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## Google's Lunchtime Betting Game

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IT probably doesn't come as a huge surprise to learn that while employees in many companies sit in the cafeteria gossiping about work, or the boss, or the competition, at [Google](#) they are doing something else.

At Google, employees are encouraged to go online and place bets on a prediction market — an exchange that tries to forecast events based on the money wagered on a particular outcome.

Prediction markets have been used for years to predict things like elections. At Google, they are used, of course, for business. In the last two and a half years, 1,463 employees have made wagers with play money (Goobles, as in rubles) on questions like: will Google open a Russia office? will [Apple](#) release an [Intel](#)-based Mac? how many users will Gmail have at the end of the quarter?

The lure, nominally, is accumulating those Goobles, which can be converted to modest prizes — \$10,000 worth each quarter. As it happens, Google employees were also taking part in an experiment on how information courses its way through the company. A study of those markets — by two outside economists, Justin Wolfers of the [University of Pennsylvania](#) and Eric W. Zitzewitz of [Dartmouth College](#), and a Google economic analyst, Bo Cowgill — used the betting patterns of employees and their demographic details to try to find common factors among people with similar opinions — is it type of job or level within the corporate structure, being friends or sitting close to one another?

According to the report, "[Using Prediction Markets to Track Information Flows: Evidence From Google](#)," which was presented Friday at the American Economic Association meeting in New Orleans, the strongest correlation in betting was found among people who sat very close to one another, trumping even friendship or other close social ties.

This is tangible evidence, the authors argue, that information is shared most easily and effectively among office neighbors, even at an Internet company where instant messaging and e-mail are generally preferred to face-to-face discussion.

It is an argument, the authors say, for giving greater importance to "microgeography," or how people interact in the workplace. The finding that information moved fastest among people who were the closest together is also an endorsement of the company's "third rule for managing knowledge workers: Pack Them In," the authors say.

"Peoples' primary job isn't to trade these commodities," Mr. Zitzewitz said, putting the role of prediction markets into perspective, even at Google. "What we are picking up is communication on 'low priority topics.' But that's how creative ideas come about."

The other crucial finding of the report was that there was a detectible “optimism bias” among Google employees. That is, results that were good for the company tended to be overpriced, particularly for “subjects under the control of Google employees, such as, would a project be completed on time or would a particular office be opened.”

This optimism was most evident among new employees, the report found, and it was bound to show up on days when Google stock had climbed.

This discovery largely jibes with what experts have found about the entrepreneurial mindset. If you take a job where much of the reward will come from the appreciation of company stock, you tend to see the silver lining within the cloud. (What is striking is that this bias was detected at Google during its greatest period of success. The stock more than tripled in the two-and-a-half-year period being studied, yet it was still possible to be too bullish about the company.)

Beyond its findings, the report is fascinating for its inadvertent peeks into the secretive world of Googleland.

One learns, for example, that the researchers could determine “physical proximity” by using “data on the precise latitude and longitude of employees’ offices” — the better to find the closest burrito stand using Google Earth, I guess.

Also, the authors report that “employees moved offices extremely frequently” during the time they were studying the company, about once every 90 days. “You walk into their offices and no one packs from their moves,” Mr. Zitzewitz said, a sign, he said, that Google was acting on the kind of insights the report described and was putting the right people next to one another.

A question never addressed in the report is what would seemingly be most interesting to an outsider: Do prediction markets work? Unlike surveys, the markets rely on something, I think the technical term is ... oh, yeah, greed, to get their results.

Ask me who I think will win a baseball game, an election and an Oscar, and I can try to be objective, but I can't help being influenced by who I would like to see win. (The Yankees, Fred Thompson, Pee-wee Herman; or is it the Yankees, Pee-wee Herman, Fred Thompson?) Put \$5 on it, however, and suddenly I am willing to use all the information I have at my disposal to come up with the best answer.

When they exist exclusively within a company, these markets are a way of extracting hidden knowledge from the work force: if a floor salesman learns that a new TV model will be a dud, with a predictions market he can profit from that knowledge, and perhaps the chief executive can learn that as well.

Google, however, is no ordinary company. As detailed in a footnote, one Google employee, looking to be a profitable trader, wrote the code for an extremely prolific trading robot. As a result, he “was participating in about half of all trades” and made a profit (in Goobles).

So the authors had to compensate for these trades. Who knew that someone from Google would try to game the system?

