The Coleman Insights PPM Series:
Mapping the DNA of PPM

The PPM DNA of Rush Limbaugh

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INTRODUCTION

"The PPM DNA of Rush Limbaugh" is the second study in Coleman Insights' "Mapping the DNA of PPM" series. This series is driven by our keen interest in learning as much as possible from Arbitron's measurement of radio audiences via its Portable People Meter (PPM) service. We want to understand as much as possible about how PPM measures listening and what it can teach us about how consumers use radio.

As the radio industry has prepared for the rollout of PPM measurement, many have made pronouncements about how to program and market stations under this new system. Some of these pronouncements have been made based on scant evidence or—in some cases— erroneous evidence about how consumers use radio.

The "Mapping the DNA of PPM" series is Coleman Insights' effort to address this situation. Only through sound empirical analysis of PPM data will we learn the strategies and tactics that will be most successful in a PPM world.

As they prepare for the introduction of PPM measurement, many of our clients ask about what Talk Radio can learn from PPM. Can PPM discern a different audience reaction to different topics or approaches to topics? Does the attitude of the host have a bearing on how people respond, or is it more content or topic driven? Or, do listeners choose talk shows based primarily on the perceived value of the brand, meaning that changes in content do not have significant or measurable impact on immediate station shares? Also, are there patterns in how people listen to Talk Radio that offer insight into how to program a show for maximum impact? How do Talk Radio listeners react to commercials? Do Talk Radio shows retain a larger share of the audience for commercials than other formats? What percentage of a station's audience listens to the whole show? How many listen for a whole hour? Addressing these questions will allow Talk Radio programmers and hosts to better serve their audience since they will have concrete knowledge about listening patterns.

ACKNOWLEDGEMENTS

We want to thank Arbitron and Media Monitors for their assistance with this study. As we will describe in greater detail in the Methodology section later in this report, Arbitron provided us with listening data from the PPM service. Media Monitors' assistance was invaluable as well, as they provided access to their audio archives of radio station content, allowing us to listen to the Rush Limbaugh show, which in turn allowed us to code and precisely time each part of the program.

TALK RADIO AND LISTENER "LOYALTY"

For years radio professionals have asked about how people listen to Talk Radio. When do they tune in? Do they make appointments for shows? TSL data suggest that Talk Radio listeners are "more loyal" than are listeners to other formats. But, what does that mean? Often radio professionals get the impression that people are so loyal to Talk Radio that they listen to entire shows and never react to content of any kind.

What this study has taught us is that the Rush Limbaugh show's audience is more loyal than the average audience. We see significant tune in at the beginning of the show, but we also see some immediate ratings volatility in the first few minutes of each hour. In addition, there does not appear to be a huge amount of volatility in share levels for normal Rush Limbaugh content, but we also recognize that measuring the precise content people like is very difficult using PPM. We also learn from this study that Talk Radio listeners are very loyal and listen to the commercials. This finding vindicates decades-old research done by Golden West Broadcasting in the 1970s.

With the introduction of PPM ratings we now have the ability to measure and understand radio listening behavior not even dreamed 25 years ago. But, this new measurement system has put a brighter spotlight on the question of what content is "good" content.
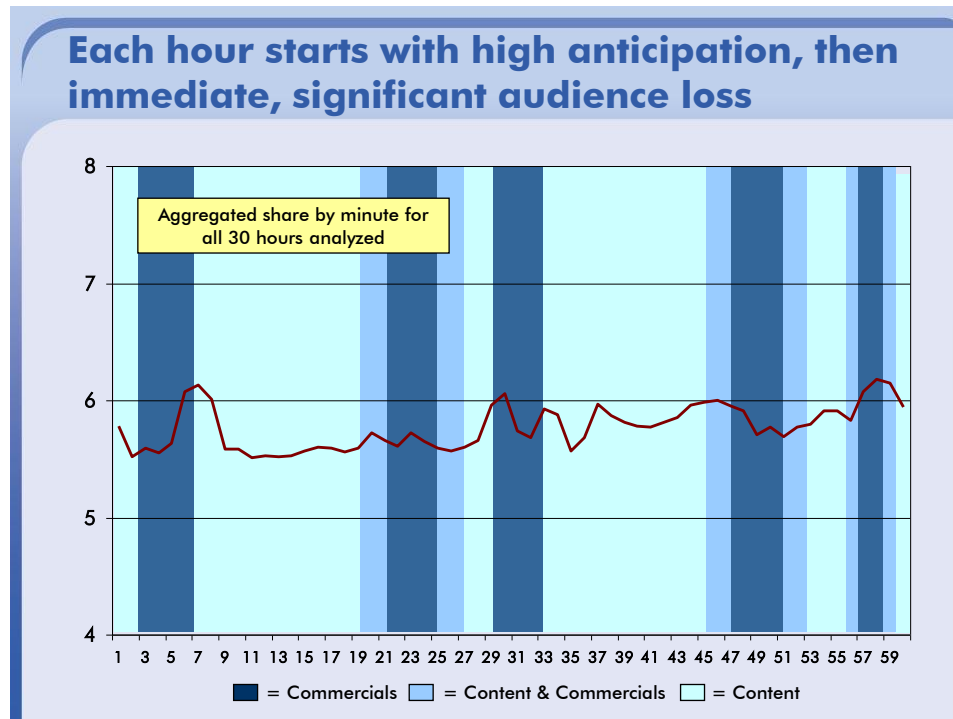
KEY FINDINGS

The major findings of our analysis of Rush Limbaugh's show are listed below. In the section that follows this one, we expand upon these findings and discuss their implications.

1. **The show loses substantial audience in the first few minutes of each hour.** Rush's audience builds to a peak at six minutes after the start of each hour (when local content ends and Rush's content begins) and then drops dramatically in the first few minutes of the show. It then takes about 20 minutes for the show's audience share to rebound to the peak level it achieves at six minutes past the hour.

Each hour starts with high anticipation, then immediate, significant audience loss

Aggregated share by minute for all 30 hours analyzed

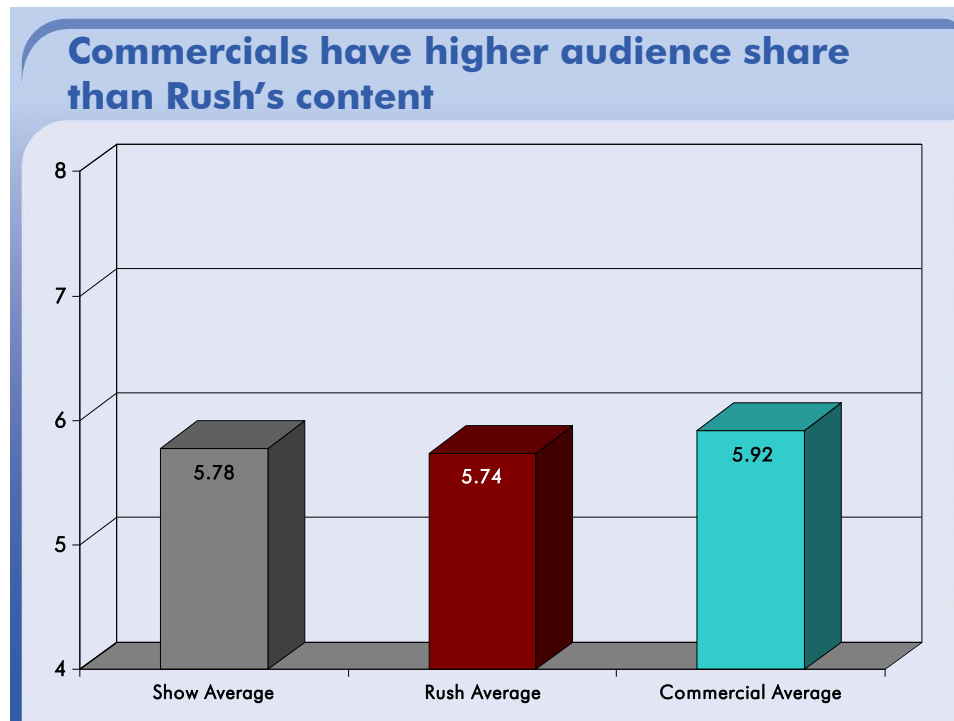■ = Commercials ▫ = Content & Commercials ▫ = Content

We believe this occurs because of the strength of the Rush Limbaugh brand, as there is significant audience anticipation for the show as it begins and at the start of each subsequent hour. What is likely happening is that many people are tuning in to hear what Rush has to say, with some of them then electing not to stay with the show at that point based on its content.

2.   **Commercials have a higher average share of audience than the talk content that surrounds them.** The show's average audience share on the days covered in our analysis is 5.78. During the minutes in which Rush Limbaugh is actually delivering content, the average audience share is 5.74. However, during the commercials airing in the show, the average audience share is 5.92. These data suggest that commercials do not undermine the audience levels of the Limbaugh show; in fact, the show's shares are higher during commercials than during Rush's talk content.

Commercials have higher audience share than Rush's content

Show Average	5.78
Rush Average	5.74
Commercial Average	5.92

There are several potential reasons why shares for commercials could be higher than shares for content. It could be a function of the times when people tune it to listen to the show, the quality of the commercials themselves, or based on how people respond to content versus commercials. An examination of the exact times when commercials run indicates that the share of audience for commercial stop sets at the top and bottom of each hour, in general, grows during the commercials and then drops for the content that follows the stop sets. The commercials at other times in the hour do not show much, if any
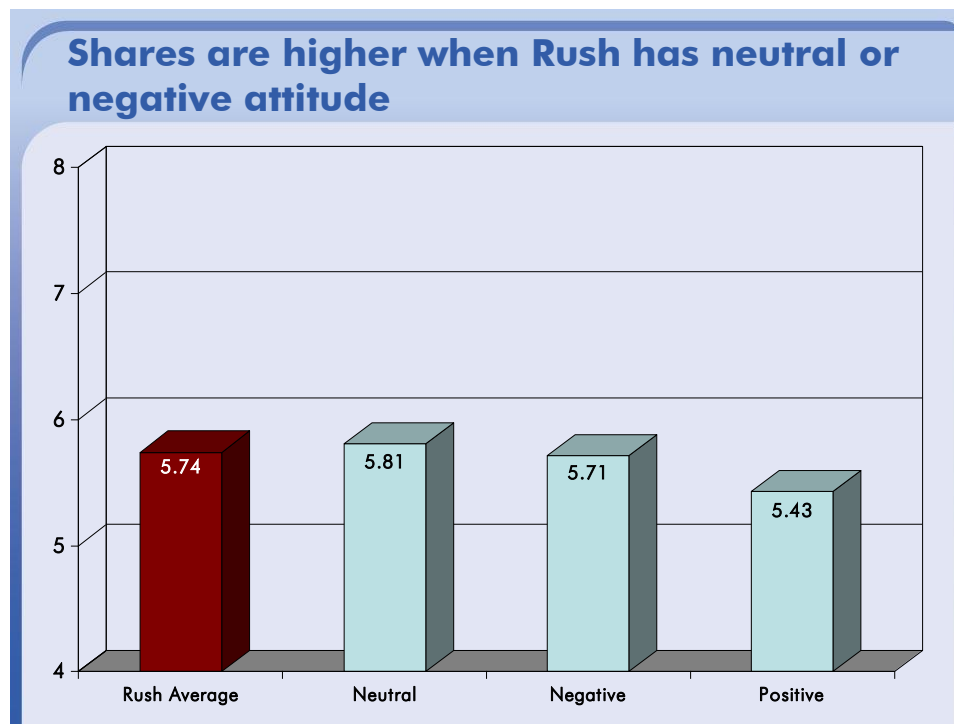
decline. So, behaviorally, the exceptional share for commercials overall is driven by the shares the show achieves at the top and bottom of each hour.   One could also hypothesize that the commercials do well because listeners like them. A third hypothesis for which we have seen support in focus group research about talk shows in general (not related to this specific show or analysis) is that listeners do not invest or engage in commercials the same way they do in content. Thus, listeners may be willing to listen to commercials because the content is "attitude neutral," whereas show content is not. If only some listeners are not interested in the content of the show at the moment the show starts on the hour and half hour, the share for content would be lower than the share for commercials.

3.   **Shares are higher when Rush's attitude is neutral or negative than when he is positive.** The largest percentage of content on the Limbaugh show projects a neutral attitude, while content presented with a positive attitude makes up the smallest percentage.   When Rush projects a positive attitude, he only achieves a 5.43 share, whereas he garners a 5.81 share when his attitude is neutral.   He garners a 5.71 when he is overtly negative   This does not mean to suggest that Limbaugh should never be positive, but it may imply that he is more passionate when he is negative than when he is positive and that this passion causes his audience to react more positively to that tone.
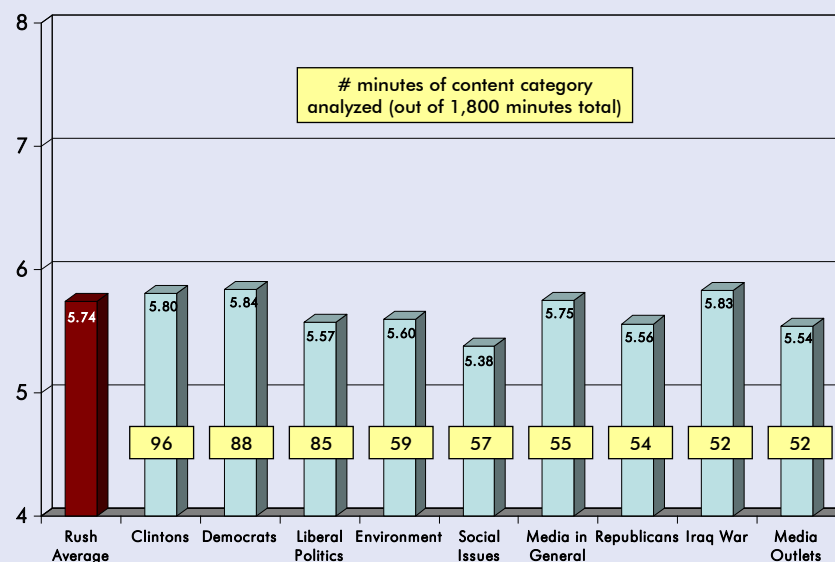
Shares are higher when Rush has neutral or negative attitude

5.74	5.81	5.71	5.43
Rush Average	Neutral	Negative	Positive

4.   **There is less than 5% variance from the show's average share as Rush moves from one content category to another.** When we aggregate instances of each type of content Rush covers, we do not find dramatic share differences between them. In comparison to the 5.74 average share we find for Rush's content overall, none of the major content categories the show regularly covers average less than a 5.5 or more than a 6.0 share. Furthermore, we cannot discern a specific pattern about the type of content that performs well and that which performs poorly. The types of content we would hypothesize might show a difference do not show a statistically significant difference in share. In other words, whether Rush is talking about Hillary Clinton, the Iraq war, abortion or any other topic, this does not appear to drive major changes in his show's performance. This appears to be another demonstration of the strength of the Rush Limbaugh brand and the loyalty of his audience, as we will discuss in greater detail in the Implications section of this report.

Share rarely varies by more than 5% between content categories

Category	Share	# minutes
Rush Average	5.74	
Clintons	5.80	96
Democrats	5.84	88
Liberal Politics	5.57	85
Environment	5.60	59
Social Issues	5.38	57
Media in General	5.75	55
Republicans	5.56	54
Iraq War	5.83	52
Media Outlets	5.54	52

minutes of content category analyzed (out of 1,800 minutes total)

This runs counter to what we observe when we examine the show's performance in individual hours on individual stations, where we
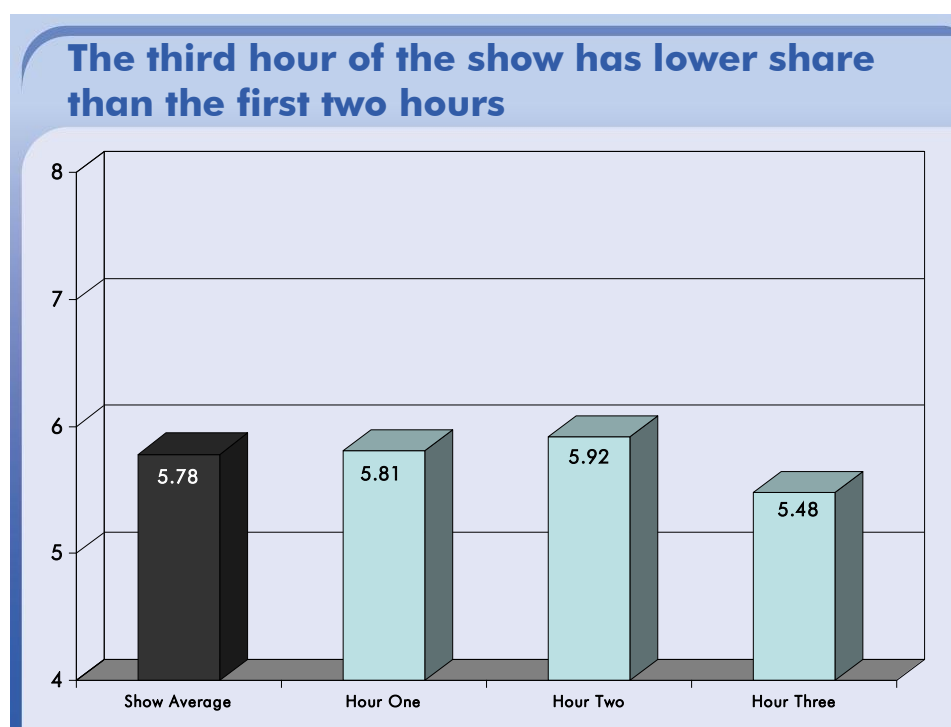
observe share fluctuations by as much as two, three or four points. One is tempted to link these large swings to the content occurring at those times. The problem is that a two-share swing in audience can occur over a few minutes not because of the content, but because a few PPM panelists tune out for lifestyle reasons. The issue with looking at individual shows and individual minutes for this type of discrete programming content is that there can be only a few meters registering listening. At any given minute, there are only about 30 meters in New York, Philadelphia and Houston registering listening to Rush Limbaugh's show. This means a one-share-point change could occur with five meters going on or off. The solution to this issue is aggregation of data over more days and eventually over more markets. As mentioned above, when we aggregate multiple instances of Rush covering a specific topic, we are unable to see significant changes in his show's audience share.
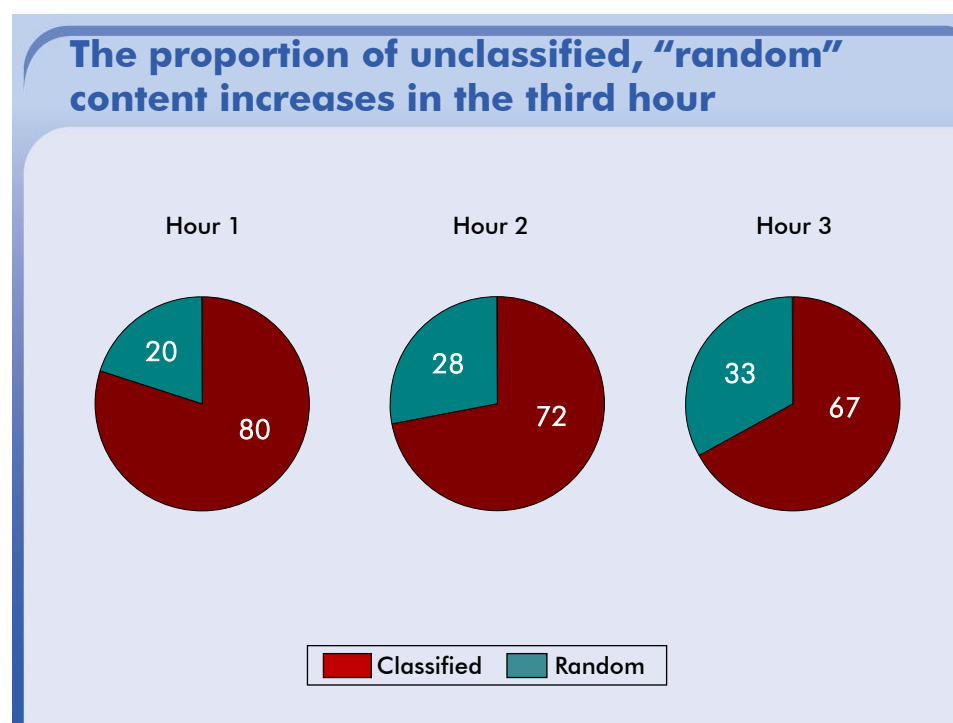
5.   **The third hour of the Limbaugh show has a lower audience share than the first two hours.** The third hour of the show achieves an average share of 5.48 in our analysis, as compared to shares of 5.81 and 5.92 in the first and second hours, respectively. There are a number of possible explanations as to why the share might be lower in the third hour. It could possibly be a function of increased competition in the third hour, or general fatigue with the show as some fans just stop listening to the radio or switch to other stations. In other words, it is conceivable that Limbaugh fans have sated their daily Rush appetite after two hours of listening.

The third hour of the show has lower share than the first two hours

Show Average	Hour One	Hour Two	Hour Three
5.78	5.81	5.92	5.48

However, our analysis of the content of the show offers another interesting possible cause of this weaker performance in the third hour. We observe a significant shift in the show's third hour away from Rush's main source of content and towards "random" content that does not fit a clear category. In fact, we observe a 65% increase in the amount of random content between the first and third hours of the show, as random content makes up a third of the content of the show's third hour and dwarfs any specific content category in that hour.

The proportion of unclassified, "random" content increases in the third hour

Hour 1	Hour 2	Hour 3
20 / 80	28 / 72	33 / 67

■ Classified ■ Random

Thus, there may be a correlation between the broadening and changing of the content of the show in the third hour and the decline of the share in that same hour. As the show loses focus from the content of the first hour, the share declines. This does not mean automatically that this is the cause of the share decline, but it does raise the question as to whether or not Limbaugh, by changing content in the third hour, gets away from what people really like about his show and therefore undermines his performance. If this is true for Limbaugh, it most certainly would be true for other talk shows. Listeners may tune in to Rush Limbaugh for certain specific types of content. If the show deviates
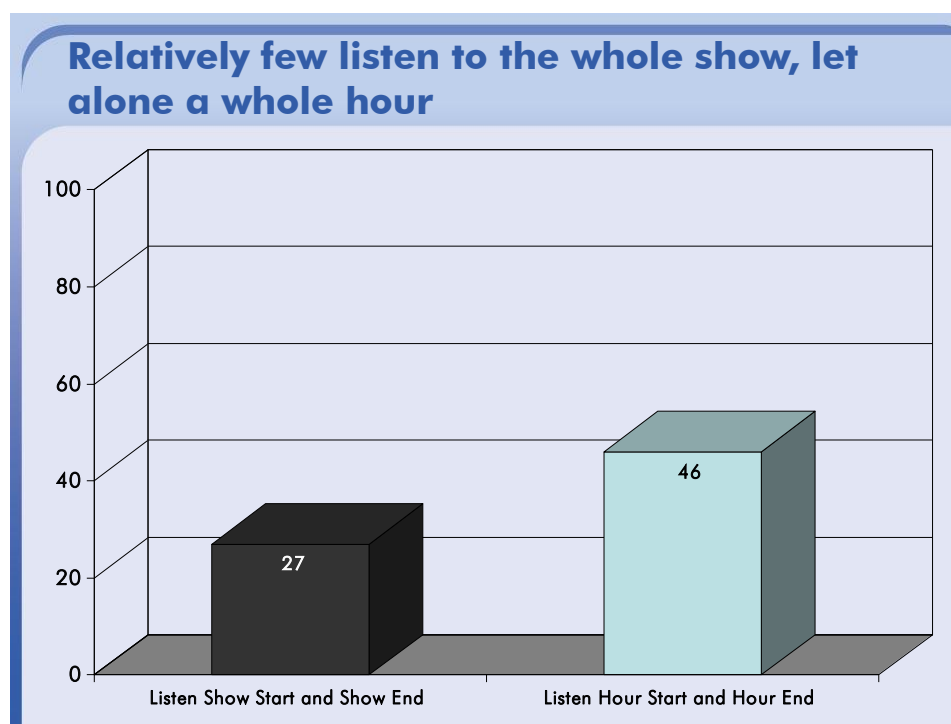
too far from the types expected and/or loses its content focus, listeners may lose interest. The change in content focus from hour one to hour three also may suggest that Limbaugh believes he needs to change subjects in the third hour because his audience has already had their fill of the normal fare in the first two hours and that a third hour with more diverse content is the correct approach.   This may be the wrong conclusion.

6.   Few Limbaugh listeners listen to the whole show, let alone a whole hour.   One possible reason why Limbaugh's content changes in the third hour is that he may believe that his fans will tire of the same content if they have heard it in the preceding two hours. This notion is, however, undermined by our finding that a mere 27% of the audience listening in the first quarter hour of his show is still listening in the show's final quarter hour. What this suggests is that the audience listening in the first and third hour is not the same. True, there are some loyal listeners who stay for the whole show, but even for a high TSL-generating, high brand loyalty-driven show like Rush Limbaugh's, long-term listening is relative. In fact, retention for an entire hour averages only 46%, meaning that more than half of the audience listening to Rush's show near the end of an hour do not hear what he has to say at the beginning of the hour.

Relatively few listen to the whole show, let alone a whole hour

Listen Show Start and Show End	27
Listen Hour Start and Hour End	46

7.   **Accurate audience measurement of many specific content elements is difficult.** There are several factors interacting to make the measurement of audience shares for discrete content on Rush Limbaugh's show more difficult than we initially thought. Among these are the length of each content element, how this content is placed in and across minutes, how this content is placed at different times of the hour and in different hours, and the one-minute granularity of PPM.

Since content is not programmed to exactly match the minute granularity of PPM there are many cases where programming events and content types do not match up with PPM data in an easily measurable way. For example, in the exact minute when PPM is measuring audience, there can easily be—and often are—more than one type of content. Thus, if a show changes topic in a given minute, that minute will get coded for both types of content. For 30 seconds of a minute there can be one type of content and for another 30 seconds another very different type of content. One of those types of content could be very appealing and the other unappealing to the audience, yet both get counted the same. This raises the question of which content is causing listeners to tune in or tune out. In many cases, we are unable to tell.

This issue can be compounded by the fact that PPM can show listening and tune out in the same minute. If there is more than one type of content in a minute, PPM—with its one-minute granularity—cannot determine which content a person is listening to and which he or she is not listening to. Is a person listening to one piece of content but not the other? Which gets credit for causing listening and which gets credit for causing tune out? Again, it is an unclear picture.

PPM also gives credit for listening to a whole minute when as little as 10 seconds of actual listening occurs. A person could be credited with listening to content that starts at 11 seconds past the minute, even though they only listened for the first ten seconds in the minute.

Other issues involve where in the hour or in which hour in the show the content is placed. The context of where the content occurs has a measurable impact on its share and audience size. We see from our analysis of the share of each hour that there are times, regardless of content, that perform well and others that perform poorly. If content is placed at good points in the hour, it will do well, whereas other placement will equally hurt good content. The same pattern occurs with regard to which hour content is exposed. Some hours may be better than others, not just because of the content, but because of the lifestyle of the Limbaugh audience. This means that equally appealing content in two different hours may perform differently in objective PPM measurement. Also, content that appeals to the audience that follows content that does not appeal to the audience will not garner the same share as it might if the appealing content followed other equally appealing content. In fact, weak content following appealing content may look better in PPM than appealing content following weak content.

While each of these problems alone may not undermine our ability to measure content appeal with PPM, in combination they create significant fuzziness in precise correlations of content and PPM shares. Previous to this study there have been analyses of PPM released which show dramatic content related behavior changes. We believe that these types of dramatic content change are the exception, not the norm. Certainly, if President Bush gave the State of the Union in the middle of the Limbaugh show, we would see a change in behavior. But this macro event is very different from measuring share changes in a consistent brand based on what might, to the Talk Radio audience, be subtle shifts in topic.

These issues are exacerbated by the fact that much of the Limbaugh content is less than two minutes in length. When content is shorter than two or three minutes, much of the content can and almost always does overlap more minutes than the length of the content itself. This means there is almost always some fuzziness. One solution to this problem is to only analyze content items that are at least three minutes long so that at least one whole minute is always covered by specific content. This

makes synching the minute and the content much easier and more reliable.

The problem with this approach is that it would eliminate the 73% of Limbaugh's content which is less than three minutes in length without a small or large change of subject interjected in the talk. A change of subject in any segment less than three minutes could change behavior. If all content was conceptually consistent from the beginning to the end of the piece and did not have any breaks in flow, and if all content were at least three minutes in length, it would be much easier to identify measurable segments.   However, the content is not of consistent lengths, does not follow the minutes in the clock and is often interwoven with changes in content that affect audience reaction. All of this makes measuring subtle changes in the normal content fabric of a show difficult.

All of this in no way is meant to suggest that people are not responsive to content, but that perhaps PPM is just not going to be able to measure their responses as finitely as we had hoped.   There may be a difference between PPM's exciting ability to precisely and quickly measure dramatic content changes in performance and the ability to measure discrete content that is a part of a show's normal fare. The audience going up after the Super Bowl, during the President's State of the Union Address or as a result of an extraordinary event is very different from the kinds of swings a normal talk show would have over the course of the show.

IMPLICATIONS OF OUR FINDINGS

Coleman Insights believes these findings have important implications for the programming and marketing of Talk Radio shows. The research suggests that content may very well have an impact on the share of the audience the Limbaugh show achieves, but at the same time suggests that the impact, while real, is not dramatic. We do see differences in share for different types of content, but share—based on the ten days in November 2007 we analyzed—varies by no more than 5% from the average share of the show. We do not see individual content categories having significant tune out or big swings in share. This may be because Limbaugh has already honed his content palette using other research (e.g. dial technology) or perhaps the limitations of PPM make it the wrong methodology for measuring the appeal of discrete types of content. Nonetheless, we do see that the third hour of the show has lower shares. Is this share loss a function of the loss of content focus as we hypothesized above, or is the lower share the result of some other variable or variables?

The Power of the Limbaugh Brand

Another important implication of the difficulty of linking content to share performance is that very possibly Limbaugh's show is consumed as a brand, not as just good or bad content. We do not doubt that his audience fluctuates based on his content or his attitude, but perhaps it does not fluctuate as much as we would think or hope. We see for sure that his brand drives the audience up dramatically at the beginning of each hour in anticipation of the show. Is it possible that his brand builds a strong base audience and that the audience share shifts that occur after that which are driven by content are not that dramatic? It is against his large base audience that content and attitude operate, but because his brand and loyalty to it are so strong, the impact of small deviations from the ideal content are minimized.   The implication for other talk shows is that to build consistent performance you need to build a consistent brand. That brand would be more than just conservative or liberal; it would involve a whole range of expectations, including what the show is about, the point of view of the host, the attitude that is expressed and the content that the show offers on a daily basis. If you build this type of brand expectation, ratings volatility will be reduced and share will increase.

Where's the Beef?

While we tout the importance of the brand, we do not want to dismiss the impact of content. We do think there are several extremely important content implications for all radio communicators. The first implication would have to be that the audience wants "the beef." We make this comment based upon the initial tune out from the Limbaugh show at seven minutes after each hour. This behavioral pattern reflects attitudes that we have seen in other research. Listeners often tell us that when personalities do not give them something right away, they tune out. Upon listening to 30 hours of show openings, we can say subjectively that Rush has a tendency to spend several minutes reflecting on his own life, various things in the news and to talk about the show that day, without really delivering his show. The implication is that listeners are not interested in the long show set up; get to the beef right out of the box. If Limbaugh could maintain the audience share he has when his show opens throughout the hour, his show could have a share performance that is roughly a half-point higher.

Power Topics in Hour One Are Power Topics in Hour Three

Another implication is to recognize that "power" topics in the first hour are "power" topics in the third hour as well. This implication is supported by the fact that shares drop dramatically in the third hour when Limbaugh gets off message. Also, the fact that only 27% of the audience listening in the first minutes of the show are still listening at the end of the show further supports the idea that a show should give it's "A" material in all parts of the show.

Attitude as Important as Content?

The finding that Limbaugh's shares are not as strong when his attitude is positive as when he is neutral or negative may suggest that the attitude a host projects may be as important as the content. The fact that Rush Limbaugh achieves lower shares with a positive attitude leads one to possibly conclude that a positive attitude is not a part of the Limbaugh brand.

Content is Not Automatically Better than Commercials

Another major finding from this study is that the Limbaugh show's commercials actually have a higher share of audience than does the content. This is a tremendous finding for all Talk Radio, for it further supports that idea that radio is a medium where people hear commercials

and that Talk Radio is the leader. As with other findings from this research, this may be something unique to Limbaugh, but we are certain that Talk Radio in general has substantial audience for commercials.

One could look at the large audience for commercials and ask what the implications are about the Limbaugh show itself. Does the fact that the PPM share for the content in the show itself is lower than that share for the commercials cast any aspersions on the content of the Limbaugh show? We do not know the answer to this question. One thing we did note is that the commercial audience grows very much at the hour and half hour breaks and then declines. We speculate that there may be a natural "check out Rush" phenomena operating where listeners tune in to see what he is talking about. If he is not talking about something they are interested in, or if he drifts in the set up to the hour, they leave. This strong anticipation of the Rush show is, nonetheless, what drives the audience for commercials.

Not All Shows Have the Strong Brand of Limbaugh

Earlier we suggested that one of the reasons that Limbaugh's show may not show wide share swings based on discrete content changes is that Limbaugh's audience may be more brand loyal and less susceptible to large behavioral swings based on what to his audience might be subtle shifts in already honed content. However, if the Limbaugh brand is what largely drives the audience, we cannot assume this is true of all talk shows. We would suggest that the stronger the brand, the less volatile the audience. So, for less entrenched talk brands, we would guess that tune in just prior to the show beginning would be lower than for Limbaugh. We would also hypothesize that the tune in and tune out would be more volatile. And, we would think that content would play a greater role in the performance of shows that do not have the same level of brand awareness and loyalty as does Limbaugh. Therefore, other talk shows cannot look at this research and automatically assume that they too will have a large "built in" audience at the beginning of the show or that their fans listen to commercials at the same high rate. Talk Radio in general can be pleased that it likely has more loyal audiences than music radio, but not all hosts are Rush Limbaugh. If Rush Limbaugh can lose audience in the third hour because of content selection, so can all other shows.

"Overanalysis" of PPM Could Lead You Astray

We also believe that broadcasters need to be very careful about overanalyzing PPM data looking for granular information the methodology is not able to support. It is a certainty that

PPM can tell a station that its audience jumps the day after the Super Bowl or when the President gives his State of the Union Address. However, these are large chunks of programming that are departures from normal fare. Our analysis suggests it is going to be much harder to tease out of PPM data that a show does better when it deals with crime than when it deals with the war in Iraq. There are too many variables impacting the audience for PPM to ascertain performance differences for these narrowly defined content categories. "Overanalysis" could give you as much wrong information as correct information.

METHODOLOGY

To complete this study, Coleman Insights listened to 30 hours of Rush Limbaugh programming between November 12th and 16th and between November 26th and 30th, 2007. As we listened, we coded every minute of content on the Rush Limbaugh show. This allowed us to correlate content type and share. For example, we had codes that would include a discussion of Hillary Clinton's presidential bid, the impact of the troop surge in Iraq or conversation about illegal immigration. These specific content categories were then recoded into larger groups of content such as Democratic politics, Republican politics, international issues, media and media outlets, media personalities, the Clintons, etc.

We also coded Limbaugh's show for the attitude of Limbaugh himself. If he was positive about a topic, or projected a positive or promoting tone, we coded "positive attitude." If he was more neutral (the dominant attitude) it was coded as neutral. If he was negative or attacking with a negative position, we coded that content as negative.

We then looked at the Arbitron performance of the Limbaugh show on WABC/New York, WPHT/Philadelphia and KTRH/Houston among listeners 6+. The audience calculations were weighted to the population of each market so that New York had proportionally more influence on audience size and behavior than Houston or Philadelphia.

We also calculated "minute shares" using the Arbitron data. A minute share tells us the relative size of the audience in each minute. We used share, rather than raw audience, because it adjusts for audience size in different hours where a show may be strong or weak because of lifestyle or time of day and not because of show performance.

We then cross tabulated each type of content with the PPM data. This allowed us to assign a share of audience for the entire show and a share of audience for each type of content.

In total there were 1,800 minutes of programming examined, including network and local commercials, local "non-Rush" content, and over 1,000 minutes of actual talk by Rush Limbaugh.

We used the following measures in our analysis:

Minute Share: The average share of the audience listening in any minute. This calculation was made using formulas approved by Arbitron.

Show Average: The average minute share level over all 180 minutes that make up the Rush Limbaugh show.

Rush Average: The average minute share of all Rush content. This includes all Rush content, but does not include commercials, network or local news, weather, etc.

Commercial Average: The average minute share of all commercials any time in the show. It includes network and local commercials anytime in the show.