SUPPORTING INNOVATION AND VENTURE DEVELOPMENT IN ESTABLISHED COMPANIES

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EXECUTIVE SUMMARY

Accumulated research findings call into question the ability of established corporations to develop and manage new ventures successfully. This article argues that the problem comes in large part from failing to differentiate between the requirements of administrative management—geared to managing existing activities and holding things in place to ensure continuation of already-developed activities—and the requirements of entrepreneurial management—designed to create change by developing something new. The two kinds of management are in tension and may interfere with each other, but every established organization needs both in order to get both innovation and efficiency.

Innovations and new ventures have four particular characteristics that account for their special management requirements: uncertainty, knowledge-intensivity, competition with alternative courses of action, and boundary-crossing. Thus entrepreneurial management to support creation of the new puts a stress on such features as visionary leadership, "patient money," planning flexibility, team continuity/stability, and interfunctional cooperation. But the usual requirements of administrative management in established corporations contradict these principles. Thus some companies try to set their new ventures apart from the old to avoid conflicts in management requirements. However, this this only partially solves the problem.

All companies need both to manage ongoing activities and to create new ones—with the proportions of each depending on the nature of the business. They need to strike a balance between administrative and entrepreneurial management. The problem of venture development in established corporations occurs when administrative management comes to dominate and innovation is not valued sufficiently. The command system of administrative management needs to be replaced by a mutual adjustment system.

High innovation companies build mutual adjustment into their design. They allow flexibility to move into an entrepreneurial mode. They are characterized by broader jobs; structures built around

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small business units or functionally complete project teams; cultures stressing the ability of people to contribute more over time; and easy access to the key "power tools" of information, support, and resources.

A more entrepreneurial corporation minimizes hard-and-fast rules and procedures governed by a rigidly defined command structure and emphasizes instead flexibility and broadly-skilled sets of employees in flexible units that can be grouped or regrouped as changing circumstances require.

Large corporations must institute deliberate programs to encourage innovation and entrepreneurship, including removing the roadblocks of unnecessary administrative requirements; encouraging integration across departments and functions; changing budgeting and accounting procedures and providing internal venture capital and special project funds; discretionary time; and new business performance measures.

RESEARCH AND ANALYSIS ON THE INNOVATION AND VENTURE DEVELOPMENT process is itself in the development stage, but data are beginning to accumulate. Much of this concerns success or failure: the factors accounting for the fate of new concepts from the initiation to the commercialization stage (Von Hippel 1977; MacMillan et al. 1984; O'Toole 1983; Hobson and Morrison 1983; Block 1983; Vesper 1984). Whereas some writers describe the process itself (e.g., George and MacMillan 1984; Burgelman 1984; Kanter 1982; Maidique 1980); others focus on the organizational conditions that help or hinder it (Quinn 1979; Kanter 1983). Based on the mounting evidence, some analysts conclude that entrepreneurship is difficult, if not impossible, in an established business—especially large corporations (see Quinn 1979; Block 1982); while others point to the successes some companies have had in establishing a climate conducive to new ventures (3M is perhaps the most frequently cited example, e.g., Roberts 1980).

It is time for reflection on the meaning of what we are learning. Behind the question of whether established organizations can effectively engage in venturing is a classic tension in all social institutions: what it takes to develop new activities is different from what it takes to maintain ongoing ones. What helps things to change is inevitably in tension with what holds them in place.

I will explore this issue by first contrasting entrepreneurial with bureaucratic management, offering some observations about the nature of innovation. But innovation is not the only task organizations face, and even new ventures require a portion of control-oriented administrative management once they are established. So the question is one of acknowledging the necessity for two modes of management balancing both innovation and efficiency. The problem in many large corporations is that one mode has come to dominate all activities: the administrative mode driving out the entrepreneurial. I will conclude by identifying the characteristics of some major corporations that strike a better balance, and then describe some of the steps other companies are taking to revitalize entrepreneurial management.

WHAT IS DIFFERENT ABOUT ENTREPRENEURIAL MANAGEMENT

The term entrepreneurship means the creation of new combinations. At its very root, the entrepreneurial process of innovation and change is at odds with the administrative process of ensuring repetitions of the past. The management of innovation and change requires a different set of practices and different modes of organization than the management of ongoing, established operations where the desire for or expectation of change is minimal. Stevenson and Gumpert (1985) have cast this management difference in terms of the contrast between

the promoter-type stance of the entrepreneur, driven by perception of opportunity and the trustee-like stance of the administrator, driven to conserve resources already controlled (see also Hanan 1976).

In organizations in which innovation and entrepreneurship have been only minor themes in business strategy and in which the risks associated with major change have led to cautious or gradualist stances, we are likely to find an accumulation of policies and practices that make major innovation difficult—entrepreneurial management prevented by the demands of administrative management.

The creation and exploitation of new products, new processes, or new systems has four special requirements and unique situations to manage because of characteristics of the innovation process itself. Understanding the requirements of innovation makes clear why entrepreneurship needs to be managed differently from ongoing operations.

Uncertainty

The innovation process involves little or no precedent or experience to use to make forecasts about results. Hoped-for timetables may prove unrealistic, and schedules may not match the true pace of progress. "Progress on a new innovation," Quinn (1979) wrote, "comes in spurts among unforeseen delays and setbacks . . . in the essential chaos of development." Furthermore, anticipated costs may be overrun. Results are highly uncertain. Indeed, analysts have variously estimated that it takes an average of 10–12 years before the ROI of ventures equals that of mature businesses (Biggadike 1979) or 7–15 years from invention to financial success (Quinn 1979). This situation thus requires the following

- Committed visionary leadership willing to initiate and sustain effort on the basis of faith in the idea.
- The existence of "patient money," or capital that does not have to show a short-term return.
- A great deal of planning flexibility, to adjust the original concept to the emerging realities.

But these requirements can run counter to those aspects of administrative management that may require the following instead:

- Detailed analysis in advance of resource commitments (e.g., in one company the list of the analyses to be done itself runs ten pages).
- Fairly rapid returns on investment or a very high probable revenue base from the activity (e.g., packaged goods companies uninterested in product ideas with projected sales of under $100 million/year) (e.g., see Dean 1974).
- High level sign-off on a "plan" and agreement to a set of procedures or steps, with the expectation that they be followed without deviation—measuring managers on adherence to the plan, rather than on results.

Knowledge-Intensivity

The innovation process is knowledge-intensive, relying on individual human intelligence and creativity. New experiences are accumulated at a fast pace, the learning curve is steep. The knowledge that resides in the participants in the innovation effort is not yet codified or

codifiable for transfer to others. Efforts are very vulnerable to turnover because of the loss of this knowledge and experience. This situation thus requires the following:

- Stability among the participants involved in an innovation effort, especially the venture manager or visionary leader.
- A high degree of commitment among all participants as well as close, team-oriented working relationships with high mutual respect, to encourage rapid and effective exchange of knowledge among participants.
- Intense and concentrated effort focused inward on the project.

But these requirements may run counter to those aspects of administrative management that instead allow the following:

- Regular turnover of managers because of a lock-step career system that ties rewards to promotions and thus requires job changes.
- Bureaucratic assignment of managers or personnel without regard to their degree of belief in the effort or their compatibility with each other.
- Reporting requirements that disrupt project activities and distract participants by asking them to prepare special analyses for upper management or attend meetings unrelated to advancing the work of the innovation team.

Competition with Alternatives

In the innovation process, there is always competition with alternative courses of action. (The pursuit of the air-cooled engine at Honda Motor, for example, drew time and resources away from improving the water-cooled engine.) Furthermore, sometimes the very existence of a potential innovation poses a threat to vested interests—whether the interest is that of a salesperson receiving high commissions on current products or of the advocates of a competing direction (Fast 1976, argues that "political" problems are the primary cause for the failure of corporate new venture departments.) This situation thus requires the following:

- Champions or sponsors who will argue for the course of action, who will sustain the vision.
- Coalitions of backers or supporters form a number of areas willing to lend credence (and resources) to the project.
- Sufficient job security throughout the organization that innovations are not seen as position-threatening.
- Identification with the success of the whole organization.

But these requirements may be difficult to meet if managers have been selected, trained, promoted, and rewarded in an administrative mode that encourages the following:

- Cautious, conservative stands that involve betting on sure things only (e.g., in one company requiring risk analyses, a preference for no-risk new products).
- Interdepartmental rivalry and competition for scarce resources or rewards, with each area having to "defeat" others to ensure its existence, and rewards based only on individual unit performance.
- Lack of confrontation or constructive arguing out of differences, but resorting to underground sabotage instead.

"Boundary" Crossing

The innovation is rarely, if ever, contained solely within one unit. First, there is evidence that many of the best ideas are interdisciplinary or interfunctional in origin—as connoted by the root meaning of entrepreneurship as the development of "new combinations"—or they benefit from broader perspectives and information from outside the area primarily responsible for the innovation. Second, regardless of the origin of innovations, they inevitably send out ripples and reverberations to other organizational units, whose behavior may be required to change in light of the needs of innovations or whose cooperation is necessary if an innovation is to be fully developed or exploited. Or there may be the need to generate unexpected innovations in another domain in order to support the primary product, like the need to design a new motor to make the first Apple computer viable. This situation thus requires the following:

- Enlarging the focus of participants in the innovation process to take account of the perspectives of other units or disciplines. (What I call "kaleidoscope" thinking is at the heart of the creative process in innovation—the use of new angles or perspectives to reshuffle the parts to make a new pattern, thus challenging conventional assumptions.)
- Early involvement of functions or units that may play a role at some later stage of the venture or innovation effort.
- A high degree of commitment by functions or players outside of the innovation-producing unit to the innovation.
- A high degree of interaction across functions or units—and thus more interunit teamwork.
- Reciprocal influence among functions.

But these requirements can run counter to the typical administrative-bureaucratic pattern, which fosters the following instead:

- Narrowing of focus via an emphasis on specialization, single-discipline careers, and limited communication among functions or disciplines.
- A preference for homogeneity over diversity, for orthodoxy over new perspectives.
- Measurement of functions or units (or divisions) on their own performance alone, so that rewards drive behavior that maximizes unit-specific returns rather than partnership contributions to the projects of other units.
- Structural arrangements and reporting systems that separate (segment) functions or units and assign each a set of steps in a process assumed to be linear rather than reciprocal and interactional.

Overall, then, it is not surprising that research on the problems of new corporate ventures tends to attribute failures to such common factors as the requirement for inappropriate planning/analysis and pressure for faster results; turnover on the venture team and lack of committed leadership; the politics of gaining sponsorship or championing within the corporation (or the perils of getting the "wrong" sponsorship); and interfunctional conflicts that either slow the process down or steer the project in an inappropriate direction.

Note that the emphasis in entrepreneurial management is on commitment, not consensus. The entrepreneurial process can be driven by single-minded fanatics who convince a few others that their vision is worth pursuing, but complete consensus throughout the

organization is not necessary as long as the innovation team itself is committed. Indeed, it is the search for total consensus on every action throughout a company that promotes homogeneity and orthodoxy and that confines activities to the least controversial or least threatening to status quo interests. The entrepreneurial process permits diversity and allows conflict to surface, while encouraging temporary coalitions of the committed to form and operate.

FROM COMMAND TO MUTUAL ADJUSTMENT

Administrative management works to hold things in place, preventing deviation from established practice, once rules are made. It is compatible with a "command" system in which every person and every function knows its place. When this type of management results in high degrees of compartmentalization of responsibilities and limited contact between a large number of differentiated statuses (distinctions of level, of function, of unit), I have referred to it as "segmentalism"—an approach to organizing and managing that discourages change, even in the face of obvious problems (Kanter 1983).

Instead, the entrepreneurial process requires more reliance on the particular persons involved, closer working relationships, the ability to depart from tradition, and a governance system that is one of continual negotiation and mutual adjustment among all participants with something to contribute to the effort. This approach to organizing can be called "integrative"—an emphasis on bringing together rather than separating activities or people—and the governance system called a partnership or mutual adjustment model.

A simple proposition in organizational theory holds that under conditions of low uncertainty and high predictability about both input and outcome, it is effective to manage by rules, paperwork, and other impersonal means administered through clearly established centers of command that issue orders. But under conditions of high uncertainty and low predictability, it is more effective to manage by personal communication and negotiation—in part because of the sheer inability to issue enough commands to cover every contingency.

Thus entrepreneurship requires a system of management by mutual adjustment instead of a system of management by command. Management by mutual adjustment, in turn, relies on integrative organizational conditions: a close working relationship among all participants and mutual respect fostered by the absence of status differences, overlapping responsibilities, and concern for joint goals. It is partnership-oriented and allows for temporary alliances among equals instead of submersion of parties in a hierarchy—e.g., joint ventures versus acquisitions, borrowing or renting assets rather than owning them.

All established organizations need both systems. They need a command system for those areas where repeating the past is necessary, where predictable products or services are to be turned out reliably and uniformly according to an established blueprint, and where efficiencies are to be gained through a learning curve derived from numerous repetitions. And they need a mutual adjustment system wherever innovation is desired, problems need to be solved, and new techniques or methods are sought. Even in a fairly new company developing new products in a growing market, both systems play a role. Mitchell Kapor, the 34-year-old founder and CEO of Lotus Development Corporation, a highly successful software firm, acknowledged this need for two simultaneous management systems:

> To be a successful enterprise, we have to do two apparently contradictory things quite well: We have to stay innovative and creative, but at the same time we have to be tightly controlled about certain aspects of our corporate behavior. But I think that what you have to do about paradox is embrace it. So we have the kind of company where certain things are very loose and other things

> are very tight. The whole art of management is sorting things into the loose pile or the tight pile and then watching them carefully.
>
> *Boston Globe 1/27/85*

Organizations where administrative command systems dominate sometimes establish a separate system for entrepreneurship and innovation, running, in effect, two organizations side-by-side. One example is the "parallel organization" concept at use in employee involvement programs at a number of companies—a second, participative organization of temporary task forces added to the operating organization with its clear specification of roles and responsibilities and its numerous distinctions between functions and levels (Stein and Kanter 1980). Another example is establishment of new venture units in large corporations that operate by different principles than the organization running established businesses, like the separate organization that developed the IBM PC or GM's Saturn subsidiary.

Though every company, depending on the tasks at hand, needs some mix of command and mutual adjustment mode, the ability to innovate requires a shift toward the mutual adjustment mode. Companies that are successful in industries where innovation is essential tend to be dominated by the integrative principle of management by mutual adjustment more than by the segmentalist principle of management by command. This permits them to behave entrepreneurially in every domain, and to take advantage of "spontaneous" as well as officially mandated innovations.

STIMULATING INNOVATION AND SUPPORTING ENTREPRENEURSHIP: CHARACTERISTICS OF HIGH INNOVATION COMPANIES

Innovation and new venture development may originate as a deliberate and official decision of the highest levels of management or they may be the more-or-less "spontaneous" creation of mid-level people who take the initiative to solve a problem in new ways or to develope a proposal for change. Of course, highly successful companies allow both, and even official top management decisions to undertake a development effort benefit from the spontaneous creativity of those below. But regardless of origin, for the idea to be turned into reality capable of generating financial returns, certain organizational characteristics are generally present. Those companies with high levels of enterprise tend to have these conditions reflected more widely in their ongoing practices.

Based on my own comparisons of 12 companies (six high in innovation and six lower in the number of significant new projects their managers were involved in) and on review of the literature, I can identify a number of conditions that facilitate entrepreneurial management. (See Kanter 1983, for details of the original study; the data base has subsequently been enlarged.)

THE FACILITATING CONDITIONS: JOBS, STRUCTURE, CULTURE, AND "POWER TOOLS"

Jobs

Innovation is aided when jobs are defined broadly rather than narrowly, when people have a range of skills to use and tasks to perform to give them a "feel" for the organization, and when assignments focus on results to be achieved rather than rules or procedures to be followed. This, in turn, gives people the mandate to solve problems, to respond creatively to new conditions, to note changed requirements around them, or to improve practices—

rather than mindlessly following procedures derived from the past. Furthermore, when broader definitions of jobs permit task domains to overlap rather than divide cleanly, people are encouraged to gain the perspective of others with whom they must now interact and therefore take more responsibility for the total task rather than simply their own small piece of it.

Among professionals, job enlargement has been stressed more for its motivational properties than its task contributions. But still, the emerging consensus is that in areas that benefit from more enterprise and problem-solving on the part of jobholders, bigger jobs work better. This is the principle behind work systems that give employees responsibility for a major piece of a production process and allow them to make decisions about how and when to divide up the tasks. Pay-for-skill systems similarly encourage broader perspectives by rewarding people for learning more jobs.

A proliferation of job classifications and fine distinctions between steps in what are really connected processes (e.g., the distinction between many types of engineers specializing in only one step in a conceive-to-design-build process) has inhibited innovation in many large, segmentalist American companies. Individual jobholders need take no responsibility for ultimate outcomes as long as they perform their own narrow task adequately. There is a limited incentive to engage in either "spontaneous" innovation (self-generated problem-solving attempts with those in neighboring tasks) or to join together across job categories for larger top-directed innovation efforts—especially if differences in job classification also confer differential status or privilege. There is even a loss of basic efficiency as tasks are left undone while waiting for the person with the "right" job classification to become available, even though others in another classification may have the skills and the time. And there is a tendency for people to actively avoid doing any more work than the minimum, falling back on the familiar excuse, "That's not *my* job"—a refrain whose frequent repetition is a sign of a troubled company.

To capture such benefits, New United Motor Manufacturing, the GM–Toyota joint venture in Fremont, California, has enlarged production jobs. Teams of five to twelve workers, guided by a team leader, get broad responsibility and divide up the specific tasks themselves; each worker is theoretically able to do any job. In contrast to the dozens of job classifications that existed when the plant was run by GM, there is just one classification for production workers and three for skilled trades.

Organizational Structure

When it comes to innovation, "small is beautiful." Or at least it is beautiful as long as the small unit includes a connection with every function or discipline necessary to create the final product, as well as the autonomy to go ahead to do it—or a close connection with approvers and authorizers.

In order to get the kind of interfunctional or interdisciplinary integration that innovation requires, close relationships are required—working teams or venture teams that are functionally complete, on which every necessary function is represented.

This is why the idea of dividing into smaller but complete business units is so appealing to organizations seeking continual innovation. All the players are right there, to be linked closely in the innovation process. (And for all their cumbersomeness in practice, "matrix" reporting relationships acknowledging multiple responsibilities keep interfunctional links alive). In smaller business units it is possible to maintain much closer working relationships across functions than in larger ones—one of the reasons for Hewlett–Packard's classic growth strategy of dividing divisions into two when they reached more than 2000 people or $100,000,000

in sales. Even where economies of scale push for larger units, the cross-functional project or product team within a single facility (captured in such ideas as the factory-within-a-factory) helps keep the communication and the connection alive.

Finally, it is important that those with local knowledge have the ability to experiment based on it—within whatever guidelines or limits get set at higher levels. Innovation is discouraged when those with the responsibility lack the authority to make those changes they feel will benefit their business.

Culture

High innovation organizations have in common the high value they place on people and their potential—what I have come to call a "culture of pride" that expects and rewards high levels of achievement and assumes that investments in people pay off.

A mutual adjustment system of management, in contrast to a command system, requires a high degree of respect for people—not only on the part of the company but also on the part of all of the players who must back and support each other's ideas.

The investment in people that characterizes high innovation settings is slightly different from the more paternalistic principle of lifetime employment. While many high innovation companies try to maintain lifetime employment policies that certainly offer security in exchange for loyalty, this by itself is not responsible for the level of enterprise found in them.

Instead, it is the expectation of continuing growth of contribution over time that fosters more entrepreneurial stances. This is reflected in large dollar amounts spent on training and development—and in the emphasis on having the best human resource systems in general.

Operationally a "culture of pride" is fostered through abundant praise and recognition—a proliferation of awards and recognition mechanisms that continuously hold up the standards for display and publicly acknowledge the people who meet and exceed them. High innovation settings are marked by their celebrations and award ceremonies and trophies and wall plaques and merit badges and awards ("local hero" awards and "extra mile" awards and "atta-boys") that visibly communicate respect for people and their abilities to contribute. Merit reward systems, (as opposed to automatic cost-of-living adjustments but little or no merit component), also convey the company's recognition of performance.

Low innovation settings, by contrast, seem begrudging about praise, operate in ways that signal that all important knowledge comes from outside the company, and expect people's recognition for achievement to be the fact that they have kept their job. I have even found a company that gives significant monetary awards for above-and-beyond contributions—but keeps these all secret.

The Tools to Move into Action

The entrepreneurial process requires three kinds of "power tools" to move ideas into action—information, support (backing or legitimacy, appropriate sponsorship or championing), and resources. Of course, when large projects are initiated at the top of the organization and handed a staff and a checkbook, there is little issue about acquiring the tools to accomplish innovation—although even in this case, managers can run across problems of access to the tools they need. But for instances of spontaneous entrepreneurship, generated within the organization and still lacking the status of a major and official project, access to "power tools" can be critical in whether bold new initiatives are ever seeded. Access to power tools is easier in high innovation settings because of organizational structure and practice.

Information is more readily available in high innovation settings because of open communication patterns that make data accessible throughout the organization. For example, operating data may be shared down to the shop floor, or face-to-face communication may be emphasized, or norms may bar "closed meetings"—all common practices in some high technology companies.

Support or collaboration is encouraged in high innovation settings by the dense networks of ties that connect people across diverse areas of the company, because of cross-discipline career paths, membership on task forces and cross-area teams, frequent conferences or meetings across areas, or even whole-unit parties like Silicon Valley's Friday beer busts. Easy access to potential sponsors or champions is also more likely where title-consciousness is minimal and the chain-of-command is not a pecking order.

Resources are easier to get in high innovation settings because they are decentralized and loosely controlled. That is, more people have budgetary authority and can make commitments for "seed capital" for new activities. Or there are more sources of slack—uncommitted funds—that can be allocated to innovation. There is discretionary time and discretionary resources that can be managed flexibly, used for experimentation, or reinvested in new approaches.

SPECIAL PROGRAMS FOR ENCOURAGING CORPORATE ENTREPRENEURSHIP

In addition to developing a structure and culture conducive to innovation and entrepreneurship, many companies are beginning to institute deliberate programs to encourage it.

Making Sure that Current Systems, Structures, and Practices Do Not Present Insurmountable Roadblocks to the Flexibility and Fast Action Needed for Innovation

Reducing Unnecessary "Bureaucracy"

For example, a major petroleum company has made a number of significant changes in order to remove roadblocks to entrepreneurship. Its exploration area reduced the number of approvals necessary for land acquisition, finding that each additional approval was associated with a 15% loss of productivity. Another division conducted a "hog law" review, soliciting views from employees about no-longer necessary rules and regulations that were impeding change. Still another department reorganized to remove levels of hierarchy, after concluding that the additional levels did not "add-value" to activities but simply slowed them down.

Reducing Segmentalism" and Encouraging Integration Across Departments and Functions

Actions that improve communication and information flow across units and levels are one step. Some companies with a legacy of excessive segmentation of activities are restructuring to create more business-specific, customer-specific, or product-specific teams across functions. Others are stressing interdepartmental improvement projects or idea exchanges. They are trying to increase the flow of information, support, and resources across areas—the key "power tools."

Changing Internal Budgeting and Accounting Procedures

One large household products manufacturer has discovered that its internal financial systems may discourage investment in new technologies because all expenditures must be justified in terms of immediate cost-savings. A leading bank decided to separate budgets for ongoing products and activities from investments in new ones for just this reason, and they have started noting levels of investments expenditure as a positive step in department reviews as well as, in the aggregate, in their Annual Report. The bank has also begun to encourage the divestment of old or less profitable products and techniques in favor of new ones by allowing departments to retain most of any cost-savings they produce for investment in new developments.

Providing the Incentives and Tools for Entrepreneurial Projects

Internal "Venture Capital" and Special Project Budgets

Following the lead of 3M, and now several other major organizations such as Eastman Kodak, an increasing number of companies are setting up special "innovation banks" to fund new ventures or innovations outside of operating budgets. This not only permits a large new venture to be supported inside the company as a separate business, but it also permits many small development activities to be undertaken that would otherwise find no place in a line manager's budget (with its usual requirement for immediate profitability). Efforts that are more experimental, or may take more time to bring returns, or do not fit neatly within existing areas, can still find a home. This is useful not only for those innovations in products or technology that might normally fall within the scope of an R&D operation, but also for numerous other special projects in marketing or information systems or personnel or dealer relations that can themselves net considerable payoffs. A large computer manufacturer has funded innovative organizational improvement projects out of a corporate innovation council.

Discretionary Funds and Discretionary Time

Simply leaving a portion of budgets uncommitted, to be used as managers see fit, can stimulate innovation. Similarly with time. 3M is again the most noteworthy model because of their formalization of the 15% rule—that up to 15% of employees' time may be spent on projects of their own choosing.

A "Dry Hole" or "Portfolio" Approach to Innovation

Top management can and should act as sponsors of innovation, devoting more of their time to new venture creation and innovation in internal systems and techniques than to controlling ongoing activities. A portfolio approach means seeding many diverse projects and many diverse experiments—smaller scale and at lower funding levels than the few traditional projects in most large companies—with an expectation that some will fail, but some will pay off. The "dry hole" analogy is to oil exploration, in which a large number of holes are drilled with the knowledge that only a small portion will produce yields. But the more holes that are drilled—and the increasing intelligence brought to each by learning from "failures"—greater likelihood of major results. Of course, there is a balancing factor: the importance of good aim, of efforts focused in areas likely to pay off. Increased experimentation does not

necessitate acting on every idea. Long-range plans and management priority setting can help focus local initiative so that more "drilled holes" produce yields.

Performance Review and Compensation Geared to Innovation

While many companies engage in the rhetoric of innovation, their methods of appraising and rewarding people may still be tied to short-term revenues and profits, which discourages innovation. For this reason, companies are increasingly including the development of creative new activities as part of MBO's and performance appraisals and making it harder for people to "do well" if they are simply continuing the tried-and-true. And they are also considering much larger rewards for successful innovation, from phantom stock to a percent of the return from a new venture, in return for deferral of reward (other than basic salary) that can accompany longer-term projects or ventures. (Indeed, the entire topic of compensation will be rethought in the decade ahead and will itself be the target of innovation, as a more "entrepreneurial" era brings with it a growth of vehicles tying compensation to company financial performance through everything from ownership-like devices such as gain-sharing to actual employee ownership.) Finally, some companies are also experimenting with ways to reward and recognize the sponsors and champions of innovators, not just the doers, to encourage more high level support for innovation.

Seeking Synergies Across Business Areas, so that New Opportunities are Discovered in New Combinations at the Same Time that Business Units Retain Operating Autonomy

Joint Projects and Ventures

Intercompany, interdivisional, company-with-supplier, company-with-vendor, etc., joint ventures, requiring a partnership stance and governance by mutual adjustment, are increasingly common, as companies discover the energies that come from combining resources for specific purposes rather than acquiring a whole company—a route for new venture development that innovation experts such as Edward Roberts have been encouraging. (Howard Stevenson and David Gumpert point out that "trustees" feel they must "own" all resources themselves in order to better control them, whereas entrepreneurs are willing to "rent" them, find them through joint ventures, or turn to subcontractors.) Even joint ventures across divisions of a single company provide promising avenues for business development. But often, traditional practices have discouraged this, often by ways the performance of units was measured and career rewards given to managers. Some companies are now explicitly trying to encourage technology transfer across divisions, large-scale development projects that could not be funded within one plant's budget, or integrated product development (e.g., in the case of a decentralized computer and control systems company, the possibility of combining devices manufactured by separate divisions into one large system geared to the needs of particular customers). An important goal is increasing the feasibility and legitimacy of such projects.

Conferences, Idea Exchanges, and "Blue Sky Institutes"

Facilitating better information flow across parts of the company and between the company and its suppliers or dealers is one simple way of allowing synergies to be discovered. Rather than one-way information flow characteristic of the common style (a parade of speakers and

reports, with highly controlled question and answer sessions), companies are trying to encourage the dialogue and joint problem solving that can generate partnerships through retreats with open-ended agendas.

Overall, the ideal-typical entrepreneurial corporation would be characterized by an integrative culture and structure, one that creates teamwork across any relevant part of the organization, encourages identification with overall company goals rather than "turfiness," and removes barriers to communication or cooperative action. It would minimize hard-and-fast rules and procedures governed by a rigidly defined command structure and emphasize instead flexibility: broadly skilled sets of employees in flexible units that can be grouped and regrouped as changing circumstances require—or as they spontaneously take initiative to solve problems or create innovations.

Many observers argue that for business to exploit the opportunities and solve the problems involved in intensified global competition, entrepreneurial management principles will need to spread and take hold. Regardless of the domain in which a business improvement opportunity lies, getting results may be a matter of using a style of management and organization more suited to innovation and development than to preservation, more suited to encouraging change than to guarding against it. And this mode of management by mutual adjustment inside an integrative organization is likely to be matched by a larger number of partnership-type arrangements among organizations: suppliers and purchasers, manufacturers and dealers, international joint ventures, joint R&D efforts, and so forth. Only when participants (employees or whole units) meet as partners, and not as "subjects" in a command structure, is it possible to tap the best of the knowledge of each to make innovations work, and to encourage the maximum cooperation of each to getting them established and paying their way quickly.

REFERENCES

Biggadike, R. May/June 1979. The risky business of diversification. *Harvard Business Review* 58:103–111

Block, Z. Fall 1982. Can corporate venturing succeed? *The Journal of Business Strategy* 3:21–33.

Block, Z. 1983. Some major issues in internal corporate venturing. In J.A. Hornaday, J.A. Timmons, and K.H. Vesper, eds., *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.

Burgelman, R.A. Winter 1984. Managing the internal corporate venturing process. *Sloan Management Review* 25:33–48.

Dean, R.C. May 1974. The temporal mismatch—innovation's place versus management's time horizons. *Research Management:*12–15.

Fast, N.D. November 1976. The future of industrial new venture departments. *Industrial Marketing Management* 8:264–273.

George, R., and MacMillan, I.C. 1984 Corporate venturing—venture management challenges. Working Paper, New York University.

Hanan, M. May/June 1976. Venturing corporations: Think small to stay strong. *Harvard Business Review* 55:139–148.

Hobson, E.L., and Morrison, R.M. 1983. How do corporate start-up ventures fare? In J.A. Hornaday, J.A. Timmons and K.H. Vesper, eds., *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College.

Kanter, R.M June/July 1982. The middle manager as innovator. *Harvard Business Review* 61.

Kanter, R.M. 1983. *The change masters*. New York, NY: Simon & Schuster.

Kanter, R.M. Winter 1984. Innovation: Our only hope for times ahead? *Sloan Management Review* 25.

MacMillan, I.C., Block, Z., and Subba Narasimha, P.N. 1984. Obstacles and experience in corporate ventures. Working Paper, New York University.

Maidique, M.A. Winter 1980. Entrepreneurs, champions, and Technological Innovation. *Sloan Management Review* 21:59–76.

O'Toole, J. 1983. Declining innovation: The failure of success. *Human Resource Planning* 125–141.

Quinn, J.B. Spring 1979. Technological innovation, entrepreneurship, and strategy. *Sloan Management Review* 20:19–30.

Roberts, E.B. July/August 1980. New ventures for corporate growth. *Harvard Business Review* 59:134–142.

Stein, B.A., and Kanter, R.M. 1980. Building the parallel organization: Toward mechanisms for permanent quality of work life. *Journal of Applied Behavioral Science*.

Stevenson, H., and Gumpert, D. March/April 1985. The heart of entrepreneurship. *Harvard Business Review* 64:85–94.

Vesper, K.H. 1984. Three faces of corporate entrepreneurship: A pilot study. Working Paper, University of Washington.

Von Hippel, E. 1977. Successful and failing internal corporate ventures: An empirical analysis. *Industrial Marketing Management* 6:163–174.