

“Dark Data” Finds Revolutionary Role to Mine Strategies, New Business



Bala Ambravan, left, and Guna Pemmaraju. They are cofounders of GadflyZone.

The same data science approaches that have revolutionized consumer side marketing—from the way people shop online to the way they hail cabs—is coming to the fine and specialty chemicals industry, say two entrepreneurs mining that field.

Bala Ambravan and Guna Pemmaraju, cofounders of GadflyZone, unveiled at InformEx 2015 a powerful tool for sweeping digital sources of obscure data—otherwise known as “dark data”—and compiling it into substantive strategies to find new applications and new business.

“The use of data is getting a lot of popular interest on the consumer side, where it’s used in tactical decision making,” Ambravan said. “In the chemicals industry, the level of data use is very much about database searches. We want to take it to a more strategic level.”

GadflyZone is a privately held corporation with Chicago headquarters and offices in Bangalore, India. The company’s name derives from Socrates’ fame, and refers to someone who asks tough and unconventional questions to large societies, that lead to the truth and right action. GadflyZone aspires to use data to do the same for industrial enterprises, its founders said.

Ambravan hails from the chemical industry, spending his career in product management and research and development at GE Plastics and SABIC. Pemmaraju, a data scientist, has spent his career at cutting edge companies like Amazon. The unlikely duo met as dorm mates at one of India’s most prestigious engineering schools. They stayed in touch over the ensuing 17 years and combined their collective expertise to launch GadflyZone last year.

The chemical industry has been undergoing yet another transformation. It is transitioning from having been product centric for over a century to providing market-facing solutions, Ambravan said.

He cited slowing demand for products, increased competition, and reduced asset utilization as the causes for this transition. Companies should get closer to their markets, customers, and their applications using similar data science strategies to

those e-tailers have been using successfully for years.

They demonstrated their product for a packed house as a part of InformEx 2015’s educational session series.

The GadflyZone wizard uses data mining, web crawling, and machine learning to collect and make sense of bits of public information from a wide range of sources, everything from SEC filings to government growth plans to research and development investments by companies.

It uses the data to generate powerful visualizations that allow companies to see where existing products might find new applications, determine which potential clients are searching for products like theirs, keep tabs on the competition and track import-export relationships between companies, among other uses.

Taking a data approach to the chemicals industry can reveal which applications and products are coming back, which customers are looking for them, and whether it’s significant enough business to meet short- and long-term company goals, Ambravan said.

The process generated more than 25 very specific opportunities for one of GadflyZone’s India-based clients, according to one case study. The most significant discovery was that with some small tweaks to the client’s existing chemistry, the company was able to enter an entirely new field of business.

“Using the manufacturer’s current chemistries, products, and strengths, in areas such as chlorosulfonation and diazotization, we were able to determine specific pockets of near-term adjacency and long-term growth,” Ambravan said. “We fed the opportunity pipeline for the next two or three years,” Ambravan said.

Using dark data in this way is a relatively new concept for the chemicals industry, but it’s part of larger trend of tech- and data-backed solutions finding their ways into non-traditional fields.

“The time to do this is right now. This is all coming together,” Ambravan said. “I would be surprised if this wasn’t the norm in three years.” □