

TOP TEN CAUSES OF FAILURE FOR TECHNOLOGY STARTUPS – AND HOW TO AVOID THEM!

By

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FOREWARD

Focusing on an area as complex as technology startups requires addressing many issues and perspectives. While I've relied principally on my own experiences, I've also discussed these ideas with several startup Founders and investors in technology startups. In particular, I'd like to express my thanks to four colleagues who made special efforts to help me refine and expand some of the ideas expressed in this piece.

Al Sisto, CEO of Tern Plc in London, England is a very successful serial technology entrepreneur and investor – as well as being my classmate from Stevens Institute of Technology. Tom Scholl, a fellow Trustee at Stevens Institute, runs his own investment operation and was formerly a partner in Novak Biddle Venture Partners in Maryland. Emil Herkert has had a distinguished career in technology management in New Jersey as well as being one of the founders and the organizing force for the NJ Institute of Technology Highlanders Angel Network. My fellow Stevens alumnus, Dr. Don Sebastian, is the CEO of the New Jersey Innovation Institute, a venture established by NJ Institute of Technology to focus on commercializing technology in collaboration with industry in New Jersey.

Hats off to all of them for their added insights. I've benefited greatly from their wisdom. And, of course, hats off to my Alma Mater to put me in touch with such talented technology entrepreneurs!

Phil Crowley

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TOP TEN CAUSES OF FAILURE FOR TECHNOLOGY STARTUPS – AND HOW TO AVOID THEM

Starting a technology company is a harrowing task – but one that can lead to great rewards and personal satisfaction.

There are myriad details to handle and numerous risks and uncertainties in pushing to the edge of technical capabilities – and beyond them. Yet dedicated and courageous innovators continue to accept the challenges to use technology to create products and services that can help thousands or even millions of people.

The sad fact is that many of these companies with technologies that could succeed in the marketplace never make it out of the development phase. They fail to reach the promise that their technological innovation deserves.

Why is that?

Well, in observing technology startups with promising innovations over several decades, I've encountered ten factors that I have found to be the main causes for failure – despite the companies' having solid technology that could solve one or more important problems in a large addressable market.

I'd like to provide them here so that technology entrepreneurs can learn the causes and guard against letting them upset their own ventures. Just as a clarification, when I speak of "technology", I mean any technology – IT, electronics, biotech, pharma, software, mechanical devices, chemical processing and any other means of using any of the sciences or engineering to create products or services. In each of the cases about which I'll be writing, technology and intellectual property are key elements of the business.

We'll go over the causes in reverse order, starting with Number 10.

#10

Failure to lock up initial protectable intellectual property with appropriate written agreements

In many cases, a technology entrepreneur will seek to obtain rights in intellectual property (“IP”) developed by another person, e.g. a University professor or researcher or by the University itself. It’s important that a technology entrepreneur have a written agreement in place with that outside source of protectable IP. Without that, the basis for a successful business may be lost.

This can happen principally in one of two ways. The first involves public disclosure of the IP. When IP is disclosed publicly it becomes part of the “public domain” and is ineligible for protection from copying and use by others. In many cases, the protection sought is by obtaining a patent on the product and/or process involved.

In other cases, keeping the IP as a trade secret provides the needed protection. (More on the classification and definitions of the types of IP in Number 7). But it’s clear that having some type of IP protection can make IP maximally valuable.

For the sake of simplicity, let’s focus on IP that would be eligible for protection with one or more patents. What is needed at the start is a written assurance of confidentiality by the owner of the IP until a patent application has been filed.

What are some situations in which the holder of IP might inadvertently eliminate the ability to protect it from copying and use by others by disclosing it publicly?

Disclosure into the public domain can occur when a University researcher participates in a scientific conference where the researcher discusses his or her previously nonpublic research, or lectures on the innovation at his or her home institution. Another avenue is submissions of publications or abstracts to scientific or other journals. All of these activities make what is disclosed part of the public domain.

Any of those activities would make obtaining a patent unavailable on what was disclosed. And without a patent to protect an idea, others could simply copy the idea once the innovator began to market a product. That robs the idea of its distinctiveness and “monopoly power”. Sadly, it also makes it unlikely that an innovator could attract the investment capital required to develop the products. “Copycats” with greater resources could simply reverse engineer the product once sales began and out-market and out-sell a small startup.

The second risk is a change of commitment by the owner of the IP. Without a written agreement giving an entrepreneur some rights in the IP, e.g. a license or an option to obtain a license, the owner remains free to grant the rights to someone else. This is an area where “oral understandings” must be avoided or at least quickly documented in a written agreement.

One important word about patents here. A patent provides a negative right – it does not necessarily permit the holder to manufacture and sell his or her innovation. Rather it provides the right to exclude others. That’s an important distinction and a reason to involve a competent patent attorney early in the innovation process.

Further, failure to recognize and protect trade secrets of the technology entrepreneur and of the other sources of IP from disclosure can also doom a project.

So, the bottom line here is to secure rights to IP from any outside source through written agreements to maintain the confidentiality of the IP and to grant rights, preferably exclusive rights, to the entrepreneur. Having these rights should provide a long term competitive advantage and a basis for providing a return on investment for the originator of the invention, the entrepreneur and his or her investors.

#9

Failure to structure and operate the project through a limited liability entity

Risk is an ever-present factor in any innovative venture. But risking personal assets should never be done unknowingly.

When an entrepreneur acts in a business-related setting, he or she is putting at risk personal assets, e.g. house, car, savings accounts, future earnings. In the event that the activity creates debts or other liabilities, all the personal assets of the entrepreneur are available to a creditor who wins a judgment against the entrepreneur.

The better method to conduct business is to use a limited liability entity. Properly established and maintained, it's like setting up a castle wall around your personal assets.

There are two vehicles that are most frequently used, the limited liability company and the corporation. Limited liability companies are frequently used to get a business started with few equity owners. Corporations tend to be used when the business is seeking more substantial funds from a greater number of outside investors. The choice of the entity is a matter to be discussed with the entrepreneur's lawyer and tax advisor.

See item
Number 2 for
more on this
last point.

The limited liability entity can shield the personal assets of the entrepreneur from debts and other liabilities of the business. But this can only occur if the business is operated in a manner that makes clear that it is the entity – and not the individual owner or owners – that is entering into obligations and creating potential liabilities. That's a matter on which competent legal counsel is essential to advise on how to manage the entity in order to ensure the limited liability features that can be provided are actually realized.

#8

Failure of the founders and others to transfer to the company ALL of the relevant IP needed to start the business

Think of your limited liability entity as a “bucket”. Investors are investing in that “bucket” and it’s important to ensure that all of the properties that make your project valuable are in that bucket.

Failure to do that can lead to a lack of trust from the potential investors – and since investment is based in large part on trust, the potential investors may just decide to invest elsewhere. Such a failure can also decrease the valuation of the entity if it lacks all the IP required to develop the business. Careful investors will look closely to ensure that written agreements are in place to ensure that all relevant IP owned or controlled by the founders has been assigned to the business.

Without that, the investors’ due diligence process before investment may result in a decision of “No Sale”.

#7



Failure to ensure that all employees, contractors and vendors assign to the company the IP rights they create

Intellectual property is the “fuel” that powers a technology startup.

But IP is a slippery concept – it consists of ideas, concepts, designs and symbols. So, the law has set some strict requirements about how it can be transferred. There are four basic types of IP: trade secrets, copyrights, trademarks and patents. All can be incredibly valuable – and all can be lost unless appropriate written protections and appropriate procedures are in place.

Let’s start with trade secrets. That is knowledge not generally known that is valuable, in part because it’s not generally known. If the information is disclosed publicly, it loses its protection. So it’s important to have written agreements with employees, vendors and especially independent contractors requiring them to recognize the ownership of the company in that IP and to maintain the confidentiality of trade secrets.

But simple written agreements aren’t the end of the story. It’s important to have in place policies and procedures to protect the trade secrets. For example:

- Are instructions kept in locked files when not in use?
- Is access to the trade secrets restricted to those who have a need to know them and who have executed written agreements to protect them and keep them confidential?
- Are they marked as “CONFIDENTIAL”?

While not all these measures may be necessary, the lack of most or all of them in your operations can jeopardize classifying this important information as your trade secrets. And once protection as a trade secret is lost, any competitor to the company is free to use it.

Next, there are copyrights. Those are the rights to copy or display or perform an original work of authorship that has been set in fixed form. It can be a computer program, code for a website, a training manual, a display, advertising, a logo or photo or a video. For works subject to copyright protection, ownership vests in the company generally for works created in the course of an employee's duties. BUT for independent contractors, ownership STAYS with the contractor UNLESS there is a written agreement in place.

That's a trap for cash-starved startups who hire independent contractors instead of employees. It can be particularly painful if your "oral agreement" with the designer of your company's website leaves ownership of the code – and the site – with the designer! So, it is a MUST to have independent contractors – both individuals and companies – sign appropriate agreements expressly giving ownership in their work to the entrepreneur's company.

Another form of IP is a trademark. That's a distinctive graphic, color, scent or sound that identifies a product or service with a designated source. Think BROWN for UPS, the familiar tones for the NBC network or for "Intel Inside", or the distinctive logo for Apple products. The powerful characteristic of a trademark is that, if it is properly protected, it can last an unlimited amount of time.

For example, the familiar red triangle has symbolized Bass Ale continuously since the early 1700's. The various trademarks for Coca-Cola were used in the 1880's but were not registered with the U.S. Patent and Trademark Office until 1892. So, Coca-Cola is a relative newbie. But both trademarks show the power and longevity of protection available to this form of IP. So, it's important to understand the legal requirements for using and protecting these identifying markers.

Finally, patents are probably the most talked-about aspect of IP for tech entrepreneurs and their investors. Here's a question to consider. Suppose you have a patent on a particular invention.

Does that patent automatically ensure that you have the right to make, use and sell that invention?

Well, it may surprise you to learn that it DOES NOT! A patent is not a

positive right. It is the right to prevent others from making, using or selling your invention. Let's take a simple example to illustrate this.

Suppose Inventor Adam has a patent on bicycle wheels and Inventor Beth has a patent on improved bicycle wheel spokes.

Can Beth make, use and sell bicycle wheels with the improved spokes?

The answer is that Beth may **not** make, use and sell bicycle wheels with the improved spokes without the permission of Adam since making, using and selling a bicycle wheel would infringe on Adam's patent.

Now, may Adam make, use and sell bicycle wheels with the improved bicycle spokes? After all, he has a patent on bicycle wheels.

No, even though Adam can prevent others from making bicycle wheels, Adam may **not** make bicycle wheels with the improved spokes without the permission of Beth. But, as you see, Beth may not "practice" her invention without permission from the holder of the "dominant" patent. We call this permission a patent license.

And it is one of the most valuable methods of transferring rights to IP.

See item
Number 3
and 2 for
more on this.

The type of IP that is valuable in a particular case can vary by technology and industry. This is an area where careful planning and execution of an IP strategy can add considerable value to a venture.

#6



Failure to align equity and rewards with contribution.

To illustrate this principle, let's consider a hypothetical.

Three friends Alex Abel, Betty Barns and Carl Caswell, newly-minted Ph.D.'s from Technology University, set up a corporation to develop a new technology they've licensed from their university. Each person is issued one-third of the stock in the corporation that houses the venture. Initially, they all work diligently on the project. Twelve-hour days are the norm. However, after six months Alex is offered an assistant professor position at a prestigious university and after a somewhat sad going away party he leaves.

Betty and Carl continue to work on the project, this time increasing their efforts to make up for the loss of Alex. It's fifteen-hour days and some work on weekends as the norm. They're making progress but still have to overcome some technical stumbling blocks. But then about a year into the project, Betty becomes discouraged and decides to leave to pursue other research.

That leaves Carl, who is now working 18 hours a day including weekends to finish the work. He discovers several novel, patentable ideas and incorporates them into the project. The new discoveries completely resolve the obstacles that have been holding them back. Carl applies for and receives several patents on the inventions – all assigned to the corporation. Finally after another three years of effort (and several further new patents granted) he succeeds and finds a buyer for the corporation and all of its IP at a price of \$30,000,000. He is understandably ecstatic – but he wonders, what about Alex and Betty?

Questions

What portion of the price do you think Carl deserves to receive based on all his effort?

- Four years of full-time effort*
- Creative insight and innovation to overcome previously unsolvable problems*
- Numerous patents on which he is the sole inventor*
- Negotiation of advantageous sale of company at an attractive price*

What portion of the price do you think each of Alex and Betty deserve to receive?

- Left early*
- Didn't contribute to key innovations*
- Aren't named as inventors on the new patent*

What portion of the price do you think Carl WILL receive based on his agreement with Alex and Betty?

Well, based on the initial agreement, each of the researchers is entitled to one-third of the purchase price, \$10,000,000, even though the amount of work each one devoted to the project was very different. This is why we set vesting schedules so that rewards and compensation are earned out over time as founders and others make contributions to their businesses.

If that had been done in the hypothetical we just discussed, the results would have tracked more closely the time and effort each person dedicated to the business and the contributions they made. Let's look at an example that may make this concept clearer.

Return to our hypothetical case and incorporate monthly vesting over four years. Let's assume that the company issued 480 shares of stock to each founder. So, the stock interest of each of the founders becomes the property of the founder at the rate of 1/48 of the total per month, 10 shares. If the founder leaves before four years, he or she loses all unvested shares.

So, when Alex leaves after six months, he would be entitled to 60 shares. The rest of his 480 shares would be returned to the company

Betty left after about 12 months, so she would have 120 shares vested and the company would have the return of the rest. Carl stayed the course, so he earned all his 480 shares.

When the money from the sale is paid out, each person is paid in proportion to the number of shares outstanding, 660. That's the 1,480 shares issued less 680 shares forfeited. Carl would receive about \$21,800,000, 73% of

the proceeds. Betty would receive about \$5,500,000, 18% and Alex about \$2,700,000, 9%.

It's not a perfect reflection of the value of each founder's contribution but it is far better than the unvested case we discussed initially. There are other techniques that can be used to augment the percentage interests of continuing founders over the interests of those who depart. For instance, founders and key employees could look at the potential value an employee may contribute to the business in the future and key vesting – and the amount of stock grants or stock options keyed to meeting agreed milestones. But that's beyond our straight-forward discussion here.

Suffice it to say that thinking through vesting schedules, the contribution of each founder and provisions for additional equity grants for additional contribution is a very important part of establishing an equitable division of ownership in the enterprise. And it can lead to difficult conversations among the founders about the value of a person's input. So, it's helpful to have experienced advisors guiding that process to prevent degrading the important business and personal relationships among the founders and their key employees and advisors.

Another set of issues of importance here is taxes. Receiving stock in an existing venture can create taxable income – even if the technology entrepreneur doesn't receive cash with which to pay the taxes! And if the venture increases in value between the time of grant of stock and the vesting of the stock, an entrepreneur can find himself or herself in the uncomfortable position of having non-cash taxable income and not enough cash from other sources to pay his or her taxes. A very uncomfortable position indeed!

Fortunately, this problem can be ameliorated by making an election under Section 83(b) of the Internal Revenue Code. That section permits a recipient of stock subject to a substantial risk of forfeiture (e.g. losing stock by leaving a company before a vesting period is complete) to choose to be taxed on the value when the stock is granted (presumably at a low price or nominal value) and avoid taxation on the value when the risk of forfeiture lapses. A full discussion of this issue is beyond the scope of this summary description. Suffice it to say that it's a complex decision that should be made only after discussion with your lawyer and your tax advisor.

But it's always good to know about the potential pitfalls in this area and address them upfront – before you receive that uncomfortable letter from the IRS.

#5



Failure to attract, retain and motivate a multi-talented team

A single person in most cases cannot do all the tasks required to bring a technology project forward to a viable endpoint.

The inside joke in the pharmaceutical area is the innovator who thinks his or her innovation is just the thing that large companies should jump at – and at a rich price. It’s the “man (or woman) with a molecule”.

Much more is required than the passion – and competence – of an individual. No one person ever has the entire skill set required to take an innovation and bring it through the many challenges in all areas of the commercialization process.

In the real world the solo entrepreneur frequently finds frustration and burnout as the result of failing to engage help. That involves bringing into the venture employees, consultants and advisors with competencies beyond those the solo innovator possesses.

As the project moves beyond the scientific concept phase, the venture may need experts in finance, operations, manufacturing, marketing, sales and other areas based on the plan to grow the company. In many cases a strong advisory board can help get the company moving in the right direction even before it can afford to bring on part-time or full-time employees in these areas.

It is rare that the initial innovator – usually very strong in the technology – also has the skill set in these other areas.

And it's not enough simply to bring the right people onboard. Motivating them, obtaining their engagement and cooperation in a team-based atmosphere is very important as well. Good leaders understand that and seek to instill a culture of excellence and cooperation toward common goals.

Dr. Daniel Goleman in his series of books on emotional intelligence (e.g. *Emotional Intelligence: Why It Can Matter More than IQ - 10th Anniversary Edition* (2005), *Working With Emotional Intelligence* (2011)) speaks eloquently of the power of the leader who can simultaneously challenge, support and inspire colleagues to go beyond their own self-imposed limitations and reach the level of performance they were meant to achieve. And at the same time, the leader must keep the colleagues accountable to him, the organization – and themselves.

It's very impressive to see when it happens.

Sadly, highly competent technical experts without these skills can sabotage their own ventures. Don't be afraid to obtain some help in this area as you develop your venture and your culture.

Here are some additional thoughts you may wish to consider.

Start-ups that are led by the inventor/technologists typically struggle with issues related to structuring a business and then growing it as a business – marketing issues, finance issues, HR issues, etc. all tend to take a back seat because they believe the utility of the invention is self-evident and that the product or service should sell itself.

They diminish the importance of non-technical team members and stunt the growth of the company by under-investing in the roles that turn the idea into a company. AND... they often lack the ability to pivot. They don't recognize market signals that foretell a dead end for their idea as they see it but open the opportunity to morph it into something that does have value in the marketplace. It's a risk that needs to be addressed in any business plan.

Start-ups that are led by entrepreneurial types who are promoting technology that they have not created themselves run the risk of over hyping the product, over investing in marketing and underinvesting in product development required to get past PowerPoint engineering and elevator pitches that are necessary to actually prove that the idea makes Technical Sense and has market acceptance to make Dollars and Cents. If they have fractured the relationship with the inventor – or never had one to begin with – they lack the ability to pivot because they do not command the underlying technology. These are issues that the wise technology innovator will focus on and address.

#4



Giving up too much to initial outside investors

Giving up a large percentage of equity to early investors is a problem when you need equity to incentivize founders and early employees. It limits the attractiveness of the venture to those working in it.

Giving away control issues can be even more insidious. When initial investors have veto power over essential business activities – incurring debt, issuing new stock, making acquisitions, etc. – the founders can find themselves hamstrung in running the business. Conservative investors may not see the benefits of seizing opportunities and entering new markets.

It's true. Investors should have reasonable protections. Their money is at risk as it's being used in the venture.

But those protections must be balanced by the long-term interests of founders, employees and investors in the growth of the business. Be sure to discuss with your counsel what constraints on management's freedom to operate are appropriate – and which may cause significant problems as the venture develops.

Also, be aware that restrictions tend to grow over time with subsequent financings. So, a restriction given to early investors is likely to be demanded by subsequent investors as well. What's needed is a focus on the long-term growth and viability of the venture.

Experienced investors will know that. So, part of the entrepreneur's job is to find the "right" investors – and to have the patience to continue to work to find them even when ready money appears available. The entrepreneur

may seek to have discussions with the CEO's of other companies to which the proposed investor has provided funds. What has been the investor's management or oversight style? What types of provisions does the investor typically require? It's better to know that up front rather than to find out after the investor is onboard.

As you are interviewed by potential investors, realize that you are gaining insights into their thinking and their style of interacting. Sometimes a growing technology company can benefit from having investors who know the market and/or the technology involved. Those type of investors can be a great source of strategic thinking.

When you "recruit" your investors, you are probably better off having folks who are both able and willing to take up some oars on your "boat" and row with you as opposed to those who act more like anchors!

Once an investor is "in", he or she will be around for a while. So, it's best to choose wisely.

I'd like to make one clarification here.

It is important to preserve the right to give up equity to new employees and new investors. In the startup world, it's the prospect of large capital gains – and tax advantages – that drive people to consider the world of entrepreneurship rather than taking a position with a larger and more stable company.

There are many ways to accommodate most of the interests of the community of people who are stakeholders in a venture. And planning up front for what will come is a key to success here.

As Stephen Covey pointed out in his best-selling book *The Seven Habits of Highly Effective People: Powerful Lessons in Personal Change* (1994) – "begin with the end in mind".

Sage advice here.

#3

Failure to have a written business plan

It's not the plan itself that is the most important item. It's the planning process that counts. Creating the plan requires the company management to think long and hard about goals, metrics, risks and benefits in a way that doesn't happen without crystallizing the thinking into a written plan.

And sophisticated investors will want to see that before they invest -- especially the proposed metrics. As technology guru, Andy Grove, a founder of Intel Corporation, is quoted as saying "If it can't be measured, it can't be done."

By the way, those investors know the plan is likely wrong in many respects. But it is a work in progress that can be, and must be, used and refined as the business grows and develops to guide strategic direction. This is particularly true when it comes to developing an IP strategy.

As we discussed in item Number 7, there are several principal types of IP with distinct advantages, disadvantages and requirements for use and protection. To maximize the value of a company's IP, it's necessary to plan how it is to be used, developed, expanded and protected. There are many ways to accomplish the foregoing. It's important to have a view and plan on how best to do that up front. Mistakes can result in the irretrievable loss of protection of the company's IP.

Working with your business advisors and counsel can help you build into your plan the flexibility to deal with problems and issues the advisors and counsel know you will face. That will increase your chances of success when problems and issues arise – as they always do.

#2

Failure to involve an experienced business lawyer early in the formation process.

It is self-serving – but eminently true – that having someone to identify and help the founders deal early on with risk issues – and especially legal risk issues - can avoid many if not most of the problems caused by issues Number 3 through 10.

I've seen more than one client rue the day he or she saved \$1,000 by taking some forms from the internet and serving as a “do-it-yourself lawyer”. I've had clients who have nearly lost their entire investments in their ventures by failing to obtain help in assessing the risks they were taking and developing strategies to minimize or eliminate those risks.

And, as I pointed out for issue Number 3, in a technology business protecting the firm's IP in a systematic and effective manner is a key issue. Once it's out in the public domain or inadequately protected the ability to capitalize on the IP may be lost – and with it the prospects for the success of the firm.

In terms of organization of the venture, it's always better to anticipate difficult situations up front when people can be rational and not be overcome with emotion – the need to be “right”, to vindicate “principles”. I can tell you that vindicating principles can be VERY expensive. And all the energy and cash spent in the fighting is energy and cash taken away from making the business succeed. Trying to work things out when parties are at loggerheads, tempers have flared and emotions take over can destroy a venture.

And, with proper planning and assistance, it doesn't have to happen. Finding the right lawyer for your venture can be a key factor in addressing issues as a planning matter instead of as a “firefighting” exercise can substantially

increase the venture's chances of success.

An entrepreneur may be in his or her first venture. Experienced counsel – as well as other business advisors – who have helped many such ventures can alert the founder team to issues and problems they may not anticipate with enough time to plan for them. So, don't just settle for any lawyer you come upon when considering your choice of counsel.

Here are some questions to consider when selecting your counsel:

1. How long has the counsel been practicing in the area of interest to you?
2. How frequently has the counsel handled issues like the ones that you can identify are facing you?
3. Is the counsel interested in businesses and technologies like yours?
4. What other experience has the counsel had in businesses or technologies like yours or related to yours?
5. Does the counsel have a sense for business priorities?
6. Is there “good chemistry” between you and the counsel? Is this someone who seems to be able to listen well to your concerns and to communicate well?

Doing some initial due diligence here can pay great dividends. Having the right legal counsel can help you position your firm to optimize opportunities and minimize or avoid risks and liabilities as you grow and develop your business.

#1

Failure to Focus

The top reason that I have seen for tech startup failure has three parts. Let's go at them in reverse order.

#3 A **VERY** important point.

The failure of the company to focus its resources, time and attention on the one or two most promising near term projects that can result in measurable success and potentially another funding point.

#2 is **EVEN MORE** important. It is

The failure of the company to focus its resources, time and attention on the one or two most promising near term projects that can result in measurable success and potentially another funding point.

#1 which is the **MOST** important of the three, is

The failure of the company to focus its resources, time and attention on the one or two most promising near term projects that can result in measurable success and potentially another funding point.

It's simple. Just as the three most important factors impacting success in real estate investing are . . .

Location . . . Location . . . Location

For tech startups, it is

FOCUS...FOCUS...FOCUS.

When I hear a presentation where an innovator or an academic researcher speaks about how his or her technology is broadly applicable to many industries – without specifying exactly how and why it would be used and what the size of the market is in the United States and the rest of the world – I’m thinking to myself “My money would be going to finance a science project.” Other investors with whom I’ve discussed this give me the same reaction.

Needless to say, those proposals don’t often attract investment. And companies who spread their constrained resource over too many projects risk running out of money before they can complete any of them.

Don’t let that happen to you.

A successful technology entrepreneur I know has emphasized the importance of focus in businesses in which he has been involved. He likes to see companies get to a minimum viable product or technology (“MVP”) that gets roughly 90% of the way to the roughly ideal commercial solution. Then you need a real live customer using the MVP and stress testing it to help the company figure out what the last 10% of features, functions and benefits should be.

Do you think that can’t possibly work? Think again!

Remember Windows 1.0 software from Microsoft – a small upstart technology company – back in November of 1985? It was underpowered and lacking in features measured by today’s standards. And I’ve been able to find over 25 versions of the Microsoft Windows software for individual computers – and additional versions for servers – since the initial launch.

However, the licensing of that original software helped Microsoft bring in cash and learn from the experience of real customers using it every day. And it also allowed Microsoft to eclipse the market penetration of one of the prime innovators of the graphical user interface, Apple Inc. Clearly the experience of real customers with your product – if you can obtain it – can be worth even more than what the customers pay for the product.

I’ve also found another area in which focus is important – presentations, your “pitch deck”.

I’ve seen too many presentations by startup entrepreneurs that seem oblivious to the audience they’re addressing – typically Angel investors or venture capitalists. They launch into a detailed description of the wonders

of the technology in which they are steeped in tremendous detail and leave potential investors to figure out the answers to the investors' primary concern – how can I make money in this venture?

I had the great opportunity a while back to have a conversation with Dr. Curtis Carlson, former President of SRI International, a leading research and innovation organization responsible for thousands of inventions and technical breakthroughs themselves and for training many large organizations how better to innovate. He has focused for decades on innovation – how to do it and how to teach organizations to do it.

I've adapted some of his thinking into an outline that I've recommended to many of my clients and contacts as a more disciplined method for attracting investor interest. It's not the only way to approach presentations of this type, but I'll set it out here for your consideration.

The approach follows the mnemonic M-S-A-B-C. It's not intended to be a "cookie cutter" approach but rather a set of principles to be measured by the innovation involved and the audience to which it is being presented.

M is for the market for the issue your innovation addresses. How big is it in the United States? outside the United States? What are people doing in that market to address the issue now? What market "pain" are they seeking to address? How much money is being spent? What are the results? Why do the results need improvement? How do you know?

S is for stakeholders – who are they and what are their interests in the issue? Are there some who would be directly benefited? Are there others who would be damaged in some way by your innovation – through loss of business or otherwise? Are there insurers or other payors involved? What would be the effect on them? Are any of them potential allies? What are the stakeholders doing now to address the problem? Will there be inertia in getting them to change how they do things?

A is for approach – how your innovation addresses the issue at hand. Yes, it's only after the Market and Stakeholders have been identified that we speak of the technology. That gives the potential investors the context to know why the innovation can be profitable. And this part of the presentation needs to be tuned to the audience – concise for financial investors, more detailed if presenting to a room full of Ph.d.'s in the subject area of your innovation.

B is for benefit. Here you speak about the benefits and costs of the innovation.

C is for competition. I always smile a bit when I hear an innovator tell me “There’s NO competition. My technology and its benefits are completely unique!” Well, people are doing something in the market to deal with the issue. So, that’s at least one element of the competition.

The innovator has to motivate people to do something new, something different. That can be difficult in areas that are very conservative – like medicine. Systems grow up around doing things the old way and it takes work to help them see the need to break old habits.

And there are other innovators out there as well. They are unlikely to stand still while you innovate past them.

Finally, make a request for a specific amount of money, provide a detailed list of goals to be accomplished with the money and a timeline for doing so.

I tell my clients – that approach will not get them a check at the end of the presentation. But it increases the chances they’ll receive an invitation to a further meeting. That’s the real goal.

Also, it’s important to realize that there are times when a company may need to do things that seem to be “de-focusing”, like getting a product out quickly, your MVP, to start the money flowing in. That’s another area where having a team with complementary skills that work well together, along with the right mix of outside advisors, can be particularly helpful.

The question the management team needs to address when conditions change – as they always do – is “Is this change or opportunity a distraction or a new direction?” Having a diverse group of individuals looking at that issue promotes a useful dialogue and increases the chances of making the right decision for the business.

So, I’m not saying that no changes are permitted – but rather than changes need to be carefully considered and thoughtfully pursued if found necessary. And then the business can FOCUS on the new direction.

CONCLUSION

So, there you have it. My list of the top 10 causes of the failure of technology startups. Consider how many you've seen in action in other startups and use them – as well as other causes you've observed - as a checklist for your own venture.

How many of them are increasing your risk factors? How many of them are well under control?

Of course, these are not the only issues and problems that can derail a technology startup. However, focusing on these factors and putting in place plans and practices to minimize their impact on your venture will give you the time and bandwidth required to deal with all those other challenges you face on a daily basis.

A bit of reading in this area can be particularly helpful in understanding the startup process and particularly the Angel investors with whom you're likely to start. You might review Brian Cohen's and John Kador's insightful book "*What Every Angel Investor Wants You to Know: An Insider Reveals How to Get Smart Funding for Your Billion Dollar Idea*" (2013). Cohen and Kador provide their views on what Angel investors are looking for in early-stage startups. Focusing on those factors can be very helpful in preparing you for the due diligence investigations that serious investors favor.

Note: The foregoing does not constitute legal advice but is rather a general discussion of issues I've observed.

Before addressing any of your particular legal issues you should engage your own counsel to review your unique circumstances.

I applaud your efforts to work to use technology to improve our societies and our world. At least now you know some of the stumbling blocks that can stand in your way and some initial thoughts on how to increase your chances for success. If you have any questions about the foregoing, or like to add your own thoughts, please let us know via our web portal www.crowleylawllc.com.

If you are in the process of forming your company or moving your development forward, we'd love to speak with you. Call us at (844) 256-5891 or email us at Info@CrowleyLawLLC.com to set up a complimentary conversation with a member of our Team.

We're here to help."

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