

Sales

Tapping the Power of Social Networks

by Lawrence G. Miller and Nicholas A. Christakis

From the Magazine (September 2011)

Salespeople have always prized the individual at the center of a web of prospects, because once that person becomes a customer, peer influence may cause the rest to follow.

The trick, of course, is finding that well-connected prospect. Traditionally the search has required all the salesperson's black arts: sniffing, calling, schmoozing, and guessing. But network theory is beginning to turn it into a science.

With the right data on interactions, you can mathematically analyze and visually depict the locations of people within their social networks. You can see who's connected to whom. You can determine who's a hub and who's a mere outlier. And if you gather and overlay data on who uses your product and how both product use and network structure are changing over time, you can tell which potential customers would be the most valuable ones to approach.

Prospects, Good and Bad



The pharmaceutical industry provides a good example of how this works. Research by our team and others shows that social networks play a key role in doctors' prescribing choices. Even after a drug has been proven effective, doctors tend to be slow to recommend it, often waiting until other doctors they trust start doing so. Studies have shown that physicians were much more likely to prescribe the diabetes medication Januvia if they had Januvia adopters in their networks—an effect that extended to three degrees of separation (a colleagues' colleagues' colleagues). Social connections can also work the other way, turning physicians away from certain drugs. Sales of Pfizer's cholesterol drug Lipitor declined precipitously when a generic came on the market: Interconnected doctors switched their prescriptions almost simultaneously, like a flock of birds changing direction.

The drug industry is an obvious place for the early use of social network analysis. Pharma companies spend vast sums getting the word out about their products and are understandably eager to reduce those costs. Insurance claims provide concrete evidence about which doctors are prescribing which drugs—and because doctors tend to communicate with one another about patients they have in common, claims also yield information about physicians' social networks.

But network science has great potential in other fields as well. Knowledge has always flowed along social connections. Now savvy managers can analyze the flow with tremendous clarity, using the information to identify prospective customers, encourage employee collaboration, manage online advertising, and boost customer loyalty.

A version of this article appeared in the September 2011 issue of *Harvard Business Review*.

LM

Lawrence G. Miller, a physician and clinical pharmacologist, is a cofounder and the CEO of MedNetworks.

NC

Nicholas A. Christakis directs the Human Nature Lab at Yale University and is the Co-Director of the Yale Institute for Network Science. He is the Sol Goldman Family Professor of Social and Natural Science, appointed in the Departments of Sociology, Medicine, Ecology and Evolutionary Biology, and Bioengineering at Yale University.