

M+E

JOURNAL

WHAT'S NEXT?

An M&E industry that's learned to adapt and excel after a year like no other, for one

LOCALIZATION

Dubbing from home is a work in progress

SECURITY

How to beat piracy and secure your business during a pandemic

SMART CONTENT

The new ways content players are using data to connect with consumers

NEW WORKFLOWS

Adopting the latest tools fuels a successful change to remote work

20.02

A NEW CROSSROAD OF ART AND SCIENCE

AI as a new dimension in avails calculations

ABSTRACT: AI and ML have become critical components of effective intellectual property management. Most rights and avails systems can only provide the answer to what can you sell rather than what you should sell. By integrating rights data with advanced AI and predictive analytics, the result is the right content available on the right platforms, at the right time for the right audience and viewer.

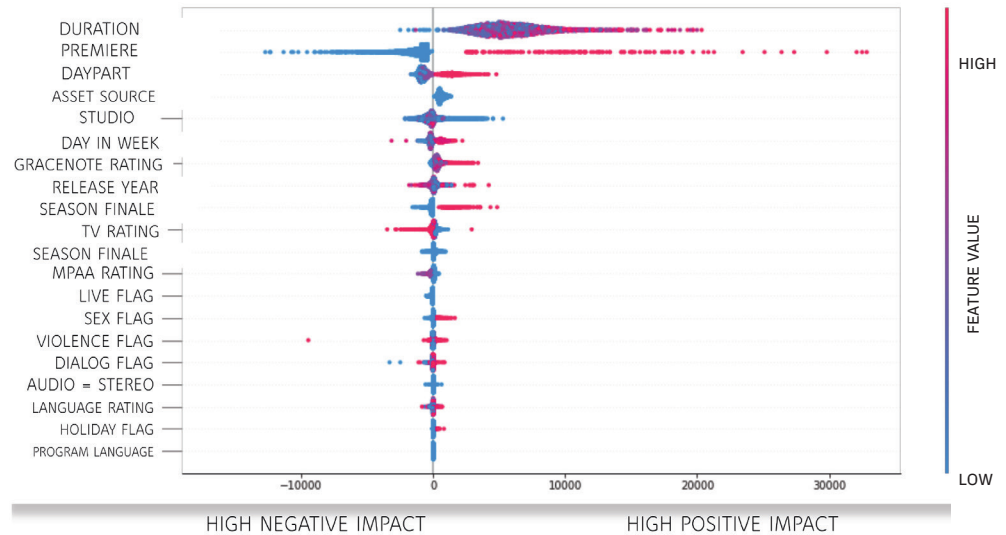
By Shiv Sehgal, Chief Product Officer, RSG Media

As market and channel management becomes more and more complicated, there are now ways to analyze and solve some of these complexities via the convergence of the fields of rights management, financier, program strategy and artificial intelligence. What has emerged is the development to new content management tools that rely on machine learning, a form of AI that lets computers improve their predictive algorithms by automatically learning from experience, relevant datasets, and iterative calculations.

Companies working on AI systems, including RSG Media, have aligned AI with their existing algorithms, such as with avails calculation, to dramatically improve their clients' profitability and ability to fully and effectively exploit all windows of exhibition.

Feature Analysis: Top Factors to Predict Network Ratings

Creating new models to account for the errors of prior models results in more accurate predictions.



RSG Media's proprietary machine learning algorithms are proficient in delivering accurate audience viewership levels and tune-in. The process follows the typical modeling fundamentals one might expect:

- Parse Out KPIs that significantly impact a given network's program audience (your linear regression analysis).

- Identify the network-specific and program-specific KPIs with the highest predictive value to the overall predictive model (your feature analysis).

Considering the rapid changing landscape of TV viewing and evolving audience behaviors, adapting to changing audience levels is RSG's selling point that features the new queen of machine-learning a technique called "gradient-boosting." It is an approach where new models are created that predict the residuals or errors of prior models and then added together to make the final most accurate prediction.

FINDING YOUR CONTENT

The M&E consumer of 2021 and beyond has a tremendous variety of options for viewing content. Hundreds of television channels and OTT options are available. This tremendous variety is good; it also presents problems: a paradox of choice. Oftentimes it's difficult to find what one wants to watch because there are too many options to evaluate, and the programs are located in too many places. One can waste a lot of time searching for pro-

grams one wants, at the right price, at a particular time.

For the programmer, or scheduler, anticipating what people want, and when they want it, is both an art and science. Now, forward-thinking broadcasters are leveraging AI and ML to aid in the decision process so that customer retention remains high due to the continuous offering of relevant content.

A recent hit show is a fantastic example of a broadcaster understanding its market and delivery content that is relevant. Through structured analysis that uses AI to enhance programming performance, this broadcaster was able to innovate its scheduling strategy to generate growth. Another broadcaster, wanted to ensure that it was serving all facets of its viewership with relevant and interesting content. Both broadcasters saw viewer retention is a key factor their success, influencing how much advertisers are willing to pay for ad time.

THE NEW CROSSROAD OF ART AND SCIENCE

The intersection of rights, avails and AI is where the new strategy for effective IP monetization is to be found. This strategy starts with two basic questions. One, how do we align our business around our core content portfolio to drive distribution and anchor audiences? And two, who are we? In other words, are we a network or a brand or both? Answering these questions leads to additional areas of introspection that yield a strategic direction: Who is our audience and how do we drive engagement with that target audience? What content do we have? Of that content



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which titles maximize the reach to our target audience? What supplemental content is available? How can we measure, remeasure, and remeasure again to ensure we are delivering relevant content to our audience? And finally, where does AI come into play and how can we automate the programming process?

The new convergence of art and science comes when AI is able to automate something that is done artistically by humans. If we know who we are, what content we have in our library, and who our target audience is and what they like (or, at least, what they watch), then we should also know if we are in sync with them, delivering the content our target audience wants to be watch when they want to watch it. The artistic side of program optimization comes with experience and gut feel. The science of AI can replicate and augment that experience, using advance algorithms to confirm or improve on that gut feel.

Assume you are a scheduler responsible for program and revenue optimization. You may assess your schedule against your competitors and run an avails report by genre and runtime to determine what content is available for a particular channel and exhibition window. Most avails engines can easily, and automatically create a list. But this is telling you what you have not what you should program. Advance avails, enhanced with AI, can project ratings, and tell you what you should program. The crystal ball/gut feeling approach is replaced with hard science.

If ratings are down, you may subscribe to services that provide ratings reports that tell you who is watching what and while this data is historical in nature, it can be used to forecast future performance. However, smart companies are employing tools to help more accurately forecast specific ratings. The programmer will know not only why those ratings forecasts are down, but what specifically I should program to improve the ratings. The programmer can also use AI and Advanced avails to determine if your brand is aligned, or not, with your target audience. If not, AI tools can determine the reason and programming corrections can be made by schedulers. Success has already been seen as several large broadcasters that have reported significant increase in ratings and ad revenue.

AN EXAMPLE

Recently, a major broadcaster saw a significant decrease in quarter over quarter ratings. Their target audience of pre-teens and teens began to erode due to programming fatigue and poor scheduling. They were unsure of the cause given the brand recognition of the programming. Alternative programming did not offer any improvement and the concept of forecasting ratings tied to

specific demographics proved to be only a concept.

RSG Media conducted an initial assessment of their programming and identified the root cause of the decline. The assessment, which also included several competing channels, also identified the programming that was successful and the reasons why. RSG Media utilized AI/ML to create various scenarios, calculating predicted results. This output became the foundation for their new programming strategy that included a rework of their morning and mid-afternoon schedules.

Additional calculations showed how moving certain shows to different dayparts improved ratings and generated desired audience demographics.

These, in turn, were used to forecast ratings and project revenues based on the expected increase in ad rates. This broadcaster was surprised to learn that the audience they thought watched their shows was not really the audience that was actually watching. AI/ML analysis revealed the effects of counter programming to the same audience demographic by competing broadcasters. The results showcased the critical difference between their perception of their brand and the actual strength of their brand, which was not as robust as they thought.

IN CONCLUSION

■ AI and advanced avails enable broadcasters to know what their audience will be watching rather than just what they have already watched. This insight enables them to generate a programming schedule that is competitive and has the best chance of capturing audience share.

■ AI and advanced avails can tell you why people have stopped watching your programming and where that audience has migrated.

■ By diving into the data, to the respondent level, broadcasters can better target their programming, their promos, and their ad time.

■ By strategically deciding what and when to broadcast, they can enhance the viewership and audience anchored to a channel and a brand.

The crossroads of art and science is really about the intersection of rights management, avails calculation, and effective programming. The insights generated from a combination of avails and audience insights will yield what programs are sticky, what is the best show, by genre to run and who and what is my likely audience. Data science can't automate everything but for a programmer/scheduler, it can provide a significant competitive advantage. ■

4 Ways MediaTech is Changing Your Business

Nascent trends are disrupting business as usual and unlocking hidden value.

1 AI/Machine Learning Based Intelligent Scheduling RSG Audience

Imagine what you would do to create the perfect schedule – one where every show attracts and engages your target demo. One that creates raving fans. You'd analyze audience behavior at the household level for all your content avails until you knew what they were going to watch before they did. You'd look at competitors' schedules and find ways to pick up viewers. You'd run millions of simulations until your schedule was bulletproof.

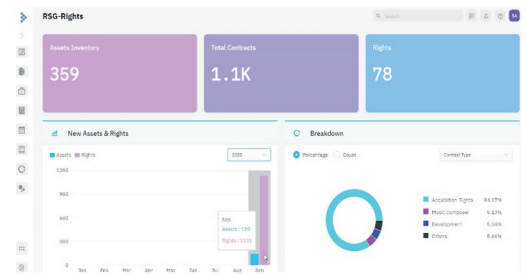
You don't have time to do that – but we do. Build your own AI-Driven Approach to Micro-Target TV Viewers with [RSG Media's Audience 2.0 Platform](#)

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Mon-Fri	Mon-Sun
09:00:00am	139	97	108	156	126	94	47	123	94
10:00:00am	133	104	125	139	124	90	48	125	97
11:00:00am	132	117	129	140	120	90	77	127	109
12:00:00pm	125	134	138	141	134	93	88	134	115
01:00:00pm	128	142	141	150	144	92	88	140	130
02:00:00pm	146	166	165	169	163	98	89	161	134
03:00:00pm	191	202	201	205	201	92	83	200	156
04:00:00pm	211	213	201	194	214	92	81	206	161
05:00:00pm	208	207	197	194	206	89	78	203	160
06:00:00pm	141	145	157	144	157	88	75	148	124
07:00:00pm	107	113	111	104	117	77	75	110	99
08:00:00pm	103	101	100	99	105	74	72	102	93
09:00:00pm	108	95	99	95	81	71	73	95	88
10:00:00pm	100	66	93	88	79	73	80	82	81
11:00:00pm	107	87	105	88	82	73	77	93	88
12:00:00am	95	96	105	86	86	77	82	93	89
01:00:00am	91	96	108	86	86	83	84	93	90
02:00:00am	96	104	111	91	86	86	96	97	95
03:00:00am	105	113	118	97	86	91	90	103	99
	126	118	130	123	121	84	78	124	109

2 Unified Content Rights, Royalties, and Participations RSG Rights

The silos are breaking down as enterprises seek to fully realize asset value across movies, series, sports, news, and elemental assets, including merchandise & brand licensing. From revenues to royalties and participations to amortizations, enterprises are looking an auditable "chart of accounts" that gives them insight into their rights. The all-new [RSG Rights v4](#), the world's leading enterprise-strength rights-management platform does just that.

- New, easy to use UI and real-time Dashboards
- Improved functionality and productivity tools
- Real-time reporting, includes Avails Catalog, SVOD & Digital Restrictions, Clearances, Program Sales, and more
- Performant, scalable, serverless computing infrastructure



New: Real-time dashboards for fast action

3 AI/Machine Learning Promo Optimization RSG Audience

Organizations are rethinking promos, using machine-learning based micro-targeting to optimize program campaigns on and off network to build better audiences with fewer promos.

[RSG Promo 2.0](#) optimizes campaigns on the fly. **New!**

"Our clients create new value by using AI and audience analytics so that content, merch, advertising, and promos all work together"

4 AI/Machine Learning Log & Spot Optimization RSG Advertising

Savvy programmers are using AI to slash ADUs without over-delivery. New dashboards give you even greater control to better meet advertiser's demands and increase revenues. [RSG Advertising 2.0](#) **New!**



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