INSIDE MARKET DATA

PCQUOTE HYPERFEED 2000
COMPRESSION TECHNOLOGY REDUCES BANDWIDTH

CHICAGO: PCQuote has signed up approximately 2,000 customers for its new HyperFeed 2000, released last month (*IMD*, Mar. 8). A spokesperson for the company says that while the majority of those users represent existing clients, the company does have 80 new end users signed up and is just now starting the sales and marketing push to target new customers.

Due to increased volumes of real-time market data, vendors are constantly faced with capacity and bandwidth problems. PCQuote is positioning its HyperFeed 2000 as an option for customers, touting its proprietary compression and IP multicast technologies.

The new feed puts PCQuote in increased competition with real-time market data vendors, including Standard & Poor's Comstock and A-T Financial, which was recently acquired by Primark (*IMD*, Jan. 11).

The new feed is an upgrade to the company's previously released 1024kb hyperfeed. Existing clients who have adopted the new feed include two Chicago-based firms—The Arbitrage Group and The Options Clearing Corp. Bernard Rice, owner of The Arbitrage Group, currently has about 70 users of the new feed and notes the speed of the quote delivery as the main selling point for his firm. The Arbitrage Group uses the feed with its own software application and Rice says their market makers on the trading floor would notice a delay of even a second or two. The Arbitrage Group uses leased T-1 lines for feed delivery.

HyperFeed 2000, which has been in development since late 1997, and entered beta tests in October 1998, uses IP technology to provide network compatibility over LANs, WANs or the Internet.

Another key technology feature of the new feed is its proprietary compression techniques. PCQuote says its technologies have been utilized in its Chicago-based ticker plant with throughput and compression techniques that have reduced their bandwidth consumption. The company says the new feed provides clients with real-time quotes during heavy trading periods, when slow delivery or the possibility of dropped quotes might be an issue with other delivery technologies. With HyperFeed 2000, users can access approximately 350,000 equity, option and commodity issues, including option chains, via the T-1 HyperFeed. The compression technologies allow for lower communication costs due to the use of only a fraction of the T-1 line.

The feed, which can be delivered into PCQuote applications, is also available to users of Omega Research products. A company spokesperson says that the company is working to make the feed compatible with other applications, including OptionView and Robert Slade's First Alert.

PCQuote's agreement with Omega Research provides users of the TradeStation 2000i, OptionStation 2000i and RadarScreen 2000i products with a discounted introductory pricing offer of $325 per user per month for broadcast delivery and $135 per user per month for Internet delivery.

As PC Quote recently finished its total changeover to a fully NT-based system, including its ticker plant in Chicago, the new feed is currently only NT compatible. The company is, however, considering the possibility of providing UNIX-compatible services and is currently running feasibility tests.

Internet delivery of HyperFeed 2000 is made possible via a QuoteSocket—a communications mechanism that allows a PC to retrieve data from the HyperFeed 2000 Quote Server. The minimum requirements to receive the new Internet-delivered feed are an Internet connection, a 28.8kbps modem and a Windows 95, 98 or NT operating system. For opti-

mal performance, PC Quote recommends a client have a direct connection over the Internet and digital subcriber lines (DSL) or cable modems.

HyperFeed 2000's compression technologies allow the feed to be transmitted over less than a quarter of the previous bandwidth required for a complete datafeed, thereby reducing monthly communication costs. Broadcast circuit delivery reaches a user's desktop via fractional T-1 from the HyperFeed 2000 ticker plant over a dedicated point-to-point circuit.

The pricing for regular broadcast delivery starts at $395 per month plus exchange fees. With circuit delivery there is an additional cost for the client server installation. HyperFeed 2000 is also delivered via high-speed satellite transmission, using a 21-inch satellite dish.

Vendors are currently facing repeated capacity and bandwidth constraints due to the increasing amounts of real-time market data being generated by increased market activity and in derivative markets. This forces vendors to prioritize their datafeed components and during sudden volume escalation, to run the risk of falling behind or dropping quotes. PCQuote believes that the new feed will satisfy the increased concerns of vendors faced with capacity and bandwidth issues.

—Mason M. Burnham

AMEX
PQT

Jim R. Porter
Chairman of the Board
Chief Executive Officer

PC Quote, Inc. provides real-time and delayed securities quotations and news to professionals and consumer markets worldwide. Jim R. Porter, Chairman of the Board and CEO of PC Quote, spoke to Wall Street Reporter.
URL: http://www.pcquote.com

PCQUOTE

WSR: Could you give a biographical description of your company's history and explain how you came to be involved with it?

PQT: For a small company, PC Quote has actually been around a surprisingly long time. It started back in the early '80s, as a response to a need for better options data. Our founder was a fellow named Louis Morgan. Lou, who was an acquaintance of mine, realized that the rapid growth of the interest in options and the very rapid growth in the volume of options data versus stock data was going to create some significant demands on current technology.

So he began to develop a data feed that would be able to transmit information about options and stocks and futures. Most everyone else was concentrating just on stocks and/or just on futures. So the technology has always been the leader. And as it turns out, the volume of options data grew over the years, and Lou was kind of forced or encouraged to stay on the leading edge of developing technology to deliver that data.

So the firm has always been first in the technology of creating broader bandwidth, cleaner data. Along with that we became known for better reliability for the data source over the years. We were one of the first firms to implement, for example, a major step up in bandwidth just before the October 1987 crash in the market. PC Quote was the one data feed that was able to keep up with the heavy volume that day. So the firm has always been the one data source that can keep up with busy markets during volatile trading sessions.

Over the years the company has developed new products — software analytics, etc., eventually bringing us to the early '90s when the firm got involved in the Internet. It was one of the first financial Web sites, one of the first firms to develop Web site services for financial sites, and put together a product that really got the attention of the community. As a matter of fact, PC Quote was actually one of those companies that were in the spotlight in the early Internet days. When we look back, it obviously wasn't that long ago.

But then PC Quote actually began to have some problems integrating management and the rapid growth. The difficult period began in late '96, early '97. By early '97 it was obvious that the company really did need to make some significant changes. There was some serious concern about the firm at that point in time by the investor community.

I was asked to come aboard near May 1997 and I actually made the move in June. I think our objective then was to turn PC Quote around. Turn-around is probably an overworked word, but I don't think it's inaccurate. We have been through an almost 18-month process now of totally changing the infrastructure of the firm, from the financial to the operational and improving our ability to deliver our technology. We've also made some rather major technological advances during a time when we frankly didn't have much money to invest in such a way. Some might see it as a luxury, but we didn't cut that expense. We cut expenses in a lot of other places, but our mission was not to cut the company to the bone. Our mission really was to rebuild the company's platform and maintain our position as the leader in the technology. Frankly, I couldn't be happier about our position right now as we're going into the beginning of 1999.

WSR: Tell us about your product line, in terms of the different types of financial services that your software provides?

PQT: The firm is basically a market data service company. We get market data and market data analytics to customers to satisfy their needs. We've really focused on being a solutions firm for companies that are trying to figure out what their needs are; or addressing problems that they have already identified pertaining to either getting market data to a particular software platform, a local area network. Our customer base, by the way, ranges from the institutional customer — and I'm talking about the really major institutions that need the fastest data and the highest bandwidth — all the way down to the individual customer that can get the very same quality of data, but get it delivered in a very inexpensive way through the Internet.

PC Quote provides a range of products, services and solutions. Our flagship product, HyperFeedTM, has been called the world's fastest data feed since it was implemented back in 1986. We've always had the highest bandwidth, obviously a necessity for today's market. We also provide analytic software and our PC Quote 6.0 is one of the market leaders- you probably see it in Investor's Business Daily. It's customer base is really growing.

PC Quote 6.0 which has been around since 1996 was obviously one of the first in its product line and most recognizable. Many of the similar products you see advertised today are actually PC Quote 6.0 in a private-labeled version for that particular customer. PC Quote 6.0 is one of our solution-oriented products targeted to a wide variety of business units including day trading organizations, brokerage firms and financial Web sites.

We also specialize in financial Web site services. PC Quote has a unique tool set. PC Quote HyperScript, which enables Web sites to provide their customers with financial data — everything from quotes to much more detailed information about securities, options, etc. We also provide a template type product. PC Quote Web Templates, so that you can actually create your Web site with very professional looking financial data. It's a very quick solution for a lot of people who have somewhat limited resources. Not only do we offer clients the tools to help themselves, but we can also do the work for them by custom structuring these various products to satisfy a particular problem or need.

WSR: Describe the demographics of your customers, in terms of who they are, and why they desire your product.

PQT: It's changed radically since we entered the Internet arena. One part of our business that's certainly an important dimension is our new business unit PC Quote.com, an outgrowth of our Internet financial Web site — WWW.PCQUOTE.COM. The unit's mission is to provide a comprehensive array of investment tools to empower the growing sophistication of the individual investor. Supported by advertising, the site provides free and subscription-based financial data and services.

Since we entered the Internet business, we have experienced an explosive growth in the use of our financial tools, like PC Quote 6.0, by the individual investor. As a matter of fact, at one point in time it was just a fraction of our business. Now PC Quote 6.0's customer base is growing at such a rate that it's quickly going to overtake the 50 percent mark as far as our customer mix.

The web site has brought us a highly diversified customer base. In the past, we had a very centralized business around larger institutional clients. Now our largest accounts, which are still very substantial in size, are less than four percent of our business. There was one point in time when you could combine a couple of those clients and account for more than 30 percent of our business.

WSR: *Who do you consider to be your direct competitors? For example, Online Brokerage, Full Service Brokerage, and Financial Management Software companies like Quicken. And how do some of these groups fit into the mix?*

PQT: I actually look at them as potential customers with a strong need for accurate and more importantly, really timely market data. In this day and age customers are so empowered and involved in the marketplace, it's imperative to provide the customer with absolutely the fastest information they can possibly receive.

Sure, we have applications that compete with some of their products. But I don't really see them as competitors. We are good at filling niches and satisfying customers with our product solutions. Not only are our products flexible but we can also satisfy their core need for market data, with our core strength: HyperFeedTM. Our mission is to get the highest quality market data to the customer with no delay, transferring comprehensive data in milli-seconds from the exchange to the customer's desk. That is our standard of performance.

So I really see a competitor as someone in the market data business. Obviously they might also be in the analytic software business. Our real competition is anyone trying to disseminate today's market data on a timely basis. I think all the other products are basically very important but very key adjuncts to that basic core business.

WSR: *Those groups I named, specifically Online and Full Service Brokerage and even the financial management software companies, could these vendors be strategic partners for your company?*

PQT: Absolutely. As a matter of fact, we do have such strategic relationships. One of the things that we've been trying to effect during this aggressive turnaround period in our company is the cultivation of business development. There are so many opportunities that I think we could have pursued last year and did not. I am confident that we will take full advantage during the next year.

A number of people I think saw opportunities and called us. I just don't think we were as aggressive following up as I wish we had been. As we go forward, I'm sure there are some people that might have been interested in being a strategic partner in the past and who might have hesitated because of our passive approach. I can assure you that this will not be the case in 1999. And I think we'll see a lot more of that type of activity. It's something that I'm really looking forward to and something I think that we can absolutely excel at because of our technological advantage.

WSR: *That's a good segue to talk about your views on the overall market for online financial services, relative to how quickly we've seen this market grow during the early 1990s and how the market is different today with regard to the overall market. Furthermore, where PC Quote fits in.*

PQT: I don't think I could be more excited about being anyplace other than in these financial markets at this point in time; and, to be involved in the Internet delivery of these services. I think it's going to be one of the most exciting periods. I also think that what we've seen so far has actually been nothing but setting the stage for some major shifts in how business is done. We already can see those things taking place, and I believe there are going to be a lot more creative ideas coming out of this effort that we've seen in the past three years, right through the beginning of the next millennium.

I believe that empowering the individual investor with the information and capability to get closer to the market -- allowing them to develop their investment skills and become independent rather than remaining dependent on intermediaries, is going to bear tremendous fruit for both the individual and the marketplace from a liquidity point of view.

This is one of the greatest things we've ever done for the market. You can look already at what's happened to the spreads and the liquidity. The liquidity is actually phenomenal. In the past there were concerns about these institutions that have so much cash flow that they have to take on larger and larger positions: where is it going to come from? How are we going to satisfy that type of liquidity? Well, guess what? It's a trivial problem today. I should say.

The liquidity is there. It's there because of the numerous day traders that are trading on both sides of the market all day long: the individual investors that have a very high variety in their opinions about the markets and about individual securities. Putting the information on the fundamentals, on the technical tools, right on their

desktop and the absolute last tick information the instant that it occurs, can't do anything but create more liquidity and more trading in the marketplace.

I'm just extremely excited that we're there and are the firm with the technology to deliver this type of information when the market really demands it. Frankly, we may be the only one that can really deliver it.

WSR: *It sounds like you are well positioned to take advantage of the market growth. You recently reported an increase in revenues combined with the strengthening of your bottom line for the recent reporting period ended September 30th. How have you been able to sustain this double shot, if you will, of favorable financial performance?*

PQT: Well, obviously in a turnaround situation we've had a number of things to do simultaneously. This has been much more than patting your stomach and rubbing your head or vice versa. We've had to work on the operational side and implement better controls. Better controls help to uncover expenses that are not necessary. On the sales side, we literally rebuilt our sales force. As a matter of fact, I just came from our national sales meeting which focused on extensive product training and extensive training on the branding of HyperFeedTM. It's really exciting to see what we have put together in so many different areas during this past year.

But the answer is: getting costs down and finding efficiencies, as well as continuing to build the sales force and getting new products in front of them that satisfy the needs of the customers. It starts to happen quickly when you have both of those aspects working and not just one.

I should add that we could have addressed the expense side in a much different fashion. We could have gone in and slashed expenses and done some major restructuring to the firm's product line and capabilities. I think that would have been an extremely regrettable mistake. We did just the opposite. Not only did we spare development from the cutbacks, but we actually increased our development efforts. We have increased the number of software developers working in what we call our "skunk works". They are developing our new products of tomorrow. We've increased the company's total staff from 72 when I came on board to maybe 120 to 130 employees now. That growth is definitely stabilizing and has been flat for some time. But it took that type of staffing to run the company right and to get our daily services in front of the customers with a level of reliability that will meet our standards of performance.

In addition, we've begun enhancing our customer service. We were getting new customers, but unfortunately we weren't keeping them. Improved customer service is helping to remedy that problem. We actually hired 35 people without increasing the employee count and simultaneously upgraded the quality of our people. Rather than temporary employees, we started looking for people who could be leaders in their areas. One of the things that we've really added to the firm is an incredible staff of very excited leaders with a very high level of initiative. It would be impossible to tell you how much work goes on here in a 10 to 12-hour day.

WSR: *In a recent press release, you talked about potentially looking at acquisitions that will help you even further strengthen your operations and your capacity. This must be a great benefit and comfort to your customers. Why the decision to do this? How does this make your company truly unique in this market environment?*

PQT: I think our unique feature and our edge is our technological advantage. Few organizations have been able to build such a technologically innovative team like we have, however, our next step is to develop some economies to benefit the customer. I see a variety of potential acquisitions including product lines similar to ours, where we can offer our technology and benefit from the economies of similar customer bases. There are probably incredible efficiencies in marketing and the sales side, and of course administration.

Remember that we're a small company, but with the capability that we have, we certainly could do substantially more than we do. For that reason it begins to become obvious that potential acquisitions along the way will make you much more competitive in the marketplace. It's one of the things that I think we should be considering very seriously as we now move from the platform that we've built to the next stage in our development.

Wall Street & Technology

MARKET DATA

Faster, Damnit, Faster!

PC Quote makes headway with HyperFeed.

BY CRAIG MCGUIRE

With ever-expanding trade volumes showing no sign of receding, the pressure is on for market data vendors to not only provide greater capacity over faster, reliable market data feeds, but do it as cheaply as possible. While it may not have the name recognition or market share of a Reuters or a Bloomberg, Chicago-based PC Quote, armed with a suped-up version of its HyperFeed market data service, is making its mark.

Realistically, no one's going to confuse PC Quote with one of the leading market data vendors which have carved up the lion's share of the industry— Reuters leads touting 485,000 desktops worldwide, Bridges places itself at approximately 300,000 worldwide, and Bloomberg claims 117,000 globally. There's still plenty of business to go around. Looking to grow its already sizable user base, PC Quote spent two years developing the next generation market data feed—HyperFeed 2000 (H2000) it debuted earlier this year.

In development since 1997, H2000 entered beta testing in October and was fully functional by the end of last year. "In 1996 we saw a need to prepare for future market growth and came up with plans for HyperFeed 2000 in late 1997," says a spokesperson for PC Quote. "The first priority this year was to switch existing clients on our 112 feed, and we have also brought on 80 new end users."

PC Quote had been delivering HyperFeed via 112KB and 1024KB prior to the introduction of H2000. While 1024KB had capacity and speed equivalent to the new H2000, it was not always economically feasible for some clients as it required a T1 line from PC Quote's Chicago-based ticker plant.

"To alleviate this burden, we set up SONET rings to get T1 distribution to more customers, more economically," says a spokesperson for PC Quote. "Clients from far away from Chicago usually went with our satellite delivery which was 112KB." Many of PC Quote's 112KB clients were actually older clients still using OS/2. When PC Quote introduced 112KB, OS/2 was the first multi-tasking platform for distributing data.

The improvements H2000 provided over PC Quote's previous offerings became apparent immediately to some users. "The difference is like night and day, from the 112KB HyperFeed to HyperFeed 2000," says Douglas Hurst, president of Atlanta-based Capital Gains. His firm went live with H2000 in February.

"Once we switched, we were seeing the market in true real time," says Hurst. "We haven't seen any gaps or had any technical problems with the new feed. Speed is vital to our business. We trade strictly on momentum and if a stock has changed direction in the last few seconds, our traders may make the wrong trade at the wrong time if they don't have accurate fresh data. Our traders turn around a trade in minutes or seconds and if data is 2-3 minutes old, they may make decisions based on bad information."

While he was satisfied with the 1024KB PC Quote offering, A.G. Huston, executive vice president, strategic planning at NY-based broker/dealer A.B. Watley Inc.,

was also concerned that it required a full T1 for delivery. PC Quote's compression routine compacts data so that it takes up 1/9th the space of raw data, and 1/3rd the space of our previous delivery. "A.B. Watley and other clients like the peace of mind knowing that we have the capability to instantly expand our bandwidth at any time," said a PC Quote spokesperson.

So far, H2000 seems to be holding its own against the competition. Shortly after launching four years ago, Chicago-based software developer Risk Information Systems & Consulting tapped PC Quote to provide a live data feed to its proprietary trading software, Remote Trader Workstations (RTW). Traders on the vendor's network have PC Quote installed in their workstations, including live market quotes, news technical analysis, fundamental data and historical data. "We have had the opportunity, when on the trading floor, to compare speed of data delivery on our network relative to other trading applications," says Shelly Brown, managing director at Risk Information Systems. "During the circumstances we have observed, PC Quote data was at least equal to, but in most cases faster than the other quote data."

Meanwhile, the H2000 has in some cases strengthened PC Quote's relationship with existing clients. Chicago, Ill.-based The Arbitrage Group has used PC Quote's services for over six years. The firm currently uses H2000 to feed its inhouse proprietary trading applications on some 20 terminals. The in-house applications were developed to monitor and arbitrage options. Asked if PC Quote cost-justifies itself, Arbitrage Group President Bernie Rice says, "PC Quote's HyperFeed is so valuable for options exchange data, at four times the price it would be worth it."

The PC Quote spokesperson says the vendor is currently working on additional enhancements including channelization. No release date has been scheduled yet for the upgrade yet. ●