The Hardware Renaissance

October 2012One advantage of Y Combinator's early, broad focus is that we  
see trends before most other people. And one of the most conspicuous  
trends in the last batch was the large number of hardware startups.  
Out of 84 companies, 7 were making hardware. On the whole  
they've done better than the companies that weren't.They've faced resistance from investors of course. Investors have  
a deep-seated bias against hardware. But investors' opinions are  
a trailing indicator. The best founders are better at seeing the  
future than the best investors, because the best founders are making  
it.There is no one single force driving this trend. Hardware does  
well on crowdfunding sites. The spread of tablets makes it  
possible to build new things controlled  
by and even incorporating  
them. Electric motors  
 have improved.  
Wireless connectivity of various types can now be taken for granted.  
It's getting more straightforward to get things manufactured.  
Arduinos, 3D printing, laser cutters, and more accessible CNC milling are making hardware easier to prototype.  
Retailers are less of a bottleneck as customers increasingly buy  
online.One question I can answer is why hardware is suddenly cool.  
It always was cool.  
Physical things are great. They just haven't  
been as great a way to start a rapidly growing business  
as software. But that rule may not be permanent. It's not even  
that old; it only dates from about 1990. Maybe the advantage  
of software will turn out to have been temporary. Hackers love to  
build hardware, and customers love to buy it. So if the ease of  
shipping hardware even approached the ease of shipping software,  
we'd see a lot more hardware startups.It wouldn't be the first time something was a bad idea till it  
wasn't. And it wouldn't be the first time investors learned that  
lesson from founders.So if you want to work on hardware, don't be deterred from doing  
it because you worry investors will discriminate against you. And  
in particular, don't be deterred from applying to Y Combinator  
with a hardware idea, because we're especially interested in hardware  
startups.We know there's room for the next Steve Jobs.  
But there's almost certainly also room for the first   
<Your Name Here>.  
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