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WHAT HAPPENED TO YAHOO

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When I went to work for Yahoo after they bought our startup in 1998, it felt like the center of the world. It was supposed to be the next big thing. It was supposed to be what Google turned out to be.

What went wrong? The problems that hosed Yahoo go back a long time, practically to the beginning of the company. They were already very visible when I got there in 1998. Yahoo had two problems Google didn't: easy money, and ambivalence about being a technology company.

Money

The first time I met Jerry Yang, we thought we were meeting for different reasons. He thought we were meeting so he could check us out in person before buying us. I thought we were meeting so we could show him our new technology, Revenue Loop. It was a way of sorting shopping search results. Merchants bid a percentage of sales for traffic, but the results were sorted not by the bid but by the bid times the average amount a user would buy. It was like the algorithm Google uses now to sort ads, but this was in the spring of 1998, before Google was founded.

Revenue Loop was the optimal sort for shopping search, in the sense that it sorted in order of how much money Yahoo would make from each link. But it wasn't just optimal in that sense. Ranking search results by user behavior also makes search better. Users train the search: you can start out finding matches based on mere textual similarity, and as users buy more stuff the search results get better and better.

Jerry didn't seem to care. I was confused. I was showing him technology that extracted the maximum value from search traffic, and he didn't care? I couldn't tell whether I was explaining it badly, or he was just very poker faced.

I didn't realize the answer till later, after I went to work at Yahoo. It was neither of my guesses. The reason Yahoo didn't care about a technique that extracted the full value of traffic was that advertisers were already overpaying for it. If Yahoo merely extracted the actual value, they'd have made less.

Hard as it is to believe now, the big money then was in banner ads. Advertisers were willing to pay ridiculous amounts for banner ads. So Yahoo's sales force had evolved to exploit this source of revenue. Led by a large and terrifyingly formidable man called

Anil Singh, Yahoo's sales guys would fly out to Procter & Gamble and come back with million dollar orders for banner ad impressions.

The prices seemed cheap compared to print, which was what advertisers, for lack of any other reference, compared them to. But they were expensive compared to what they were worth. So these big, dumb companies were a dangerous source of revenue to depend on. But there was another source even more dangerous: other Internet startups.

By 1998, Yahoo was the beneficiary of a de facto Ponzi scheme. Investors were excited about the Internet. One reason they were excited was Yahoo's revenue growth. So they invested in new Internet startups. The startups then used the money to buy ads on Yahoo to get traffic. Which caused yet more revenue growth for Yahoo, and further convinced investors the Internet was worth investing in. When I realized this one day, sitting in my cubicle, I jumped up like Archimedes in his bathtub, except instead of "Eureka!" I was shouting "Sell!"

Both the Internet startups and the Procter & Gambles were doing brand advertising. They didn't care about targeting. They just wanted lots of people to see their ads. So traffic became the thing to get at Yahoo. It didn't matter what type. [1]

It wasn't just Yahoo. All the search engines were doing it. This was why they were trying to get people to start calling them "portals" instead of "search engines." Despite the actual meaning of the word portal, what they meant by it was a site where users would find what they wanted on the site itself, instead of just passing through on their way to other destinations, as they did at a search engine.

I remember telling David Filo in late 1998 or early 1999 that Yahoo should buy Google, because I and most of the other programmers in the company were using it instead of Yahoo for search. He told me that it wasn't worth worrying about. Search was only 6% of our traffic, and we were growing at 10% a month. It wasn't worth doing better.

I didn't say "But search traffic is worth more than other traffic!" I said "Oh, ok." Because I didn't realize either how much search traffic was worth. I'm not sure even Larry and Sergey did then. If they had, Google presumably wouldn't have expended any effort on enterprise search.

If circumstances had been different, the people running Yahoo might have realized sooner how important search was. But they had the most opaque obstacle in the world between them and the truth: money. As long as customers were writing big checks for banner ads, it was hard to take search seriously. Google didn't have that to distract them.

Hackers

But Yahoo also had another problem that made it hard to change

directions. They'd been thrown off balance from the start by their ambivalence about being a technology company.

One of the weirdest things about Yahoo when I went to work there was the way they insisted on calling themselves a "media company." If you walked around their offices, it seemed like a software company. The cubicles were full of programmers writing code, product managers thinking about feature lists and ship dates, support people (yes, there were actually support people) telling users to restart their browsers, and so on, just like a software company. So why did they call themselves a media company?

One reason was the way they made money: by selling ads. In 1995 it was hard to imagine a technology company making money that way. Technology companies made money by selling their software to users. Media companies sold ads. So they must be a media company.

Another big factor was the fear of Microsoft. If anyone at Yahoo considered the idea that they should be a technology company, the next thought would have been that Microsoft would crush them.

It's hard for anyone much younger than me to understand the fear Microsoft still inspired in 1995. Imagine a company with several times the power Google has now, but way meaner. It was perfectly reasonable to be afraid of them. Yahoo watched them crush the first hot Internet company, Netscape. It was reasonable to worry that if they tried to be the next Netscape, they'd suffer the same fate. How were they to know that Netscape would turn out to be Microsoft's last victim?

It would have been a clever move to pretend to be a media company to throw Microsoft off their scent. But unfortunately Yahoo actually tried to be one, sort of. Project managers at Yahoo were called "producers," for example, and the different parts of the company were called "properties." But what Yahoo really needed to be was a technology company, and by trying to be something else, they ended up being something that was neither here nor there. That's why Yahoo as a company has never had a sharply defined identity.

The worst consequence of trying to be a media company was that they didn't take programming seriously enough. Microsoft (back in the day), Google, and Facebook have all had hacker-centric cultures. But Yahoo treated programming as a commodity. At Yahoo, user-facing software was controlled by product managers and designers. The job of programmers was just to take the work of the product managers and designers the final step, by translating it into code.

One obvious result of this practice was that when Yahoo built things, they often weren't very good. But that wasn't the worst problem. The worst problem was that they hired bad programmers.

Microsoft (back in the day), Google, and Facebook have all been obsessed with hiring the best programmers. Yahoo wasn't. They preferred good programmers to bad ones, but they didn't have the kind of single-minded, almost obnoxiously elitist focus on hiring the smartest people that the big winners have had. And when you consider how much competition there was for programmers when they were hiring, during the Bubble, it's not surprising that the quality of their programmers was uneven.

In technology, once you have bad programmers, you're doomed. I can't think of an instance where a company has sunk into technical mediocrity and recovered. Good programmers want to work with other good programmers. So once the quality of programmers at your company starts to drop, you enter a death spiral from which there is no recovery. [2]

At Yahoo this death spiral started early. If there was ever a time when Yahoo was a Google-style talent magnet, it was over by the time I got there in 1998.

The company felt prematurely old. Most technology companies eventually get taken over by suits and middle managers. At Yahoo it felt as if they'd deliberately accelerated this process. They didn't want to be a bunch of hackers. They wanted to be suits. A media company should be run by suits.

The first time I visited Google, they had about 500 people, the same number Yahoo had when I went to work there. But boy did things seem different. It was still very much a hacker-centric culture. I remember talking to some programmers in the cafeteria about the problem of gaming search results (now known as SEO), and they asked "what should we do?" Programmers at Yahoo wouldn't have asked that. Theirs was not to reason why; theirs was to build what product managers spec'd. I remember coming away from Google thinking "Wow, it's still a startup."

There's not much we can learn from Yahoo's first fatal flaw. It's probably too much to hope any company could avoid being damaged by depending on a bogus source of revenue. But startups can learn an important lesson from the second one. In the software business, you can't afford not to have a hacker-centric culture.

Probably the most impressive commitment I've heard to having a hacker-centric culture came from Mark Zuckerberg, when he spoke at Startup School in 2007. He said that in the early days Facebook made a point of hiring programmers even for jobs that would not ordinarily consist of programming, like HR and marketing.

So which companies need to have a hacker-centric culture? Which companies are "in the software business" in this respect? As Yahoo discovered, the area covered by this rule is bigger than most people realize. The answer is: any company that needs to have good software.

Why would great programmers want to work for a company that

didn't have a hacker-centric culture, as long as there were others that did? I can imagine two reasons: if they were paid a huge amount, or if the domain was interesting and none of the companies in it were hacker-centric. Otherwise you can't attract good programmers to work in a suit-centric culture. And without good programmers you won't get good software, no matter how many people you put on a task, or how many procedures you establish to ensure "quality."

Hacker culture often seems kind of irresponsible. That's why people proposing to destroy it use phrases like "adult supervision." That was the phrase they used at Yahoo. But there are worse things than seeming irresponsible. Losing, for example.

Notes

[1] The closest we got to targeting when I was there was when we created pets.yahoo.com in order to provoke a bidding war between 3 pet supply startups for the spot as top sponsor.

[2] In theory you could beat the death spiral by buying good programmers instead of hiring them. You can get programmers who would never have come to you as employees by buying their startups. But so far the only companies smart enough to do this are companies smart enough not to need to.

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