

Theory and Evidence...  
Satellite Radio: Can It Survive?

by

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## Table of Contents

Executive Summary .....	2
Introduction.....	4
Background.....	6
The Industry .....	6
The Companies .....	8
Executive Leadership.....	9
Competitive Environment.....	10
Satellite Radio Competition.....	10
Terrestrial Radio Competition .....	11
Technology Competition .....	12
Marketing Strategies .....	16
Programming.....	18
Technology .....	22
Possible International Expansion.....	26
Possible Merger or Change in Ownership .....	28
Putting It All Together .....	30
SWOT Analysis: Satellite Radio Industry .....	30
Strengths .....	30
Weaknesses .....	31
Opportunities.....	31
Threats.....	32
SWOT Analysis: XM.....	33
Strengths .....	33
Weaknesses .....	34
Opportunities.....	34
Threats.....	34
SWOT Analysis: Sirius.....	35
Strengths .....	35
Weaknesses .....	35
Opportunities.....	36
Threats.....	36
The Future: Does It Look Bright?.....	36
Recommendations.....	39

## **Executive Summary**

This thesis focuses on the satellite radio industry, a relatively new field made up of two companies, XM and Sirius. The question that this paper attempts to answer is “Can satellite radio dominate today’s media marketplace?” This question is broken up into two specific goals of the research: to make a prediction about the future of the industry and to determine which company will likely dominate the field. In order to make these determinations, this paper first analyzes all of the relevant factors that will determine the fate of the two companies. First, it defines the competition in the marketplace, which ultimately consists of both terrestrial radio and other forms of music technology that do not necessarily provide the same service. Next, it covers a variety of marketing actions taken by both XM and Sirius in order to make broad conclusions as to the marketing objectives and strategies of each company. Here it is found that XM focuses on the hardware involved with satellite radio while Sirius is more concerned with getting the best programming. After making this conclusion, that there are two ways of marketing, hardware and programming, the paper delves into each a little further. In addition, the research focuses on two other key factors that will have a big effect on the future of this industry: international expansion and a possible merger or purchase of one of the companies.

After discussing all of the relevant issues and drawing conclusions about the satellite radio industry from all of them, the findings are compiled into a series of SWOT analyses (strengths, weaknesses, opportunities, threats). All of the findings of the paper up to this point are allocated to one of the four categories, in order to better make broad conclusions based on the evidence. This SWOT analysis was the basis for final predictions of the future of the industry and the two companies. The most important conclusion made out of all of the research is that satellite radio will become a major facet of today’s world, and is not just a passing fad or a niche-

oriented product. Satellite radio, like cable in the television sector, will become a new necessity for the modern consumer, and it will be the norm, rather than the exception for people to pay for radio service.

Additionally, if satellite radio can indeed dominate the modern media world, this thesis concludes that XM is better poised to take on this task than Sirius. This finding is not based merely on XM's size, but on XM's hardware-focused marketing strategy and its competitive advantage based on technology. Sirius' focus on programming will need to eventually be changed, because the company cannot sustain the vast expenditures that are required in order to get the best programming. Additionally, Sirius' belief that XM is the main competition and its almost ignorance of other competition will become more dangerous as the music technology sector grows more competitive and more consolidated. The biggest danger to Sirius currently is that it either be merged with XM or purchased by some media giant.

Based on these findings, I recommend that XM continue its focus on hardware, but also attempt to obtain Sirius. This would preempt the sale of Sirius' assets to some other company and also end the incessant programming battle that is currently happening between the two companies. I recommend that Sirius, on the other hand, re-evaluate its marketing strategy and its cost structure. It may have Howard Stern under its belt, but this will not do it any good if it goes bankrupt because of it.

## **Introduction**

Terrestrial radio has been a part of the dominant U.S. culture since before most of us can remember, even before television. Radio was the first harbinger of mass entertainment in the 1940's, bringing listeners in with the sweet voice of Bing Crosby and the intriguing reports of

Edward R. Murrow.<sup>1</sup> This staple of American entertainment has also always been free of cost, as long as one had a working radio. That is, until 2001, when XM Satellite Radio was launched, followed closely by Sirius Satellite Radio in late 2002. Now, in 2006, the two companies have subscriber numbers totaling over 9 million combined (XM with 6 million, and Sirius with 3 million). While these numbers are small compared to the estimated 280 million Americans<sup>2</sup> who listen to terrestrial radio, they do put some fear in the hearts of these traditional radio broadcasters. And, in fact, they should. For cable television began this same way. It was called a fad; critics said that people would never pay for what they could get for free. However, by the end of the 1990's, about 97% of households had cable in them.<sup>3</sup>

The aim of this paper is to examine the satellite radio industry and determine whether it, like cable, will eventually dominate the media market. Do the apparent benefits of satellite radio outweigh the cost of subscription? Are the two companies poised to take control of the radio market? The issue is not as clear-cut as simply terrestrial vs. satellite. There are a number of other radio-like technologies emerging in the marketplace that will not only threaten traditional radio, but whose success will also determine the fate of satellite radio. Additionally, the actions of XM and Sirius in marketing and technology investment will affect their ability to woo consumers and gain subscription numbers. The success of satellite radio as a medium does not necessarily guarantee the survival of either XM or Sirius. Therefore, it is important to also determine, through critical analysis of the companies' actions, which one appears to be better positioned to dominate the marketplace. This paper will analyze all of the above-mentioned things in turn, in addition to a number of other factors impacting this industry. The ultimate goal is to make some relevant predictions about the future of satellite radio. These predictions should

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<sup>1</sup> Justin, Neal. "The New Golden Age of Radio." The Star Tribune 8 January 2006.

<sup>2</sup> Cotton, Karen. "As Satellite Radio Blossoms, Many Still Prefer Local." Wyoming Tribune Eagle 22 July 2005.

<sup>3</sup> Tracy, Paul. "An In-Depth Look at the Satellite Radio Industry." StreetAuthority Market Advisor.

include a determination as to which company is more strategically poised to succeed, as well as a statement on the fate of the satellite industry as a whole.

In beginning this paper, the two companies appear very similar. Neither seems to have any distinguishing features. Both XM and Sirius offer a variety of programming, which is very similar, for the same price. Therefore, it seems inevitable at this juncture, that either one of the two will go out of business, or that they will merge, because consumers cannot distinguish between them. As far as the survival of the industry, my original hypothesis is that satellite radio, as one of many new technologies in the marketplace providing roughly the same service, will not become a dominant medium. Rather, it will struggle in its battle with these other media and will end up splitting the market with them.

## **Background**

Before analyzing the satellite radio industry, it is crucial to first explore its foundations, in order to become familiar with the setting of this paper. Therefore the backdrop of the industry, the makeup of the two companies involved, and the people who will critically impact its future, are discussed below.

### ***The Industry***

There are currently only three satellite radio providers in the world: XM, Sirius, and Worldspace Corp., a firm that provides its services in Asia, Africa, and Europe.<sup>4</sup>

There are only two firms competing in the U.S.: XM and Sirius. What is the reason for this? One explanation is the immense barriers to entry. Not only did the two companies have to spend 1 billion dollars for the launch of their respective satellites into orbit, but

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<sup>4</sup> Kumar Sarma, Ripunjoy. "Why Should I Tune Into Satellite Radio?" The Economic Times 26 July 2005.

they also had to each pay over 80 million dollars for the only two satellite broadcast licenses the FCC offered in an April 1997 auction<sup>5</sup>. Because of this, we can be reasonably sure that the U.S. satellite radio industry will remain a two-company battle. *The Economist* compares the situation faced by XM and Sirius to the duopoly of Coke and Pepsi, both “with high profit margins and barriers to entry”.<sup>6</sup>

What exactly is satellite radio and what are its benefits compared to traditional radio? Satellite radio offers better sound quality, fewer commercials, more variety and a higher quality choice of programming, all uncensored. Imagine being able to listen to the radio on a long road trip without experiencing any commercials or station breaks! Satellite radio offers just this type of experience. Another big appeal of satellite radio is that it can offer niche programming. Because each provider has over 120 channels of nationally available content, it is able to broadcast “genres of music that do not attract enough listeners to justify their own terrestrial radio stations”.<sup>7</sup> However, this ultra-targeted and ultra-convenient service comes at the cost of a satellite radio receiver and \$12.95 a month subscription fee.

When satellite radio was formed, critics claimed that “[companies] in the embryonic industry would go the way of the 8-track tape”<sup>8</sup>; in other words, the benefits of satellite radio did not outweigh the costs. However, they were quite wrong. While current satellite radio market penetration is estimated at only 4% of the U.S. population<sup>9</sup>,

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<sup>5</sup> Gartner, John. "Can Digital Kill the Radio Star?" 8 Jul. 2000 <www.wired.com>

<sup>6</sup> “Howard’s Way.” *The Economist* 12 January 2006.

<sup>7</sup> Kumar Sarma, Ripunjoy. "Why Should I Tune Into Satellite Radio?" *The Economic Times* 26 July 2005.

<sup>8</sup> Levine, Greg. “Sirius Stock Climbs on Karmazin’s Buy.” 12 Jan. 2006 <www.forbes.com>

<sup>9</sup> Heine, Paul. "Satellite Stampede: the Competition Zone." *Billboard Radio Monitor* (2005).

the Radio Business Report predicts that satellite radio will have 46.8 million subscribers by 2014<sup>10</sup>.

However, even with their success on the basis of subscriber numbers, neither company has managed to turn a profit so far. Both XM and Sirius claim that this is due to large programming costs, which are masking the huge growth in revenue. Additionally, both claim that they will break even and begin to make profit within the next two years.<sup>11</sup>

### *The Companies*

XM is the leader in the satellite radio industry, with about 6 million subscribers compared to Sirius' 3 million. Formed in 1992, XM has been publicly traded since 1995. Service officially began on September 25, 2001, in San Diego and Dallas/Fort Worth, followed by a nationwide launch. XM launched a third satellite in February 2005. Its programming lineup consists of 170 channels, again more than Sirius, which only has about 125 channels. Its corporate headquarters are located in Washington, D.C., but it has broadcast facilities in New York, Nashville, Boca Raton, FL, Southfield, MI, and Yokohama, Japan.<sup>12</sup> Financially, XM's 2005 Net Income was -666.7 million dollars, yet its 2005 Sales were 558.3 million dollars. This large sales figure represents a 128.4 percent growth since the previous year.<sup>13</sup>

Sirius is the smaller of the two companies. It was incorporated in May 1990 and went public in 1994. Its three satellites were not launched until 2000, and broadcast officially began in July 2002. Sirius' headquarters are located in New York, with offices

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<sup>10</sup> Cotton, Karen. "As Satellite Radio Blossoms, Many Still Prefer Local." Wyoming Tribune Eagle 22 July 2005.

<sup>11</sup> "Sirius Posts Wider Loss, Raises Guidance." 1 Nov. 2006 <[www.forbes.com](http://www.forbes.com)>

<sup>12</sup> XM Website <[www.xmradio.com](http://www.xmradio.com)>

<sup>13</sup> Anderson, Linnea. "XM Satellite Holdings, Inc. Fact Sheet." <[premium.hoovers.com](http://premium.hoovers.com)>

in Los Angeles, Memphis, Nashville, New Orleans, Houston and Daytona.<sup>14</sup> Sirius' financials are similar to XM, in that it had an extremely negative 2005 Net Income figure (- \$863 Million) and a relatively high 2005 Sales figure (\$242.2 Million). Also, like XM, this sales figure represented a large percentage growth from the previous year (262%).

### ***Executive Leadership***

XM's CEO and President Hugh Panero, who has held this position since July 1998, has an extensive media background, with particular experience in subscription based services. Prior to working at XM, he spent 5 years as President and CEO of Request TV, a national pay-per-view television service owned by Liberty Media and Twentieth Century Fox. Before that, he spent 10 years at Time Warner Cable, where he held various positions, including Vice President of Marketing.<sup>15</sup> Panero is particularly known for his perseverance with innovative ideas that are doubted by the general public. He was one of the first supporters of the pay-per-view model, arguing that people would pay to watch premium content on their televisions. Although his experience is particularly relevant to television, Panero has shown that he is able to adapt this knowledge to the radio industry. He joined XM at a time when it was "a staff of fewer than a dozen working out of a windowless basement office in downtown Washington".<sup>16</sup> His innovative thinking will be crucial to XM's success.

Mel Karmazin is the CEO of Sirius, joining the company in 2004. He has a much more radio-oriented background containing a more impressive list of companies than Panero. Karmazin served as President and CEO of Viacom Inc., one of the largest media

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<sup>14</sup> Sirius Website <[www.sirius.com](http://www.sirius.com)>

<sup>15</sup> XM Website <[www.xmradio.com](http://www.xmradio.com)>

<sup>16</sup> Shin, Annys. "At XM, Boldly Going Under Hugh Panero, Satellite Radio Is a Hit." Washington Post 29 November 2004.

companies in the world, for 4 years. Before that, he served as President and CEO of CBS Corp., Chairman and CEO of CBS Broadcasting, and President and CEO of Infinity Broadcasting. Karmazin is the vice chairman of the Museum of Television and Radio, has been inducted into the Broadcasting Hall of Fame, and received the National Association of Broadcasters National Radio Award<sup>17</sup>. His stature in the radio industry is a huge benefit to Sirius, as it will help him in making programming deals. For example, Howard Stern worked under Mel Karmazin at Viacom and the two are known to have a good relationship, a fact which was probably instrumental in bringing Stern to the Sirius family.

## **Competitive Environment**

### ***Satellite Radio Competition***

XM and Sirius are very similar at first glance. Both offer over 120 channels of music, talk, and sports programming with fewer commercials, better sound quality, and more niche-oriented variety in programming. Both companies offer an equal number of 100% commercial free music and a variety of personality-based talk and music programs, featuring stars such as Eminem, Jimmy Buffet, Martha Stewart, and Ellen Degeneres. Additionally, each company offers “local” traffic and weather stations for about 20 larger markets. XM and Sirius both charge a \$12.95 per month subscription fee and offer a variety of hardware alternatives for listening to the satellite transmission.

However, upon delving further into the website of each company, as well as reading a number of reviews on the services, the differences between them begin to

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<sup>17</sup> Sirius Website <[www.sirius.com](http://www.sirius.com)>

become clear. XM is known for having better music selection, hardware, and sound quality. Sirius, on the other hand, leads in talk radio selection, sports coverage, and personality-based programming<sup>18</sup>. The choice between the two programmers is largely a matter of personal preference. Music lovers will probably prefer XM, as it is dedicated to providing its consumers with music that is just not heard on terrestrial radio.<sup>19</sup> However, sports aficionados will most likely choose Sirius, as it has programming deals with the NFL, NHL, and NBA, 3 of the biggest sports franchises in the U.S. Additionally, one may choose a satellite provider based on a personal affinity for one of the celebrities on its program list. Or, perhaps, based on the specific hardware available to listen to the transmission. How are XM and Sirius to market themselves when the decision between them is so complex in itself, and may be completely different for each individual consumer? The marketing strategies pursued by each company will be covered in the next section. For now, it is relevant to discuss external competition faced by the industry.

### ***Terrestrial Radio Competition***

Satellite Radio's most obvious and biggest competitor is terrestrial radio. Terrestrial radio, also called traditional radio, is a large market, with about 6,215 FM and 4,758 AM stations as of September 2005.<sup>20</sup> The industry is mostly composed of large corporations that own hundreds of stations across the country, the two biggest being Clear Channel Communications and Infinity Broadcasting Corp.<sup>21</sup> In fact, this corporatization of traditional radio is what caused many people to leave its ranks for

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<sup>18</sup> Guttenberg, Mark, and Mathew Moskovciak. "CNet'S Quick Guide to Satellite Radio." <reviews.cnet.com>

<sup>19</sup> Bagley, Nancy. "Interview with Hugh Panero of XM Satellite Radio." Washington Life Magazine.

<sup>20</sup> "IBOC Digital Radio Broadcasting for AM and FM Radio Broadcast Stations." 15 Nov. 2005  
<<http://www.fcc.gov/mb/audio/digital/index.html>>

<sup>21</sup> Well Connected – the Center for Public Integrity. 18 Nov. 2005  
<<http://www.publicintegrity.org/telecom/industry.aspx?act=broadcast>>

those of satellite radio. Lee Abrams, who joined XM in 1998, said “FM looks at radio like a science. We [satellite radio] look at it like a rock band trying to make a great album.”<sup>22</sup> However, the major advantage that traditional radio has is its ability to provide local content to consumers. While XM and Sirius each offer about 20 “local” stations, these are only available for major markets, and still leave many smaller areas devoid of “local weather, traffic situations, news or community events -- which is why local FM and AM radio stations still play a vital role in communities across the U.S.”<sup>23</sup> The issue in debate here is whether people actually care about local content or not. A survey taken by the Mellman Group in 2002 reported that 78 percent of Americans felt that their radio stations played a vital role in providing information to their communities.<sup>24</sup> Sirius and XM are both taking on this challenge, by expanding their local content to include more and smaller communities in traffic and weather reports.

A few terrestrial broadcasters have seen satellite radio as a distribution platform for content, instead of as a competitor. Companies such as ABC, Clear Channel, and Westwood One have invested in XM and Sirius, and provide them with talk and local content. Traug Keller, Senior VP of ESPN Radio summed up the attitude of these broadcasters when he said, “Everywhere ears are.”<sup>25</sup>

### ***Technology Competition***

The satellite radio industry faces competition with several industries, which essentially share the same operational function of offering digital, high-quality music and entertainment. The first major competitor industry is digital radio broadcasting, also

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<sup>22</sup> Justin, Neal. “The New Golden Age of Radio.” The Star Tribune 8 January 2006.

<sup>23</sup> Daglian, Krikor. “Satellite Radio Analysis.” eMarketer (2006).

<sup>24</sup> “The State of the News Media 2004: an Annual Report on American Journalism” 18 Dec. 2005 <[journalism.org](http://journalism.org)>

<sup>25</sup> Bachman, Katy. “Defying Gravity.” MediaWeek 30 January 2006: 18-22.

called HD radio, which allows terrestrial stations to broadcast two separate FM programs on one channel simultaneously, therefore enabling them to offer more programming options than before. Like satellite radio, digital radio broadcasting relies on special radio receivers, which listeners must purchase. A key player in development of digital radio broadcasting is iBiquity Digital Corp, a dominant power because the Federal Communications Commission voted in October 2002 to adapt its technology as the standard for digital broadcasts. The competitive advantage of digital radio broadcasting over satellite radio is that the service will require no subscription fee from listeners. However, HD radio requires stations to be equipped with new transmitters, a hurdle which may discourage development of the technology. Another weakness is that, although stations will be able to offer twice as many programs as before, they will still face difficulty fighting satellite radio's wide variety of program offerings. Lastly, unlike satellite radio, HD radio still contains commercials, which may lessen the benefit of investing in a digital radio. This technology could be the lifesaver for the traditional radio station, thus will be encouraged aggressively by the terrestrial radio industry.

Another competitor of the satellite radio industry is Internet radio, also called webcasting. The key player in the webcasting field is Digital Media Association, which represents major web-based radio providers such as AOL, Yahoo!, Apple, and Live 365<sup>26</sup>. Internet radio offers very attractive advertising and marketing opportunities because it has the ability to incorporate visual and audio, thus enabling advertisers to more effectively grab a consumer's attention. Also, Internet radio is able to instantly link listeners to online music retailers to purchase songs they hear on the stream. In addition,

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<sup>26</sup> "Is the Internet Radio Dying?" Managing Technology At Wharton. 17 Jul. 2002  
<<http://knowledge.wharton.upenn.edu/index.cfm?fa=viewfeature&id=590>>

there is no signal strength constraint to deliver services, which means that the service can be easily made international<sup>1</sup>. However, the major obstacle of Internet radio is the royalties that the US Copyright Office imposed on the Internet radio stations in 2002, which applies to re-transmitting radio signals over the Internet or streaming original music programming over the web. Many cell phone companies have begun to market wireless Internet streaming audio services and devices, which makes the technology even more threatening to satellite radio<sup>27</sup>.

The most threatening competitor industry that satellite radio is faced with is MP3 players. MP3 players store digital music in their internal memories, on removable storage media, or a combination of both. They allow people to convert CD-based music to digital files or to download music from online music stores such as Apple's iTunes or Napster, websites that allow users to download music legally for a fee, then listen to the files on a computer or transfer them to a portable MP3 player. The MP3 player industry is dominated by Apple's iPod. The biggest obstacle that MP3 players face is the fee per downloaded song. Unlike satellite radio, which charges a fixed fee per month to listeners, after which they have unlimited access to the programs and music, MP3 players require customers to pay for an individual song or album. However, the purchase of an MP3 does signify ownership of that particular digital track, as opposed to simply hearing a stream of it, which may provide a competitive advantage to MP3s.

One of the next opportunities for growth for MP3 players is to deliver music via cell phone. Apple, Motorola and Cingular Wireless have launched the world's first mobile phone with iTunes, called the Rockr, which enables

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<sup>27</sup> "Live365 Completes Comprehensive Report on the Internet Radio Industry; Past, Present and Future." PR Newswire. 27 Feb. 2001. <<http://www.prnewswire.co.uk/cgi/news/release?id=63652>>

customers to transfer up to 100 of their favorite songs from iTunes to their mobile phone<sup>28</sup>.

After looking at the various sources of technology competition, what are the competitive advantages of satellite radio over these other mediums? The benefit of satellite radio compared to Internet radio and digital radio is that satellite radio is commercial free all the time. This is a huge plus for all consumers, for whom we know that commercials can be extremely annoying. However, the downside of offering commercial-free programming is that XM and Sirius must charge subscription fees to make up for loss of advertising revenue. Although 12.95/month is not an exorbitant price, some consumers may still be willing to deal with commercials rather than pay this fee. Another competitive advantage of satellite radio over its competing industries is that it can be listened to in almost any setting, with many new and inventive satellite radios receivers coming out all the time. Satellite's most dangerous competitor is the MP3 player. The MP3 player industry has had massive growth in recent years, and does not look like it will slow down any time soon. Satellite radio must deal with this threat accordingly if it is to succeed.

One pattern that emerges from the preceding competitive discussion is that of integration between many different technologies. Cell phones and mp3 players, cell phones and internet radio, terrestrial radio and digital technology, and so forth. This technology integration will have a huge effect on the satellite radio industry as it competes with these various technologies. Will it choose to integrate its own product with other technological products or will it keep its product in its present condition? This question will be investigated later. Next, however, the

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<sup>28</sup> [Apple Website](http://www.apple.com/pr/library/2005/sep/07rokr.html). 17 November 2006 <<http://www.apple.com/pr/library/2005/sep/07rokr.html>>

marketing strategies that XM and Sirius employ in order to gain subscribers and differentiate themselves from the competition will be discussed.

## **Marketing Strategies**

Who is the typical listener of satellite radio? According to BIG Research, the average satellite radio subscriber is a 42.7 year old male, with an income of \$77,329, which is well above the national average of \$44,389.<sup>29</sup> This finding, that satellite radio listeners are older and more affluent males, is important in examining the two companies' marketing strategies. Because the business of satellite radio is based on subscription, both XM and Sirius must give marketing and sales a lot of significance. Thus one is able to recognize the companies' aggressive commitment to advertising and promotion. However, as indicated earlier, the two companies do not differ a great deal on attributes such as price or service characteristics. How do XM and Sirius market themselves in order to both attract subscribers and differentiate themselves from each other? At first glance, it seems that the two companies pursue very similar marketing strategies. Both XM and Sirius use three main techniques for marketing: development of cutting-edge technology to listen to the broadcast, capture of big name celebrities for programming deals, and creation of partnerships with other entertainment and technology companies.

A strategy both companies have found essential to their marketing plans is the incorporation of various fields of entertainment into their broadcasts. Both XM and Sirius have signed a number of deals with music and talk celebrities. The most notable deals for Sirius are those with Howard Stern and Martha Stewart, while the biggest deal for XM is probably that signed with Oprah or Major League Baseball. Programming will be analyzed in detail in the next section, in order to assess its impact and importance for both companies.

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<sup>29</sup> Daglian, Krikor. "Satellite Radio Analysis." [eMarketer](#) (2006).

XM and Sirius also pursue deals with a number of other companies, some for functional enhancement of their product and others for basic promotion of their service. With cell phone deals, magazine deals, and automaker contracts among their many arrangements, the satellite radio industry is targeting every market they can. For example, XM and Sirius radio have teamed up with almost 30 automotive companies to target car buyers. The companies have had varying levels of success with this strategy. XM acquires about half of its new subscribers in the dealer showroom, and half at retail, while Sirius obtains 75% of its new subscribers from retail and only 25% from the automotive sector.<sup>30</sup> One of the key advantages of these deals, in which satellite radio is tied to another product, is that it allows XM and Sirius to give consumers a free trial period, after which they can decide whether they would like to continue with service or not. The reason this is an advantage to satellite radio is because both XM and Sirius have a very low “churn rate” of around 2%.<sup>31</sup> A churn rate is how rapidly new subscribers quit the service. A low rate basically means that once subscribers are exposed to satellite radio, they want to keep it. The number of people who receive free trial periods and then switch over to satellite radio is rather high, with about 56% of GM customers who receive a free trial actually converting to XM as paying subscribers.<sup>32</sup> Other examples of trial period deals for XM occur via DirecTV, Time Warner AOL, Hyatt and JetBlue Airways.<sup>33</sup>

Another type of promotional deal, in which satellite radio attempts to make it easier for people to convert, is one in which the company gives away free satellite radios. For example, XM passed out a free satellite radio to every fan at the U.S. Cellular Field in Chicago for Game One of the World Series. They even agreed to extend the promotion to Minute Maid Park in Houston if

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<sup>30</sup> Heine, Paul. "Satellite Stampede: the Competition Zone." Billboard Radio Monitor (2005).

<sup>31</sup> Daglian, Krikor. "Satellite Radio Analysis." eMarketer (2006).

<sup>32</sup> "XM's 3Q Loss Widens Despite Revenue Growth." 27 Oct. 2005. <[www.forbes.com](http://www.forbes.com)>

<sup>33</sup> Roney, Maya. "XM Seen Topping Sirius in 2006." 13 January 2006.

the series extended to Game Five, so that they would not appear biased toward the Red Sox baseball team.<sup>34</sup> These deals, which emphasize increasing satellite radio's integration with other products and brands, will be discussed in more depth in the remaining sections.

Although it is evident that both XM and Sirius pursue roughly the same marketing strategies in their quest to win the satellite radio battle, the main difference between the two is their strategic emphasis, and more basically, their definition of with whom they are competing. XM focuses mostly on hardware and lowering prices while Sirius focuses more on content, attracting the biggest names for programming. This is because XM fundamentally believes that it is more important to compete with other forms of technology, while Sirius is focused on competing strictly with XM. This makes sense when one thinks of the fact that Sirius is so much smaller, and therefore, more threatened by XM's presence. These attitudes are demonstrated by the actions and attitudes of the companies. Sirius spokesman, Jim Collins, said, "This is about content. Content and programming will drive this business."<sup>35</sup> However, XM Chairman, Gary Parsons, said in Business Week, "It's more important to differentiate ourselves from the other technologies and services that are out there than for either Sirius or us to differentiate ourselves from one another."<sup>36</sup> It is apparent that the two companies have completely different marketing focuses. Now that it has been determined that technology and programming are the two main points of competition, the next two sections will delve into each a little further.

## **Programming**

The last section concluded that Sirius holds programming as its main focus while XM is concerned more with technology. This, however, does not mean that XM does not pursue

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<sup>34</sup> Levine, Greg. "Panero's XM, MLB in World Series Radio Giveaway." 21 October 2005.

<sup>35</sup> Daglian, Krikor. "Satellite Radio Analysis." *eMarketer* (2006).

<sup>36</sup> Business Week Online, July 2005 <[www.businessweek.com](http://www.businessweek.com)>

programming deals. It must if it is to stay competitive! Outlined below are the major deals that each company has made, and any other relevant details for an analysis.

Sirius has an extensive list of programming options, including the NFL, NBA, Playboy Channel, Nascar, Christian Chat Venue, Bruce Springsteen (E Street Radio), Eminem (Shady's Uncut Hip-Hop), Jimmy Buffett (Escape to Margaritaville), Blue Collar Comedy, and, most notably, Howard Stern and Martha Stewart (How-to For Living). Howard Stern has become Sirius' golden child, its ticket to huge subscriber growth, or so it claims. Stern came from terrestrial radio to satellite in order to escape the clutches of censorship. He has promised his satellite listeners live sex shows and stripper poles, among other things.<sup>37</sup> These sex shows are not coming cheap for Sirius. The deal, originally worth about \$500 million for five years, including 200 million dollars in stock, has now inflated to be worth about \$670 million.

XM's specialty channels include MTV and VH1, Major League Baseball, the National Hockey League, Nascar Radio, Hear Music (a property of Starbucks), MSNBC, Jimmie Johnson (Nascar Star), Opie & Anthony, Bob Dylan, Snoop Dogg, and Oprah.<sup>38</sup> Sometimes, these deals have been taken from right under the nose of Sirius. The 100 million dollar deal signed with the NHL to become the league's exclusive satellite provider, was a direct play to take the privilege away from Sirius. Because Sirius has better sports coverage, XM has worked on improving its own sports deals. Sports are very important to the average satellite radio listener, him being an older male. In fact, between 16 and 20 percent of XM subscribers state the MLB content as their reason for choosing XM.<sup>39</sup> XM paid 650 million dollars for the 11 year exclusive coverage deal, so one would hope they were gaining some sort of benefit from it. The exorbitant programming

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<sup>37</sup> Burgos, Annalisa. "Bain Capital Buys TI Division for \$3B." 9 Jan. 2006 <[www.forbes.com](http://www.forbes.com)>

<sup>38</sup> [XM Website](http://www.xmradio.com) <[www.xmradio.com](http://www.xmradio.com)>

<sup>39</sup> Daglian, Krikor. "Satellite Radio Analysis." [eMarketer](http://www.emarketer.com) (2006).

costs associated with deals such as XM's MLB agreement and Sirius' Howard Stern contract will be covered later in the paper.

Other deals signed by the two companies appear to be with relatively similar stars, as if they are attempting to match each other's programming offers. XM inked a deal with Opie & Anthony, a comedy duo that first aired on XM in September 2004. The pair is considered a near equivalent to Sirius' Howard Stern, as both shows attract the same sort of listener (young to middle-aged men) and both have been targets of FCC disapproval on traditional radio. Opie and Anthony are best known for their live broadcast of a couple having sex in New York's St. Patrick's Cathedral. By airing the duo at the same time as Sirius' Howard Stern announcement, XM calmed down the buzz about Sirius' new catch. However, it is not clear what impact the signing of Opie & Anthony had on XM's subscriber numbers. Its subscription numbers rose by 713,101 in the fourth quarter of 2004, its biggest single quarter subscriber growth, but this may have been simply due to holiday shopping.<sup>40</sup>

Other analysts point out the clear similarities between Howard Stern and XM's newest player, Oprah. As Forbes writer Greg Levine so eloquently puts, "The Color Purple star could easily lay claim to the salty raconteur's sobriquet of 'King of All Media'"<sup>41</sup> She has her own self-named chat show, Oprah Magazine, and is a co-founder of the Oxygen cable channel. Yet the one stark difference between these two deals is the cost. Oprah's deal with XM is costing the company a mere 55 million dollars for three years. Undoubtedly, this deal causes many critics to question Sirius' intelligence in forging its deal with Mr. Stern.

Another example of similarity between the two companies' offerings is in the presence of Eminem's show "Shady's Uncut Hip-Hop" on Sirius and Snoop Dogg's channel "The Rhyme"

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<sup>40</sup> Daglian, Krikor. "Satellite Radio Analysis." *eMarketer* (2006).

<sup>41</sup> Levine, Greg. "XM Inks Oprah For \$55M--Sirius' Stern Looks Pricey." 9 Feb. 2006 <[www.forbes.com](http://www.forbes.com)>

on XM. The two rappers are known to work closely together, often appearing on each other's albums. The difference between the rappers' roles at satellite radio is that Snoop Dogg was named an Executive Producer at XM, which basically means that, in addition to hosting the show, he will provide creative direction for the channel and assist in development of exclusive programming.<sup>42</sup> One must wonder whether this title is not just another type of promotion for the service.

Apparently, both Sirius and XM have realized that the old saying is true: "content is king." It appears that the game between XM and Sirius is who can attract the biggest names in sports and media for programming, which will sway a potential subscriber's choice between the otherwise very similar companies. However, are these deals worth their costs? The two most expensive occurred between Sirius and Howard Stern and XM and MLB. The true test of whether these deals are profitable comes in subscription growth that can be attributed to this specific content. While Sirius has grown a great deal after signing Stern, many are worried about its financial health. Standard & Poor's Equity Research predicted that the deal will raise programming costs much more than the estimated \$100 million dollars.<sup>43</sup> Even worse, according to Wharton Business School professor, Peter Fader, Sirius would have had the same subscriber count even without its Stern deal. He says, "both [companies] will have tens of millions of subscribers. It was too early to do a bold move like this."<sup>44</sup> It appears that Sirius may have become overzealous about programming.

Another way of looking at the profitability of deals is through subscriber acquisition costs. XM pays about 57 dollars to acquire each new customer, while Sirius pays around 150 dollars. This is almost 100 dollars difference! It is true that Sirius is growing more than twice the rate of

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<sup>42</sup> Levine, Greg. "Panero's XM Names Snoop Dogg Exec Producer." 8 Dec. 2005 <[www.forbes.com](http://www.forbes.com)>

<sup>43</sup> Ng, David. "Sirius to See Stern Pressure in Near Term." 12 Jan. 2006 <[www.forbes.com](http://www.forbes.com)>

<sup>44</sup> "A Sirius Gamble." [Knowledge@Wharton](mailto:Knowledge@Wharton). 13 Feb. 2006.

Sirius in subscription numbers (229% vs. 100%), but if Sirius pays this much more to acquire a customer, will it be able to sustain itself in the long run?<sup>45</sup> Sirius' focus on programming is not a sustainable marketing strategy for the long term success of its business. The Wall Street Journal has said that Sirius is "crushing its own windpipe" with the type of deals it is making.<sup>46</sup> Attracting big names in programming is important in order to differentiate oneself from the competitor, but not if it puts you out of business. Perhaps XM's focus on technology and hardware is more feasible in the long term. This is explored next.

## **Technology**

Due to the cutting-edge nature of this industry, technology is a key determinant to its success. First, it is helpful to look at the basic technology behind the service. Both XM and Sirius own satellites, which are the key transmitters of the signal across the nation. However, these satellites are fundamentally different in the way they transmit the signal to a listener's radio receiver. XM's two Boeing 702 satellites are geostationary, called this because they rotate around the earth at the exact speed that the earth rotates around its axis, therefore basically remaining stationary over a point on the earth.<sup>47</sup> Because these satellites are above the equator, the terminals on the ground must have a direct view of the southern sky to receive their signals. This is not the case for XM listeners, who are mobile and often under bridges, blocked by trees or mountains, etc. To solve this problem, XM has installed a large number of repeaters, or antennas, on the ground in strategic locations to receive the signal and retransmit it to other

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<sup>45</sup> Daglian, Krikor. "Satellite Radio Analysis." eMarketer (2006).

<sup>46</sup> Eisinger, Jesse. "Long & Short: Sirius Satellite May Be Headed for Dog Days." The Wall Street Journal. 8 December 2004: C. 1

<sup>47</sup> "Geostationary Satellites Frequently Asked Questions." Dundee Satellite Receiving Stations  
<<http://www.sat.dundee.ac.uk>>

terminals.<sup>48</sup> Each XM radio is set to receive a signal from one of the satellites and a repeater simultaneously.

Sirius' three Loral FS3100 satellites, on the other hand, rotate in unique elliptical orbits to cut down on the loss of signal that geostationary satellites can cause. The satellites move in a figure eight shape, thereby traveling higher into the sky than other satellites.<sup>49</sup> Because of this, Sirius has not had to invest in as many repeaters on the ground. Regardless of the different methods used to transmit the signal, both companies have achieved great success in ensuring that their signals are available to all users, no matter where they are located.

The second aspect of technology, other than the satellites that are used to transmit the signals, is the hardware used to listen to the signal. Up until a few months ago, automobiles were the main source of hardware sales, and both XM and Sirius were locked in a race to sign the most deals with car manufacturers, known as OEMs (Original Equipment Manufacturers). XM has deals with GM, Honda, Hyundai, and Toyota. In 2006, nearly 90 percent of GM's U.S. models will offer XM receivers either as standard equipment or as an option.<sup>50</sup> By 2010, all of XM's car manufacturer partners expect to offer XM radio in at least 70% of their vehicles. The conversion rate, or amount of car owners who will end up subscribing to the service, according to Deutsche Bank, will be about 60%.<sup>51</sup> Sirius, on the other hand, has deals with BMW, Mercedes, Ford, and Daimler-Chrysler. Among these car manufacturers, Deutsche Bank expects that they will have Sirius radio available in all of their models by 2010. The conversion ratio among Daimler-Chrysler and Ford buyers will be around 40%, but will probably be much higher

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<sup>48</sup> Kumar Sarma, Ripunjoy. "Why Should I Tune Into Satellite Radio?" The Economic Times 26 July 2005.

<sup>49</sup> Kumar Sarma, Ripunjoy. "Why Should I Tune Into Satellite Radio?" The Economic Times 26 July 2005.

<sup>50</sup> "GM To Build More Vehicles With XM Radios." 26 Oct. 2005 <www.forbes.com>

<sup>51</sup> Daglian, Krikor. "Satellite Radio Analysis." eMarketer (2006).

for BMW and Mercedes owners.<sup>52</sup> It is apparent that there is no clear leader with regards to OEM deals. Therefore, future hardware development will determine where the competition is really headed.

The key trends in hardware development are improvement and integration. Both XM and Sirius are finding ways to improve the convenience and performance of their satellite radios and to integrate their hardware with other products, such as MP3 players, cell phones, as well as a host of other high-technology products. Because this market is progressing so rapidly and in so many directions, the best that can be done is to simply outline some of the key examples. XM caused quite a stir at the Las Vegas Electronics Show in January 2006, when it introduced a number of portable digital music players with enhanced features and signal. One of these is the XM-Passport, a digital tuner the size of a matchbook, and the Samsung Nexus, which when used along with the Passport, can record XM programs and then play them back to the listener. Another exciting XM product unveiled at the trade show was the Pioneer Inno, an integration of XM satellite radio and an MP3 player with 1 gigabyte of internal memory. The device allows listeners to store songs taken from their own music collection, as well as up to 50 hours of XM programming. Users can also bookmark songs they heard on XM for later purchase. The Samsung Helix XM2 Go player is similar to the Pioneer Inno.<sup>53</sup> Major record labels are very worried about this type of technology, which ostensibly allows users to pull music from the satellite radio transmission for free. We may see a legal battle between XM and these labels sometime in the near future.<sup>54</sup> Another issue is the availability of signal on a portable satellite radio device, which is not designed for automobile use, but for people, who often enter subways

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<sup>52</sup> Daglian, Krikor. "Satellite Radio Analysis." *eMarketer* (2006).

<sup>53</sup> Gentile, Gary. "High-Def Is The Word At Electronics Show." 8 Jan. 2006 <[www.forbes.com](http://www.forbes.com)>

<sup>54</sup> Kafka, Peter. "Tech Tunes In." 9 Jan. 2006 <[www.forbes.com](http://www.forbes.com)>

and buildings. To solve this problem, XM has included the ability to prerecord or time-shift listening, somewhat like Tivo, on these devices.<sup>55</sup>

Sirius also has a few devices, though not as many, that incorporate some of the technologies mentioned above. The S50 is the only semi-portable Sirius device out there right now, and it allows users to record entire songs as they listen to the transmission, even if they start recording halfway through.<sup>56</sup> However, the S50 must download programming from a home or car docking kit and cannot receive live programming on its own. The Starmate is a device for use in the car, which allows users to record up to 44 minutes of transmission.

Apart from hardware development, both companies have made a number of deals that incorporate their services into other products. For example, XM has signed a deal with DirecTV, which will now offer 72 of XM's music and talk radio channels. For XM, this means that it will have access to DirecTV's 14 million customers. In addition, the XM-DirecTV combo will be available on Jet Blue Airways flights. XM has also recently formed a partnership with Napster, the music downloading service, to present XM + Napster, a service that will give satellite radio customers access to Napster's library of over 1.5 million songs. The service is particularly cutting-edge, as it is the first true integration of digital music downloading and satellite radio.<sup>57</sup> On the other side of the coin, Sirius plans to offer two new video channels on its service, using Windows Media Video 9 technology, in the near future. Sirius recently announced a deal with Sprint Nextel, whose customers will be the first to receive Sirius radio via their mobile handsets.<sup>58</sup>

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<sup>55</sup> Heine, Paul. "Satellite Stampede: the Competition Zone." *Billboard Radio Monitor* (2005).

<sup>56</sup> Daglian, Krikor. "Satellite Radio Analysis." *eMarketer* (2006).

<sup>57</sup> "Napster Shares Climb on Testing Service." 21 Nov. 2006 <[www.forbes.com](http://www.forbes.com)>

<sup>58</sup> Bostick, Jackie. "Sirius Music Channel Makes Its Mobile Debut on Sprint." 13 Sep. 2005 <[http://www2.sprint.com/mr/news\\_dtl.do?id=8120](http://www2.sprint.com/mr/news_dtl.do?id=8120)>

It is obvious from the above discussion that XM is leading in hardware technology. It has come out with the most technologically appealing receivers for 2006, and has best predicted the future movement of the industry, away from automobiles and towards portable music player technology. XM has signed more technological integration deals, with Napster, DirecTV, Jet Blue Airways, and others. It has also developed a number of portable digital players with recording and MP3 player technology. Sirius, on the other hand, has come out with one inferior portable player and has not signed as many deals with other potential mediums for the service. As we saw before, Sirius is more focused on programming, and views its main competitor as XM, not as other forms of technology. Because XM views its main competition coming from other radio-like media, it focuses on developing strong hardware. By integrating other technologies with its service, it works to alleviate the competitive effect of these products.

### **Possible International Expansion**

Another pertinent issue that will affect future profits and competition is that of international expansion. The first country targeted for expansion, as one would expect, has been Canada. Both countries received approval from the Canadian government in June to offer satellite radio service there. However, these approvals came with stipulations that at least 10 percent of the channels offered must be produced in Canada, 85 percent of the music and programming on those channels must be Canadian and 25 percent of this must be in the French language. These requirements could easily strain XM and Sirius' network capacities. Another possible reason not to enter Canada was the already established Gray market there. XM and Sirius were already receiving revenue with no incremental costs from Canadian listeners who received the U.S. based signal, which already covered all of Canada. Anyone with a valid U.S.

address can purchase a satellite radio receiver and use it in Canada. Analysts estimated that there were 100,000 Canadians using this gray market at the time of the government's approval.

Despite these problems, XM entered Canada on November 22, partnered with Canadian Satellite Radio Holdings, followed by Sirius, partnered with Canadian Broadcasting Corp. and Toronto-based Standard Broadcasting Corp., on December 1.<sup>59</sup> XM's \$12.99 package includes 80 channels, eight of them Canadian produced, and three music-oriented. Sirius' \$12.85 service offers 100 channels, with 10 Canadian-produced, and four dedicated to music<sup>60</sup>. Originally, Sirius did not include the Howard Stern channel in its Canadian line-up, but due to popular demand, integrated it into Sirius Canada on February 6, 2006<sup>61</sup>. U.S. subscribers to both services can also receive the Canadian channels. Analysts predict that this expansion will add 1 million subscribers for each company by 2011.

Both companies have been aggressive in seeking local content, a fact that is very helpful for local Canadian talent. The chance to have music broadcast in the huge U.S. market is a great opportunity for upcoming Canadian bands. In this way, the expansion of satellite radio may be a good thing.

XM and Sirius will probably move into the same countries over time, because if one gets permission to enter a particular territory, the other company will also most likely be granted permission. Therefore, competition on this front will merely exist once the two satellite radio providers enter the country and try to grab market share. The possible further international expansion of XM and Sirius is very important, because it will provide huge sources of additional subscribers and revenues, without very many additional program production costs. But it will

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<sup>59</sup> LeBlanc, Larry. "Canada's On The Beam." *Billboard* 4 February 2006.

<sup>60</sup> LeBlanc, Larry. "Canada's On The Beam." *Billboard* 4 February 2006.

<sup>61</sup> "Sirius in Canada." 25 Mar. 2006 <[www.wikipedia.org](http://www.wikipedia.org)>

also mean that each company will have to deal with government regulation and content requirements, which could increase costs.

### **Possible Merger or Change in Ownership**

As mentioned in the Background section of this paper, neither XM nor Sirius have ever shown a profit, even though they have experienced massive growth in sales and large revenue figures over the past few years. One of the key reasons for this is the exorbitant programming cost that each company has undergone in order to get the best entertainment into their respective broadcasts. Additionally, each company has increased expenditures on technology and marketing in their quest to outdo the other. Because of this, many critics wonder about the fiscal viability of XM and Sirius.

Additionally, the companies have become noticeably similar in the past few years since beginning. As discussed earlier, their programming options are aligned very closely, with each company signing deals with entertainers that are almost direct substitutes for each other. Both services are offered for the same price and can be listened to on relatively similar hardware. Also, both XM and Sirius now use the same chipset manufacturer, making it even less clear what the real differences are between their service offerings.

One logical conclusion that arises from the combination of unprofitability and similarity is the idea of a merger between XM and Sirius. If the two satellite radio rivals were to merge into one, the high costs of programming could be cut down, as the race for programming would end. Of course, it would be necessary for the new satellite radio company to keep a superior product, as it would still be competing with both terrestrial radio and other high-technology radio-like products. But it could change focus to creating superior technology and developing highly

entertaining content, rather than just rushing to sign deals with top stars no matter what the cost, as the two companies seem to be doing now. Most likely, under the merger scenario, the new super-satellite radio company could turn an immense profit.

Hugh Panero, XM President, has revealed that XM and Sirius have worked together on interoperability studies, but claims that this was on the insistence of the government.<sup>62</sup> In fact, at the behest of the FCC, XM and Sirius have begun to develop a unified standard for satellite radio that will allow the development of radios that can receive both XM and Sirius signals.<sup>63</sup>

Although it is not clear yet whether any hardware manufacturer will actually develop a radio with dual-mode capability, it does bode well for future conglomeration of the satellite radio industry. Olga Kharif of Business Week pointed out that, if a merger were to take place, now would be an excellent time to do it. Due to the fact that neither company has made a profit, there is little risk of antitrust claims.<sup>64</sup> However, a merger would create a monopoly in the industry and the FCC, having given out two licenses for satellite radio transmission, may not be ok with it.

Another possibility akin to merger is the purchase of one of the companies by a larger media company better poised to make the satellite radio entity profitable. Critics point to Clear Channel and Viacom as the most likely candidates to do this, if any. In the event that a purchase were to occur, satellite radio would be swallowed up into the larger traditional radio world and become another facet of these media conglomerates. Just as in the case of merger, the FCC may have a problem with a company as large and consolidated as Clear Channel purchasing one of its precious satellite radio licenses.

This discussion of merger and purchase is only speculation as of now. Neither company has shown any desire to merge with the other, and are actually extremely opposed even to

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<sup>62</sup> Daglian, Krikor. "Satellite Radio Analysis." [eMarketer](#) (2006).

<sup>63</sup> "Sirius and XM Satellite Radio Interoperability." [All Things Satellite Radio](#) 18 Mar. 2006 <[www.orbitcast.com](http://www.orbitcast.com)>

<sup>64</sup> Daglian, Krikor. "Satellite Radio Analysis." [eMarketer](#) (2006).

rumors of such events. However, one can only wonder if there will come a day when a merger or a sale of the company to a more profitable media giant will be necessary, due to the losses each company is incurring now.

### **Putting It All Together**

Analysis of the two companies is almost complete. All relevant aspects of potential success have been analyzed: competition, marketing, programming, technology, and other possible high-impact events such as merger and international expansion. Now, in order to better organize the findings and come to a valuable conclusion, a series of SWOT analyses will be conducted. A SWOT analysis is a common marketing tool that simply lists all of the strengths, weaknesses, opportunities, and threats relevant to a company. In the next section, conclusions will be made based on these SWOT analyses.

### ***SWOT Analysis: Satellite Radio Industry***

#### *Strengths*

Of course, satellite radio has different advantages over each type of radio-like technology out there, so this analysis will consider satellite's key advantages as a medium. Satellite radio's biggest benefit is that it is commercial free. There is virtually no other radio technology that can make this claim. Additionally, satellite radio's original talk and music content is a huge advantage to consumers who want a unique listening experience. The caliber of stars that XM and Sirius have on their broadcast rosters are unmatched by any other type of radio service. Also, XM and Sirius have a number of channels that cater to niche listeners, whose tastes are not served by other media. These

listeners will choose satellite radio because of this content. Another huge positive of satellite radio is the quality of the signal, and the fact that it does not break up in remote locations. Anyone who has listened to terrestrial radio on a long car ride will be able to relate to the feeling of frustration that comes with a station breaking up into static.

### *Weaknesses*

Although satellite radio is very attractive, its one large weakness is that it comes with a monthly subscription cost. Traditional radio and HD radio are absolutely free to the listener, as long as he/she has the proper equipment. MP3 players and subscription downloading services come at a cost, but unlike satellite radio, give the customer ownership of the music. People may be more willing to spend money on music content if they are actually able to download the files, rather than simply listening to them. Another weakness of satellite radio is, although the signal quality is better than terrestrial radio, it still requires access to a signal. MP3 Players do not require a signal at all, and are useable in subways, basements, and other remote locations. Finally, satellite radio runs on a limited network capacity, meaning that, unlike Internet radio, its content and geographical range, are restricted.

### *Opportunities*

The main opportunity available to satellite radio is integration with other technologies to improve its product and neutralize competition. For example, the integration of satellite radio and MP3 players is seen by XM's introduction of the Pioneer Inno. This type of technology integration can help keep satellite radio on the cutting-edge

of media and improve its chances for success. By combining forces with competitive technologies, satellite radio can overcome its weaknesses and turn them into strengths.

An additional opportunity to satellite radio is that it may be able to amass large advertising revenues from marketers who find the niche audiences present on satellite radio very attractive. Satellite radio presents an opportunity for advertisers to reach very specific audiences that they may not otherwise be able to access through traditional channels. In fact, both XM and Sirius collect about 2 to 5% of their revenue from advertising on their talk and news channels. According to founder of ChangeWave Research, Tobin Smith, this will increase to about 8 – 12% of revenue in five years time.<sup>65</sup> Katy Bachman of MediaWeek estimates that ad revenue for satellite radio will equal \$854 million by 2010.<sup>66</sup> This will help satellite radio to become profitable, as marketing and programming costs soar.

Lastly, international expansion is a very exciting opportunity for satellite radio, as it has already moved into Canada. International development offers the chance for large numbers of subscribers. The only difficulty is obtaining permission to enter the foreign countries.

### *Threats*

As I have discussed, threats to satellite radio come from MP3 players, Internet radio, HD radio, advanced cell phone technology, and internet download services. These threats represent the overall danger that a superior technology will be developed and take interest away from their product. Again, as detailed above, if satellite radio can keep

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<sup>65</sup> Daglian, Krikor. "Satellite Radio Analysis." eMarketer (2006).

<sup>66</sup> Bachman, Katy. "Defying Gravity." MediaWeek 30 January 2006: 18-22.

working to integrate its product with new and interesting technology, it maintain relevance to the market and alleviate this threat.

Additionally, although increased ad revenue will help the financial health of satellite radio, it may also make the service less appealing to consumers. Satellite radio must make sure to keep its ad revenue as low as possible, so as not to alienate consumers.

### ***SWOT Analysis: XM***

#### *Strengths*

XM's main strength lies in the fact that it is the bigger company, with more subscribers. In a high-tech industry such as satellite radio, being the first mover is a huge advantage. XM has had the chance to amass a much larger consumer base, which probably has snowball effects, as consumers may simply choose XM because it is larger and therefore, more credible. Additionally, XM has much lower subscriber acquisition costs than Sirius. This means that it is much cheaper for XM to build its consumer base; it gets more revenue out of each subscriber. This fact has led to higher revenue figures, as well as higher earnings per share for the company.

XM has about 50 more channels than Sirius, including more music channels. It has exclusive rights to Major League Baseball content, National Hockey League coverage, MTV and VH1, and many more. Between 16 and 20% of new XM subscribers said that they had chosen XM because of the baseball content.<sup>67</sup> In addition, XM has signed a deal with Oprah for a much lower cost than Sirius obtained Howard Stern, and according to most critics, obtained a large bargain.<sup>68</sup> XM has also signed deals with

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<sup>67</sup> Daglian, Krikor. "Satellite Radio Analysis." *eMarketer* (2006).

<sup>68</sup> Levine, Greg. "XM Inks Oprah For \$55M--Sirius' Stern Looks Pricey." 9 Feb. 2006 <[www.forbes.com](http://www.forbes.com)>

DirecTV, Jet Blue, Hyatt, AOL, and GM that will allow their service to be broadcast in many different arenas, thereby exposing many potential subscribers to their service.

Lastly, XM's technology lead is a huge advantage. Its newly introduced products, such as the Samsung Helix XM2 Go Player and the Pioneer Inno, will help it in its competition with Sirius and with various other types of technology. XM is more technology focused and considers its main competition to be other media and not Sirius, a marketing strategy determined to be superior for overall future success.

### *Weaknesses*

XM's weaknesses arise from Sirius' strengths, and vice versa, as one would expect. The fact that XM has less talk radio channels and less sports coverage, as well as lacks the "Media King" Howard Stern are all reasons people may choose Sirius over XM.

### *Opportunities*

XM has the opportunity to use its Oprah deal to steal some of the thunder away from Sirius' Howard Stern debacle. If it can promote Oprah on XM in a way that reaches the most possible people, particularly fans of Oprah, then XM can probably gain subscribers and remind consumers of its dominant presence in the marketplace.

### *Threats*

While XM is the larger company of the two, it is threatened by the fact that Sirius is growing over twice its rate (229% vs. 100%).<sup>69</sup> This means that Sirius has a real chance to become as large as XM very quickly, something that XM obviously wants to avoid.

Additionally, the hype caused by Sirius' deal with Howard Stern is a threat to XM, as

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<sup>69</sup> Daglian, Krikor. "Satellite Radio Analysis." [eMarketer](#) (2006).

Howard Stern has an estimated 12 million listeners, many of whom have already subscribed to Sirius because of him. XM's only hope in the face of these threats is that Sirius has actually overextended itself and cannot maintain its current growth rate or high programming expenditures.

An additional threat to XM is the recent decline in the conversion rate of GM customers. This rate has fallen to 56 percent from 60 percent a year before.<sup>70</sup> This is worrisome to XM because it relies heavily on the automobile market for new subscribers.

### ***SWOT Analysis: Sirius***

#### *Strengths*

Sirius' main strength lies in its programming choices. It has a better talk radio selection than XM, as well as better sports coverage with its rights to the NBA and NFL. Its programming line-up includes both Howard Stern and Martha Stewart, two celebrities that will attract large numbers of subscribers. Like XM, Sirius has a number of deals with outside companies. Its main automobile deals are with BMW, Mercedes, Ford, and Daimler-Chrysler. Additionally, Sirius is growing at more than twice the rate of XM (229% vs. 100%)<sup>71</sup>. This growth rate means that Sirius has a chance to catch up with XM in terms of size in the near future.

#### *Weaknesses*

Although Sirius is growing at over twice the rate of XM, it also spends \$100 dollars more for each subscriber it acquires. This probably results from Sirius' high programming costs, as well as the fact that Sirius is a smaller company.

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<sup>70</sup> "XM's 3Q Loss Widens Despite Revenue Growth." 27 Oct. 2005. <[www.forbes.com](http://www.forbes.com)>

<sup>71</sup> Daglian, Krikor. "Satellite Radio Analysis." [eMarketer](http://www.eMarketer.com) (2006).

XM's strengths are Sirius' weaknesses, meaning that Sirius is disadvantaged by the fact that it is smaller, has less music content, less overall channels, and less developed hardware.

### *Opportunities*

Sirius' opportunity lies in the fact that it is the smaller company, and therefore, has more room to develop and grow. Additionally, its Howard Stern deal allows it an immense opportunity to develop awareness of its product and expand its subscriber base, provided that it promotes the deal in the right media channels.

### *Threats*

The largest threat present for Sirius today is the danger that Howard Stern may not be worth the money that Sirius has spent for him. As discussed in depth earlier, programming costs may rise more than originally estimated, and Sirius may not gain as many subscribers as it needs to make the cost well-spent. Banc of America Securities issued a report in March 2006 claiming the Stern hype will fade by the end of the first half of 2006<sup>72</sup>. Apart from Stern, Sirius faces the danger that its programming costs are too high in general, and unsustainable in the long term.

## **The Future: Does It Look Bright?**

The first SWOT analysis of the satellite radio industry shows quite an uncertain future for the medium. While satellite radio has many benefits as a product, it also faces a large threat from many other similar high-technology products. The world of communication is changing rapidly,

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<sup>72</sup> "Sirius' Stern Hype Likely To Fade In First Half 2006." 7 Mar. 2006 <[www.forbes.com](http://www.forbes.com)>

especially in the sector of music listening. Any day a new product could come out that makes satellite radio obsolete. However, satellite has a good start. The large number of subscribers that the two companies have already obtained bodes well for the future of the industry, as it shows that satellite radio is a useful and attractive service. The fact that satellite can cater to niche listeners makes it very appealing for both consumers and advertisers. The future may see satellite radio bringing in increasing advertising revenue, which would be good for the companies' income statements but possibly bad from a customer standpoint. One of the great benefits of satellite radio is its commercial free status. If it were to introduce increasing amounts of commercials into its broadcasts, consumers may feel cheated.

Satellite radio's path can be compared to the early stages of cable television. When cable first began, in the 1940s and 1950s, it too was shunned by critics who said that no one would pay for a service that he/she could already get for free. These critics were clearly wrong, as over 97% of households had access to cable by the end of the 1990s, and 64 million people were signed up.<sup>73</sup> Perhaps this is the same path satellite radio is on. Satellite radio is extremely comparable to cable television, in that it is highly catered to niche audiences, contains fewer commercials, and has more sophisticated content. In fact, satellite radio can be directly compared to a specific music channel on cable TV: MTV. Sirius executive Scott Greenstein explains that "...[MTV]'s reach wasn't as big as network TV until one day advertisers figured out that MTV might have the right audience."<sup>74</sup> Satellite radio, like MTV, has a lower reach but one that is highly targeted to a specific demographic.

Because satellite radio is so attractive to consumers and advertisers, and because it has already experienced such great success, its chances of survival in the future are extremely good.

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<sup>73</sup> Tracy, Paul. "An In-Depth Look at the Satellite Radio Industry." StreetAuthority Market Advisor.

<sup>74</sup> Bachman, Katy. "Defying Gravity." MediaWeek 30 January 2006: 18-22.

This is not a trend but a new staple in our modern world. Just as people now pay for premium content on television, they will also begin to pay for premium radio content. For as convenient as MP3 players are, they still do not provide the same service as satellite radio. Radio is unique in that it serves as a means to learn, not simply to experience something you already own. Internet radio, in cars and on mobile phones, is a direct comparison to satellite radio, but is less developed and less widely available. Because of these factors, satellite radio is here to stay.

Based on the SWOT analyses of XM and Sirius, this paper concludes that XM is the company more likely to dominate the industry. The fact that it is already bigger with more subscribers has nothing to do with this conclusion. This finding is based on the very strategy of XM as a company, in comparison to Sirius. XM seems to put a heavy focus on technology integration, making increasingly better hardware with more advanced features incorporated. This makes their service a strong competitor to the MP3 players and other radio services out there. Sirius, on the other hand, views XM as its key competitor. This explains why it pours extravagant amounts of money into programming deals and less into technology. Sirius appears to believe that it must beat XM by booking the most talent at whatever cost. However, it does not seem to be paying attention to its long-term health while doing this. Sirius is in big danger of becoming unsustainable as a company, if it continues with these exorbitant programming expenditures and if it does not put more emphasis on technology. It is the belief of this paper that Sirius did pay too much for the Howard Stern deal and that it will not see enough new subscribers directly attributable to Stern in order to make the deal worthwhile. Banc of America Securities Analyst Jonathan Jacoby agrees with these findings, stating that he likes XM over Sirius due to “OEM share, tech lead, and a more leverageable expense model”<sup>75</sup>.

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<sup>75</sup> Roney, Maya. “XM Could Offer Upside As Sirius' Stern Luster Fades.” 9 Feb. 2006 <[www.forbes.com](http://www.forbes.com)>

Overall, this paper finds that a) the satellite radio industry will survive and go on to be a dominant media form in today's market and b) XM is the company better poised to become the industry leader. In fact, it is very possible that Sirius will either be purchased or merge with XM, as it may find itself unsustainable in the long term. In the next section, some recommendations will be provided for the two companies as they progress into the future.

## **Recommendations**

The main recommendation for XM and Sirius, as they progress, is to constantly develop and update the hardware used to listen to the services. As mentioned throughout this paper, the most important thing for them to do is to constantly look into integrating their products with other high-technology products, such as MP3 players, Internet downloading services, cell phones, and others. If they can do this, they will assure that they remain at the forefront of the media world, and they will not be outdone by some better, more advanced product. XM has already begun to do this, as it has an MP3 player/satellite radio device and a deal with Napster that allows satellite radio and music download services.

With respect to Sirius, this thesis recommends that Sirius begin to develop a more long-term strategy that cuts down programming expenditures and focuses more on technology development. While both services do have to consider programming, Sirius has made irrational deals in its quest to outdo XM. The company needs to begin to look to future success through sustainable programming deals and development of hardware.

XM also must work towards future profitability, but this will probably come with the increase in advertising revenue and as the market in general develops. It too must work to make more logical programming deals, although it has begun to do this with Oprah. In general, XM

should continue its focus on external competition through development of cutting-edge hardware and deals incorporating its service with other relevant media services. At some point, once profitability in the industry has been reached, XM may look into trying to obtain Sirius, in order to preempt some media giant such as Viacom or Clear Channel from buying Sirius and using its massive amount of resources to smash XM. Of course, XM could not afford this move now. But it is something to think about for the future.

## Exhibit 1. XM Website Evaluation of Programming Competition

	<b>XM Satellite Radio</b>	<b>Sirius Satellite Radio</b>
<b>Subscribers</b>	Over 6 million	Over 4 million
<b>Digital Channels</b>	Over 170	Over 120
<b>Music</b>	69 channels, The Most Commercial-Free Music in Satellite Radio	68 channels, commercial-free
<b>Entertainment</b>	Comedy, talk, books, drama and variety, plus, children's programming featuring the award-winning XM KiDS channel	Comedy, talk, variety and children's programming
<b>Traffic &amp; Weather</b>	24/7 coverage in 21 major markets, each with its own dedicated channel	20 markets with many sharing channels
<b>Sports Coverage</b>		
	<b>Major League Baseball®</b> — Every team, all season long — XM Satellite Radio is the Official Satellite Radio Network of Major League Baseball	Not Available
	<b>NASCAR Radio</b> — XM Satellite Radio is the Official Satellite Radio Service of NASCAR	Not Available
	<b>College Sports</b> — Play-by-play of ACC, PAC-10, Big Ten & Big East football and men & women's basketball games. Over 100 college teams; more than 500 games featuring the biggest teams in college sports	Football and basketball for 26 colleges and universities
	<b>HOME ICE</b> — Analysis, excitement, up to the second news and the very best in NHL play-by-play right through the Stanley Cup Playoffs	Play-by-Play Only
	<b>World Cup 2006</b> — XM is the exclusive Satellite Radio Home to World Cup Soccer in 2006	Not Available
<b>The Most Sports Talk</b>	Cal Ripken, Jr., Dale Earnhardt Jr®, Coach K, Jimmie Johnson, Charlie Steiner, Rob Dibble, Larry Bowa, Kevin Kennedy, Buck Martinez, Andreas Cantor, and Tony Kornheiser	Not Available

<b>News and Talk</b>			
		<b>Oprah &amp; Friends</b> — Regular segments hosted by popular personalities from <i>The Oprah Winfrey Show</i> and <i>O, The Oprah Magazine</i> and an exclusive original weekly reality radio show with Oprah Winfrey and Gayle King	Not Available
		<b>Opie &amp; Anthony</b> — Opie & Anthony have found a new home on XM Radio for their cutting-edge style of outrageous radio	Not Available
		<b>The Bob Edwards Show</b> — Featuring legendary talk personality Bob Edwards	Not Available
		<b>The Ellen DeGeneres Show</b> — The Daytime Emmy® Award - winning show	Not Available
		<b>Air America Radio</b> — Progressive Talk with Al Franken, Janeane Garofalo, Mark Riley, Alan Colmes, and Jerry Springer	Not Available
<b>Exclusive Artists or DJs</b>			
		<b>Bob Dylan</b> — Coming in May 2006. A peek into the musical soul of one of the most important songwriters and artists of the 20th Century.	Not Available
		<b>"Welcome to the Chuuch" featuring Snoop Dogg</b> — Dropping tracks, previewing cuts, and welcoming friends direct from his own Los Angeles crib — <i>Exclusive XM Music Series</i>	Not Available
		<b>Disturbing Tha Peace Presents Ludacris' Open Mic</b> — GRAMMY® nominated multi-platinum-selling artist Ludacris brings his own brand of RAW radio to the hip hop nation.	Not Available

		<b>Tom Petty's Buried Treasure</b> — The Grammy-winning rock legend will pull together a set of little-known musical delights and classic tracks alike — many vintage, each a treasure — <i>Exclusive XM Music Series</i>	Not Available
		<b>Trick Daddy's Dunk Rider Radio</b> — Trick Daddy drops his favorite tracks, hosts live performances, interviews artists and serves up some unexpected surprises — <i>Exclusive XM Music Series</i>	Not Available
<b>Exclusive Music Series</b>			
		<b>Artist Confidential™</b> — Music and conversation... up close and personal — recent shows have featured Tori Amos, Clint Black, Phil Collins, Lenny Kravitz, Paul McCartney, Bonnie Raitt and more — <i>Exclusive XM Music Series</i>	Not Available
		<b>THEN...AGAIN...LIVE!™</b> — Original artists reinterpreting their classic albums — in sequence — LIVE! — <i>Exclusive XM Music Series</i>	Not Available
		<b>Classical Confidential</b> — Whether it's the soaring voice of an opera superstar, or a dazzling pianist, or a musical magician with a bow, Classical Confidential takes you into the artists' mind and music.	Not Available

## Exhibit 2. Sirius Website Evaluation of Programming Competition

MUSIC			
	<p><b>EMINEM</b> Check out Shade 45 Ch. 45, the ultimate uncensored hip-hop channel created by Eminem and SIRIUS, featuring 50 Cent's <i>G-Unit Radio</i> on Saturdays.</p>		Not Available
	<p><b>GRANDMASTER FLASH</b> Travel back to the early days of hip-hop with Flash Mash on SIRIUS Boombox Ch. 34.</p>		Not Available
	<p><b>TONY HAWK</b> Tune in to Tony Hawk's <i>Demolition Radio</i> as he shreds the airwaves Tuesday nights on Faction Ch. 28.</p>		Not Available
	<p><b>LANCE ARMSTRONG</b> Hear one of the world's greatest athletes share experiences, speak with listeners and guests, and play his favorite music Sunday nights on <i>Armstrong Radio</i> on Faction Ch. 28.</p>		Not Available
	<p><b>JIMMY BUFFETT</b> Jimmy Buffett and SIRIUS have teamed up to bring you a true taste of musical paradise on Radio Margaritaville Ch. 31.</p>		Not Available
	<p><b>BAM MARGERA</b> Join the star of <i>Jackass</i> and <i>Viva La Bam</i> as he shares his warped vision of the world, every week on Faction Ch. 28.</p>		Not Available
	<p><b>"LITTLE STEVEN" VAN ZANDT</b> Rediscover pure rock n' roll on Underground Garage Ch. 25, produced by the E Street Band's "Little Steven" Van Zandt.</p>		Not Available
	<p><b>ELVIS RADIO</b> From the early years to his comeback, it's all Elvis, all the time, only on Elvis Radio Ch. 13.</p>		Not Available

**SPORTS**

	<p><b>NFL</b> Listen to live play-by-play of the entire NFL, all season long, only on SIRIUS.</p>		<p>Not Available</p>
	<p><b>SIRIUS NFL RADIO</b> Join a host of NFL stars and legends on the only 24-hour NFL channel on satellite radio.</p>		<p>Not Available</p>
	<p><b>NBA</b> Hear live play-by-play of up to 40 games a week, only on SIRIUS.</p>		<p>Not Available</p>
	<p><b>NCAA® MARCH MADNESS®</b> SIRIUS is the exclusive satellite radio provider of the NCAA Men's Division I basketball tournament.</p>		<p>Not Available</p>
	<p><b>COLLEGE SPORTS</b> Division I football, basketball and other sports action, from five top conferences across the country.</p>		<p>Only three conferences covered</p>
	<p><b>ENGLISH SOCCER</b> Follow all the action and excitement of the Barclays English Premier League, only on SIRIUS.</p>		<p>Not Available</p>
	<p><b>HORSE RACING</b> It's off to races weekdays, only on SIRIUS.</p>		<p>Not Available</p>

**TALK/ENTERTAINMENT**

	<p><b>HOWARD STERN</b> The "King of All Media" makes Howard 100 and Howard 101 his exclusive home where nothing is off limits except censorship.</p>		Not Available
	<p><b>MARTHA STEWART</b> Advice and inspiration from Martha and her team of lifestyle experts on Martha Stewart Living Ch. 112.</p>		Not Available
	<p><b>BILL BRADLEY</b> Join Senator Bradley as he hosts <i>American Voices</i>, a weekly talk show focused on people, places and politics on SIRIUS Stars Ch. 102.  Photo: Jocelyn Augustino 1999</p>		Not Available
	<p><b>MAXIM</b> Get busy with Maxim Radio Ch. 108... the best thing to happen to men since women.</p>		Not Available
	<p><b>THE WISEGUY SHOW</b> Hear Vincent "Big Pussy" Pastore and his wiseguy friends discuss life, the arts, and meatballs every week on Raw Dog Ch. 104.</p>		Not Available
	<p><b>JIM BREUER UNLEASHED</b> Experience Breuer's comedy revolution, weekday afternoons on Raw Dog Ch. 104.</p>		Not Available
	<p><b>OUT Q</b> Get the latest news and hottest entertainment on satellite radio's only GLBT-themed channel.</p>		No GLBT Programming
	<p><b>NPR</b> Listen to the best of public radio on NPR Now Ch. 134 and NPR Talk Ch. 135.</p>		Not Available

	<p><b>EWTN GLOBAL CATHOLIC NETWORK</b>  One of three spiritually themed channels, EWTN features talk shows, devotions and a teaching series.</p>		Not Available
	<p><b>COSMOPOLITAN RADIO</b>  Be the most informed girl at the water cooler. Cosmo Radio has advice on love, sex, and relationships; tips on beauty, fitness and fashion; and the latest celebrity gossip</p>		Not Available
	<p><b>BLUE COLLAR RADIO</b>  Laugh 'til you're blue in the face at the Blue Collar Comedy of Jeff Foxworthy, Larry the Cable Guy, Bill Engvall, Kathleen Madigan, Lisa Lampanelli, Ralphie May and many more, showcasing their enormously successful movies, tours, CDs, TV programs and books.</p>		Not Available
	<p><b>PLAYBOY RADIO</b>  Are your ears burning? Listen to Playboy Radio, featuring a full range of original live programming created for SIRIUS, including a new morning show featuring segments with Playboy founder Hugh Hefner, live call-in shows and broadcasts from the Playboy Mansion—sexy, smart and refined adult programming.</p>		Not Available

### Exhibit 3. Comparative Estimates: Satellite Radio Subscribers in the US, 2004 - 2010

#### Comparative Estimates: Satellite Radio Subscribers in the US, 2004-2010 (in millions)

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Deutsche Bank, September 2005	9.1	13.8	19.5	25.6	31.4	37.6
<b>eMarketer, November 2005</b>	<b>9.3</b>	<b>14.1</b>	<b>19.0</b>	<b>24.2</b>	<b>29.2</b>	<b>35.6</b>
Forrester Research*, April 2005	-	-	-	-	-	20.1
Gartner, 2005	-	-	-	9.0	-	-
PricewaterhouseCoopers, June 2005	-	-	-	-	20.5	-
Sanford C. Bernstein & Co., July 2005	-	-	-	-	-	44.0
Stifel, Nicolaus & Company, Inc., September 2005	9.0	14.6	20.3	25.7	31.1	36.3

Note: \*households

Source: eMarketer, November 2005; various, as noted, 2005  
067758 ©2005 eMarketer, Inc. www.eMarketer.com

**Exhibit 4. Demographic Profile of Terrestrial Radio, Satellite Radio and MP3 Player Listeners**

**Demographic Profile of US Radio, Satellite Radio and MP3 Player Listeners\*, March 2005 (as a % of respondents in each group)**

	Radio	Satellite radio	MP3 player
<b>Age</b>			
13-17	9.0%	10.9%	22.2%
18-25	13.1%	15.5%	27.7%
26-35	17.9%	23.0%	19.7%
36-50	28.9%	36.6%	20.1%
50+	31.1%	24.0%	10.3%
<b>Gender</b>			
Male	47.6%	52.6%	56.8%
Female	52.4%	47.4%	43.2%
<b>Income</b>			
<\$25,000	20.2%	14.8%	13.7%
\$25,000-\$44,000	20.5%	19.0%	17.2%
\$45,000-\$74,000	25.9%	22.6%	24.2%
\$75,000-\$99,000	13.3%	16.5%	14.1%
\$100,000+	20.3%	27.1%	30.8%

*Note: \*listened to the source within the past 4 weeks  
Source: NPD Group, April 2005; Twice, June 2005*

065641 ©2005 eMarketer, Inc.

www.eMarketer.com

## Exhibit 5. US Adults' Plans to Subscribe to Satellite Radio

### US Adults' Plans to Subscribe to Satellite Radio, by Gender, 2005 (as a % of respondents)

	Male	Female	All
Own satellite radio	4.5%	3.9%	4.2%
Plan to buy in the next 6 months	3.5%	1.6%	2.5%
Plan to buy it someday	20.6%	11.9%	16.1%
Not planning to buy at this time	57.8%	47.8%	52.6%
Not informed enough about satellite radio to make a purchasing decision	13.7%	34.7%	24.6%

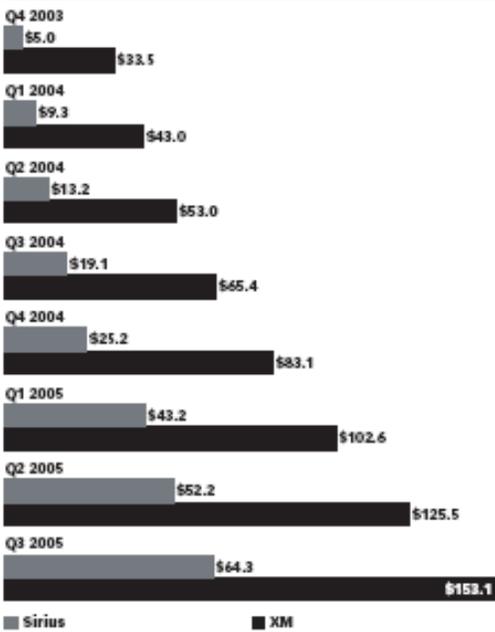
Source: BIGresearch, March 2005

063720 ©2005 eMarketer, Inc.

[www.eMarketer.com](http://www.eMarketer.com)

## Exhibit 6. Satellite Radio Revenues

**Satellite Radio Revenues in the US, by Company, Q4 2003-Q3 2005 (in millions)**

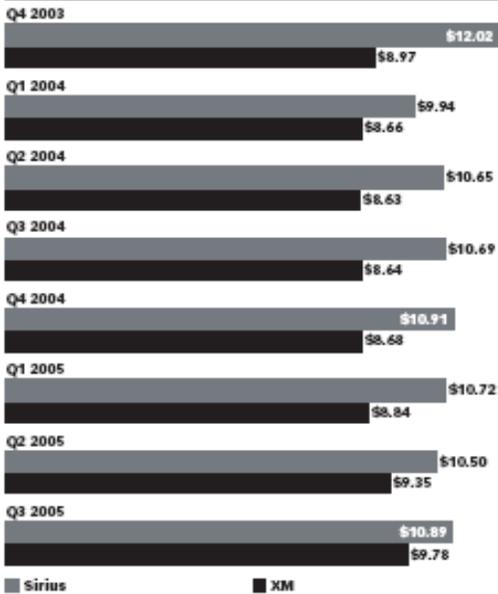


Source: company reports, October 2005

061328 © 2005 iVestment, Inc.

www.iVestment.com

**Average Revenue per User (ARPU) among Satellite Radio Operators in the US, by Company, Q4 2003-Q3 2005**



Source: company reports, October 2005

061328 © 2005 iVestment, Inc.

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