Innovate with Influence enters the mind of a high-tech inventor. Steve Todd epitomizes the word 'intrapreneur', and delivers his real-life experiences as a model for young innovators looking to thrive in a large corporation.

Innovate With Influence

INNOVATE WITH INFLUENCE

Tales of a High-Tech Intrapreneur

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INTRODUCTION

I kicked up my feet onto my desk, leaned back in my chair, and listened to my company's internal talk radio show. My laptop was open, and images of the talk show guests danced across the screen.

Today's topic was personal branding. One of the guests, Dan Schawbel, was making the argument that employees throughout the company should be aware of (and develop) their own personal brand. A personal brand is an important aspect of an individual's career development. The ubiquity of the Internet makes it easy for prospective employers to learn about a candidate with just a few well-placed keystrokes. What information is out there? Are there ways to control what is discovered? What does your own personal brand look like?

Dan and I had discussed this topic on several occasions, and I have to admit to a fairly high degree of skepticism. I'm in my forties, Dan is in his twenties. People of my generation perceive the concept of personal branding as self-promotional, something to be avoided at all costs. Dan countered my protests with what I had to concede might be a valid statement: People who control their personal brand have an edge in the job market.

The radio banter shifted to the intersection of personal brand with employer brand. I leaned in a little bit closer. I hadn't considered this angle.

If an employee has a personal brand (whether it's a good one or a bad one), the employer's brand can be affected (either positively or negatively).

As listeners began to ask their questions, I found myself agreeing with the overall statement. And I started asking myself a few questions.

"What's my personal brand?"

"Would the development of my own personal brand help my company?"

It would never have occurred to me to control my personal brand, but even the most old-school employee will consider an opportunity to help his or her company, especially since doing so also helps the employee.

As the host signed off the air, I kept the conversation alive in my own head. I'm a software engineer. I build products. Customers buy them, and then I build more products. How can I make a brand out of that? I would need to do better. I asked myself a different question.

"What would differentiate me from others when looking for a job? How would I sell myself?"

Everyone should be able to answer that question for themselves. I realized my own answer was a simple one.

I'm an inventor. I've come up with dozens of ideas. But that's only half of my story.

The other half is that I know how to build and deliver those ideas.

I'm an intrapreneur (a corporate version of an entrepreneur). An intrapreneur innovates and delivers within a large corporation. That's my brand. I've often thought that I could write a book on my experiences as an intrapreneur. After listening to the radio show, I decided that maybe I should do just that. After all, it would help my company.

But who would read it? Should I just write it for fun, or write it to be read?

I spent some time over the next few weeks outlining a chapter, rearranging ideas and concepts and angles and approaches. After thrashing around for several days, I understood I had a lot to say, but I didn't know who to say it to!

And then it hit me. My career in innovation started immediately upon college graduation, and it's been on a roll ever since. I imagine there are a good many college students looking to make an immediate innovative impact in their field and might need some idea about how to go about making it happen. I started writing this book for them. It doesn't matter, really, whether these students are software engineers. My experience, I reasoned, is applicable to any student, no matter what major.

Then it dawned on me that another potential audience is perhaps just as large and even more interested in how my particular approach to innovation might be applied. Over the years, I have encountered hundreds of employees in many different industries who were less than satisfied with their innovative output. They feel that their ideas are often ignored, and their desire to make a difference is replaced by disillusionment. I realized that many of them could benefit from one simple piece of advice: build your influence first. So I began to write for them as well.

Yet another angle emerged. What about the managers of innovative employees? How can they enable innovation within their organizations? Do they recognize their employees' talents and do they know how and when to get out of the way? Should managers innovate? I added managers as an important aspect of the book.

And what about corporate executives? Many of them will claim that they want their companies to be innovative. How

do they encourage innovation? How do they locate their innovators? What do they do once they find them? Which corporate processes and programs are detrimental to innovators, and which are empowering? Innovation perspectives for corporate executives were added to the book.

I also surveyed the landscape of books about innovation. Many of the more recent books on innovation were written by researchers and consultants. These books are loaded with data related to innovation. In-depth studies of multiple corporations are summarized, and conclusions are drawn. If you want data and conclusions, those books are probably fine. If you want stories about personal innovation, those books would leave you hungry. This book is my personal innovation story. It describes a success formula that isn't taught in colleges, corporations, or management books. How does personal innovation, within a corporation, really work? The answer to this question can be immediately deployed for both personal and corporate success.

I had one additional and very tangential audience in mind when I started writing this book. Throughout my career, I have built the products that take care of the world's information. I wondered if people really knew where their information went when a bill was paid online. This book, at least in part, answers that question. The flow of information, from consumer to disk drive, is not generally understood and it's not as mysterious as some might imagine it to be. The technology behind the world's information is described at a very high level. I don't expect you to be able to build your own array in the back yard or write your own software to operate it. The intent of this book is to generate ideas and illuminate the path to help those ideas mature into products.

Customers that purchase high-tech products understand the plumbing behind the flow of information. What they perhaps don't know is the thought process of the people who

create and build these products. This book gives them an inside look.

I'm fortunate to have the job that I do. I thank my lucky stars and my high school guidance counselor who nudged me into this industry. Along the way to this point in my career, I've discovered that employees in the high-tech information industry play a grand role in the history of humanity. We build the technology that houses and protects the world's information. The population at large expects their information to always be at their fingertips, safe and secure. They're really not interested in the low-level plumbing; they just want their information.

It's up to the builders of those technologies to make sure that happens. But "builder" is not the word that I prefer to use.

I prefer the word *caretaker*.

1. A Day in the Life of a Caretaker

I am a caretaker of the world's information. I also use this term to describe my co-workers. I've been doing this job for over twenty years, but I still couldn't do it in my sleep.

I am one of those folks who awakens instantly. When my eyes pop open at 5:15 a.m. each morning, the gears of my brain engage immediately and my thought processes are launched. I automatically sequence the expected tasks and problems I will encounter in my role as an information caretaker.

What if the disk storing the information fails?

What if a temporary power outage occurs in the midst of an information transfer?

What happens if the information becomes corrupted?

Is the information tamper-proof? If not, where in the process is it susceptible to tampering, by what means, and by whom?

Clearly, there are always problems to be solved. Apparently, my subconscious is always raring to go, urging me to spend every spare moment solving them. Time that could be spent sweeping the night's cobwebs from the corners of my brain is time that would be wasted.

I don't necessarily like waking up this way. I'll stir around in the bed a little bit, trying to shake off these thoughts and delay the day for a few minutes. This movement inevitably causes my dog to stick his cold, wet nose in my face. Dogs don't care about the world's information and its integrity. They care about going out and eating breakfast on schedule. If it's 5:15 a.m., it's time to go out and then have breakfast. Somewhat reluctantly, I push back the covers, bumble down the stairs, and

let him out to take care of a dog's business in the backyard. The dog, the kids, my wife, and the daily trip to the local YMCA occupy my primary thoughts until just about 8:30 a.m., at which point I leave the Y and drive to work. My secondary thoughts are on caretaking.

I usually begin my official workday at the office by getting up to speed on what's going on in the information industry; this activity consumes the first ten minutes of my time in the office. Near my desk I keep a piece of paper that reminds me of what I need to do each day. The first portion of the paper lists my quarterly goals. The rest of the paper is fun stuff. Actually, there's a good chance that what's on the rest of the paper includes the next new thing in information caretaking. Even though I might want to dive right in and start working on the fun stuff at the beginning of the day, I work on my goals instead. For my entire career I have had the exact same goal: build outstanding software for the information industry.

I work on my goals every day. I don't mean I work "on" the goals, fine-tuning and changing them; I work on achieving them. My goals might include reading about how the world (more precisely, a customer) wants the next product to work. It might include writing a description of how to build software, or how to test software. It might include writing the software itself.

In the beginning of my career, I slaved like a cave troll, typing on my keyboard in the secluded semi-darkness of my windowless cubicle. I had always had an anonymous existence in my role as a caretaker, and I was okay with that. My own family didn't know the extent of my role as an information caretaker and, for the most part, neither did the majority of the people at my company, including my superiors. I used to spend hours working alone. Actually, I used to spend years working alone.

Not anymore.

Influence: A Day in the Life of a Caretaker

The job of taking care of the world's information has achieved a much higher profile in recent years. I am no longer anonymous. This is a problem.

Anonymity allowed me to innovate and deliver. Over the years, I created and delivered dozens of products that take care of the world's information.

This is why I use the word caretaker to describe myself and my co-workers. We're not personally taking care of the world's information; it's the software we helped create that does the real work. Roughly one million copies of "our" various software packages are running at locations around the world, silently storing and protecting the world's information.

Employees at companies around the world, not just the one I work for but competitors new and old, are trying, just as we are, to build the next new thing. New products are always being developed to create, send, capture, sort, store, duplicate, secure, protect, retain, search, destroy, and retrieve information. In the scramble to capture information technology market share—or just about any other industry market share—I often read that the most innovative companies will win.

The trouble with that statement is that companies aren't innovative; employees are. Stories about employee innovation are among the most interesting reads in the high-tech market. My former company had a Pulitzer prize-winning book written about employee innovation: *The Soul of A New Machine*.

This book contains my personal story. I didn't start out to be a caretaker. In fact, as I was approaching graduation day at North Andover High School in 1983, I didn't know what I wanted to be. I had only applied to one college: Plymouth State College in New Hampshire. My guidance counselor asked me why. Rather than make up some clever excuse, I responded with the unvarnished truth.

"Because I like to go camping," I told her. She rolled her eyes.

I went camping every summer in New Hampshire. It was awesome.

"Steve," she replied, somewhat exasperated, "your SAT scores are off the charts! Apply to some other schools as well! What kind of career do you want, anyway?"

I shrugged.

"If you don't know what you might like to do, why not think about something in computer science. You did well in that course, and software engineering is a hot field right now."

I took her advice. I applied to several other colleges and specifically those with computer science programs. Several of them accepted me, but I only had eyes for one.

In September 1983, I began my freshman year at the University of New Hampshire. I learned how to write software and, in June 1986, I started a co-op job for a computer company located just off-campus: Data General. I joined as a software engineer in the disk storage division. At that time, Data General employed just over 18,000 employees.

The pay was great. I was making more than $10 an hour and could work whenever and however much I wanted. The job itself was fascinating and, after a few months, I approached my boss about securing a full-time position after graduation.

I was hired as a full-time employee in 1987, right out of college. Within months, I was given an assignment that changed not only my career, but also influenced the path of the storage industry.

My boss handed me a research paper written by someone from the University of California at Berkeley and said, "Read this and start thinking about how you'd build the software to implement it."

So I did. The paper described a technique, just a theory, really, that would be useful in building a fast, reliable, and cost-effective disk storage system. The theory was called the redundant array of independent (or inexpensive) disks (RAID). The software to implement the theory, setting fire to this new technology, would be called FLARE®. FLARE was my first big job.

Twenty-two years later, hundreds of thousands of copies of FLARE are running on RAIDs installed around the world, providing fast and reliable storage to millions of users and thousands of businesses.

I'm still writing software for the information industry, except now I work for a company called EMC. As of 2009, EMC employs well over 35,000 employees. What happened to Data General, my first employer? They're part of EMC.

During those twenty-three years of software development, I've participated in the generation of over one hundred and fifty patent applications. Many people don't believe that patents are a good or valid measure of innovation. I disagree with those people. When you strip the legalese from those patent applications, three things stand out:

1. A description of a customer problem.
2. A unique and novel solution to the problem.
3. A thorough description of how to effectively build that solution for the customers having that problem.

Are these three items not the essence of innovation? You bet they are! Well-written patents are definitely a measure of innovation.

During my career I've worked with no less than ten different software teams. Each team delivered a product that was shipped to paying customers, and most of these products

are still being shipped in some form or other. To date these products have generated a sum total of nearly $10 billion in revenue for EMC.

All of these products started with innovation. The revenue that these products have generated—mind you, this is just the one's I've worked on—is a testament to the power of personal influence.

I've consistently collaborated with others to take new ideas and realize them. Looking back, it's easy for me to see the pattern, a repeatable combination of innovation and influence. I've continually generated innovative solutions to customer problems—even problems they didn't yet know they had—by using what I now call Venn diagram innovation. This is not to say that using this technique to innovate is enough to achieve actual innovative success (especially at a large company). In order to consistently deliver innovation, I had to develop influence first. Influence is based on reputation.

That's what this book is about. There is a method for building influence that is unique to innovators. This method often goes against the grain of conventional thinking. It requires choices in the areas of visibility, career paths, and horizon scanning. I've executed these techniques dozens of times and the results speak for themselves. Although I'm still "just a software engineer," I've joined with my co-workers to create a deep and long-lasting innovative impact on not only our company, but on the industry as well.

I do not believe the popular misconception that good ideas typically become lost at large companies. In fact, innovation at a large company should actually be easier (this also goes against the grain of conventional thinking). I do believe, however, that good ideas will get lost if they are proffered by a person who is not influential.

Influence: A Day in the Life of a Caretaker

Developing influence must trump practicing innovation in the greater scheme of career success. Influence must come first. For this reason, I present my story in two different sections. This first section highlights how I built my influence and maintained it throughout my career. I did not become a one-trick pony; whenever an idea hit the big time, I started anew to find the next big idea.

The second section highlights a personal innovation process I used within a large corporation (EMC). The influence I established, when combined with the disciplined innovation techniques that I used, had a direct and very positive impact on EMC's bottom line. I accomplished all of this while maintaining relative anonymity. When EMC eventually took steps to establish an advanced culture of innovation, they found me.

When I started my career, I didn't have any ideas. It didn't matter. Ideas were given to me, and I used them to build my influence first.

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