

Originally published August 18, 2008, in BusinessWeek.com

The Trouble with Twitter

Don't be surprised to see advertising on Twitter soon. It's about the only way the service can generate revenue. But will it be enough?

By Ben Kunz

Twitter's business model is starting to show. An early sign came in April, when the popular microblogging service launched in Japan and the home page for every Japanese user included a big banner ad in the top right corner.

Then, on Aug. 7, [Twitter](#) made another change, this time in the U.S., by limiting the number of people a single user could connect with, or "follow," to about 2,000. Most recently, on Aug. 14, Twitter made the biggest move yet to slash costs. It killed outbound message delivery to mobile phones via short message, or SMS, in all countries except the U.S., Canada, and India.

Taken together, these moves point to the trouble with Twitter. Investors and marketers have been agog over the potential for Twitter—unlike other social media properties, such as [Facebook](#) and MySpace ([NWS](#))—to crack the code, finally, on wringing revenue from millions of users. But the optimists better brace for disappointment.

METCALFE VS. ZIPF

To understand the limits of Twitter's value, first look inside. Robert Metcalfe, co-inventor of the Ethernet, noticed that communication networks tend to increase exponentially with each single addition, a logic that today is called Metcalfe's Law. Think of a fax machine sitting alone and unplugged in your office; it has little value by itself. But plug it into a network of fax machines around the world, and suddenly that communications tool has huge potential.

Metcalf's logic drove a lot of the inflated company valuations of the Internet bubble in the 1990s. And today, investors have the same hopes for a lot of companies that rely on users and their networks, including Yahoo's ([YHOO](#)) photo site Flickr, video sharing companies YouTube and Vimeo, and human networks on Facebook, MySpace, Pownce, and Twitter. Just think how delighted marketers would be to lob a single, online message to the masses and have it forwarded to millions of their friends, all for free.

But Metcalfe's concept doesn't apply to Twitter. The explanation why comes from two fellows named Zipf and Dunbar. Back in 1935, linguist George Zipf noticed that words in the English language are used in an interesting pattern. "The" is spoken most commonly, making up 7% of all utterances; "of" is the second-most common word, used exactly one-half as often as "the"...and the pattern continues with the 100th word in popularity being used only 1/100th as often. Zipf's Law suggests that each subsequent thing in any series (such as your Twitter contacts) has predictable diminishing value. Your spouse is more important than your best friend, who outranks your boss, colleague, and that guy you met on a plane from Chicago. Inside the 2.3 million-strong Twitter network, not all connections are equal, and some will never be used at all. You will probably never send tweets to ice skaters in Finland.

THE DUNBAR COROLLARY

Further depressing Twitter's internal value is a concept from British anthropologist Robin Dunbar, who noted in 1992 that humans—like other primates—can handle only 150 relationships. If we try to add many more connections, our little brains get overloaded.

These are just theories, but they point out that Twitter is not a vast communications network of 2.3 million users squared. Rather, it consists of small pools of people with gaps and limits on how they interact. This is important to marketers and investors, because it puts big brakes on how internal communications could propagate inside any social media network.

Theory aside, Twitter's communications could certainly be turned into money. We count four ways for Twitter to generate cash, though each has limits:

- **Twitter could ask users to pay.** It's been done before—competitor Pownce charges user fees for enhanced content—but is difficult to add fees once the service has been established as free.

- **Twitter could get messages to pay.** With millions of messages flying around, why not convince some to be "sold" as product placement? Blogger Steve Poland suggests that Twitter could insert text ads into every 10th or 50th tweet. But again, users would rebel.
- **Twitter could extract money from user data.** Millions of people now share intimate thoughts via Twitter. Think of the market research potential. Companies are already mining these huge swarms of data. Dell has enlisted [Visible Technologies](#) to learn what users are tweeting about its products. But if Twitter itself tried to monitor user data, privacy concerns could quickly alienate users.
- **Twitter could sell ads.** Twitter is already doing this in Japan.

Advertising is the most viable option, but the total potential pool is not huge. Social media sites are notorious for having low ad response rates, and advertisers will enter a new forum cautiously.

A simple way to calculate how much money advertisers would spend on Twitter ads is to ask, how much profit will advertisers get back? We arrived at our own figure using the following analysis:

- Assume each of Twitter's 2.3 million users sees 10 ads each day. Twitter could thus serve 23 million ad "impressions"—a banner ad appearing on a Web page—each day.
- For Internet banner ads, the average click-through rate is 0.14%. So Twitter's 23 million banner ad impressions would generate, at a 0.14% response, 32,200 users who click on the ad.
- Clicking on a banner ad takes a user to the advertiser's site. Only about 8% of consumers who visit such a site continue further, turning 32,200 clicks into 2,576 serious shoppers.
- And of course, not every shopper at a Web site buys. If 30% of shoppers actually ended up buying the product or service sold, Twitter ads would generate 772 sales a day.
- Finally, let's assume each sale generates \$100 in profit. Thus, 772 sales would create \$77,200 in profit each day for advertisers—or (times 365) about \$28.2 million in profit per year.

Advertisers would find Twitter ads generate \$28.2 million in profits. So the maximum they logically would spend on such ads is \$28.2 million.

Thus Twitter has a real value of \$12.26 per user. Compare that with Facebook, which has a perceived value of \$300 a user—or at least it did last year, when Microsoft purchased its 1.6% stake for \$240 million and the site had 50 million users.

Now, this columnist must pause to explain: I'm not here to mock Twitter. I love Twitter, and as an avid user, I have connected with friends in Connecticut, marketing strategists in Australia, journalists in New York City, bloggers in Vancouver, and a UFO-car launch in London (don't ask). As an ad industry guy, I'd love advertising to work on Twitter. But as a user, I'd hate to see anything muck up the place.

COMING: BANNER ADS

Yet, putting such personal conflicts aside, I predict Twitter will begin selling ads outside Japan, which is no doubt a usability test. American users will see banner ads soon, and don't be surprised if your message on dining out gets side-saddled with an ad for a local restaurant. And to be fair, Microsoft's deal valued Facebook at 100 times its then-\$150 million in estimated revenues. Similar hyperbole could turn Twitter's \$28 million revenue potential into a \$2.8 billion valuation.

But response rates will be low, since other social media, such as Facebook and MySpace, have fared poorly selling stuff to their users. It seems social media users are too busy being social to pay much attention to ads. As marketers see poor results, they will move their ad budgets to other, more responsive ad media. The social media value bubble will be pricked by reality.

In the end, Twitter will most likely be sold and become a hood ornament to another service, like Gmail is to Google ([GOOG](#)) or Hotmail is to Microsoft ([MSFT](#)). The corporate buyer won't get much ad revenue, but it will pull millions of communicating consumers closer to its own business model.

Which is perhaps for the best, because I like Twitter the way it is. Here's hoping that eventual buyer keeps Twitter pure.

Ben Kunz is director of strategic planning at [Mediassociates](#), a media planning and Internet strategy firm. He is author of the advertising strategy blog [ThoughtGadgets.com](#).