Book Viral Loop

From Facebook to Twitter, How Today's Smartest Businesses Grow Themselves

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Recommendation

In 2000, the "Naked Scientists," a group of Cambridge University physicians and researchers who popularize science, satirically described the viral path of an odd growth industry: Elvis Presley impersonation. At that time, more than 85,000 Elvis impersonators actively performed around the world, "compared to only 170 in 1977 when Elvis died." The Naked Scientists jovially argued that, at that rate of growth, "by 2019, Elvis impersonators will make up a third of the world's population." Of course, this is deliberately ridiculous, but "viral growth" is not. Just note the astounding expansion of such Internet juggernauts as YouTube, Google, Ning and Facebook. Indeed, based on Facebook's remarkable current popularity, it is not inconceivable that everyone on the globe with an Internet connection could be a Facebook member in 30 years. What accounts for such incredible growth? If you want an answer to that question, *BooksInShort* recommends Adam L. Penenberg's absorbing and detailed (perhaps too detailed) book. He examines this timely subject with a focus on the Web's ability to foster sites that are social trendsetters and economic powerhouses.

Take-Aways

- Some traditional companies, such as Tupperware, achieved "viral"-type success decades before popular use of the Internet.
- Online firms grow virally when members of a Web site invite their friends to join.
- When this pattern generates exponential growth, it becomes a "viral expansion loop," which has three categories:
- A "viral loop" expands based on referrals from members to their friends.
- A "viral network" is made up of numerous connected viral loops, such as Facebook.
- A "double viral loop" is a combination of a viral loop and a viral network.
- With quality online offerings, sites don't need salespeople or advertising to go viral.
- Viral companies, such as Hotmail, YouTube, Facebook, LinkedIn, Twitter and eBay, share certain traits, like clear concepts, ease of use and rapid adoption.
- A Web offering's "viral coefficient" is measurable; a score of 1.0 – indicating that each member generates one new member – leads to exponential growth.
- Viral growth is an integral component of great products and services, and is suited for smart phones, which will soon outsell PCs as Internet access machines.

Summary

Hot or Not?

In the fall of 2000, two 20-something entrepreneurs, James Hong and Jim Young, had a simple idea for a new Web site: Am I Hot or Not allowed visitors to vote on whether they thought the men and women in photographs displayed on the site were good-looking. On October 9, Am I Hot or Not debuted with a few dozen

"candid" shots gleaned from the Internet. Hong invited 42 friends to be the first visitors. By the end of the day, the site had drawn 37,000 guests, and people had uploaded 200 more pictures. The next day, more than 100,000 people viewed the site. That is a viral bonanza in action.

> "A viral expansion loop is like compounding interest on a bank account: one user becomes two, then four, eight, to a million and more."

To avoid an expensive bandwidth problem due to their soaring popularity, Hong and Young quickly began to use Yahoo as the posting destination for new photos. They set up commercial Web hosting. The two young men made all the right moves. By its eighth day of operations, Am I Hot or Not had reached 1.8 million page views daily, a remarkable figure considering that it had started out with a few dozen visitors a week earlier. Within six weeks, this number grew to three million daily page views and 3,000 volunteered photos.

> "It's possible to build a multimillion- or even billion-dollar business from scratch, simply by designing a product the right way."

Hong and Young monetized their Web site with advertising. Within three months, Am I Hot or Not became one of a major rating service's Top 25 Web ad sites, with $100,000 in revenue. Hong and Young renamed and refined Hot or Not, and affiliated with a photography-hosting site (Ofoto). They started Meet Me, their second site, in April 2001. It allowed Hot or Not visitors to network with each other for $6 per month. By the spring of 2002, Meet Me had generated $600,000 in membership fees. By 2004, Hot or Not was earning $4 million annually. It became an Internet sensation for one reason: Visitors told their friends about it, their friends told still others, and so on. That's what "going viral" means. In 2008, Hong and Young sold Hot or Not for $20 million.

Build a Better Mousetrap

As Hot or Not illustrates, the Web can make a business hugely profitable if the entrepreneurs have the right design and offer something the audience really wants. This formula worked for Hotmail, eBay, PayPal, MySpace, YouTube, Facebook, Digg, LinkedIn, Twitter and Flickr, as well as Hot or Not. Such sites offer services to which people come to feel so deeply attached that they become fervent evangelists. Then their contacts do the same, in a "positive-feedback loop." That's how viral lightning hits. Companies become Internet juggernauts when they can ride the three-part "viral expansion loop," wherein Web visitors reliably beget additional guests:

1. **"Viral loop"** – This referral-multiplying mechanism grows member-to-member.
2. **"Viral Network"** – Members form groups that intersect as they expand.
3. **"Double Viral Loop"** – This hybrid of viral networks and viral loops is built on ever-increasing user content. A double viral loop grows more quickly as it adds users, often with little marketing effort (though increasing technical concerns).

> "The more Tupperware sold, the more people would sell Tupperware products."

The expansion of a viral loop depends both on users who promote a site's goods or services, and on designers who build virality into their offerings. The Web is the ultimate, exponential connectivity medium, in that it enables people to share blogs, links, photos, videos and other Internet services. This creates a "virtuous circle," the most efficacious form of direct marketing, based on the understanding that people will share things they like. The trick is figuring out what they like and including it, intrinsically, from the very beginning.

Tupperware as a Precursor

Tupperware plastic food containers achieved viral-type results well before the advent of the Internet. Bankrupt tree surgeon Earl Silas Tupper, a kooky inventor, created Tupperware on the heels of a string of failures, such as a "fish-powered boat." By 1949, he was selling Tupperware brand kitchenware in large department stores such as Bloomingdale's. His business expanded when sales dynamo and single mom Brownie Wise began to represent Tupperware in Florida. At the time, she was selling Stanley Home Products through "patio parties," which she transformed into "Poly-T parties" (using the brand name of the plastic in Tupperware). Social gatherings quickly became the Tupperware sales model nationwide. Within a few years, thousands of women were hosting sales parties and recruiting friends for Tupperware get-togethers.

> "Over the last decade and a half, some of the world's most successful businesses started from scratch and then rode a viral loop."

The Tupperware plant could not cope with the demands of Wise's home-party dealers, so Tupper stopped selling his containers in stores. By 1953, Wise had 3,000 dealers and distributors; by 1955, she had 20,000. Within 10 years, "her army of Tupperware ladies" was selling tens of millions of dollars worth of containers annually. Tupperware parties were the viral networks of their time. Wise became the first female executive to make the cover of *BusinessWeek*. Today, Tupperware is a $2.2 billion global behemoth, but the Web tallies less than 2% of its sales. Parties still provide Tupperware with its virality, especially in Latin America and Asia.

The Viral World Wide Web

In the early 1990s, the Internet was a text-based medium that academics used to share research. University of Illinois computer science student Marc Andreessen changed all that. While working for $6.85 an hour for the National Center for Supercomputing Applications (NCSA), Andreessen developed a Web browser that anyone would be able to use, not just academics.

> "The bigger a viral network gets, the faster it germinates."

In late 1992, he teamed up with NCSA programmer Eric Bina to develop a new browser, eventually named Mosaic. Once it became available early in 1993, it made the Internet accessible to everyone. By December 1994, more than one million users were employing the new browser to navigate the Web. With Mosaic's introduction, the Web experienced its first "network effect," a term originally used to describe what took place when the telephone became popular in the early 20th century. Back then, each additional subscriber made the phone network more attractive to others. This same effect generated a true positive-feedback loop for Mosaic: As more people used it, they told others, who also used it and told others, and so on. With increasing numbers of users, more people began to create new Web sites, which made the Web more attractive, which drew more users to it, who built more Web pages, in a bona fide self-replicating cycle.

Ning and the "Viral Coefficient"

In 1994, Andreessen left NCSA and teamed up with James H. Clark, the co-founder of Silicon Graphics, to develop new Web technologies. Andreessen wanted to develop a "Mosaic killer," an even better browser, so the duo recruited disgruntled NCSA programmers and went to work. The result? Netscape Navigator: a quicker, stronger, more stable browser that did indeed murder Mosaic, becoming the de facto standard for Web browsing, with 10 million users by the middle of 1995. That August, Netscape's IPO made Clark and Andreessen immensely wealthy. Their early coders netted millions each. By the end of the '90s, more than 400 million users were surfing the Web on Microsoft's Internet Explorer or on Netscape Navigator.

> "The blogosphere is a teeming viral network."

In February 2007, Andreessen launched Ning to enable users to create their own social networks. By April 2009, Ning had nearly 29 million users. Its growth rate at the time was two million new members monthly, with more than 40% coming from outside the United States. Ning's viral coefficient – the "number of additional members each person brings in" – stood at 2.0. Anything more than 1.0 means exponential growth. With a 2.0 viral coefficient, Ning became a "double viral loop" company. That is to say, on Ning, which earns its profits by selling advertising, "every network creator is a user, and every user is a potential network." Here is how such viral growth works: If a site has a coefficient of 1.0 and 100 users, those users will generate 100 more users. Thus, the site will have 200 users on day two and 400 users on day three. On day four, it will have 800 users. This growth rate will expand exponentially, resulting in millions of users.

Viral Champions

Big-time viral winners like Ning share certain characteristics:

- **"Web-based" service** – The firm is designed to function and grow on the Internet.
- **"Free" offering** – The service is complimentary but may be monetized in the future.
- **"Organizational technology"** – Users, not employees, develop the content.
- **"Simple concept"** – Straightforward and easy is always best.
- **"Built-in virality"** – Users spur growth through sharing and positive word-of-mouth.
- **"Extremely fast adoption"** – Some 50% of Harvard students joined Facebook a month after the social network started, although the site spent no money on promotion.
- **"Exponential growth"** – Users bring in more users, who bring in more users.
- **"Viral" characteristics** – The "Virality index" must read greater than 1.0 for exponential growth.
- **"Predictable growth rates"** – Just as "epidemiologists can predict with some certainty how quickly a virus will spread through a city," you can foretell the birth of a viral loop.
- **"Network effects"** – The more users there are, the more attractive joining becomes.
- **"Stackability"** – PayPal's relationship with eBay offers stackable, synergistic growth.
- **A "point of nondisplacement"** – Viral companies eventually hit a "tipping point," an unbeatable mass of users.
- **"Ultimate saturation"** – Growth can slow once a site becomes immense.

> "Google, with its $100 billion-plus market capitalization, is vulnerable because social networks, which count on user engagement, are, for many people, their first stop on their Web journeys."

Increasingly, users access the Internet from mobile devices. Experts estimate that in 2010, smart phones will outsell PCs as a way to connect to the Web. Three factors will account for this surge: improved screens, stronger microprocessors and easier connectivity.

Marketing Goes Viral

Hotmail demonstrated the Web's viral marketing capacity when it offered free e-mail accounts and promptly grew from no members to 30 million members in two and a half years. When it launched on July 4, 1996, Hotmail didn't embed marketing copy in its clients' e-mails for the first few days. When founder Tim Draper finally persuaded his partners to put, "Get your free e-mail at Hotmail" at the foot of every message, the firm's growth curve soared. In six months, it had one million users. A little more than a month later, it tallied two million, with 20,000 new people enlisting every day. With a clickable link on each e-mail, every Hotmail user became an unpaid promoter. Eventually, Microsoft bought the site for almost $400 million and renamed it MSN Hotmail. (Many start-up viral loop companies sell out to bigger firms once they are experiencing exponential growth.) Later, Microsoft made Hotmail a component of the Windows Live program.

> "Social networks have become a global online phenomenon."

Compelling Web video content goes viral just as quickly. In 2006, Mentos mints demonstrated how powerful viral video can be as a sales catalyst. That year, for fun, juggler Fritz Grobe and attorney Stephen Voltz donned lab coats and goggles, and filmed themselves mixing Diet Coke and Mentos. The two materials bubble over explosively when combined. The men orchestrated a faux fountain, replicating the one at the Bellagio in Las Vegas. The tape rapidly became a Web sensation, and a surprise marketing triumph for Mentos, which had nothing to do with it. Sales climbed 20% after the initial hype, and eventually plateaued at 15% higher than normal. Sales also climbed for Diet Coke.

> "Social networking makes us happy and, online or off, all of this congregating is merely a product of biological necessity."

The popular online auction site, eBay, is also a prime example of how commercial offerings can grow in an amazingly viral spurt on the Internet. Originally named AuctionWeb, the online service was a popular hit from the start. It conducted 200,000 auctions online in January 1997. In September, the company renamed itself eBay. After confronting and handling major technical problems to keep its machinery abreast of its growth, it continued to boom, buying PayPal for $1.5 billion in 2002 and Skype for $2.6 billion in 2005. Not only does it now generate 14% of "global e-commerce revenue," but eBay is also a major earnings source for 1.3 million people.

"The wide dissemination of our personal information – that's the unintended byproduct of social networks – could lead to a more tolerant, less judgmental society."

Numerous other Internet superstars, including Facebook, YouTube and Twitter, experienced the same kind of exponential growth. Like eBay, they started from scratch and exploded, blessed with baked-in virality – the goal of every Web site creator – and lots and lots of friends.

About the Author

Adam L. Penenberg teaches journalism at New York University, where he is assistant director of the Business and Economics Program. He has written for *The New York Times*, *Forbes*, *Slate* magazine, *The Economist*, *Mother Jones*, *Fast Company* and *Inc.*