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A Small Business Guide
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Lessons Learned Along the Way

Pandora was Zeus' creation and his revenge upon man for having accepted the fire stolen from him by Prometheus. As the first woman, the gods presented her with a box into which they had placed all the ills of mankind, with Zeus contriving to make Pandora's curiosity release them into the world. Lest becoming involved in technology-based businesses can seem a little too much like opening Pandora's Box and finding oneself confronted by unknowable difficulties and traps, let's look at a lot of the hard lessons we have learned along the way.

LESSONS LEARNED ALONG THE WAY

Experience, whether in any business, profession or sports, is nothing more than making our share of mistakes. While the winner of the race may not be the swiftest or the strongest, that's who we put our money on–particularly when working in new technologies that have the capacity to change the economics of industries. And so, at the end of the day, we come full circle to known people bloodied by experience with a few basic lessons we might want to heed.

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Cash Is King. Small businesses are always resource and cash limited and will always take on more than they can deliver. Most entrepreneurs will jump off the cliff believing that some investor or angel will catch up with them. Bad news—the law of gravity hasn't been repealed. Lack of money is by far the greatest single source of failure for most entrepreneurs. The money people know that it will always take at least twice as much money as we originally figured—and probably three times as long. At the seed and start-up stages, we can only really control our expenses—defer, defer, defer expenses until we have a sound financing plan in place to carry us for at least the first 2 to 3 years. And, don't be quick to fall for the interim credit-card financing approach to finance the operation while working through "expressions of interest" from several sources. I know that *Inc magazine* has written several stories about entrepreneurs who made it this way but, believe me, these are the exception. At worse, we'll be stuck with payments for many years; at best we'll lose our negotiating position with investors if a large amount of funding has to be used to pay off existing debts. Plan for the long haul and try to build a sound and prudent business basis through patents or proprietary positions while carefully nurturing the fledgling business.

Never Work in a Vacuum. Someone a lot smarter than us will find a way to overcome a specific technical, business, or legal problem that will occur if indeed we have a viable commercial opportunity. Too often, our training causes us to focus inward and to shun outside help when it is offered. This is particularly true of entrepreneurs who have experienced the typical 5-year rejection cycle that most of us go through. It's hard to see light at the end of the tunnel when all we see is another rock being thrown at our "baby" by well-meaning advisors.

Know Where We Want To Go and What Outcome We Desire Before We Start the Game. This way, we do not lose sight of the end result as objections and disappointments confront us along the way. We must plan our part as necessary lest our emotions sway our judgment and our patience expires. I'm a great believer in success through planning. Remember, it's not the plan itself that's the key—it's having a plan with written and measurable assumptions that allow us to determine if we are at least on the right road. As someone once wrote, be careful, you just might finish up where you want to go—in spite of yourself. Persevere.

Tell a Simple Story With a High 'Wow' Factor. For the few technologies that make it to market, the end of the yellow brick road is a public or private offering of some type. Our ability to communicate excitement and interest is paramount to our success. This is why the "best" technology deals are simple, solve an identified problem that people can relate to, and are easy to explain—particularly to the hard-nosed media. One of the more recent deals we have worked on is for a battery charging technology that can recharge a cell phone or computer battery to 99-percent capacity within 2 to 3 minutes—bet you can relate to that opportunity!

Translate Science and Technology Into Terms That Are Easily Understood by Both Business and Investors. Most business people and investors are trained to place their faith in abstract numbers and to dismiss longer term visions. Worse still, they haven't repealed the adage of "he who owns the gold, makes the rules!" Conversely, entrepreneurs and researchers most times get hung up on the beauty of technology, failing to realize the time and costs involved in commercializing an embryonic technology.

Put together simple revenue and expense forecasts with the assumptions clearly listed and measurable. Investors are looking for confidence in us—that we know what it is that we want to do, how much it's going to take to get there, and most importantly, how we will know when we get there. One of the more simple ways to express this is a new method called Discovery Driven Planning. This method starts with the end in mind—ROI from an income statement—and calculates forward costs and key testable assumptions. To read more about this method, get a copy of the *Harvard Business Review*, July-August 1995, article titled "Discovery Driven Planning," by Rita McGrath and Ian MacMillan.

Gain Industry's Interest. Demonstrate solid interest from industry in product applications for the technology in particular markets of interest. Nothing beats a third-party testimonial in conferring credibility on our opportunity except, of course, an order in hand. Industry sells products, not dreams. Investors want to make money not, unfortunately for the most part, solve societal problems. And, we must be sure we can demonstrate clearly that we understand the competition we are up against! "We have no competition" is baloney—there is always an alternative to our product even if that alternative is to do nothing! It is essential to build early and honest relationships with industry and to deliver, deliver, deliver. . . .

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Form a Multidisciplined Business Team. A multidisciplined approach is necessary to commercialize technologies. Our team should comprise strong management and marketing together with good technical leadership, as well as a legal capability, to perform the functions necessary to get the job done. I used to think that marketing was 90 percent of the job—innovation 10 percent. Now I think marketing is 98 percent to get a new high-tech product across the chasm that separates early adopters from mainstream users. And remember, at the end of the day when all the marketing jargon is stripped away, there are really only three marketing plays: commodity, differentiation, or niche—which one are you?

Align Our Interests. Whether working with a bank, investors, or corporate partners, we often overlook a simple and very basic fact—we all look at things very differently and expect different outcomes. It is critical that the expectations of each party be understood and aligned particularly when dealing with major cultural differences in size. Family businesses need special attention in this regard—watch out for the "mystery person" behind the scenes if we sense that we're not dealing with the key decision maker. Also, beware of the wounded prince syndrome—the autocratic leader who may be inflexible if/when things don't go his or her way. And don't forget to share an accurate understanding of our respective strengths and weaknesses with each potential partner. Small business is traditionally quick to make decisions, long on technology and short on management, marketing, and sales. Conversely, big business is slow on deciding and often operates with a conservative management committee approach. Successful alignments identify areas of cooperation and introduce flexibility into the relationship early on. The answer: identify champions on both sides of the fence who have a stake in a successful outcome to reconcile differences—before they become major problems.

Make Realistic Projections. Another common problem for most of us is being too optimistic in estimating the sales cycle time and potential barriers to entry, which destroys our key revenue line and our credibility as well. Take a moment to imagine how we feel when presented with a purchase opportunity from a company with which we are unfamiliar—we also go with the tried and true. If we're old enough, we might even remember the famous McGraw Hill ad that stressed the value of advertising—the ad that starts out with "I don't know your company . . ." and progresses to ". . . now what was it you wanted to sell me?" To succeed in introducing a new product, and getting across the marketing chasm, we must identify and have no less a goal than to dominate a niche—reread the section on niche marketing if this is a revelation. This means we clearly understand and, moreover, can articulate our USP (unique selling proposition) to our defined target audience. Our competitors will not willingly give up market share so be prepared for a fight!

Be Prepared To Defend Our Numbers With Independent Confirmation. Business ultimately reduces itself to numbers. We musn't take umbrage when our potential investors, partners, or associates challenge our projections. Because most of us are unknown quantities in this game, people do, and must, place more faith in others when first presented with an opportunity. Primary market research (testimonials, potential customer confirmations, clearly articulated needs) carries more weight than the traditional top-down secondary market research approach (x% of a $billion market) or a "believe-me attitude."

Be Open, Patient, and Social. Someone once wrote, and I paraphrase, that the smartest man in the world wasn't the person who knew everything but rather the person who knew everyone. Taking technology to market is an extreme exercise in team building that requires a climate of trust and patience. Encourage and facilitate social interactions early on to create this climate and to build relationships amongst all parties: the management team, investors, advisors, partners, and customers. Sometimes a little libation in a nonthreatening out-of-office environment can work miracles.

Seek Early Involvement, Comments, Suggestions, and Concurrence From the Government and Universities When They Are Involved. Extreme patience is necessary in working with the government funding, R&D programs, and legal sections because government has to reconcile a myriad of interests. Likewise, the university environment contains a plethora of cultures and interests. Be prepared to serve as the key interface between customers, investors, and public-sector partners if the opportunity comes from this side of the house. And, oh yes, allow lots of time!

Technology can and does change the rules of the game. Look at a roster of the 100 largest U.S. companies at the beginning of the 1900s—only 16 are still in existence. Fast forward to the Fortune 500 list first published in 1956—only 29 out of the Fortune 100 could still be found in the top 100 by 1992. In fact, during the 1980s, 46 percent, or 230 Goliaths, disappeared from the Fortune 500. The final lesson to be learned: neither size nor reputation guarantees success in managing technology in our global economy. This means that the Davids of our world can indeed smote the Goliaths with their technology slingshots—yes, the small business owner can indeed win the technology game.

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