

Microsoft, with its near-monopoly on operating systems, on one side of the ring, and Netscape, with plenty of cash from a successful public offering, on the other. The giants were poised for a fight between platforms—just like Mac and PC. If not for Apache, engineers would have had to make a decision to align with one of the giants, hoping their platform would win out in the end. For users, surfing a Web site would have been reminiscent of the old days of renting a movie. Rather than a clerk asking, “VHS or Beta?” a visitor to a site would have had to choose between Netscape and Microsoft platforms.

The Apache software is similar to other open-source projects such as Linux, the operating system that’s like a free version of Microsoft Windows. In the face of open systems—where anyone can contribute and everyone can have the software for free—traditional spider organizations are finding that they have to adapt and become more starfishlike. If you’re Microsoft, and all of a sudden your competitors are giving out better products for free, pretty soon you’ll lose your competitive advantage. Later on we’ll see how other big names like Sun and IBM have had to adapt. For now, it’s enough to realize that just as the Apache Indians introduced a new way of fighting to the Spanish, so has the new Apache changed the software industry.

Wikipedia

We all remember doing school reports in the sixth grade. Back then, research meant going to the library and hoping that the *Encyclopaedia Britannica* wasn’t checked out.

If you were doing a report on penguins, you’d take out the

“p” volume and pretty much copy word for word the entry on the bird. Then you’d slap on a hand-drawn illustration, slip the paper into a plastic cover, and you were done. The encyclopedia was the savior of lazy elementary school children everywhere.

When we heard about a new online encyclopedia, we expected a variation on *Britannica*—short articles written by experts, covering the basics on a variety of subjects. But then we found out that the entries were all user-contributed. A truly open model.

Wikipedia has fascinating origins that in many ways capture the evolution of an open system. It started with Jimmy Wales, a successful options-trader-turned-Internet-entrepreneur-turned-philanthropist. In 2000, Wales launched a free online encyclopedia to be used by children whose parents couldn’t afford their own set. The project, called Nupedia, used peer review. But getting something published on Nupedia was a chore.

There were seven steps: assignment, finding a lead reviewer, lead review, open review, lead copyediting, open copyediting, and final approval and markup. It was a handful just to read these instructions, let alone execute them. The process was tedious; PhDs and other experts were assigned as authors. As the articles were slowly being churned out, Larry Sanger, Nupedia’s editor-in-chief, learned about something called a wiki. Derived from the Hawaiian word for “quick,” wiki is a technology that allows Web site users to easily (and quickly) edit the content of the site themselves.

Sanger pitched the idea of using wiki technology at Nupedia. Taking a cue from Bill W., Jimmy Wales agreed, and Wikipedia was born. Just like AA, the project took off. Within five years, Wikipedia was available in two hundred languages and had extensive articles—more than one million in the English-language sec-

tion alone—on a host of topics. And just like the AA offshoots, Wikipedia spawned Wiktionary, Wikibooks, and Wikinews.

As for Nupedia, it managed to squeeze out twenty-four finalized articles and seventy-four articles still in progress before closing down. Larry Sanger's idea to introduce wiki technology ended up costing him his job—the users took over the editorial functions.

When we first visited the Wikipedia site, we thought it was a quaint idea but honestly had fairly low expectations about the quality of the articles, and we expected to find more vandalism than on a 1980s subway car. We were wrong on both counts.

First, the quality of the articles is outstanding—the vast majority are clearly written and succinct and have just the right level of depth. People take great care in making the articles objective, accurate, and easy to understand. This brings us to the seventh principle of decentralization: *put people into an open system and they'll automatically want to contribute.*

And not only do people contribute, their contributions are remarkably accurate. In fact, an investigation led by *Nature* magazine found that Wikipedia and the *Encyclopaedia Britannica* are almost equally accurate. “The average science entry in Wikipedia,” concluded the experts, “contained around four inaccuracies; Britannica, about three.” Like concerned and thoughtful neighbors, members of the Wikipedia community care enough to contribute regularly and are mindful to keep the content accurate.

During our initial search of Wikipedia, we wanted to do a test. Does it really cover everything? We typed in the first obscure reference we could think of—our favorite 1980s sitcom, *Three's Company*. Sure enough, there was the article. It was fairly

complete, but the information on the show's landlords, Mr. and Mrs. Roper, was lacking. We read the article and decided to hit the “Edit” button—we were about to make our first contribution to the site. At first, it seemed a little weird—wow, we have the power to change this entry, and everyone in the world will see it (or at least *Three's Company* fans). But then again, every Wikipedia article is made up of contributions by ordinary users just like us.

The second page we visited was the entry for the group Environmental Defense. Finding the entry rather vague and inaccurate, Rod spent an hour writing a summary of the organization and its highlights. He cut and pasted his revisions from Microsoft Word and updated the article. What he created was definitely an improvement, but graphically, the different fonts and type sizes made the article look messy.

Because Wikipedia allows everyone to contribute, someone quickly came along to beautify Rod's work. This time it was Walt Lockley, who describes himself on his own page as “an architectural consultant and writer.” His contributions to Wikipedia “concentrate on design issues. Product design, interior design, architecture.” Lockley finds pages on Wikipedia that are, by his aesthetic standards, “in terrible shape” and cleans them up.

The very next day after Rod posted the Environmental Defense article, Walt came along and made it aesthetically pleasing. We've never met Walt, never even sent him an e-mail. But still he came along to contribute to the larger Wikipedia community, without insulting Rod's work and without ever demanding remuneration. Walt just wanted to help out. There's just something rewarding about contributing.

Today there are experts all over Wikipedia contributing in any and all ways—from providing up-to-the-minute information about a natural disaster to writing in-depth articles about the psychologist Carl Jung. This leads us to the second surprise we encountered—the vast majority of contributions are positive.

In fact, it took months of using Wikipedia before we encountered a vandal. This person added a reference on the Inca page claiming that *“the Inca empire proved that giant, man eating rats lived for up to one-hundred years.”* Within nine hours, another user, Jessica, “an architect living on the Lower East Side in Manhattan,” had removed the vandalism.

When we investigated craigslist, we learned that the site is a virtual neighborhood. The same can be said of Wikipedia. It remains a nice, clean neighborhood because people like Jessica remove vandalism as soon as they see it. The unnamed Inca vandal has continued to alter pages. Some of the vandal’s hits include adding “max is a looser” in the chemistry article and “Y is your cat eating my anal fluids with a fork :D” in the illegal drug trade entry. In each case, the vandalism was quickly cleaned up.

Members themselves take on the job of policing the site. There are some who even volunteer as Wikipedia cops—people like user Quadell, who describes himself as a “Wikipedia custodian.” He says of his job, “I have keys to the mop room, and I mop things up.” Being a custodian isn’t an easy job. Quadell has an ongoing battle with vandals whose attacks on his own entry have included deleting all the text and replacing it with statements like: “It is kinda boring here in the middle of the night, so I thought to myself, maybe I should vandalize Quadell’s page, he doesn’t mind!” and “Quadell is an AssPirate!”

Wikipedia has the power to “lock” certain pages, either because of rampant vandalism or because a certain topic (say Islam) is controversial. The matter is then debated in the public forum until users agree on some sort of compromise, at which time the page is quickly unlocked. But Wikipedia always strives to keep pages open. Even Quadell’s page—though regularly vandalized—remains open.

Burning Man

The Burning Man festival, which happens yearly in the Nevada desert, is known for eclectic costumes, rave music, and a host of naked people on Ecstasy and pot. It’s also the only 24/7 decentralized experience you can find these days.

Because of its wild reputation, there’s a certain embarrassment associated with going to Burning Man—if your coworkers ever tell you that they’re taking “a weekend trip to the desert” just before Labor Day, chances are they’re not telling you the whole truth. In reality, they’re heading seventy miles north of Nowhere, Nevada, to a dry lakebed where over thirty thousand people congregate once a year.

Ori and his friends drove up in a beat-up Toyota, with their mountain bikes strapped to the back. They’d heard that bikes were the only good way of getting around Burning Man because it’s too big to walk and conventional cars aren’t allowed. They passed Reno and then made a left off Interstate 80 onto a two-lane highway that stretched across the desert. After they drove by an Indian reservation, there was nothing. Eventually there weren’t