Tiscali.

Owning networks and supplying set-top boxes are not pre-requisites for delivering television and films over IP networks. Competition to telcos and ISPs is stiffening as large software, hardware and broadcasting companies make video content available online.

- Amazon.com's service. Amazon Unbox, allows customers to rent films from US\$1.99 each, once they have downloaded the Unbox player onto their PC.
- iPod and PC maker Apple—whose CEO, Steve Jobs, is on the board of Disney—is also entering the market for online film sales.
- Television broadcasters are increasingly offering content for download. These include ABC network, owned by Disney, CBS Corp and MTV in the US, as well as UK broadcasters, the BBC and ITV.
- Individuals are creating and sharing their own content through sites such as YouTube and Google video, a free service that lets users watch and buy videos and films submitted by both companies and private individuals. Google is also understood to be developing software to better corner advertising revenue.

IPTV Monitor—Issue 2

Large equipment manufacturers are betting on growth and buying smaller IPTV technology companies accordingly. Accompanying market consolidation are advances in technology performance, which together promise cheaper, better equipment.

- Motorola recently moved to acquire a producer of video-on-demand servers, Broadbus; in February 2006 Cisco completed one of its biggest ever acquisitions when it paid US\$6.9 billion for Scientific Atlanta, a leading set-top box manufacturer.
- Meanwhile MPEG-4—which, crucially for operators, demands less bandwidth to deliver video than MPEG-2—is increasingly available in IPTV equipment; France Telecom recently demonstrated a live, high-definition TV broadcast using MPEG-4 over an ADSL2+ network.

Regulation remains an irritant, but it can on occasions prove to be a boon — at least for competitive operators.

- The European Commission said it wants to make IPTV services subject to the same rules regarding advertising and the access of minors to content as terrestrial TV, under its Television Without Frontiers directive. The move underscores how regulators in Europe, Korea, Australia and Japan are struggling with IPTV, which breaks with traditional time- and location-based programming.
- However, in France tightly regulated wholesale access rates and the availability of naked DSL have spurred intense triple-play competition.

Coming to terms with content management

Written in co-operation with the Economist Intelligence Unit

Key points:

- Content management poses enormous difficulties for network operators. Content providers will be anything but submissive partners, but incumbent telcos have assets of their own to leverage; these include large customer bases, secure networks and strong national brands.
- Distribution and revenue-sharing deals are operators' preferred means of sourcing content. Only a few will seek to acquire or develop in-house content development capacity.

Telecom Italia's former chairman, Marco Tronchetti Provera, likes to point out that the shares of media companies trade at many multiples to those of telcos. This alone sounds like a compelling reason for telcos to take on the guise of a media company and start using IPTV to offer compelling content to viewers. Since telcos say they are not about to produce content themselves, they need to find it elsewhere.

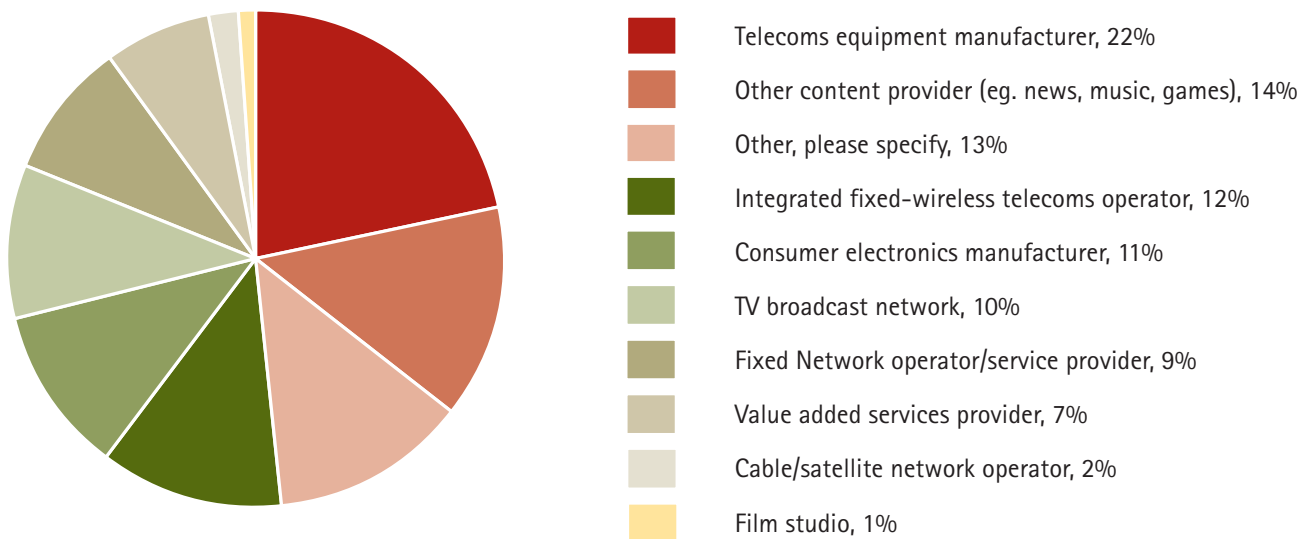
Yet sourcing and managing content effectively are the toughest of numerous challenges facing telcos in establishing an IPTV business. Of 302 executives of telecoms, broadcasting and media firms surveyed recently by Accenture and the Economist Intelligence Unit, nearly half (and a majority of those representing network operators), say that developing working relationships with content and other partners is the single greatest operational challenge along the way to developing a viable IPTV business.

IPTV Monitor—Issue 2

About the survey

In April-May 2006, Accenture and the Economist Intelligence Unit conducted a wide-ranging survey of 302 executives of technology and media firms that are involved in or close to the IPTV business. The survey covered 40 countries in three regions; 35% of respondents were based in Europe, 33% in the Americas and 32% in Asia Pacific. The types of firms represented in the survey are detailed below:

Types of companies represented in the survey



In addition to being cosmopolitan, our survey sample was very senior. Fully 53% of respondents were C-level executives such as CEOs, CIOs and CFOs, and the other half consisted of senior managers such as heads of business units and directors of

marketing or planning. Participants also came from a range of company sizes, with 54% reporting annual revenue of over US\$500m, and 28% over US\$5bn.

IPTV Monitor—Issue 2

After a long lament that big-brand content companies do not take broadband delivery seriously, telcos have finally started trumpeting content deals with major Hollywood film companies and other content distributors. This is not a business for the half-hearted: content agreements, after all, do not fall into operators' laps. Those that are attracting good content have proven they are serious about IPTV by investing in technology and marketing. With a few exceptions, they also offer a large potential customer base. In France for example, it is behemoth France Telecom that has signed with Buena Vista International Television; in the UK, it is incumbent BT that has struck a deal with Warner.

Yet content sourcing and payment models remain in flux. Tellingly, content provision is the area of the IPTV business where costs will be most difficult to control, according to 35% of telco executives surveyed, even more so than customer acquisition.

In which of the following areas will IPTV industry players find it most difficult to control costs over the next 12 months?

	Total sample	Network operators
Content provision	23%	35%
Customer acquisition	23%	14%
In-house content development	13%	12%
Deployment of network equipment	11%	14%
Research and development	10%	5%
Customer support	7%	9%
Procurement of network equipment	7%	8%
Provision of set-top boxes	6%	2%
Other	1%	2%

Source: Accenture/Economist Intelligence Unit survey, May 2006

Content management is unfamiliar ground for telcos. For one thing, content companies wield strong brands and do not plan to be submissive partners to network operators; 27% of content providers in the survey even expect to use mergers and acquisitions to obtain access or transport networks.

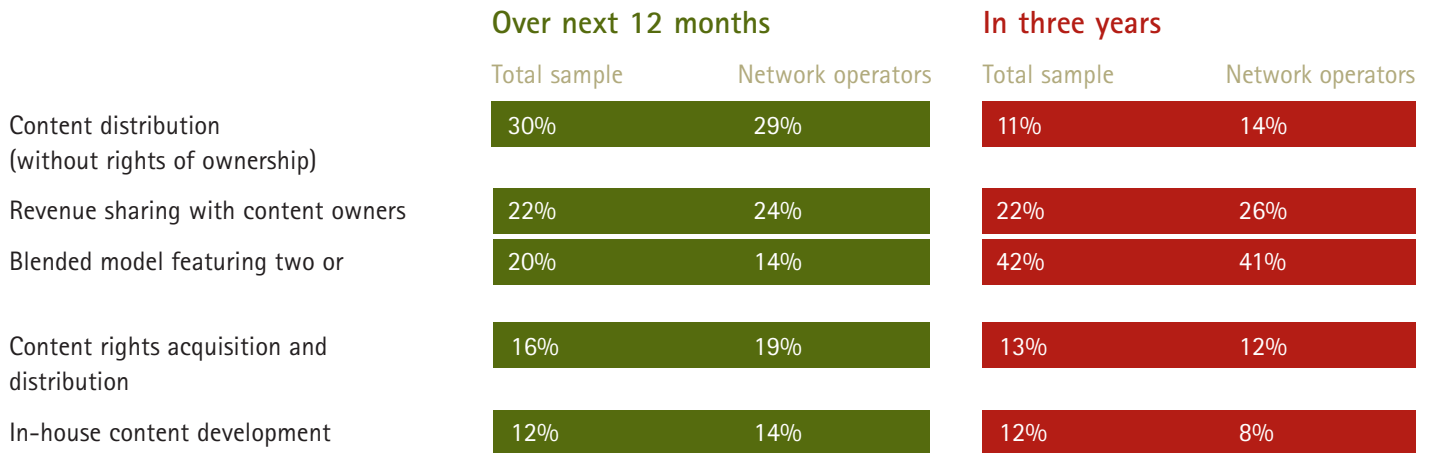
Moreover, competing TV providers have established content sources and long content-management experience, and will compete fiercely with telcos on this front. For example, the UK's leading pay TV provider, BSkyB, has sold to BT the rights to televise highlights of football matches after it has shown them live on its own pay TV service. This didn't stop BSkyB from announcing in July 2006 that it would invest £400 million in providing "free" broadband access to its existing pay-TV customers, two months prior to BT's own IPTV launch.

Another emerging competitor for content is web search powerhouse Google, which is entering the market for what it calls "personalised TV". Google has an international brand and reach weighty enough to attract good content. If operators are to do the same they will have to play on their strengths of secure networks, strong national and even regional brands and existing large-scale customer billing systems.

With the various players in the IPTV value chain only beginning to take positions, there is considerable experimentation under way to find the most effective content-sourcing and payment structures. According to survey respondents, most arrangements being reached today are straight content distribution deals without any transfer of ownership rights to IPTV providers, and they believe this will remain the case for the next 12 months. This is expected to give way in three years' time to a more sophisticated system of content-sourcing by IPTV providers, involving distribution with and without ownership rights as well as revenue sharing with content owners. (In distinction to other regions, Asia-Pacific firms seem likely to cool on revenue-sharing arrangements, to judge by the survey.)

IPTV Monitor—Issue 2

Which of the following models for content sourcing will be used most widely by IPTV providers?



Source: Accenture/Economist Intelligence Unit survey, May 2006

Network operators appear set—in both the short and long terms—on partnerships to source and develop content rather than bringing content development in-house. Less than 10% of telco executives in the survey expect to be sourcing content from within in three years' time.

Asked what measures they will take over the next 12 months to develop their IPTV business, a vast majority of 64% of operator executives cite above all others the formation of partnerships with independent content providers. No more than 13% plan to acquire in content development capabilities (considerably less than the share of content providers who are prepared to buy network assets).

Telcos, then, clearly appreciate the unique capabilities of content providers and the strengths they enjoy in the IPTV value chain. For most telcos, buying film companies is not the answer to the content challenge. For all IPTV providers, learning how to manage their content partnerships is.

Bringing the technology up to standard

Written in co-operation with the Economist Intelligence Unit

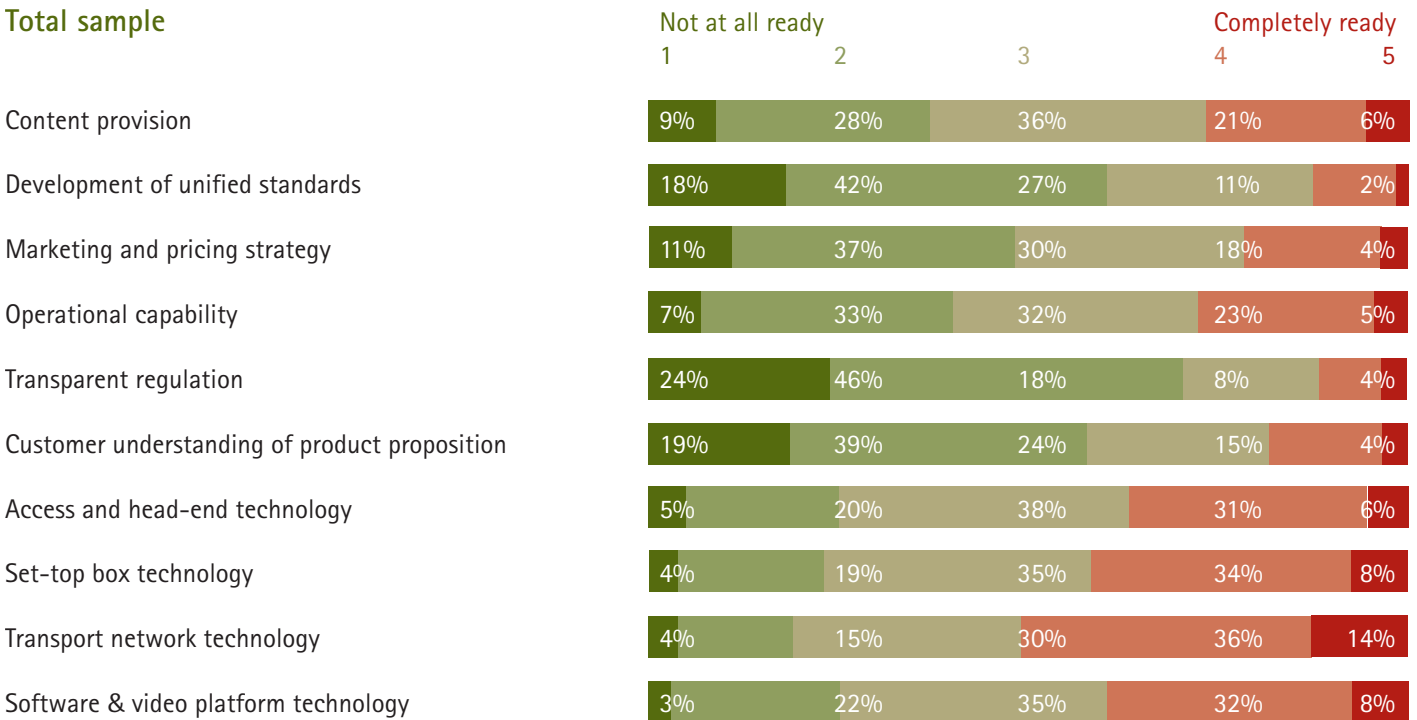
Key points:

- Set-top box software and hardware remain the most problematic part of the IPTV technology chain, due largely to the continued prevalence of multiple, proprietary standards. Operators must push technology suppliers and standard bodies to reach agreement on unified standards.
- Quality of service suffers, partly as a result of multiple standards, but industry executives expect technology hitches to recede as an obstacle to consumer adoption over the next three years.

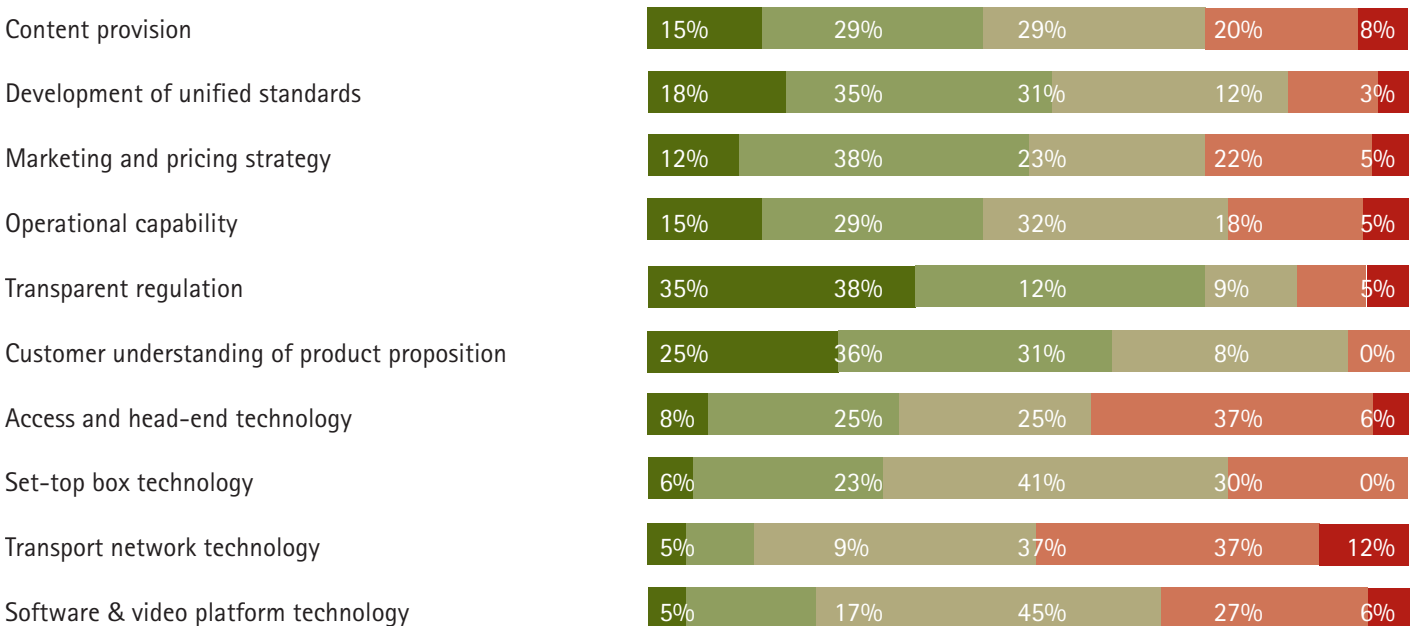
Of the various parts of the IPTV puzzle, technology development is arguably the least problematic for network operators. The majority of industry executives surveyed by Accenture and the Economist Intelligence Unit view content sourcing and the development of marketing strategy and operational capabilities as much tougher challenges. Transport, access and head-end technologies, by contrast, are believed to be sufficiently developed to support a viable IPTV business (although Asia-Pacific executives are less convinced than peers in other regions on access and head-end technologies).

IPTV Monitor—Issue 2

To what extent are the following aspects of the IPTV business are in place to enable the delivery of IPTV services by network operators?



Network operators



Source: Accenture/Economist Intelligence Unit survey, May 2006

IPTV Monitor—Issue 2

Somewhat paradoxically, however, the same executives cite quality of service issues having to do with equipment quality, bandwidth and picture resolution as currently among the chief obstacles to IPTV adoption by households .

The problems lie mainly with set-top box (STB) equipment and software. Telecoms operators don't waste time and money on developing DSL modems—unified standards have helped ensure that these are as cheap, abundant and mass-produced as the broadband access service they feed. Triple-play STBs, however, are still being developed along proprietary lines. Even France's third-largest IPTV service provider, Neuf, has developed proprietary STB software for delivering interactive television and video content.

Small wonder that not a single network operator who replied to the Accenture/ Economist Intelligence Unit survey believes STB technology to be completely ready. Even consumer electronic manufacturers are cautious; only 6% of those polled believe STBs are fully ready for IPTV delivery.

Telcos can put on a brave face and contend that in-house software development allows them to differentiate on how easy their interactive services are to navigate. Yet this seems an expensive luxury when IPTV subscriber numbers still count in the tens—or at best hundreds—of thousands.

The reality, of course, is that any telco putting in place an IPTV service today cannot escape software development and integration work, be it on the customer interface or when stitching together disparate middleware and networking products. Indeed, a total of 60% of those interviewed agree that the development of unified technology standards is not yet ready to support IPTV market development.

Dozens of companies are vying to sell technologies along the complex chain that leads to the STB in the consumer's living room. This leaves operators to weigh up which technology does the best job against which supplier will be around tomorrow. And they have little room for error; operators' margins on triple-play offerings are slim at best, and consumers have high expectations of TV services.

Consolidation will bring more technology under fewer roofs, but operators will have to continue to push equipment suppliers and standards bodies for greater standardisation in order to bring down technology costs and ensure that IPTV is more than a loss leader.

The good news is that the majority of survey respondents expect technological hurdles to diminish as the industry consolidates and standards take shape. Today 21% of respondents believe that quality of service (QoS), afflicted by inadequacy of technology and low bandwidth, is an obstacle to IPTV take-up, but this figure drops to 10% in three years time . There are regional disparities in this view, however: unlike those from Europe or Asia-Pacific, executives from North America expect QoS to remain undiminished as an obstacle to consumer adoption.

Meanwhile, transport network technology is the most developed aspect of the IPTV business according to respondents—51% think it is fully or nearly ready for IPTV delivery.

Even better news for operators is that as equipment deployment grows, unit costs should drop. Already only 7% of those interviewed believe the procurement of network equipment will be one of the most difficult areas in which to control costs in the next 12 months . Their biggest cost-control challenge will involve content provisioning. As we have discussed in the previous article and will see in the following one, content management is also telcos' biggest operational headache.

Managing operations

Written in co-operation with the Economist Intelligence Unit

Key points:

- Managing partnerships with content and technology providers is the toughest operational challenge facing operators seeking to establish a viable IPTV business. Developing creative marketing strategies and effective customer service are other major operational hurdles.
- Many telcos are recruiting new talent to manage IPTV content and marketing, but they will also need to implement some measure of cultural and organisational change to enable new staff to work effectively.

Network operators built their businesses out of optimising complex network technology, and their boards are still peppered with engineers. This situation did not do incumbent telcos undue harm as long as competition in the provision of traditional voice and network access remained circumscribed. No longer: voice over IP and mobile are eating into traditional fixed voice revenues, and regulation has opened access networks to broadband competitors. Incumbents and their competitors are turning to fixed and/or mobile voice, data access and content to keep the largest possible share of a customer's total communications spend.

As we discuss elsewhere in this newsletter, content is the toughest part of this challenge. Content sourcing and management demands new skills from telcos, and they are having to shake off their engineering garb and learn to work with a new set of partners. Fully 45% of respondents to our survey believe that forming content and technology partnerships is among the biggest operational challenges to developing a viable IPTV business.

Which of the following currently present the greatest operational challenges in developing a viable IPTV business?

	Total sample	Network operators	Content providers
Developing working relationships with content	45%	62%	37%
Developing creative marketing strategies	35%	24%	34%
Developing sufficient customer service capability	24%	18%	32%
Developing sufficient technical support capability	21%	14%	29%
Lack of imagination on the part of senior management	15%	17%	15%
Organisational rigidities (departments not working together)	13%	14%	5%
Identifying and training talented managers and staff	12%	3%	22%
Other, please specify	2%	2%	0%

Source: Accenture/Economist Intelligence Unit survey, May 2006

IPTV Monitor—Issue 2

Which of the following currently present the greatest operational challenges in developing a viable IPTV business?

- Developing working relationships with content and/or technology partners
- Developing creative marketing strategies
- Developing sufficient customer service capability
- Developing sufficient technical support capability
- Lack of imagination on the part of senior management
- Organisational rigidities (departments not working together)
- Identifying and training talented managers and staff
- Other, please specify

Europe	North America	Asia-Pacific
51%	39%	44%
34%	31%	40%
19%	28%	27%
16%	30%	18%
16%	8%	20%
13%	14%	13%
7%	20%	9%
3%	1%	2%

Source: Accenture/Economist Intelligence Unit survey, May 2006

This view is not universal across all industries and regions. Content providers are fairly sanguine: only 37% see forging effective relationships with partners as a serious hurdle. This figure rises to 62%, however, among network operators, who have long complained of Hollywood majors' reluctance to strike attractive content distribution deals. Telcos concerns may also be exacerbated by content providers' own forays into IP-based content delivery. North American executives, meanwhile, appear relatively less worried about their ability to manage partnerships than those in Asia-Pacific or Europe.

Operators are going about beefing up their content management skills in various ways. India's Reliance has chosen to buy a controlling stake in Indian film production company, Adlabs. PCCW of Hong Kong has partnered with Star, an Asian content distributor, to sell both content and IPTV deployment services; it thereby also hopes to build a business out of salving service providers' operational woes.

Other service providers have brought in outside content and legal expertise as part of an overall strategy to shift employees' skills away from the network technologies of the past. BT, for example, has made the former president of Universal Studios Networks UK, Dan Marks, head of its "BT Vision" division.

But if telcos really want to be considered as media companies in the future, they will have to make changes that go deeper than merely poaching a few executives from broadcasting and TV firms. Organisational changes may be required, for example, which allow "new blood" brought in by telcos in to work effectively. Many operators—especially incumbents—are old dogs that will not find it easy to learn new tricks quickly; efforts will also be necessary to try and bring about some measure of cultural change.

Once service providers have IPTV content, they must sell it. Developing creative marketing strategies is viewed as the second biggest obstacle to building an IPTV business, according to 35% of all respondents (and 40% in Asia-Pacific). And this is as true for equipment suppliers as it is for anyone else in the industry: after all not every service provider is convinced that IPTV will provide enough returns to merit investment.

Managing customer service is the other major operational concern for IPTV providers. Here telcos display somewhat greater confidence than others in the IPTV industry that they'll be up to the task. Experience suggests that such confidence is misplaced. Although telcos have long experience in interacting with their customers, in many cases the latter still seem unimpressed with the levels of service they receive.

For more information regarding IPTV, please contact Accenture at cht_inquiries@accenture.com

About Accenture

Accenture is a global management consulting, technology services and outsourcing company. Committed to delivering innovation, Accenture collaborates with its clients to help them become high-performance businesses and governments. With deep industry and business process expertise, broad global resources and a proven track record, Accenture can mobilize the right people, skills, and technologies to help clients improve their performance. With approximately 140,000 people in 48 countries, the company generated net revenues of US\$16.65 billion for the fiscal year ended Aug. 31, 2006. Its home page is www.accenture.com.

Copyright © 2006 Accenture
All rights reserved.

Accenture, its logo, and
High Performance Delivered are
trademarks of Accenture.