

Software predicts which songs will be hits

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Computer programs already recommend books to read or DVDs to watch. But can a mathematical algorithm predict if a song will become a hit?

Images



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Singer-songwriter Ben Novak said he was skeptical that a San Francisco company's technology could determine whether his song "Turn Your Car Around" would be a winner.

But the technology, called Hit Song Science, gave the song a high score, which caught the attention of a record executive. The song ended up hitting No. 12 on the British music charts and No. 2 in Italy.

"The hard thing for songwriters is that it's difficult to get an objective opinion," said Novak, who lives in New Zealand. "You love your song and so does your mom, but will anybody else? So that's why I loaded it up to Hit Song Science. What could be more objective than a computer program?"

Hit Song Science comes from Music Intelligence Solutions Inc., which this summer started a new Web service, uPlaya.com, that lets artists and record labels upload songs to have them analyzed for hit potential.

The technology draws on a database of millions of songs from the past six decades, broken down into thousands of factors that create human response to music. Those factors range from beat, harmonies and lyrics to mood, language and era, said Music Intelligence Chief Executive Officer David Meredith.

It's like a FICO credit score for music.

"Music is one of the last industries to use data in making decisions," Meredith said. "It's really been a gut-feel kind of industry for years."

Popular songs tend to have comparable characteristics. Graphically depicted by Music Intelligence as stars in a galaxy, hit songs tend to cluster. "We've found constellations of songs recognized as good songs," Meredith said.

Predictive technology isn't entirely new to the entertainment business. Since the advent of MP3s, numerous companies have designed song recommendation programs.

Oakland's Pandora Media Inc.'s Music Genome Project has cataloged more than 750,000 songs, using about 400 categories to determine what its 31 million Internet radio listeners want to hear.

Meanwhile, DVD-rental firm Netflix is close to naming a winner in its \$1 million challenge to improve its system of recommending movies. TiVo's DVR service makes TV show recommendations based on viewer habits.

But Meredith said his company's mathematical algorithms go further by incorporating artificial intelligence.

"We train the system to behave the way the human brain does," Meredith said.

The technology was created about seven years ago by artificial-intelligence scientists at Grupo AIA in Barcelona, Spain. They eventually formed Polyphonic HMI, a predecessor to Music Intelligence Solution, which also has offices in Barcelona and Savannah, Ga.

In 2003, the company tested the first album by then-unknown artist Norah Jones. The industry didn't give the sultry stylings of "Come Away With Me" much of a chance, but the software predicted eight tracks on the album would be big. And they were.

Novak heard about Hit Song Science on BBC Radio while driving. He turned his car around at the next exit, went home and uploaded his song.

The tune scored so well that then-Polyphonic CEO Mike McCready called his European record label contacts, which led to British pop star Lee Ryan singing the song and taking it up the charts in 2005.

Robert Lamm, pianist, singer and founding member of the rock band Chicago, said he also didn't believe the "outrageous" software could predict hits. But after trying it on some solo projects, he

realized the program could give artists a "leg to stand on" when trying to persuade record label executives to promote a particular song.

"I can't tell you how many arguments I've had with record label guys," Lamm said. "Often pop music is essentially some element of catering to the lowest common denominator, catering to guys who are basically lawyers making those kinds of calls."

Lamm also heads a new independent label, Blue Infinity Music, which is working with uPlaya.com. The label's chief operating officer, Trent Gardner, said he tried for months to foil Hit Song Science because he believed it was like someone trying to "sell me a used car with sawdust in the engine."

"I went in thinking I'm going to burn this system big time," Gardner said. "I mixed and mashed MP3s. I (mixed) demos that nobody had ever heard with hit songs and everything I could find. I even cross-faded total duds with hit songs, and it lowered the score. I tried to prove that they were full of it, and I couldn't."

Gardner said the tool could become "an industry standard for a record industry now ready to embrace new technology."

The 20-employee Music Intelligence Solutions has not yet turned a profit. But it hopes to generate revenue through subscriptions from artists and labels who upload hits to uPlaya.com, and through the promotion and social-media marketing tools it supplies.

Still, Novak, who made enough in royalties from "Turn Your Car Around" to pay off his mortgage, doesn't use the Hit Song Science software anymore, because it taught him to trust his own judgment. He also cautioned that software can't replace "the people factor" in producing good music, either as an artist or a record executive.

"You, as the artist, have to write and produce songs," said Novak, who is set to release an album soon. Music intelligence software is merely a good filter."

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