Walk into any art museum or institute and you will find a variety of paintings that are better known for their technique than for their titles or artists. Some of these techniques can be thought of as precursors to the pixel-based world of digital images because of the artist's application of colored flecks to canvas, which forecasted an ideal technique for analysts studying the unfathomable complexity of today's network industries.

The application of miniscule grains of color was often blended with the artist's ability to see how this detail was shaping the larger scene.

The CLEC industry can be viewed in a similar way. Up close there's a wide variety of carriers in various colors, but taking a step back can provide a more complete view of what's happening on the CLEC landscape.

In 1998-1999 there were approximately 160 facilities-based CLECs. By the end of 1999, that number had increased 19 percent to 190. In addition, the total revenues of companies covered jumped from $10.64 billion in 1998 to $26.85 billion in 1999—an amazing 152 percent increase. Focusing on this moderate company increase and much stronger revenue growth, New Paradigm Resources Group Inc. (www.nprg.com), which recently published "CLEC Report 2000," foresees CLEC industry revenues growing more as a result of CLEC expansion than of new companies entering the fray (see "Competitive Industrial Snapshot" chart, page 80).
Total network route miles reported also increased between 1998 and 1999, growing 56 percent, from 103,657 to 161,717. The number of access lines moved from 5,507,706 to 10,366,127, a larger expansion of 88 percent. And on the switch side, CLECs experienced 54 percent growth in voice switches installed, going from 538 to 828, and 67 percent growth in data switches installed, shooting from 850 to 1,416. The numbers of voice and data switches planned increased 7 percent and 11 percent, respectively, between 1998 and 1999—voice going from 250 to 269, and data from 343 to 379 (see “CLEC Industry Revenue Growth” chart, page 82).

Even a cursory analysis of the aggregate data on CLEC revenue suggests significant and sustainable growth in all areas. From infrastructure to marketing, from customers to vendors, industry totals are increasing at an aggressive pace.

During 1999 however, a number of CLECs began reviewing their business plans and more methodically addressing their primary markets. Management teams are being shaped from the ranks of sophisticated telecommunications managers. The fevered creation of the past is giving way to a more deliberate synthesis of established resources.

No CLEC has taken this perspective more to heart than McLeodUSA Inc. (www.mcleodusa.com). Within sight of the $1 billion yearly revenue mark, the company has grown both organically and via acquisition throughout its Tier 2 and 3 markets. Its notably leveraged financial picture of early 1999 gave way to a well-funded business plan after a nearly $1 billion infusion from Forstmann Little & Co. (www.forstmannlittle.com). McLeodUSA also has been adding to its already vivid palette of Overseers, bringing in a spate of new and distinguished directors, including Anne Bingaman, former U.S. Department of Justice Antitrust Chief; Erskine Bowles, Forstmann partner and former White House Chief of Staff; and Theodore Forstmann, eponymous head of Forstmann and regarded investor. McLeodUSA’s recent acquisition of data services firm Splitrock Services Inc. (www.splitrock.net) also brought the company WiTel founder and former CEO Roy Wilkins.

Adding further color to this perspective of increasing CLEC sophistication is the spectrum of other large investments that have been made by savvy financiers during 1999. Paul Allen’s Vulcan Ventures Inc. (www.paulallen.com) added $1.65 billion to RCN Corp. (www.rcn.com) coffers and $355 million to those of Allegiance Telecom Inc. (www.allegiancetelecom.com), Microsoft Corp. (www.microsoft.com) and Hicks, Muse, Tate & Furst Inc. invested a full $500 million in wireless CLEC Teligent Inc. (www.teligent.com). In short, the reviews from the investment community are consistently excellent. The succession of CLECs that have successfully gone public in 1999, moreover, suggests that this support is quite broad and, as the market continues to advance, likely will be sustained.

Casting the Ideal CLEC

While none of the CLECs is expected to become the next Ma Bell anytime soon, there is a trend away from knock-kneed novices toward business organizations with a more sophisticated eye.

Early on, CLECs entered any market they thought would produce revenue. Much of the time, they were straying farther away from their initial focus. Some lost sight of their core competencies, and peripheral ventures occasionally turned unprofitable.

Picturing the Strategic Scene

Of course, there are a wide variety of competitive carrier strategies.

The “smart build” strategy—deploying network intelligence while acquiring...
transmission from other providers—has proven particularly strong. Mpower Communications Corp. (www.mpowercom.com), US LEC Corp. (www.uslec.com) and Newsouth Communications (www.newsouthcommunications.com)—all bright performers during 1999—have shown that the approach is solid, and will be valid for some time to come. However, these CLECs will need to strengthen their access to transmission facilities, either through long-term agreements or by deploying these facilities themselves. Allegiance and Focal Communications Corp. (www.focal.com) have already started down this path.

Complementing the smart build strategy is the fiber-wholesale model, under which carriers deploy fiber and provide “nonswitched” services. Mirroring the old competitive access provider (CAP) strategy, this model has been given new life and further refined by carriers such as Metromedia Fiber Networks Inc. (www.mmfn.com) and NorthEast Optic Network Inc. (www.neoninc.com).

The traditional CLEC model, under which carriers deployed both switching and transmission facilities, has also proven very robust. First-generation CLECs, including KMC Telecom Inc. (www.kmctelecom.com), GST Telecommunications Inc. (www.gstcorp.com), Electric Lightwave Inc. (www.eli.net) and espire Communications Inc. (www.espire.net), continue to experience growth. These carriers’ best days may well lie ahead. Additional CLECs continue to enter the market employing this strategy, including relative newcomers Cavalier Telephone LLC (www.cavaliertelephone.com) and US Xchange LLC (www.usxchange.com). Interestingly, some of these companies seem to be misunderstood by analysts on Wall Street, which has not rewarded them with particularly strong relative valuations.

Most observers will agree that data services, broadly defined, will drive the future expansion of the competitive local telecom market. Frame relay and ATM services provided CLECs with their earliest forays into the data market and whet their data appetites. At present, data CLECs such as Covad Communications Co. (www.covad.com), NorthPoint Communications Inc. (www.northpoint.net) and Rhythms NetConnections Inc. (www.rhythms.net) are seeing tremendous growth by feeding the bandwidth hunger of the U.S. economy a steady diet of DSL expansion.

Most other CLECs have announced or begun some data strategy, with DSL the most prevalent.

This is just the tip of the iceberg. Data services, driven by the Internet and web, will dominate the CLEC space over the next 12 to 24 months in terms of investment and revenue growth. Led by carriers such as Intermedia Communications Inc. (www.intermedia.com), Mpower and 2nd Century Communications Inc. (www.2c2.com), CLECs will transform themselves into providers of data services but maintain a primary focus on voice, which will remain the driver of revenues in the immediate future.

**The Panoramic View**

The larger CLEC scene is being created, to a considerable degree, by changing technology. A large number of vendors are supplying technical solutions to alleviate the need for higher bandwidth, as well as to deal with the increasing shift toward a packetized universe.

IAOs, DSLAMs, voice gateways and a host of other equipment are paving the way for widespread DSL service, including both data and voice. Technology is enabling pure IP and cable telephony. DWDM is making inroads into local transport, aided by advances in optical switching. Advances with LMDS, MMDS and
satellite are creating even more options for voice as well as data transport.

It is difficult to discern whether technology is advancing in reaction to demand, or whether the clamor for additional bandwidth is growing as a result of technological advances. Most likely, an iterative process has developed whereby one feeds the other. This much, however, is certain: Technology advancement will remain an integral—if not the most important—part of telecom growth in the United States and overseas.

The market model is supplanting the regulatory model more every year as the primary means of characterizing and assessing the industry. Issues ranging from line sharing for DSL to sustaining competition in the face of ILEC mergers are still best viewed through a regulatory lens. It is clear, though, that traditional market disciplines such as organization, management, finance, marketing and other functional subjects are driving the present success and future expansion of the industry.

As many industries begin to mature, consolidation becomes rampant; market share and scale economies become of paramount importance. Though these issues are gaining in terms of relevance, in the past they have not been of primary importance for CLECs, preempting consolidation. Other reasons consolidation has not been great include the considerable amount of debt that has been held by the carriers, as well as very high valuations across the industry, both of which have scared suitors.

There is another reason: A key driver of consolidation is a dearth of new ideas that can lead to differentiable strategies. As competitive analyst Michael Porter points out, companies come to focus exclusively on increasing their operational performance, and in the process lose sight of differentiation—the core of sustainable strategy. CLECs do not appear to be losing sight of the many ways they can differentiate themselves—through technology, alliances, marketing and other means. This might explain why there does not yet seem to be the same impetus for wholesale consolidation as has been seen across many other industries. As these factors change over the next 18 months, however, horizontal consolidation will eventually begin to take hold as a trend.

A concern has been voiced that only the most lucrative markets would see new offerings; “cream skimming” would target business customers in Tier 1 markets to the exclusion of smaller markets. This has been a force prompting industry critics to continue thinking in regulatory terms. To a considerable extent, this does indeed characterize much of the competition within the local telecom markets in the recent past. The current trend, however, shows that while CLECs are developing a foundation among first-mover small and medium-sized businesses in large markets, there is a trickling downward of services into Tier 2 and 3 markets. Market demand is driving a solution to this problem.

Well-regarded CLECs such as McLeodUSA are showing that a company can be highly successful focusing on these smaller markets. The infusion of nearly $1 billion into McLeodUSA shows that significant money is being that these markets can be profitably addressed. Other CLECs including TDS METROCOM (www.tdsmetro.com) and DSL provider Jato Communications Corp. (www.jatocom.com) are targeting even smaller markets. “Rural CLECs,” ranging from CFW Communications Co. (www.cfw.com) to R&B Communications (www.rbnet.com), are successfully addressing outlying Tier 4 and 5 markets such as Staunton and Daleville, Va. Upstarts including Lightship Telecom (www.lightship.net) and Eschelon Telecom Inc. (www.aticom.com), formerly known as Advanced Telecommunications Inc., are successfully going after the same small markets, raising considerable funding in the process.

The competition that many say is lacking outside of the largest markets is coming. The last year of the millennium will show us the viability of the overall CLEC model for the new century, for businesses in Chicago as well as for rural residents in Mankato, Minn. It won’t take as long as many expect for services to spread across the American geographic canvas.

Steven Weinberg, Carol Shabrook, Greg Mycio and Liz Singleton are analysts with New Paradigm Resources Group Inc. (www.nprg.com), a Chicago-based consulting firm specializing in CLECs. They can be reached at (312) 980-7848, or their respective e-mail addresses sweinberg@nprg.com, cshabrook@nprg.com, gmycio@nprg.com or isingleton@nprg.com.