



IP-based university spin-offs – why should VCs bother?

There are VCs out there who think that spin-offs based on university-created intellectual property are a big deal. But, in Europe at least, there are not as many as there used to be

At the moment of its creation, university-created IP does not have much immediate economic value. It might have a lot of potential value but this has to be developed, typically in an industrial environment. One might think: “That’s great, let’s license it to large corporations”; but that’s not straightforward, either for the corporation or for the universities. Corporations will not typically sit and wait until the time the technology transfer officer knocks on their door and offers the IP which is needed for the company’s product development plan. From the university’s perspective, it’s hard to judge if it will ever receive royalties for its IP as the corporation might change strategy or just not put that much effort in (forget upfront payment at this stage).

Instead, real value is created when IP meets entrepreneurial spirit, especially if the entrepreneurs in question have a clear vision of a new market or a breakthrough new product. Such entrepreneurs have a long-term commitment to their technology and they put a lot of effort into commercialising it.

Atlantic differences

As opposed to basic research, where scientific insight is a rather good driving force, graduates and postgraduates are often motivated to see the technologies they worked on applied in the real world. This often drives them to be active as an interface between university and industry, where they get their first industrial experience. In combination with an entrepreneurially minded professor, this often leads to the foundation of a spin-off – ideally the beginning point at which entrepreneurs get their feet wet (ie, earn some initial money of their own) before they get fully funded by venture capitalists.

There are various initiatives in the US and Europe to institutionalise the spin-off process through incubators and special structures – Darwinists probably doubt that this is of any use, but there are certainly not enough data points available to judge.

There are substantial differences between the way university IP is commercialised in the US and Europe. Over the years, US universities have implemented technology transfer structures to participate in every form of IP commercialisation. This often means that the technology transfer officer picks up technology in labs at a very early stage of development. The technology is then patented and marketed to the outside world with, in most cases, a vanishing contribution to the university budget (with the exception of Stanford, MIT and three or four others). Some labs might be funded by corporations which, in turn, have their hands on the IP. Both situations might not be very encouraging for the researcher to start their spin-off, unless they take the IP out of the university through the back door, which is quite a common practice.

Europe, and its technology powerhouse Germany, face a different situation. Technology transfer is widely unstructured – something that is both good and bad. It is for the good because it offers a wide range of opportunities for allowing entrepreneurs to spin-off the technology they factually own. For the bad, there is, of course, less direct transfer to industry, because this transfer route relies much more on a structured exchange.

Interestingly enough, according to the IBF technology transfer conference last autumn in Boston, there is a much stronger perception of US professors living in their ivory towers than of European professors.

Capital markets perspective

Capital markets are all about arbitrage in a broader sense: in time, in locations, in knowledge. The problem is, the more perfect or efficient markets are, the less money can be earned. A good case in point is the inflationary number of hedge funds: they make this particular market very efficient. Another example is the huge amount of capital available for mid and large-cap private equity, which is hunting for prominent companies, as you can read about in the news every day.

But there are people in the capital market – venture capitalists – who take advantage of a special kind of inefficiency. The inefficiency is that most of the people out there do not have a clue what the next killer application (an application which dominates the marketplace)

is going to be in, say, telecommunications or medical devices, or where these breakthroughs are coming from. The inefficiency by definition gets worse the less developed a killer application is. So the rewards for getting an idea to conquer a marketplace are enormous.

But who are the guys who take breakthrough technologies (IP) out of universities and who are able to minimise the risks that run alongside the road to a killer application? They are not those who bet on one item because most likely their chance is less than the reciprocal number of ideas out there. They are those who have the domain knowledge and experience of technologies and markets, those who have the vision of new marketplaces and those who actively participate in product creation out of IP.

These people actually marked the beginning of venture capital 20 to 30 years ago and were very successful in exploiting this special type of market inefficiency. Due to the enormous success they enjoyed, more and more money has floated into venture capital since the late 1990s. But something has changed. Where most venture capital funds in the beginning focused on start-ups, the majority of today’s funds invest in market-ready products. Unfortunately, nowadays there are less funds available for university spin-offs than even a couple of years ago. This hits Europe hard, but leaves vast fertile grounds awaiting harvest for those brave enough to take the risk.

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