Behind the Campaign:
Laugh Tracker

This campaign is a 2020 Super REGGIE Award Winner, in the Creativity & Innovation category.
Introduction

Parents want nothing more than to create memories and see their kids laugh and smile while on vacation. But with so many fabricated and subjective online reviews influencing travel decisions, it’s hard for parents to know if they are making the right vacation choice for their family.

So, how did the Tennessee Department of Tourism use technology to provide parents with a trusted source of honest and authentic feedback? By creating a new metric to help parents understand visitor satisfaction: laughter.
“Research showed that moms don’t know what to believe and are unsure if they are making the right choices, which is stressful. We’ve experienced this ourselves. This was our “aha” moment. We thought, ‘What if we could prove that kids have fun and eliminate the subjectivity of travel reviews?’ What if moms knew their kids would have fun before booking a trip? And what better way to prove this than through the sure sign that kids are having fun: laughter.”

Brian Wagner, Assistant Commissioner of Marketing at the Tennessee Department of Tourist Development
The campaign had four main objectives:

1. Efficiently drive interest and travel to Tennessee.
2. Produce more than 1.3 million hotel and flight searches.
3. Increase hotel demand by 3.8 percent year-over-year (YOY).
4. Generate a $100:$1 return-on-ad spend (ROAS).

Tourism is the second-largest industry in Tennessee, generating $22 billion in economic impact last year alone. But in 2018, when family travel made up 35 percent of all domestic travel in the United States, only 18 percent of Tennessee visitors were families.

Recognizing an opportunity in the market, the Tennessee Department of Tourist Development partnered with VMLY&R to create a campaign that attracted visitors in the valuable family travel segment.
“We are now able to work with partners like ADARA and Arrivalist, which allows us to track our marketing efforts from exposure to hotel bookings or arrival in Tennessee. Leveraging these attribution solutions, we are able to measure whether a campaign drove tourism resulting in economic impact for the state. All of our paid media and owned assets were tagged, and we were able to directly attribute visitation and economic impact to this campaign.”

Brian Wagner, Assistant Commissioner of Marketing at the Tennessee Department of Tourist Development
Parents want nothing more than to hear their kids laugh because it’s proof they are happy. Leaning into this insight, the department invented “The Laugh Tracker,” a wearable device for kids that measures their laughter during experiences.

Equipped with a microphone, GPS, and cloud computing technology, the Laugh Tracker recorded audio samples in 10-second increments. The recordings were then sent to a neural network home to 214 thousand audio files of laughter to find a match. The device also collected heart rate data to measure excitement.

The Laugh Tracker was sent to hundreds of kids, recording their audio in 31 locations across Tennessee. As the recordings poured in, AI software was used to determine if a sound clip qualified as genuine laughter.
More than two million data points were collected, including:

- 924,741 recorded laughs per day
- 53,433 moments of excitement
- More than 1.6 million seconds of laughter

The data was used to provide parents with a trusted means to measure how much fun their kids could have at the many family attractions across the state of Tennessee. In addition to using the Laugh Tracker, booths were set up so that children could record a video review of each attraction.

Using GPS location data, the department developed a “laugh map” to show parents where children had the most fun. These laugh maps could also be filtered by age, empowering parents to choose age-appropriate activities for their kids.

Finally, a planning tool was developed on the department’s website, showcasing the data collected and attraction reviews from kids. The campaign was supported by video, display, social, and out-of-home creative assets strategically placed where parents look for family travel inspiration to drive traffic to the planning tool.
"As we started collecting the data, we learned very quickly that we needed data from more kids in various age groups to analyze and draw conclusions. In some cases, we had to return to an attraction to gather data from certain age groups. We ran into numerous challenges along the way, but if it were easy it would have been done before."

Brian Wagner, Assistant Commissioner of Marketing at the Tennessee Department of Tourist Development
This Campaign’s Results Are No Joke

The Laugh Tracker gave families confidence in choosing Tennessee as a family vacation destination, and the campaign exceeded all of its objectives, including:

- More than 5.9 million hotel and flight searches (354 percent above goal)
- $42.2 million in hotel revenue
- Increased hotel demand by 6.2 percent (11 percent above goal)
- $142 to $1 return on ad spend ($42 above goal)

Individual attractions across Tennessee are also leveraging the Laugh Tracker data to enhance their offerings. Not only did this campaign prove that Tennessee is fun, but the data captured is also being used to make it even more fun in the future.
“Be inventive. If it doesn’t exist, it doesn’t mean that it can’t exist. Be scrappy and find new ways to use technology. Tech-driven ideas don’t have to be big, scary, expensive, or time-consuming. Push past the “nos” and the “it can’t be done.” There aren’t red lights. Sometimes you just have to find a different route.”

Brian Wagner, Assistant Commissioner of Marketing at the Tennessee Department of Tourist Development
How did the idea and strategy for the campaign develop? Was there an ‘aha’ moment?

We are always looking at industry research, trends, and data to guide our ongoing strategy. Research showed that the family travel segment was growing and that families spend more when traveling. Looking at Tennessee’s visitor study, only 18 percent of visitors to the state were families, and we saw an opportunity to increase travel from this valuable segment.

As we dug into how families plan travel and the challenges they face, we reflected on our own experiences. We found that moms who are the primary planners feel this pressure to plan the perfect vacation and want everyone to have a good time. They spend hours reading through conflicting and subjective opinions about family-friendly destinations and fun activities for kids.
Did everything go as planned regarding the campaign development/execution? What starts, stops, pivots, etc. did you experience? Feel free to share challenges here.

Nothing ever goes as planned. When we first approached our innovation team with the idea that we wanted to develop a device to track laughter, they thought we were crazy. As we started working together, we discussed what existing technology could be leveraged to build a device to track laughter and bring the idea to life. When we started prototyping the device and testing it, we damaged multiple versions. We finally remade the Laugh Tracker using a casing that was more durable and waterproof, and also used a stronger magnet to better secure the device on the child.
What role does company culture play when it comes to leveraging innovative marketing ideas?

We are extremely lucky to work with clients who are brave and willing to take risks with us. Big risks can come with big rewards. We've seen time and time again that innovative marketing ideas break through. Over the years, VMLY&R and the Tennessee Department of Tourist Development have pushed the boundaries in the tourism industry, from creating interactive live-stream concerts from Tennessee to the streets of Chicago to developing the first colorblind scenic viewer so that those who are red/green colorblind could see the fall colors for the first time. We focus on finding ways to connect with our audiences and break through all the clutter that is out there.

Do you plan on using the laugh tracker devices in other ways or other places? Do you foresee any other opportunities to measure or track other expressions/reactions beyond laughter?

This campaign has been extremely successful and a great way to showcase various attractions across the state. We would like to continue to expand the program and visit more locations to collect data to add to our planning tool. While tracking laughter, we concurrently tracked heart rate to gauge excitement levels. The team has also talked about tracking screams since there were periods where we didn’t detect laughter, but kids were screaming with excitement while on roller coasters or zip-lining.
Q & A

"The data collected was secure... We never published the data in a way that could be traced back to a specific child."

Q

Did any of the families have safety or privacy concerns about their kids wearing the devices? How did you dispel those concerns?

A

None of the families participating had safety or privacy concerns about their kids wearing the Laugh Trackers. Our production team met with the families who volunteered to participate and explained what the devices capture and what we planned to do with the data collected. The parents signed releases and filled out information on each child participant. The kids were then outfitted with a Laugh Tracker before visiting the various attractions. When the families were done at each attraction, they completed a survey and returned the Laugh Trackers. The data collected was secure and leveraged a unique user ID that connected to a child’s first name and age. We never published the data in a way that could be traced back to a specific child.
Did you get any “false positives” (unintended laughter, other sounds that were logged as laughter)? How did you ensure that the technology was working and reporting data consistently?

As part of neural network training efforts, there is a level of planned opposition-based learning (OBL). We established a variety of laugh types to match against, ranging from hearty laughs to chuckles from various sources like different genders and ages. So, while some noises were at a higher percentage of acceptance than others, a laugh needed to reach a positive identification percentage to be counted as a laugh in the system.

During the initial data-gathering phase, we had technologists on-site to outfit the children wearing the devices and monitor the daily datasets for processing in the neural network. They were responsible for charging the devices and making sure they were connected during each user session captured. If one of the wearables had issues, we would replace the device on the wearer with one that was capturing data correctly.
SOURCES
