

Venture Capitalists: Change or Perish

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[Abstract] VCs have been “picking the low hanging fruit” for decades, but now the “low hanging fruit” is becoming harder to find. As a result, their investments have, on average, been riskier. Their profit model is built on a 10% success rate, which is unstable in a world of shrinking opportunities. VCs must now change the way they do business or gradually disappear into the oblivion of failing investments.

[Keywords] CEO; corporate shells; founders stock; funding; just in time development; parallel development; patent attorney; venture capital

Introduction

Enabling technologies are new and patentable methods of producing new classes of products rather than just a single new product. Much of our world is built on enabling technologies, like internal combustion engines, networking, satellites, atomic fission, etc. Even science fairs have people presenting what should be world-changing, enabling technologies that never make it to market.



Figure 1. Here the author (on the left) is demonstrating his game theory computer at the 1962 WESCON convention.

As shown in Figure 1, the author is demonstrating his game theory computer at the 1962 WESCON convention. This special purpose computer was the fastest computer in the world for solving 5x5 non-zero-sum game theory (war strategy) problems until the RAND Corporation adopted the author’s algorithm. Earlier awards included 1st Place at the King County Science Fair and the Space Medicine award presented by U.S.A.F. General Curtis LeMay. Wouldn’t it be nice if computers could now solve our own personal strategy problems?

On the author’s right in space 24 was an incredible walk-around 3-D display device that would still be amazing even if seen today – a half century later. The author recently founded Savant AI Holdings, to apply the various financial methods being presented. Savant’s technology is a method of parsing natural language that is extremely fast, coupled with a method of utilizing fast parsing to better promote products on the Internet than can be done with conventional advertising.

The Problem

Enabling technology is in abundance, but there are solid dysfunctional reasons why enabling technologies go unfunded despite being the potential basis for whole new future industries (Gladstone & Gladstone, 2002). What seemed to be needed was research into methods to circumvent the usual failures to fund. Investors have foregone enabling technology investments despite their potentials for astronomical profits. This is because, in the past, enabling technologies have cost more and taken longer to become profitable than innovations based on already-available technology.

Research slowed through the 1990's and stopped on September 11, 2001, when America's economic future became clouded. There was enough underdeveloped technology in the pipeline to continue making innovations for another decade or two. It has now been 14 years. Productive innovation is gradually becoming much more difficult without new enabling technology. VCs' 10% success rate is unstable and will implode as they continue funding ever-weaker innovations without new enabling technology.

Methods

Enabling technologies can be repackaged to successfully compete for investment money by using the following methods:

Secure The Services of Good Patent Attorneys by Paying Them A Significant Piece of The Action

This sounds easy enough, but patent attorneys all understand that only about one in fifty patents turns out to be worth anything at all, so it becomes a MAJOR challenge to get them to bet a lot of their time and energy on both you AND your idea (Pressman & Tuytschaevers, 2014). If you think venture capitalists (VCs) are skeptics, then you haven't yet had a heart-to-heart talk with a good patent attorney. To show you aren't naive, tell your prospective patent attorney what he already knows -- the awful truths regarding success rates-- and assure him that you have a way around such hazards. To overcome some of the obvious objections, point out that most patents are never intended to be sold, so the one-in-fifty figure is misleading. Further, give the attorney a big enough piece of the action that if it works out, he will never again have any reason to write more patent applications.

Some things a patent attorney may look for include 1) the solution to a long-felt and unsolved problem in a critical and burgeoning technical field; 2) a very creative algorithm, e.g. instead of merely throwing raw processing power through hardware at a problem; 3) your motivation and participation in the process; and 4) potential return on investment (ROI) considered in view of all of the other factors. Of course, this last one is where the magic is.

There is no formula for selling yourself and your idea to a patent attorney because this is all about how it feels to the patent attorney. If it doesn't feel good to him, he won't do it for a piece of the action. I am now working with counsel in Northern California with whom I worked when we had a mutual client. Our deal was for a percentage of whatever I got in return for pushing the application through the second office action. Another percentage was for the attorney to still be on-board when the "big money" arrived (the technology got funded, sold, etc.). A third percentage applied if I would ever fire him. I have assured my attorney that he will never see a dime of this last percentage because I trust his judgment on patent matters over my own judgment. In addition, we agreed to share all patent-related expenses so that neither of us would work in a way to unreasonably increase expenses for the other.

Secure U.S. Patents In One Year, Instead Of The Usual Decade, Using Senior Co-Developers (Ala U.S. Patent 8,788,263)

The U.S. patent office is the first and only, U.S. government office to ever show a profit. To accomplish this minor miracle, it has increased fees, reduced services, and instituted all sorts of "gotcha" procedures and fees. In this hyper-complex environment, designed to trip up veteran patent attorneys, you wouldn't stand a chance doing it yourself.

One result of reduced services is that it often takes several years (sometimes 5-7 years or even a decade) to secure a U.S. patent, by which time whatever technology is being patented has probably

become obsolete. There is a provision in U.S. patent law to process certain patents before all others. For example, if you can show that your invention is being infringed upon, you can pay a substantial fee and receive this acceleration. To expedite the process somewhat, you can also petition the U.S. Patent Office to treat the application as a “special” application if one of the named inventors is over 65 years of age. This does not necessarily provide for a swift examination, but it may speed things up simply by getting your application to the front of the line.

An assured way to expedite the entire process is to seek an accelerated examination through a petition filed under 37 CFR 1.102. There are some pretty stiff requirements for a pre-filing search, and the filing of a support document (and these can be time consuming and costly themselves), as well as the payment of a higher filing fee, but the application is guaranteed a final disposition within one year. As an alternative, a prioritized examination can be sought, and while the filing fee is a bit higher, a pre-filing search and a support document are not required; this, too, will result in a final disposition within one year.

One common source of needless delay is arguing for disallowed claims when some claims have already been allowed. A better strategy is to accept your patent with just the allowed claims and file a Continuation In Part (CIP) to argue the disallowed claims. This costs more in fees, but it gives you a patent months (or sometimes years) earlier than would have otherwise been possible.

Evaluate your IP

Contact a professional patent sales representative like PPI: <http://www.patprofit.com/> to see if your technology is worth more to someone else than it is worth to you. If it is, then SELL IT. If not, you will have an independent valuation to improve your bargaining position with future VCs.

Find An Interim CEO

The Chief Executive Officer’s (CEO’s) primary responsibility is to produce the business plan and find the money needed to make the company successful. VCs who will fund your company will probably want to install their own CEO to watch over their investment. Hence, hiring a CEO before you have found funding probably won’t work. This leaves you with a chicken-or-egg dilemma because you need a CEO to put together the deal with the VC, yet the VC will probably want to replace your CEO. The solution here is to “hire” (for a promise of stock) an interim CEO, with the understanding that when the company gets funded, he will probably have to change jobs within the company, e.g. to become its new vice president or marketing manager. Finding an interim CEO can sometimes be a challenge. Past employers might be interested. You can also advertise or even post on State job bulletin boards.

Plan to Develop More Than One Product

The usual problem with enabling technologies is that several mini-developments are needed to assemble the desired product. However, those mini-developments can probably be combined in other ways to make other products and/or be sold as separate products. While your business plan will show most of the potential income in the target product, with careful planning you can show enough other income in allied products to make the company a good investment, even if the target product should fail for some reason. An additional advantage is that developers have a closer product horizon and are more motivated to achieve it. They can be given stock in the piece they are developing instead of the whole company. Also, investors like having some insurance against a possible marketing failure because this mitigates one of the major unknowns.

Identify And Mitigate Both Perceived And Actual Risks Without Resorting To Development

The first problem you encounter with enabling technologies is that investors want to see it work before they invest, but most of the desired investment is to make it work. Having made the mistake of playing this game, trust me, there is NO end to this. Whatever you demonstrate, investors will want to see MORE before they will invest. Eventually, they will lose interest, or they will have invested their money elsewhere before you give up on demonstrations. This simply doesn’t happen when there is an

independent expert involved, so the key here is to find a way to involve a suitable expert, e.g.:

- Obtain fixed-price quotations for developments that VCs want to see demonstrated.
- Find a super-expert, like a former president of a respected research establishment, to carefully review the project and proclaim it to be no problem.
- Ask the VC to provide an expert they trust.

Develop Different Novel Components And Products Within Different Corporate Shells

There are many reasons to chop major startups up into separate stand-alone pieces, ranging from litigation protection to being able to grant stock at a later time to being able to sell some pieces to fund other pieces, etc. However, you simply can NOT decide to do this later. You must arrange for this before accepting your first dollar of investment money.

Reward Key Personnel With Stock Without Incurring Tax Liabilities

Chuck, a consultant friend, once provided consulting to a company headed by a good friend of his, for which they paid Chuck in stock, which wasn't trading at that time because of the problems Chuck was called in to solve. Then, the next year, when he turned his finances over to his accountant to prepare his tax return, the accountant informed Chuck that he owed part of a million dollars in taxes on the stock!!! Chuck went to unload the stock, but its price had fallen to nearly zero, and, besides, it was now the next year and too late to mitigate his astronomical tax liability. When it was all over, the IRS ended up seizing Chuck's home. Granting stock, without incurring such liabilities requires that it be granted before the company has been funded so the stock has no per-share value. Unfortunately, this is too late for key personnel you hire after you have been funded. However, if your VC funds a holding company that later forms other companies to develop a technology, then you can wait until those companies are formed to distribute stock in them.

Collapse Development Using Parallel Efforts And Just-In-Time Scheduling Methods

Most high-tech projects involve a long sequence of tasks, each of which is dependent upon the previous task. For enabling technologies, these critical paths can be quite long, sometimes involving years of work. From an investor's point of view, if you take twice as long to make the same amount of money, you have cut your yearly rate of return in half. Hence, planning to do enabling technology products in this manner is economically suicidal – you will NEVER get funded. However, for a tiny amount of additional effort, you can create stubs for all of the major components needing development. Stubs are nonfunctional placeholders to put into other components as they are being designed, built, and tested. In software, stubs are typically empty subroutines that do nothing, and they are extensively used during top-down development. Once the stubs have been created, the many separate developments can all be done in parallel, with one final step of replacing the stubs with the components for which they have been placeholdering, and debugging any remaining problems.

Multiply The Return On Investment Using Staged Committed Financing

In most startups, small teams of people each take responsibility for their part of the company. They then approach investors and give them NO responsibility other than seeing that their checks clear the bank. In the process, they rob investors of an opportunity to take care of the company's needs with FAR less money (by finding other early investors or buyers) and tie up that money for FAR less time (by waiting until the money is needed before putting it into the company). Consider a different relationship. An investor is charged with raising money as needed (or wanted) by the company in return for a piece of the action. An astute investor might know someone who knows someone else who would simply purchase the company. With such deals in place, investors could potentially earn their pieces of the action while expending NO money. Failing this, an investor might elect to operate the company as a "doomsday project" within which a skeleton crew gradually creates the new technology while investors spread the word about how it will destroy entrenched industry players. New technologies are often worth a lot, but

not nearly as much as the existing technologies they usurp.

For example, Savant's technology to displace much/most present-day advertising is probably more economical for major advertisers than present-day advertising. As a result, Savant's technology may be worth more to Google, Yahoo, Facebook, Amazon, etc. to upgrade their present products than it would ever be worth as a new product. Failing this, an investor might elect to execute a rear-end-loaded development, delaying major expenses for as long as possible to shorten the time the money is tied up and, therefore, increasing the yearly rate of return. An astute investment team can utilize staged committed financing to achieve FAR greater rates of return than can ever be achieved using classical funding, where the money is given in one large lump sum and held until it is needed.

Plan on Selling Off Some Corporate Shells to Fund Others

In an ideal world, everything would be in place for a simple change that would make a lot of money, which is what innovations are all about. Enabling technologies usually require that some additional supporting components of an ideal world be created. While these supporting components may not be a part of the technology being developed, they are, nonetheless, needed to make the technology marketable. While not worth astronomical sums, companies that produce these supporting components may still have substantial worth. Once created, they become separate mini-startups assuming their own value. Rather than hanging onto these mini-startups while the primary product is being brought to market, it may be possible to sell these mini-startups to raise additional capital to fund development of the primary product.

Avoid Exclusive Licensing Deals

Exclusive licensing sounds attractive, but it is a trap. If your enabling technology is disruptive, and it probably is, then other players in the same industry will be forced to decide whether or not to infringe on your patent. When they absolutely MUST infringe on your technology to stay in business, you have a problem. They will infringe, and you will end up in court, costing ~\$2M per litigant. Your patent will be challenged in every conceivable way, and, since nothing is perfect, there is a good chance that they will find some tiny chink on which to invalidate your patent. *The Impossible Lens* is an excellent video about how an exclusive licensing deal destroyed an excellent patent and did so without even finding flaws in the patent (Pure Science Speciales, *The Impossible Lens*).

Look For An Early Buy-Out

Disruptive technologies can often assume values far beyond their worth as a product, especially when they threaten the cash flow of large companies or have a synergistic ability to transform something of little worth into something of great value. Rather than toiling for years, wouldn't it be better to be paid more right now than you would eventually earn? Your investors would also prefer this, so make sure they have a path to make this happen.

Make Your Venture Capitalist A Full Member Of Your Team

With most pre-funding startup teams, everyone has a job, and everyone does his or her job, or else everyone walk away with nothing. "Employing" your VC on this same basis, somewhat like a combination of investor and CEO, gives your VC an opportunity to try many ways of marketing your stock and company and/or waiting until the last minute to pay your company's expenses as described in section 2.9. You can grant your VC a sizeable chunk of stock because you know you won't be granting the next VC another chunk of stock unless your present VC has walked away without his stock. Most VCs would welcome the opportunity to simply cut and run should the company veer off of its success trajectory instead of having such companies continuing to spend the VC's money in honor of the VC's "right" to collect a drawer full of worthless stock certificates. This approach is a "win" for everyone. The VCs get more control and more stock by taking some responsibility to keep a company running so the rest of the team can concentrate on product development, instead of finances. Astute VCs will then use their connections even more than their money to make companies successful.

Conclusion

Enabling technologies are often worth far more than innovations. However, classical exchanges of stock for investment money are simply not up to the task of funding enabling technologies. Here, the angel is in the details to chart a success path from idea to startup to riches. The key to charting that path is to make your investors full members of your team with responsibility for all monetary concerns. Like other members of your team, if they fail to deliver what they agreed to deliver, they walk away with nothing.

Annotated References

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Pure Science Specials "The Impossible Lens" <http://www.hulu.com/watch/646797#i0,p16,d2>
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