



Social Intelligence

Analyzing what people do online provides a way to peer into society's collective mind, says Bernardo Huberman.

Social media have made information so ubiquitous as to be almost devoid of monetary value. What is scarce now—and therefore valuable—is the user's attention, which explains the intense efforts made to obtain it through focused advertising, short videos within news portals, and, most disheartening, spam.

Understanding how people allocate their attention, as well as steering it to specific content, has tremendous value. In the case of social media, harnessing the enormous and highly variable flow of information that propagates through large user networks can make it possible to predict specific outcomes (*see "A Social-Media Decoder," p. 44*).

My research group recently showed that Twitter messages can be used to accurately predict box-office revenues for movies about to open in theaters across the country. The basic intuition was simple: the greater the rate at which people discuss a forthcoming movie, the more likely it is to have a large audience on opening night. Studying how feelings about a movie appear on the social network and propagate through it after opening weekend increased the accuracy of forecasts as time went on. Among other advantages, such knowledge might be used to swiftly shift advertising budgets from one movie or product to another.

This type of analysis has a wide range of potential uses. Although we focused on

movies because it gave us a good way to verify our predictions, the technique can be applied to all sorts of social-media chatter, from academic discussions of technology to public debate about future products and trends.

But predicting the future, however interesting, is only one potential benefit of knowing how attention is allocated within social media. Large groups of interacting people constitute a collective intelligence that can also be harnessed for myriad purposes. Think of what institutions and enterprises can and will do as social computing that taps into this collective intelligence becomes an integral part of their existence. It will give them a way to pare down the vast number of choices that companies and individuals now face. Organizations ranging from governments to charities will gain new insights into the collective intelligence that enable them to evaluate possibilities and learn of emerging trends. In business, understanding how product rankings and opinions work, and how to best exploit them, will grow in importance as ever greater quantities of data are created online every day.

Making it possible to exploit this wisdom will require efficient ways to filter, extract, and rank insights from social data. Such methods are being developed in my own research group, which is already demonstrating the power of analyzing collective intelligence through social media. Tools will also appear that connect individuals with the workings of the collective mind, creating a new source of information that will help determine our choices and ideas about what to do and how to act.

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