

Hard is Not Defensible — Alex Crompton

6-8 minutes

In startups, being defensible means competitors can't catch you once you're ahead. It's an important characteristic of successful tech companies, so investors often ask about it when you try to raise money.

Defensibility questions sound like *'once you're big, how will you stay big?'*, *'once you're winning, how will you keep winning?'*, or the slightly misleading *'what stops other people doing this?'*.

Founders tend to think a good answer might be *'what we do is hard to do'*. They mix hard with defensible. But hard is not defensible.

Why? There are two kinds of hardness: Math hard – the hardness of working something out; and Bodybuilding hard – the intrinsic hardness of doing certain things. Both can buy you time, but are never enough.

Working new things out is hard, but that doesn't mean once something has been worked out it's hard to do. Things that are hard to come up with but easy to copy are 'Math hard'.

Many mathematics problems take a long time to figure out how to solve. But, once you have a method, often the answer can be verified quickly and the method can be learned easily. Pythagoras needed to be smart to invent his theorem, but now children learn it in school. Other Math Hard things include recipes, designs, and new ideas.

Unless Pythagoras could have kept his method a secret, which is difficult to do, his theorem wouldn't have helped him build a defensible company. Even school kids can copy it.

This is like startup ideas for a new kind of user experience or interface – they're hard to figure out, hard to keep secret (especially if your users experience the secret), and easy to copy.

But what if you could keep the secret? After all, 'trade secrets' can be kept for a while if you're careful.

The problem is, the more success you have with your secret, the more effort other people will put in to discover it. You might be really smart, and have worked really hard, but there are lots of smart people who will work hard to be successful. It's unrealistic to think that you'll ever have a totally unique insight, let alone one other people couldn't come up with if they really wanted to.

If this kind of insight were the defensibility criterion necessary for starting a successful company, by definition almost no-one would ever start one. No matter the ingenuity of your invention, you're going to end up competing on some other dimension.

Math Hardness, the hardness of working stuff out, at best buys you time. How much time? Sadly, some amount of time that's inversely proportional to how much success you're having. The more valuable your secret turns out to be, the less time you have left.

The other kind of hardness is the intrinsic hardness of doing certain things. Some things are difficult to do, even if everyone knows how to do them. This is Bodybuilding Hard.

Achieving a bodybuilder's physique isn't complicated, no matter what the endless range of supplements suggests. You need to: exercise frequently with heavy weights; and consistently eat a protein rich diet. Neither is a secret or complicated to understand. Most people, in shape or not, know this stuff. The problem is that doing these things is intrinsically hard. It requires strenuous activity that's much less fun than seeing friends over beers and burgers.

Most valuable achievements are Bodybuilding Hard. Learning a new skill, becoming wealthy, being a good partner – all require effort. Practically everyone knows more or less how to achieve these things, but few actually do. That's why there is a supplement shortcut for every industry: pointy guitars; self help books; and magazines with fancy bedroom techniques.

Bodybuilding Hard startups are everywhere. On demand services, marketplaces, ecommerce – they're the backbone of Rocket Internet's portfolio. They don't have Pythagorean secrets. These businesses are a pain to run, requiring the coordination of thousands of people and complex operations.

Without a secret, beating everyone else is hard. But bodybuilding isn't economically self-sustaining if you're just good: you need to be the best. Despite small differences, the winner still takes it all.

Hence, **bodybuilding is riddled with steroids and techniques to eek out tiny advantages. Bodybuilding startups are no different – only their steroids are cash, experience, and thousands of traumatised former bankers and consultants.**

The more success you have through doing something Bodybuilding Hard, the more people are going to be incentivised to try to do the same thing. If it's a startup worth starting, eventually the payoff must outweigh the hardness. And once it's clear it does, your competition will bring steroids.

Bodybuilding Hardness, like Math Hardness, buys you time. How much time? Once again, some amount of time inversely proportional to how much success you're having. The better it's going, the less time you have left.

Both types of hardness are good ways to get started. Doing something hard buys you a window of opportunity to succeed. But, once you're big, something else has to keep you there.

Defensibility doesn't imply hardness in the long run, even if hardness is useful in the beginning. For the best companies, things get easier after the hard part.

Their long term advantage doesn't require new insights or ongoing effort: it's too hard to compete like this once the stakes are high enough. Their advantage is unique resource accumulation – like Google's datasets or Apple's brand, or scale-enabled product differentiation – like Uber's liquidity or Amazon's delivery infrastructure. You need to snowball.

Doing something hard can put you ahead of your competition, but it isn't the hardness that will keep you there.

Thanks to the EF team for reading drafts of this. If you want to do something hard, and ideally defensible, start [here](#).

PS. My colleague Zefi Hennessy Holland raised an insightful point about hard to find market secrets that I can't phrase better myself.

He said *'If Math Hard is finding the solution to a problem many people know about, Market Hard means finding an industry problem that few people know about through a lot of hard work... Your competition can copy your moves but not the underlying insights that made you make them.'*