Methodology

A closer look at our engagement gauge and intensity index

Here's how our data-driven analytics tools help shed light on the degree of attention corporate leaders are paying to the latest tech and business trends.

Corporate leaders today find themselves under constant pressure to prepare their organizations for the next emerging technology or business trend. But how can we know how much they're actually taking these various trends and developments—from sustainability to the metaverse—into consideration in their plans, strategies and actions, or in their analysis of the operational environment?

We think it is possible to shed light on that important question by using advanced analytics to "listen in" on thousands of earnings calls between business leaders, investors and analysts, with our antennas up for particular terms and related phrases. By measuring how often and how much company leaders discuss a topic in their presentations, we can get a real view into the extent to

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which executives believe the topic is impacting (or will impact) the business environment, as well as the extent to which they are preparing to address it or have already done so.

That's why we created two tools, driven by advanced analytics:

- The "**engagement gauge**," which provides an overall sense of engagement levels by measuring the percentage of companies whose earnings-call presentations included at least one mention of terms associated with the topic we've selected for study.

- The "**intensity of engagement index**," which provides a sense of how deeply engaged businesses are with the topic by measuring how often the terms in our search were mentioned, on average, in the earnings-call presentations.

A deeper look

Here's how these tools work. After identifying a particular topic, we work with Cognizant or external subject matter experts to develop an exhaustive list of words and phrases associated with that topic. For instance, if the topic in question is the metaverse, the list would include not just the word "metaverse" but also phrases such as "virtual reality" and "augmented reality."

We then apply text mining technology to a global and cross-industry database of thousands of corporate earnings-call transcripts from AlphaSense, a market intelligence platform. On average, 6,665 such transcripts were available through AlphaSense per quarter between the third quarter of 2021 and the second quarter of 2022.

Rather than analyzing the entire transcript, we use only business leaders' (usually CEOs') initial presentations, omitting the question-and-answer portion. We do this because this latter material doesn't necessarily reflect what business leaders themselves have chosen to discuss.

With the results, we can gauge companies' overall engagement level with the chosen topic by quantifying both the share of companies discussing a particular topic and the amount of attention paid to it in their presentations.

Contextualizing the search terms

In our analysis, we take into consideration that some important terms only indicate engagement with a specific topic when used in a certain context. In these cases, we instruct the text-mining tool to highlight a term only if it is mentioned in relative proximity to (i.e., shortly before or after) another term.

For example, if the topic at hand is "climate change," both "climate" and "carbon" are relevant terms. However, a search for each of these terms individually would return many instances that are not related to climate change. By looking for them in close proximity to one another, we can verify that the discussion being captured is about the topic we've selected.

The data we capture

We run individual searches on each quarter of the time period being analyzed. These searches reveal:

- The number of earnings-call presentations for a particular quarter in which at least one of the terms in our search was mentioned.

- The number of times the search terms were mentioned in earnings-call presentations in the quarter.

The extent of engagement gauge

After verifying the number of companies with earnings-call transcripts in the database for the quarter being analyzed, we can then calculate the percentage of companies whose presentations included at least one mention of one of the terms in our search. This calculation forms the basis of our **extent of engagement** gauge.
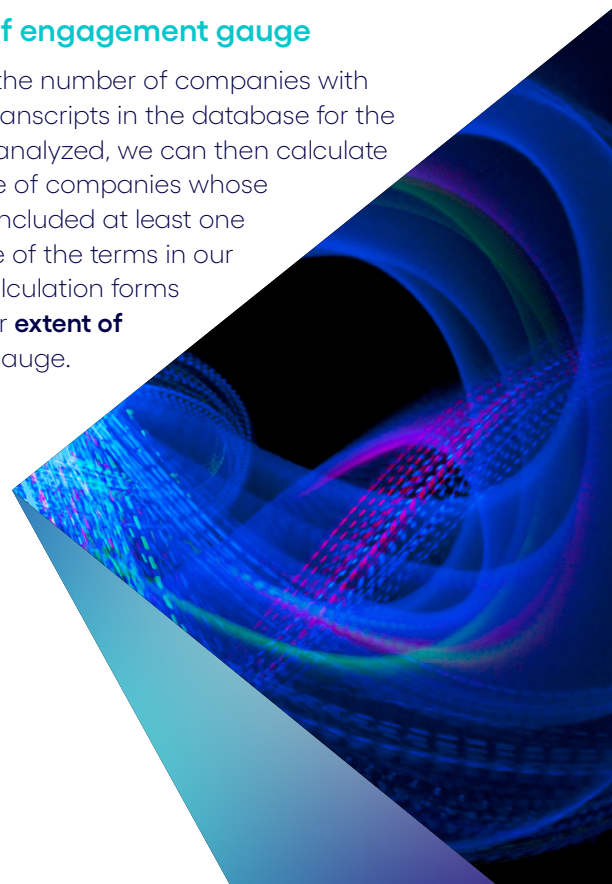
However, quarterly data is highly volatile, and this volatility is often not driven by specific or relevant events. As a result, quarterly variations may not indicate relevant changes in the trend we are studying.

Therefore, our gauge uses four-quarter running averages to ensure that any variations reflect relevant information—in effect, eliminating the "noise." Hence, for example, the share of companies engaged with a topic in the second quarter of 2022 reflects the average of what was observed in the four quarters from Q3 2021 to Q2 2022.

The intensity of engagement index

While the engagement gauge provides an overall sense of interest in the topic, the **intensity of engagement index** reflects the depth of engagement by measuring the number of times the terms in our search were mentioned, on average, in the earnings-call presentations. For this, we use only the earnings-call presentations from the quarter being studied that include at least one of the search terms.

We present this information as an index because showing the absolute number of mentions is less instructive than understanding the evolution in the amount of attention companies are devoting to the issue at hand.

Using an index also means we can compare the evolution in the levels of attention paid to different topics even when the searches at the heart of our calculations are based on a different number of terms.

We establish the index baseline at a value of 100 so that later fluctuations can be easily seen. To set that value, we take the average of the previous four quarters finishing in the first quarter of the period of study. For example, for an analysis covering a period starting in the first quarter of 2020, we consider the average of the four quarters from Q2 2019 to Q1 2020 as being equivalent to 100. We then calculate the subsequent fluctuations in the index in relation to that baseline.

As with the extent of engagement gauge, the intensity index's quarterly data can be excessively volatile, so we also use a four-quarter running average of the index in our analysis.

An accurate read of business engagement

Our engagement gauge and intensity index offer an accurate and data-driven way of scratching beneath the surface to assess whether organizations are thinking seriously about any business investment area. By deeply analyzing thousands of earnings-call presentations, we can get a true measure of what's on top of executives' minds.

For more information on our engagement gauge and intensity index, click here to contact us.

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