Revenue Generating Radio Technologies

A progress report

Independent market research from:

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Introduction:

A survey of the radio industry's technical managers

While it is hard to predict which of the radio industry's newest business models will succeed in generating new revenues, we can better anticipate the winners by measuring how fast the technologies that enable them are being adopted.

To find out, we surveyed the radio professionals involved in all aspects of technology management (engineers, and operations and technical management). The results reported in this study can serve as a benchmark for managers to evaluate their own organizations' progress.

Evaluating the new radio business models is not easy. According to Mark Ramsey, president of Mark Ramsey Media, "Part of the difficulty is they are all baby models at this point, and they are all different. Different organizations are following different models: Some people are making money from streaming, others from local events, still others are making money from banner ads. Not everyone is good at following these paths. Radio could end up becoming multiple industries, because [individual] broadcast groups [could] have less in common with each other than they do with companies in other industries."

Because there is not a one-to-one ratio between the number of radio engineers whom we surveyed and the number of radio stations, the numbers from this study will not always project to represent the exact number of radio stations adopting certain technologies. However, the numbers do represent how the people implementing these technologies see the trends. If you want to know where the technologies that are driving radio's new business models is going, there is no better way to find out than viewing it through the collective opinions and actions of radio's technical managers.

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Finding #1

Almost all radio tech people believe the Internet will play a bigger part in the future of radio.

While there may be debate over which technology will drive the future profitability of the radio industry, one thing almost all respondents can agree on is that the Internet will play a bigger role.



Matt Lightener, president of the radio system integrator Lightener Electronics says, "More people are listening to radio on mobile phones or on their office computers. Also, the Internet is interactive, so radio stations will be able to do a lot more to engage listeners in the future." The interactivity of the Internet offers potential for radio stations to better connect with their listeners. However, according to Mark Ramsey this is still a relatively untapped resource: "As broadcasters, we spend too much time asking what we should put on our websites and not enough time considering how we can create opportunities for our audiences to interact with us and each other."

As we shall see in the next findings, however, while everyone agrees that the Internet is key, not everyone agrees on exactly how best to make use of it.



Of the new revenue generating technologies, streaming a station's signal has the biggest earning potential.



When respondents were asked to pick the ONE technology with the most potential to make money for their station, they chose streaming their signal over the Internet ahead of all other technologies.

Gary Kline, VP of Engineering and IT at Cumulus Media, says that just implementing technology does not assure profitability, "None of these technologies will make money for your station unless they are combined with the right tools to monetize them. You need to have the right people, resources, technology training, sales training, and company-wide education. For example, what good is a large investment in streaming going to do for you if your sales force is not prepared to properly sell it?"

In addition, Kline points out that no technology generates revenue without a sales plan: "Just because you build it does not mean you can sell it. You need to consider how you manage your sales department, how you train your sales people, and how deep your sales penetration is into different advertising categories. You need carefully designed systems in place to manage everything from leads to closing, and these should be tailored to each type of medium you are selling: terrestrial, streaming, digital, multicast, etc."

Keep in mind as well, that while streaming was top choice, it was not the only choice. The other votes were split between a wide range of activities. Consider that while streaming media was chosen by 30.9% of the stations, the next two options, interactive websites (19.2%) and streaming multiple channels (12.7%), together received 31.9% of the votes, so this does not mean that other options will not also succeed. Remember, in this question we asked respondents to only "pick one" option.



Technologies that require little or no capital investment are being deployed at similar frequencies by both stand-alone and group owned stations



Of the 10 revenue-generating technologies from Finding #2, the top four, except for streaming, require little or no capital investment to deploy. Social media tools are free or nearly free, all stations already have a website, and podcasts require no additional studio technology to produce and can be distributed for free. "No out of pocket expense" could explain why some of these technologies are among the most popular. A more pertinent question, however, is how much revenue the "free" technologies generate.

These are the four technologies used by the greatest number of respondents. But in the previous finding that reported which have the most potential for growing revenue, these same technologies get mixed rankings. Of the ten technologies ranked in terms of revenue-generating potential:

- Streaming signal over the Internet was ranked first out of ten
- Using social media to win more listeners was fourth
- Website that interacts with listeners was second
- Creating podcasts was seventh

Technologies that have no out of pocket cost are being deployed frequently, but some of these have low revenue generating potential

A technology gap is emerging as stand-alone stations deploy revenue generating technologies requiring investment at only half the frequency of group owned stations.



These numbers should be alarming to anyone at a stand-alone station looking to compete for revenue in the future. Group owned stations seem better able to finance the deployment of new revenue generating technologies -- at about twice the rate of their stand-alone competitors. Here are the comparisons:

- Having a website that delivers video: Group owned, 43.1%; stand-alone, 26.8%
- Promoting station with a mobile phone app: Group owned, 43.1%; stand-alone, 22.8%
- Streaming multiple channels: Group owned, 38.5%; stand-alone, 20.3%
- Broadcasting in HD Radio: Group owned, 36.9%; stand-alone, 19.5%
- Websites that create musical discovery: Group owned, 27.7%; stand-alone, 17.9%
- Broadcast multiple HD Radio channels: Group owned, 26.2%; stand-alone, 10.6%

Group owned stations seem to have better access to capital to invest in new revenue generating technologies.

Finding #5:

The revenue generating technology that most group owned stations plan on deploying next is a mobile app, while for standalone stations, it is broadcasting in HD Radio, with mobile apps coming in a close second.



For stand-alone stations, the top choice for the future is broadcasting in HD Radio, with 17.4% looking to make this their next investment. Valerie Geller, president of Geller Media International, explains why HD is important: "Stations can use their HD channels to make money by creating programming for deep targeting of special interests. You go wide with broadcasting; you can go deep with HD or your Internet channels. On the secondary channels, HD and streaming on the Internet, we can do narrowcasting. For example, at an oldies station you could have a narrowcast channel for just oldies from 1972 to 1975. Or if you are doing an NPR style documentary on the Great Golden Eagle, your air time might be five minutes, even though there will be some listeners who want to hear more. But there will be unused B roll from that interview—you can put that content on an extra channel."

According to Jennifer Lane, president of Audio4cast, "It is great that developing mobile apps ranks high on a station's list of things to do. The mobile Internet presents an enormous opportunity for listeners and audience growth, so investment in this area is important for stations."

Because mobile devices are central to the experiences of younger consumers who have never known a world without them, Mark Ramsey asserts they can be the key to engage especially younger listeners.

Stand-alone stations also put a high priority on developing a mobile app. In fact, it is their close second choice. But because fewer stand-alones now have an HD signal, playing catch-up has made HD Radio their next top priority.

There is a big divide between radio stations that are now, or will soon be, making money from streaming their signal over the Internet, and those who likely never will.



When it comes to making money by streaming a radio signal over the Internet, some stations are making it work and some possibly never will.

This finding paints a picture of radio dividing into two separate worlds: one making streaming succeed as a business, the other convinced it will never work. What is unusual about this finding is that there is almost no middle ground. Respondents who picked 6 years, 10 years, and 15 years are negligible. When it comes to monetizing streaming, it's now or never.

Fortunately, a majority of stations are in the "now" group. If we combine the percent of standalone stations that are now making or expect to be making money in three years, it totals 58%. In addition, 67% of group owned stations expect the same. The unfortunate news is that a full 31.9% of stand-alone stations and 22.3% of group owned stations expect they will never make a profit from streaming their signal.

But according to Gary Kline, making a profit on streaming is not just about the technology: "Is streaming your signal over the Internet the best chance for making money at a radio station? It depends on how successfully you monetize it and ultimately what streaming's contribution to the bottom line is. At Cumulus we've built our own system from the ground up, so we do our own distribution. We have our own streaming encoders and our own streaming players, so our cost of delivery is much smaller than most other broadcasters. As a result, we end up generating a profit from it."



Finding #7:

The day will come slowly, but in 15 years a majority of radio stations expect they will have more online listeners than RF listeners.



Stations see the crossover point at which they have more online listeners than over the air listeners coming at varied times.

Most radio broadcasters do not think of themselves as online content companies, but someday that could change. The number of stations that anticipate having more online than over the air listeners grows gradually each year. But over time, their numbers add up. If we add the number of respondents between now and 15 years from now that forecast more online than over the air listeners, we have a majority. After 15 years, the total for stand-alone stations is 61.3%; for group owned stations, 54.8%.



Despite the expected decline in over the air listeners, few stations expect to turn off their transmitters.



Radio stations may eventually have more online listeners than over the air, but a transmitted signal gives stations an advantage over online-only competitors.

Mike Cooney, VP of Engineering and CTO of the Beasley Broadcast Group, agreed with the majority of respondents that he would likely never turn off his transmitters, but he also raised the question, "Which transmitters?" Said Cooney, "There may be a time down the road when we turn off our analog signals but continue with just our digital signals. We will have multiple channels of digital and may make as much money transmitting data services as we do from our radio product. Because there is a lot of bandwidth in the HD signal, there could be many different services, such as the Broadcaster Traffic Consortium, where we transmit traffic data on the HD signal. By then, there could be many other kinds of data services we could be taking advantage of."

Other radio delivered data services could include text-based information such as song titles and artist names, weather updates, movie listings, sports scores, stock quotes, and school closings.

Finding #9:

Three years from now, radio station technology will be more IT centric with more automation, as well as more networking between stations, IT networks, and office and audio networks.



Group owned stations have a higher expectation for a more IT centric environment, but stand-alone stations are not far behind.

A majority of respondents from group owned stations see a more IT network oriented environment in the future, with 77.3% expecting more automation, 68.9% expecting that more stations will be networked together, 64.4% expecting more IT networks will be integrated together, and 54.5% expecting integration between office and audio IT systems.

Mark Ramsey asks, "What's the difference between an engineer and an IT professional? Is there one? Because if you're an audio engineer and not an IT person then I'm not sure that you are fully equipped to handle the technology needs of the radio station. Once upon a time an audio engineer was the only technology help you needed, but that's no longer true. Today's audio engineer is tomorrow's IT professional."

If we look back to Finding #4 we see the same trend with stand-alone stations not having access to capital to modernize their faculties at the same rate as group owned stations. Although the transition to IT technology is happening faster among group owned stations, stand-alone stations are not far behind.

Finding #10:

Three years from now, the stability of each radio station network will be more important, as will networks with no single point of failure.



When asked if networks that have no single point of failure will be more important three years from now, 59.8% of group owned stations replied yes, while only 45.5% of stand-alone stations agreed.

Says Gary Kline, "These things are already important. If you're thinking about these three years from now you're not thinking correctly. The stability of each network and having networks with no single point of failure are important right now."

Another trend which will make this issue more critical is the growing shortage of qualified engineering help. Matt Lightener explains, "Three years from now, networks with no single point of failure are going to be

more important because it is getting harder to find in-house tech people and more stations are using contract engineering for maintenance. Systems will have to be designed with redundancies that can be switched on from a remote location. As they keep the station running, engineering can make its way to the station and fix the problems." In this environment, backup systems are important for technical emergencies, but also to keep the station on the air until technical help arrives to fix things.

As networks get more integrated, as was reported in Finding #9, the stability of each individual network becomes more important. When networks are integrated together, a failure in one can impact others.

Finding #11:

Three years from now, more audio consoles will be networked together. Also, the bandwidth of those networks will be required to increase.

Three years from now, which of the following statements about radio station facilities would you agree with:

Two thirds (63.6%) of group owned stations predict more audio consoles being networked together three years from now. Even at standalone stations, whose systems tend to be smaller, over half see more networking as well.

Says Mike Cooney, VP of Engineering and CTO of the Beasley Broadcast Group, "I think the day of independent audio consoles will go away and at some point in the future they will all be networked together."

Two thirds (65.9%) of group owned stations (as well as 45.5%

of standalone stations) also believe that increased bandwidth of those networks will be required to handle the workloads of the future. Cooney adds, "Bandwidth in the production process will have to increase because the nature of our programming is changing. For example, we are now adding more video to our websites. As result, we are doubling and tripling our storage almost yearly, and along with the storage we are raising the bit rates of our streams to provide more high quality audio and video. "

In addition, there could be data from a variety of sources that will tax the bandwidth of a studio network. As radio broadcasters look to build revenue with new kinds of content and data, it is possible that text-based information, traffic and weather updates, sports scores, or stock quotes could be added to the network traffic.



Finding #12:

The top reason group owned stations bought an AoIP network was to reduce maintenance costs. The top reason for stand-alone stations: to share talent.



Although group owned and stand-alone stations differ in their choice of top reason for buying an AoIP network, both agree that their number two reason was to increase reliability.

The top motivation to buy an AoIP system at group owned stations was to "reduce maintenance issues." But Gary Kline says that the savings in maintenance does not come from the traditional way we think of maintenance: "Consoles have not been that much of a maintenance problem in the last 10 years, even if they were analog. I don't think the savings comes primarily from normal wear and tear reduction. I think it comes from the upfront savings on installation and the ability to re-design the physical plant (studio) to reduce footprint and labor. By just reducing the footprint needed to power a multi-station cluster you can save on rent, HVAC, and other costs. The network topology model presents numerous opportunities to save both on the non-recurring side and the operational side, as well as greatly improve flexibility and quality of the on-air operation."

Mike Cooney agrees, "I don't think of these systems as reducing traditional maintenance costs, but they do reduce the time my engineering staff spends traveling to radio stations to help our on-air talent. With networked systems, we can remotely dial into the system, see what the talent is up to, and fix a problem for them [remotely], instead of driving to the station.

"In addition, if there is a maintenance problem, we have a backup system in place that we can switch to in literally seconds. In the old days, this would have been very time consuming, if even possible, so this reduces off-air time in case of an emergency."

In contrast to group owned stations, the top benefit AoIP networks delivered for respondents from stand-alone stations respondents was in their ability to share talent during programming creation.

Finding #13:

At stand-alone stations that now have an AoIP network, more than a third found installing it harder than anticipated.



For many in the radio industry an AoIP network is new technology. Despite marketing claims, installing an AoIP network can pose challenges, especially at stand-alone stations.

By contrast, group owned stations, where a specialist from an IT department or a system integrator may be brought in, largely found that installing an AoIP system was pretty routine.

By now many station groups have staff people experienced with AoIP technology who help with new installations. Once a tech staff has done installations, they become

easier. Mike Cooney speaks from experience: "My first installation was about five years ago. It was probably one of the first installations of its kind and it did not go smoothly. It was a learning curve on our part, and on the manufacturer's part, as it was a new product. [Installing] the same exact system a year ago went absolutely smooth with no troubles at all. Neither system caused any problems after it was installed, but the first installation was harder because of the learning curve."

It is not that AoIP technology is hard, rather that it is new. When the engineers doing the installation have experience with AoIP technology, installations go more smoothly.

Finding #14:

At stations with an AoIP network, more than one in four stand-alone stations and one in three group owned stations report latency problems.



Latency continues to be a problem when deploying AoIP networks.

Latency, or audio delay, is created when the speed of the network cannot keep up with audio distribution requirements. This can annoy on air talent when the audio in their headset has a slight delay over the words they are speaking. But latency can cause big problems with station automation systems. A small delay can cause an automation system to miss an audio stream, skip playing a commercial, or drop a satellite feed.

At stand-alone stations, 29.4% of installations experience latency issues. Incidents are more frequent at group owned stations (33.3%) where networks tend to be larger and involve different facilities.

Overall, this means that roughly one in three AoIP installations have latency problems. Newer designed systems that operate at higher bandwidths could solve many of these problems.

In Conclusion

According to Mark Ramsey, the speed at which new technologies are deployed is not determined by the technology itself, but by how consumers want to use it. What radio listeners want is the content they like, delivered in the way they can choose to receive it. To keep listeners, stations will need to deliver content to more channels, often with fewer personnel.

But success is not just about adding new ways to distribute the same content. Ramsey warns, "The danger is to just keep sending the same programming we are creating for over the air current into the new delivery channels. Never think for a minute that just duplicating your existing channel over the Internet is going to make money. The future of your station is not equal to your present station plus the Internet. The Internet changes things."

Valerie Geller believes the key to profitability is to develop programming for deep targeting of special interests, "More targeted programming attracts a smaller audience that some advertisers, looking to focus their marketing, will find more attractive."

Gary Kline believes part of the answer is in the use of IT infrastructure which can reduce costs, make the studios more efficient, and help improve the quality of programming.

Three years from now there will be more listeners of secondary radio station signals on computers, receivers in automobiles, mobile phones, and iPod and MP3 listening devices. Says Matt Lightener, "The days of just playing music like a jukebox are going to be over because your listeners can now do that on their iPods."

Ramsey asks, "Is radio on the decline or does it have tremendous new opportunities? The answer depends on how you define the word 'radio'. If you define it the way we did in 1985, it looks to be a shrinking universe."

But it does not have to be that way. New technology can help stations create programming more efficiently and open new distribution and revenue opportunities. This study has documented that while some organizations are starting to make money with these new technologies, it appears that others may never. Clearly, radio has a bright future, but it does not look like all stations will share in the good fortune.

Methodology

The goal was to survey professionals involved with the technical side of radio facilities. Wheatstone contracted an independent research company, Alethea Research, to conduct the study.

The survey was deployed over the online e-mail lists of two major industry trade publications. Each list was sent the questionnaire twice and an incentive was offered. A total of 302 completed questionnaires were returned.

More information is available upon request.