

The end of everything

IN AN INDUSTRY WHERE ONLY THE PARANOID SURVIVE, EVEN FACEBOOK AND GOOGLE WILL EVENTUALLY MAKE THE JOURNEY FROM HERO TO ZERO.

Years ago, when the Google Books project, which aims to digitise all of the world's printed books, was getting under way, Google's two co-founders met the librarian from one of the universities that had signed up for the plan.

At one point, the Google boys noticed their collaborator had gone rather quiet. One of them asked him what was the matter. "Well," he replied, "I'm wondering what happens to all this stuff when Google no longer exists." Recounting the conversation to me later, he said: "I've never seen two young people looking so stunned. The idea that Google might not exist one day had never crossed their minds."

And yet, of course, the librarian was right. He needed to think about the next 400 years. But the number of commercial companies more than a century old is vanishingly small. Entrusting the world's literary heritage to such transient entities might not be entirely wise.

Compared with my librarian acquaintance, the rest of us have the attention span of newts. We are constantly overawed by the size, wealth and dominance of the current corporate giant. At the moment, the leading monsters are Apple, Google, Facebook and Amazon. Yet 18 years ago, Apple seemed weeks away from extinction, Amazon had just launched, Google was still three years away from being incorporated and Facebook lay nine years in the future.

At one level, this proves only that in the technology world one can go from zero to hero in a very short time. (Or, in Apple's case, from hero to zero and back to hero in 36 years). Some of the industry's greatest executives have understood this quite well. Andy Grove, for

instance, who led Intel for more than a decade, was famous for his mantra "Only the paranoid survive". And for many years – while he led Microsoft and before he embarked on saving the world – Bill Gates appeared to have the same sentiment tattooed on his forehead.

And they both turned out to be right. Intel and Microsoft remain significant companies, but their power has declined. The processors that dominate the market for mobile devices are designed by ARM, a British company, and not by Intel; Microsoft's monopolistic grip on the desktop computing market turned out to be a wasting asset.

We understand pretty well the factors that determine the fortunes of companies that make things people buy – which is why, for example, one can predict Apple won't be able to sustain the enormous profit margins on its iDevices indefinitely. Likewise, it's pretty easy to predict where Amazon is headed. It aims to be the Walmart of the web, and is therefore likely to be around for quite a while. Google has a well-understood and currently profitable business model and an enormous technical infrastructure, but ultimately is vulnerable to a well-resourced competitor armed with better search technology.


This leaves Facebook, a company that has one billion products (called users) and earns its living by selling information about them to advertisers. Given that holders of Facebook accounts don't pay for the service – and can

therefore leave at any point – you would have thought that its long-term durability would be questionable. And yet there are many informed and canny investors who disagree. They seem to regard the company as a sure-fire bet.

The two main factors that will determine Facebook's future are the power of network effects and the "stickiness" of its service – i.e. the extent to which it can dissuade users from leaving. A network effect comes into play when the value of a product or service is dependent on the number of people using it.

Early on, there was a range of incompatible social networks – Friendster, Orkut, MySpace and Facebook. But, over time, Facebook won out by attracting more users and growing more quickly than the others. And the more quickly it grew, the more powerful the network effect became, with the result that it became the de facto standard for social networking.

So if you put your faith in network effects, then Facebook looks like a good investment because it will be around for the long term. If people want to do social networking, then it will be the only game in town. Facebook users will constitute a captive market and will be correspondingly exploited. And the company will be regulated as a monopoly.

How much exploitation will users tolerate before they decide to quit? We know quite a bit about network effects but relatively little about this, which is why a study by three scientists at the Swiss university ETH Zurich is such interesting reading. The researchers looked at several social networking services, in an effort to identify what makes them resilient and what could trigger decline. And they performed an empirical autopsy on a failed service, Friendster, using data gathered just before it closed down. The key determinants of success or failure were users' average number of friends and whether the difficulty of using the site outweighs the perceived benefits. Facebook is doing OK on the first of these criteria but – in my experience – is becoming vulnerable on the second as the company tries to "monetise" its users. If Mark Zuckerberg's empire can't square this circle, then not even the power of network effects will save it in the long run. 

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Mark Zuckerberg's Facebook is showing signs of coming unstuck as it moves to monetise its users.

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