

#### **Consumer Technologies & Services**

by Patrick Mahoney and Kate Griffin September 2004

# Driving Toward the Triple Play: The Telco Video Opportunity

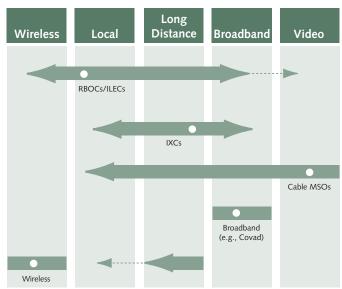
#### **Executive Summary**

Competition between telcos and cable providers is stronger than ever. As cable companies begin to deploy voice services, telecommunications companies are seeing their traditional voice business erode. The traditional service boundaries between telcos and cable companies are disappearing, which is pushing telcos to explore video options (see Exhibit 1).

Although many of the larger U.S. telecommunications providers have initiated partnerships with DBS providers, it's only a short-term fix to a long-term problem. To stay competitive and generate new revenue, the telcos will need a facilities-based video offering.

This report looks at how multiproduct bundles and increased cable competition are driving the industry toward the video triple play.

# **Exhibit 1**Breaking Down the Communication Barriers Source: The Yankee Group, 2004



Note: Bullet indicates original offering

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#### I. Market Trends and State of the Market

#### **Cross-Market Competition**

The wireline industry is in the midst of a seismic market restructuring. Boundaries between industry subsegments are collapsing as competitive pressures drive players into new communications segments. As providers cross boundaries, the battle for the consumer bundle has begun.

Secular decline, new entrants, maturing substitute technology and regulatory policy have all combined to fuel massive change in the industry's landscape. In the search for new revenue, and in an attempt to fight commoditization and subscriber churn, service providers have expanded their breadth well beyond their original product offering (see Exhibit 1).

Incumbent local exchange carriers find themselves competing not only with traditional CLECs, but also with cable MSOs, IXCs, independents and wireless carriers for the local customer. The wireless carriers pose a significant wireline displacement threat (i.e., cord-cutting) and an even greater threat in terms of substitution as more and more of the average consumer's usage moves to their wireless phone. Although recent regulatory proceedings have tempered IXC and CLEC interest in UNE-based local customers, the threat from facilities-based providers (namely cable MSOs) is only mounting, and cable MSOs are looking to telephony to round out their triple play.

#### **Fighting Access-Line Erosion**

The largest telcos—the RBOCs—are losing about 2% of their retail access lines each quarter. Although the majority of those lines represent market share shifts, with customers shifting to UNE-based local providers, about one-third of the lost lines are because of actual shrinkage in the traditional switched-access market. Because of the decline in the telcos' traditional business, the broadband product is becoming a primary growth driver for most companies. Broadband gives the telco an additional access point into the home and provides a pipe upon which telcos can build additional content and applications.

#### **Driving to Mass-Market Broadband Penetration**

s line loss and wireless substitution erode the value of the local phone, and as broadband reaches massmarket levels, the broadband pipe is becoming the most critical connection to the home for the service provider. By the end of 2003, broadband had captured most of the early adopters and had begun conquering the mass market. More than 24% of U.S. households have a broadband connection. The Yankee Group forecasts that by 2006, broadband will replace dial-up as the most common means to connect to the internet. Competitive pricing and compelling content and services will fuel broadband's growth. Broadband service providers (BSPs) are now deploying new content, services and applications to drive future subscriber growth and increased revenue with the broadband pipe.

Broadband subscriber growth is quite strong. Broadband customers grew by 45% between March 2003 and March 2004. This increasing growth rate is driven by:

- Speed upgrades from cable and DSL
- Highly competitive pricing, especially from DSL providers
- More experimentation with tiered broadband service offers
- A strong focus on multiple product bundles
- Increased content and value-added services

Broadband providers must continue to innovate their service offerings because ongoing mass-market adoption will depend on more than a faster internet connection.

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#### II. The Mid-Term Outlook

s the communications market undergoes this transformation, the rules of the game are still being established. In the midst of this uncertainty, the MSOs and wireline carriers are gearing up for direct competition. They are preparing for battle by building a bundling strategy and locking in their customers.

#### Suppliers Drive the Bundle

Wireline and cable providers are tactically focused on capturing customers on a multiproduct bundle. However, the bundle is a supply-side phenomenon, and although consumer acceptance and momentum are building, there is little pent-up consumer demand for the bundle itself. Its appeal lies in its cost and time savings potential. Cable and wireline service provider interest in the bundle is driven by three key benefits:

- The bundle reduces churn.
- The bundle opens a new revenue stream, increasing ARPU.
- The bundle eliminates the competitor's direct channel to the customer.

#### The Drivers of Line Loss Will Shift

number of factors drive wireline line loss. Although market share shifts between incumbent and CLEC players have caused the majority of retail line loss, the actual shrinkage in the market can be attributed to three primary sources:

- Broadband growth
- · Cable telephony and alternative VoIP providers
- · Wireless displacement

Broadband growth has been a primary driver of access line shrinkage to date as consumers drop their second lines in favor of broadband. However, the full effect of cable telephony or wireless displacement on access-line erosion has yet to be seen. The threat from these challenges is still increasing.

During the next 2 years, traditional local exchange providers will see increases in access-line shrinkage driven by cable telephony and other VoIP players. The full effect of wireless displacement will increase incrementally in the near term, with a growing impact beyond 2 years.

#### New Players in the Telephony Market

Carriers. Since 1997, a select few cable MSOs have provided local telephony service. These operators used traditional circuit-switched technologies to deliver the service, and because of low margins, their subscriber acquisition efforts have been mixed. Approximately 2.8 million households (less than 3% of all U.S. households) receive their local telephone service from cable MSOs.

The emergence of VoIP dramatically changes the cable threat. Cable MSOs have been testing VoIP technology for several years. However, only recently—spurred on by the success of alternative VoIP players and by burgeoning DBS-telco partnerships—have these providers committed to large-scale commercial VoIP telephony deployments.

Cable operators are using their multibillion-dollar investment in network upgrades to offer multiple services, including local and long-distance (LD) telephony. The benefit of a combined bill and a discount on multiple services will help the MSOs capture telco voice subscribers.

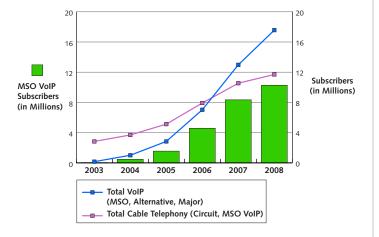
Cablevision and Time Warner were the first to aggressively roll out VoIP telephony services in mid-2003. By June 2004, Cablevision had signed on 115,000 subscribers in its region (limited to areas of New York, New Jersey and Connecticut). Time Warner Cable's considerable success in its first market (Portland, Maine) prompted it to commit to a full 31-market rollout. In Portland, Time Warner penetrated 30% of its high-speed data homes and more than 10% of all homes passed in the area.

Cox Communications, Adelphia and RCN all have commercial VoIP offerings in limited markets. Comcast, which is currently the largest circuit-switched cable telephony provider, is testing VoIP in three cities and plans to enable VoIP to 95% of its homes passed by year-end 2005. Adelphia, Mediacom, Advance/Newhouse and Insight are developing VoIP plans. Smaller cable companies, including Liberty Cablevision of Puerto Rico, Cebridge, Armstrong Cable and Advanced Cable Communications have partnered with hosted voice providers Net2Phone and Vonage for VoIP offerings.

Fueled by these MSO deployments, by 2008 the U.S. VoIP market will grow to more than 100 times its year-end 2003 size (see Exhibit 2). VoIP will near 1 million subscribers by year-end 2004 and serve 17.5 million U.S. households by year-end 2008; cable MSOs will capture the majority of this market.

The overall cable telephony market—served by both circuit-switched and VoIP technologies—will reach nearly 12 million subscribers by 2008 (10% of U.S. households). By year-end 2006, cable VoIP will surpass circuit-switched cable telephony.

**Exhibit 2**U.S. Consumer Local VoIP Subscriber Forecast Source: The Yankee Group, 2004



#### **Broadband Forecast**

The average consumer finally understands the appeal of broadband, and subscriber growth is beginning to increase. Providers are turning toward the bundle as a necessary driver of higher value customer relationships.

The Yankee Group forecasts that by the end of 2008, there will be more than 52 million broadband households. Although historically dwarfed by cable, DSL continues to grow at a healthy pace. The data product is becoming the lead wireline product for the telcos, since access lines are in decline. The 2004 Yankee Group *Consumer Broadband Forecast* shows the net adds for DSL increasing over the forecast period by almost 4 million more than previously anticipated. By mid-to-late 2006, the U.S. broadband market will surpass the narrowband (or dial-up) market, based on subscribers. The ability for both broadband and content service providers to generate additional valuable services over the network, such as voice, games, photos and video that will drive consumer utilization, is key to this forecast.

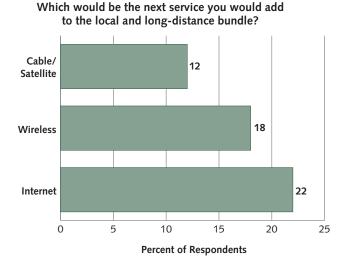
Although DSL will gain more market share than previously anticipated, cable will remain the dominant broadband technology through 2008, with roughly 57% of the total market. For wireline providers to eclipse cable data subscribers in the next 4 to 5 years, companies must deploy content and applications that enable completely new entertainment and productivity functions.

#### III. The Rising Dominance of the Bundle

In an era of increasing competition, cable MSOs and wireline providers are seeking to lock in high-value customers, and bundled product offerings are their bait. Bundles give service providers the opportunity to reduce churn, create new revenue streams, diversify services and boost ARPU. According to the Yankee Group 2004 Technologically Advanced Family (TAF) Survey, 52% of U.S. households already subscribe to more than one service from their local phone provider. The natural bundle—local and long distance—comprises the majority of this group. with 41% of U.S. households purchasing long distance and local phone service together. However, nearly 49% of U.S. households are interested in a larger bundle that meets most or all of their communications needs. The increasing momentum of the bundle is evident in the rise in consumer bundling interest during the past 2 years. In 2002, only 38% of U.S. households expressed interest in a bundle that meets all or most of their communications needs.

What are the stepping stones toward building the bundle? When beginning from a telephony base (local/long distance), U.S. households are mixed as to which product they want next (see Exhibit 3).

Exhibit 3
The Next Step in the Bundle
Source: The Yankee Group, 2004



In fact, respondents want multiple products in their bundle. When calculated on an inclusive basis, 37% of U.S. households prefer a telephony bundle that includes cable or satellite, and 45% of U.S. households prefer a telephony bundle that includes data.

Although the voice-only bundle (local and long distance) is the most common bundle, the second most common bundle is video (cable or satellite) with an internet service.

Beginning from their respective bases (video for cable and telephony for wireline), both types of service providers are driving toward the triple play. Cable MSOs and wireline telcos provide high-speed broadband access to complement their core products—video and voice, respectively. The next step for both players is to capture their final third product (voice or video) to eliminate a competitive channel to the customer and effectively close out their competition.

#### **Supplier Perspective: Churn Reduction**

Despite the success of the bundle, it's a supplier-driven phenomenon. With this supplier push, customers gravitate toward the bundle for simplicity, time savings and discounts. The local exchange carriers enjoy a customer mindshare competitive advantage over the cable MSOs.

When asked their preferred provider for their ideal communications bundle, 39% chose their local telephone carrier, while 19.5% chose the cable provider.

Quantitative data on actual churn impact is elusive because of variations on the base measured (telephone versus cable video, basic service versus premium service). However, there is no doubt bundles are effective in reducing churn. As a general rule of thumb, adding a strategic product (voice, data or video) can reduce churn by approximately 25% or more.

Some comments from the carriers:

- **SBC:** According to CEO Ed Whiteacre, bundles pay off. He said, "as you add additional products to the bundle the impact on churn is enormous." SBC stated that bundles with DSL and LD reduced churn by more than 70%.
- **BellSouth:** Complete Choice voice packages with DSL experience a 50% reduction in churn.
- Cox Communications: Adding a cable modem product has reduced cable TV churn by more than 25%. Adding voice and cable modem together to complete the triple play reduces churn by more than 50% of its original rate, bringing the rate to 0.7%.

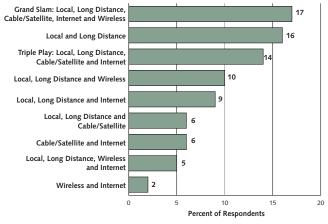
#### The Consumer Perspective: Time and Money

onsumers are drawn to bundled offerings for the promise of saving time and money. The money savings comes in the form of cross-product discounts or initial coupons for multiple product subscriptions. The time savings occurs throughout the consumer experience—from point of acquisition (one sales call), through single bill/monthly payment and ongoing customer support. This interest in simplicity and time savings drives people toward multiproduct bundles. In fact, the number-one choice for a specific bundle is the grand slam (telephony, data, video, wireless), which indicates the allure of consolidation and simplicity. The triple play (telephony, data, video) was the third most desired bundle behind the natural bundle of long-distance and local telephony (see Exhibit 4). In the survey, 11% of the U.S. households preferred to use separate companies.

Broadband is set to play an increasingly important role in the bundle, as telcos desperately try to prevent their customer base from churning to cheaper alternatives. Survey data generated from the Yankee Group 2004 Technologically Advanced Family Survey shows that consumers adding DSL to the telephony package provides a great protection against the cable threat. Households with the broadband and telephony bundle are 50% less likely than the average U.S. household to switch to a cable MSO for telephony service without a price incentive. Moreover, they are 30% less likely to switch when offered a price incentive.

### Exhibit 4 Consumers' Number-One Bundle





Note: 3.7% returned a "Don't Know/No Answer" response

#### IV. The Role of Video in the Bundle

Since the early 1990s, the telecommunications industry has been exploring the idea of transmitting video over telephone networks. In fact, DSL was originally developed to deliver video-on-demand (VoD) to telephone company customers. However, after multiple failures—each gaining more media attention than the last—it appeared the industry had given up on the technology.

During the last few years, telco video has seen a resurgence of interest. Several small independent phone companies across North America have made the required network infrastructure investments and added multichannel video to their bundle of consumer services.

In 2003, three of the four RBOCs issued an RFP for fiber deployment, adding momentum to industry speculation that telco video was at the brink of broad deployment. Verizon is now deploying FTTP in Texas, with Huntington Beach, Calif., and Tampa, Fla., scheduled for deployments in 2005. Both SBC and BellSouth have plans for IP TV trials for 2005.

While determining the best approach to their video strategy, the RBOCs have initiated partnerships with DBS providers to address the immediate triple-play threat and offer consumers a near-term video solution. Consumer Technologies & Services September 2004

#### **Telco-DBS Partnerships**

In 2003, three of the major RBOCs (SBC, BellSouth and Qwest) announced plans to partner with direct broadcast satellite operators to offer a competitive service bundle. In early 2004, Sprint announced a relationship with DISH, and Verizon joined its RBOC peers and officially announced a partnership with DIRECTV.

Driven by a number of competitive pressures and hoping to reduce line losses, the RBOCs are looking to add video to beat cable's triple play. Consumers prefer bundling their communications and entertainment services in one bill. Cable MSOs—particularly Cox Communications—have been successful with bundles. Add the growing likelihood that broad cable telephony deployment rapidly is drawing closer and it becomes critical for the RBOCs to respond to cable's growing threat with a bundled offer.

RBOCs need to identify an immediate-term solution for offering a bundled service, as well as work towards a long-term answer to cable's bundle. The DBS partnerships provide both a near-term band-aid, and a learning opportunity for the telcos. The DBS partnerships will help address their immediate need, but they do suffer from some limitations:

- Multiple brand and management philosophies: Each
  company in a partnership has its own organizational
  culture and management. These differences can derail
  the partnerships. Conflicting objectives also could limit
  flexibility in promotions.
- significant implication of the relationships is on provisioning and customer care. Although the RBOCs are planning to integrate their back-office systems, there are no hard deadlines. With the exception of SBC DISH, the specific elements of this integration are unclear. Even after the integration, separate technicians will conduct the installs. However, with the exception of Cox, which has made a considerable investment in Convergys' ICOMS back-office system specifically for this purpose, most major MSOs also require separate install teams for different services.

• Different sales channels and brands: Consumers' brand perceptions and purchasing behavior may influence adoption of the bundle. Consumers are used to a particular image of satellite services and are accustomed to making the transaction in a retail outlet where they can see the picture and the service. It isn't clear how a different sales channel may affect their purchase decision. In addition, SBC is rebranding the combined service.

Even if these partnerships are successful, the best solution they offer consumers is functional parity with cable. To beat out the incumbent MSOs for residential customers, telcos must be able to differentiate their service effectively. This will be considerably more difficult if they are constrained by disparate technologies and corporate structures. In addition, DBS partnerships generate no incremental revenue for the telcos. Without a facilities-based solution, they will not be able to grow revenue.

Because of these challenges, as well as other strategic objectives, DBS partnerships are unlikely to be a final play for the RBOCs. They will look to these partnerships to limit the impact of cable's bundle, drive new service growth, and cut churn today. But in the longer term, RBOCs and ILECs are already looking beyond partnerships to facilities-based video services.

#### V. Telco Video

Video offers telcos the potential for new revenue streams and an opportunity to stem customer losses. Telco video deployment has been generating a lot of press in 2004, as telcos begin to investigate their technological options for deployment. In the next section, the Yankee Group examines the drivers of increased noise around telco video.

There are four reasons for the buzz around telco video:

- The RBOCs' fiber announcements
- Competitive pressures on telcos
- MSOs' entrance into telephony
- Equipment costs

#### **RBOCs Announce Fiber Strategy**

n May 2003, BellSouth, SBC and Verizon announced Lthey would adopt established industry standards for FTTP. These fiber systems can be used to connect residences and businesses to existing telecom networks to deliver advanced data, voice and video applications. In recent rulings following the Triennial Review, the FCC relieved the RBOCs from unbundling their broadband networks or providing access to competitors on their fiber networks. Although the revised regulations give RBOCs the green light to proceed with fiber deployments, the RBOCs are demanding clarification of these rulings before investing. The RBOCs will not proceed with broad FTTP deployments without these assurances. Regulatory freedom—not video deployment—is the immediate driver of fiber deployment. Fiber deployment will address only greenfield communities and copper replacements initially, with strategic overbuilds as a longer term proposition that will not be initiated for the next 2 years.

However, the announcements have served to drive interest in telco video and public discussions of fiber and video deployment costs have underscored the drop in prices. Although the RBOCs are unlikely to widely deploy video soon, smaller telcos are evaluating investing in IP TV. Tier 2 telcos, in particular, provide the most likely prospects for telco video deployment.

#### **Equipment Costs Fall**

For several years after the introduction of the technology, video-over-copper required a high capital investment. Even if the technology had been scalable, the ROI would have been difficult to justify. Today, costs have declined (see Exhibit 5), and the number of services possible over the plant has grown, creating a considerably better ROI for telcos deploying video.

# **Exhibit 5**Video Equipment Costs Are Becoming Affordable Source: The Yankee Group, 2004

			Cost per 20,000 Subscribers	Cost per Subscriber
Digital Headend	Reception (dishes, IRD, switches, routers)	\$300,000 fixed	\$900,000	\$45
	Video grooming/ digital turnaround	\$3,000/channel		
Middleware		\$100,000 fixed \$35/subscriber	\$800,000	\$40
VoD	Stream for 10 subscribers	\$200/stream	\$400,000	\$20
Set-Top Boxes	Two per household	\$150/STB	\$6,000,000	\$300
Total Cost in U.S. Dollars			\$8,100,000	\$405

#### VI. Telco Video Advantage

A lthough phone companies will enter the multichannel video market late in the game, they have advantages over their cable and satellite competitors, especially in small, rural markets.

#### Weaker Competition

Cable operators have invested \$85 million in upgrading their plants to offer digital video, VoD, HDTV, broadband internet and voice services. These upgrades are largely complete. However, operators have focused investments on large cities and clustered areas rather than rural systems. This varies from operator to operator and from market to market, but the smaller rural markets generally have cable systems with the lowest capacity. Consequently, these markets have yet to receive advanced video applications. In addition, older systems are less likely to offer reliable, high-quality transmissions, which results in low customer satisfaction levels. Telcos launching triple-play bundles in these areas could rapidly attract subscribers from the incumbent cable operator.

#### **Local Presence**

Satellite companies offer services in rural areas and have been very successful growing their rural subscriber base at the expense of cable. However, as a national service with no local presence in most markets, their ability to become involved with the community via sponsorships of local or regional sporting events, county fairs and similar community activities is limited. Phone companies can leverage their local presence and community relationships to build their brand and drive subscriptions.

Satellite operators have expanded their local-into-local service (local channels beamed into local markets) but still offer local channels in less than 150 out of 210 markets in the United States. Like cable, satellite operators primarily have focused their efforts on larger metropolitan markets. Phone companies can use local content to differentiate their product from satellite in smaller markets.

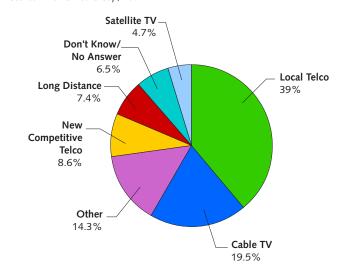
#### **Consumer Preference**

Telcos have one compelling advantage over cable or other providers: Consumers prefer their telco to provide bundled services. Thirty-nine percent of consumers interested in bundled services would like their phone companies to provide these services, compared with 19.5% who selected their cable operators and 4.7% who selected their satellite operators (see Exhibit 6). e.

#### **Content Experience**

Although their lack of experience in the content business does place telcos at a near-term disadvantage, it also provides an important advantage. Telcos can take advantage of the contentious relationship between content owners and MSOs. Telco video could provide an alternative and competitive channel for the content owners, which could possibly provide stronger negotiation abilities for the content owners with MSOs.

**Exhibit 6**Consumers Prefer Local Telco
Source: The Yankee Group, 2004



#### VII. Conclusions and Recommendations

The competitive landscape is changing dramatically and as competition intensifies, local telcos will face challenges from new non-traditional players, especially cable MSOs. As barriers between wireless, video, LD, and local break down, bundles are becoming critical. Although the bundle is supplier-driven, consumers are increasingly being drawn to the bundle and are making combined decisions that cross their communications and entertainment needs.

DBS partnerships provide an immediate band-aid, but in the long term, telcos would gain greater advantage by integrating the video within their own network and retaining control over packaging and the end-to-end consumer experience. Telco IP video will require dedication and capex. However, if executed well, these deployments can pose a significant threat to MSOs.

#### Recommendations

- To meet the cable challenge, telcos must include video in their bundle.
- All telcos should develop both a long-term and shortterm video strategy during the next year.
- Telcos should look for ways to differentiate their IP video services, similar to the way VoIP can be used to differentiate the service of POTS voice.
- Telcos must get smart regarding video. Video service
  is a new undertaking for the telcos, and they must
  deliver a service that meets customer expectations. To
  successfully deploy video, issues such as latency,
  reliability and network scale must be addressed.

#### VIII. Further Reading

### Yankee Group Consumer Technologies & Services Research Note

Service Providers and Consumers Alike Discover Benefits Come in Bundles, May 2004

## Yankee Group Media & Entertainment Strategies Report

Will Video Drive New Revenue Growth for Telcos?, May 2004

Yankee Group Broadband Access Technologies Report Broadband Bundles Give Service Providers a Competitive Edge, January 2004

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