Get Innovative or Get Dead (Part 1)
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PART ONE:

Get Innovative or Get Dead

Tom Peters

"We subcontract damn near everything, including most R&D. We must, to get beyond the confines of our own brain-dead company." "Most of our biggest firms couldn't innovate their way out of a wet paper bag in the midst of a Southeast Asian monsoon." Not very encouraging words—both came from senior technology-company executives attending one of my recent seminars. But then what would you expect after a decade that witnessed 40 percent of the *Fortune 500* dropping off the magisterial list?

I've become obsessed with innovation of late. I even dream about it. (Yuk!) Looking back at the turmoil of the eighties, all ten bloody years, set me off. Looking at the timid and orderly strategies many are suggesting for big-firm renewal iced the cake.

One school of thought says that we have to get much faster at developing new products. Proponents provide air-tight schemes for doing so. The complexity of the proposed processes are stunning, but who could argue: It's a complex world. I heartily acknowledge that new approaches are required to slash product-development cycle time by a necessary order of magnitude. However, the rigidity of several popular proposals scare me; so do their implied "one size fits all" character. The alternative to air-tight formulas may not be ten-man bands of lunatics cast adrift (the small skunkworks idea, which I have applauded in the past); but there is a ton of evidence suggesting that the significant breakthroughs—the products and services of the FedExes, Apples, Compaqs, Dells, Everexes, BancOnes, Wal-Marts, CNNs (Turner Broadcasting), *USA Today*s (Gannett)—will come neither via orderly plans nor from the right-company-at-the-right-time.

Formulas are questionable. And ten-person bands alone are not up to the innovation task. But unless you are a one-dimensional, entrepreneurialism

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fanatic (like economics commentator George Gilder), there's got to be something more to do than stand around and let our big firms twist slowly in the wind, while anxiously awaiting the arrival of the next Sun Microsystems or Wal-Mart (or Honda or Sony) to upsurp an old market or create a new one. This article is a sketch of my "something more." I will outline eight elements—usually mutually supportive, but at times in conflict—which can serve as the essence of an innovation strategy. While my focus is to some degree on larger companies, my Silicon Valley residence (and my own innovation nightmares as head of a teeny firm) lead me to believe that most "AT&T problems" are also the problems of $10 million companies.

Violent Market Injection Strategies

Begin with the most radical of the strategies. In short: *force* the market into every nook and cranny of the firm. Let economist Joseph Schumpeter's powerful "gales of creative destruction" not just refer to entrepreneurs attacking the establishment from the outside, but to a *self*-generating strategy for obsoleting ourselves from the inside—before some outsider does it to us first.

License your most advanced technology. Quad/Graphics is a fast-growing, $500 million (revenue) high-technology printing firm. Boss Harry Quadracci is a contrarian when it comes to most any aspect of management, but nowhere more than here. He underwrites a sizeable R&D activity, Quad/Tech. But as soon as it develops something interesting, buttons it down, and gets it ready for routine application, Quadracci licenses/sells it to all comers including his chief rivals. His reasoning is straightforward: There is essentially no such thing as "proprietary" today, he says; somebody, a rival or outsider to the industry, will copy him very quickly. The saving grace: via Rube Goldberg devices hung onto every machine in the plant, he has long been at work on the next generation of innovation (and the next), while Quad/Tech polishes, for sale, the current innovation. By selling off (for a whopping profit!) his most sophisticated ideas as soon as they are commercializable, *he purposefully keeps the heat turned up under himself.*

Fast-growing workstation pioneer, Sun Microsystems, practices the same religion. Sun reaps many side benefits from quickly peddling its newest technologies: for one, innovative licensees—IBM, Digital Equipment, and Toshiba among others—end up enhancing that technology to Sun's subsequent benefit. Also the licensing aids Sun's efforts to be a recognized standard setter. But, once more, keeping the heat turned up under itself is by far the most important objective.

Cannibalize your most profitable products. An old-line manufacturer is developing a half dozen new technologies, some with exceptional potential. Several bits are ready for the marketplace and have been tested successfully with leading-edge customers. Now is arguably the hour for an outright

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market onslaught. But the tradition-clad pieces of the company, which are profitable market leaders, are balking. They see the new technologies (unproven to their mind) as direct threats to the company's "cash-cow," mainline businesses. To say there's a battle royal going on is gross understatement. "The thing about it," one new-product chief laments, "is that they say our unproved technology is attacking the heart of their *new* technology. True, we haven't been *selling* their product for all that long, but the technology itself is 42 years old! New? Who are they kidding!"

Emil Martini, recently retired chief of Bergen Brunswig (America's second largest drug distribution company), says there's a single question he pesters everyone with, on any occasion: "How do we obsolete ourselves?" Bergen Brunswig has been a technology leader in distribution systems for decades, with unparalleled growth and sophistication the result. But the company lives in fear: obsoleting itself—working to cannibalize its leading edge services—is seen as the only practical defense against sprightly competitors. Procter & Gamble and 3M have practiced this discipline to great effect for years. It's not pretty—none of the strategies in this section are—but it works.

(None of these strategies, of course, amount to sure things. The P&G "model," for example, has some blemishes. Chief among them: even the cannibals—in this case, brands attacking other brands in the same family—are somewhat bureaucratic and sluggish.)

Sell off/Split off new units. This strategy is zanier still. Supercomputer star Cray Research came to a fork in the road last year. It was essential to place a big bet on the nature of the next-generation product. However, there were two very different approaches to developing that next generation. Cray felt—with admirable and rare honesty—that its culture wouldn't allow it to give both novel approaches a fair shot. So founder Seymour Cray split off, creating Cray Computer which is only 10 percent owned by parent Cray Research. This an example of the bitterest of medicine! But if you cotton to the opening quote—"couldn't innovate their way out of a wet paper bag"—such medicine may at times be required.

Long ago, IBM thought it had a less violent, "have your cake and eat it too," answer to this problem. It chose a "parallel" product-development path: multiple approaches would be followed by competing IBM teams, which were neither allowed any contact with each other nor any access to the other's information. "Shootouts" between the projects were to settle upon the eventual winner-which would then move to final development. This process was successful on numerous occasions. I was unabashedly enamored with this approach. On the other hand, recent discussion with a senior IBM workstation engineer pointed up the error of my ways, in today's volatile market place. Despite a recent successful workstation announcement, this executive reported that IBM remains solidly a mainframe/hardware-oriented company. "Shootouts" may be real enough, but they seldom encompass the turf beyond the main dimension of the corporate

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culture. That is, they rarely involve radical alternatives of the sort that any outsider is likely to embrace. Cray apparently understood this. Perhaps IBM doesn't.

Sell off old winners to force dependence on the new. This amounts to acting more or less like a successful corporate raider. Recall the company that had difficulty cannibalizing profitable old product lines, therefore postponing an honest test of several new lines. I can rant and rave as I wish about "cannibalizing your most profitable products," but the fact is that few are willing to do so *voluntarily.* If the top team feels as pessimistic about the innovation as I do, perhaps they should follow the strategy that I have recommended to several clients: Consider dumping one or more "cash cows." while those cows still have milk (i.e., market value). You force yourself, then, to depend upon the newer lines of business. In most cases, only such an aggressive strategy like this will cause you to attend to the new in the compulsive fashion necessary to induce new product family success.

Fund kin. Cypress Semiconductor is a relatively youthful company. Yet CEO T.J. Rodgers feels some staleness in the air. One antidote is acting as a venture capitalist. He/Cypress fund clever people in the firm who have new ideas, ideas which would probably lead them to depart or would otherwise be stifled by the current biases of the operation. High-tech star Raychem has long followed a similar strategy, it usually retains a modest share of ownership and invigorates itself at the same time. Thermo Electron follows a similar route, retaining controlling ownership but selling a subsidiary share to the public.

Insist that every element of the firm—even staff—demonstrate "fitness to compete" by selling a substantial share of their products or services on the outside market. German and Japanese car manufacturers are physically surrounded by vital subcontractors. America's Big Three have long been much more vertically integrated than their principal foreign competitors. They have suffered of late as a result. But GM, for one, has decided not to forgo vertical integration, except to a modest degree. It has, however, chosen a strong alternative to shedding businesses. GM is demanding that its wholly owned component producers sell a sizeable part of their output on the open market—to keep them honest, to inject innovation, and to demonstrate their readiness to compete in the global marketplace. One unit I happened upon was preparing a bid for persnickety Honda of America Manufacturing. (It was already working successfully with another Big Three member.) The hoped-for results: GM's quality will go up overall if the unit learns to compete to Honda's standards; the unit will in general become more innovative.

On an even more grand scale, a couple of years ago AMR (American Airlines' parent) made more money selling the by-product of its information systems than it did flying passengers from here to there. As a result, it founded a wholly-owned subsidiary, Amris (AMR Information Services), to peddle the information system's wares.

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This idea is boundless. Some pioneering firms are applying it to virtually all functions—insisting even that training, accounting, and other indirect support functions sell their "output" beyond the company's borders.

Force fitness to compete among subsidiary functions by allowing—and even encouraging—close-to-the-market units to purchase any and all goods and services on the outside. This is the mirror image of the strategy proposed above. Bell Atlantic and AT&T follow such a strategy. They have recently created close-to-the-market units. To allow these new units true freedom to compete, they are permitted—even encouraged—to buy products and services from the best source, even when the units could purchase such products and services from an internal operation. This applies to staff services as well as components and end products.

In general, Dartmouth professor James Brian Quinn encourages firms to venture far beyond the normal "make-buy" decisions associated with manufactured components: every service (purchasing, accounting, training, transportation) should be tested, he insists, against the *world's* best. Following such logic, Marathon Oil (a U.S. Steel subsidiary), for instance, recently went to Avis to purchase transportation management services; Avis, along with Ryder Systems, is tops at sophisticated transportation-system management.

Subcontract anything and everything. Subcontracting is hardly new. What's new is that major firms are looking at subcontracting as a way of life; they conceive of themselves, in fact, as "nothing more" than a web of subcontractors (they retain "systems integration skills," to use Boeing's term). MCI, for one, makes nothing—by choice. Its small but potent R&D activity principally aims to surface vendors—of any size, from anywhere—who can provide something clever to hang onto the MCI network, to better and more rapidly serve MCI's customers. MCI *runs* a telephone network for profit. MCI, as a company, *is* a network. Apple Computer's story is much the same: sales per employee are $370,000. IBM's come in at $139,000. Apple goes outside, as a matter of strategic choice, much more than its elderly rival. Innovation is the major reason.

One could discuss a hundred nuances. MCI, in order to enjoy the fruits of small-company innovation, will even train its little brethren in service and quality management—so that MCI can obtain requisite world-class service/quality performance, while simultaneously reaping the benefits its youthful partners' cleverness. "Subcontract everything but your soul," one senior transportation company executive advises. But even when it comes to soul, MCI would counsel, make sure that clever outsiders are allowed in under the tent. Especially when activities like research are involved, this is a rather brutal approach to force-feeding innovation. But it's ever more necessary in today's volatile environment.

(I mustn't make such decisions sound easy. In today's information technology-intense, systems-dominated world, a thoughtless firm could easily end up subcontracting the basis for lasting strategic advantage. Suppose, for example, AMR had subbed its data processing/reservations system to

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Electronic Data Systems? Or GM had chosen 60 years ago not to do its own financing? Surprising sources of competitive advantage, often executed by once lowly staff functions—e.g., MIS, distribution/transportation—are arising with regularity. The major point—seeking out the best operative to potentially perform any task—is hardly invalidated. But a caution flag is important, too. You could wake up with "no there there," to borrow a phrase from Gertrude Stein.)

Create numerous joint ventures and alliances, especially with upstart and overseas firms. It boils down to this: work with anybody, from anywhere, for a long or short period of time, to inject energy and novelty into one's own systems. Of course joint ventures can create market power through size: the hoped for result of the new Mitsubishi-Daimler Benz alliance, for example. This is an important reason to link up, to be sure. But the more important purpose of oddball alliances is to tap into other firms' different approach to any aspect of life.

Case in point: Digital Equipment desperately needed to catch up in the workstation business. It turned to relatively small MIPS Computer of Sunnyvale, California, to provide a leading-edge microprocessor—the very brains of the new workstation. Digital is a proud company. "If it wasn't invented in Maynard, Massachusetts [company headquarters], it wasn't invented." That's the dictum the firm lived by for decades, and darn near choked on. Now that's changed. The same set of decentralized computing-product announcements that included the MIPS association at the high end (workstations) also proclaimed a relationship with Tandy at the low end of the line (personal computers), where Digital has performed so miserably in the past. Tandy will manufacture Digital's PCs.

Even more imaginative combinations are sprouting: GM has invited PPG managers and engineers to manage GM hourly workers inside a Buick paint shop! The object is quick, no hassle problem-solving, more innovation, and faster improvement.

A discussion of alliances could fill a book; skills required to manage alliances effectively are rare, and pitfalls are numerous. The point here: the alliance, especially one mixing an established firm and an upstart, is now a court of first resort, not last resort. It is part of "the way we do business around here" for an increasing number of wise, innovation-starved companies.

Attacking Markets By the Numbers

The first section counseled forcing the market into the company, no matter how rough the fit. (The rougher the better, to some extent.) In some respects such an approach is reactive: these are things a company's leadership, via strategic decision, does *to* itself because it sees no alternative. The strategy is purposefully designed to be one from which members of business units cannot escape! This section discusses proactive approaches that the company

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can take in addressing marketplace innovation; to some extent, if the firm does the following things well, it won't have to resort to the draconian discipline suggested above. (Although "do both" is doubtless the better, more honest advice.)

Respect small markets. Silicon Valley marketing maven Regis McKenna exposes all of IBM's warts, and then some, in his recent book, *Who's Afraid of Big Blue?* Near the top of his list: IBM's reluctance to take on markets unless they have $100 million in potential. The problem: Most new product markets, especially for new technologies of the sort found in the electronics industry, are initially small and emerge from surprising crannies—for example, desktop publishing when Apple first embraced it as an entryway to corporate markets.

I agree with McKenna's assessment, though IBM hardly deserves to be singled out for opprobrium. I recall ancient discussions with managers at Procter & Gamble: to be worthy of consideration for funding, a new "line-extension" had to aim for a quarter-billion dollars minimum in revenues in just a handful of years. The problem again: The world doesn't work that way! In packaged goods, where P&G competes, genuinely novel product entries—e.g., the burgeoning market in prepared convenience foods—has initially consisted of little niches. To ignore these pipsqueak products is to ignore the direction in which the market is moving until, perhaps, it's too late to make a comeback.

The *Economist* says we live in an era of "manic specialization." From the world of Norton abrasives and Monsanto specialty chemicals, to banking and insurance, all markets are microtizing. *Successful companies of any size will learn to respect tiny markets, or else*. That's no mean feat, given the historical record.

The reasoning behind this point is fundamental, and timeless as well as timely. There was no market, small or large, for Post-It notepads until the product came along. Market research, time and again, showed that there was little interest in the product. Indeed, who would have assumed that such a mundane idea would have made such a big impact? The Post-It story, though, turns out to be the innovation norm, not the exception. Formal market research studies would doubtless have proclaimed Ted Turner and CNN as all wet, Fred Smith and Fed Ex as all wet. Big ends almost always come from small, unexpecting beginnings. Big ends seldom, perversely enough, come from planned big beginnings. In short, it you know ahead of time it's going to be a "big market," then everybody else knows, too; the odds of success plummet.

Does this fly in the face of "listening to the customer"? You bet it does, at least in the traditional, big-bang market research sense. I'd argue that Steve Jobs and Ted Turner are in tune, are on a special wave length, with the customer. Both have a refined, intuitive sense of future product/service use. This is true of most business startups stars. Of course, all failed startup

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bosses *thought* they had good inner ears. They were wrong, but that doesn't upend my point: it *will* be the inner ear, not market research, which points the way. The fact that most inner ears are out of tune is neither here nor there. Most market research is out of tune, too.

Respect inner ears! Respect crannies! That's my discomforting message.

Conduct joint development projects with "lead" customers and vendors. In a sense, this amounts to an addendum to the forced market injection strategies discussed above: the objective in this instance is to pull outsiders—customers and vendors among others—into the firm's inner sanctums.

The research is clear: a remarkably high share of successful new products come when "lead" customers and "lead" producers work together—that is, when pioneers from the buying side and pioneers from the making side, both willing to take a risk on a new idea in return from gaining a possible edge over the competition, get together. This timeless idea has never been more timely. In an age of market microtization, finding a risk taker to work with, who will mount with you a quick test of the new in the "real world," has never been more helpful. Not only does such an approach lead to quick (and somewhat dirty, yet not embarrassingly so) tests, but also it forcibly injects the pioneering outsider's views directly into the development process at an early stage.

Intensive vendor involvement is a variation on this theme. Most, including me (see *Thriving on Chaos*), trot out Ford's Taurus project as the new "classic" case in point. Ford, for the first time with Taurus, involved numerous vendors from the outset in product specification. Ford reaped an enormous reward in innovativeness from the vendors' massive experience. Such an approach is almost commonplace in Silicon Valley: Computer makers, for instance, routinely work arm-in-arm with microprocessor makers from the start. Another variation on the theme: producers working with franchisees and distributors. Premier Cadillac dealer Carl Sewell, for example, has been on an experimental team in General Motors' Cadillac division. He and a select few other dealers have had a telling impact on the product design process for the first time. (GM, like others, has always given lip service to dealers in this regard. But this time it's the real thing.)

Pursue an "at bats" strategy. This is not a new theme for me—see all three of my books. New product development is a low probability game, no matter how much you plan, survey, and do the sorts of things mentioned above (and to be mentioned below). There are so many variables—literally millions of variables—that go into a new product success. There are variables that deal with the *technology* (design, engineering, manufacturability, quality, serviceability); variables that deal with *distribution* (who, in what channels, take how much interest in a product, for what reason, when); and there are variables that deal with *customer use* (lag time between the development of a new product, and its routine adoption, even when dramatic and unmistakable benefits are evident from the outset, often runs decades—and

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almost always occurs via a convoluted, totally unpredictable path); not to mention variables that involve *competitors* (big, small, domestic, foreign, noncompetitors who turn into competitors). Multiply these and other clusters of variables together, and the odds of succeeding on any given "at bat" are frightfully low.

Which leads me to the obvious conclusion: *innovation, in the end and no matter how well thought out, is a numbers game*. Lots of tries, lots of lead users, lots of tiny markets—and maybe a hit or two from time to time. Sadly, though my point is obvious, it is rarely reflected in corporate innovation strategies, which typically depend on a small number of ponderous projects. Such a wrong-headed approach is predicated on the notion that "if we throw enough money at it, surely something good will happen." Wanna bet?!

Measurement and Reward

This is yet another set of "force-feeding" innovation strategies. One important and often ignored innovation issue: how do we really get innovation "on the agenda"? Later on, while discussing leadership strategies, I'll talk about several subtle but powerful tactics. But the point here, once again, is to discuss blunt instruments.

Track new product sales as a share of sales, compared to competitors. Defining what is and isn't a new product is an art. (How much of a variation on today's theme does it take to count as "new," for instance?) Nonetheless, it can be done, however crudely. The point: damn few do it.

Figure 1, from the current Hewlett-Packard Annual Report, is a deceptively powerful device. HP pays a lot of attention to the chart. It simply portrays the share of today's revenues that come from products introduced in each of the past five years (and before). I have, quite honestly, never seen a more clear "picture" of innovation. My suggestion: get to work constructing one for your firm today!

I also urge you to go a step further, tracking such numbers versus your principal competitors. Some years back, when Digital Equipment had scored a series of computer-market coups, one analyst observed that DEC's share of revenue from new products developed in the last couple of years was three or four times higher than IBM's. This number alone, he said, could explain much of DEC's relative success. The case was plausible.

"What gets measured gets done" is one of management's most time-honored pieces of conventional wisdom. Most of the conventional wisdom in business has been set on its ear in the last few years. But not this piece. Measure it. Post it. Talk about it. And, surprisingly, *something* will begin to happen. This idea might sound simplistic. But I've seen so much evidence to the contrary that I beg you to try it.

Pay for share-of-new-product-sales. Now move from "what gets measured gets done" to the even more powerful "what gets paid for gets

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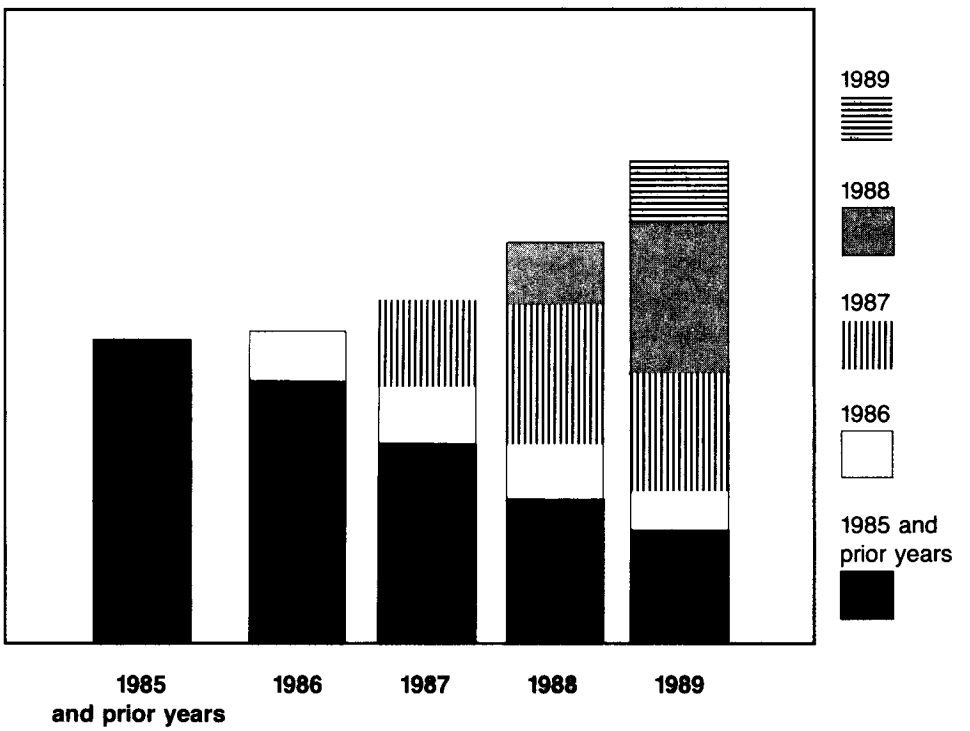
Figure 1. HP Product Orders by Year Introduced*



* This graph illustrates the key role new products play in HP's growth. Each bar indicates the year's total product order, with the top section of each bar showing orders for those products introduced in the past thee years.

Source: HP 1989 Annual Report

done even more." It's the obvious next step, but even less frequently taken. 3M has long taken the share of new product sales formally into account in evaluating each division's personnel; the division boss and his team are in very hot water if corporate-wide, quantitative innovation goals are not met.

3M, in my experience, is almost alone in this practice. The question: why? Is the instrument too blunt? Shouldn't, for example, targets vary from division to division? (They don't at 3M, where the bogey is the same for a mature division as for an exotic, new-technology division.) One could debate such issues ceaselessly. They are worth debating. But the major point is: this can be done, ought to be done, is seldom done. And that's a crying—and stupid—shame.

Use time as a (the) principal business performance measure. "Time-obsessed competition," as I call it (others call it "time-based competition," "competing in time"), will be the principal competitive battleground for the 1990s. I'm not sure I would put it at the very head of the class, but I have

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no difficulty granting speed a first-row seat. In particular, shortening the product development process—by an order of magnitude—is a competitive necessity for most firms, service or manufacturing, small or large.

There are any number of factors involved in becoming time-obsessed. One is essential here: measures that spotlight time *per se* force many aspects of the innovation issue out of the shadows.

The problem: we all jaw about time, lament its quick passage, and then do little about it. We fail repeatedly to home in on the "consumption of time," as senior Boston Consulting Group members Tom Hout and George Stalk, Jr., call it in their seminal new work, *Competing Against Time*. They argue that time (time consumption) should be the most widely discussed, measured, rewarded, and punished variable in the firm's information/measurement/compensation scheme. I think they are dead on. Northern Telecom, one of the pioneer time-based adherents, contends that it indeed has shifted its entire measurement system to emphasize time consumption, with all other variables—*including profit*—now subsidiary.

How do you go about it? You do it. It's about as simple as that. Every firm is loaded with rules of thumb: "Takes four weeks to process an application." "Delivery cycles are eight weeks around here." "New product development takes 18 months." Begin by writing these down. (And, I hope, snickering at your foolishness in the process.) Then get to work on charting, graphing, mapping, talking—and measuring. Figure 2, from textile giant Milliken & Co., tracks the number of hours required to produce a unique sample for a customer. Until Milliken put a spotlight on this sort of crucial variable, it wasn't measured—and therefore it wasn't much attended to (except through general lamentations about slowness and unnecessary delays). Though many steps were involved in quickening processes at Milliken, measuring *per se* was among the most important.

Organizing Strategies

It should come as no surprise. Today's organizations, especially the giants, are not designed for innovation. They are the by-products of a more placid environment. Love of change, acting opportunistically, and shifting direction monthly were not until recently required for survival, or even excellence. Not only were such traits not required, but to have emphasized them would have *detracted* from performance. Doing yesterday's job just a little bit better—at the most—was *the* prescription for success. Isn't that the saga of the post-World War II automobile industry? The steel industry? The chemical industry? The first two decades of even the computer industry? I think so.

Get flat/lean, fast. Sam Walton rises from Bentonville, Arkansas, and his Wal-Mart bushwhacks Sears, K-mart, J.C. Penney, and a host of others. Boom. In a decade, Wall-Mart shoots from less than a half billion dollars

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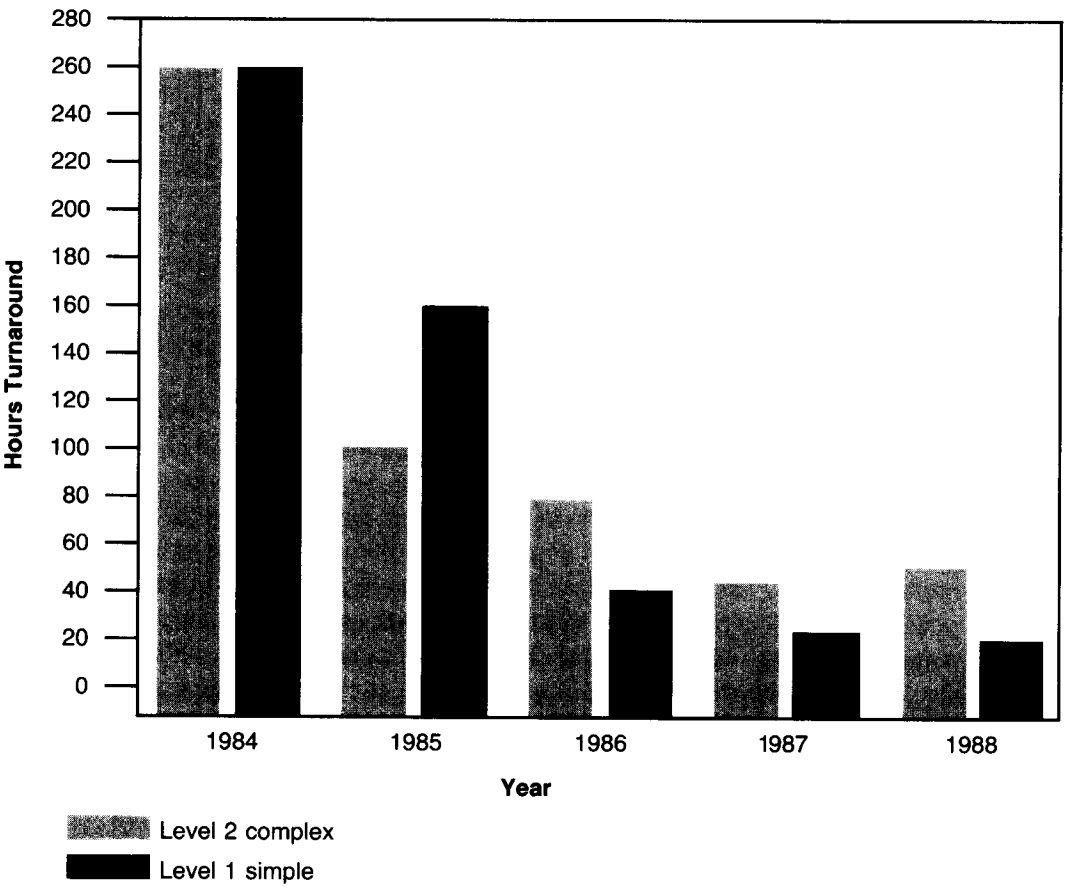
Figure 2. Turnaround Time for Customer Samples/Milliken



Source: Journal of Accountancy, April 1989

in revenues to over $30 billion. The story is one of luck, cleverness, the brilliant application of information technology, the extraordinary personality of Sam Walton, *and* a lean-and-mean, no-nonsense organization designed for speed and lightening-fast adjustment. The number of management layers in Walton's outfit are just a shadow of the ponderous superstructures that hobble the Searses of the world and that we designed for a different environment. Stick with retailing and consider the almost equally impressive success of Benneton and The Limited: once more, these stories are largely by-products of lean, flat, no-nonsense, quick-change organizations.

Harry Quadracci of Quad/Graphics pioneered the market injection strategy that I labeled "license your most advanced technology." But that's only one of Quadracci's noble obsessions. He runs a remarkably flat firm. A young man or woman (a pressman) going to work at one of his $6 million presses

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reports to a lead pressman (honcho of a dozen-person profit center, which is the press). The lead pressman in turn reports to the vice president for presses, who reports for Quadracci. That's it. Just two layers of management separate the big cheese and the 17-year-old who probably didn't graduate from high school—in a high-tech, high-quality, high-service, half-billion dollar, 4000-person, multilocation firm. In such an environment, people get responsibility fast—*by default*. That responsibility includes the requirement/authority, with no stopwatch holders looking over your shoulder, to do it better—and different—today than you did it yesterday. Flat/lean is not the whole Quadracci strategy. But it is the lynch pin.

In short: look at Nucor Steel, Chapparal Steel, Federal Express, Quad/Graphics, Wal-Mart, or C&S Grocers of Battleboro, Vermont. One cannot imagine a flabby, 10-layer organization being flexible enough/innovative enough to survive in any of tomorrow's marketplaces up against the likes of these new, lean/mean marvels.

(Incidentally, the "by default" idea is central. If there aren't lots of layers and lots of staff cops and supervisors, then people—by definition—end up with lots of autonomy. A very flat structure *automatically* defends management from its natural tendency to meddle and stifle.)

Grant high spending authority. Last year, the consultants A.T. Kearney assessed long-term performance among the really giant firms—the *Fortune 200*. Using two decades of data, they turned up 13 who markedly outperformed the other 187. Only a handful of factors separated the winners from the also-rans. Closeness to the market (flat/lean) was one. Another was sky-high spending authority: division general managers among the winners could spend $20 million on their own signature; $2 million was the number among the also-rans.

Both numbers are high by many standards, but remember that this is the *Fortune 200*—all true giants. On a reduced sale, this idea holds down to the mom-and-pop company on the one hand, and to the line worker within the big outfit on the other. A notable employee involvement program at the WIX Division of the Dana Corporation, for example, features the right for any employee to spend a hundred bucks on a tiny process innovation without asking anyone. Sure that's small change. But getting a hundred bucks, or stamp money for that matter, is often a painful, humiliating ("help us make great widgets, but understand that we don't trust you with five bucks"), innovation-quashing experience in many (most?) firms. Whether it's $20 million or $100, the idea and the atmosphere that shouts "try it"/"we trust you" is the point.

Look again at the Kearney study. "It's my further contention that those chiefs who allow their unit bosses high monetary discretion have *de facto* constructed what amounts to my kind of "at bats" scenario. They have created the impetus for a sizeable portfolio of experiments ($20 million "bets" unscrutinized by beady-eyed, big-firm staffers). It's not that the

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chiefs need to have particularly brilliant division managers (I'm only half facetious), but instead they need garden variety, aggressive general managers *who are allowed to do something*.

PepsiCo fits the A.T. Kearney mold. Pepsi Cola boss Roger Enrico told *Fortune* some time back that he signed up Michael Jackson for the first multi-million-dollar commercial without ever informing then-chairman Don Kendall. Kendall is a bit of a tyrant, tough as nails. But that's precisely the sort of behavior Kendall expected—nay *demanded*—of his unit bosses. You're supposed to take risks at Pesi, blow it from time to time and even in a big way—and you live to tell the tale. It's a "try it"/"risk it" environment, and arguably among the handful of best managed giant companies in the world as a result.

Grant true autonomy to divisions. This is a variation on the prior theme. Most companies, giant and even mid-size or smaller, have long since broken down into divisions (or SBUs or whatever). It started in the 1920s and reached a high-water mark in 1970. Most everyone did it. The catch: over time many big divisions became giant, functional organizations in their own right. Then any number "matrixed," *de facto* giving back authority to large corporate staffs. That is, "autonomous" divisions were anything but autonomous.

Autonomous means very high spending authority. It means a very lean and flat corporate superstructure, with no cops perpetually prodding and probing in the division, distracting the division's folks from the task of sticking close to the market, trying stuff and making money. I have no objection, as you'll see below, to a very tough, performance culture (PepsiCo is Exhibit A again). That is: make the division autonomous. Give the top team the wherewithal to get the job done. Get out of their hair. (All the way out.) And if they don't perform, find another team. But you must let them have an honest shot in the first place if this strategy is to work: do you *really* have a divisionalized structure? Truly *autonomous* divisions?

The issue ranges far beyond the important details of spending authority and the size of corporate oversight function. It's also a matter of those two big "squishies"—"culture" and "attitude." Do people *feel* autonomous? Do they *sense* someone(s) lurking over their shoulder, regardless of the formal structure and formal connections to "on high"? A *feeling* of freedom is as important as the reality. Check your TQ (what my colleague Reuben Harris calls the "terror quotient"): if it's high at the top of the division and high on the shop floor, then you haven't got autonomous units. Period.

Bend over backwards to install small profit-and-loss centers. The ability to do this varies from firm to firm, technology to technology. It's tougher for systems companies like Boeing or MCI than it is for Quad/Graphics or Marriott or McDonald's. In Quad's case, the printing press serves discrete customers with discrete jobs. Though it calls upon functional skills from

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many other parts of the firm, it truly is a "little company." Boss Quadracci treats it exactly that way: each press has its own P&L and full financial reporting.

Though unable to carve out $6 million units as at Quad, even AT&T came to understand the point. It recently broke itself up into 19 largely autonomous business units. (As noted above, the AT&T units were allowed to break tradition and purchase products/services from the outside, even when an inside alternative existed.) The movement to true profit-and-loss centers was recognition of the failure—at AT&T and most everywhere—of the great god "synergy" to do his or her thing. One AT&T boss comments on the delusion of connectedness that led to the dramatic breakup: "When we were arguing for getting into something, we argued its synergies. When we should have gotten out of something, we argued it was hooked to something else. But we had trouble banking the synergies. You can't be out there with poor-fitting left glove and a perfect right glove and say you're the best in the glove business."

The message, then, from smallish Quad to giant AT&T: Break it up!

Instill a "project orientation" everywhere. To be speedy, to practice innovation on every product and process, to develop new and scintillating products quickly requires that *all* functional boundaries—between design, engineering, manufacturing/operations, purchasing sales, marketing, distribution, etc.—be destroyed. Not "broken down." "Not softened." Not made "penetrable." But utterly *destroyed*. Near the top of the list for achieving this (a major topic itself, about which I've written extensively elsewhere) is "projectizing" the entire company. Moreover, the projects should almost unfailingly be "horizontal"—that is, multifunction projects.

Virtually every person in the company should spend a fair amount of his on her day on project teams with people from other functions: *The essence of perpetual quality improvement, service improvement, speeding up this and that, and rapid product development is getting people from multiple, warring tribes working together on output-oriented activities that generally go unmanaged in our traditional, "vertical," "functional stovepipe" organizations*. All managers in the sleek, new-look "projectized" organization become first and foremost cross-functional project creators. It's what they *do* for a living. It's what they get *paid for*. They don't—pointedly—get paid for "minding the functional store." They become yeah-sayers (for the multi-function task), not naysayers (representing the function's—and their bosses'—constraints.)

Create co-located, joint-function teams. The project, described above, gets done by a team of some kind. Joint-function teams become the principal "way we do things around here," "the way we make 'it' [any 'it'] better," the bedrock of the corporate culture. But there is one element that deserves special mention, even in this brief treatment. I've said many times, to the

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surprise of many people: *physical location—in particular, jamming people from disparate functions together in the same room or workspace or cubby hole—is the number one culture change tool that I've discovered!* Move the accountants to the manufacturing floor: within *six weeks* the accountants will *appreciate* the manufacturers, the manufacturers will *appreciate* the accountants. Put the designers, engineers, manufacturers, and marketers in one location working on a joint product development process: something close to a miracle will invariably occur.

I've even coined a set of "iron laws":

- Want a *50 percent* reduction in product development time? Put the engineers, designers, manufacturers, marketing, and finance people together in one team space.
- Want a *60 percent* reduction? Move that space two miles from headquarters, renting an old, unused restaurant.
- Want a *70 percent* reduction? Make sure that the old warehouse or restaurant you rent is next door to a pub, to induce after-work, casual interchange.
- Want about an *80 percent* reduction? Put full-time customer and vendor people on the team in the isolated location.

Could it be that simple, you rebut? Well, of course not. Nothing in life is. But this one comes close. I can honestly say that, with very rare exceptions, I've never seen this "trick" fail.

Pursue a pronounced "horizontal" (time-based) orientation. I've hinted at this before, but it deserves singling out. I am suggesting no less, and I acknowledge the frightfully high level of abstraction, than reorienting the basic "doing-business axis" of the organization from "vertical" (narrow, functional expertise honored) to "horizontal." That doesn't mean that we forget special expertise, which is surely important. It does mean that an obsession with narrow functional skills and zealous guardianship of "functional integrity" become the unmistakable secondary "dimensions"/axes of the firm.

This sort of talk seems mighty odd to some. It doesn't to me. I worked as a consultant at McKinsey & Co. for years. One is required, for eventual promotion, to develop a deep, functional skill (banking, strategy, etc.). Yet the unmistakable orientation of the firm is toward *the project* (the team-based client engagement). The three-quarter billion dollar company lives for, breathes, and supports that project orientation dimension. If you do well on the "horizontal" (project) axis/dimension, you get promoted. If you don't, you don't. (My choice of example amounts to more than a personal whim. Many are suggesting that the fluid, professional service firm, of McKinsey's ilk, is the single best model for tomorrow's commercial environment. See, for example, Harvard professor D. Quinn Mills' new *Clusters: The Alternative to Hierarchy.*)

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Get customers/vendors inside, on teams. I have an irritating (to some) way of drawing organization structures these days: I walk up to a flipchart, draw a single big circle on a blank page, and blithely declare, "Everybody inside!" The new, fleet-of-foot, opportunistic organization will have no "outsiders"—people (customers, vendors) who aren't allowed to walk the hall without being "badged," people (customers, vendors) without access to the organization's innermost secrets. "Outsiders'" must become "insiders" post haste, if we are to achieve the fast-paced innovation aims that are requisite for survival in any industry today.

Customers and vendors (and franchisees, reps, etc.) must routinely be "discovered" walking "our" halls, acting as part-time or full-time members on "our" teams and assessing anything from logistics to new products. They "inject new ideas." "They" head off down-the-road mistakes. "They" speed things up in general. "They" inject a sense of realism and urgency. There is no end to the list of advantages of bringing the "outsider" *into* our most secretive deliberations, putting him or her on a workaday basis *into* every aspect of the firm's dealings. (Yes, "every." The "outsider" can contribute as much to MIS or training or logistics, or even accounting, as to engineering or manufacturing.)

Don't let teams become committees. In addition to flat, lean, and autonomous, the project/horizontal "orientation" is the chief organizing strategy for innovation that I'm proposing. But we all realize that many if not most task forces/project teams become *de facto* "committees," often more bureaucratic than even the narrow, functional organizations that we were trying to replace, speed up, and de-bureaucratize. In the Appendix you'll find a list of baker's dozen "must do" ideas for halting the degeneration of task-centered project teams into committees.

Destroy job descriptions/Think in "wholes". The elimination of—destruction of, outright burning of—job descriptions may sound like a lower order idea, compared to the high falutin' notions mentioned so far in this section. I contend that it's not. To be sure, the elimination of job descriptions will not bring tomorrow morning a new-found dedication to innovation. On the other hand, the elimination of job-description *thinking* amounts to a surprisingly big step in the right direction Job descriptions are about blinders and constraints. One of the biggest differences between American and German/Japanese managers is that we are narrow and specialist (vertical again) in focus; they are more generalists in focus (horizontal). front-line employees in Japan and Germany think less about their 17 square feet, more about how they relate to other functions in the organization, near or far.

"Thinking in wholes" has become the obsession of any number of organization researchers. "Thinking in wholes" means learning about, acting upon, having access to, more than one's own narrow arena. The concept

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can readily be turned into a useful "to do" list; yet mainly it is a point of view, a way of life, a way of doing business "with" fellow-insiders in other functions, and also "with" outsiders beyond the firm's legal (and increasingly irrelevant) limits.

In the last part of this article, I will discuss people strategies, leadership, organizational learning, and the fundamental innovation paradox.

(*To be continued,* in *CMR*, Vol. 33, Number 2, Winter 1991)

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