



## Scrabulous and the New Social Operating System: How Facebook Gave Birth to an Industry

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Most industries do not begin on a single day, but it's easy to see Facebook CEO Mark Zuckerberg's presentation on May 24, 2007, as the starting gun in an entrepreneurial race that some have dubbed "the Facebook Economy."

On that day in May, Zuckerberg announced that the privately held social networking site he founded in 2004 would open to third-party developers, transforming itself from a popular website to a platform on which other businesses can operate. Eight months later, more than 14,000 applications from third-party developers are live on Facebook, allowing users to do everything from flirt to browse for books. The most successful are raking in profits from ad revenues.

Is Facebook becoming the social operating system of the Internet, poised to support a whole new generation of businesses? Or is this new industry of applications leaning too heavily on the quixotic popularity of a single website? Industry leaders and Wharton experts see major opportunities ahead for those who can manage the risks.

"There's no question that social networking platforms will be the basis for a great deal of innovation and business opportunity," says [Kevin Werbach](#), professor of legal studies and business ethics at Wharton. "What's not clear yet is whether there will be one or two dominant players. It's a very dynamic environment."

For the moment, however, Facebook is "king of the hill" as a social networking platform and will be for some time, according to [Peter Fader](#), a Wharton marketing professor. While MySpace is bigger, currently the third-most-popular site in the U.S., compared to Facebook's rank of fifth, it has not yet opened to third-party developers (although owner Rupert Murdoch has announced intentions to do so). "Facebook is like the QWERTY keyboard: There's nothing particularly special about it, but it came along at the right time and place. At some point that standard just becomes locked in," says Fader.

What makes Facebook attractive as a platform for businesses is obvious, says Kendall Whitehouse, senior director of IT for Wharton. "It brings in this huge audience from the get-go and so you have a built-in infrastructure [for online interactions], so you get the network effect in spades." The payoff for Facebook? Rich interactive content that keeps eyeballs on the site, and an entire world of developers competing with each other to create newer and better applications, says Whitehouse.

With the floodgates now open to developers of every stripe, from Facebook-addicted teenagers to major public companies, Fader says entrepreneurial excitement is reaching a fever pitch. Judging from interest among his students, he jokes, Facebook entrepreneurship could be "a stand-alone major" at business schools. "Many of them aren't even thinking of making money. Facebook is just where they spend so much of their lives already, and now they have a chance to play on it themselves."



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But such enthusiast-entrepreneurs are just one group climbing onto the Facebook platform, says Fader. For already established companies, making a Facebook application is a way to "stand up on a mountaintop and shout." In that category are applications tied into real-life products, like the popular game "Parking Wars" created by A&E Television Networks to advertise a new series about the Philadelphia Parking Authority. This "advergame" allows Facebook users to "park" cars on one another's profiles and earn virtual cash by ticketing illegally parked vehicles.

There's no doubt that Facebook's platform, known as "f8", has spawned a fledgling industry, says Fader. "I'm only surprised it's taken so long." But with many start-ups focused entirely on Facebook, Fader sees potential downsides. "Being based 100% on Facebook is very risky, because social networks are inherently unstable. Five years ago, we would have been talking about Friendster." Still, he says the market is vibrant enough now to at least "give businesses a start."

## Two Brothers and a Board Game

Jayant and Rajat Agarwalla are typical in many ways of Facebook entrepreneurs. The Kolkata, India-based brothers first created a website for playing an online version of the word game Scrabble several years ago "just for the love of the game," says Jayant, 21, who also runs an offshore web development firm with his brother. The website attracted about 3,000 regular players. When an American user suggested the brothers launch a Facebook version of the game, they spent 10 days cooking up the application and then launched it in July 2007.

With this small investment, the brothers were suddenly owners of one of Facebook's biggest hits: Scrabulous. As of late January 2008, more than half-a-million Facebook users play Scrabulous daily, with four times that number having added the application to their Facebook profiles. Because third-party developers can keep all the revenue they generate, the Agarwallas are currently pulling in about \$25,000 a month from advertising, according to Jayant, resulting in a "decent profit" after expenses like hosting, labor and server costs.

But the Agarwalla brothers may become victims of their own success: In mid-January, Pawtucket, Rhode Island-based Hasbro, which holds the Scrabble trademark in the U.S. and Canada, asked Facebook to remove Scrabulous because of copyright infringement. "We have spent many years building the Scrabble brand, and what Scrabulous is doing is piracy," reads an official Hasbro statement. "We ... hope to find an amicable solution. If we cannot come to one quickly, we will be forced to close down the illegal online game."

The Agarwallas' entrée into viral superstardom demonstrates the business opportunities inherent in the Facebook platform, according to Wharton's Whitehouse. Launching an online application is "not like cranking up a manufacturing plant," he says. "The barriers to entry, while not trivial, are relatively low -- basically the cost of a clever programmer's time." The Agarwallas' seemingly accidental success is actually a common pattern, he adds. "Often developers create their first application without any immediate plans for revenue generation. If it doesn't take off, it doesn't matter, because they didn't expect to make any money. If it does take off, they can then figure out how to generate revenue." Such a nothing-to-lose strategy is less appealing for major businesses. "The lone programmer has a different set of incentives for making his work available for free. An established company, with a responsibility to its shareholders, will probably take a more measured path."

In August 2007, Hasbro sold the digital rights to Scrabble and other games to the Redwood City, Calif.-based online gaming giant Electronic Arts (EA). The following month, EA launched a version of Scrabble for mobile phones. Technology reviewers gave the game a thumbs-up except for one potentially fatal flaw: Users can only play with one another by physically passing the phone back and forth between them.

Hasbro does have online multiplayer games. Users can download Monopoly, another Hasbro board game, for \$19.95, but playing with friends is only possible if they buy the game as well.

Both attempts at digital board-gaming demonstrate how Scrabulous filled a niche by drawing on Facebook's greatest asset, what Zuckerberg calls "the social graph," the links between users and their friends. Scrabulous makes it possible, for example, to recreate a big family game of Scrabble, even when

family members are scattered around the world (assuming, of course, that all family members are tech-savvy enough to maintain a Facebook account). Because Scrabulous games can be saved and played out over weeks or months, they allow for what new-media entrepreneur Rodney Rumford calls "short bursts of interaction."

"I know so many venture capitalists and CEOs who play Scrabulous. It's a new form of golf. Maybe you don't have time to play nine holes, but you can socially interact and challenge one another via Scrabulous," says Rumford, CEO of the Solana Beach, Calif.-based Gravitational Media and publisher of Facereviews.com, a review site for Facebook applications.

"Scrabulous has created value for the product in a way Hasbro would have never thought of doing," says Wharton's Fader. "Hasbro's challenge is to call off the lawyers, do better business development and come up with an online version of the game people will like even better. If people are playing more Scrabble, they should figure out how to tap into that."

Karl Savage, whose Facebook photo describes him as "the unelected, unofficial radio spokesperson for the Save Scrabulous Campaign," was asked during a BBC radio interview last week whether he would play a Hasbro-created online Scrabble game if Scrabulous were shut down. "The main selling feature of Scrabulous for me is the fact I can play it within Facebook. If it was on an external site, I would have to search for my friends all over again, and I don't think that would work, and I don't think people would sign up for it."

### **Online Dating and Greeting Cards**

Because the majority of Facebook application developers are individuals or small companies, major companies "who are used to hiring ad agencies with \$100 million budgets are only now just beginning to work with microdevelopers," says Rumford. A few major brands have made it big on Facebook, like Red Bull, the energy drink produced by Austria-based Red Bull GmbH, whose Facebook application "Roshambull" offers an online version of the classic children's game "Rock-Scissors-Paper."

But many more major brands may be falling behind. Rumford's Gravitational Media launched a greeting card application on Facebook as a lab experiment, to give its programmers a chance to play around with the f8 platform. "We didn't intend to make any money on it, but now we're beating out Hallmark's application by 10 to one," says Rumford. On a recent day, Gravitational Media's "Cool Greeting Cards" had 2,015 active daily users compared to 205 at "Hallmark eCards."

Online dating is another area where big players are lagging. Like the Agarwalla brothers before the f8 launch, Cliff Lerner ran a website, in his case called [iamfreetonight.com](http://iamfreetonight.com), an online dating site owned by the Manhattan-based eTwine Holdings. After the Zuckerberg announcement in May, Lerner recalls, "We decided to stop working on [iamfreetonight.com](http://iamfreetonight.com) for a couple of weeks in order to write a dating application for Facebook." The result was an application called "Meet New People." "In no time we had more users on the app than we had on the website. And we didn't spend a dime on advertising the app -- it was all viral."

Lerner's company has since launched an even more popular application, "Are You Interested?" which allows users to find and express interest in other available singles. The application recently had about 600,000 daily active users. Lerner's company has now changed its name to SNAP Interactive and is preparing to shut down its stand-alone dating website and concentrate full-time on developing Facebook applications.

In comparison, two of the dominant players in online dating -- eHarmony.com and Match.com -- had Facebook applications with 48 daily active users between them on a recent day. And it's not just on Facebook where the online-dating incumbents are losing out. According to comScore, a web analysis firm based in Reston, Va., traffic to stand-alone sites like eHarmony.com and Match.com fell 21% and 16%, respectively, between 2006 and 2007. Industry observers partly blame the allure of dating opportunities on free social networking sites like Facebook.

### **Scaling an Industry**

Lerner's SNAP Interactive receives extra attention in the Facebook business world because it is one of

the few publicly held application-development companies. Its preliminary earnings report for the final quarter of 2007 showed profits around \$388,000 -- a more than 10-fold increase over third-quarter profits.

In spite of such tremendous growth for application superstars, including the San Francisco-based Slide and San Mateo-based RockYou, Wharton's Werbach asks whether the Facebook economy will remain on a micro-level for some time to come. "If you are starting a business that needs only a small revenue stream to support a few people, you can do that on Facebook, but to build a business that would become a public company, valuable enough to be a major acquisition -- it's not clear today there is enough opportunity," says Werbach, founder of the Supernova technology conference.

Other questions about the relevance of applications come from Facebook users themselves. Because applications constantly prompt or even require users to invite others, they can lead to a seemingly constant stream of requests from Facebook "friends". One wants to compare movie tastes with you; another challenges you to a game of Texas Hold'Em; a third invites you and a hundred other people to watch a random video. Some Facebook users have begun to protest such "friend-spam."

But Rumford, of Gravitational Media, says he's confident the free hand of the Facebook market will separate flash-in-the-pan applications from the truly useful -- and in spite of the proliferation of applications, he asserts there is plenty of room for more. "The low-hanging fruit has been picked, but a whole bunch of niches has yet to be filled."

Those bullish on the Facebook market predict that people will conduct more and more of their online lives through social networking venues like Facebook. Styky Phonebook, an application developed by a Wharton undergraduate, for example, allows users to save and synchronize cell phone address books on Facebook pages. Other applications let users import their music libraries or feed in streams of content from outside blogs. And with Facebook planning to launch its own payment system, users will soon be able to shop online without ever leaving the cozy blue-and-white confines of their profile pages.

"The apps currently on Facebook only scratch the surface of what's possible," writes Salil Deshpande of the Menlo Park, Calif.-based Bay Partners venture-capital firm in an e-mail. Deshpande, together with colleague Angela Strange, created AppFactory, a fast-track venture capital fund targeted solely at Facebook application developers. According to Deshpande, the fund has received several hundred applications and has funded six ventures, all with investments between \$25,000 and \$250,000.

Deshpande says it is fair to ask whether a healthy industry can grow from a single website, but writes that AppFactory's vision "does not require Facebook's dominance. Social platforms are here to stay."

One key to scaling up the industry is "interoperability" among social platforms, says Wharton's Werbach. With Facebook taking the lead, industry participants like Deshpande called on other social networks to make their platforms compatible with Facebook's so that developers can deploy their applications on multiple platforms with a few clicks.

Deshpande says he sees "momentum" in that direction. In early December 2007, for example, the popular social network Bebo announced an open application platform that works easily with Facebook applications. One month earlier, Google launched OpenSocial, a standardized applications platform which gained the support of most of the major social networking sites, except Facebook. Such compatibility may be essential for application developers to break into non-U.S. markets where Facebook is a less-known quantity.

For the moment, however, Wharton's Fader sees Facebook commanding a mass market in a way traditional forms of media no longer do. "Even TV does not have the same level of engagement. Right now, Facebook is unique."

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