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INFLExible BUREAUCRACY, TOP-DOWN MANAGEMENT, TIGHTLY REGULATED INDUSTRIES, MONOPOLY — THESE ARE THE TIRED REMNANTS OF THE OLD CORPORATE WORLD ORIGINS. THE NEW ECONOMY DEMANDS NEW THINKING. YET THE WHY-FIX-IT-IF-IT-AIN'T-BROKEN ATTITUDE OFTEN PREVAILS AMONG CEOs WHO ARE TOO MYOPIC TO NOTICE THAT THE MARKET HAS EVOLVED, LET ALONE TO ENVISION HOW IT WILL LOOK IN FIVE YEARS. SO CHANGE OFTEN COMES FROM WITHIN, FROM INDEPENDENT THINKERS WHO SEE OLD PROBLEMS WITH NEW EYES.

THOSE WHO BREAK THE SHACKLES OF BUSINESS AS USUAL — CORPORATE REBELS — SET THE PACE FOR THE NEXT MILLENNIUM. THEY ARE ICONOCLASTS WHO QUESTION THE STATUS QUO, CUT THROUGH RED TAPE, AND CHALLENGE THEIR BOSSES TO GREATNESS. NOT ALL SUCCESS AND GAMES PEELED TO BECOME ENTREPRENEURS. BUT THE SMARTER COMPANIES TAP THE UPRISING WITHIN, CREATING WAYS TO TURN THE STEAM OF THE REBEL INTO THE FUEL THAT DRIVES THE BUSINESS.
Selker, 41, seems like a natural for this role. His angular face is framed by his annual winter beard, and his breath-takingly smart with an appropriately esoteric academic background. As an undergraduate at Brown University in 1978, he built an electronic simulation of how the eye focuses and then went on to study brain modelling at AI at the University of Massachusetts and Stanford. In his spare time, Selker used his restless energy to climb peaks like the 20,702-foot Chimborazo in Ecuador to carve a 6-ton oak sculpture.

He worked at Atari's think tank during its heyday in the early 1980s and moved over to Xerox PARC in 1984. Both labs were full of rebels who invented brilliant things and... were ignored! But Selker has managed to break that pattern. You know the little red-positioning button used on the TextPad? That's his. Called the TrackPoint, it is the biggest improvement in pointing devices since the mouse. IBM tripled its notebook production every month for four months after the TrackPoint arrived. Two other IBM notebook PCs, introduced without a TrackPoint, were both discontinued.

Selker never really fit in at Atari or Xerox. In 1985, when IBM asked him to join its T.J. Watson Research Center, he accepted. "I wanted to show I wasn't a flake," he says. He wound up joining at a lowly advisory programmer because he didn't have a PhD, and he kept getting slapped down by management. But he was starting to learn a few tricks for getting his way within the IBM bureaucracy.

One day, Selker noticed that people were slowed down by always having to reach for the mouse. If some kind of joystick device could be integrated with the keyboard, then users could keep typing. Selker experimented with different tracking algorithms and created hundreds of plastic mock-ups, finally ending up with a stubby plastic shaft that fit between the keys.

Now came the hard part: having to point its device using one of IBM's laptops, he had to win over Satoru Yamikawa, the IBM Japan engineer heading up that research, Satoru wanted an alternative trackball device and objected to Selker's TrackPoint because it left an imprint on your finger. That was ridiculous, thought Selker. It was like criticizing a Ferrari because the clutch was stiff.

But Selker initiated an orgy of collaborative head-scratching, and the two experimented with different materials to reduce the TrackPoint's stiffness. What emerged was a squishy rubber top that was both more accurate and more comfortable than the earlier version. Most important, Satoru had a stake in it.

Selker knew he had to stay involved during the entire birthing process. IBM's hardware engineers claimed the TrackPoint's microcode was too bulky and unstable, so Selker and his team reworked it. When the manufacturing expert said they had to use a cheaper rubber even though it wasn't as sticky as Selker wanted, he enlisted his father (who had worked with the rubber industry in the 1940s), and they found a company that could meet IBM's price demands. What emerged was the distinctive red dot. Even today, when many have imitated the design, you'll find people stealing the rubber covering from TrackPoints to replace the more slippery plastic used on other computers.

Selker was rewarded for his success by being chosen as an IBM Fellow, the company's highest accolade. But that hasn't made it any easier for him to get his ideas accepted. Nor has it made him any less worried about being perceived as a flake.

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...
Howard Jonas is an international telecommunications magnate. Or he is the David to AT&T’s Goliath. Or he is a loud-mouthed hustler (who was hogging 25-cent tickets of the Bronx Zoo when he was 6). It all depends on whom you talk to. One thing is certain: the 40-year-old New Yorker is a shrewdApiController who has made no qualms about fighting the giants of long-distance telecom.

And he tells a good story: in 1990, when Jonas was in publishing, he discovered that it cost a helluva lot more to call New York from Paris than the other way around. Why? Because most foreign markets were controlled by state-owned monopolies. So he hacked together some relay and dialup services, found the International Discount Telecommunications Corp., and international callback was born.

Jonas’s higher-ups did not take kindly to this renegade service, and Jonas found himself on the receiving end of AT&T’s central switchboard in Hackensack, New Jersey, and then hanging up. An IDT operator (now a bank of computers) calls the person back and patches them in the call. Because the connection originated in the US, the Parisian pays the cheaper US rates.

Callback found a clever backdoor to introduce competition into monopoly-controlled markets. Needless to say, foreign monopolies did not like this. Jonas sold himself out of the Telecomm 83 convention by the President of France Telecom. AT&T liked it even less. But when the global telcos petitioned the FCC to declare callback illegal, Jonas successfully presented his case to Vice President Dan Quayle.

Over the years, Jonas has been a vocal spokesman for cut-rate long-distance service, international callback, and Internet telephony. “Howard is an in-your-face entrepreneur,” says Danny Briere, an industry analyst with TeleChoice.

When you’re trying to break decades-old telecom monopolies by building the first private-global satellite phone network, you can expect explosive business risks. So when an airborne Delta 1 rocket mysteriously blew up one week before Iridium was set to launch its first three satellites on a similar craft, project manager Barry Bertiger took it in stride. “That was hard to explain. Some of the issues we’ve faced,” says the 50-year-old engineer. “And I’m not being cavalier.”

The genesis of the Iridium project is Motorola legend. In 1985, Bertiger and his wife, Karen, were vacationing in a remote corner of the Bahamas. Unable to make an urgent call on her cellular phone, Karen challenged her husband to create a wireless phone network that would work anywhere in the world.

Bertiger’s managers originally scoffed at his plan to build a global halo of 66 low-orbit satellites. Traditionally, space programs have been the purview of wealthy governments. But Bertiger’s idea caught the attention of company chair Robert Galvin, who informed President John Mitchell that...
global Village began as part of an effort to reengineer the billing system at the Dornher headquarters to distribute information to employees across 14 states. Wu figured that the TCP/IP technology that formed the backbone of the nascent World Wide Web could also be used to create a proprietary online network within US West.

Woo set up his first Intranet using off-the-shelf software and crude Mosaic browsers. His demo to corporate execs was impressive, but Woo's request for US$4 million and 40 people was denied. He got just $200,000 and a staff of four. Disappointed but unbowed, Woo built grassroots enthusiasm for Global Village by linking anyone to the network who demonstrated challenge centers of power.

It worked. And the corporate drones who initially saw Global Village as a threat to their company's carefully controlled lists of communication eventually gave the project an official blessing. Today roughly half of US West's 40,000 employees are jacked into the network, "When I wasn't given $4 million, I didn't look like a threat," Woo says in hindsight. "That minimized the institutional resistance." Sherman-Woo may have sparked a revolution, but the experience was still no dinner party.

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WEEanga, And, of course, you've got Mark Weiser -- remember him? - at Xerox PARC.

Soon after the University of Maryland granted Weiser tenure in 1985 as a computer science professor, he decided to leave. "The challenge was gone," he recalls. In 1988, he took a job running the CS Lab at Xerox PARC, birthplace of ethernet, the move-windows interface, laser printing, and, in recent years, not a heck of a lot else. "It needed shaking up," Weiser says.

He wanted to get researchers interested in his personal obsession: ubiquitous computing -- just got nowhere. "It was very unpopular," Weiser says. "A lot of our hardware had to be built to make it happen, and computer designers only think of faster and better, not smaller and lighter and easier."

So Weiser went to universities, lecturing about his vision of PCs in our pockets. He often hired students, particularly those who approached him after his lectures, to help solve critical problems as increasing the number of Mips per watt that a computer can process. Surprisingly, Weiser says that no one at PARC had worked on the problem for 10 years. With the help of these new hires, Xerox was able to line-up the mips-per-watt rate by a factor of 100. In 1994, Weiser told John Seely Brown that he planned to leave and form a start-up to develop a computer that hangs on a key chain, Xerox
one wants to talk about Block Trading. No one at Lehman Brothers, or Merrill Lynch, none of the venerable brokerage firms want to discuss the upstart trading house based in Houston, Texas, that offers insider access to Nasdaq's trading floor through a little-known system called SOES – the Small Order Execution System.

Chris Block, partner Jeff Burke, and their Block Trading customers are known on Wall Street as SOES bandits. But as they see it, the only laws they have broken are the unwritten rules of the stock exchange: collusion, price-fixing, kickbacks. This is how Nasdaq works: I want to buy a stock. I call my broker, who contacts the trader. The order flows to a marketmaker, who matches my buy order with a sell order. The process might take 20 minutes, if the market price has dropped in that time, the marketmaker in effect buys the stock at the best price available, no matter how much it is my higher offering price, and pockets the difference. In contrast, SOES investors have access to the latest stock quotes and dark orders to a dealer who executes the trade within seconds, Presto, Done. In 1991, Block and Burke, now both 30, wrote suit-and-tie grants at Lehman Brothers, making $600 cold calls a day. One day, Block phoned Harvey Houtkin, a savvy investor who introduced him to SOES (pronounced "sews"). The ambitious team visited Houtkin for a crash course. Burke learned fast and soon earned the US$50,000 the duo needed to start Block Trading.

When Block and Burke left Lehman Brothers, their old colleagues laughed. But five years, 12 branches, 200 customers, and $18 million in annual commissions later, no one on Wall Street is laughing. "We've taken the marketmakers' bread and butter – information – and given it to the public," says Block. "It's not an exclusive club anymore."

And the marketmakers are pissed. They believe the SOES bandits are manipulating the system. As Nasdaq spokesperson Reid Walker claims, the SOES traders are "hitting quotes by acting on information completely unrelated to news from the company, analyst reports, et cetera."

SOES investors are the black sheep of Wall Street – under 35, dressed in jeans and T-shirts. They left jobs as secretaries and lawyers to begin day trading full time at Block, which offers free informal training, as well as all the necessary tools. They trade minute-to-minute and never own a stock overnight. They never read a prospectus, never talk to analysts. They care only about the spreads, the difference between the marketmakers' buy and sell prices. They are vigilant, watching bid prices fit across the Level II screen and then pouncing. They place 20 to 70 transactions a day, trading in blocks of 1,000 shares, making profits of a quarter even a sixteenth of a point per transaction. Although each trade is small, on a good day a SOES bandit can make thousands of dollars. Thousands that the marketmakers don't get a cut of.

When the marketmakers fought the upstart system – by lobbying to limit the SOES users to four trades per day, capping the size of the trade at $500, and instituting a 20-second delay rule to take away the bandit's speed advantage – "we decided to blow the whistle," says Block. The ensuing SEC investigation resulted in several Nasdaq rule changes, including the reversal of the 500-share trade limit. The other intended SOES-killing measures were never instituted.

But Block is skeptical that the commission – "a handful of executives with no computers and rotary-dial phones" – can regulate Nasdaq. So he has joined a coalition of SOES traders that is fighting several new rules that "the marketmakers a back door."

Meanwhile, what is his partner Burke doing? Trading, of course. Like any good SOES bandit, he never takes his eyes off the screen.

| didn't want to miss the boat again – so it flanged a way of keeping the valuable employee. Technically, Wessner would be on leave from the company, but Xerox gave him his first round of financing (roughly US$50,000) and office space.

The deal required that someone else provide the second round of financial backing, but when the time came and no source emerged, "PARC approached me and said, 'Let's talk about how to get you back in here,'" Wessner says. That's when he was made chief technologist – a new position. Wessner was given five roles to oversee the entire technical program at PARC, not just computer science but linguistics, philosophy, physics, and other areas of research."My official role is to work across the grain and fill in the cracks of the official programs," he says. "If I see something fall in the cracks, I have some people and a budget: a troubleshooter and problem-solving people."

Wessner's compensation package include "phantom stock" in technology the company had begun licensing. Since it provided the first round financing, Xerox owns the technology. Issuing such phantom stock is one way to hang onto rebels. Typically, a company will set up the individual in a special unit called "spin-in," according to consultant John Nettles, president of Saratoga, California-based Strategic Enterprise Consulting. It then hires a consultant
advertising. You love it or loathe it, depending on which side of the HTML you're on. For Web publishers, ad banners mean money. Lots of it — potentially. Forrester Research expects online advertising revenues to reach US$4.8 billion by 2000. But ad banners also add frustrating seconds to every download. You know the scene: Click Open. Enter the URL. Wait. Curse the Java plugin banner that's slowing your PC to a crawl.

A BANNER CAUSE

James Howard did more than swear. Along with three other students, he founded PrivNet, Howard, 24, knew that lots of people didn't like online ads, that more webvertising meant more frustrated Web surfers, and that this was a great business opportunity. PrivNet's motto was simple: "If it's out there, we can filter it." The start-up released its first product, Internet Fast Forward, in early 1996. A weedwhacker for the Web, the software allowed complete filtering of all Web advertising. Fast Forward would identify ads by name, link, or directory position and wouldn't download them.

Advertisers were not amused. Neither were Web publishers, who saw ad filtering as a block to their revenue stream. ESPNET's SportsZone reported for Business Week, through numerous cease-and-desist letters, that any alteration of its content was illegal. Infoseek listed this type of software as a risk factor in its prospectus. Sharon Katz, a media planner at advertising agency Modern Media, summarized the industry's position: "Consumers have the opportunity to not click on an ad. But the concern [with IFF] is that you're messing with some copyright laws and changing somebody's Web page."

PrivNet's rebuttal, engineered by code whiz Mark Erood, was known as the Scissors Defense: if Rolling Stone learns that its readers are cutting out Bacardi Runy and Hootie ads, it can blame the scissors manufacturers, employees, and workers who fill the corporate ranks are expected to follow along — no questions asked.

REMANUFACTURING BUSINESS

John P. Stack, 49, has set out to defrock the priests. A lean and blunt-speaking John F. Kennedy look-alike, Stack is CEO of SRC Holdings Corp. in Springfield, Missouri. But Jack, as he is known, is also the pioneer of "open-book management," a 14-year-old business philosophy that rejects hierarchical paternalism.

In 1983, as a mid-level manager at International Harvester, Stack was ordered to shut down a moribund engine remanufacturing operation. The engine moved 40 percent of the company's overall business, and 60 percent of its employees worked on the operation.

"We identified the units and laid off the people," Stack said. "We couldn't see the point of doing all that without any benefit to the customers."

So what did SRC do? "We remanufactured the engines, not the operation," Stack said. "We remanufactured the business to be a lean operation, not a large ones." The company cut costs by 40 percent and increased its business by 50 percent.

"Like" is a business term. Business is the number of dollars. The numbers are the key to success. The numbers are the key to everything.

"But," Stack said, "the numbers don't do you good if your customer isn't happy with the product."

So SRC designed a program called "open-book management." The program is based on the belief that employees who see how their company makes money will be motivated to make the company profitable.

"Employees don't want fatcat management," Stack said. "They want management that's accountable.

"We ask our employees, 'Tell us what's wrong, and we'll fix it.'

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udaturing plant. Instead, Stack (who was fired from GM for playing poker on the job) took a gamble. The energetic Midwesterner and 12 other Harper managers bought the struggling factory. They raised the capital, closed the deal, and found themselves with $185 million in annual interest payments. “We had an 89:1 debt-to-equity ratio,” Stack says, “which put us on a par with, say, the government of Poland.”

Stack’s survival strategy: open the books, teach everyone — from the factory floor to the suit-and-tie echelons — the financial secrets, and make every employee a co-worker. The authors then had a common goal in making SRC a success. Everyone was trained in the subtleties of return on investment, cost of goods sold — and how each individual’s decisions fit in. Stack led SRC’s people to figure out how much material, labor, and overhead went into each engine they built. They broke out the costs and revenues into a balance sheet for every part of the business. And they festooned the building with financial reports, charts, and graphs. Eventually, any worker could access any financial data from all terminals. Employees and managers spent 30 percent of their time studying after-tax profits, cash flow, and cost control or putting the knowledge to work in weekly roundtable discussions.

People have a misconception about business, Stack believes. “It really is a game,” he explains in his book, The Great Game of Business. “It’s no more complicated than basketball or golf or bowling.” And it’s a game that SRC is winning. Since the books were opened, the company’s value per share has risen from 10 cents to more than $33.

The open system has led directly to some of SRC’s greatest breakthroughs. In the mid-1980s, a janitor stopped Stack in the hallway to question SRC’s strategy of rebuilding truck engines. “You’re telling us that if we reduce the debt, we’ll be secure,” the janitor argued. “But the truck market has a recession every six years.” SRC soon diversified into rebuilt automobile engines, now a critical part of the business.

When another employee wanted to start a company to recycle junked engine coolers, SRC funded it. SRC invested $60,000 in Engines Plus Inc, taking a majority interest of 74 percent and giving its entrepreneurial employees the remainder in sweat equity. The venture was such a success that SRC spun off two dozen more companies.

Despite SRC’s turnaround (it pulls in $130 million in annual sales), corporate America hasn’t embraced open-book management. A few small firms have adopted the philosophy, but most big companies — strictly controlled by the financial priests — ignore it. Meanwhile, at Stack’s 25 companies, employees are all business partners: manufacturing not just engines, but capitalism itself.

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Maybe it’s living in Berkeley — the groovy 1960s California counterculture hangout — that gave him the idea. Like, peace bro, and let’s give the money back to the people. Perhaps. Chief executive Nat Goldhaber and his 25 employees at CyberGold certainly had an idealistic side. But they’re also fiercely competitive — note the well-worn Chuck Norris heavy bag in the middle of their office — and hope to cash in on their clever idea: paying consumers to look at Web advertisements.

Goldhaber, 49, works from two simple, yet seemingly disparate, premises: 1) people dislike online ads, and 2) people like to get paid. At the CyberGold site, visitors read an ad, then prove it by answering some questions. For their troubles they get cash credited to a bank account. The money can also be directed to charity or put toward merchandise.
Some companies punish rebels. But 3M celebrates its miscontents, to the point of rolling out million-dollar cash rewards to care about their restless spirits. 

Get a great product idea you can't get past your boss?

BY RUSSELL MITCHELL

3M NEEDS TO SPEND OUT MORE THAN IT CAN ON RESEARCH. 

If you worked at 3M, you could earn up to $50,000 to move Tintaz into development. 3M hopes to sell $100 million worth of the new sandpaper by 2000. 

Paper's iconiclastic thinking 

is a tradition of famed 3M inventor Francis Okie, who in 1921 began pushing a new waterproof sandpaper, and also its star, the razor blade. Face sanding never caught on, but 3M supported Okie's ideas until the auto industry started snapping up the invention, turning it into the firm's first blockbuster product. At a lot of companies, encouraging oddballs is a new concept. At 3M, it's a tradition.

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can think of it as a personal quality that has to be fostered or a bottom-line cultural characteristic for the organization. So Cypress has its "wolf packs," people who ask tough questions in job interviews to weed out anyone who is too thin-skinned to weather the attacks frequently launched at innovators.

Sun Microsystems has set up the position of "distinguished engineer" to give "smart iconoclasts a seat from which to operate," James Gosling was a DE when he worked on Java. DEs are at the same level as company directors, who manage about 100 people. But these folks are on their own. "Your job is to do things differently, and to tell people what you're doing is not the right thing," says Jakob Nielsen, a Sun DE. "The rule is, they have to listen to what we say, but they don't always have to do it."

Vanderbilt University business professor Terrence Deal, who in the early 1980s was one of the first academics to write about corporate culture, says rebels will play an increasingly important role in the hypercompetitive high tech market. "You need a voice of honesty consistently tweaking the culture," he says. Want evidence that rebels really matter? Just open your business history books, says Deal. "When IBM started smashing these people down, that's what started getting into trouble."

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