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FORTUNE SMALL BUSINESS

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How I Delivered the Goods

BY FRED SMITH



RED SMITH MAY HAVE STUCK with the same company for 31 years, but don't call him inflexible. Since he founded Federal Express in 1971, he's kept his business nimble,

always changing to meet the demands of the market and consumers. Sure, there have been missteps. In the 1980s, before fax machines became common, Smith launched Zapmail, a program to electronically transmit documents between FedEx offices. The idea was a costly flop, but he soon recouped and solidified his worldwide express-shipping network, which has become a model for an entirely new industry based on fast delivery. "I'm not afraid to take a swing and miss," Smith says. That philosophy has helped make FedEx, with 2001 revenues of \$19.6 billion, one of the world's most successful businesses. The Memphis company now employs 215,000 people and operates in 211 countries. For a closer view of Smith's management style, read on.

—Brian Dumaine



I GUESS YOU COULD SAY THAT BUSINESS IS IN my blood. My father was an entrepreneur and an executive. He was in the bus business shortly after World War I, and then he diversified into restaurants. He started a nationwide chain called Toddle House, which was one of the very first short-order fast-food restaurants, really the predecessor of McDonald's. But my father died when I was only 4, so when I started Federal Express, I wasn't able to get any entrepreneurial advice from him.

FedEx was actually developed in two stages: The first was recognizing that there was a demand for the service; I didn't start the second stage, actually launching the business, until some years later. The first phase really started when I was an undergraduate at Yale in 1965. I wrote a term paper for an economics class in which I simply observed that as society became more automated, companies like IBM and Xerox that sold early computer devices needed to make sure that their products were dependable. They had to be 100% reliable, or the efficacy of the device was in question.

For instance, if you were a computer manufacturer like Burroughs or Sperry or IBM or Univac—all the people in those days who were competing for bank business—you'd go in and

talk to, say, a banker in Amarillo and tell him he really ought to get rid of all his clerks and replace them with computers, which would be able to do the work much more cheaply, quickly, accurately, and so forth. And the argument was totally compelling except for one fact: The minute that computer went dark, the bank couldn't function anymore. When you automate a human function, either that device has to work all the time or you have to be able to fix it rapidly. It was that simple an observation.

So to build dependability into the product, you'd need to have a vastly different type of logistics and delivery system to keep that type of installed computer base running. IBM made its computers in Armonk, N.Y., which made it very easy for it to get repairmen and parts to Chase Manhattan in New York City. But what if you're the First National Bank of Amarillo? How do you get your computer parts quickly when your system goes down? You couldn't depend on the post office. I believed you'd need a faster, more dependable, and more far-reaching kind of delivery system. That was what the paper was about; it was not a full-blown business plan.

Today that paper is kind of famous, and it's because of a careless comment I once made. I was asked what grade I got on it, and I stupidly said, 'I guess I got my usual gentlemanly C.' That stuck, and it's become a well-known story because everybody likes to flout authority. But to be honest, I don't really remember what grade I got. I probably didn't get a very good one, though, because it wasn't a well-thought-out paper.

I graduated from Yale in 1966, and I thought about going to business school and law school. But I'd been in the Marine Corps officer program, and they said, 'You're not going anyplace except Vietnam.' So I joined the Marine Corps and went to Vietnam, where I was a platoon leader and then a pilot. While there I got a close look at the logistics system for the military. It was very traditional: not a demand-pull, but a supply-push system. Buy all the beans, bullets, and bandages you think you might need and push them along forward. Put them in Penang and so forth. It was a very inventory-intensive type of operation.

When I came back from Vietnam in 1971, I saw that all the predictions I had made in my Yale paper in the mid-'60s had come true. Computers were replacing human functions, but the dependability of those products and the delivery systems for repairs were not up to par. I thought, Okay, now how can I fix this?

My solution was to create a delivery system that operates essentially the way a bank clearinghouse does: Put all points on a network and connect them through a central hub. If you take any individual transaction, that kind of system seems absurd—it means making at least one extra stop. But if you look at the network as a whole, it's an efficient way to create an enormous number of connections. If, for instance, you want to connect 100 markets with one another and if you do it all with direct point-to-point deliveries, it will take 100 times 99—or 9,900—direct deliveries. But if you go through a single clearing system, it will take at most 100 deliveries. So you're looking at a system that is about 100 times as efficient. It comes from a mathematical science called topology. (The same idea was subsequently employed, of course, in the airline industry.)

Back in 1971 my belief was that you could run these small, high-value-added computer parts through this hub-and-spoke

system. Also, I did something else a little bit unusual, which was to combine the airplanes and trucks into one delivery system. This didn't seem to me to be so controversial, but all the traditional people felt that it was highly iconoclastic. So that's the genesis of Federal Express.

I was only 27 years old, but I wanted to see if I could put this system together. I thought this was a market that really needed to be addressed, that this was a revolutionary idea, and I wasn't intimidated. After all, I'd been in Vietnam. I'd had 200 kids under my command over there, and I had flown more than 200 missions. Starting a business didn't intimidate me. Like a lot of veterans in those days, I was torched off by the whole idea.

So I went out and looked for funding. I needed a lot of seed money. The problem with FedEx was that you couldn't start small and expand, as you could with most businesses. From the very beginning, you had to build an entire network. It was similar to what some people tried to do more recently in the telecom industry. You can't come up to a potential client and say, 'I've got a terrific new phone system for you; you can call Albuquerque, Rochester, Chicago, and Miami.' People would think you were crazy. Similarly, when I approached potential clients like Xerox and IBM, I had to have a network to sell. So it was front-end loaded, but once the network got up and you got past the break-even point, the incremental profits were exceedingly powerful.

» **INNOVATION** Created Federal Express, the world's first overnight delivery network.

» **HOW IT CHANGED THE WORLD** Smith decided that a spoke-and-hub network, akin to that of a bank clearinghouse, could be adapted to shipping. It proved to be 100 times more efficient than a point-to-point network. Soon the airlines were following his example. Last year the company

mented the demand for it, we were able to raise a lot of outside money from investors like Allstate and Newport Securities.

It was easy to demonstrate how well we'd do once we broke even, but it still took us 26 months and losses of \$29 million before we did so. Of course, by today's standards that money is absolutely nothing. And since we were an asset-intensive business, about half of those "losses" weren't cash losses but depreciation. But that didn't keep the venture capitalists from getting nervous. Still, I was absolutely convinced that I was right. The early days were tough, but the traffic kept going in the right direction.

It was just a matter of looking further down the mathematical projection to the point where the lines crossed. It wasn't as though the break-even just receded into never-never land, the way a lot of the dot-coms' did.

It may seem risky to build an entire delivery network before the business has proved itself, but that was the only way to secure the first-mover advantage, which was essential. There were many people who tried to emulate what we did—at one time there were eight or nine of them—and

cleared \$19.6 billion in revenues.

» **LEGACY** Of course, competing overnight mail services from the U.S. Postal Service's to UPS's have sprung up in FedEx's wake. But no industry—technology, finance, publishing—would be the same without the promise of speedy replacement parts. And if that weren't enough, without FedEx we wouldn't have *Castaway*. Or those ads with the guy who talks really fast.

only two or three of them survived. I think the fact that I was willing to stake out new ground is one of the reasons I became such a successful entrepreneur. Our business model was truly different and sustainable, and we were able to get out there and establish ourselves as the brand of choice, and hold on to that distinction. That was extremely valuable to us.

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I had a fair amount of money from my family and myself, and I used it to set up a 25-city network. We leased some planes and then started to test the system. For two weeks we flew empty boxes back and forth throughout the country. Then, on April 17, 1973, we went live. Xerox was one of our first customers.

But then to keep the network growing beyond those original cities, I had to raise a lot of money in the venture capital business. I was asking for some serious capital (about \$90 million), but I had some marks in my favor. First, I was putting up a lot of my own cash. I wasn't just some guy with an idea; I was really risking something of my own to start this company. Second, our business was demonstrable every day. We were operating, and people could see the demand for our service going up, and we had done a lot in terms of independent marketing studies. And another nice thing about our business was that it was a relatively prosaic marketplace that people could understand. It didn't require some technological breakthrough or the development of an entirely new market. And so once we docu-

Other keys to success? It's absolutely essential to have a conservative business plan that is detailed and achievable. You want your plan to also have some cushion in case things go wrong. Be prepared, for instance, if fuel prices spike. Know what that will do to your bottom line, and account for it.

I also think that I learned a lot about leadership from my military service. The military spends an enormous amount of time teaching its officers about leadership principles, particularly the necessity to rely on other people. Today those lessons are commonly known and there is no debate about them. But back in the 1970s and 1980s, those lessons weren't very widely followed in the business world.

Then, businesspeople favored a Henry Ford or a Frederick Taylor model. Both of those guys are known for promoting automatonism—relegating human activity to that of interchangeable cogs in a mass-production scheme. But, if you read what they said, they were much more humane than people give them credit for. But that's how they're remembered,

and it was a leadership style that was very popular.

Well, you can't do that in the military, where I learned about leadership. There you have to trust that people will put in extra effort to achieve organizational goals. And it's very extreme, because in Vietnam, if those goals were not executed properly, people could be killed or maimed. So to me, the short definition of leadership is getting discretionary effort out of people. I don't want my employees thinking about the minimum amount of effort they have to put in to keep from getting fired. I want them thinking about the best possible job they could do

huge chunk of our revenue came from moving documents, and we saw an opportunity there. Unfortunately, the Zapmail technology was built around a very large satellite, which could be launched only by the space shuttle. And the space shuttle blew up. Then, of course, cheap fax machines came along and put Zapmail out of business. Had that not been the case, FedEx might have taken a very different strategic development.

Instead we ended up developing a worldwide express market. But the point is, at that juncture we knew we had to change. We couldn't just sit there. Companies that don't rec-

»»“WE TELL OUR EMPLOYEES WHAT WE’VE ALWAYS TOLD THEM, YOU’RE NOT DELIVERING SAND AND GRAVEL. YOU’RE DELIVERING SOMEONE’S PACEMAKER, CHEMOTHERAPY TREATMENT, OR THE BRIEF THAT DECIDES THE CASE.”

if everybody was giving 100% of their effort.

The key to getting that effort is communication and feedback. Workers want to know what's expected of them and how they're doing. They have to have report cards. They also want to know what's in it for them, so we put in a lot of award programs, a lot of profit sharing, and a lot of internal promotions. Simple stuff. Just telling people they did a good job.

You also have to communicate with your workers and make sure they understand that what they're doing means something. We still tell our employees what we always told them: You're delivering the most important commerce in the history of the world. You're not delivering sand and gravel. You're delivering someone's pacemaker, chemotherapy treatment for cancer drugs, the part that keeps the F-18s flying, or the legal brief that decides the case.

I have one more rule that I think has helped make me a successful entrepreneur: Engage in constant change. Every business is in the process of being commoditized. The question that you have to ask yourself is, What do I have to change to avoid being commoditized? And once you see what that is, you'd better do it. And when you do it, you're going to make some mistakes. You have to be prepared for that.

Zapmail—our attempt to develop a high-speed digital facsimile system in the 1980s—is a good example. We saw that a

ognize that their business is going to be commoditized and don't take some risks—some of which are going to work and some of which aren't—are going to end up getting punched up by the marketplace.

I fashioned my business philosophy on my military experience, so it's not surprising that the man who's influenced me the most as a leader would be a military man: George Marshall. He was probably the most thoughtful and farseeing man that we've had in public service. He won World War II, thanks as much to his prewar preparations as to his actions as chief of staff. He ended up creating the Marshall Plan, which saved Europe. He was remarkable.

Marshall also wasn't afraid to call it the way it was, a great lesson for managers. In World War I, when Marshall was the No. 2 man in some regiment, General John Pershing paid a visit and chewed out Marshall's superior. Everybody just stood around, but Marshall said, 'General, with all due respect, you're wrong, and this is why you're wrong.' Of course, everybody was astounded that he did that. But later Pershing called Marshall and said, 'Look, I want you to be my chief of staff.'

And that's an important lesson that I've tried to follow: You have to surround yourself with people who will tell you the truth. If you don't, as your organization gets bigger, you'll fall out of touch with what's going on. ”