

# 5 forces to overcome as a hardware startup

---

3D develop3d.com/product-design/5-forces-to-overcome-as-a-hardware-startup

August 20, 2021

To gain some further advice for a hardware startup looking to expand this year, we spoke with Alan Clayton, a business coach and mentor who works with the likes of go to market strategy experts Bridgehead Agency and its strategic partner HAX.

Clayton focuses much of his time on helping grow hardware distribution and sales networks globally, having assisted over 250 hardware startups, helping many great products launch successfully around the world.

Here are Clayton's five major forces at play that hardware startup founders have to overcome, and the lessons to learn from each.

## 1 Clock

---

Everything takes longer than you think, and despite knowing this intellectually, founders continue to underestimate how long it takes to bring a 'looks like' and 'works like' bench project to factory scale production – likely not even in the same country you cooked the project in the first place.

HAX was set up in Shenzhen, China to solve this problem. HAX is a US/EU based investor, but much of the hardware you have around you still comes from China. Try ordering a random electronic component online and see what happens; shipping delays, wrong part arrives, customer service doesn't exist, money transfers fail, returning the part wastes more time, and intermediaries you didn't know about get involved.

HAX makes it possible to work literally in the doorstep of the world's biggest electronics market, and round the corner from the tool makers, prototyping shops, and other suppliers you need. Why do you think Elon Musk likes to have car battery makers near his car plants?

**LESSON: Allow more time for everything**

Advertisement

## 2 Competition

---

Hardware startup founders also have a narrow view of who their competitors actually are. At the highest level, none of us have "spare" cash to spend on gadgets of any kind, especially new ones from companies we've never heard of. So there is *always* competition.

When teams claim, 'Nobody is making one like this' I have to take them to one side and explain – the car was a competitor to the horse!

Even today, car makers don't compete just with other cars, or even other electric cars, but with all alternative forms of transport that take the customer from A to B.

The same applies to any hardware startup. If, for example, you are building an automatic cocktail maker, like Bartesian, which we have at HAX, although there is no such machine on the market, it is clear that customers have many ways to satisfy their craving for a refreshing cocktail, many of which cost less, and are more convenient.

So the last point on competition is that your 'new' product must be at least 50 per cent 'better' than the competition just to turn the customer's head. Nobody is dying from lack of automatic cocktail makers, nor most other hardware products you might be thinking to build.

### **LESSON: Broaden your view of the competition**

## **3 People**

---

The third major (sadly often a negative) force at work, and arguably the most influential over time, is the people you work with. Breakdowns in how the team works together contributes to over 60 per cent of startup failures. And it's not just your immediate co-founders that count, but suppliers, investors, partners, advisors and others.

"It takes a village" as they say, and whilst the original startup team works well as a small family, managing and leading this expanding group of multi talented people is hard.

Based on the data from 1,000 startups I've worked with, startup founders tend to be smart (intellectually – engineers, scientists, software geniuses) and imaginative, which makes for a perfect start. They lack the essential people and organisational skills to keep everyone together, and on time and on budget.

Hiring a Head of Sales/Biz Dev and a Head of Operations are two major steps to building the diversity of thinking into the team, unless you are up to learning and deploying those skills yourself.

### **LESSON: Recruit a diverse team from day 1**

## **4 Corporatism**

---

Sadly, investors do not want to invest in that great hardware product you've invented, but rather in that great hardware COMPANY that you're building.

Founders often get hung up on a single product unit, such as a cheap, well designed, accurate breathalyser. But the question you get asked is, 'What are you going to do next' when that sells out, when the bigger and better financed competitors copy your idea, or when technology moves on again?

Founders often don't plan far enough ahead. So if the breathalyser is just the beginning of a broader healthcare or safety company, that would be much more attractive.

## **LESSON: Build a company not just a product**

### **5 Communication**

---

It turns out you can build a truly unique product, that makes perfect sense (financially) in the marketplace, and can be scaled reliably over several years, and still fail. Why? Because nobody cares about it.

Hardware startup founders are not usually gifted storytellers or marketers, and struggle to communicate the story of their product to the outside world. And even though investors are paid to be dispassionate and analytical in their work, and even customers in theory, it turns out we're all human and driven by emotion over intellect.

So hardware products need to be designed, built and presented in a way that gets people emotionally engaged – excited, caring, empathetic to the cause etc. The force of great communication is hard to argue with, but one which hardware founders usually need help with.

Think about how many pointless hardware products you know (or even own!) that made fortunes for their owners simply because the communications campaign created so much FOMO that sales went ballistic for five minutes, and that was enough to declare a success.