Finding the Next Steve Jobs

Nolan Bushnell with Gene Stone
FINDING THE NEXT STEVE JOBS is a book about how to find, keep, and develop highly creative people. The author, Nolan Bushnell, was Steve Jobs’ first boss, and has been a mentor not only to Steve but also to hundreds of the most creative minds in Silicon Valley and elsewhere around the world.

The book contains a collection of short chapters, called Pongs, named after the video game Bushnell helped invent forty years ago. The premise of the book is that no matter what your company does, you must be creative to thrive in today’s extremely competitive business environment. This means finding, hiring, and nurturing creative talent—something few organizations know how to do. Each chapter offers concrete takeaways for the reader, some of them novel, some intuitive, some counter-intuitive.

Nolan Bushnell is the founder of video game company Atari, Chuck E. Cheese—the first restaurant to integrate gaming into its entertainment model—as well as twenty-five other companies. Bushnell has been inducted into the Video Game Hall of Fame and the Consumer Electronics Association Hall of Fame, received the BAFTA Fellowship, and was named one of Newsweek’s “50 Men Who Changed America.” He’s a frequent subject of media coverage and was prominently featured in Walter Isaacson’s best selling book, Steve Jobs. He is a well-known speaker on the global lecture circuit on such topics as creativity, education, talent management, and innovation, and has a massive global following online, as indicated by his unusually high Klout score (a metric measuring one’s influence on social networking websites).

Net Minds, a digital publishing startup, will publish this book in early 2013 in North America. Gene Stone, a bestselling author and highly sought after ghost writer, partnered with Bushnell to create this work. What follows is the table of contents, the introduction, three sample Pongs, and the conclusion.
FINDING THE NEXT STEVE JOBS
The Art of Building a Creative Culture

By Nolan Bushnell
   With Gene Stone

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INTRODUCTION

In 1980, business at my company, Chuck E. Cheese, was excellent and I was feeling flush. So I bought a very large house on the Champs de Mars in Paris, right between the Eiffel Tower and the École Militaire. The home was quite remarkable: At six stories, it spanned 15,000 square feet, had marble staircases, and featured a swimming pool in the basement. At the time, my wife and I didn’t have any furniture yet, so we thought: Why not fill it up with people instead?

So we did. We threw a huge party, inviting everyone I knew at Chuck E. Cheese’s and my other company, Atari, and all my old friends as well. Oddly, more people showed up at that housewarming in Paris than for a party I’d recently thrown at my Woodside, California home. The festivities lasted from dusk till almost dawn.

At around nine o’clock in the evening I looked up and noticed that my former Atari employee, Steve Jobs, was at the door. I smiled, and Steve rolled his eyes—I think he was a little taken aback at the size of the place. While I was going through a grandiose period, Steve was the same as ever: not really a grand kind of guy.

“Hey,” I told him, “glad you could make it.”

He replied, “If you’re going to have a party in Paris, I’m going to be the last guy to miss it. Anyway,” he added, “I needed a vacation.”

I asked how long he’d be in town, and he said a few days.

“Let’s have breakfast tomorrow, then,” I offered, and he agreed.

As we continued to talk, I noticed that Steve’s appearance had changed since he’d worked for me at Atari—in fact, each time I’d seen him since, he’d been better dressed, more adult looking. This night he was wearing his usual Levi’s 501s, but
remarkably, they were clean. And although his hair was still long, he’d actually washed it before showing up.

On top of that, Steve’s manners were impeccable. It seemed as though he had civilized himself. Though he had been a terrific employee at Atari, no one could say he’d been terrific with people.

At this time his new company, Apple, was already quite successful, probably doing a little less than one hundred million dollars in sales—but nothing close to what Atari or Chuck E. Cheese’s were earning. In 1980, Atari was bringing in two billion dollars in revenue and Chuck E. Cheese—with more than 200 restaurants—some five hundred million. I still didn’t feel too bad that I had turned down one-third ownership of Apple—although I was beginning to think it had been a mistake.

I was nevertheless quite proud of Steve and felt part of his success. Atari had helped him a great deal. For example, we’d given him computer parts and let him buy microprocessors at cost—in fact, almost all the early Apple parts came from Atari, without markup. The Apple modulator, a very tricky device that allowed the Apple II to connect to a television set, was based on our off-the-shelf design.

The next day Steve and I hung out. Acting as tour guide, I showed him my favorite places, including the café Les Deux Magots, where we sat for hours and talked about creativity.

I told Steve that Paris brought out my best creative ideas: “There’s something about this area that is good for thinking big thoughts.” He agreed.

We spent the rest of the day walking around the city. I continued to point out my favorite places to visit, but Steve was most interested in two things: all the creativity he sensed, and the architecture.
“It’s really neat to see so much creativity,” he said. “So many people who are doing their thing and evidently making a living at it.” He talked at length about the historic Parisian writers’ and artists’ salons. And then he added, “The computer is going to allow even more people to be creative.”

At around this time, Steve had started to look at the computer as the equivalent of a bicycle for our minds. “If you look at the fastest animals, human beings aren’t among them,” he said, “unless you give them a bicycle, and then they can win the race.”

The city’s architecture fascinated him as well. He began talking about the importance of uniformity in design, how so many of the buildings—all of them seven or eight stories high and made of similar yellow stone—exuded a certain elegance and consistency that instilled a sense of harmony in the brain.

I was having a hard time thinking of Paris as having any simplicity to it. But Steve perceived the uniformity; he felt that part of Paris’s beauty was that you could parachute into it anywhere and know you were nowhere but Paris. “There aren’t many cities where you can do that,” he pointed out. “Here the architecture creates a unique signature for the entire city.”

That Parisian simplicity was something he wanted Apple to emulate.

After walking and talking all day, we sat down again at a café. I ordered a cappuccino and Steve ordered tea—he was a big tea drinker. I asked him how he thought Apple was doing, and he confessed how worried he was that the company wasn’t being innovative enough. He wasn’t happy with the current products, and he wondered what the next wave of computers was going to look like, and which new innovations would come along.
“How in the world do you figure out what the next big thing is?” he asked me.

I replied, “You have to be aware of everything that’s going on, and be open to adapting to it. In your case, what you want to do is figure out what people like about the latest developments on the mainframes, where money is no object, and then figure out a way to make these things cheap and accessible.”

“Well, that’s what I’m doing,” he responded, telling me that this was what the then state-of-the-art Apple II was about: “making computer power accessible.” I agreed—in many ways the Apple II was more powerful than an IBM mainframe from ten years earlier.

Steve and I talked about many other computer-related subjects, from processing speed to 16-bit architecture. Most of all, we tried to predict the future. Steve was totally preoccupied with the evolution of Apple products. “How do we keep ahead of the game?” he wanted to know.

“You’ve got to figure out how to put yourself in the future and ask, ‘What do I want my computer to do?’” I said. “What are the things that it can’t do now that I really want it to do?”

He nodded. “We’re trying to do that. It’s difficult, though. It’s hard to find people who can think that way.”

He was also convinced that his competitors were constantly copying Apple: “There are parasites all over the computer world ready to take whatever we come up with,” he fumed.

I told him that imitation was a form of compliment, which he understood.
Then he sighed. “Everybody expects me to come up with all the ideas. That’s not how you build a strong company.”

He went on to explain that he needed to figure out how to generate more creativity within the company. Innovation was the key to the future, we both agreed. And that innovation was going to have to come from the brilliance of all the people at Apple—not just the person on top.

What I realized then was that the original Steve Jobs felt he had to find his own next Steve Jobs.

We spent the rest of the day talking about issues related to creativity. At the time, I came up with dozens of suggestions for Steve, many of which he wrote down. I kept thinking that I should write them down too, and publish them in a book.

Now, three decades later, I have.

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One of the ideas Steve and I addressed was the concept of rules. Neither of us felt that creativity could thrive in the presence of strict ones. Thus, the book you’re reading contains no rules. Instead, it has pongs.

The reason I use pongs is because it gives me a chance to introduce a word that originated with the video game I created with my friend, engineer Al Alcorn, in 1972.

A pong is a piece of advice (and in the case of this particular book, advice designed to help enhance creativity). It applies only where the advice is helpful or needed, unlike a rule, which thinks of itself as applicable to every situation.
That is probably why most rules don’t work. Situations vary. Flexibility is always necessary. If you try to apply the same rules to every person or circumstance, you will find you’ve planted a field that is sterile and homogenous. Creativity will wither and die. The constant application of inflexible rules stifles the imagination.

For example, when I was the CEO of Atari—and still young enough to try to establish rules—we had one stating that employees could not bring their dogs into the office. After all, the workplace was chaotic enough without adding canines to it. But then we ran into a brilliant engineer who loved his dog so much he absolutely insisted on being able to bring it to work—otherwise, the engineer said, he would simply turn down our offer and find another job elsewhere. We would have not been able to hire this man and add his exceptional creative talents to our mix if we hadn’t decided to relax the no-dog rule.

However, making an exception didn’t resolve the issue. When other people saw this man bring in his dog, they wanted to bring in theirs as well. So then we had to find an inventive solution to keep the workplace from turning into a kennel. So we came up with a Solomonic decision: Other people weren’t permitted to bring their dog to work every day, but they could on special occasions. The others accepted this pong, and the problem was solved.

In fact, we ended up liking the engineer’s particular dog so much we decided to “hire” it by giving it a badge and an employee number. We then announced that other special dogs could also apply for and get a job if they were qualified. Another rule broken. Some day I will write a book on how to hire creative dogs.

The truth is, there are no rules that apply to everyone uniformly—and that rule is the one exception to the rule that there are no rules.
So, then: Pongs—fifty pongs to help you and your company create an environment in which creativity can flourish.

Why creativity?

Because as Steve and I discussed that day in Paris, without creativity your company will not succeed. That may not sound surprising, but what is surprising is how few companies actually care about it. Yet creativity is every company’s first driver. It’s where everything starts, where energy and forward motion originate. Without that first charge of creativity, nothing else can take place.

And your entire company must be creative, or at least receptive to creativity (which, in a way, is itself a form of being creative: some people’s creativity resides in having the foresight to recognize the imagination of others).

Of course, some businesses are more aware of this requirement than others. Hollywood, the gaming industry, the publishing business—all must stay on top of their market. Pong was a great video game, but after you’d played it ten thousand times, you wanted to move on to another game. Star Wars was a great movie, but once you’d seen it (perhaps ten thousand times), you were ready for a new and different cinematic experience. In the entertainment field, the creatives are not just important members of the team—they’re critical.

But almost all other types of companies are equally creative dependent. They just don’t know it.

The reason is competition. Just about every company faces some form of competition. All of your competitors are trying to improve the product, the service, the concept; they’re trying to create new markets, refine processes to cut costs, and make
the business more efficient. That’s what businesses do. The ones that don’t wake up one day and find they have been outgunned, outclassed, and are now out of business.

So every company needs to make sure it is constantly pushing the envelope, because it can take time to move a new process or project into the marketplace efficiently. Few companies can innovate on a dime. The ability to move quickly must be always present. That ability exists only where creativity thrives.

This openness to creativity must be present at all levels of your company. Creativity doesn’t reside in one person, or even a few people. It must be planted throughout the entire company, or it won’t bloom anywhere.

For example, the person who identifies a problem is part of the creativity chain. The person who thinks of a solution is also part of the chain. The person who executes the solution is yet another part of the chain, as is the person who then moves that solution into the mainstream, through marketing or production (see pong 00).

All these DNA-like links must be in place for the fruits of creativity to blossom. Each of the people involved is creative in his or her own way. Everyone must do their part or nothing gets done, and the ideas remain stillborn.

For example, I remember one beautiful Sunday morning in May when Steve Jobs visited my house in Woodside. Steve brewed some tea with one of the odd Indian tea bags he carried and I drank my usual espresso macchiato. We then strolled up to the Redwood Grove and sat on our favorite rocks as he talked about getting too much of the credit for Apple’s creativity. I told him that the feeling was natural and that it had been happening to me for as long as I had been running Atari. People always gave me the credit for inventing Pong when in fact Al Alcorn had engineered many of the innovations that made it such a great game.
What I actually did was to see a great market for Pong, and then go ahead with the plan I’d created. Similarly, I told Steve, it might have been Apple co-founder Steve Wozniak’s computer design that was groundbreaking, but it was he, Steve Jobs, who had seen its full potential. “You both were responsible for getting it onto the market—who gets credit for the creativity is irrelevant.”

Yes, for creativity to flourish, it must flow throughout an entire company. Yet at every organization there is always a large cluster of people who are afraid of creativity. Why? Because they are afraid of the future. They don’t want change. Here’s your company, all nice and stable, predictable and understandable, and now They want to change everything.

These future-fearers are the equivalent of the nineteenth-century Luddites, textile workers who were trying to destroy the automated looms. Today the Luddites’ very name is synonymous with short-sightedness. Others who follow their path and try to stop the future from happening will look equally silly.

Within most companies you will find both nervous people trying to stifle creativity and forward-thinking people along the creative chain trying to promote it. These two warring factions represent the guardians of the status quo and the sowers of change.

While the former should be heeded as the voice of stability, the latter must be allowed to prevail as the voice of the future. Why? Because just as your business will not succeed without creativity, it also can’t succeed without change and innovation.

There was a time when companies evolved: They studied their place in the business landscape over many years and changed slowly. That kind of gradual evolution is no longer appropriate today; now, companies have to radically revolutionize themselves every few years just to stay relevant.
That's because technology and the Internet have transformed the business landscape forever. And the pace of change accelerates every year. Think about what's happened over the last few decades. A letter that once took three days to deliver to a mailbox now takes three seconds to arrive in an inbox. A transatlantic order that once required a costly telex machine to transmit can now be completed at the push of a button on a smart phone. A face-to-face meeting that once meant weeks of planning and miles travel can be conducted instantaneously via Skype. Once, if you wanted to test-market an idea, it took three weeks or longer to gather and crunch the data. Now you can get it coded up and tested out on the Internet in one afternoon.

Ideas happen faster, knowledge moves faster, competitors react faster. So it doesn’t matter what you do or your company does. The odds are overwhelming that you are going to have to change, and change again, and then again. You may be happy selling soap, and consumers will always need some, but the kind of soap they want will alter, as will its container, its smell, and its role in their lives.

As the world changes, you need to mold your product to suit the shape of the new society—and that new society is coming, whether you want it to or not. The key to survival in this new world is creativity.

BOX: Reinvention

Many successful companies went out of business because they were not able to reinvent themselves when times changed. Other companies, however, have reinvented themselves many times—and prospered as a result. Other companies however have reinvented themselves many times. For example, jeweler Tiffany started out as a stationary store. Telephone maker Nokia was once a paper mill. Conglomerate holding Berkshire Hathaway began as a textile manufacturer. Kutol Products was a Cincinnati-
based soap company that manufactured a soot cleaner as well; the soot cleaner business began to fade so the company turned the product into a cute little toy, which they eventually called Play-Dough (which has sold over two billion cans). Then there’s the 3M company in Minnesota (which began life as the Minnesota Mining and Manufacturing Company, selling the mineral corundum) has designed and brought 55,000 different products to market. The company basically reinvents itself every decade or so: about one third of the company’s annual revenue derives from products that are less than five years old.

1. Maintain a workplace environment that is an advertisement for your company.

Atari didn’t find Steve Jobs. We made it easy for him to find us. A good company is a 24/7 advertisement for itself.

Back in the mid-1970s, Atari wasn’t your average large company. Our quirky environment allowed creative people to thrive, and these people acted as a living, breathing billboard for the company. They talked a great deal about Atari—about what it did, about its products, but mostly about how much fun it was to work there.

For example, at a time when most business’s lobbies were as warm and friendly as a funeral home’s, our main lobby area was basically an electronic games arcade. Because we were making arcade games, why not also make them available for everyone to play? Everyone did, and they loved it, and told their friends.

Actually, the whole lobby was goofy, decorated with redwood and ferns that made it seem as though you were entering a jungle, not a corporation. That, too, helped create our image as a place where imagination flourished.
(I don’t remember who was responsible for the Amazon-like entry, but that’s not a memory lapse. At Atari, top management empowered employees to take interesting actions without permission. So while I’m sure someone very talented created the lobby environment, I probably never knew who it was. That’s another way we made our company a living advertisement; see Pong 00.)

Everything Atari did reflected an environment that was fun and inviting, but perhaps nothing spoke more clearly of that than one of our beer busts on the back loading dock. It was just a few kegs, some pizza, and maybe some music, so it cost almost nothing. (Occasionally we had to pay the band up to fifty dollars.) These blasts were a reward for hitting the sales quota (which we always did) and a great way to bring everyone together—and that really meant everyone, from the most senior executives to whoever had just been hired for the production line. We mingled, drank beer, and had an altogether awesome time.

These parties became synonymous with the company culture. Soon we were inviting anyone whom we were considering hiring. This practice gave us a chance to see the person in a relaxed environment and, more important, it gave him or her a chance to see how much fun the company was.

Today, if you want to know more about a company, you visit that company’s website. You are typically directed to a tab that takes you to a page inviting you to learn more about the firm and its employment opportunities. It’s invariably the most boring page you have seen in your entire life. One look and you know that working for that company is going to be dreadful.

I can think of several companies right now that actually aren’t such bad places, but their sites are so dull that no one could possibly be enticed even to apply for a job there. If you want ordinary employees, then you promote your company as an ordinary
workplace. If you want creative employees, then you demonstrate creativity. Yet few companies are willing to do that. Most don't want to take chances, and that stagnancy shows on their websites.

Your company image is either a recruitment ad or a piece of negative PR. Consider its name. When the Steves—Jobs and Wozniak—were trying to think of a name for their computer company, Jobs was working part time at a communal farm in Oregon and eating a fruitarian diet. Jobs thought Apple sounded peaceful and user friendly, traits that reflected the philosophy behind their computers. But when they announced their selection, it was very controversial and widely mocked. A company name should have the gravitas of a Hewlett Packard or an International Business Machines, people said. Apple? Silly. But in the long run, the Apple name has been enormously helpful in creating and sustaining its image as a creative company.

The sense of fun embodied in that name has been implanted throughout the company over its entire history. And Apple’s image has been carefully nurtured, that of a hip company making hip products. This image soon became a self-fulfilling prophecy. When the concept of company-as-advertisement is done right, it allows you to sustain a creative ecosystem to which creative people are attracted, both as customers and as employees.

Another way to show the world your company is creative and interesting is to adopt odd job titles. Who needs another universe of executive vice presidents and assistant general managers? At TOMS, the California-based company that gives away a pair of shoes to a child in need for every pair of shoes it sells, there are no traditional titles. Founder Blake Mycoskie is the Chief Shoe Giver. Other titles include Shoe Glue, Straight Shoeter, Shoe Dude, and Shoe-per-Woman.
Another company that’s its own self-advertisement also happens to sell shoes: Zappos, the online retailer. At its headquarters, there’s a sign posted near the Human Resources Department featuring the image of a man with a mullet haircut, captioned “Business in the front... Party in the back.” Visitors to the careers page on the company’s website find an eclectic “Zappos Family Music Video” in which employees hula-hoop, do back flips, and wear hotdog and ketchup-bottle costumes. The page also highlights Nerf gun wars along with karaoke and Oreo-eating contests as regular staples of the company’s culture. Zappos’ reputation as one of the most enjoyable companies to work at means that only one out of one hundred applicants actually gets hired.

Much of life is about creating an appropriate ecosystem. Every individual has one. I have one. You have one: What are your values – what do you stand for? What is your character? What are your passions? What are your quirks? Most important, in what type of atmosphere do you thrive? All of these aspects will define your individual ecosystem. Similarly, companies have ecosystems that reflect the choices made by the CEO, the executives and, in general, their first dozen or so employees. Your company’s ecosystem also becomes your living, breathing, advertisement.

Those first dozen people in a company form the seed kernels around which the corporate culture will mold itself. A dozen individuals are sufficient for a dynamic to get going; beyond that number, everyone else will probably conform to the ethos they’ve established. In several of my companies there have been one or two outliers, though, and I’ve found that if you don’t take care of them, change them, or get rid of them early on, they can form a toxic pod that sprouts an atrophic branch in your company.

I once tried to change an entire company's DNA. In 1992, I bought a Southern California firm that made some interesting products but also had the worst corporate culture imaginable. The place had been on a five-year decline, and all the innovative
people had left. All that remained was a bunch of dispirited jerks. I should have gone in and fired 90 percent of them. But I didn’t; I thought I could turn the company around. I couldn’t—the corporate ecosystem was contaminated. This was one of my worst failures.

9. Hire the obnoxious

A common truism in business today is that pleasant employees are good employees. Perhaps they are, but unpleasant employees can be even better ones.

Unbridled arrogance is obnoxious. Yet in some cases arrogance is well founded because such people are, indeed, the smartest people in the room and therefore quite accurate about their perceived value to your company. Is it obnoxious for them to actually tell you this? Yes. But when you have a problem that needs a brain that can crack walnuts, you want them to get on it.

Having arrogant people around sounds like a morale dampener, but it isn’t. It can even make the office more fun. You become accustomed to saying, “Give that problem to George,” and then rolling your eyes. George’s obnoxious personality becomes a shared joke. And George doesn’t care if people don’t like him; he’s spent his entire life knowing that. In fact, some of the Arrogant Georges I know consider their unpopularity a badge of honor.

However, you can’t have too many Arrogant Georges in your company. If everyone is the smartest person in the room, then the word “smartest” doesn’t make sense anymore. There are only a few really top people out there, and you definitely want to hire them. When you do, you can warn the others: “George is showing up on
Monday. None of you are going to like him. You don’t have to. He’s brilliant, though, and he’ll make us a better company.”

George probably doesn’t want to go to lunch with any of your employees anyway, nor to be taken out after his first day. He’ll even roll his eyes when you talk to him about your interests, because his, he knows, are so much more interesting.

Embrace the Georges of the world. They will seek out your company if they know that it is seeking them. Steve Jobs knew that Atari was the kind of place that would allow him to flourish, no matter how arrogant he seemed. That trait made me wonder whether perhaps everyone has creative potential, but only the arrogant are self-confident enough to press their creative ideas on others. Steve believed he was always right, and was willing to push harder and longer than other people who might have had equally good ideas but who caved under pressure.

24. Skunk it up

As companies grow, they also tend to balloon in terms of paperwork, logistics, hierarchies, and so on—and also tend to shrink in creativity. Bushnell’s Law states that when a company reaches 150 employees, sclerosis sets in. It’s unavoidable. Once there are too many people for everyone to know each other’s names, what they do, and how they do it best, the calcification intensifies. Pennies start being watched, speed to market slows down, entrepreneurship disappears, and you basically become just another big company.

One good means of avoiding such rigidity is to branch off. This doesn’t mean creating a subsidiary. Instead, create a subsidiary location. Rent another site and let people work there, away from the bureaucracy, away from the stagnation. All you
need to do is water them a little, let them take root, and watch them grow their own culture.

Aerospace company Lockheed created a special branch in the 1940s and called it their Skunk Works. Lockheed’s Skunk Works was enormously successful, and since then, the name has stuck to describe any group within an organization that is given a high degree of autonomy and whose mission is often to work on advanced or secret projects. Some companies give it a different name: Google’s Skunk Works is called Google X. At Google X, employees are working on special projects such as driverless cars and space elevators, although the precise nature of what they are doing is kept so mysterious that most Google employees themselves don’t even know. Similarly, now that the company has bought Motorola, it is planning to create an Advanced Technology and Projects Division within the company to convene a small group of experts to develop new technologies that can be included in Motorola’s devices.

Microsoft also established its own Skunk Works, Microsoft Research, in 1991 “to advance the state of the art in computing through a combination of basic and applied research.” Ford recently created a Skunk Works operation comprising eighty-five team members to redesign their Lincoln luxury-brand autos.

We placed Atari’s Skunk Works in an unused World War II-era hospital in Grass Valley, California. An odd industrial building, it had thick walls, a bizarre floor plan, and an emergency generator in the basement. The building sat on a slight hill surrounded by pine trees, and many of us thought it was one of the most beautiful spots in the world.

We then assigned a core group of engineers to a special team, each of them possessing unique skills in electronics or mechanics. Wildly creative people, these
individuals had been withering at our headquarters. Now that they were out on their own, their imagination soon broke free. A significant number of Atari’s best products were spawned in Grass Valley, including the driving games that represented a strong profit stream for Atari. Our Skunk Works was also where we created the core design for the Atari 2600, a multibillion-dollar product that launched the home game-console business.

How far away should your own Skunk Works be from your central office? That depends on how far out in time you want to focus. If you’re looking to create projects that should soon see the light of day, your Works can be as close as a block away. Your creatives can walk to it, but it’s not in your face. If the projects are further down the timeline, the Skunk Works should be farther away. Ours were a two-hour car ride from headquarters—I didn’t need to check on it on a regular basis, because the creatives were focused on projects that were a year or more off.

One of the other advantages of keeping your Skunk Works at a distance is that you can relax the rules. Maybe your company doesn’t allow people to sleep over. Here they can. Maybe it doesn’t allow dogs. Here they’re welcome. Maybe there’s a dress code at the home office. Here people can wear anything they want that won’t get them arrested.

Furthermore, at the main building, you need to maintain such bothersome items as guards and badges and structure. These strictures hamper creativity. So you don’t need them at your Skunk Works.

The relative isolation also gives people at the Works an opportunity to hide from the daily tornado at headquarters. Most companies have a major moneymaker, a key product or service that can suck up most of the available labor. And, at most places, this moneymaker is usually in some kind of crisis. As a result, the natural tendency is to
pull in as many resources as possible to resolve the emergency, because it is core to
the business.

It may be hard for many people to understand, but the future is also core to the
business. Businesses tend to suffer from the tyranny of Now. People think now trumps
later. But if there is no later, now won’t do you much good. That’s why you don’t want
creative projects to get sucked into that day-to-day morass. If all of your people—
including the best ones—are fighting internal battles, nothing else happens.

Mind you, remoteness is becoming harder to achieve today, no thanks to Skype,
texting, tweeting and so on. So you have to cloister your Skunk Works not only from the
emergencies but also from the trivialities of everyday life. If this means forbidding
electronic communication, gulp and try it.

CONCLUSION

“The best way to predict the future is to invent it”

– Computer scientist Alan Kay

If you can fix your company’s bureaucracy, if you can streamline your creative
chain, if you can establish a workplace where innovation is rewarded and naysayers
are denied power, if you can celebrate, if you can deal with toxic people, if you can
play with toys… you may well be creating a workplace that cultivates creativity. In that
case, the next Steve Jobs may already be applying for a position at your company.

Even better, you may find that the next Steve Jobs is already working for you—
although the odds aren’t bad that if so, that person is wilting under your company’s
hierarchy, his or her inspiration destroyed by your management team, by the lack of support for ideas, by the fear that taking a risk will lead to being fired.

As mentioned, it isn’t enough to find the next Steve Jobses and hire them; you have to create a situation in which they can flourish, and then your company can, too.

If you are able to abide by many of the pongs in this book, you will be on your way to success. However, there’s one last pong to keep in mind. It’s a simple one:

Act!

If there’s only one thing you take from this book, it’s this. You must act! Do something! Too many people read books, listen to lectures, attend seminars, and then return to their lives without changing a thing. If that’s the case here, then I’ve failed. Because it isn’t enough to understand that you must find, hire, and nurture creative people. You must actually go out and do it.

You and your company are in a daily battle with the future—blink, and your competitor may suddenly take a giant step forward, leaving you wondering what happened. The future can leap out at you from any direction—do you think that Nokia or Blackberry thought their business would be decimated by a computer company in California that had never before entered the cell phone market? You must be of the future, not the past. If you’re really creative, you can actually help dictate that future. Being creative means making the future happen faster.

All the companies that are known for being innovative act. They do many things. If you want to have a good idea, great, have a lot of good ideas. But if you want to be successful, act on as many of those ideas as you can. Some will fail and the world will quickly forget about them, but the ones that succeed can change the trajectory of your business and transport you to new heights.
This is one of the things I always admired most about the original Steve Jobs. He acted. In fact, he never stopped acting. He was constantly tackling new ideas, putting new concepts into play, looking for the Next Big Thing. Much of Apple’s success has been due to his frenetic activity.

It was always that way. For example, in the early 1980s, I invited Steve over to Chuck E. Cheese’s to see some of our research projects. We had just started our Kadabrascope division to investigate computer-aided animation; it consisted of a few software engineers and a couple of animators working on a VAX 11-750 (a hot minicomputer at the time). Steve was very interested in the project and we talked for hours about how the future of animation was computer aided, although we knew we weren’t there yet.

The VAX 11-750 used a Unix operating system, which Steve later put on his NeXT personal computer. The system had multi-threading capability—in other words, you could run multiple software programs at the same time, and even if one of them crashed, the entire system didn’t. (At that time, personal computers would crash if any one program did.)

A few years later, I had just returned from spending Christmas in Colorado when Steve showed up at my home in Woodside. He wanted to talk more about computer-aided animation—a continuation of the same conversation we’d had years ago, which says something about his focus. He wanted to know what I thought about the Lucas division of Pixar, especially their technology.

I told him that we were reaching the break point, where the technology was ready for commercialization on a larger scale, but still might be risky—no one had yet used computer-based animation successfully for full-length cartoons. Once they did, I predicted, it would become the prevailing technology.
Steve replied that since he’d left Apple (temporarily, it turned out), he had been fascinated with Pixar’s use of technology and was thinking of investing in the company. I told him that his nose for such things was excellent and that he should do what he always does:

“Act!” I said. “And then solve any problems that came along.”

He thanked me and we talked about other things. Only a few months later, I found out that he had gone out and made a significant investment in Pixar.

Sometime later I received an invitation to the San Francisco premier of the movie Toy Story. At the party we talked about how terrific the animation technology was.

“Great job, Jobs,” I said.

He smiled. “I acted,” he said, and moved off into the crowd.