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THE VENTURE CAPITAL INDUSTRY IN CANADA:

A SHORT NOTE

A. VANTERPOOL

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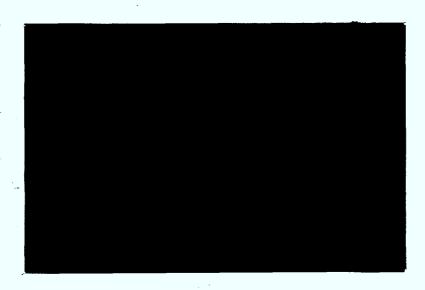


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INTRODUCTION

Quantitative information on the Canadian venture capital industry is extremely hard to obtain. However, as a result of listening to some talks, attending seminars, doing some reading and talking to a few Canadian venture capitalists, the following information has been obtained. It is unfortunately only of order-of-magnitude accuracy and is liable to change rapidly as the Canadian economic climate changes.

CURRENT SITUATION

The major venture capital houses in Canada probably command around \$100 million, of which \$15-20 million is available each year for investment. The amount of money available is very sensitive to the economic climate - it rises rapidly in a bull market and drops just as rapidly in a bear market.

There is only one venture capital house with over \$10 million available to it, and three to four, with \$5-10 million dollars - the remaining 40 or so firms have less than \$5 million. In consequence there are few deals for over \$1 million unless there are two or more partners involved. Also, there are few deals for under \$250 thousand, because it costs too much to investigate and manage smaller investments. This is not to say that initial investments of less than \$250 thousand are not made - but situations where the total venture investment over the life of that investment is expected to be less than \$250 thousand, are not too common.

Every deal a venture capitalist enters into is different. He may require anything from 100% equity involvement to 100% debt involvement with every conceivable variation in between. The deal can range from 10% equity for the inventor (where the inventor has no proven record either as an inventor or as an entrepreneur) to 80% equity for the inventor (where the inventor has successfully commercialized several inventions). The venture capitalist seldom wants control of a company he invests in, but he always insists on being able to get it when he thinks things are going wrong. Most venture capital firms have very few professional employees (i.e. Helix investments has four - even Helzer in the U.S. with \$81 million capital only has 18), and cannot afford to become too heavily involved in the management of the companies they invest in if they are to meet their investing objectives.

Is there enough venture money available in Canada? To the inventor and entrepreneur the enswer will always be "no". Currently, some Canadian venture capitalists agree there is a shortage of start-up capital - but

say there is more than enough second stage financing for the "good" proposals made to them. To the venture capitalist there is always a shortage of good entrepreneurs - and most Canadian venture capitalists find that better proposals (i.e. sounder business plans made by a team of entrepreneurs in the U.S. vs. an idea brought forward by one man in Canada) are available to them in the U.S.A. Also their past investment experience has been much better in the U.S.A. than in Canada.

Most venture companies receive 500-1000 proposals for every one they invest in ... Of those they do invest in (and considering a 5-10 year time frame), 40-60% die or are "living dead", 50-30% do "reasonably" well (but do not repay the venture capitalist for his risk), and 10% pay off at from 50 to 100 to 1. The overall return on investment in the industry is less than 5% (1970 performance).

In the U.S.A. the statistics are similar except that the 10% of the investments paying off really well do much better in the U.S. and the overall r.o.i. was 5.7% in 1970. In the last five years about 50% of the venture capital firms in the U.S. have left the field, (no comparable figure is available in Canada - but UNAS the largest venture capital firm has apparently discontinued making venture deals).

TRENDS

Banks, insurance companies, and large manufacturing companies are moving into the venture field. The first two sources generally are interested only in buy-out or turn-around financing. The manufacturing companies finance spin-offs and start-ups with the (usual) ultimate aim of absorbing the fledgeling company.

The small investment dealer is leaving the venture field - largely because he is being legislated out by stricter securities legislation.

Venture capital firms will probably move out of investments in manufacturing industries except where the products have a very high technology or design component. There will probably be a corresponding move into service oriented industries however, especially those involved in financial services, distribution of goods and retailing, communication and data processing (where existing telephone facilities can be exploited).

There are attached, three appendices which deal respectively with:

- a description of the venture capitalists environment;
- some common venture capital terms defined;
- a check-list of information required by a venture capitalist before he makes an investment.

A. Vanterpool Planning and Evaluation October 20, 1972.

Womture capital: the biggest mousetrap of the 1970's?

by Chris Welles

Once the preserve of an elite of private investors, venture capital has lately become a game n'early everyone scems to be playing. The reason is obvious; after all, the earlier you get in on a potentially explosive situation, the better.

But there are two dangers, as this article points out. First of all, venture capital investments are just about as risky as they come. And further, with institutions of all sorts pouring their capital into venture situations, it seems extremely

unlikely that there will be nearly enough good ideas to go around. Here, General Editor Chris Welles examines these not-to-be-underestimated problems, as well as the rather apparent chance of reward that vonturing offors.

is there really a new great land of superprofits untouched by the great institutional scramble for performance?

It was perhaps inevitable that after one promising area of possible capital gains after another had been descerated by the sheer number of people who tried to cash in on it, everyone should finally come upon the world's riskiest equity investment: venture capital. While it is difficult to be precise, if for no other reason than widespread disagreement over how small a company must be to represent a "venture," John M. Bryan and William C. Edwards, two experienced San Francisco venturers, estimate that within the past couple of years, large institutional investors may have "ear-marked" (in other words, authorized the investment of, though not necessarily spent) somewhere between \$500 million and \$1 billion for venture-capital endeavors. But in all the talk that has been going around about this new El Dorado, too fow pooplo have been thinking about that same old problem: Now that a new voin of gold has been discovored, will there be enough to go around?

Venture capital used to be a rather ethoreal game played by a small elite group of private investors who were almost alone in their willingness to accept the sizable risks of laying out several hundred thousand dollars on nothing more than a couple of eager entrepreneurs and a promising idea. Once the entrepreneurs had incorporated their firm, set up their offices, built their factory or commorcial outlets, begun talting in revenues, gone into the black and established a "track record" (as the phrase usually . goes), then, and only then, would most of the large institutional investors condescend to consider an investment. Usually they would wait until the new firm had managed to achieve the

status of a Big Board or Amex listing.

But as institutions have become more adventurous in investing in equities, they have started to notice that while their investment in a listed stock might, if they were lucky, double or triple, they were missing out on the stock's really big gains. For, by the time they had decided to buy, the firm's original investors had perhaps multiplied their money 50 to 100 times and even more. They became aware of such heart-stopping tales as that of Digital Equipment Corp., probably the all-time fantastic venture capital winner. A mere \$70,000 investment in 1957 by American. Research & Development Corp., one of the pioneer venture capital organizations, is now worth, despite sale of some of the shares, close to \$420 million, a 5,700-fold increase. Another memorable deal was made by Edward Heller, a senior partner at Schwabacher & Co. (now decoased), who some consider to be the grandfathor of west coast venture capital. Hollor traditionally put a few thousand dollars in just about any situation that looked intoresting, but his biggest success was in Raychem Corp., where sharos he bought for \$.07 are now worth \$260. Arthur Rock, another longtime west-ooast venturer, made 800 times his money as a founder of Scientific Data Systems; he also did well with early stock in Teledyne.

An itch for action

Stirred by such successes, practically all of the major insurance companies, who are today the most prevalent institutional venture capitalists, in part because of their ability to hold illiquid securities for long periods, have set up pools of venture capital, and many, such as Travelers and Massachusetts Mutual, have organized speoial subsidiaries. At least 25 large corporations,

including General Electric, Dupont, Singer, American Express and American Broadcasting Companies, have venture funds. Most large Wall Street firms such as Smith, Barney, Donaldson Laffeln & Jenrotto, Kidder, Panbody, A.C. Bookor, White, Weld, E.M. Warlung, Cogan, Herlind, Weill & Lovitt, Faulkner, Dawldns & Sullivan, Burnham & Co., Eastman Dillon and many othors are actively engaged in venturing. Many university endowment funds and pension funds ere committing money. Banks and investment counselling firms are increasingly interested. "Venture capital is the sexiest aspect of private finance today," says Robert Madden, manager of Kidder, Peabody's private placements. "They are all sitting there like virgins," a promoter of venture capital deals says gleefully, "just itching to get in on the action."

Typical of the kind of action going on is Heizer Corp., founded last year by Edgar F. Heizer, Jr., 39, who for six years was assistant treasurer for Allstate Insurance Co. in charge of the private placement division and who supervised some 70 venture capital investments totalling \$125 million. Heizer Corp.'s purpose is to invest its assets in venture situations, and last November, with the assistance of White, Weld, Hayden, Stone and William Blair & Co., Heizer managed to raise \$81 million through the private placement of 6 per cent convertible notes and 4 per cent convertible preferreds, both with accompanying warrants. Among the backers are Bankers Trust (\$7.5 million), First National City Bank (\$7 million), Manufacturers Hanover Trust (\$6 million), New England Mutual (\$5 million), Employers Mutual (\$5 million), Northwestern Mutual (\$5 million), University of Chicago (\$5 million) and St. Paul Fire and Marine (\$4 million). Some of Heizer Corp.'s allure derives no doubt from the presence on its star-studded board of such entrepreneurs as Donald F. Eldridge, founder of Memorex, and George Kozmetsky, co-founder of Teledyne. Similar organizations are rapidly being formed. Data Science Ventures, which specializes in data-processing situations, picked up \$6 million from such investors as White, Wold, Crocker-Citizens National Bank and E.M. Warburg. Now Court Securities, sponsored by Kuhn, Loob and backed by Rothschild money, is trying to raise \$50 million. Charles Loa, a partner with F.S. Smithers, is organizing Ungersmith Securities Co., with an anticipated capitalization of between \$10 and \$25

The search for genius

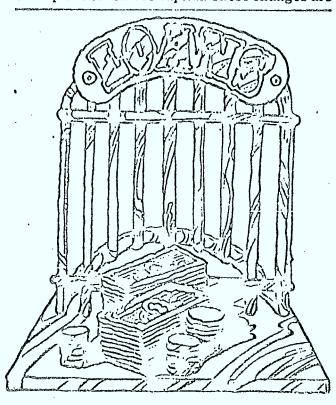
Much, if not most, of this new interest has cen-

tered on "high tech" (the first buzz word nonvoau vonturors are required to learn) or high technology, especially data processing any right now, computer peripherals and rolath arons, Aotlon is no hot that when Dr. David Leeson, a notentlat with Itek, told some friends one day during the aummer of 1968 that he wanted to start a company called California Microwave, Inc., "the deal," says one still somewhat numb venturer, "was oversubscribed in twenty-four hours. It was incredible. It vanished so fast it was like it had been struck by lightning." The rush was in no small part due to the regutation of Dr. Leeson, who had degrees from MIT, Stanford and Cal Tech. "Look, the guy is a genius, a real actual genius," claims one investor, "When I heard about the deal I said I don't care what he intends to make, I want in."

Such successes, at least at raising money, have brought forth pioneer instincts among scientists and engineers at IBM, Control Data, and other large companies who previously had been satisfied to pick up a comfortable \$35,000 and wait for their promotions. Generally in groups of three and four and more, hundreds of men have been giving up security in favor of the frontigen Their former employers have been less than ov& joyed about this, not only because of the personnel loss but also because the idea on which the aspiring entrepreneur's company is to be founded is often a product of their old company's research and development. "We can't afford to pay for research," says a venture capitalist. "We want somebody to have already done it for us. Now, if a couple of guys get a really good idea, they don't give it to their company. They just put it in a drawer and wait to form their own company." Despite one of the lowest turnovers in the computer industry, IBM has instituted some new policies to help block an exodus. When an imminent departure is discovered, IBM will proffer all manner of salary hikes. stock options and promotions. "The decompression process is fantastic," says one engineer. "You have to talk to your boss, and his boss, and his boss, all of whom are trying to find out why you are unhappy and what they can do for you." But once a man decides to leave, IBM makes it clear that he will no longer be welcomed back into the fold as he once was like a child who le foolishly wandered away from home. And, as a warning to other departees, IBM has sued the newly formed Cogar Corp., two-thirds of whose employees once worked for IBM, for alleged use of IBM's trade secrets.

Drawing conclusions from the rather sudden

mass search for "another Digital Equipment" (the phrase somehow has a familiar ring) that is now going on is not easy, for venture capital is in a somewhat muddled state of midpassage between domination by traditional venturers and domination by the institutional nouveaus, and the patterns are far from being set. But it can be said that in the outpouring of enthusiasm and effusively amateurish press reporting most people have failed to notice the extremely significant changes that are occurring in techniques, philosophies, motivations and indeed the entire conception of venture capital. These changes are



Getting money for new ventures

not an occasion for applause but for apprehension, as a few of the newer venturers themselves are beginning to realize. One problem is that despite tight money, the unavailability of bank loans, the disenchantment of mutual funds with letter stock, and the weak state of the stock market, there may be too much money being committed to venture investments for the available ventures. "I gave a speech recently at Kidder, Peabody's private placement forum," says Harold E. Bigler, Jr., second vice president with Connecticut General Life Insurance Co., "and I just happened to think what might bappen if just one-half of one per cent of the \$50 or \$60 billion that was sitting in that room should suddenly be put into venture capital. The market just wouldn't be able to absorb it. The gaine would be all over." The other problem, as Richard D. Irwin of Hayden, Stone puts it, is that

"most of the big institutions just don't know what the hell they're doing. They just think that venture capital is a neat way to invest, if it's done right, venture capital is the most profitable business there is. But if it's not done right, you can lose your shirt."

Technology vibrations

Traditional venture capitalism by and large has been a tight little world composed of a handful of small professional partnerships, well-to-do executives from large corporations who enjoyed the diversion of investing their private funds and managers of a few pools of Eastern family monoy - the Rockefellers, the Whitneys, the Phippsos. The most active venturers are located in Now York, San Francisco and Boston, with lossor groups in Phoenix, Houston-Dallas, Los Angeles-San Diego, Ann Arbor and Washington, D.C. The heart of the high teeh venturing is in Palo Alto, California, and the surrounding communities, where on sparkling, tree-lined streets, sleek, glassy, low-slung office buildings full of venture capitalists snuggle close to sleek, glassy, low-slung factories and plants on whose future output their bets have been placed. Palo Alto addicts are convinced they have eclipsed anything Boston's famous Route 128 ever had to offer. "They don't vibrate in Boston like we do," says one. "They're too establishment-oriented, too structured, too concerned with crossing t's and dotting i's. Technology moves out here." He pauses to gaze up at the bright, still warm December sun. "Besides," he continues, "how's the weather back East?"

The most important venture capitalists are divided into perhaps a dozen loose groups, with considerable overlapping, which for the purposes of specific investments forms itself into syndicates. During the initial financing of a new company, the venturers prefer to work with people who "think and operate the way we do," as one puts it, and the involvement of large institutions will only be solicited during later stages. Most of the traditional venturers know one another well - they have worked at the same firm, or they went to business school together - and competition between syndicates is slight. Few. would even think of stealing someone else's deal, and an entrepreneur who fails to elicit the interest of one venturer will most likely be forced to go outside traditional channels entirely. Few of the venturers are personally highly skilled in the areas in which they invest, but virtually all of them maintain a sizable network of experts — many at companies they helped start

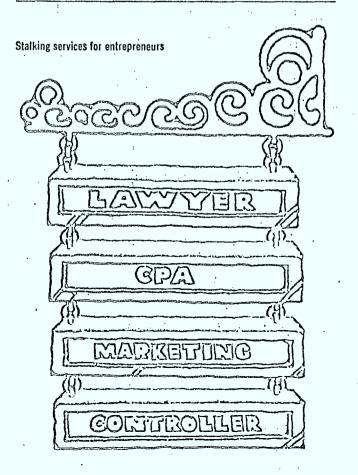
Mother, father and scapegoat

All of the traditional venture capitalists, of course, want to make money, and for their invostment of usually between \$500,000 and \$2.5 million in a company's future, they receive a healthy slice of its stock. But most are strongly motivated also by a special pleasure in "ereating value," as one phrases it, and seeing a large company materialize from a few dreams and hopes. The family mency, especially, is interested in aiding entrepreneurism, in fostering the development of socially useful innovations. Consequently, for no other compensation than the possible appreciation of their investment, they play a very active role in the management of their ventures, especially when the venture is a "start-up." Former IBM scientists generally have only the most rudimentary conception of the mechanics and problems of establishing a new corporation, and the venturers will supply them with lawyers, accountants, marketing experts and personnel experts and will teach them how to make cash-flow analyses and, most important, how to institute and maintain strict financial controls. The "lead" venture capitalist, who organized the syndicate, will almost always go on the board along with another member of the syndicate, or perhaps some outside expert, often the president of another small company which has already been through the throes of birth. The venturers will keep in constant contact with the company's progress, and will usually review financial results on a monthly or even weekly basis. They are always available for consultation. Says one venturer rather hyperbolically, "We're their mother and father. We wet nurse them, act as their crying towel, or their whipping boy or scapegiat."

The traumas that can afflict small companies are immense and multifarious. "It is very difficult for many of these men to adjust from working at a large company to a small one," says one experienced venture investor. "They are used to the fact that when they run out of poncils all they have to do is snap their fingers

and there are pencils. Or if they need computer time, they make a telephone call and Bings thoro's computer time. But when these gays get their own little company, they find themselves all wrapped up in trying to decide what the lettorhoad is going to look like, and it drives them right up the wall." "Unfortunately many of these people, especially scientists and engineers, are rotten businessmen," says another venturer, "and they get off the track completely. First they think just because they're so smart in the lab that they know everything about overything. Also, they're great prima donnas and they're always worried about their reputation. They don't seem to realize they are actually entering the greasy business world. When the first little machine is produced, they think their entire life is being laid on the line, so too much time is spont tinkering with it and gold-plating it that you've get to practically kick them to get the damn thing out of the lab. Or they'll suddenly get interested in something else, some other project, and everything is dropped to run after it, leaving the rest of the company up in the air."

Occasionally, the venturers will find it necessary, in order to save the company, to change its management. "You aren't a real venture capitalist until you've fired your first president," says one. It is not a simple move to execute. "You've got to have a real long talk with the



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guy," says a west-coast venturo investor whose proficiency in deposing chief executives is widely revered, "and convince him that it's for the good of the company, and for his own good as well, because, of course, he's got a lot of stock. Otherwise, I tell him, 'You're going to lose a lot of money, and your wife and family are going to loso a lot of money, and a lot of good people are going to lose their jobs.' I've had people cry and break down, but to most of them it's a relief. They know they've been in over their heads and they've wanted out, but they just didn't know how to get out. Still, that doesn't make it easy. I fired one president the week after his son had gone into a mental institution, and I'm telling you, I went out and had a lot of drinks after I did that. I mean, I'm only human. But what else could I do? Look, we've got to serve as the conscience of the corporation, and our job is to preserve the corporation. Management wants that too, but they also want to preserve themselves. And sometimes that just isn't in the best intorests of the corporation."

To be in the position of being able to force these changes, most traditional venturers prefer to have either formal control of the company or at least de facto control through the syndicate of investors they organize. "To show you what can happen when you don't have control," recalls San Francisco venturer William Edwards, "we were in this one company that was really going down the tubes [another venture capital buzz word], and despite all the suggestions we made. management just ignored us. They were enormously unrealistic, and they always felt that these great big orders were just about to come in, and when we pointed out that they weren't coming in, the president and the chairman would just smile and say 'You'll see.' When things got worse, we tried to got them to raise somo capital, but the chairman resisted because he didn't want his equity diluted - he was one of those guys who would rather own 100 per cent of a peanut stand than 10 per cent of IBM. Finally, to illustrate how their serious corporate problems were creeping up on them, I got up in a board meeting and told the story about that old Frankonstein movie - romombor? - where the monster has escaped from the eastle and he's orashing through the woods, and the camora cuts to a little boy who is throwing flowers into a stream, and then it cuts back to the monster, and then the little boy, all of the time with this ominous music playing, and flually the monster gets to the kid and plays with him for a while until his flowers are gone. Then he grabs him, I

told the board that the monster was just about to get them too, unless they did something pretty quickly. Well, we did eventually get those guys out of there, but the company's still very sick. I'd say it was just about down to its last flower."

Rescue operations can be very time-consuming. "It's always the losers that take your time," says a venture investor. "You bust your ass for weeks trying like hell to fix up some dying little company, and finally you manage to get it going or at least merge it or sell it or get most of your money back. So after all that work, you're lucky to break even. But when you've got a winner, you just sit back and watch it go up, and the only thing you have to do is read the nice, neat little memos the president sends you about how great everything's going."

Whether the rescue work is really worthwhile is problematical. One man estimates that out of 90 ventures he's been in over the past ten years he has only had two losers, but he admits that a large number of the "winners" have yielded only the most marginal profits," "We'll break our backs to salvage a company," says Richard Stillman of Payson & Trask, a venture firm founded by Joan Whitney Payson, John Hay Whitney's sister. "But I suppose you could make a good argument that if we didn't spend so much time on sick companies and just wrote them off that we'd have more time to look for profitable deals and that we'd be further ahead. It's hard to say for sure." One motivation for making an earnest salvage effort is based on the close ties among the traditional venture capital groups. "We've got a lot more to lose than management when one of these companies goes down the tubos," says one venturer, "If they bomb, they can just blame it on the Ananolal types and walk away. But we've not only lost our money, we've also got our partners to account to. If I bring my friends in on a deal, I feel a great responsibility to them because they're relying on me to watch the company for them. And if I let too many deals get out of hand, they're not going to be too anxious to ask me in on their deals." Just as important a factor, though, is that the traditional venture capitalists view the creations thoy holped bring into this world and on which they exponded their time and effort with a cortain pride. "The thing is we just don't like to lose," says Richard Stillman. "It's not so much the loss of money but, well, just seeing a new business go to pot."

The one-in-ten approach

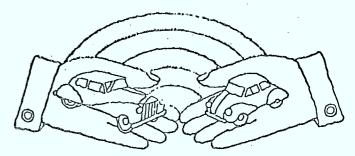
The new venture capitalists see the field rather differently than the traditionalists. Generally.

they are unencumbered by the same philosophical and altruistic motivations, and they tend to regard a venture investment as being just like an investment in a listed company, except that, of course, the risks and the potential rewards are greater. This outlook manifests itself most strongly in what might be called the "one-inten" idea of the public venture capital and letter stock funds such as the Value Line Development Capital Corp. and the Diebold Technology Venture Fund. The theory is that nine out of every ton vonture investments will probably be lesers. broak-evens or only mediocre gainers. But the touth will hopofully be such a splendid winner that it will more than make up for the other nine. While these organizations investigate and koop track of their investments to a greater degree than they would a listed company, they do not see it as part of their job to assist the corporation in any but the most cursory way. Such assistance would be impractical anyway - Value Line recently held positions in some 112 companies. If a company becomes sick, that is the company's problem, the normal, to-be-expected hazard of ontroproneuring.

The institutions who have recently become interested in venturing are not unaware of its special qualities. In a recent speech at Kidder, Poabody's private placement forum, Harold Bigler of Connecticut General said that venture capital "requires a substantially higher input of management time per dollar invested than any present form of investment we have." "The proper approach to venture capital," he remarked at another point, "emphasizes the creation of value and a willingness to expend the effort required to create those values. This means more than just dollars. And if a venture capital program for the traditional institutional investor is predicated on the assumption that its contribution should be more than money, then many of us must rethink our traditional approach to investing."

Bigler admits, however, that while "venture capital is a lot of fun and everyone likes to spend time on it, we have a half billion dollars worth of marketable securities, much of which is in funds that are competitive-performance oriented, and we just don't have a lot of time for a few little venture invostments. I mean, recently we spent two man-months on a single venture capital deel. I just can't afford that sort of thing."

Since many of the deals the institutions have gone into were organized by their investment bankers, they usually expect the investment bankers to be responsible for maintaining a close scrutiny over the company. While investment bankers have been eager to put together enough deals to satiate the growing appetite their clients, few feel it is their job to do anything more than passively "monitor" the company. Most decline, for example, to go on the board—which can subject them to various legal liabilities and make them insiders—making their investments less liquid among other things. "We invite the institutions to go on the board," says Robert Madden of Kidder, Peabody, which does perhaps the largest number of private



Checking on company spending

placements on the Street, "but generally their problem is the same as ours. They just don't have the time. We keep in constant touch with management and review their financial statements at least quarterly, but we want to be in an advisory position rather than a command position. We're investment bankers, not operating people, and we just don't have experience in this area. Smart investors try not to interfere with management."

It is difficult to generalize, but many of the corporations that have gone into venture capital appear to view it as principally a kind of research and development exercise - indeed, onecompany actually writes off its venture losses as an R & D expense -- or a way of keeping abreast of promising technological developments. Some smaller companies have purchased pieces of start-ups with the idea they might become future acquisitions. Some entrepreneurs have not been anxious to become involved in such deals. "I'm not too sure that being 40 per cent owned by, say, Control Data," says one, "would help us very much in trying to sell stuff to Burroughs or Sperry Rand." Another reason may be that the ultimate success of the venture may be only (of several goals of the larger company's involved ment.

Crap-shooting

Many traditional venture capitalists display considerable distain for the approach of the nou-

yeaus, Richard Stillman of Payson & Trask says he dislikes their use of the term "deal" and the way they talk about "monitoring" their investments, Paul Bancroft of Bossemer Socurities Corp., which invests Phipps family money in ventures, asserts that "too many people today just let companies go adrift and down the tubes." He says you can't see when "the yellow lights are going on" unless you are intimately involved with a company, Reviewing quarterly financials of a new company is insufficient, he asserts, because "a small company, in a quarter, can go from being profitable to bankruptcy." But their most vehement criticism is reserved for what they feel is the callousness of what they scornfully term the "lettery" or "crap-shooting" concept. "Big institutions usually got cold feet when a company comes back for more money," says one venturer. "They think this means the company doesn't know what it's doing, and so they figure they ought to write that one off. Holl, nome good companies need four or five financings before they get into the black and start to go. But I know one guy who asked an institution for more money and they complained that Sam Wyly had started University Computing with \$1,000 and they had given this guy \$1 million and nothing had happened yet. They just told him to go away."

. To a certain extent, these criticisms can be dismissed as the expected reaction of people who, after having a field to themselves for a long time, are at last getting some competitors. But if they have generally been successful, and the evidence seems to indicate that they have (one partnership claims that two-thirds of its deals over a year old have doubled and a half have tripled), then anyone considering entering venture capital must consider how important the traditional approach of close, even intimate association with one's ventures is to its ultimate success. If it is important, a potential venture capitalist must consider whether venture capital is really so attractive and profitable that even a lottery one-in-ten approach will yield results commensurate with the risks. The available evidence appears to indicate that venture capital is far from the automatic bonsuza that some poople would like to believe.

Most venture capitalists keep their investment records quite confidential (though they do like to brag about winners), but one company whose achievements are known is the publicly-owned American Research & Development Corp., which professes to maintain a close involvement with its investments and whose suc-

cess has been widely acclaimed. AR&D has been called everything from "the most successful venture capital firm on record" (Forber) to "the most preeminent venture capital company of modern times" which "has demonstrated the most golden touch in industry" (Dun's Review). However, in a September-October 1968 article in the Financial Analysts Journal, William Rotch, professor of business administration at the Univorsity of Virginia's Graduate School of Business Administration, concluded that during the first 20 years of AR&D's operation through the beginning of 1967 "recognizing income and capital gains dividends when declared and assuming all unrealized gains were realized and distributed on December 31, 1966, the stockholder's investment would have resulted in approximately a 14 per cent compounded annual return." Without Digital Equipment, by far the most successful of all of the 100 companies in which AR&D has invested, the return fell to only 8 per cont. By contrast, the Dow Jones Industrial Avorage over the same period, assuming a 4% per cont dividend yield, showed a compounded annual return of about 111/2 per cent,

Rotch also studied the records of seven SBIC's (Small Business Investment Companies). Since most were started in 1960-1962, Rotch said it was somewhat premature to analyze their results definitively because of the long maturation time of most venture investments. Still, he said, "a similar pattern [to AR&D] is beginning to emerge." (Though at one time a major source of venture capital, SBIC's, formed after passage of the Small Business Investment Act in 1958, have declined considerably in importance, due principally to a tangle of government restrictions, the unavailability of Federal financing and the difficulty of attracting skilled venture capitalists to a salaried job when they could be picking up equity working independently. Most of the original SBIC's have either gone out of business, transformed themselves into investment companies or become little more than finance companies, often in the real estate field. A few, such as Midland Capital Corp., established by Marine Midland, and FNCB Capital Corp., set up recently by the First National City Bank, are distinct exceptions and conduct active venture operations. Some members of venture capital partnerships, as well, have organized their own private individual SBIC's as a useful method of corducting certain deals.)

E.F. Hoizer of Heizer Corp. tends to agree with Rotch's analysis. "You figure out how the one-in-ten idea works mathematically," he says.

"and you'll find out that with the kinds of winnors you're likely to get, the losers will kill you. They'll eat up your roturn to the point where it will be just like investing in ostabilshed companios. In other words, it won't be worth all the trouble and the staying awake nights. The only way to do it is to work at each investment so you don't lose money on any of them."

The performance of the four letter stock funds, further, has been considerably less than awesome, though, again, it is much too early to come to firm conclusions. According to a recent analysis in Barron's, the Value Little fund, which started in February 1968 and is the oldest letter stock fund, was also the only one as of last December to show a gain with a rise of 10.5 per cent in its per share net asset value. The Diebold Fund was down 2.5 per cent. SMC Investment Corp., started by Shareholders Management Co. in Los Angeles, was down 7.7 per cent. (SMC has invested only \$156 million of its initial \$238 million.) The Fund of Letters was off 34 per cent. Over a roughly comparable period, the Arthur Lipper mutual fund industry average dropped 16 per cent and the Dow average was off 18 per cent. All of the funds currently sell below their MINISTERF I HOLLOWIN book value.

The point of diminished returns

A further dilemma facing aspiring venturers is that the rush of capital into the game, as well as the desire of big institutions to become involved in big deals, has inevitably raised the price of the deals. The "step-up" from founders' purchase prices of second and third stage financings, where institutional interest has been heaviest, has been substantial. "Six months after its start, even if a company hasn't proved much of anything," says a venturer, "you can figure it might well be ten times as expensive to buy in." Even start-up prices have escalated as now Streetwise entrepreneurs have demanded more favorable terms. A few years ago, depending on the track record of the entrepreneurs, the p/e ratio of the area of business they were trying to enter and the apparent soundness of their business plans, a group of entrepreneurs might sell about 60 per cent of their company for as much as \$1 million. Today they might get \$3-to-\$4 million for a 40-to-50 per cent share. This means that the company would be starting with an initial valuation of \$6-to-\$8 million against around \$1.5 million. If the eventual goal for the mature company is about \$100 million, the upside potential for today's venturer in such a deal would be 12to-15 times his money instead of 60-to-70 times.

One mini-computer company (another currently hot area) which was losing \$1 million on \$1 mil-Hon in malon recently obtained institutioned backing on the bank of a company valuation \$10 million. These flaures are very eignificant. for as Rotch pointed out: "The success of equity oriented venture capitalists depends on obtaining a high rate of capital gain on those investmonts that turn out to be winners." There are not many deals around today where 78 per cent of a high technology company can be obtained for \$70,000, as AR&D did in Digital Equipment.

The profusion of new money has also precipi-

tated some dubious distortions of traditional

venture capital practices. Eager brokerage

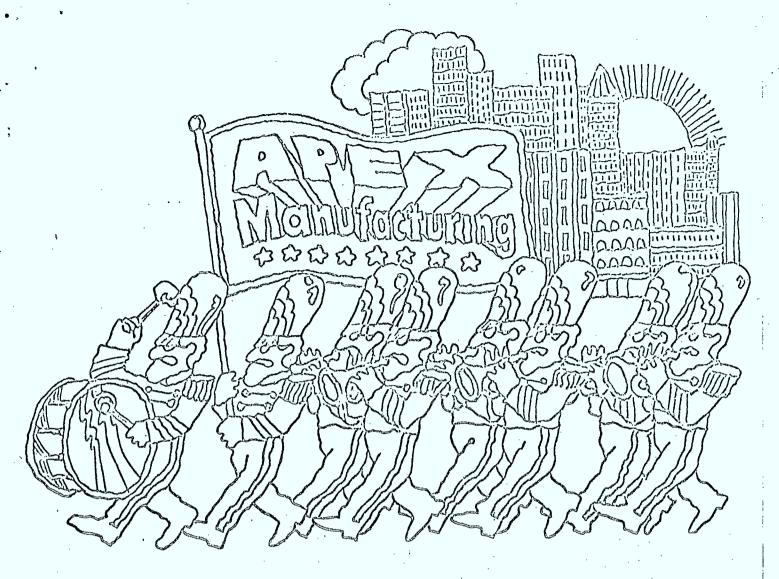
houses and a growing band of "finders" (who are compensated by fees and warrants) have been seeking out talented scientists and engineers at large corporations, convincing them of the joys of running their own companies and then, with barely a pause for the formulation of business plans, filing public offering registrations with the SEC. "Wall Street has been performingea tremendous seducing act," says Robsiert Johnston of Johnston Associates, which vienelps small companies arrange financings. There are not as many real entreprent around as you would think from all the prospectuses." Just a few days before the public offering the two principals for one high-technology company, who had been only casual acquaintances at the computer firm from which they had been recruited, developed such an intense hatred for each other that the whole deal had to be called

To carry the new firms through the offering. its promoters often try to peddle cheap letter stock with the promise that the offering price six or eight months later will be four or five times the letter stock price. In difficult situations, the promoters have offered various sorts of notes with accompanying warrants, and have guaranteed that the loans would be paid off after the offering. Hedge funds, which have recently been generally leery of venture capital because of their letter stock troubles, have often been willing to assist in this sort of "bridge financing." "If you need money quick to carry you through the offering," says one broker, "some of those guys will give it to you in twenty hours after one phone call."

off.

Even in the most respectable venture situations, one of the chief goals for all concerned is now to bring the company public "as soon as possible," as Robert Madden of Kidder, Peabody puts it. "That's the kicker," he says. "That's





Beating the drum for new firms

when the book value translates into market value and a multiple." Madden does, however, like the company first to get into the black. As hard as it is to imagine today, Digital Equipment waited nearly ten years before going public—"to avoid the pressures of the public stock market," said DEC president Kenneth H. Olsen.

Hand holding

The trend toward less and less involvement with one's venture investments is by no means universal. A number of new firms organized within the past couple of years profess to operate under the same philosophies as the traditionalists. Creative Technologies Co. was formed recently by two physicists from Quantum Science Corp., a consulting firm for many venture capitalists, to organize venture deals, especially start-ups. Dr. Victor J. Krasan and Gerard M. Grosof feel their scientific expertise gives them a big advantage over other venturers. "There are quite a lot of jerky people in venture capital," says Gro-

sof, "Some of these Wall Street firms think they can turn their financial people into scientists just by teaching them a few buzz words. But they just don't know the quality of the people they interface with. If some guy comes in with what looks like a good idea, they just pass the hat and hope for the best. But we can get in there and help make that company work. If they're having trouble with their laser, we can tell them who to call. Some partner down on Wall Street can't do that." "Besides, the scientists trust us," says Krasan, who after picking up an MBA from NYU apparently feels a scientist can become a financial man. "We all have a lot of friends in common. This is helpful, because a lot of them are afraid of Wall Street. They think they're all a bunch of thieves down there." With a group of 17 partners, including two investment banking houses and the board chairmen of two large corporations. Creative Technologies has gone into eight deals, four in which they are the lead investor. In planning fu-

Though his Heizer Corp. is just beginning operations, E.F. Heizer says he intends to "stick very close to our companies," to the point where he sees his firm as not so much a venture capital outfit as a "business development corporation" with a staff of operations-oriented people with experience on the "firing line" (he already has hired 16, who will be given the incentive of stock options) to help his companies through all stages of its development. Despite the institutional support he has acquired and his track record at Allstate — a reported annual pre-tax appreciation rate of 40 per cent - many institutions are still skeptical. "It's a great way for people to play the game without getting mixed up in the nitty gritty of venture capital, and he'll be able to buy some wild things we'd never get past our investment committee," says one insurance exocutive. "But I still think it's too goddamn big for him to accomplish the things he says he's going to."

Another high-involvement firm is Faherty & Swartwood, which was organized last year by some young employees at Blyth & Co. The new company calls itself "venture bankers." According to T. Marshall Swartwood, "When the companies we're in need money we'll arrange it. If they need exposure on Wall Street, we'll arrange that, and get research reports written. We'll provide all the services that Blyth and Morgan, Stanley do for GM and Standard Oil, except that we'll be doing it for the little guy." Adds J. Roger Faherty, "We intend to always have our fingers right on the risks."

Richard Irwin of Hayden, Stone contends that his firm can actually offer young companies more assistance than the traditionalists, though mainly in the investment banking area: "We want to go through all the stages, developing the people and the idea, arranging the initial financings, the public offering, subsequent financings, mergers and acquisitions, private placements — we're looking for a long-term relationship and we like to go on the board." For its services, Hayden, Stone generally buys a piece of the company, and receives a fee and warrants. Irwin does not feel he is at a disad-

vantage against such organizations as Creative Tochnologies. "I don't have any faith in the technology boys," he says, "The Ph.D. from Stanford may understand the technology, though you really ean't understand a machine unless you actually take it apart, but he doesn't understand markets the way I do. The technology will take care of itself. The real problem is getting the product into the right market." However, because of its close association with the company, says Irwin, "this means that instead of doing ten-to-fifteen deals a year, we'll only be able to do two-to-three."

High prices for junk

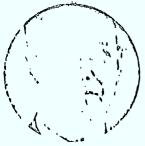
Whother Hayden, Stone will continue to be satisfled with two-to-three deals a year while its institutional clients increase their demands for venture-capital action remains to be seen. At the present time, there appear to be plenty of respectable deals to go around, but many experienced vonturers feel that the rush of uninformed money will inevitably distort the values of small companies to the point where a serious fallout, perhaps on the order of 1962, may result. Already, says Harold Bigler of Connecticut General, "a lot of people are paying horrondous prices for junk, for crap, It's getting to be a big put-on job, with everybody figuring that two-to-three financings along they'll be bailed out by the public." If several hundred million dollars should suddonly become unhappy with the whole idea, the battering that small companies could receive would be brutal. Many traditional venture capitalists, who have been forced more and more toward start-ups, where the price is relatively lower and their expertise puts them at the greatest advantage over more impersonal institutions, now feel that their best bargains may come to be young companies that have been abandoned by their original institutional backers. "In the past few months," says Paul Bancroft of Bessemer, "we've seen a lot of these institutionally-backed companies who have just run out of money."

"You can write this down in your little notebook, there is going to be a lot of money lost in venture capital over the next three-to-four years." says Richard Irwin, "and it's not going to be the old venture capitalists like Bessemer and the Rockefellers and Arthur Rock who are going to be the losers. It's the banks, the insurance companies and the brokerage houses who are going to lose their tails. There will be a big retrenchment. And then this business will get back to where it ought to be."

Profiles of vonture capitalists

On these pages we present strict sketches of a few loading venture capitalists, representing both men with a traditional approach to the business and those with a more science-oriented view. The sampling admittedly is a small one, but it offers insights into where venturers come from, what their backgrounds are, and how they ply their trade.

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PAUL BANCROFT, III,
vice president,
BESSEMER SECURITIES CORP.

Paul ("Pele") Bancroft III, as vice president and manager of high growth and risk investments for Bessemer Securities Corp., which invests money for the Phipps family, is one of the foremost of the Eastern family venture capitalists. A graduate of Yalo University in 1951, he did graduate work under an Air Force program at Georgetown University's Institute of Foreign Relations, from which he graduated with honors in 1953. He entered the securities business in 1956 as an account executive with Merrill Lynch in New York, then left to join F. Eberstat & Co., specializing In underwriting and private placements. In 1962 he joined Draper, Gaither & Anderson, one of the best known west coast venture capital firms, where he became a general and limited partner. In addition to serving as a director on the boards of six companies, Bancroft investigated prospective investments, negotiated additional financings for companies in which the firm held an investment and arranged mergers and acquisitions. Draper, Gaither &

Anderson was dissolved in 1967 and Bancroft then went to work for Bessemer, with more or less the same responsibilities.

Bancroft bolieves Ingualidating a very close working rolationship with the companies in which Desarmer has an investment, and he is currently on the board of about nine companies, "Venture capital is an instinctival kind of business," he says. "You can make all kinds of charts and checks, but the real decision on whether to go ahead with a deal tends to be made at four o'clock in the morning when you suddenly figure that the guys somehow seem worth betting on."



WILLIAM ELFERS, managing parlner, GREYLOCK & CO.

Elfers, 51, might be counted as something of a traditionalist in venture capital, having served for nearly 20 years at American Research & Development, the granddaddy of venture capital firms. A Princeton graduate (history, 1941), he joined AR&D after World War II, and views his stint there as his education in the venture capital business. In 1965, he formed Greylock, with six limited partners and three general ones, as a private equity partnership. "I think private vehicles are the best way to participate in this business," he says, pointing out that Greylock's approach is different from that of the typical family operation. The partnership's assets have grown from \$5 million to more than \$15 million in four years-not counting the effects of pending public offerings of several of its companies. And Elfers is quick to give much of the credit to two of his associates, general partners Daniel S. Gregory and Charles P. Waite.

Greylock is somewhat less bold than many venture

capital firms, rarely getting involved with start-ups or companies which are in trouble. "The investments we make," says Ellers, "are minority positions in private companies or companies which have just gone public, usually with sales ranging from two to twenty-five million dellars, and primarily in the technological fields. Moreover, we are not loners and frequently participate with others if we need to."

Elfers, however, sees some problems in store for the business as a whole. "There are an awful lot of new entities which have been formed because of the apparent altractiveness of venture capital," he says, "but many of them have not learned the business they're in. They think venture capital is just an easy way to riches, but it's much tougher than it looks. More is needed than just putting money into a company; what you need to do is live and breathe with a company—and stay with it."



REID W. DENNIS,
president,
THE AMERICAN EXPRESS
INVESTMENT MANAGEMENT CO.

Dennis, 43, in a sense bridges the gap between the old and the new venture capitalists, applying many of the traditional approaches to a corporation's venture program. A Stanford graduate—with a degree in electrical engineering as well as an MBA—he joined the Fireman's Fund Insurance Co. in San Francisco as an analyst. After a series of promotions, and acquisitions and reorganizations of the firm, he became a vice president and senior investment officer of the Fund American Companies as well as the Commonwealth Group. And after the American Express takeover in 1968, he received his present title.

Two of Dennis's biggest finds have been Ampex and Recognition Equipment. He had seen Ampex products in action at a Stanford engineering seminar in the early 1950's and was impressed enough to put in \$20,000 at 20 cents a share. He recalls that the investment was in a product, not in the company's financial prospects, which "looked terrible for years and years,"

But because he had no experience as a financial man, he "wasn't quite so cynical about the investment business and fortunately didn't know that when you double or triple your money, you are supposed to take a profit." He walked away with more than a million dollars in this one.

His first investment in Recognition Equipment came in 1962, when he was alerted to the company's potential—and capital needs—by a Wall Street brokerage house. Firemans paid \$500,000 for convertible debentures and warrants, and added an equal amount for straight common stock two years later. Dennis estimates the worth of current holdings at about \$28 million, a success which "set the stage for further deals of this sort." These, since 1968, have involved seven investments totaling \$2.5 million, including four which Dennis ranks as successful to highly successful.

STAGE I START-UP ("basement")

When capital is required to launch a new enterprise sciling a promising product or new service in a well-researched market.

When an operational company with staff, plant and equipment and some customers, is finally about to realize or has just begun to realize its profit potential, and needs money to hang on until the profits actually arrive.

When a well established, profitable company could benefit from substantial expansion but lacks the necessary extra funds.

When a company that is in difficulties can be re-established on a profitable basis, by the injection of new capital and internal changes.

When the present owners of an established and profitable company wish to liquify their investment in the company for personal reasons.

SUBJECT: Venture Letter #100

"A 24 POINT CHECKLIST FOR PREPARING A BUSINESS PLAN"

Presidents, Marketing Vice Presidents, General Managers, Corporate Planners & Individual Entrepreneurs

The items listed below represent the salient points to be considered in planning and financing a new venture centered around the development of a new product. They are presented in the order in which a business plan is normally documented.

- Provide a one page summary of the venture idea, the market need, and the magnitude of the dollar resources required.
- 2. Describe the key goals and objectives specify what you are setting out to achieve, particularly sales and profitability goals.
- 3. Provide an in-depth market analysis and cite external market research data sources.
- 4. List the names of six close competitor firms.
- List the anticipated selling price to an ultimate consumer for each product - present a brief summary of comparison prices.
- 6. Provide a list of potential customers who have expressed an interest in the products.
- 7. Provide a one page summary of the functional specifications for the new product spectrum.
- 8. Illustrate the physical forms of the products with drawings and/or photographs.
- 9. Provide a profile of key patents.
- 10. Categorize and list the key technologies and skills required to develop and manufacture the products - indicate which frontiers are being pushed the hardest.
- 11. Describe the alternative channels of sales distribution, e.g. Direct, Manufacturer's Representatives, O.E.M., etc.
- 12. Describe the basis for determining if the new products are typically "lease" or "buy" items from the purchaser's point of view.
- 13. Describe the type and geographical distribution of the anticipated field service organization.

- 15. Portray the cost vs. volume curves for each module illustrate the cost breakdown for material, labor and factory burden.
- 16. Describe the manufacturing process involved illustrate via a block diagram.
- 17. Describe the types and quantities of capital equipment needed, and when required.
- 18. Portray a Flow-Event-Logic-Feedback chart which illustrates achievement milestones and portrays stepped levels of when and how additional funds should go into the venture.
- 19. Project staff and plant space requirements over a five year period.
- List the rationale for choosing any single manufacturing plant location.
- 21. Provide cash flow projections, by month for 24 months, every quarter for the next three years.
- 22. Provide pro-forma balance sheets for five years.
- 23. Provide pro-forma P & L statements for five years.
- 24. Present a position on the degree of ownership control being sought and the limits to which these can be varied with time and profitability.

Several examples of growth industries to which this checklist has been applied are:

Health Sciences
Education
Computers & Peripherals
Solid State Electronics
Electronic Communications

Power & Energy
Metals & Alloys
Chemicals & Plastics
Pollution Control
Infrared, Optics, and
Holography

I sincerely hope the content of this letter will be useful to you in the preparation of your new venture business plan.

Yours very truly,

Robert R. Kley Senior Consultant

RRK: ok

MINISTER OF STATE
MINISTER OF

HAROLD E. BIGLER, JR., president, CO SECURITIES CORP.

Bigler, 38, has spent his entire bosiness carrier with the Connecticut General Life Insurance Co. (see page 53), rising from a securities analyst in 1957 to his present job, where one of his functions is to supervise the company's venture capital investments—Connecticut General currently is one of the most active insurance companies in this field. One of Bigler's distinctions is that the number of corporate fitles he holds simultaneously probably sold some sort of a record: In addition to being president and director of CG Securities Corp., he is treasurer of the CG Fund, the CG Income Fund and the Companion Fund, second vice president of the securities department of Connecticut General and Aetha Insurance, assistant secretary with Aetha, vice president of CG Investment Management Co. and vice

president of CG Equity Sales Co.

Bizler graduated from Brown University zith a B.A. in English in 1953, from served in the Havy three years, after which he received his Mita II Babson Institute of Business Administration. Bizler, not long ago, spelled out what might be considered his criteria for picking a standard type of venture investment. The company is small, he explained, and usually in a high technology product area (rather than a people oriented firm in service or software fields). It has been in business long enough to provide some reading on management and product capabilities, but probably has not yet reached the stage where it is turning in a profit. And in most cases, the stock is still unregistered.



ROBERT T. MADDEN, menager, private placement department, KIDDER, PEABODY & CO.

Madden, 37, is actively engaged in putting together venture capital deals for Kidder's institutional clients, especially a number of targe insurance companies. A Princeton graduate, Madden also received a law degree from Indiana University in 1937, and then went into the Coast Guard as a law and intelligence officer, where he tried cases for 2½ years. After the service he joined the investment department of the Metropolitan Life Insurance Company and then went to Temper Insurance Group (now Temper Co., a holding company). At both places, he and some other individuals maintained a small portfolio of venture capital investments. After two years at Temper, he joined Kidder in 1967.

"There are a few lawyers in the investment business," he says, "and I think legal training is good for

just about anything." Recently, Madden, in association with the Diebold Group, arranged one of the Street's largest venture capital start-ups, a \$10 million financing of convertible notes and common stock (Connecticut General was one of the biggest backers) for Intermodal Transportation Systems Inc., which is now in the container leasing business. Though the company only began operations in February of last year, it already has orders in excess of \$14 million. "Venture capital is a little like a fad in that everyone is rushing into it," Madden says, "but I think that the people involved are generally quite sophisticated."



VICTOR KRASAN, prosident



GERARD GROSOF, vice president CREATIVE TECHNOLOGIES CORP.

Creative Technologies exemplifies something of a new breed of venture capital firm in that its partners use their technical expertise to spot new opportunities rather than concentrating on management as so many of the traditionalists do. Both president Krasan, 38, and vice president Grosof, 40, have impressive scientific backgrounds which have led to investments in science-oriented companies.

Krasan has a number of degrees in chemistry, including a Ph.D. fruit Cathalle University in Washington (1958) as well as an MHA in corporate finance from NYU, He worked fur the Bureau of National Standards as a research chemist studying the effects of highenergy radiation on polymers and subsequently did scientific research at NYU in such abstruse fields as energy transfer and photo conduction. Grosof, for his part, is a physicist (undergraduate, Cornell; graduate, Columbia). "Standing in the radiation lab one day," he says, "we decided to profit from huge capital gains which could be derived from high-technology investments." Thus, with a number of partners including Nobel laureate Charles Townes of Columbia, and Mirek Stevenson, he started Samson Associates and later formed Quantum Science Corp., a subsidiary which has developed a long list of investment industry clients over the past ten years. Meanwhile, he worked as a research physicist on the first government project to develop the taser, and developed the laser retinal detachment

surgery technique—"which, for a long time, was about the only thing the laser was good for," he says. In 1970, he moved to the Zaret Foundation, as director physics. The two men joined forces in 1967 to form Creative Technologies.

EDOAR P. HEIZER, JR., chairman and president, HEIZER CORP. "Ned" Heizer's Chicago based Heizer Corporation raised some \$\$1 million last November from a number of prestigious institutional investors in order to make venture capital investments and provide management support for the firms in which it invests. Indeed, Heizer's plans for assisting fledgling concerns are so detailed he prefers that his company be called a "business development" firm.

Heizer's background is broad; He is a lawyer, having received his degree from Yale; he has an undergraduate degree from Northwestern University; he is a Certified Public Accountant; and he formerly worked as a management consultant with Booz, Allen & Hamilton, as a

financial analyst with Kidder, Peabody, as an accountant with Arthur Anderson & Co. and, during the six years before he left to form Heizer Corp., he was assistant treasurer with Allstate Insurance Co. in charge of the private placement division, where he supervised some \$125 million in venture capital investments. With \$125 million in venture capital investments. With \$125 million in venture capital investments. We're already getting five calls a day from people who want money," he says.



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