## Trend Analytics: A Data-driven Path to Foresight

To create analytical models that turn insights into foresights, insights professionals must think in three dimensions





GREG HEIST AND SARAH TARRAF

- → gheist@gongos.com
- ⁴ starraf@gongos.com

he future ain't what it used to be." - Yogi Berra
While we chuckle at the accidental wisdom of the late Yankees legend, understanding the future is an increasingly serious business.
Organizations recognize that they need to get better at peeking around the corner to gain greater clarity into an increasingly ambiguous future.

Given the fact that Gartner suggests that 35% of the top 5,000 global companies will regularly fail to make insightful decisions about significant changes in their business, the stakes are high. Organizations today must have a relentless yet measurable mechanism to remain relevant in a disruptive world.

But it's not as if they're not trying

Most have existing functions in place to inform long-term strategy: forecasting, trend watching and, to a lesser degree, social listening. However, they often serve different masters. Forecasting folks rely heavily on past financial and sales metrics. Trend

spotters wade through syndicated reports to inform research and development. And, social listeners often reside in CRM circles to drive near real-time engagement. Senior executives look to these activities and think they've "got it covered" when it comes to future-proofing.

But do they?

In order to yield untapped value, these currently siloed "outputs" must be integrated into an analytical framework—one that can assess their dynamics, adjacencies and congruencies. By pairing this data-driven wisdom with sound judgement, organizations will finally be able to:

- Capitalize on relevant trends and avoid chasing the fad du jour;
- Recognize when critical mass meets market readiness; and
- Identify emerging trends not yet on their radar.

To accomplish this task, organizations must apply new thinking—and rigor—around trend analytics.

## What is Trend Analytics?

While there is a resurgent interest in trends and what they stand to offer organizations, applying analytics in this space is both standard and novel. At its core, the science of forecasting seeks to use a set of known inputs to gain greater clarity about an unknown outcome. However, the prediction of trends requires integrating cultural inputs via non-traditional sources of data, as well as the ability to dynamically refine models to incorporate ever-changing inputs.

With an understanding of this, three dimensions must be considered when creating analytical models that stand to turn insights to foresights:

## A Move From Trendspotting to Trend Modeling. As all

statisticians know, predictive models must be trained on a set of known inputs and outputs. For example, when forecasting future sales, analysts rely on past sales data. When forecasting trends, it's tempting to only look forward. However, the first task at hand is actually to compile and structure a dataset that maps the trajectory of past fads, trends and 'would-be' trends. In doing so, it creates a foundation that allows us to understand the elements that distinguish a fad from a game-changer.

While this may seem daunting, the challenge for organizations is to begin systematically tracking, monitoring and scoring trends as part of their ongoing efforts. This best practice becomes invaluable when the volume of inputs are sufficient to begin training a statistical model of future trends.

2 Dynamic and Non-traditional Data Streams. Identifying emerging trends starts with a unique



twist on harnessing social chatter. Today, organizations tend to use these measures of sentiment and strength of trending topics in mostly ad hoc ways. However, the capability to both stream and convert real-time social conversations into structured data allows us to leverage social listening in a far more systematic and purposeful way.

In doing this, human bias is removed through the rigorous processing

and consistent interpretation of enormous volumes of data. Even more importantly, this unstructured data can be transformed into a purposeful input to a future statistical model.

Rigorous Understanding of How "Influencers" Create Cultural Tipping Points

Malcolm Gladwell's classic, *The Tipping Point*, and Jonah Berger's more recent

book, *Contagious: Why Things Catch On*, are both forays into the dynamics of how and why ideas, brands and products gain critical mass. One of the central tenets of these books lies in the suggestion that social influence is a powerful force shaping what moves from being on the fringe to becoming mainstream.

In the context of trend analytics, there are two specific challenges when applying this thinking. First, models must be sophisticated enough to capture the changing and dynamic interactions between the influencers at play. Secondly, models must be built to learn and adjust to the continually shifting landscape of external influences. This puts us squarely in the realm of an advanced application of machine learning, which clearly pushes the limits of the types of models we currently employ in our space.

Ultimately, trend-forecasting models play a critical role in mapping the networks that influence the trajectory of emerging trends. For example, in the food industry, we just may have foreseen the forces that propelled the gluten-free trend to the force of human nature it has become.

And, what can we learn from this example about where—and how—organizations spot emerging trends that aren't even on their collective radar?

Answering questions like this are incredibly complex and seemingly impossible. Yet this calculated merging of data analytics and trend watching holds promise for companies to avoid chasing the fad du jour, and instead, pinpointing the "next big thing." MI

◆ GREG HEIST is Chief Innovation Officer (CInO) and SARAH TARRAF is director of analytics at Auburn Hills, Mich.-based decision intelligence company Gongos Inc.