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Now that both services are online, what lies ahead for this new technology?

fter a visit to the headquarters of both Sirius Satellite Radio in New York City and XM Satellite Radio in Washington DC, I came away with the impression that both companies maintain a staff of truly talented individuals all working very hard to transform a speculative new technology into successful business ventures. Sure, experts in the investment community (and investors, for that matter) have seen little to get excited about in terms of stock prices, however based on the energy and optimism of Sirius CEO Joe Clayton and XM CEO Hugh Panero; I wouldn't rush to count either company out of contention just yet.

A Solid Background

Amongst other notable accomplishments, Joe Clayton led the launch of DIRECTV satellite television, and Hugh Panero led the charge in the development of cable TV. Now, both apply their vast experience in the subscription-based service industries to making satellite radio a working reality for consumers. Both CEO's reported that their respective companies have each generated between \$1.5 and \$2 billion dollars from the financial markets, debt, and other financial instruments. Clayton is quick to point out that all of that capital

has funded the launch of five satellites total (three for Sirius and two for XM), repeater networks, and the New York and DC network operations centers. "I suspect that the buying public is going to beat a door down to buy this product," predicted Clayton, who cited programming variety, a digital sound experience, and nationwide coverage as the core reasons for his optimism. "Every single [consumer electronics] product that has been launched going back to color TV has been done with the independent retailer at the grassroots level, and this product will be no different than any of the rest of them," Clayton asserted. "Best Buy and Circuit City will always sell a lot of product, but not a lot of the knowledge and information that goes with it. I am a big believer in the independent retailer," said Clayton.

Sirius reported having approximately 30,000 subscribers at the end of 2002, with over 300,000 projected by the close of 2003. Subscription numbers from XM, launched about 1-year ahead of Sirius, do justify a somewhat positive outlook. "We are doing very well," reported Panero. "We had 28,000 subscribers at the end of 2001, 347,000 at the end of 2002, and we have eclipsed the one-half million mark as early April, 2003. We have achieved 'Gold' status, now we are on our way to 'Platinum,'" he added.



By Micah Sheveloff **Editorial Advisor**

Both Sirius and XM have had to develop high-quality studios and control rooms.

The Sirius control rooms are pictured here.

Although subscriber numbers are on the rise, Clayton points out that the one million mark seems to be the magic number for increasing consumer awareness of any consumer technology through valuable press coverage and word-of-mouth referrals.

Selling the Service

Justin Rindos, the mobile electronics manager at a Connecticut Tweeter store, agrees with Clayton's assessment. "There are not too many consumers who come in looking for satellite radio," reported Rindos. "Many of those I have shown it to have never heard of it before." Rindos finds consumers are often wary of taking on another monthly expense in addition to the hardware costs associated with getting satellite radio. The unpleasant look of the somewhat bulky antenna has been yet another stumbling block in the sales process. Rindos also noted that the consumer who is buying satellite radio is a traditionally older male with a family, and a small quantity of early adopters who have to have the latest and greatest.

"We have also done a lot of boats, outfitting them with satellite radio systems," Rindos said. "The three dollars per month difference between the services (XM is \$9.99, Sirius is \$12.95 per month) is not a huge issue for consumers. It is the upfront costs such as hardware and installation that tend to garner some objection."

Rindos believes the introduction of a single-chassis solution (eliminating the need for a separate receiver box that must be installed somewhere in the vehicle) would serve to lower installation costs and help boost sales. "I am comfortable selling both services, however Sirius has had some effective promotions, such as "The Free Ride" (providing a free receiver box) and instant rebates that have caught consumer's attention. With the introduction of the Delphi SKYFi (a transportable device compatible with the XM service and designed for use in cars as well as portably and in conjunction with a home stereo system or optional boombox), consumers only have to pay for one activation for both home and car," said Rindos. "It is selling very well."

Who Will Buy It?

One of the big questions posed by electronics industry executives and financial analysts alike was whether or not consumers in metropolitan areas would pay for a subscription radio service over the "better" choice of stations available in American cities. Both Clayton and Panero think that is a false issue.

"The selection of available programming in most metro areas is not very great" said Panero. "A lot of our customers currently come from urban areas, dispelling the common misconception that there is a vast selection of genres to choose from. In new York City for example, there is no station offering American Standards...a station that might play the Sinatra song *New York*, *New York*," Panero explained, emphasizing the irony in the fact that there is nowhere to turn to hear a piece of music that is as much a part of the Big Apple as the Statue of Liberty.



Different 12-volt manufacturers have partnered with Sirius or XM to provide satellite ready head units. Pictured is Jensen's FM Modulator, which keeps OEM equipment intact.



Delphi is pushing a new portable satellite receiver for XM that allows one subscription to be moved from car, to home, to the boom box pictured below.



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Tweeter salesman Justin Rindos doesn't see a huge demand for satellite radio...yet. Rindos is one of the many who feel once the satellite receiver chipset is integrated into head units, sales will soar.



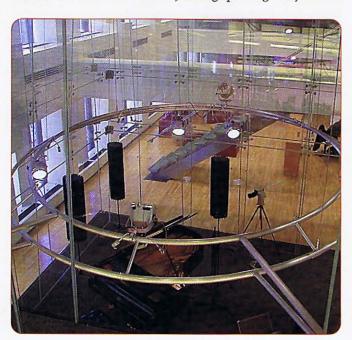
The New York skyline can been seen behind Sirius satellite dishes. It's an expensive place to put antennas, however access to entertainment for content is nearby.

"Consumers want three major things: digital sound quality, diversity of channels, and mobility," he added.

Clayton echoed the sentiment and bellowed, "How many country music stations do you think there are in New York City? How about San Francisco? Zero!" Clayton also pointed out that many people working in Manhattan live outside the city and have long commutes. "We fulfill needs for consumers in both metropolitan areas and many secondary markets as well," Clayton said. "In Oklahoma City, you can hear top 40, country music, and the farm report. That's about it, and we are talking about a pretty sizable audience. These people are audio limited," surmised Clayton.

Another Monthly Bill

Another perceived obstacle facing any subscription service is overcoming consumer's objection to adding yet another monthly bill to their household expense tally...a concern again panned by the big guys. "Look at the success we have had, starting up during a very difficult



Sirius' Studio 3 has seen big names behind the keyboard.

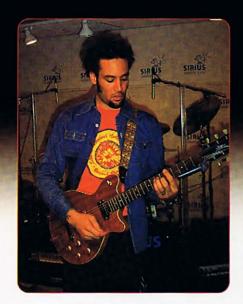
economy," XM's Panero said pointedly. "People have made a value equation regarding satellite radio, deciding that it is a cost effective way to make their lives more enjoyable, even when they might be cutting back on other things."

Siruis' Clayton agrees that it all depends on how much importance people place on having the service. "They said the same thing about satellite TV, and look what has happened since then. Now there is Internet and cellular...people seem to have found room in their budgets for them. We may roll GPS together with satellite radio and consolidate some of the services, but our research has shown that most of the objections are related to hardware costs, and we know how to cost-reduce hardware," Clayton emphasized

The OEM Equation

Satellite radio subscriptions in the future may not only come from electronics retailers. New car dealerships have also gotten involved by offering the service to their customers. Sirius has agreements with Daimler/Chrysler, BMW, and Ford, in contrast to XM's arrangements with GM and Honda. "The most likely way for car dealers to get their customers to subscribe is to give the service away free, and some companies will do that," Clayton said. "The other way would be to entice them with a taste of the service, say 10, 15 or 30 channels. It is important to whet their appetite, and I expect that some combination of the two strategies is what we will see."

XM's Panero had quite an optimistic view of the OEM channel for acquiring subscribers, predicting that dealerships will account for 40 to 45 percent of total activations by the end of 2003. "Obtaining satellite radio through the dealership is a very elegant way of getting the service," Panero said. "The radio is packaged into the price of the car, and you pay for the service as part of your monthly finance or lease charges," he added. "Eventually, these cars will all become used vehicles, of which something like 42-million are sold each year," said Panero, pointing out how the satellite radio technology would become prevalent in the US much the same way that FM and cassette gained acceptance when they started to be included as factory installed devices. As for attracting subscribers, Panero maintains that consumers will be drawn to the service based on what it offers them. "We need to continue to focus on the level of quality we offer through authentic genres and live programming. Currently we are



Rock star Ben Harper records live for Sirius. XM also features live shows and a large staff of "stream jockeys."

receiving about 50,000 calls per month from listeners who are communicating with our DJ's, so that whole interaction has to be maintained, and we clearly have to continue to improve the hardware component, which we have done with the SKYFi device."

Positive Vibrations

Consumer feedback has been overwhelmingly positive thus far from subscribers of both XM and Sirius. "I had bought a new car, and was having the radio swapped out," reported Brian Stafford, a native of Little Rock, Arkansas who is a Sirius subscriber. "The guy at Auto Audio showed me this new satellite thing, which is perfect for me because I am in sales and travel into Northern Arkansas where there are almost no conventional radio stations available," Stafford said, "I no longer use traditional radio at all anymore, the commercials drive me insane."

Stafford drives a 2003 Jeep Grand Cherokee and listens to five or six music stations as well as news, sports and comedy programming, "I use the service every time I am in the car," concluded Stafford. Tom Coffey is an MD living in Connecticut, and a very satisfied XM subscriber. "I read about the service in the newspaper, and I thought it would be perfect for me because I love satellite TV," said Coffey, who considers himself a mainstream early adopter of things that truly meet a need in his life. His favorite XM stream is Beyond Jazz, and he frequents about 5 streams in total. "I still listen to NPR (National Public Radio) on my conventional radio, but the rest of the time I use XM. Coffey drives a Lexus LS-470 and acquired his FM-modulated XM system



A view from the master control room looks on to the XM Live Performance Studio where the 48-track Sony Oxford digital console allows engineers to record, mix and re-master performers' sound.

through the dealership when he originally bought the SUV.

Creating In-car Entertainment

Both CEO's were willing to discuss the role of other entertainment companies, such as those that operate traditional radio stations, in the building of satellite radio. "I think Clear Channel operates something like 1,200 radio stations across the country, having created a national footprint for themselves with standardized programming," Clayton assessed. "Now that's expensive! I maintain that we can get a national footprint at a much lower cost using satellite radio. I am not sure that this (New York City) is the most appropriate place for an antenna farm, nor is Washington, DC. But we attract talent here-NBC and FOX are right over there," he added, pointing out of his office window... ...and CBS is down the street. Operations could probably be done more cost effectively someplace else, but for entertainment and content, this is where you have to be, or Los Angeles. We have studios in Nashville, not large facilities, and more importantly we have two facilities in Detroit where we deal directly with the car manufacturers. We also have an exclusive deal with Hertz to offer Sirius service in select rental cars. There is not a better marketing company than Hertz, and we are very happy working with them," concluded Clayton.

"The majority of the entertainment on XM is created in-house (about 50-60 of the more than 100 channels), however other entertainment companies have expertise that would be difficult for us to duplicate," said

XM's Panero. Clearly, we are not going to create an international news service, so we use CNN, the BBC, CNBC, and FOX news," he explained. "With regards to a company like Clear Channel, who provides some content on XM, they have a portfolio of talk talent that we package into various channels, so it's a great extension for them with satellite radio. The Discovery Channel might have a presence on the Internet and on TV, but they have no way to reach people in their cars," added Panero. "Satellite radio is a great way for them to access consumers with their brand, with their content, using our service in a very cost effective way. Radio's heritage, with the evolution of FM, was to be very passionate about music. I think over time, it has become homogenized with a mass market programming mentality and a tremendous amount of commercials. It is a good business, but whether it satisfies the listener base is another story, hence the opportunity for satellite radio."

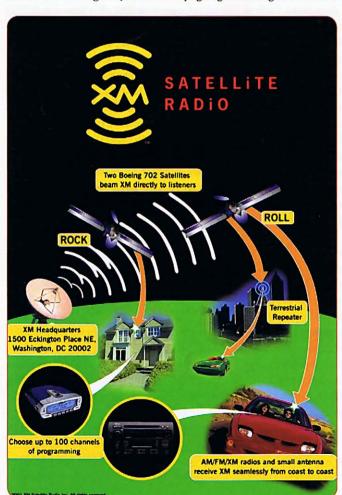
Can Two Survive?

Analysts and armchair experts are poised to see whether there is enough gross market share (overall consumer interest) to support two satellite radio companies. "Sure there is," stated both Panero and Clayton. "Look at the total number of licensed drivers in the US, and all of the used cars sold every year," Panero continued. "We are now going after the home audio and portable audio markets, as well as boats and trucks. At this point in time however, it is all about execution. People should feel confident when they are buying XM Satellite Radio that they are

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buying a service that is of high quality."

Sirius' Clayton also pointed to the large number of cars and trucks sold each year. "Look at how many 12-volt car stereo radios are sold each year—10-million! We have a market that is bipolar now: Mercedes, BMW, Cadillac: \$50-thousand dollar cars and above—consumers with an income of \$75-thousand or more, typically about a 44 year old male. Down at the other end, we have the 18 to 28 year olds, who paid \$9,000 for a used car, and probably had \$1,000 left over for a \$500 set of speakers and a \$500 radio. When our business will have truly arrived is when the middle of the market—the Ford Taurus owners, the Dodge Intrepids, the Chevy's, become satellite radio customers. Today, our business is about 90 percent retail, but it will invert itself to include more automotive business (car dealerships and OEM installed) in the next 18 to 24 months. That being said, there is always going to be a big retail market



Both satellite radio companies use a combination of ground and sky-based technology to bring their signals to subscribers.



Sirius CEO and President Joe Clayton.



XM President amd CEO Hugh Panero.

here, just like there is in 12-volt today," Clayton surmised.

Another perceived fly in satellite radio's ointment has been the announcement of a digital upgrade technology for conventional radio stations, providing better fidelity and a host of other potential improvements to a format that has gone unchanged for decades. "It's still local radio, and requires a significant expenditure for a radio station," Clayton responded. "Look how long it has taken HDTV to be incorporated into local TV stations," he added. "I think it's going to be a long trot for local radio, but I also think it's a must! Just like terrestrial broadcast television has been improved by the presence of satellite and cable TV. Satellite radio is never going to chase local radio out of existence. People always need their lifeline and connection to local news, weather, and sports, but it will force local radio to become more competitive, I guarantee that. It's a good thing," Clayton concluded.

Educating the Consumer

Most consumers do not initially understand that the actual satellite receiver is a separate sub-chassis (black box) that must be installed somewhere in their car, adding time and installation cost to the satellite radio proposition. "The evolution will be to incorporate the chipset technology directly into the head unit itself, rather than a separate black box," predicted Panero. "Our devices are getting less expensive and they are miniaturizing, so people will be able to either have an installed system or the flexibility of a transportable device, like the SKYFi, that they can bring to multiple locations. We have been able to drive equipment costs down more quickly than many other industries, and the progression of the technology and the decreasing costs will continue on," Panero said.

A Solid Emergence

Satellite radio, even in its infancy, has created an opportunity for consumer electronics manufacturers, retailers, and consumers to take advantage of an innovative technology that brings entertainment and information services to places once difficult or impossible to reach. As with any new concept launched within a free enterprise system, there must be an evolutionary process and inevitable growing pains, however, satellite radio seems to have delivered the goods to those inspired customers who have been among the first to subscribe. With determined and dynamic personalities at the helm of each company, the overall success of the technology in some form appears to be a near certainty.