How Signals picks up on market trends that everyone else is missing

Signals Analytics develops data tools for companies that are looking for profound insights on the latest market trends. LexisNexis' raw patent data plays a crucial role in the powerful, predictive analyses they make. "Patent data is one of the most important signals to pick up on, if you want to determine the value of your business."

Kobi Gershoni is Chief Research Officer of Signals Analytics, an Israeli-American company with roots in the defense industry. Signals works for corporate clients such as PepsiCo and Johnson & Johnson and for several NGOs. "We collect unstructured, raw data; information that doesn't appear to be correlated in any way and that comes from various sources outside the company. We process that data in a way that makes it transparent and comprehensible, so it can be used by organizations to make smarter decisions," he explains.

Part of the mix

The thousands of digital data sources that Signals collects and processes come from many different sources across the globe. When creating an understanding of a specific market or industry or so-called "ecosystem," Signals strives to create a realistic 360-degree view of that industry. Product information that's available online is combined with market research and sales figures. But customer reviews on e-commerce websites, blogs, articles from opinion leaders, and even conversations on social media are also part of the mix.

'We can 'hear' what consumers actually think about your product'

To get a full picture, however, it's equally important to look back and understand what's happening during the ideation or the initial stages of technology development, Signals' Data Strategy Director Omer Kehat explains. And that's where patent data comes in. "Patents are a great way to help us identify early trends or technology advancements that could be potentially significant to our customers. Including that data in our platform is very important."

Connecting the data dots

Signals refers to the way it processes different types of data as taxonomic classification. By connecting all the data dots, Signals applies a type of hierarchy. "By doing so, you can 'hear' what consumers actually think about your product, but also unveil the activities your competitors are

focusing on," says Gershoni. According to Product Management Director Mila Boiman, that's what differentiates Signals from social listening vendors, market researchers, and intels that focus on products. "What Signals offers its customers is basically 'data connectivity', the ability to read across different data types and sources. By connecting data sources, we create value for our customers that they never would have found with a stand-alone data source."

Predictive power

A key part of this 360 view that Signals creates involves data about the technology landscape. The company often works directly with R&D and Product Innovation teams within the organisations they serve, and for them, patent data is especially valuable. Boiman: "Product development teams are particularly interested in the technologies that are driving the innovations that are brought onto the market. So for them, patent data is a must-have component of our services."

Taking technology out of the equation

While patent data can give you an idea in which technology to invest, it can also do the opposite. Boiman illustrates this with the example of a customer that was looking to enter a new space and introduce a product with a new feature. As competing brands were already offering this feature, Boiman's customer wanted to know what they needed to do to make sure they could compete with them. What Boimans saw by connecting all the different data types and looking at different attributes is that this new feature, this new claim, was not based on technology. "No patents or companies were claiming this feature. This meant that if my customer wanted to enter into this new space, they didn't have to invest in technology. All they needed was the right combination of ingredients or features to be able to make the same claim as their competitors. This was a break-through insight for them because it meant they could develop a competing offering within a matter of months."

> **'Our analysis showed that our customer did not have to invest in technology; that was a breakthrough insight'**

Seeing the full picture

For their supply of patent data, Signals initially worked with the LexisNexis® TotalPatent One® solution, which provides many options to search within an enormous database of patent data. This proved to be a challenge, as "with patents, it's not enough to look at just the past two months," Kehat explains. You need an accurate historical overview of what happened in the past few years to understand trends within a specific category or industry and spot something interesting. The process from ideation to an actual product that is brought onto the market takes a while. "It takes time for technology to mature," Kehat says.

Exporting all that data from the LexisNexis system was labour intensive. That's why Signals switched to the LexisNexis™ IPDD™ solution, which enabled them to integrate the complete set of raw data that LexisNexis accumulates into their system. Despite the many technical implications, this was a conscious choice. "As a company, we claim to be able to 'see the full picture'," Kehat says. "That's why our tool is great for picking up on early signals. If we chose a system that didn't cover everything there is to know about patents, including some niche categories and patents from smaller companies, it would debunk our claim. LexisNexis has the largest dataset when it comes to patents, so the choice was obvious."

> **'We claim to be able to see the full picture'**

Patent data is a key part of a predictive model, Gershoni concludes. "If you want to compare your products with your competitors', there's no other option than to look at the patents of all the companies involved. If you combine patent data with sales numbers and the sentiment in the market – for example, what's being said about you – it provides a complete and accurate picture of your position in the market. It's a superior model that tells you: are you in the right place? Are you running any risks? Is your position stagnating? Patent data is one of the most important signals to pick up on, if you want to determine the value of your business."

How Signals runs a patent analysis
Omer Kehat: "If we want to collect all patents on food, we identify four or five relevant Customs Procedure Codes to determine the full picture of relevant patents. After that, we use the text, title and abstract of the patent to do everything else. We assign the patents to the right segment, so in dairy you know which patents are assigned to milk and which to yoghurt or cheese. And then we use the text to identify those specific product attributes or product claims that might also be mentioned. So, if a patent is about a new formula that has specific digestive benefits, it may fall under "digestive health," which could also include other types of products that make similar claims. This helps us to create those connections and see which technologies are present in different products and how those products are claiming these technologies."