Do Metrics Prove The Music? A Slide-by-Slide Commentary

SLIDE 1: Do Metrics Prove the Music: A Three-Year Trend Case Study
Thank you to CRB and the CRS Agenda Committee, and to the folks at Nielsen BDSradio, Mediabase, Warner Music Nashville, Country Aircheck, Pandora and Billboard for their help in our research.

When it comes to data, music and professional sports have some things in common. Take football, for example. The head coach of your favorite team decides who gets to play, just as PDs and MDs choose the artists and singles to be added. Coaches evaluate each player's stature and reputation, just as programmers do. And both use their gut instincts. By the way, stature and gut feeling are the two perennial No. 1 and 2 factors programmers say influence them on new adds, according to findings from several years of Music Decision Surveys conducted by the Stone Door Media Lab and Country Aircheck.

At one time, football coaches used to regard data as a threat to their decision-making authority, but no more. They're now adding in new information, such as probabilities of going for it on fourth down and which wide receiver gained the most separation on which routes in which situations.

When it comes to music programming, there are both familiar and new metrics available that decision makers need to know about, too. Of course, in both football and Country music, the real proof comes in the actual performance, by both the players/artists and everyone associated with them.

The new Sentiment Survey shows that a majority of Country programmers worry about streaming services increasing their "share of ear" at their station's expense. One way to fight that is to leverage those streamers' early data to help PDs/MDs with their own music decisions, especially when the Sentiment Survey shows programmers are already working 56 hours a week handling three or more jobs.

SLIDE 2: Heart ad.
This ad appeared in February 1980 – 40 years ago – in the leading radio trade magazine of the day, *Radio & Records*. Back then, usually the only data you'd see in an advertisement would be a list of call letters and chart movement at various stations, and maybe announcing that it was No. 1 Most Added. If there were early sales, it was rarely mentioned in print. And that was about it. But new data has become available, and there are now have label staffs and data analysts looking for correlations to help programmers make sense of it all.

Slide 3: Jordan Davis ad.
Compare that old ad with this data-driven trade ad from early December 2019. There's chart position, of course. But you also now see national callout info by demo. And local audience preference data at specific stations. And weekly streaming totals. The new survey shows that all four of these statistics rank as significantly influential on new adds and spin increases if the numbers are good enough.

Data analytics may have become mainstream, but there's still a lot of uncertainty and even skepticism among programmers about metrics. Do they *prove* the hits? No. But project the hits? Definitely.

Slide 4: 10 Free Early Predictive Factors for Hit Country Singles.
The Stone Door Media Lab was asked to identify specific early predictive factors that labels can share with radio PDs and MDs that cost nothing to harvest. This PowerPoint covers 10 of those factors. Some are familiar from previous reports but have been updated, and some are brand-new. You don't need to

see big numbers on all 10 for a particular single to get a sense of its potential. But if you see five or more, that record is likely to become a "most valuable player".

Many of the statistics are calculated after the second airplay chart week. Why the second chart week? First, it provides a credible fixed point to compare data in terms of airplay, streams, consumption per spin and other statistics. Second, by the second chart week daytime spins are commencing, and usually at least half the Country reporter field is already playing the single, which by then is averaging at least one spin per day. It's early enough to be useful and usually well before a single is familiar enough for callout.

The first is a high Most Added rank. Our surveys consistently show that most programmers don't regard Most Added as very influential. Yet labels have been promoting this statistic for decades … and for good reason. Yes, Most Added sounds like something that could be hyped. But radio program and music directors are rarely fooled. The Stone Door Media Lab has been tracked this metric since 2015, and the percentage of No. 1 Most Added singles that never charted is just four percent. Meanwhile, more than half of No. 1 Most Added singles go all the way to the top. No. 1s typically have been at least No. 2 Most Added once, if not No. 1 Most Added.

The second is a big add week, regardless of the Most Added rank. The magic number for the average No. 1 single is 53 stations in one week, or about a third of the reporter field.

The third is the number of consecutive Top 10 Most Added weeks. If a single gets 53 stations at once, this metric isn't likely to be an issue, but most hit records build more slowly. If a PD/MD sees a single on the top 10 list four or more weeks in a row, that kind of steady consensus is pretty predictive of a No. 1.

The fourth is a high number of Shazams per Country spin, measured in the single's second chart week. Shazam no longer makes this info available to the public online, but labels can furnish the info. The magic number for future No. 1s is about 7.2 Shazams per spin, but the more Shazams per spin they get, the more likely the single will be a No. 1.

The fifth is heavy early streaming activity, again measured in the single's second chart week. "Survey says" programmers view local streaming data far more important compared to national data, and that makes sense. But national streaming numbers are predictive. No. 1 hits average at least 1.35 million streams per week or more. The more they get, the more likely the single will reach the top. But bear in mind that younger artists get more streaming activity than older artists, so there's a bias there.

The sixth is a high number of streams per Country radio spin, again measured in the single's second chart week. The magic number for No. 1s is 1,400 or more. And again, the more streams per spin, the more likely the single will go all the way.

The seventh is a high number of consumptions per radio spin, once more in the second chart week. The latest survey shows this metric to rank among the top 10 factors for influencing spin increases, so the Stone Door Media Lab has researched more than two years of data to study how charting singles perform. For the first time, it can be reported that the magic number for future No. 1s is about 19 consumptions per spin. Generally speaking, the higher, the better the outcome.

The eighth is a high consumption per spin rank, again in the second chart week. On average, No. 1 singles rank among the top 10 in their second chart week. This also has never been reported before.

<u>The ninth is how high a single peaks in Pandora.</u> While the latest survey continues to rank Pandora pretty low for influencing adds and spin increases, Pandora is very popular among Country fans. About 25% of their weekly top 100 current singles are Country. No. 1 singles have typically made the top 5 among the Country singles on Pandora's top 100, and they reach top 10 more than five weeks sooner than at Country radio.

<u>The 10th metric is Pandora's Thumbs-up ratio</u>, again in the single's second chart week. This data point ranked last or near-last in the latest survey, yet is definitely worthy of attention, especially if a single is getting 50,000 or more Pandora radio spins per week – a large sample. If 2.2% or more of Pandora radio spins generate a "thumbs up" response from consumers, you're probably looking at a No. 1 record.

Of these 10 metrics, the average No. 1 registers the magic number on at least half of them, and often most of them. There are many specific examples of big hits, as well as for some current singles, newer singles, developing artists and even comeback artists.

Slide 5: Top 3 Most Added singles have delivered 96% of the No. 1s.
More than half of the 170 No. 1s since August 2015 have been No. 1 Most Added at one point or another. Most of the No. 1s were either No. 1 or No. 2 Most Added. Of those 170, only three didn't rank among the top 3 Most Added in any given week. Yet "Most Added" ranks only 26th of 37 factors influencing new adds among PDs/MDs in the latest survey.

Slide 6: Singles that reach No. 1 average 54 adds during one week.
Almost half of No. 1s average at least 50 adds, and nearly all get at least 30.

Slide 7: The power of steady, collective early radio momentum.
A single may not be No. 1 Most Added and still be a big hit, but those that get enough adds to rank among the top 10 Most Added for four or more weeks perform above average, and especially so for five or more weeks.

Slide 8: Big early Shazams is correlated to big results.
Singles that peak at No. 1 averaged 8.1 Shazams/spin in their second chart week. Those peaking lower than No. 1 averaged consistently fewer Shazams/spin. Shazam data ranked No. 27 on new adds influence and No. 26 on spin increases.

Slide 9: Airplay rank and streaming rank appear to be correlated.
The higher the average airplay rank, the higher the average streaming rank.

Slide 10: Average streams per week
Here's another way to look at it: Whether in chart rank or streaming rank, notice how closely the top 50 songs match each other. After all, what is a hit these days? Can a single be a hit with lots of airplay but not much streaming, or lots of streaming without much airplay? The data say yes to both questions. The close correlation we see here regarding stream totals based on airplay rank and also on streaming rank shows that a hit is a hit, and they usually go hand-in-hand.

Slide 11: High early "streams per spin" indicates hit potential
Streams per spin is one of the newer metrics that is proving to be predictive of a hit single, especially at very high levels, as we can see here.

Slide 12: Consumptions per spin for future No. 1s are above average all the way to the top of the charts. Consumptions per spin decline as songs move up because radio spin counts increase much faster than consumptions do.

Slide 13: Future No. 1s rank, on average, among the top 10 in consumption-per-spin very early (the second airplay chart week). In the "old" days, you might hear about a record that's top 10 in sales. Now if a programmer hears a single is top 10 in consumption in its second chart week – when it's probably in the mid-40s – it's worth paying attention to.

Slide 14: Most Pandora Top 5s reach No. 1 at Country radio and usually lead on Top 10s. On average, 25% or more of the Pandora Top 100 are country singles – Country fans listen to Pandora a lot, and the data has been proving to be reliable for years now.

Slide 15: A high early Pandora "Thumbs Up ratio is correlated to hit outcomes. This is the ratio of "Thumbs Ups" among Pandora radio spins. Anything around the 2% ratio is an important threshold here. Three percent is very impressive. At very low levels such as a few thousand spins, an artist's fan base can produce a artificially high ratio of Thumbs Ups, but when we're talking about a bigger base, say, 10,000 or 25,000 or 75,000 spins or more, the sample is quite large, stabilizes on a weekly trend and becomes very useful.

Slide 16: BB Country top 5 hits for 2017-2019
The Stone Door Media Lab examined each of the top 5 singles for the past three years, and chose the *Billboard* Hot Country top 5s because it includes not just airplay, but also sales and streams, which form the new consumption metrics discussed here and that is being studied across the industry each week.

Slide 17: BB Hot Country's 5 top hits of 2017
The top 5 were Sam Hunt's "Body Like A Back Road", Brett Young's "In Case You Didn't Know", Dustin Lynch's "Small Town Boy", Kane Brown featuring Lauren Alaina on "What Ifs" and Luke Combs's "Hurricane". Collectively, they averaged high numbers on 76% of the key metrics. Four of them scored on at least 80%.

Slide 18: Brett Young's "In Case You Didn't Know"
Let's look at one of the examples, "In Case You Didn't Know" – a No. 1 in June that year. We can see by the metrics in green that this single reached or exceeded those of the average No. 1.

Slide 19: BB Hot Country's 5 top hits of 2018
The top 5 were Bebe Rexha featuring Florida Georgia Line on "Meant To Be", Kane Brown's "Heaven", Thomas Rhett's "Marry Me", Dan + Shay's "Tequila" and Jason Aldean's "You Make It Easy". Collectively, they averaged high numbers on 89% of the key metrics, and two hit 100%.

Slide 20: Kane Brown's "Heaven"
Let's look at one of the examples, "Heaven" – a two-week No. 1 that May. We see by the metrics in green that Kane matched or outperformed all the key metrics of an average No. 1 single.

Slide 21: BB Hot Country's 5 top hits of 2019
The top 5 were Morgan Wallen's "Chasin' You", Dan + Shay's "Speechless", Blake Shelton's "God's Country", and two by Luke Combs: "Beautiful Crazy" and "Beer Never Broke My Heart". Collectively, they averaged very high numbers on 86% of the key metrics, and four of the five hit 90% of the key metrics.

Slide 22: Luke Combs "Beautiful Crazy"
Let's look at one of the examples, "Beautiful Crazy" – a four-week No. 1 last March and April. The single scored at or above average on all of the key metrics.

Slide 23: Strong Early Metrics Project No. 1s
Here's a comparison of the key metrics for the average charting single, the average No. 1 historically over recent years and the 40 singles reaching No. 1s for 2019. We can see how No. 1s outperform average charting singles – which include No. 1s – by significant margins on nearly every statistic.

Slide 24: Impressive Metrics on Current Singles
To give you examples of how things look for some records that haven't peaked yet, here's what the data looked like on three current singles months ago – back in September for Riley Green and Morgan Wallen, and in early November for Gabby Barrett. All three scored highly on 75% or more among these key metrics.

Slide 25: Strong Metrics Led 2020 No. 1s
The first three No. 1s of the year, Dustin Lynch's "Ridin' Roads", Lady A's "What If I Never Get Over You" and Dan + Shay & Justin Bieber's "10,000 Hours" all achieved strong numbers on a majority of the key metrics we've discussed.

Slide 26: Strong Metrics Led 2020 No. 1s
The two most recent No. 1s: Jon Pardi's "Heartache Medication" and Maren Morris's "The Bones", along with might be (as of this writing) the next No. 1 – Sam Hunt's "Kinfolks" – all delivered on more than 70% of the 10 key metrics.

By the way, two "comeback" artists who earned their first No. 1s since 2015, Lee Brice with "Rumor" and Brantley Gilbert (& Lindsay Ell)'s "What Happens In A Small Town", both scored high numbers on 70% of the key metrics.

Slide 27: Look for 5+ early key metrics for future No. 1s
Here's a one-sheet summarizing the 10 key metrics discussed in this presentation. out. Download this page, print it and use it as a reference, especially for that second chart week.

There are many additional slides available that cover these metrics in greater detail. For more info, contact Jeff anytime at jeff@stonedoormedialab.com; 615-406-4567. Thank you!

TOP FACTORS INFLUENCING NEW ADDS

"Very likely" (VL) or "somewhat likely" influence

2016	2017	2018	2019		Adds 2016	Adds 2017	Adds 2018	Adds 2019	VL Pct.
1	2	1	1	Artist stature/reputation	95.9%	90.2%	94.9%	88.7%	32.4%
2	1	2	2	Gut feeling	90.5%	96.7%	88.8%	87.3%	39.0%
…	…	5	3	Local sales	…	…	81.0%	81.2%	33.3%
…	8	11	4	^Corporate mandate	…	68.6%	60.6%	80.9%	74.5%
6	7	3	5	^Local callout	68.5%	69.6%	86.0%	80.9%	66.0%
3	3	4	6	Playlist fit (tempo, sound, etc.)	75.4%	88.0%	82.5%	77.1%	50.0%
…	…	13	7	†Upcoming/recent concert	…	…	58.2%	70.0%	8.6%
4	9	6	8	Artist free show for station	71.7%	68.5%	75.0%	67.1%	38.6%
…	5	7	9	Local streaming data	…	76.1%	72.2%	65.2%	24.6%
…	…	8	10	Email/online music test poll	…	…	70.5%	61.2%	22.5%
8	11	16	11	‡Artist/label relationship	63.8%	60.9%	54.8%	60.6%	5.6%
…	…	10	12	Input from staff/listener group	…	…	62.0%	60.6%	9.9%
5	4	9	13	Prior single's success/lack of	70.7%	80.4%	63.3%	60.0%	10.0%
9	10	12	14	Nat'l airplay growth/position	51.4%	64.7%	60.3%	58.6%	10.0%
…	20	14	15	^Format captain/corporate PD	…	34.2%	55.6%	57.5%	23.4%
11	16	15	16	^National callout	48.0%	39.1%	55.2%	47.2%	13.2%
…	…	…	17	Consumption per spin	…	…	…	44.9%	8.7%
10	12	22	18	Specific non-local radio airplay	49.3%	48.9%	31.7%	40.0%	7.1%
…	…	17	19	National sales	…	…	38.5%	36.2%	2.9%
…	13	19	20	National streaming data	…	43.5%	34.6%	30.4%	0.0%
…	…	23	21	Airplay (or not) at competitor	…	…	30.4%	28.6%	2.9%
7	7	31	22	Word-of-mouth from PDs	64.0%	69.6%	26.3%	28.2%	1.4%
19	23	21	23	Streaming data: Spotify	31.1%	27.2%	32.1%	26.8%	2.8%
20	26	35	24	Streaming data: YouTube	20.3%	20.7%	19.5%	26.8%	2.8%
13	17	20	25	*Persuasion of reg./nat'l rep	37.0%	38.1%	33.3%	23.9%	0.0%
21	18	25	26	Most Added data/rank	20.0%	37.0%	29.1%	22.9%	1.4%
16t	14	30	27	Shazam data	32.0%	42.4%	26.7%	22.4%	4.5%
14	15	32	28	Listener requests	34.1%	40.2%	22.2%	21.7%	1.5%
15	22	18	29	Recent/upcoming artist visit	33.8%	29.3%	35.0%	20.0%	1.4%
12	19	24	30	Label reputation	37.9%	34.8%	30.0%	19.7%	1.4%
22	25	28	31	Streaming data: Apple	19.5%	21.7%	28.2%	19.7%	1.4%
16t	27	29	32	Social media data	32.0%	20.7%	26.9%	18.3%	4.2%
24	28	34	33	Streaming data: Pandora	13.6%	14.1%	19.5%	17.1%	1.4%
…	24	27	34	^Consultant input	…	23.5%	28.4%	16.3%	7.0%
23	29	33	35	Concert tix/meet-and-greets	17.6%	14.1%	21.3%	15.7%	0.0%
18	21	26	36	Mscore data	31.6%	29.7%	28.9%	13.0%	2.9%
…	…	36	37	Pandora "Thumbs Up" data	…	…	17.9%	9.9%	2.8%

TOP 10 "VERY LIKELY" FACTORS ON NEW ADDS

| 2017 | 2018 | 2019 | | "Very likely" as influence | | | |
				2016	2017	2018	2019
2	2	1	^Corporate mandate	...	58.8%	56.1%	74.5%
1	1	2	^Local callout	55.3%	58.9%	73.7%	66.0%
4	3	3	Playlist fit (tempo, sound, etc.)	38.7%	45.7%	48.8%	50.0%
3	8	4	Gut feeling	50.0%	47.8%	32.5%	39.0%
8	4	5	Artist free show for station	25.7%	20.9%	42.5%	38.6%
...	7	6	Local sales	...	...	34.2%	33.3%
5	5	7	Artist stature/reputation	37.8%	41.3%	38.0%	32.4%
6	10	8	Local streaming data	...	29.7%	27.9%	24.6%
10	11	9	^Format captain/corporate PD	...	10.1%	19.4%	23.4%
...	6	10	Email/online music test poll	...	...	34.4%	22.5%

TOP FACTORS INFLUENCING SPIN INCREASES

"Very likely" (VL) or "somewhat likely" influence

2016	2017	2018	2019		Spins 2016	Spins 2017	Spins 2018	Spins 2019	VL Pct.
1	1	1	1	^Local callout	90.8%	87.0%	96.5%	95.8%	79.2%
...	...	5	2	Email/online music test poll	...	...	71.7%	79.6%	36.7%
...	...	2	3	Local sales	...	...	84.6%	78.3%	31.9%
3	3	4	4	Playlist fit (tempo, sound, etc.)	78.7%	81.5%	74.7%	65.7%	24.3%
5	6	6	5	Artist free show for station	61.3%	63.0%	70.0%	64.3%	22.9%
...	8	10	6	^Corporate mandate	...	58.5%	55.4%	63.0%	50.0%
...	5	3	7	Local streaming data	...	68.5%	77.2%	62.3%	23.2%
7	9	11	8	Nat'l airplay growth/position	54.4%	56.1%	53.6%	60.0%	8.6%
...	...	...	9	Consumption per spin	...	...	...	59.4%	11.6%
...	...	12	10	†Upcoming/recent concert	...	...	52.5%	58.0%	4.4%
2	2	9	11t	Gut feeling	79.7%	82.6%	60.0%	54.9%	15.5%
4	4	8	11t	Artist stature/reputation	74.7%	69.6%	60.0%	54.9%	11.3%
...	16	13	13	^Format captain/corporate PD	...	38.0%	51.4%	52.2%	21.7%
8	12	7	14	^National callout	53.3%	42.4%	60.3%	47.2%	13.2%
...	...	14	15	Input from staff/listener group	...	...	46.8%	44.3%	11.4%
10	11	16	16	‡Artist/label relationship	46.4%	47.3%	36.9%	36.6%	2.8%
...	...	15	17	National sales	...	...	40.3%	34.8%	2.9%
12	13	19	18	Specific non-local radio airplay	44.0%	40.2%	30.4%	34.3%	8.6%
9	7	21	19	Prior single's success/lack of	50.0%	63.0%	29.1%	31.4%	5.7%
...	17	18	20	National streaming data	...	37.0%	32.9%	27.5%	0.0%
13	15	17	21	Mscore data	30.7%	38.7%	35.6%	24.6%	5.8%
...	...	23	22	Airplay (or not) at competitor	...	...	26.6%	24.6%	2.9%
11	14	26	23	Listener requests	44.4%	39.1%	24.4%	23.2%	1.5%
16	22	20	24	Streaming data: Spotify	27.0%	25.0%	29.5%	22.5%	4.2%
6	10	24	25	Word-of-mouth from PDs	54.7%	54.3%	25.0%	22.5%	2.8%
15	18	25	26	Shazam data	27.4%	35.9%	24.4%	22.1%	4.4%
...	21	22	27	^Consultant input	...	25.9%	28.4%	19.1%	7.1%
21	24t	36	28	Streaming data: YouTube	17.6%	18.5%	11.7%	18.6%	2.9%
19	24t	27	29	Recent/upcoming artist visit	20.6%	18.5%	22.5%	15.7%	0.0%
22	24t	28	30	Streaming data: Apple	16.7%	18.5%	21.8%	15.5%	2.8%
14	19t	31	31	*Persuasion of reg./nat'l rep	29.1%	30.4%	18.2%	14.3%	0.0%
23	28t	33	32	Streaming data: Pandora	12.2%	15.2%	14.1%	14.1%	1.4%
20	28t	30	33	Concert tix/meet-and-greets	18.9%	15.2%	18.8%	13.0%	0.0%
17	27	29	34	Social media data	25.3%	17.4%	19.5%	12.7%	4.2%
18	19t	34	35	Label reputation	24.0%	30.4%	13.8%	11.4%	0.0%
...	...	35	36	Pandora "Thumbs Up" data	...	...	13.0%	8.6%	2.9%
24	23	32	37	Most Added data/rank	9.3%	21.7%	17.9%	8.6%	1.4%

TOP 10 "VERY LIKELY" FACTORS ON SPIN INCREASES

2017	2018	2019		"Very likely" as influence			
				2016	2017	2018	2019
1	1	1	^Local callout	80.3%	79.8%	91.2%	79.2%
2	2	2	^Corporate mandate	...	49.1%	44.6%	50.0%
...	3	3	Email/online music test poll	...	...	35.0%	36.7%
...	5	4	Local sales	...	...	28.2%	31.9%
3	4	5	Playlist fit (tempo, sound, etc.)	30.7%	42.4%	30.4%	24.3%
5	6	6	Local streaming data	...	29.4%	26.6%	23.2%
7	7	7	Artist free show for station	22.7%	25.0%	26.3%	22.9%
13	9	8	^Format captain/corporate PD	...	8.9%	17.1%	21.7%
4	14	9	Gut feeling	...	35.9%	8.8%	15.5%
10	8	10	^National callout	10.7%	13.0%	19.0%	13.2%