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HD Radio and the Case for ROI



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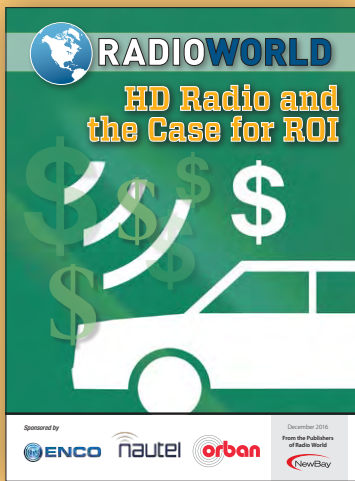
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HD Radio and the Case for ROI



Paul McLane
Editor in Chief

By **Paul McLane**

The question of return on investment has always been a big one for broadcasters when it comes to HD Radio, as with any technology decision. But it's even more so for smaller and medium-sized broadcasters who may not have been involved in the IBOC initiative at the outset and for whom the ROI argument needs to be very clear indeed.

Is the "translator play" as effective as widely believed?

What revenue can stations expect if they participate in the Broadcaster Traffic Consortium? Are stations discovering revenue opportunities from leasing digital subchannels? Could such revenue help cover the cost to upgrade to digital? Who is willing to purchase such capacity? Can we quantify how HD Radio might help an AM owner justify the investment?

For this eBook, we asked these questions of a dozen or so broadcasters and other industry participants in a series of interviews. Respondents include executives of Cromwell Group, WDGY(AM), Emmis, Scott Communications Inc./Alexander Broadcasting Co., RUSA Radio, BTC, HERE LLC, as well as our eBook sponsors and other observers. Q&As were conducted by phone or email and have been edited and formatted for brevity and clarity.

CONTEXT

Some context for the interviews that follow:

According to HD Radio parent DTS Inc., the percentage of vehicles sold in the United States in 2015 with HD Radio was about 35 percent, and three dozen vehicle brands now offer the technology. The number of U.S. stations with HD Radio installed is about 2,300 out of 15,500 or so licensed stations.

The great majority of installed stations are FMs. While these tend to be in larger markets to date, about 95 percent of Americans now have access to at least one HD Radio broadcast. Three-quarters of U.S. radio listeners listen to stations that have HD Radio, though many of these consumers may not actually be listening in digital. There are about 1,700 FM multicasts, including 50 or so HD4 channels. HD Radio has made its biggest inroads in the car, compared to mobile and home listening.

When talking about the ROI from a digital investment, be clear on what, exactly, you're discussing. One might be referring to an AM or FM station's main HD1 digital signal, or to one of several FM multicasts, or to an analog FM translator that is rebroadcasting content of an HD multicast. To a listener in the latter case, the role of HD Radio might be invisible, but that digital component is a key part of the station's ROI considerations.

IN TRANSLATION

Proponents have argued that "content is king" and that HD Radio is an important tool to be used not for its own sake but to gain listeners. They say

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the cost to add digital is roughly comparable to the cost of going FM stereo in the early 1970s and that radio cannot afford to remain analog in an increasingly digital world.

Much of the discussion about immediate ROI from the investment focuses on the strategy of programming an HD2 or HD3 multicast in order to feed a separate FM translator. Proponents point out that certain groups like Saga, iHeartMedia and Cox jumped early on this idea and have been successful in markets large and small. DTS tells us numerous broadcasters have done this, realizing monetization and recovering their investments.

Some show up in the ratings. Rick Greenhut, director of broadcast business development for HD Radio at DTS Inc., has tracked HD-on-translator simulcasts in PPM markets since early 2014, when there were 23 multicast stations in 11 markets meeting minimum reporting standards to be included in Nielsen monthlies. "As of this month," he said in December, "there are now 54 multicast channels that appear in their respective monthlies in some 26 markets, despite the higher listening requirements (Nielsen MRS or minimum reporting standards) for inclusion in the monthlies in these major markets."

As a case study for translators, DTS points to WLZX(FM) in Springfield, Mass. This Saga station uses the HD2 channel to feed programming to a translator that targets five major area colleges, "super-serving" student populations and supporting the effort with a dedicated sales team. DTS says that by introducing a CHR station in the market, Saga realized "a significant source of ROI."

Ed Christian, president/CEO of Saga, has been quoted using the term "Metro Station" to describe the HD-on-translator opportunity. After all, the thinking goes, local advertisers don't know the difference between a primary FM and a translator as long as the signal covers the market.

Critics may carp that the translator approach only further demonstrates the proven desirability of access to frequencies on the FM dial. But there's no question many stations find this strategy attractive. While stations we contacted were reluctant to cite numbers, Radio World had no trouble identifying a number who embrace and endorse the translator strategy.

Further, while there is a 250-watt limitation on translator power, there's no height limit, so you don't have the "tower vs. power" issue that applies

to traditional FM signals. "You can put your translator antenna on top of someone's 2,000-foot TV tower, and have a signal that rivals a Class A FM in many smaller markets," one HD Radio insider says.

Backers also believe HD-on-translator is not a "zero-sum" game. Add a unique format to a market and there are additional listeners and dollars that come into a marketplace from those not currently involved with radio, both on the listener side as well as the advertiser's, supporters say.

Niche formats, foreign-language broadcasts or even an oldies channel targeting baby boomers can serve to generate audience and dollars. As this proponent put it, "You don't rob Peter to pay Paul by adding a new way to serve underserved listeners."

"ENLIGHTENED USE"

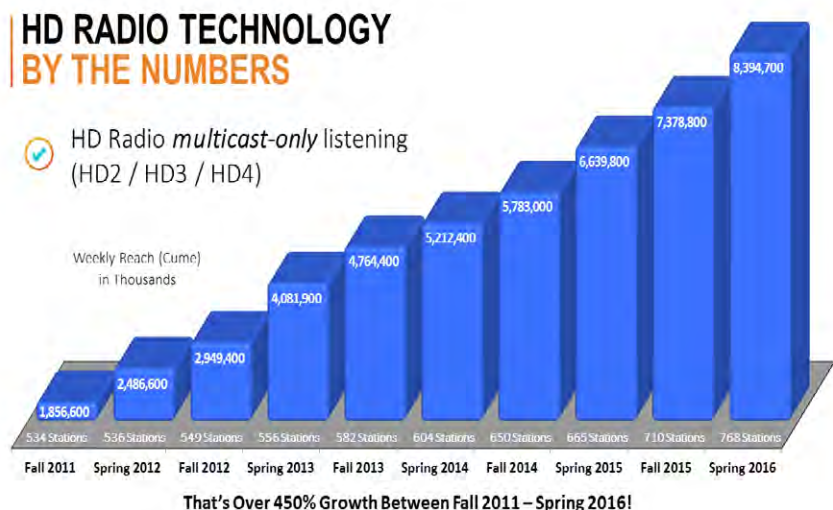
Evidence supports the idea that at least some smaller operators are putting this HD2/FM translator strategy to good use. Translators that originate on HD multicasts are an increasingly important part of the FM landscape.

Obviously the overall market for translators has been heated, with plenty of money being spent by groups large and small; it's due also to the special recent opportunity offered to AM stations, unrelated to the HD Radio sector. But clearly the package of an HD2 feeding a translator to gain more FM footprint has been a successful one in many situations.

The best guess is that there are about 250 HD-on-translator simulcasts on the air; there may well be more.

An interesting case is demonstrated in the accompanying graphic (facing page) from DTS Inc. It shows 60 dBu coverage of Cromwell Group's WYDS(FM) in Decatur, Ill., and its three translators fed by its multicast channels.

The image is an example of what one pro-HD source



This chart from HD Radio parent company DTS Inc. documents growth in multicast listening over the past five years.

calls “enlightened use of HD-on-translator,” to maximize coverage, ROI and ensure market dominance. The main channel and the HD2/HD3/HD4 60 dBu coverage are indicated by the large red circle. The main channel (analog + HD1) plays CHR. It is 4.6 kW Class A at 367 feet HAAT. The HD2 is urban adult contemporary, simulcast on a 250-watt translator at 244 feet HAAT; the translator’s 60 dBu coverage is the yellow circle. HD3 is classic country, and simulcast on a 250-watt translator at 538 feet HAAT; its circle is cyan. HD4 carries sports and simulcasts on a 175-watt translator at 277 feet HAAT; it is blue.

Based upon the target audience of the formats on the multicast channels, Cromwell apportioned translators to ensure that to the extent possible, coverage of the translator and the highest population density of the target audience coincided. Between those four formats, the argument goes, Cromwell can make the case for a piece of virtually any local or regional ad buy, either as a standalone or sold in combination. A buyer who wants to reach African-Americans can buy the HD2. A buyer who seeks to reach men 18–49 can buy a combo of the HD3 and HD4.

Multicasting thus lets a station create spot packages that can reach an advertiser’s primary and secondary demographic targets.

Translator signals typically are smaller than the native HD2, HD3 or HD4 signal. “As more HD Radios hit the marketplace, we expect a natural migration from the analog simulcast to the digital original,” says one DTS source.

OTHER MODELS

But what about other revenue opportunities?

“Pureplay” HD multicasts are not uncommon, both commercial and public. Stations might use their HD2 channel to replicate a legacy sound from the 1960s or ‘70s, using period jingles and air personalities.

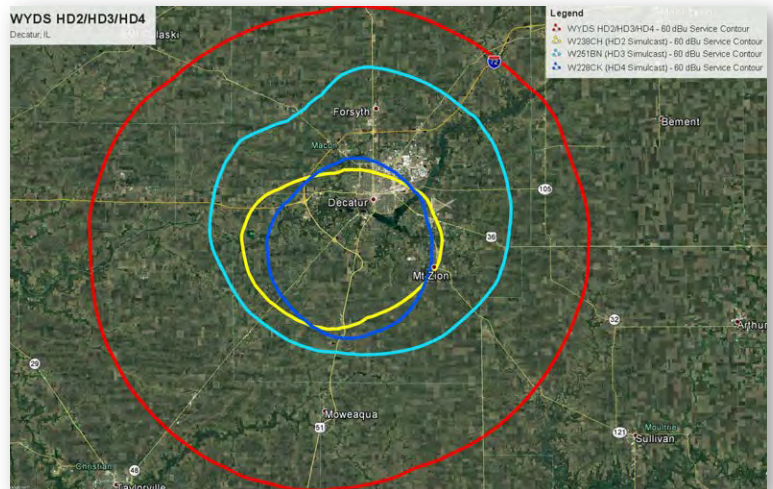
HD Radio, its backers say, also allows a station to bundle digital assets. “Package banner ads on your website along with spots on your HD2 for clients who might not be able to afford your main channel rates,” a marketing piece states. “Your additional multicast channels can serve to bring new advertisers into radio by lowering the cost of entry for smaller clients.”

Proponents say public stations in particular do a good job in general of promoting their alternate programming on their main channel; they also often cross-plug program reruns: “If you can’t listen to all of this show now,” a public radio station might tell listeners, “we’ll be repeating the program at 8 o’clock tonight on our HD2 channel.” Talk and religious stations find this useful too.

Demand for multicast capacity also comes from highly targeted program sources, often ethnic or religious — echoing the days when stations built revenue streams

from their analog SCAs. Now, however, the receivers required can be readily available HD Radios rather than custom-built SCA radios, helping the sub-channel broadcaster solve the “receiver availability” problem.

In this eBook we interview one enthusiastic supporter with such a lease, Anna Pekerman of RUSA. Other organizations reportedly using HD multicasts as part of their distribution include Sputnik Radio, Saigon Radio, YTN radio (Korean in Los Angeles), G & E Chinese Radio, Pillar of Fire and Radio Hamrah (Persian language in



This map, described in the article, shows 60 dBu coverage of Cromwell Group’s WYDS(FM) in Decatur, Ill., and its three translators fed by its multicast channels.

L.A.). The scope of the leasing marketplace is difficult to quantify; but as one of our respondents told us, the lease argument is supported by a universal truth: Spectrum remains scarce and in demand.

In another example of how HD2 channels can be used, in 2015 the iBiquity-owned HD Radio Ad Network (now part of DTS) announced a deal to broadcast Radio Disney content 24/7 via numerous HD2 and HD3 stations owned by several major broadcasters. The ad network sells advertising on them and shares the majority of revenue produced with the stations. That agreement remains in place and is being expanded to more stations in 2017, a DTS official confirmed.

Yet another approach of which we hear are one-off lease arrangements that broadcasters sign with local churches broadcasting in Spanish, Korean or Chinese. Anecdotal, at least some stations have added HD because they knew they had a lease with a church for an HD2 channel. (I welcome information about such deals that we can share with readers; my email is below.)

To be sure, there are 13,000 AM/FM stations that have not yet made the digital choice or have opted for a long-term waiting approach. At one big group, an engineering

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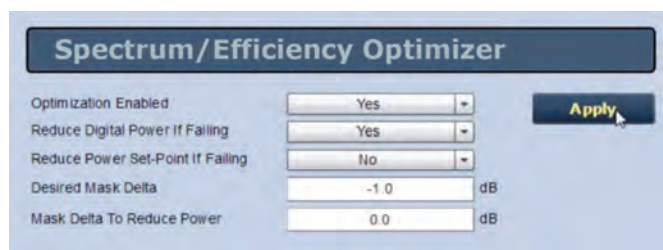
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at -20 dB

60%
at -14 dB

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Nautel's award-winning AUI enables real-time measurement of MER including the ability to diagnose issues such as interference with the MP3 carriers near the analog signal due to FM analog signal over-modulation. Measurements follow the new NRSC standards and require no external equipment.

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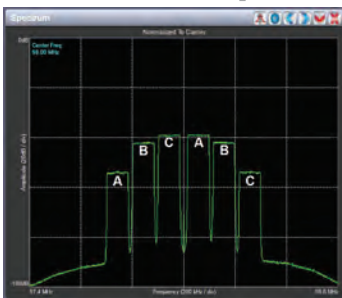
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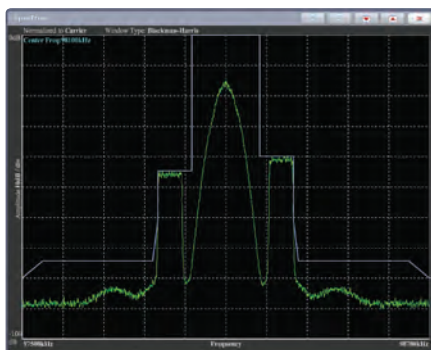
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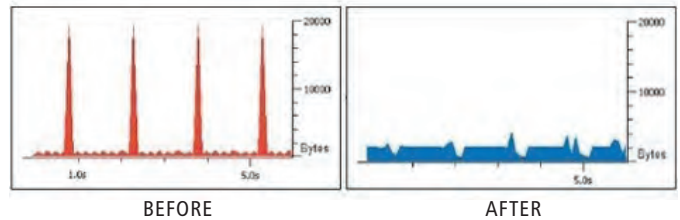
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Cromwell Creates More “Touch Points”

Q
A

Bayard “Bud” Walters is owner/president of *The Cromwell Group*, which has stations in Illinois, Indiana, Kentucky and Tennessee. Long focused on startups and small markets, it is licensee of 17 FM stations, six AMs and 23 translators. An early adopter of HD Radio, Walters has paired FM translators with HD multicast channels in a variety of markets. He has five FM translators paired with sub-channels in Nashville, while in Decatur, Ill., an HD2 with FM translator has achieved Nielsen ratings in the 7+ share range. Walters won the National Radio Award from NAB in 2014.

Q: Please summarize what you’ve been doing with HD Radio and ROI opportunities you’ve seen.

A: When the whole thing started, I just honestly wanted to be supportive to the industry. We bought the first HD transmitters in Tennessee, I think, and put them on our Nashville station; then we got some lower-[power] transmitters for Kentucky and Decatur, Ill., and put them on the air.

But we really didn’t have a purpose, it was just “do it” — and we did it without the ability to do HD2 or -3 or -4 [yet]. There was no grand plan. There was no attempt to make any money; I didn’t know how. Later, as translators came into play — this has been over the last four or five years — I could see the opportunity to have differing formats in differing markets.

In Decatur we ended up putting an HD2 on, which became an urban AC station, and it became a real radio station instantly and monetized instantly. We ended up adding more translators as time went on. In Nashville we have a black gospel station on a translator that runs on the HD2 of WPRT, and it monetizes.

Then we got some translators in Murfreesboro, Tenn.; they run off of the HD of WBUZ, our rock station [in Nashville]; one of them actually repeats our sports station, WPRT, our ESPN station in Nashville. It’s 100,000 watts but Murfreesboro is just outside its coverage area; so we added a translator down there; and in order to be legal in feeding that translator, it had to come from someplace else; that became WBUZ HD2. Then we added WBUZ HD3, and we have a translator in Nashville and

in Murfreesboro that repeats it; and it is a second ESPN sports station for us. Then we added a third translator in Nashville recently that goes with our AM; that is now a classic hits station.

So in Nashville we have five FM signals. Two of them are FM formats originating on a HD2 or -3 but feeding a translator; two of them are 100,000 watt FMs; and one of them is a translator related to an AM.

This monetization, both for AM [translators] and for HD2 and -3, has really come because of the ability to offer a different service and a different format. And the signals are competitive.

In Decatur we added that urban format and put in HD2, and it monetized. Since then we’ve added a country, it’s on HD3; and we added a sports station, it’s HD4. Then just recently we put another HD on in Decatur on WZNX, and it is doing an alternative rock format called The Buzz. So we have four translators in Decatur with programming

originating from the HD2, -3 or -4. That in effect has given us the ability to provide different choices for the public.

It doesn’t necessarily mean tons more business but it means a chance that we have more touch points, and that we don’t have to lose business because we don’t have formats.

Down in Owensboro, we have an HD2 that is what we’re calling a hip-hop station, The Vibe; and again it’s monetizing. We have the opportunity if we have additional translators to provide another format if we wanted to.

This is a way to justify the HD costs while HD still finds



Bayard “Bud” Walters

its footing. And I think it will. We're beginning, as time goes on, to get people who notice that the HD is there, and they'll notice the HD2 is there.

Q: *What is the consumer awareness of multicast signals? Or is it really just a two-step process in which the translator is your end game?*

A: Right now the translator is the end game — though, if you think about it, we've got a programming source and it's going out on a main signal; it's going out on a HD signal; it's going out on a translator signal; it's going out on a streaming signal; it's going out on a mobile signal. They're all equal. Our challenge really is to have unique programming that we can put out on all these things in our local areas so that our local people want to come to us at least some of the time.

Q: *What advice would you give to a smaller broadcaster? Would it be worth the investment to transition to digital based on the revenue opportunities?*

A: Maybe on future revenue opportunities. My opportunities with these transmitters came about because we had already done the HD; then I just kind of fell into it. We were in a position to take advantage of the opportunity as opposed to trying to have to make an overt decision.

Most things we're doing in our broadcast world today, you know, are really opportunistic. If we as licensees don't try to think ahead, we're never in a position to take advantage of those opportunities that the FCC offers. You can look at what happened with translators in AM; some guys took advantage of it and were prepared, and other people weren't. As it relates to HD, some broadcasters started using their translators to rebroadcast the HD2, -3 signal. That received FCC blessing and now some of those people have opportunities that others have not yet taken advantage of.

» *Continued from page 5*

executive told me that smaller/medium markets aren't producing revenue and "we are looking at not replacing [HD Radio] as they die. Translators are really the only justification." Another industry leader is supportive of HD Radio but feels it's too hard for consumers to find HD and multicast options on car hardware, compared to one-button access for services like Spotify.

And more than one person wished for better and more detailed industry analytics and ratings for these forms of digital consumption. Nielsen does not report who listens in analog-only vs. who is listening in "native" HD; the diary and PPM meter encoding just note call letters or frequency. There's no way to capture analog vs. digital, nor a percentage of listeners listening to an

Q: *We've heard of leasing arrangements and sports teams using HD2s. Are there other ROI strategies?*

A: There are some folks that are using some unique formats on them but the listeners are not there. Nielsen hasn't figured out how to handle this. ... Nielsen wants to call the signal, in our case let's say, WPRT HD2, or D2. Well, that doesn't tell what the station really is. There's still some evolution yet to come that has to do with the ratings, which then leads to monetization. I would say Nielsen's holding monetization back.

Q: *Any other thoughts?*

A: Of course we wanted to build them, but we wanted to do them in the most reasonable way that we could. Hopefully the prices will come down, and hopefully DTS will price their royalty payment in a way that it makes the pricing more reasonable for somebody to want to consider buying a digital transmitter.

If you've got Nielsen figuring a way that they can report this stuff so it can be monetized, and if you have DTS or the company that just bought them [Tessera Technologies] looking longer-term about their revenue opportunities if more stations are on digital, they are in a position to make it more affordable to broadcasters to want to consider it.

In the past iBiquity was pretty much strapped for cash. They didn't have the opportunity to have a lot of room in what they did, whereas these new players are thinking farther down the line, they've got more assets and more capabilities in working with the automobile manufacturers to make HD more important in the automobile and for different services that they may be providing.

For us as broadcasters it's important that we consider the long term, and even in the small towns, when you're buying a new transmitter, to make it an HD transmitter. That's the approach we will take.

analog simulcast of an HD2/3 in HD vs. analog.

Another observer with significant major-group experience thinks the ROI remains difficult for small and medium-market stations. Yet like his colleague quoted above, he too immediately qualified this by adding: "... unless you can get a lucrative HD2/HD3 lease, or unless you can secure your own analog FM translator that can relay HD2/HD3 content."

Those are the kind of applications that we heard about in the marketplace. And he expects the overall outlook to improve over time as receivers proliferate further and hardware becomes more affordable.

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Demand for Frequencies Exceeds Supply

Q

A

Chuck Kelly is director of sales for Nautel. The manufacturer is a sponsor of this ebook.

Q: In your experience at Nautel, is HD Radio providing an ROI case yet for smaller and medium-sized market broadcasters?

A: Increasingly, the number of HD receivers in the market is changing the value for broadcasters adopting HD Radio. Clever broadcasters are finding ways to cover the costs of conversion by leasing secondary channels, and/or data space. At the same time, HD Radio equipment has become much more cost-effective, both in initial capital costs and in operating cost.

Q: Are there profitable HD Radio strategies for small-market broadcasters other than securing their own analog FM translator to relay HD multicast content?

A: The value of most FM stations is far more than its physical assets, because the demand for frequencies exceeds supply. Therefore, there are organizations, such as religious broadcasters, foreign language communities and other organizations who can't afford to buy a license, that are willing to pay for a lease on an HD subchannel.

Q: Are you aware of broadcasters discovering revenue opportunities in leasing digital subchannels?

A: Yes, we have several stations who have done exactly this — and the revenue comes either as a monthly lease, or as a longer-term lease in exchange for the capital costs needed to purchase the upgrade equipment. Typical customers are religicasters, foreign-language communities and services such as reading for the blind.

Q: Could we see an online marketplace where buyers and sellers could transact such capacity, something like is happening for programmatic advertising?

A: I think that's an exciting concept — a website where stations with channel capacity can negotiate with interested buyers. A more efficient way of buyer and seller discovering each other would benefit both sides.

Q: What other questions should we in the industry be asking about this issue?

A: A licenseholder is responsible for the content on its frequency. How will broadcasters protect themselves against libelous content or other prohibited material being broadcast? As HD receivers continue to proliferate, the value of the subchannels will rise; how can the broadcaster assure that an initial lease isn't being sold below the market price in the future?

Q: Anything else we should know?

A: HD Radio is and always has been a transitional technology, a path for gradual transition from the analog past, through the hybrid analog and digital on the same frequency, to the fully digital future. The future is exciting in part because of the increased channel capacity that can

be realized when the analog is shut off. Eventually, a vast majority of the radios in the field will be HD Radio-enabled, the analog can be shut off and the number of content channels a broadcaster can have can multiply significantly while the power consumption is reduced and single-frequency networks will solve coverage problems cost-effectively.



Chuck Kelly

In Alabama, Putting Translators and HD2s to Work

Q
A

Scott Alexander has experience both with formatting his own HD2 signal as well as leasing one out. He is CEO/president of Scott Communications Inc. and Alexander Broadcasting Co. in Selma, Ala. These separate but related family-owned companies, with a 44-year radio history, are licensees of WALX(FM) in Orrville, playing classic hits as “Alex FM”; translator W268BQ, playing country by picking up an HD2 multicast from WALX; and WJAM(AM) in Selma and an associated FM translator W242BW, both airing as “Jammin WJAM.” Meanwhile, according to published reports, its station WMRK(FM), licensed to Shorter, Ala., and serving Montgomery, which is operated under an LMA with EMF Broadcasting (K-Love), has recently leased its own HD2 to American Family Radio in turn, though Scott Alexander declined to confirm that, as you read below.

Q: You’ve been involved in leasing at least one HD2 signal to an organization that uses it to feed a translator. What’s the relationship, who’s doing what?

A: Because of contractual obligations, I cannot comment on the details, but yes, we have American Family Radio on WMRK-HD2 in Montgomery. Not only have we added HD services in Montgomery, we also added HD services in our small market of Selma.

There is still a problem with HD Radio being recognized, as far as the general public is concerned. For us to have made an investment into HD, we had to have translators to make it beneficial to us in the small-and medium-sized markets.

When it comes to HD Radio and the general public, some are aware, but most still are not. Even to this day. A couple of weeks ago I was at a couple of car dealers, and they still don’t understand what they have in their products. I talked to a car salesman at a local tractor show recently, and he had a nice Chevrolet pickup truck on display and I asked if it had an HD Radio in it. He said, “Yes, it does have satellite radio.” I said, “No. Does it have HD Radio in it, the one that pertains to terrestrial radio?” And he said, “What is that?”

We’re still trying to educate the public. We’re still trying to educate the vendors. Even going into a Best Buy, I’m still asking these questions as a broadcaster and still having problems with people understanding what it is and what products they do and don’t have with HD Radio.

When we look into the expense of adding HD Radio

services to our facilities, we have to consider what’s going on in the marketplace and how are we going to get a return on our investment.



Scott Alexander

Q: In your opinion, does the translator strategy itself justify the investment in HD Radio?

A: It is the only way we justify it at this time. As long as you have a translator or someone who is willing to use theirs. We are trying to push it, to explain to our listeners what we have and what they have if they have an HD Radio in their vehicle or at home. It’s an education process; but until that process catches, we’ve got to have an analog counterpart to make it work for us.

Q: You have two stations on which you’re leasing out HD2s?

A: At the moment, I have just one that was mentioned before. The other

HD services are either tied to one of our own translators or we have partnered with another broadcaster in a market where we are sharing expenses and doing things together. They may have a translator [while] we had the HD service or vice versa. Instead of leasing it out, it was more advantageous for us to be working together to try to generate revenue and provide a service.

This is [our] one exception, as far as leasing is concerned. Maybe in major metros, the lease payment to a station may [justify] the capital investment in the HD equipment. But in our case, there was more to it than just

Alexander continued on page 14

» **Alexander** continued from page 13

the possibility of a lease. “What’s it going to benefit for us to do the other HD services and how much we are going to gain out of this by making that capital investment of HD equipment or the cost of the translator?”

Q: So for you the ROI is primarily about your own ability to use translators.

A: Absolutely. And this [HD2 lease] was the one exception to what we’ve been doing. Now, if somebody approached us and we have one available, then we’ll consider it, absolutely; but the offering out there, what people are willing to pay for the lease at this time for our size markets, doesn’t justify by itself the expense of adding HD.

“For us to have made an investment into HD, we had to have translators to make it beneficial to us in the small-and medium-sized markets.”

—Scott Alexander

Q: Who are you partnering with?

A: We have joint business arrangements with two other Montgomery broadcasters at this time. In Selma we’ve done our own. There was a void in the market three years ago. A void was made by a competitor of abandoning a format that was very popular. We said, “You know what? We’ve got a translator. Let’s put that format back on the

air.” That has worked out well for us, where we added HD service to our existing facility.

Q: What else should we know?

A: Looking at a capital investment, it does give you an opportunity to provide additional services to the community. You’ve just got to weigh whether that’s going to produce and what the return on that will be over time.

As far as looking at it for leasing purposes, I would look into the options of leasing at least one of the HD channels to offset the expense, and I am hearing about some broadcasters getting decent monthly lease fees for their HD2/3 channels in bigger markets, but not so much at this time in small to medium markets.

Q: What about the idea of a pure-play multicast, doing an HD2 just for the sake of doing the HD2, a new format of your own?

A: Without a translator?

Q: Right.

A: At this present time, no I would not do it without a translator; I’d still be waiting until the marketplace — where more car manufacturers are putting the HD Radios into all of their models. There are still a lot of new vehicles being sold without HD Radios in them. As I said before, there needs to be a lot more education to the general public. That’s going to fall upon us, the equipment suppliers, the manufacturers and the people that license [the technology]. We all need to promote this more.

It’s getting out there. The market penetration is climbing due to the fact that translators are being able to fill in for these things. But [the] education ... is still not where it should be, in my opinion.

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HD Radio as a Long-Term Investment

Q
A

Cris Alexander, CPBE, AMD, DRB, has been director of engineering at Crawford Broadcasting Co. since 1984. He also is managing partner of Au Contraire Software Ltd. and technical editor of *Radio World Engineering Extra*.

Q: Describe your experience with creating revenue with HD Radio strategies at Crawford.

A: I can't say that HD Radio strategies have been a big money maker for our company. We do have some revenue that comes from leasing a multicast channel in one of our markets for a translator entry. Crawford was an early adopter of HD Radio technology, both FM and AM, and we made the investment for the furtherance of the industry and media, not so much with an eye toward creating revenue.

Q: How has your company put the "AM translator on FM" to work with HD Radio?

A: We do, in several AM-FM markets, put out AM signals on FM multicast channels to extend the reach of weaker-sister AMs in some cases and to provide consistent 24-hour coverage in others. In Birmingham, Ala. we have even used our FM multicast channels as emergency STLs.

Q: How do the economics of HD Radio work for smaller and medium-sized market broadcasters today?

A: I'm not sure that they do in a traditional sense, unless it's as a means of providing an entry point for an FM translator. In small, medium and even large markets, the impetus for making the HD Radio investment will often be to provide listeners with options and stay current with the available technologies.

Q: Are broadcasters discovering revenue opportunities in leasing their digital subchannels? Could such revenue help cover the cost to upgrade to digital?

A: In some markets, broadcasters are finding revenue opportunities in leasing subchannels. Crawford has certainly found some such opportunities. For many, that

could offset the HD upgrade costs.

Q: -Some feel that unless you can obtain a lucrative HD2/HD3 lease or secure your own analog FM translator that can relay HD2/HD3 content, the value proposition for the other services is a little ways off. What's your take on this for smaller-market operators?

A: I think this is true. HD Radio is an expensive upgrade by any measure, and opportunities for multicast leasing are few and far between in smaller markets as a function of low demand. There is also the very real issue of new program streams in a market making the pie pieces all smaller. Stations can end up hurting themselves by bringing on new signals, particularly third-party translators using multicast channels as their gateways. Those new FM signals end up competing for listeners — and advertising/program revenues.

So while multicast lease revenues can to some extent offset the investment and operating costs of an HD Radio upgrade, licensees have to consult their crystal balls to see how those new market entries might affect station listenership and revenues. It

could well end up being a net loss.

Q: Who is willing to purchase such channel capacity? Is there a developing market?

A: There are certainly foreign language entities that have leased or tried to lease multicast channels in various markets. There are also independent operators who want to bring new formats to a market.

For example, in one of Crawford's markets, it is a local operator that leases a multicast channel as a translator source for a Fox Sports entity. That "station" is operated in every way as a local station as far as I can tell, with local



Cris Alexander

and network programming. Those that tune into the translator signal would have no idea the labyrinth the program feed goes through to get to their ears (unless they pay attention to the top-of-hour legal ID).

Q: *How does the combination of the proliferating number of FM translators combined with the “translator play” HD Radio option work? Also, can we quantify how HD Radio might help an AM owner justify the investment?*

A: I think overall, the translator proliferation that has come out of the 2016 windows has reduced the number of opportunities for “translator play” HD Radio. By definition, this sort of arrangement retransmits an FM HD multicast on a local fill-in translator. The AM translator windows have taken a good number of FM translators out of play for FM stations altogether, marrying them to AM stations for four years. Arguably, many of these translators were unbuilt CPs that might have never been built anyway, but moving those CPs and out-of-market translator licenses to other markets has reduced the potential number of translator frequencies in those markets. When the next translator window comes around, there will be fewer opportunities for FM licensees to put new fill-in translators on the air in many markets, and that reduces the opportunities for “translator play” HD Radio.

I don’t see how HD Radio can help an AM owner justify the investment.

Q: *What are you hearing from listeners or consumers about your HD Radio offerings, in terms of quality, coverage, features?*

A: It varies from market to market and station to station. In some markets, if the HD Radio is off for some reason, the phone will ring. In other markets and for other stations, it doesn’t seem to matter much. Listeners are either unaware of HD Radio or they could take or leave it.

Q: *What other questions should we in the industry be asking?*

A: “Is there an ideal time to make the HD Radio investment?” My answer would be yes. The ideal time to make the HD investment is when a transmitter is being replaced anyway for whatever reason. The additional costs of HD Radio can be lumped into the capital cost of the new transmitter, and there are economies of scale to be realized in those cases. There are still the license

costs to pay — those are built into the equipment costs, and there are external devices that must be purchased, such as exporter, importer and audio processor, but the overall costs of the HD Radio investment do seem to be considerably lower if the HD upgrade is made at the same time an “HD ready” transmitter is purchased.

All the above notwithstanding, I think that broadcasters should keep HD Radio in their plans, and not just in a nominal way. With increasing competition from nontraditional media, over-the-air broadcast has got to be different and better, providing listeners with a better experience than the competition. This means better sound quality.

Since HD Radio’s earliest days, we have put the



Translator installations have become increasingly important in spectrum planning. This is K236CQ, which carries programming of KLTT(AM) in Colorado.

emphasis on making the digital sound just like the analog so that in the blend areas, listeners won’t notice the back and forth. There is some wisdom in that, but why would listeners care about even having a digital signal to listen to if it’s no better than the analog? We should take advantage of the inherent advantages of HD Radio and process for superior sound so that listeners notice when the radio locks in digital. There should be a “Wow Factor” there. We should also get aboard with metadata, Artist Experience, etc. to make the dashboard experience different and better than our competition’s.

The HD Radio investment cannot, in my opinion, be justified on the basis of immediate revenue. It is more than justified, however, by the long-term viability and relevance of over-the-air broadcasting.

BTC Looks to Expand Data Network

Q
A

Paul Brenner is president of the Broadcasters Traffic Consortium, a coalition of U.S. and Canadian broadcasters that sells data delivery capacity to third parties, using member stations' HD Radio and analog RDS-TMC subchannels, and returning revenue to its member stations. According to its website, the network has more than 1,500 FM stations, over 1,200 of which are HD-capable: "Our signal coverage surpasses any other HD Radio offering," including that of iHeart-owned competitor Total Traffic and Weather Network, it states. Brenner works at Emmis Communications, one of BTC's founding members, and is president of Emmis subsidiary NextRadio/TagStation.

Q: You touch this topic of HD Radio in a number of ways. What's your feeling about the ROI argument for small- to medium-market stations?

A: There's always going to be the audio discussions, the value of audio quality and multicast channels either as programmed by the station for additional inventory or as an asset that can be rented or sold. As more cars are on the road, that will continue.

When I started this data opportunity, it was 2007. I had to convince a group of about eight broadcast leaders, top CEOs, that someday the data that HD Radio can deliver could possibly be more valuable than the audio that it can deliver. It's taken me almost 10 years to get to this point.

But I do believe that in the world of on-demand feel and user choice — the way that a smartphone has driven behavior — you need more payload. Every bit gets used. Automotive data needs are a good example for HD Radio as the most efficient way for utility information to reach an entire market of people 24/7/365.

Back in 2007 we launched with the ROI benefitting the bigger markets, and have moved into markets needed for road coverage links, corridors, between the markets. Now as we win more automakers, and more of our customers are paying for the data, we're down now into the medium [markets], and looking for more small markets that are willing to participate in the [BTC] network.

The ROI may not pay for their [digital] transmitter, as you might say; but it definitely puts some money in their pocket — enough to cover expenses for operating HD Radio and some extra money on top of that.



Paul Brenner

Q: How much money are we talking?

A: We don't give out dollar amounts. The ranges are from five to mid-six figures annually.

Q: Is BTC actively looking to expand its footprint in membership?

A: Yes, and our expansion is always driven by the automaker interests. We have the win with Hyundai which is now public, and there are more coming. [Mapping and location technology company HERE LLC, BTC's data partner, recently announced that Hyundai has added its HD+ Traffic service to some 2017 models; it will be delivered via HD Radio on BTC stations.] For every automaker we add, there are more "asks" for additional markets, for robust coverage in the existing markets — meaning diversity of signals, being able to operate a network of "always up and available" content.

We're definitely looking for more [stations]. We're somewhere around 120 markets of coverage right now. We probably want to be up around to 150 to 160 markets of coverage.

Q: How many stations that is?

A: Hundreds. It's at least redundancy in every market, and often multiple redundancies and the coverage contours. Between two and five signals per market. We're looking for more folks to become a part of it.

We're not going to outright "pay" for a transmitter for somebody; but if a broadcaster is looking to invest in HD Radio and see some form of revenue from that, they should definitely talk to us.

Q: Do potential partners come back with other uses? Do they say, "Well, I'd do better to do a translator with my HD signal"?

A: Often. But it's additive, right? People are looking for answers to quite a few questions — the ROI to at least cover operating expenses, but then [also], "How am I going to use the multicast channels? For diverse content, or to feed a translator, broadcast my AM content?" We inevitably ensure that what we require from the broadcaster for BTC data will work within that list of things.

Often, broadcasters are confused because of limitations of older analog technology. HD Radio actually is quite flexible. You don't have to pick one or two of those things, you can do all of these things to identify your ROI. Maybe that's serving album art to these new HD Radio Artist Experience cars, maybe it's one or two or three audio multicasts plus our traffic data.

Q: Do you think there's a lot of growth yet to come in HD Radio or has the big growth already happened?

A: I think the growth curve on the auto side is yet to happen. That's coming probably in the next one, two, three years, just by the nature of how long it takes. But I think the use of it is yet to really blossom. We're early adopters.

When I asked for these resources from the broadcasters in '07, '08 and '09, it was a no-brainer: "Oh sure, take it," like, "I'm not doing anything with it." Today, when I go back to those companies, now they negotiate. They have other people wanting the resources. There's a good indicator that the market's maturing.

Here's another example. We've been pretty successful with what we've done with HERE, and this is just traffic, weather, fuel. Then a very large automaker reached out to me and says, "Do you think your industry would be willing to build a common, singular network for the distribution of safety recall data? I'll build that into all my cars if your industry will provide that network for always broadcasting safety recall data to cars."

Q: So what happened?

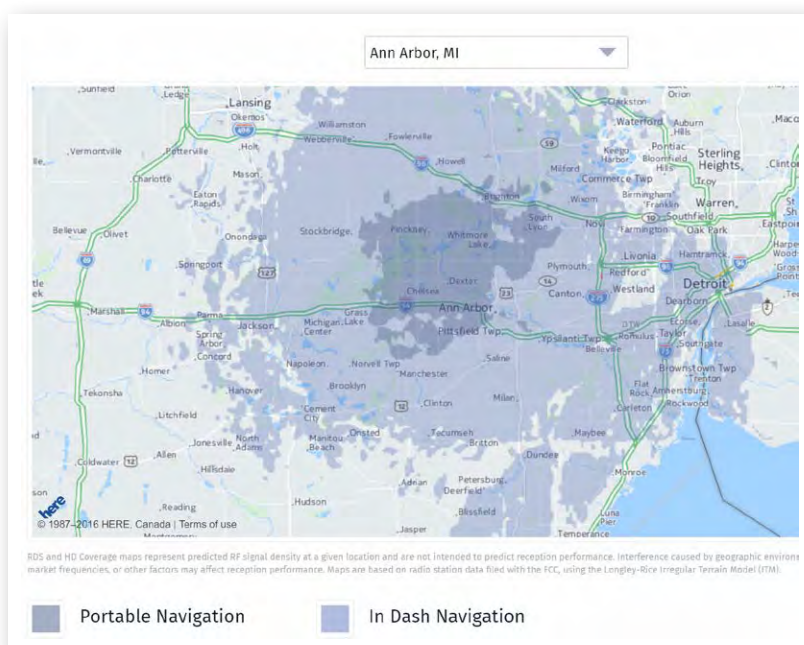
A: Nothing. I can't represent that. I don't have enough coverage to do that. So somebody else would have to jump in the ring with us. Right now iHeart's TTN and BTC are the two. The groups would probably have to collaborate, right? To deliver something like that, especially in the top 100 markets.

People are really looking to the capability of the data, but nobody could really deliver that at this time.

Q: About ROI models. BTC is one. Translators are a well-known one. Are there others?

A: Are you counting the lease of side channels? Emmis as a radio company has done pretty well with them. We've covered WorldBand Media for a long time, the Bollywood format. There's always ethnic groups looking for that kind of thing.

I know people have tried different things in the emergency alerting business, in other kinds of data. Over-the-air flash firmware kind of technologies have been tried and haven't really gone anywhere because there's nobody championing those things. I've seen some luxury vehicles updated as a prototype through HD Radio data services. They're not real businesses; they're just things people have tried but nobody monetized them.



BTC coverage map of Ann Arbor, Mich.

Q: Could we see people access capacity on HD2 and HD3 channels through some kind of programmatic advertising system?

A: Wouldn't the perfect example of that be what HD Radio did themselves by buying the rights to Radio Disney? [In 2015, iBiquity, then the owner of HD Radio, announced that its HD Radio Digital Network sales team would manage ad sales for Radio Disney content airing on multicasts of participating stations, this after Disney sold off most of its owned stations.] They said, "Hey, I'm the owner of the relationships with the broadcasters. I happen to know who has multicast channels available. Why don't I buy a defunct Radio Disney broadcast operation and just put it on multicast?"

Brenner continued on page 20

HD Radio Delivers Data for HERE

Q
A

HERE LLC, which offers location platform services, pays the Broadcaster Traffic Consortium for data capacity on FM digital and analog sub-channels of BTC member stations. Christopher Phillips is a senior manager of business development for the Americas at HERE.

Q: What does broadcasting offer HERE?

A: It provides us another medium so we may be multimodal in our delivery of content, primarily into vehicles, using internet and RDS and HD Radio. As more and more cars become connected, managing the transition between these mediums becomes significant to ensure an uninterrupted experience for the user while reducing data usage and cost. We deliver real-time traffic content with an underlying map to vehicles by way of FM frequencies (RDS); we deliver additional content by way of HD Radio.

HD Radio gives us the ability to deliver things like graphics; so now on top of traffic, we can deliver radar weather images. We can deliver near real-time fuel prices.

As we conflate these different data sets, it gives the driver, or consumer, a more complete understanding of the situation in their immediate surroundings, and allows them to make better decisions on routing, improving safety and arrival times.

Q: Who is your customer?

A: Related to RDS and HD Radio, in most cases it is a car manufacturer (or an OEM), or one of their technology partners. So we will work with an OEM and license our map content and other data sets, as well as some of our live cloud services, which could include supplemental location content like on-street or off-street parking and EV charging stations.

› Brenner continued from page 19

Q: What else should we be asking?

A: There's an often undiscussed but unique advantage to being supportive of the HD Radio technology. The BTC's work with the automakers is a great example. For

Hyundai, we beat satellite, we beat connected car, we beat our competitor TTN, as our industry being the most efficient and cost-effective way to send this mass market data to the car.

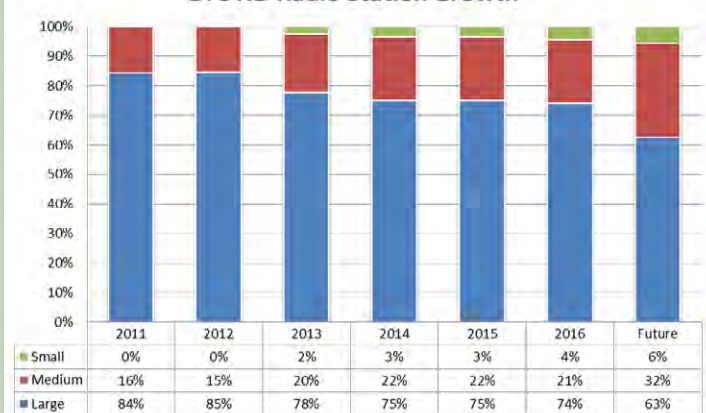
The more you can demonstrate that kind of unified result, you can [worry] a lot less about, "Oh boy, the radio might go away in the car someday." If the industry across the board is showing progress and trying to innovate, that actually speaks volumes; more than touting our listener reach.

Q: Speaks volumes to the car makers, specifically.

A: Yeah. The people that are deciding your fate.

There's all this talk [that] "Oh, the future of the car's at risk! The autonomous car! The Android Auto! The CarPlay! They're going to obfuscate the console!" Well, it's being done because of demand, right? A carmaker's never going to remove radio if they always feel the consumer and the market demand it. Keep giving people a reason and you won't go anywhere; but if you don't, you probably are going to go somewhere.

BTC HD Radio Station Growth



A graphic from the consortium indicates recent relative growth in BTC's small and particularly medium-market footprints. BTC does not publish a station list but Brenner said the number of participating stations is in the hundreds and growing.

Q: How long have you been using FM as part of your deployment?

A: We've been offering real-time traffic for 12 years, using RDS as a medium for delivery starting in 2007. HD Radio is newer technology and has been a part of our offering for about six years. We continue to enhance the service by evaluating new providers and innovative sources for traffic insights. In fact, we've just recently announced that we are incorporating probe and rich sensor data from three connected car fleets, an industry first.



An image from HERE LLC. The company taps sources of traffic and related sensor data and delivers that content to vehicles and drivers through broadcast channels and cloud services.

Q: Is the Broadcaster Traffic Consortium your only broadcast partner?

A: For partnering, and specifically partnering for delivery of our content, BTC is our primary partner. They've done an excellent job of rounding up the various radio stations and owners, allowing us to use BTC as a single point of contact for working with the broadcasters. That's very valuable to HERE. The BTC also prioritizes markets and station locations to achieve proper station redundancy and ensure the broadcast service remains uninterrupted.

Q: How much of what you're doing is analog RDS?

A: It's both. An increasing amount is moving to HD Radio.

Q: How are you feeling about radio as a medium these days?

A: It's certainly interesting to us and the auto makers and partners, because it allows us to deliver a high-quality product, without additional data cost to the consumer. That's a different model than moving exclusively to a connected environment, or some of the subscription models that put additional cost on the consumer, or in some cases the OEM. By way of this model, it's a free

experience. It's a no-cost way of delivering that content to the consumer. We believe data delivery by way of broadcast is a viable model and one that will continue to survive and do well.

Q: Do you need more stations expanding the physical footprint of your services? If a broadcaster wants to get in touch...

A: We're always looking to expand. To align with our existing partnership with the BTC, we would start by directing them to the BTC. That single point of contact is a convenience for us. We're not the experts in broadcast partnering. We use the broadcast medium to deliver our products and services to the consumer. We rely on the BTC to manage the relationships with each of the broadcasters.

Q: The benefit to the broadcasters here is the revenue stream; you're paying for this, right?

A: That's right. We are effectively leasing a portion of the broadcasters, FM and HD bandwidth.

Q: Is there anything that you would say to the broadcast industry to do differently, do next that would help advance your business model?

A: Continue to focus on growth of HD. Again, the ability to deliver richer content by way of HD is significant to consumers. When we do primary market research, or even secondary market research, what we find is consumers are very interested in things like weather as a supplement to live traffic information. Consumers are also interested in near real-time gas prices or even prices by a preferred brand, and other dynamic content. If there's a continued emphasis on growing HD Radio, that will allow HERE to deliver richer content at a reduced cost, or no cost, to the consumer.

Q: But might one argue that the dashboard is changing so quickly — and there's going to be so much pipeline capacity eventually into the dashboard that doesn't rely on HD Radio — that there will come a time sooner than later when you guys don't need that pipeline anymore?

A: I don't see that in the near term. There's a cost associated with living exclusively in a connected environment, and it's a challenge for OEMs and consumers to get the estimated cost right. It's difficult to know exactly how much data is going to be consumed by an individual, and it varies from consumer to consumer. Having the option of broadcast, both as RDS and as HD, is a compelling capability that auto makers will continue to leverage despite the increasing connectivity and expanding bandwidth.

Emmis St. Louis Finds Demand for Its HD2s

Q
A

John Beck is senior vice president and market manager for Emmis Communications-St. Louis, a cluster of four stations. One of them, KNOU(FM), leases its HD2 signal to a classical music station operated by nonprofit Radio Arts Foundation, with its programming then relayed to a translator that Emmis helped locate and build to give that format a broader FM presence. KNOU also airs smooth jazz on its HD3. Meanwhile, another station in the cluster, KPNT(FM), now leases its HD2 to simulcast the sports/talk programming of KFNS(AM), part of a series of changes on the local AM dial that, according to various news reports, involved St. Louis sports host and entrepreneur Tim McKernan moving to KFNS and seeking an FM footprint for his content.

Q: John, what your experience with HD Radio and with trying to generate revenue from that investment?

A: The best use of the space, I think, is to rent the frequencies, rent the space to people who can't afford to buy a radio station. It could be religious groups, it could be ethnic groups, colleges, universities or any organization looking for access to an interest group in your area.

In our case we helped a local former broadcaster [Radio Arts Foundation] who once had a full-power classical music station at 99.1 FM. The owner, the Lutheran Church, sold the station from under them to another religious group, who changed the format. The Radio Arts Foundation was then forced to look for a new radio station home [but] found them to be extremely expensive.

We went to them with the idea of renting one of our HD2 channels. They liked the idea but still wanted an analog presence. We came up with the idea of building a translator and associating it with the HD2 channel. So the result was that we built a translator for them at 107.3 FM, which they own; it is associated with our KNOU HD2, which they rent from Emmis. That has made us some money.

On a similar note, there was a St. Louis broadcaster by the name of Tim McKernan who was on 920 AM doing a popular sports-oriented morning show and [whose company] moved to 590 AM [taking partial ownership of that station]; and they wanted to have an FM presence. We leased KPNT-HD2 to them in return for our ability to

sell spots; and between the two of these projects, we're probably making close to \$400,000 a year, \$380,000 maybe.

I've thought a lot about it in terms of returns on investment, [and] I haven't seen anything better yet. Perhaps what the Pittsburgh Penguins did with iHeart Media's WXDX HD2.

When somebody wants to be on the air and available to the public and [on their] car radios or in their phones, instead of spending their money going out and borrowing perhaps as much as \$16 million to get into this market for a full FM, instead of going crazy finding equity partners, they can rent one of these HD2s, possibly get a translator, and then spend their money on marketing and helping the consumers buy an HD Radio.

And as to availability on the dash, HD Radios are coming off the assembly lines at a pretty good clip.



John Beck

Q: For broadcasters who have been following this story of digital radio for decades and perhaps have some hesitation, your story would be encouraging. Do you think they can have similar success in smaller- and medium-size markets?

A: I think it would exponentially go down as you go down in market size, just guessing, because you have fewer people and fewer varied interests. When you're in a city the size of St. Louis, you've got pretty much every ethnic group looking for a way to get to their people, and other organizations that are looking for something they want to do to communicate to their people. But as you

get into smaller markets, [it's] probably be harder to do.

When you drive around any larger city like St. Louis, all the stations are HD-capable and running multiple channels. The same is true in Kansas City. But there are hardly any in Columbia, Mo., which is getting down in market size in terms of Missouri, though that is where the flagship Missouri university is, and near the state capital. I think there is one HD station in Springfield.

It seems to be a larger-market thing because all the large groups got together years ago and supported HD. In large part the thought at the time was in response to satellite radio's multiple music channels. But since that time, we have come to the conclusion that satellite radio really isn't a competitor for our

"I've thought a lot about it in terms of returns on investment, [and] I haven't seen anything better yet."

—John Beck

revenue or listeners the way we thought it might be — reason being that satellite radio has about 30 million subscribers in a country of about 320 million, so in any one market, satellite radio doesn't have a heavy enough concentration to worry about. And as far as I know, they're not selling local advertising, which is where we all make our money.

I think the reasons to get onto HD Radio have changed.

Q: *Given your experience, would you encourage someone in a small to medium market to look seriously at investing in digital radio based on this kind of revenue opportunity? Could it pay for itself?*

A: I think the investment is about \$180,000 to \$350,000 per station, depending on the configuration. You've got buying the transmitter, putting up the antenna, and everything else that goes with it ... Let's say an average of \$250,000. That's a lot to get back for a small-market broadcaster.

But here's a reason that I have pushed it, even though I know it's a lot of money for them. On the dashboard, if you look at Pandora or you look at Spotify, all those services have album art, artist information, and all those kinds of bells and whistles that look pretty cool. Online services have a nice visual associated with it, and some data and information.

HD Radio has that too. It has a nice visual display on the screen. It keeps up with what young people are used to seeing associated with their audio service. It looks pretty cool on the dash; if you don't have it, your station

looks kind of plain on the dash.

Is that a big enough reason for a small-market broadcaster to invest that kind of money? It's hard to convince them of it.

Q: *Do you have a sense there's broader interest among third parties in leasing multicasts? In the old days it would have been Muzak with your SCA. Are there equivalents with digital where you see people coming around saying, "I'm interested in paying you, Mr. Broadcaster, for your multicast"?*

A: I haven't seen all that many. Disney is doing it. Disney is putting a channel on anywhere they can, and they sold off their AMs. The money that you make from that comes from ad revenue.

But your question is, "Are there enough people coming to you and asking?" Not really. It's something I think the broadcaster has to have an eye for. Let's say there's a university in the market and they can't afford to put up a full FM. The communications department in that university could afford to lease an HD2 or HD3 from you. That could create some cash flow. You would have to use your imagination and look for situations that fit.

And think about the ethnic groups that exist in your community. I know out west and southwest, and in some cases out east, there are many Hispanic stations, but here in Missouri there aren't that many really. That's a growing opportunity right there. In St. Louis the Bosnian community presents an opportunity; St. Louis has probably the largest concentration of Bosnians in the USA. Each market would have to think through those things and see who might be interested.

Q: *Might we someday see an online marketplace where buyers and sellers could transact that kind of capacity — sort of a programmatic advertising market for digital multicast channels?*

A: For regular everyday radio advertisers I just don't think there is that big of a desire in the marketplace for formats that we're not providing already. You need to have enough critical mass, enough of an audience to be able to have an impact for advertisers or it's not worth it. People might sit around and complain and say, "You know, we don't have a jazz station," well that's probably because we can't get enough audience or advertiser support for jazz on over-the-air radio.

Q: *The people who wanted it now can get it online.*

A: Yes, it's true that you can get almost any format you want online, but there is something magical about being on the radio, real radio, in your car and on your phone that is attractive to people, and if you look you might find a situation or two that could pay the cost of going digital.

RUSA Leases HD2 In New York

Q
A

Anna Pekerman is founder and owner of New York-based RUSA Radio, with main studios in south Brooklyn. It describes itself as the only Russian-speaking HD Radio station in the United States. The format airs on the HD2 multicast of New York iHeartRadio FM station WWPR, “Power 105.1.” RUSA transitioned to that signal in 2014 from its former home on the 87.7 analog audio subcarrier of local TV Channel 6. It is also heard on the iHeartRadio app and via online audio stream.

Q: Are you looking to expand to other markets? What cities might be strong for Russian listening?

A: Absolutely. Chicago, Boston, L.A., San Francisco, Seattle, Houston, Dallas, Ohio ... there are a lot of Russian-speaking residents in the United States.

Q: How would that relationship work?

A: We’re flexible. Our number one thing is that we are Russian-language programmers. We have 24/7 programming with a full staff, the best hosts that our community has to offer, and we take a huge pride in everything that we do.

Q: Is it expensive to lease the capacity from iHeart?

A: iHeart is a fancy company. It’s a high-end company, so yeah. Not cheap.

Q: Do you sell commercials to the local community?

A: Yes. We are commercial radio, we sell commercial time and we think we are very [effective] in partnering with local businesses to bring them success. We have an 80 percent rate of recurring clients.

Q: Do you have a way of quantifying how many listeners you have?

A: That’s a challenge. The only thing we see is the stream. ... I keep on top of Nielsen, but nothing is happening that doesn’t cost an arm and a leg.

Q: Do you have full-time staff, or are these volunteers or part-timers?

A: Oh no no no no no. We have full-time staff, very serious staff, very professional. It’s not inexpensive but I certainly personally believe a lot in professionalism and a professional approach to business.

Q: Is it self-sustaining or do you have other businesses in addition to the radio income stream?

A: It’s self-sustaining, but also we do bring in Russian entertainers. We have concerts that we produce and there are different projects that we do throughout the year.



Anna Pekerman, at right, celebrated the service’s birthday with a U.S. theme (its name is pronounced “R-U-S-A”). She is shown with evening drive host Andrei Laskatelev and host Tatyana Rodos.

Q: I imagine most of your HD listeners are in the car?

A: Well I would not suggest for anyone to buy a HD Radio receiver for home — I think that’s a device that’s going to become obsolete. What we recommend for our listeners is just to buy a very inexpensive speaker that you can get now on Amazon between \$7 and \$10 which connects to your smartphone and everybody owns a smartphone these days ... even though maybe not everybody has HD Radio in their cars, which is a little bit upsetting. It should be there already.

But I think a smartphone is definitely the radio of today, and the same thing even in the car — iHeartRadio allows you to listen to radio through Bluetooth. You just connect



it, then you have phenomenal sound, digital sound coming from all your speakers, and super good stereo, crystal clear format, and no range [limit]. I mean you can drive from here to California and not lose us if there's decent Internet somewhere, even in your phone. Most providers don't charge much for the use anymore, so it's pretty much almost free.

Q: *Do you perceive that iHeart benefits from having you on that multicast, other than the revenue you bring them?*

A: I think it's pretty exciting for them to be able to offer Russian on one of their platforms. We are more than just a LMA. We do have a certain partnership that I don't want to go deeply into, it's not a straightforward LMA, it's more than that. I do have access to the Russian community of New York, which is over a million in the tri-state area, which I think is pretty exciting for everybody. They have a professional partner. I've been in the radio business for almost 20 years and I know it inside and out, from the technical aspect, the legal aspect, the production aspect, the creative aspect. Our partnership is over three years already and there's trust there and there's loyalty there.

Q: *What else should we know on the topic of HD Radio?*

A: I think it takes a village here too; if everybody wants HD to blossom further and bring them revenue, I think there is revenue there for everybody.

The only thing I think would be very important is that — HD changed hands, they [iBiquity Digital] were bought out, there is new ownership

there. Since then it's not as active in getting into more and more new vehicles. That [seemed like] the mission before and was pretty successful; I feel like there's a little bit of a stop here.

I think the most important thing is for HD to be accessible in cars, for as long radios are not going to become obsolete in cars. I am following the industry, and it's very possible that eventually we're not going to have the FM/AM dial in there; but at this point it's not a definite; and we still believe in the radio.

I certainly believe in the radio. Just like it was for TV when TV became digital, it's inevitable for radio to become digital, just because of the quality of the sound and what it has to offer. I think that the better HD is going to do in penetrating cars, the better everybody in the industry is going to do with HD.

Q: *If a broadcaster in another city is interested, how would they contact you?*

A: They are absolutely welcome to email me at anna@rusa.fm or (718) 339-0003.

Q: *Anything else I should include on this topic?*

A: Russians rule!



Summertime event at RUSA Radio.

Enhanced Metadata Is a Principle Advantage

Q
A

Paul Stewart is broadcast automation specialist with ENCO Systems, a sponsor of this ebook, and serves on the Michigan Association of Broadcasters Engineering Committee.

Q: Describe your experience with radio entities seeking to create revenue using HD Radio strategies.

A: Quite a few of our clients own HD stations and oftentimes program them in an alternative way so as to provide unique programming to their listeners. In some cases, our clients are using HD stations as a way to feed FM translator sites while also providing consumers with HD Radio receivers as a means of listening to a crystal-clear signal with enhanced metadata.

In most situations we have dealt with, an HD station is run in a fully automated manner, reducing the overhead of operating the station. In these situations, we provide our clients with fully automated music and traffic ingest, automated playout and metadata to the HD importer or other transmission equipment.

“In most situations we have dealt with, an HD station is run in a fully automated manner, reducing the overhead of operating the station.”

—Paul Stewart

Q: Where does a company like ENCO fit into this discussion?

A: ENCO provides broadcasters with the necessary platform to automate playout for an HD Radio station as well as the tools to provide their listeners with “now playing” metadata. Some broadcasters have decided to



Paul Stewart

voicetrack their playlist to eliminate the need to dedicate a studio for the HD station. In this case, we provide multiple solutions for voice tracking, either onsite or remotely, to further reduce an operation’s overhead.

Q: What are you hearing from the field about HD Radio quality, coverage or features?

A: One of the principle advantages of HD Radio is the enhanced metadata that can be displayed on a consumer’s radio. While title and artist metadata and scheduled messages have been commonplace in RDS-capable receivers, displaying images such as album artwork has become possible with the advent of HD Radio.

AM HD Helps WDGY's Automotive Sales

Q
A

Greg Borgen is president of AM HD Radio daytimer WDGY in Hudson, Wis., near St. Paul, Minn., and an associated FM translator. He also leases an HD2 subcarrier from FM station KTMV that airs his AM's programming.

Q: You added AM HD at a time when you were planning a facility upgrade, yes? Should small or medium-sized broadcasters be considering an HD investment at this point?

A: I put a new transmitter in, and I'd heard the quality of the HD and it sounded awfully good. I decided well, this is probably what we should do. We're playing the music of the '60s and '70s, and the quality is phenomenal.

We bought the new transmitter and then we just went ahead and put the HD exciter in and rolled with it that way. It's been awfully, awfully good for our automotive business. That sector is a pretty good advertiser. We were able to attract and retain some new car dealerships with the demos and talking about HD Radios and the new cars, the new GMs, new whatever's, and just was able to increase our automotive advertising and even to retain some of our dealers that might go away first quarter.

All in all, it has paid for itself; we've had good return on investment. I think that each individual broadcaster should maybe take a look at it. They've got to upgrade their facilities at some point. It works; it attracted some new revenue.

And the HD quality is so good that if you have an HD Radio, it does penetrate homes and is not subject to the interference. [Also] we were part of that all-digital study [by NAB Labs, about interference consequences of all-digital modulation]; and it was a huge, huge success.

Q: As controversial as HD Radio has been at times, the most controversial part has been the AM; but you've had a positive experience overall.

A: Yes. We have tried to capitalize on it and in selling our auto dealership partners. That's where we had success, trying to encourage people to buy a new Chevy Silverado or GMC Denali. We've had good success from that standpoint.

Q: Awareness...

A: Show-and-tell awareness. We're not doing a huge volume with it; but it definitely has helped, and we have paid our investment forward with that. We're out at our events throughout the summer. We have some success at selling HD Radio [receivers] through iBiquity [now DTS, the parent of HD Radio]. We've sold them at various car shows and that type of thing.



Greg Borgen

Q: You are retailing the radios directly to the listener to help encourage distribution.

A: Yep. We had some moderate success at doing that.

Q: You mentioned a possible all-digital AM future, but that might be some time away. In the meantime many AM owners are economically quite challenged. What advice would you have for them when it comes to the wisdom of a digital strategy now vs. sometime down the road?

A: It's hard to say where it's really ultimately going to go. But we looked at it hard, and it sounds terrific, and it was [as] we were doing scheduled upgrading of our facility. I think anytime anybody's going to be upgrading their facility — putting in a new AM transmitter in and new processing — they might as well just take it to the next step. Then you're set and ready to go.

Q: Are you concerned about reports that some AM HD broadcasters have stopped broadcasting their signals?

A: Yeah. And I can see why they do that too. In our particular world, I'm sitting here with a sunrise-to-sunset daytimer. How's an all-HD, all-digital setup going to help us? Probably not. What's going to help us the best is if we can have some kind of a nighttime issue addressed; and I don't know if I'll be around long enough to [see] a solution for that.

Is Artist Experience the “Steel Sword” HD Radio Needs?

Q
A

Fred Jacobs is president of Jacobs Media Strategies, a Detroit-based media consulting firm, specializing in maximizing commercial and public radio’s digital opportunities.

Q: Describe your experience or observations about creating revenue with HD Radio strategies.

A: Your timing is excellent because our company is immersed in a research study for HD Radio, focusing on broadcaster success stories with the technology. While the research is still in the field, we’re beginning to see a number of patterns in the data. We also have conducted a number of interviews with broadcast CEOs and industry leaders about HD Radio.

And it’s pointing us in the same direction: the car. HD Radio’s Artist Experience is still emerging, but all signs indicate that album art levels the playing field for radio in the dash, allowing stations to replicate the in-car experience offered by brands like Pandora or SiriusXM. If you drive a newer vehicle with a touchscreen and connectivity, you quickly learn the value of importance of radio keeping pace in the car. As you switch from a streaming station or service to FM radio, it’s critical the look and feel stay consistent. That’s what Artist Experience provides.



Fred Jacobs

The other big piece is advertiser displays on touchscreens. Our research — both qualitative and quantitative — is showing strong signs that broadcasters share enthusiasm for this feature, expressing confidence it can be a difference-maker in producing much-needed ROI.

Interestingly, many radio execs and managers aren’t even aware this technology exists, signaling an opportunity for the HD Radio team to maximize value by focusing its efforts toward this Artist Experience technology.

Throughout its often rocky history, HD Radio has been searching for its “steel sword” —

the one feature or benefit that can cut through and be embraced by broadcasters of all varieties, formats and market sizes. Our research is indicating Artist Experience could be that “one big thing.” When the top-line findings of the research are released industry-wide, it’s looking more and more like this compelling feature will emerge as a key in HD Radio’s value proposition.

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