

# Natural-Born Entrepreneur

*His most famous invention, the computer spreadsheet, changed the course of business. But to this entrepreneur, it was no big deal. He was just doing what came naturally.*

by Dan Bricklin

**I WAS LUCKY.** No doubt about it. In 1979, when my partner, Bob Frankston, and I created VisiCalc, the first electronic spreadsheet, we didn't realize it would jump-start the personal computer industry—let alone revolutionize the way businesses kept records and tested financial scenarios. In the midst of my studies at Harvard Business School, I had grown more than a little frustrated by having to manually calculate and recalculate every single change on a spreadsheet as I worked through a case study. There had to be a better way, I figured, so I started designing a computer program to address those inefficiencies. I described my idea to Bob Frankston, whom I'd met as an undergraduate at MIT, and he agreed to try to turn my primitive prototype into a working program. After toiling for several months in the attic of Bob's home, we had a hunch that we might have something big on our hands. The rest of the VisiCalc story is replete with the usual twists and turns—not to mention some very difficult downturns. But that cool little software program is still regarded as the first killer app of the PC in-

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dustry, and, much to my surprise, I have had to get comfortable with being famous as “the father of the electronic spreadsheet.”

Some 20 years and four start-ups later, I still get my jollies the same way: by creating tools that solve people’s everyday problems. I like to think these are tools that speak to people’s needs, whether for expressing a personal passion, such as publishing digital photo albums, or for solving a practical problem, such as automating the small-business budget or prototyping a piece of software. Times haven’t always been easy. I’ve lived through a lawsuit, layoffs, two acquisitions, and a failed start-up. (Let’s just say that I won’t be endowing any university buildings or faculty chairs anytime soon.) But life as an entrepreneur, professional tinkerer, and technology and business commentator has brought me many joys.

Aspiring entrepreneurs and business executives frequently ask me what I’ve learned, especially now that the notion

of being an entrepreneur seems both glamorous and, every once in a while, an effective method for getting rich. I’ve done a lot of thinking about that question recently, and although I don’t have a complete answer, I do know that unless you find your true calling and love your craft, the risks may outweigh the rewards. Sure, training, talent, and that most elusive component, good timing, are essential. But they are not enough. You need to have a true passion for what you’re doing.

You also need humility. We’re coming out of a time—the dot-com era—when many entrepreneurs have lost all sense of humility. They’ve come to believe that the lessons of the past no longer apply and are, in fact, laughable. They’ve paid a price for their arrogance. Personally, I’m convinced that much of what I know has come from paying attention to timeless questions and to the work of those who came before me.

## What Will People Pay For?

Someday soon, so we've been told, cell phones will become our most ubiquitous and essential financial instrument—to be used for everything from checking stock quotes and making trades to buying all sorts of goods and services. Cell phones, these prognosticators argue, will lead a wave of wireless e-commerce, and people will pay to use cell phones in order to make all sorts of purchases.

I beg to differ.

If you look at why people actually use the Internet, cell phones, and other communications technologies *they pay for*, you quickly discover that they are rarely driven by a desire to buy things or track their money. Unlike the kings in children's rhymes, most people don't sit in their counting houses counting out their money. Most people don't buy and sell stocks so frequently and on such whims that they need to do it on a cell phone. When have you ever heard any normal person say, "Oh, look! That trendy kid over there is wearing penny loafers! Quick, I must buy stock in a penny loafer company before it goes up this afternoon." The reality is, most people don't buy and sell many stocks at all—and certainly not the imagined majority who will supposedly drive the wireless Internet revolution.

So what will people pay for? For that answer, listen to cab drivers on their cell phones. Listen to bus drivers. Listen to mothers and teenagers in the mall. Who among us hasn't witnessed—or participated in—these kinds of conversations? "I finally left the office, but traffic is light," "Yes, I can pick up a pizza on the way home," "I've got a free minute and thought I'd say 'hi.'" Or, watch people when they go to an Internet café in Paris, where fellow travelers stop in to connect to the Internet over a café au lait. You don't find them surfing to buy things. Instead, they pay money to send e-mails to friends and loved ones. A large percentage of AOL usage comes from instant-messaging services.

The fact is, people will pay for the privilege of saying "hi," flirting, chitchatting about their days, and coordinating activities with their buddies and families. People engage in all sorts of seemingly mundane and trivial activities: forwarding jokes to people, recommending URLs, arranging dinner plans, and, yes, gossiping. People will also pay money to give little gifts to show that they remember a special event, that they care about or are thinking of someone. They send postcards (mainly the paper kind but increasingly the electronic kind), they spend an inordinate amount of their valuable vacation time buying souvenirs, and they love spending money on friends and loved ones at special times like Christmas. Indeed, for many of us, it is absolutely more fun to give than to receive.

No matter how banal some of these uses sound, they are exactly the kinds of activities people will pay for and have always paid for. (Think of that now archaic communications tool, the telegram, which people continued to use for years in celebration of major life events in spite of its high cost.) Instead of dreaming up far-fetched uses for the technology, we ought to spend some time considering what it is people actually want to do and what the natural uses of these devices might be.

## Composing a Life

My formal training with computers began in high school in 1967 when I participated in a National Science Foundation summer program that enhanced my basic programming skills. My education continued at MIT, where I worked at Project MAC, which later became the famous Laboratory for Computer Science. MIT helped me strengthen my skills in programming, systems design, and algorithm analysis and gave me an appreciation for the knowledge and abilities of the great technologists who came before me. My generation was wrestling with the same general problems that the greats, all the way back through Galileo, were trying to solve. Like a lot of my peers at MIT, I revered those who came before me, and I was honored to work with a current generation of stars.

After graduating from MIT, I took a job designing computerized typesetting and early word processing at Digital Equipment Corporation. Four years later, I went to business school, where I learned to understand the relationship between things—for instance, how decisions about allocating costs affect other parts of the business. Business school taught me that all aspects of business, even the seemingly mundane activities, can be fascinating and challenging. Try your hand at enough case studies, and you realize that nothing is as simple as it first appears. These were key moments in my development, but in terms of what made me an entrepreneur, other factors were surely at work.

My entrepreneurial backbone was formed much earlier, as a kid in Philadelphia. My father headed up the family printing business, Bricklin Press, which had been founded by his father in the 1930s. Afternoons spent at





# ARTICLE AT A GLANCE

## THE IDEA IN BRIEF

In 2001, 20 years and four start-ups after Dan Bricklin created the first electronic spreadsheet, VisiCalc, aspiring entrepreneurs often asked him what he'd learned along the way. Besides the need for training, talent, and good timing, he suggests these lessons for surviving the ups and downs of entrepreneurship:

- Understand your true talent and value, appreciate the contributions of others, and know when to ask for help.
- Don't wait to get started, or if you do wait, know that eventually you may be less willing to sacrifice your standard of living for the sake of the business.
- Most important, realize that you are not your business. Your company's success or failure does not reflect on your worth as a person.

Bricklin says his work has been shaped by the idea of being an active participant in making the world a better place. Ultimately, do what you love and don't do it for the dream of money alone.

the printing plant and dinners devoted to the day's business problems prepared me (though I didn't realize it at the time) for the trials I would face in my own business ventures. My family's unspoken dedication to the business gave me respect for the paradox of running your own business—the contradictory feelings of freedom and responsibility that define the experience of setting out on your own. Growing up, I never expected that some big company would eventually take care of me; instead, I was always looking for opportunities to turn some nifty idea into a business. Some ideas would work out, I hoped, but I knew others wouldn't, and that risk didn't stop me from wanting to try. I suppose you could say the entrepreneurial instinct was in my genes. But much like a lot of people, I also became an entrepreneur because I felt I couldn't achieve my goals through any other means.

Another important part of my early entrepreneurial training came from a source many people might regard as unusual—the religious instruction I received in Jewish day school, which I attended from kindergarten through high school. Many of my values, my ways of approaching problems, and my first skills as a leader were formed there. One concept of Judaism that greatly impressed me was *tikkun olam*. According to one story, when God made the world, he left it a little bit incomplete. Instead of making bread—so the story goes—God gave us wheat; instead of bricks, we have clay, and we have to bake the bricks ourselves. Why? So that we are partners in completing the act of creation. The point of *tikkun olam* is that our time on earth is important; we are not passive observers but active participants in making the world a better place. That sense of individual responsibility—the need to ask, How will I participate?—stuck with me.

My religious studies also taught me how to analyze complex problems. When you study Torah, you learn how to peel an onion. You learn to look at a situation, a single word or phrase, and to appreciate that even one word can have multiple interpretations. The process of discovering each meaning is gratifying, and it teaches you different styles of logic, which in turn deepen your understanding. The discipline of studying the Bible certainly played a role in my technical work because it reinforced the importance of examining a problem from all angles, sorting through the possibilities, testing different models, learning from them in the process, and recognizing the contributions of great philosophers. As a kid, I had already acquired a passion for tinkering. In the third grade, I built an electromagnetic crane from scratch for a school science fair, and a few years later I had advanced to Heathkit voltmeters, shortwave radios, and a stereo system for my parents.

In yet another way, my religious studies gave me what you might call “just-in-time” leadership training. As one of the more advanced students of Hebrew in my synagogue, I was often called on to lead services, which meant that I had to be able to get up in front of my peers and adults to chant from the Torah. I don't have a particularly melodic voice—

I'm no Pavarotti—but that experience helped me to become comfortable performing under pressure and speaking in front of groups. Equally important, it taught me to accept that I would make mistakes and that the crowd wouldn't rip me to shreds. I also came to understand that one of the jobs of the leader was to teach other students how to chant from the Torah themselves. Because of my notoriety and my years as an entrepreneur, these days I am often asked to speak before large audiences, to pitch my ideas to investors, or to give talks to journalists and conference audiences about trends in technology or products. Performing these activities has been made easier by those formative experiences in temple.

So, are entrepreneurs born or made? For me, the answer has been both: through a combination of following my instincts and being in an environment that cultivated and directed my talents. And I suspect this is the case for most entrepreneurs.

## Learning on the Fly

Even with good training and strong motivation, being a successful entrepreneur is tricky. You have to live with having control and *not* having control at the same time. It's like this: In big businesses, when you need to cross a river, you simply design a bridge, build it, and march right across. But in a small venture, you must climb on the rocks. You don't know exactly where each step will take you, but you do know the general direction you're moving in. If you make a mistake, you get wet. If your calculations are wrong, you have to inch your way back to safety and find a different route. And, as you jump from rock to slippery rock, you have to *like* the feeling.

Of course, you can save yourself some grief by taking to heart some conventional wisdom: Hire the right people. Choose people who are flexible—who don't mind doing the dirty work—especially in the early days, when there's more than enough work to go around. And, yes, do what you love, and don't, whatever else, do it for the dream of money alone. Too many people

Even today at Trellix, the company I founded to build Internet publishing tools, my title isn't president or chief executive officer. It's chief technology officer, a role I planned to hold from the very beginning. I'm not the most senior person in the company, but I can influence the company's direction in ways that matter to me and make the company better. I'm

**On those darkest days when things aren't going so well, try to remember that your company's failures don't make you an awful person. Likewise, your company's successes don't make you a genius or superhuman.**

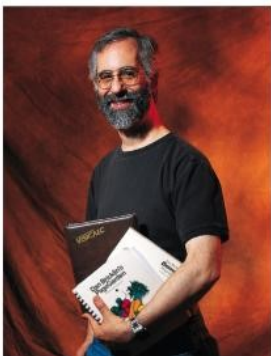
joined dot-coms for the lure of money and glory, only to be left with neither in the end. But those of us who love our craft find that approach foreign. We like to work in areas that interest us, and we hope money will be a by-product. To be sure, certain business truisms still apply: People matter, and focus is important. And yet, I'd like to suggest a few other lessons that have made all the difference to me.

First, understand your true talent and what value you bring to an endeavor. Too often, entrepreneurs don't value the work others do, and they tend to overestimate their own contributions. Of course, in the early days, when you're simply trying to give birth to an idea, you may not need help from outsiders. But when—make that *if*—you are able to take the business to the next stage of growth, a different and deeper set of talents may be required. If these aren't your talents, you may need others to step in—for instance, to swim in the details of running the operation, to build strategic partnerships, to set financial priorities, or to make the trains run on time. When you have had to do everything as I have—right down to packing the product, licking the stamps, and hiking to the mailbox—you develop a greater appreciation for the contributions of others, from the office manager to the production manager to the customer service people.

also the public face of the company, which happens to be a role I enjoy. I appreciate the work others do, how their talents contribute to the business, and what I can learn from them. Still, founders always play a special role. Take Paul Allen, for example. In most people's minds, he's still associated with Microsoft, even though he hasn't worked at the company in years. But sometimes founders have to forgo the CEO title for the sake of the business. Accepting that hard truth is often best for the founders, too.

Second, don't wait to get started. Or at least understand that if you wait, you may have less flexibility in making trade-offs between the business and your standard of living. MBA students often ask me whether they should start a business right after graduation or wait until they have more experience. The answer depends on a number of factors, naturally, but I do warn them about the personal sacrifices they will undoubtedly face. All entrepreneurs must ask themselves whether they will be able to tolerate these sacrifices—and whether their families will be able to tolerate them, too. Granted, if you wait until you've been in the workforce for a few years, you'll have more business experience and, let's hope, money in the bank. But you will also have grown accustomed to spending more money; you may be faced with the terror of not being able to make a decision about the business because you can't afford it. If you start early, on the other hand, both your appetite for creature comforts and your family responsibilities are not likely to be as great, and you will be able to make different choices. That's one of the reasons it's important to evaluate the risks and rewards of a venture in such a way that even if you don't succeed, you'll still be happy.

No matter what, however, you must always be a careful spender. In every business I've started—whether backed by venture capital funds, family investors, or my own bank account—I've arranged my affairs so that on short notice I can afford to live without a salary for a year. This approach has allowed me to keep the business going longer with fewer resources or to start another venture if the first one dies. And I've had to do that. For



Dan Bricklin, who changed the face of the computer industry with his invention of VisiCalc, says he became an entrepreneur because he couldn't achieve his goals through any other means.

instance, when Bob and I were developing VisiCalc, we raised a little more than \$25,000 from family members as a down payment for the computer we used to write the program. Then we obtained royalty advances from the publisher who agreed to distribute the software, which we used to pay other expenses. We didn't draw a salary for about a year, and we were able to live like a couple of students. We were willing to stay in the cheapest hotels or with family members when we traveled to trade shows or made sales calls, and on a few occasions, we even shared a bed if it meant we could save a few dollars. Neither of us had a lot of other responsibilities at the time, so when we sacrificed a little personal comfort on behalf of the business, we didn't have to worry that our families would suffer, too.

The final and most important lesson every entrepreneur must learn is this: You are not your business. On those darkest days when things aren't going so well—and trust me, you will have them—try to remember that your company's failures don't make you an awful person. Likewise, your company's successes don't make you a genius or superhuman. To avoid this ego trap, first you should consider the difference between pushing a tidal wave and riding one, and second, you should accept that every business faces challenges beyond its control. Obviously, these are difficult points to remember when you're heading for a rough patch, but I tell you from experience, business failure is not the end of the world.

Fortunately, I learned the meaning of failure early when Software Arts, the company I established to develop VisiCalc, went belly up in a very public fashion. My friends and family were able to follow virtually every step of its demise because the company's difficulties—a horrible lawsuit with a partner that eventually left both parties broke, and the sale of our assets to Lotus to stave off bankruptcy—were regaled in publications

such as *USA Today*. I can recall one particularly awful Friday. I was returning from the West Coast on a red-eye flight with the knowledge that I would have to inform half my staff that their jobs were ending that very day. I was heavy with the weight of that responsibility as I walked off the jetway at seven o'clock in the morning at Logan Airport. Half wondering who would possibly show up to greet passengers at this hour, I lifted my bag onto my shoulder and then turned to see my own family waving and smiling. They knew what kind of day I faced, and they had shown up at this painfully early hour to support me. I cannot tell you how important that moment was to me—and still is. It didn't change the fact that my business was in trouble, but it did make it easier to do a hard job. When you're an entrepreneur, you need a family who will support you that way, a family who will separate your success in business from your worth as a person. I was fortunate to have come from a long line of entrepreneurs, which means that my family doesn't think I am crazy for heading down the same path. Not all my family members have chosen to be entrepreneurs themselves, but they certainly have understood and tolerated the choices I have made.

**THESE DAYS**, I try to share my experiences as an entrepreneur with other people. I've told my story to many different audiences: business school students, grade school kids, and job-retraining students. In these talks, I make use of a collection of artifacts from my various adventures. These include photographs from those early days, a video of old staff meetings and the Apple Mac announcement, the original VisiCalc program (a working version of which can still be downloaded from the World Wide Web), company T-shirts, old newspaper clippings, and old pen computers and typewriters. People seem to love hearing these stories, warts and all, because—let's face it—we all have our ups and downs, and it's some comfort to know that others have faced and survived hardships, too. Stories like mine, I suppose, give people hope. The point I'm trying to make is that even though I am not wildly rich, the experiences and influence I have had are worth more than money can buy.

How lucky and happy I am to be here. Someone else could very well have gotten here first—someone else could have been the pioneer, the so-called father of the electronic spreadsheet. All of the ideas were already floating around. I just happened to be in the right place at the right time with the right skills and experiences to put the pieces together. As you go through life, you never know what little thing will make a big difference. When I turned 50 this summer, I looked back with wonder and relief. My efforts had amounted to something, even more than I had any reason to hope for. ▀

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**Dan Bricklin** founded and served as chief technology officer of Trellix Corporation (now owned by Web.com). He is currently the president of Software Garden, Inc., and the chief technology officer of Alpha Software Corporation in Burlington, Massachusetts.

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by Daniel Isenberg

Harvard Business Review Press, 2013

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