16.09.2014 - 10:37

Hardware startup funding — What makes it so different from software startups?

© Shutterstock/Andrey_Popov

Investing in a startup company is about as risky as it gets. High uncertainty in respect to the business model, the technology, and the team combined with inherent market risks gave rise to miscellaneous methods to assess these young companies and inform funding decisions.

However, even the organizations lauded as the financing motors of the startup world — venture capital firms — struggle to yield returns adequate for the risks taken. In fact, the majority of European VCs do not make a profit at all.

Venture capital funds remain a hoard though, primarily due to investors' portfolio diversification strategies and because capital has fewer and fewer safe places with decent returns to go to —and of course because some VC funds indeed fulfill their yield promises.

VC likes fast traction and rapid growth

Startups making a stab at a piece of these venture capital funds have to adhere to a set of rules in order to succeed. These rules include an idea that is in some way innovative (e.g., in regard to the technology, the revenue model and/ or distribution channels) and of course a market potential that allows for the rapid growth of the company through soaring customers, revenues, and ideally profits —i.e., what makes a startup a startup.

A synopsis would read: Venture capital firms are cautious and like proven business models that are nonetheless innovative enough to enable fast growth and an enormously profitable exit in due time of the fund's term.

VC likes software companies

Some say that the venture capital model is thus only suited for software startups. These companies require relatively small upfront investments to arrive at a prototype or a usable product that can be used to proof market demand and show traction.

Once the startup arrives at a working business model, rapid —and often global — dissemination is possible thanks to the Internet and standardized operating systems. Additionally, delivering digital products has minimal marginal costs and allows for the scaling VCs are looking for.

Any startup that doesn't work this way has a hard time to outdo software companies in the fight for funding. Basically any firm relying on manufacturing —i.e., hardware startups— falls into this category.

Hardware companies are too slow

Time restrictions induced by the funds' lifetimes establish an additional handicap for these companies. Whenever development or —dread the thought — research is necessary, venture capital often shies away from the company and its particularly unforeseeable future.

But even if the product is likely to be successfully developed and the market potential is enormous (i.e., just good enough for a VC), hardware startups are likely to require too much time to attract customers on a global scale.

Times are changing

In recent years, hardware has started to tread some of the same paths software walked decades ago. Increasingly modular approaches, standardization, and open source hardware communities have created an environment that makes hardware development increasingly faster, cheaper, and more accessible.

This gave rise to the maker movement that helped to bring devices such as 3D printers to ordinary mortals. Some call it the hardware revolution, while others refer to it as the hardware renaissance, acknowledging that grassroots hardware development is anything but a new phenomenon.

Founding and funding hardware startups

Startup companies sprout in this ecosystem of innovation, openness, and low entry barriers. A pivotal element is of course the declining capital required to start a hardware business. Bootstrapping a company to build a working prototype of a piece of hardware is possible again.

During my last trip to Boston, I had the chance to talk to a few MIT hardware startups. What I found particularly striking was that business angels investing in these companies seem to be a lot closer to the product than it is the case in software startups. Founders told me that their angel investors knew their devices very well and gave actual engineering advice —it has been a while since I heard that from a software startup founder.

Though this is highly anecdotal, it might hint at a greater non-monetary added value that business angels can bring to the hardware table and that it is something founders should be looking for.

Crowdfunding the hardware renaissance

As many hardware startups use the crowd to co-develop their devices (e.g., through open source hardware communities) it comes at no surprise that crowdfunding too is an attractive way to get the company started. Often, these startups even go through multiple crowdfunding campaigns and use different platforms as their financial needs change.

That could mean to start off with a donation-based mode that requires nothing more than to write a thank-you note to investors, to then —a few months and successful prototypes later— move on to full-fledged equity-based crowdfunding with six-digit investments and above.

The corporate world is waking up

Notably, established players are beginning to notice this renaissance too. Stratasys' acquisition of Makerbot, BMW Mini sponsoring hardware startup fairs in New York and Berlin, Google's acquisition of Nest Labs, and, last but not least, venture funds specifically aiming at hardware startups (e.g., haxlr8r) are indicators that some can tell which way the wind is blowing.

Acquiring funding for a hardware startup still is a hassle and anything but easy —but frankly speaking, this applies to any new venture. What is changing is that it is not almost impossible anymore. As hardware development goes the way software development went a long time ago, it becomes easier to test and grow ideas.

In alliance with sources of capital ranging from your kindergarten teacher to corporate venture capital funds, I have a notion that it has never been easier to get a hardware startup off the ground.

Feature image: Business Executives At A Meeting Discussing Work On Digital Tablet via Shutterstock. Copyright: Andrey_Popov

Mehr Beiträge zum Thema

- IBB venture capital in Berlin – an interview with Roger Bendisch
- Berlin startups to receive 100 million in new EU funding
- Working for a startup: the pros and the cons
- Hamburg Startup Weekend - Build Community. Start Companies. No Talk. All Action
- Webinale Startup Days: Making the best of your startup failure
- Google Ventures announces $100 Million for European startups