Following an okay 2005 and a stellar 2006, the cable sector was beaten up by industry-watchers in 2007. Implementation of VoIP service went better than expected overall, creating high expectations mid-decade; when AT&T and Verizon went into high-gear with their fiber rollouts last year, with promising early success, they took the spotlight away from cable once again.

But cable is poised for another renaissance. VoIP services continue to grow; new services, such as interactive programming and ultra-high-speed Internet access, offer better consumer satisfaction and additional revenue; and an industry-wide strategic push into the commercial customer segment is yielding solid early returns and beginning to throw the telcos back on their heels.

**Continued Dominance in Video and High-speed Internet**

Cable companies' historical strength has been their the dominance as providers of subscription-television services (see Table 1). Earlier this decade competitors, mainly in the form of satellite television providers like DirecTV and DISH Network, cut into this dominance. However, by migrating consumers from analog to digital platforms, cablecos have regained some tangible advantages and generally slowed subscriber losses in recent years.

Cablecos' expanded video offerings—including video on demand (VOD), integrated digital video recorders (DVRs), and other digital service enhancements like interactive program guides—have improved and compare favorably with not only satellite services but also the telephone companies’ Internet protocol television (IPTV) offerings.

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1 New Paradigm Resources Group, Inc. (NPRG) is a Chicago-based research and consulting firm focused on identifying, analyzing and forecasting emerging technologies and industry trends, fostering mission critical decision-making processes for service providers, technology developers and financial institutions. The authors are Senior Vice President and Director, respectively, with NPRG and can be reached at cclusen@nprg.com and jkestel@nprg.com or (312) 980-7848.
Another strength is high-speed Internet service rolled out to compete directly with telephone companies' DSL deployments. Cable broadband services become available throughout most of the United States relatively quickly, and because they are not dependent on proximity to a telco central office like DSL services, they sometimes are a consumers' lone broadband option.

The penetration rates of telcos' DSL services have increased over the past few years, but cable modem services retain an advantage in high-speed lines. From approximately 63% of broadband services provided by telcos and cablecos in 2002, cable modem services still accounted for 56% of these services five years later. Cable-provided broadband simply "took off" faster than telcos' DSL services, in large part because cable companies had competitive incentive to do so.
VoIP as a third service--and a cut into the telcos' revenue base

By year-end 2005, the number of cable VoIP subscribers exceeded cable TDM subscribers, and the gap will only continue to widen (see Figure 2). Cable companies are actively migrating customers to their next-gen IP networks, accelerating the trend. In 2007, VoIP customers accounted for more than 90% of the cable industry's growing base of telephony subscribers.

VoIP’s influence has been felt throughout the cable industry. For example, from 2006 to 2007 Charter more than doubled its voice subscribers. Likewise, Time Warner Cable reported 57% voice revenue growth over the previous year—a figure the Company credited to strong customer demand.
Business Customer Segment: Working Progressively Upmarket

Historically, cable companies have focused on the residential segment—consumers of their core video services. More recently, the focus has shifted to include “business-class” broadband service for small businesses. These customers are a natural target because cable companies' web-like residential networks are perfect for targeting small offices. Cable companies can connect telecommuters or branch offices in residential areas to regional or headquarters offices, giving them the ability to make inroads in the SMB market.

To penetrate this segment, the cable companies are modifying their approach. Comcast, for example, plans to serve its SMB customers with a completely separate, 1,600-person sales and support team that the Company says is more attuned to the needs of business customers. Other cable companies are following suit, recognizing that a salesperson, customer service representative, or service technician whose work day is devoted primarily to solving residential consumers’ issues cannot fully serve the needs of business customers.

To a lesser extent than they have in the small business market, cable companies are dabbling in the enterprise segment, historically been the turf of the former Bell companies (RBOCs), IXCs, large CLECs, and IT services companies (e.g., IBM and EDS). Large MSOs like Cox, Time Warner Cable, Charter, and Comcast have leveraged their extensive fiber networks in a few cities by building more robust central business district backbones, but the buildout has been relatively minor.

Our research over the past few years indicates that cablecos plan to work progressively "upmarket." That is, they initially rolled out business-class service to telecommuters, are now
extending service to small office locations with no more than a few seats, and will soon offer services that support slightly larger sites. Longer-term, cable MSOs will creep into the mid-sized segment where business cases are enticing.

The Near-Term Outlook

For years, the cable industry has been at a strategic disadvantage because system operators do not have their own wireless networks. The advent of triple-play bundles (wireline voice, video, and Internet) in recent years has only exacerbated this gap, as the RBOCs, namely AT&T and Verizon, have a clear path to building comprehensive wireline and wireless packages--and the first-mover advantage in rolling out tightly integrated inter-modal services. A multi-operator joint venture with Sprint Nextel called Pivot Wireless was unsuccessful due to back-office issues at the operator level.

Hopes are much higher for the recently announced Sprint-Clearwire deal. Helped by investments from Comcast and Time Warner Cable, the two largest MSOs, as well as from BrightHouse Networks, the new Clearwire entity combines WiMAX networks from Sprint and “old” Clearwire in an attempt to build a nationwide mobile broadband service.

We expect Clearwire to accomplish two things for the MSO investors. First, it gives them access to a wireless play, and, importantly, without tying up the kind of capital needed to build a network on their own. This alone would blunt a primary RBOC marketing message. Second, should the nationwide buildout proceed as planned, the venture will have a two to three year head start on AT&T’s and Verizon’s plans to introduce 4G service using LTE technology. For now, the RBOCs are publicly insouciant: for all the hype surrounding WiMAX and high-speed wireless in the industry, consumer up-take of services has been slow, and they believe LTE will provide superior levels of service once the market does materialize. But with the cable industry already taking aim at the commercial segment—the telcos’ highest-margin business—early indications are that the Clearwire service could give the cablecos’ unexpected leverage with business customers.

In the second-half of 2008, cable MSOs will begin rolling out services using DOCSIS 3.0, a standards update which will significantly increase throughput. The new DOCSIS 3.0 will support IPTV and provide theoretical maximum download speeds of up to 160 Mbps (with 120 Mbps upload). These higher speeds will enable cable operators to remain competitive in the face of ongoing telco FTTx buildouts and, quite possibly, provide ultra-high-speed service to more of their respective footprints more quickly than the telcos can in theirs, and at more attractive price-points. The market may play out much like the original high-speed race between DSL and cable modem service, with the cablecos taking an early market share lead.