The Critical Relationship Between Venture Capitalists and Entrepreneurs: Planning, Decision-Making, and Control

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ABSTRACT. On the basis of preliminary interview and survey data, evidence suggests that venture capitalists (VCs) are less involved with their affiliated new venture organizations than may be necessary for long term survival. The dual core model of innovation that emphasizes the need of a technical and administrative core for continued innovation is used as the foundation of this perspective. In the post investment relationship between the venture capitalist and the new venture, it is expected that the new venture has a well developed technical core. However, the administrative needs are often ignored by the new venture entrepreneurs. Therefore, it is recommended that VCs become more involved in the administrative component of the new venture organization (NVO) through either direct involvement or through the recruiting of key personnel. As the NVO moves through its life cycle the addition of an administrative component to its technical core provides for continued innovation necessary for long term survival and growth.

I. Introduction

The post-investment activities of venture capitalists *vis-à-vis* their portfolio companies have been ignored in the majority of literature on venture capital with a few exceptions (Gorman and Sahlman, 1989; MacMillan *et al.*, 1989; Bygrave, 1988; Tyebjee and Bruno, 1984). However, the venture capitalist's relationship with the entrepreneur in the new venture organization (NVO) may significantly affect the performance of the new venture organization (MacMillan *et al.*, 1989). This relationship is critical to strategic concerns such as recruiting, locating expansion financing, and orchestrating a merger, acquisition or public offering. The venture capitalist is generally involved with an entrepreneur for five to ten years (Bygrave *et al.*, 1988) which often includes the initial investment through at least two years beyond the initial public offering (IPO) or similar sale of the firm's assets. During this time period, the entrepreneurial firm grows in complexity through the addition of personnel, new products, and/or production capabilities. The emergence of a successful firm capable of coping with internal and external complexity is posited to depend largely on the relationship between the entrepreneur and the venture capitalist. This paper focuses on some of the factors that affect this relationship. The preliminary conclusions are gleaned form semi-structured interviews and suveys of a random sample of venture capitalists.

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II. Venture capital industry

Venture capital tends to denote institutional investors that provide equity financing to young businesses and play a role in their management (Henderson, 1989, p. 64). However, the degree of involvement will vary among venture capitalists. This research suggests that a number of factors will affect this level of involvement by venture capitalists (VC). These factors include the previous experience or knowledge of the owners/management of the new venture organization (NVO), the number of active investments of the VC, the amount of money invested in the NVO, and the preferred management style of the VC. MacMillan *et al.* (1989) supported this later contention that the level of involvement as a personal preference of the venture capitalist.

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Venture capitalists manage approximately $30 billion or $3 billion a year. These funds represent about 10% of the equity funds raised during the last decade. Initially, there was a preference for investments in "high technology" industries including the computer hardware industry representing approximately 33% in 1983. However, this investment focus has been reduced to about 13% in 1988 (Bulkeley, 1989). Coincidentally, the rates of return for the industry have decreased since 1983. This has been attributed to the proliferation of venture capital partnerships without sufficient experience in the industry (Bygrave *et al.*, 1988). The mix of funds has also changed to include public agencies as well. For example, as many as forty states now have their own venture capital funds. This involvement by public organizations raises important issues concerning the type and level of support, i.e., sponsorship (see Flynn, 1988), potentially affecting the survival of these new venture organizations.

The process of supporting and sometimes, nurturing new organizations, i.e., sponsorship, has been found to significantly affect the birth of new organizations. However, the degree and type of control undertaken by the sponsor can affect the potential survival of the new venture organization. For example, more control of operations at an early stage of organizational development could reduce organizational learning (Miles and Randolph, 1980) and reduce the emergence of a more strategic organization. An organization is considered more strategic if it has developed both an administrative and technical core. This dual core model of innovation (Draft, 1978) may be applied more broadly to the effective transitions through the life cycle of the organization. The concept of organizations moving through life cycles has recently been supported by Kazanjian and Drazin (1989) who further validated the work of Miller and Friesen (1984).

III. Dual core model of change

The process of innovation is recognized as a complex mix of external and internal factors through the three stages of idea generation, selection, and implementation. Each of the three stages requires different structures for effective task completion (Callantone and di Bendetto, 1988; Robertson and Wind, 1983; Zaltman *et al.*, 1973).

The dual core model suggests that the requirements for innovation are different for administrative and technical tasks. In particular, high formalization, centralization, low complexity, and tight coupling are necessary for administrative innovation. In contrast, low formalization, decentralization, high professionalism, and loose coupling are necessary for technical innovation (Draft, 1978, p. 207). An example of this duality was evident in the record industry where organizations developed a loosely coupled structure for the production department to allow flexibility in dealing with craftsmen, professionals, and artists that were often hired on a job-contract basis. However, centralization and tight coupling existed for administration and planning (Peterson and Berger, 1971). For planning to be effective three features are necessary: the analyst (other than the entrepreneur) plays a major advisory role in strategy making; there is a systematic analysis of costs and benefits of competing proposals; and there is a careful integration of decisions (Mintzberg, 1988). Moreover, the strategic imperative of a planning organization is innovation (Miller, 1987, 1988; Miller and Friesen, 1984). Recently, Frombrun and Wally (1989) found that internal systems designed by small high-growth firms varied by strategic orientation and degree of product diversity. As the firms grew, there was an increase in formalization of procedures for the new employees. However, the coincidental increase in product diversity brought about an unfulfilled desire for greater decentralization and less formalized decision processes. These apparently conflicting requirements may be effectively fulfilled through the establishment of a dual core, administrative and technical.

In the creation of new venture organization (NVO), the requirements for technical innovation generally dominate at the initial stage of new product introduction. The typical structure for an NVO is simple. Specifically, there is little specialization, low formalization of behavior and little planning and control (Mintzberg, 1979). However, as the organizations grows in size and complexity, the development of an administrative core will be necessary for organizational survival. In particular this core would serve the role of

centralizing the disparate goals of the organization characteristic of an innovative firm, even an entrepreneurial firm (Miller and Friesen, 1984, p. 171).

In the period of time from the initial investment by a venture capitalist through the initial public offering, the association between the venture capitalist and the new venture organization may effectively bring the organization through its entrepreneurial stage to a more planning type (Mintzberg, 1988) of organization. However, the type of planning and control employed by the venture capitalist could alter this outcome, potentially resulting in a more reactive type of organization.

For example, MacMillan *et al.* (1989) have provided evidence that venture capitalists differ in their level of involvement, i.e., *laissez faire* to close involvement, as a matter of personal preference. These different levels of involvement also have differing effects on performance. For example, the *laissez faire* group had a positive effect when they helped develop a professional support group. However, the other extreme of close involvement, positively affected performance when it involved the setting of compensation for the management team. MacMillan *et al.* (1989) suggested that these compensation packages motivated the management team to maximize the firm's performance. Both VC strategies can be considered part of the administrative core.

As suggested earlier, an effective sponsorship process is necessary for the emergence of a successful strategic organization. This organization would be comprised of an administrative core composed of professional managers and a technical core (i.e., technostructure, see Mintzberg, 1979), often composed of the founding entrepreneurial team. However, as the organization grows in complexity other professionals will be necessary for innovation. These professionals would also include accountants, engineers, scientists, and lawyers.

Recently, Gorman and Sahlman (1989) identified activities of the venture capitalists with their associated companies. Although the level of involvement by the venture capitalist was suggested to be frequent, i.e., an average of 80 hours a year, and concerned with the critical areas of building the investor group, reviewing and formulating strategic plans, and recruiting for the management team, there was a high level of under-performing firms in the portfolios of the VC firms. The most often cited reason for under-performance was an ineffective senior management team. These results are somewhat ironic considering that strategic involvement of the VCs, noted above. One may interpret this inconsistency as a lack of expertise in the strategic advice given by the VCs or as suggested by Gorman and Sahlman (1989, pp. 235–236), venture capital involvement is principally crisis oriented and otherwise serving primarily a monitoring function. Consistent with the perspective of the present analysis, the administrative core is not fulfilled by the VC causing many venture backed organizations to under-perform or fail.

IV. Factors affecting the organizational life cycle

A. *The influence of founders and other constituencies*

In the early stages of a new venture organization, the entrepreneur dominates the operating decision making process. He or she possesses the power to make most decisions in the organization. It is therefore, fair to expect the characteristics of the entrepreneur will dominate among the internal factors affecting the performance of the newly established organization. Some of the more important characteristics of successful entrepreneurs include: (1) moderate risk-taking propensity; (2) ability to tolerate ambiguity; (3) an internal locus of control; (4) high need for autonomy, dominance, independence, and self esteem; and (5) a low need for conformity and support (Sexton and Bowman, 1989).

One of the more salient of these characteristics is the locus of control construct. Locus of control refers to the extent to which an individual perceives events in his or her life to be under his/her control (internal) or as unrelated to his/her actions and therefore, beyond their control (external). Also, internally, oriented people are more cognitively active in that they make more use of information (Sexton and Bowman, 1985, p. 132). Recently, Kan and Manopichetwattana (1989) were able to distinguish founders from non-founders by their locus of control, i.e., founders were primarily internals. However, when locus of

control was tested with innovation, no significant correlation was found. This later finding is consistent with Begley and Boyd's (1987, p. 89) findings that above a "threshold" psychological characteristics are dysfunctional to performance. Specifically, founders scored significantly higher in need for achievement, risk-taking propensity, and tolerance for ambiguity. However, there appears to be a threshold point where these psychological characteristics become dysfunctional. However, small firms tend to be run by internals who believe that they control the destinies of their firms. Therefore, one could also argue, that internal executives are more likely to develop a structure that uses scanning, strategic planning, and control (Khan and Manopichetwattana, 1989). However, the entrepreneurial task is posited to be focused more on the technical operating task than the strategic administrative task. Due to this focus, it may be necessary for the VC to take charge of the administrative and strategic responsibilities of the firm. The venture capitalist is outside the organization where more effective scanning of environmental and competitive threats and opportunities can take place.

Recent research on characteristics of the entrepreneur, the initial size of the firm and its effect on future performance indicat that firm size had few significant effects among the surviving firms (Cooper *et al.*, 1989). And surprisingly, the smaller firms reported fewer serious problems than the larger firms while having higher growth rates in sales and increases in the number of employees. These later results may reflect on the characteristics of the founders of the larger firms. These entrepreneurs tended to have more education, more management experience, and more strategic goals, i.e., administrative expertise. However, what they may have lacked, in the context of the dual core model, was the technical expertise necessary for continued innovation. This technical dimension was not identified in the study.

A large proportion of organizational learning takes place during the earliest stages of development of an organization (Miles and Randolph, 1980). For example, conditions at the founding of an organization are important to the degree to which strategies may change (Boeker, 1989) and therefore, affect the performance of the organization over the long term. In particular, the adoption of a dominant strategy at founding limits the range of future strategic change that occurs, possibly due to a high level of commitment and investment in facilities, personnel, and other resources. Also, a firm owned by its founders imprints the initial strategy of a firm by building consensus around a given strategic choice.

Factors that contribute to strategic change include firms that lack an initial strategy, poor performance, older firms, and firms in which outside interests predominate (Boeker, 1989). This later factor of outside influence is salient to the present research because venture capitalists often are granted majority control of the new venture organizations. This places the venture capitalist in a dominant position for providing strategic direction. However, venture capitalists often emphasize financial control and intervene in strategic matters only at the time of lower than expected performance or crisis (Gorman and Sahlman, 1989). This intervention is more representative of an adaptive/reactive response to environmental and competitive threats. Venture capitalists may be under-utilizing their influence as a dominant constituency to provide an administrative component to the new venture organization. If a venture capital firm provides only financial support and control, the firm may be inadequately prepared for competitive and environmental threats. As noted earlier, in the dual core model of innovation, the technical core exists with the entrepreneur. However, the under-developed administrative core which may not be critical for early stage survival, would not be sufficient for later stage growth. Often, entrepreneurs lack the administrative skills necessary to move the organization beyond its technical core. Kazanjian and Drazin (1989) identified the growth stage (stage 3) as the stage where the professional organization emerges. This professional type of organization is comparable to the planning organization.

B. *Environmental effects*

Both the environment and characteristics of the firm's early activities influence the likelihood of survival. As suggested by both the population ecology (Aldrich, 1979; Hannan and Freeman, 1977) and resource dependence (Pfeffer and Salancik, 1978) models of organizations, the

mortality of new organizations is predominantly influenced by available resources in the environment. These resources include financial, administrative, technical, and human. Romanelli (1989) found that the aggressive acquisition of resources in specialized markets improves the likelihood of survival especially when sales are increasing rapidly. During this time of prosperity, an aggressive attack on multiple and/or general markets will significantly reduce the risk of failure.

The characteristics of the firm's management team also affect the type of organization that emerges and potentially survives. Specifically, generalist and specialist types of organizations have different survival rates depending on industry conditions and the stage of the organizations life cycle. Generalist organizations tend to exploit existing resources, whereas specialist organizations move quickly to exploit resources when they first become available. When industry sales are increasing, generalists fare better than specialists. However, specialist organizations are more likely to survive their early years than generalists (Romanelli, 1989, p. 385). The specialist organizations can be viewed as an organization with a well developed technical core. These organizations are more likely to attract venture capital money. At this time of venture capital sponsorship, a more generalist organization can be introduced through the addition of an administrative core. As suggested by Romanelli (1989, p. 375), a more strategic approach to exploiting market resources may be appropriate for new firms.

V. Decision making and control of new venture organizations: Preliminary evidence

A. *Methodology*

In the attempt to identify the more critical factors affecting the level of involvement by venture capitalists in the decision making and control of the new venture organization, two research methodologies where employed. First, the issues of decision making, control, formality were discussed with twenty venture capitalists in a structured interview process during the summers of 1987 and 1988 in the San Francisco and Los Angeles areas. A preliminary questionnaire was developed that included questions derived primarily from Miller and Friesen's (1984) work on quantum change in organizations and from a review of the literature. Miller and Friesen's questionnaire has been validated to meet and generally exceed the Cronbach Alpha reliability measure (Nunnally, 1962).

After these interviews, a revised questionnaire was developed that was significantly reduced in length. This questionnaire (available from the author) was mailed to fifty venture capitalists in the Metropolitan New York area, and twenty questionnaires were returned. Subsequently, a second mailing of one hundred questionnaires was undertaken to other venture capitalists, especially in the Los Angeles and San Francisco Bay area, including Menlo Park. An additional twenty usable questionnaires were received. This relatively small sample size inhibits statistical sophistication. Therefore, because of this small sample and the exploratory nature of this research, the data are presented according to the frequencies, means and standard deviations of the various questions included in the survey (see Tables I—IV). The discussion that follows addresses some of the more substantive issues salient to the dual core model of change.

B. *Results*

1. *Interview data*

a. *Pre-investment screening.* In discussing the factors that were considered significant to entrepreneurial success during the interview process, the due diligence process was one of the standard methods of screening the new venture organizations in the pre-investment phase. Among the more important factors gleaned from the due diligence process, included in the order of significance, were: (1) the ability to articulate the venture idea clearly; (2) the existing track record of the entrepreneur, i.e., previous success in the related venture; and (3) reference(s) from a reliable source. These factors have been identified before as important to the pre-investment decision (see Dubini and MacMillan, 1988). One factor that was not considered significant was the existence of a formal business plan that generally included pro forma financial projections. The explanation sug-

gested for the relative unimportance of these plans was that the existence of software for easy financial forecasting reduced the perceived validity of the financial information. Additionally, the venture capitalists were more impressed by the ability of the entrepreneur to articulate their understanding of the product or service distinctiveness relative to existing products or services.

These perspectives of the venture capitalists screening process suggests the importance of the informal screening processes. Specifically, because the VCs are sent numerous plans, the ability to separate the better ideas/ventures results from experience in the industry. This experience includes knowledge of "better" risks, i.e., product/service risk and entrepreneurial risk. Since the majority of venture capitalists in this sample have industry specialists, one could suggest that the assessment of risk is facilitated through their technical knowledge of the product/service market and a well established informal network of entrepreneurs and other VCs. The VCs appear to rely on their "feel" for the entrepreneur. In a related study, this "intuitive" or gut-feel was found to be important to the investment decision of VCs (Hirsmich and Jankowicz, 1990).

b. *Post-investment control.* In the post-investment period, the relationship between the venture capitalist and the entrepreneur becomes more individualized, often dominated by characteristics of the venture capital firm and venture capitalist. In particular, the level of control used by the venture capitalist is affected by their previous success in sponsoring new venture organizations (NVO). For example, if the fund has been successful then they often take a more hands-off approach, relying on the rigorous screening of potential investments during the due diligence process. However, if their previous success has been low, then more control is exercised in the NVO.

Other characteristics of the venture capitalists included the number of investments that the VC is presently involved with, i.e., the higher the number, the lower the level of involvement by the VC beyond periodic, e.g., monthly, financial audits. This factor was found to be more significant than the amount of money invested in the new venture. Also of significance were the years of experience as a VC, i.e., the more years in the business, the lower the level of direct control. Variation among the VCs was also found for management style. These styles varied from high involvement in operations on a weekly basis as a part of the new venture "family", e.g., a clan style. On the other extreme was a low involvement preference articulated by some of the venture capitalists who intervened when an aberration from expectations and forecasts appeared in the financial reports. Similar differences in the level of involvement by VCs has been recently reported by MacMillan *et al.* (1989). Their results reported that the level of involvement was a matter of personal preference among the individual VCs.

2. *Questionnaire data*

a. *Sample profile.* The sample characteristics may be important to the interpretation of the results listed in the following section.

For example, the percentage of ownership was an average of 15.2%, which may be considered low, thus influencing the amount of control of the NVO used. Also, the stage of the investment was split between start-up and second stage financing. Those firms involved in the second stage may be less likely to intervene in a more established NVO. An additional sample characteristic of importance was that the cover letter to the VCs specified that they identify a NVO where they are the lead investor. Less control would be expected among the follow-on investors, especially for mezzanine financing.

b. *Questionnaire results.* Based on the extensive work by Miller (1987, 1988) and Miller and Friesen (1984), items included in the following discussion are taken from the sections measuring information processing and organizational structure. The questions included in Tables II and III refer to information processing, i.e., the existence and type of scanning and control, respectively, undertaken by the venture capitalist. Scanning may provide the venture capitalist with important information about competitive and environmental threats and opportunities. It is expected to contribute to innovativeness, especially because if this administrative task (of the dual core) was undertaken by the NVO, it may cause innovative and

TABLE I
Sample characteristics[a]

Venture capitalist characteristics
Male 60%; Female 30%
Age: Mean = 36.4; Standard Deviation (SD) = 9.91 Range = 56 to 29 years
Education: MBA = 60%; MA = 20% BA = 20%
Partners in the VC firm: 20%
Years experience in VC industry: Mean = 7.1; SD = 6.5 Range: 20 to 2.5 years
Functional expertise finance = 80%; Research = 20%
Entrepreneurial experience: 20%
Year VC firm founded: Range: 1972–1983
Size of VC fund: Mean = $87.4 million; SD = 90.05 Range: $256 to $1 million
Number of full time employees: Mean = 8.2; SD = 5.27 Range: 16 to 1 employee
Industry specialization: Manufacturing = 20% Real estate = 20% High tech = 20% Other: 20% No specialization = 20%
New Venture Organization's (NVD) characteristics
Percentage ownership of NVO: Mean = 15.2; SD = 4.44 Range: 22% to 8%
Stage of initial investment: Start up financing = 50% Second stage = 50%

[a] Rounding of percentages used for clarity.

risk embracing entrepreneurs to slow down (Miller and Friesen, 1984). Therefore, one would expect to see a high level of scanning undertaken by the VC. The average response for this variable (including all five questions) was 5.56 of a possible 7. This suggests a relatively high level of scanning being undertaken by the VC. However, if one distinguishes among the formal and informal information processing mechanisms, less formal processes of scanning are preferred (see Items 1 and 5).

In particular, the responses included in Table II indicate a variation from moderate to extensive use of formal tracking, forecasting, and special market studies (see Items 2, 3 and 4; average response = 5.4). However, more informal information processing including routine routes gathering of opinions from customers and informal discussions are used more often (see Items 1 and 5; average response = 6.2). Although not necessary statistically significant, a preference for informal scanning techniques are suggested by the venture capitalists. This finding is consistent with

TABLE II
Informal and formal information processing mechanisms used by venture capitalists to gather information about the environment and competition of the new venture organizations.

SCANNING[a]		
N = 40	Not ever used 1 2 3	Used frequently 4 5 6 7
1. Routine gathering of opinions from customers	M = 6.2	SD = 1.51
2. Formal tracking of the policies and tactics of competitors	M = 5.0	SD = 0.79
3. Forecasting sales, customer preferences, technology etc.	M = 5.2	SD = 0.62
4. Special market studies	M = 6.2	SD = 1.51
5. Informal discussions with personal contact	M = 6.2	SD = 1.51

[a] Average response for SCANNING = 5.56.

TABLE III
The usage of control mechanisms by venture capitalists of the new venture organization

CONTROLS[a]		
	Used rarely/ Small part of firm 1 2 3	Used frequently/ Throughout firm 4 5 6 7
1. A comprehensive management and information system.	M = 3.4	SD = 1.35
2. Quality control of operations (sampling and other techniques)	M = 1	SD = 0
3. Cost control by fixing standard costs	M = 1	SD = 0
4. Formal appraisal of personnel	M = 3.1	SD = 2.74

[a] Average response for CONTROLS = 2.13.

the literature on the correlation between uncertainty and more informal planning processes (see, e.g., Fredrickson, 1984).

Control, as measured by the questions in Table III, can provide indisputable information about operations. This information can be readily used to alter the direction of resource allocation to more promising projects. From the perspective of the venture capitalists, one would expect to find more control being used so as to effectively monitor performance. On the other hand, Miller and Friesen (1984) found that when measuring control within the firm, the lower the level of control the higher the innovativeness of the firm. However, herein we focus on the relationship between the venture capitalist and the entrepreneur. Therefore, it is posited to be important as an administrative task.

In considering the overall measure of control, the average response for all four questions was 2.13 of 7. This result suggests a low level of control used by the VC of NVO operations. In considering the type of control devices used by the venture capitalists in monitoring the performance of the NVO, there is only some evidence of frequent and extensive usage of more formal mechanisms such as a comprehensive management information system, statistical quality control, standard cost setting, and formal personnel appraisal (see Table III). In discussing these control mechanisms with venture capitalists included in the interview process, the types of management information systems used included weekly or monthly financial reports, such as "flash reports" used in the retailing industry. This emphasis on financial reporting mechanisms does not suggest the usage of comprehensive management information systems as suggested by the survey results. A comprehensive management information system would include information processing for more functional areas, i.e., marketing, human resources, and production, as well as the financial area.

Integration as a structural variable is measured by the questions included in Table IV. In entrepreneurial firms, integration seems to behave like an information processing device that causes decision makers to be aware of the dangers or costs of excessive innovation (Miller and Friesen, 1984). As suggested by the dual core concept, the separation of the administrative and technical components are necessary for continued innovation. This perspective is consistent with Burns and Stalker's (1961) notion of the organic structures needed for more creativity. However, later research into the three stages of innovation indicate the need for mixed structures existing within the organization. The level of integration measured as the average of all four questions is 4.5 of 7. This may suggest that the administrative and technical components are somewhat integrated. This result may suggest that less innovation may result in the sample firms. However, other explanations may be plausible. For example, the compatibility of decisions between the venture capitalist and the new venture organizations may be important to effective collaboration in this dyad. This would be achieved through more integration. A closer look at the responses in Table IV indicate a range of responses to the various questions. A clear pattern

TABLE IV
Decision making mechanisms used by venture capitalist and New Venture Organizations

INTEGRATION[a]	
1. Joint committees are set up to allow for joint decision-making:	
Not used ... Used extensively	
1 2 3 4 5 6 7	
M = 6.7 SD = 1.68	
2. Task forces (temporary bodies) are used to collaborate on a specific project:	
Not used ... Used extensively	
1 2 3 4 5 6 7	
M = 4.3 SD = 1.21	
3. Liaison personnel whose specific job it is to coordinate the efforts for specific projects:	
Not used ... Used extensively	
1 2 3 4 5 6 7	
M = 3.1 SD = 1.47	
4. How do you rate collaboration between your firm and the new venture organization in responding to tough problems that competition or changes in business conditions create for the new venture organization?	
Inadequate ... Very fine (work as team)	
1 2 3 4 5 6 7	
M = 3.9 SD = 1.16	

[a] Average response for INTEGRATION = 4.5.

is not evident. However, when assessing the level of overall collaboration between the venture capitalist and the NVO (see Item 4), the responses were only moderate, i.e., M = 3.9, SD = 1.16.

Further evidence of the existence of collaboration between VCs and the NVO is addressed in Table V. Collaboration is evident in the functional areas other than research and development (R&D). This shift from a joint process to the decision made by the new venture organization for the research and development area is consistent with the dual core model. Specifically, the technical core is provided by the entrepreneur in the new venture organizations.

It is important to point out that the results obtained from this limited sample, may have been influenced by characteristics of the the respondents. For example, there is a high (80%) representation of associates (vs. partners), and a high percentage of the sample with finance expertise. These characteristics may affect the orientation of the VCs toward more of a functional versus strategic perspective. Also, the respondents generally did not have previous experience running their own business.

Although the results presented are somewhat tentative, the following section integrates these results with the literature on the life cycles of organizations.

VI. Effective collaboration for organizational survival: Establishing the dual core

The preliminary evidence presented above suggests that the degree of involvement by the venture capitalist tends to be informal, infrequent, and not strategic. Also, the type of control employed tends to emphasize financial versus a broader strategic perspective. These results are somewhat troubling, because the venture capitalist may be contributing to the long term demise of new venture organizations. This perspective is based on the dual core model that suggests organizational innovation critical to survival necessitates the existence of an administrative and technical core.

TABLE V
The degree of collaboration for critical decision areas between venture capitalists and the New Venture Organizations

	Decision made by venture capital firm 1 2	Decision is joint 3 4	Decision made by New Venture Org. (NVO) 5 6 7
1. Production	M = 4.75	SD = 1.21	
2. Marketing	M = 4.75	SD = 1.21	
3. R & D	M = 6.25	SD = 2.03	
4. Capital budgeting	M = 4.50	SD = 0.23	
5. Long term strategies	M = 3.50	SD = 2.66	

In particular, the entrepreneur comes to the venture capitalist with an established product or service. This product or service initially requires only financial resources. However, in the later stages of the life cycle, a degree of administrative intensity (McKinley, 1987) will be necessary to effectively accomplish a more complex set of tasks. Furthermore, since organizations are increasingly faced with both environmental and competitive threats (Huber, 1990, 1984), a more complex planning (vs. adaptive) type of organization will be necessary for survival. In the earlier stages of the new venture organization, the technical aspects of the product/service provide a niche for early survival. However, after early insulation from competition, the product/service is challenged by competitive entries. At this time, the entrepreneur needs to focus on increased innovation in the technical core to maintain a market niche. It is at this time that the venture capitalist can facilitate the introduction of an administrative core by fulfilling the requirements of internal complexity through recruiting of appropriate personnel, designing management information systems, and other administrative tools that will fulfill a strategic (planning) form.

Venture capitalists appear to largely ignore this required level of involvement. As suggested earlier, this may occur due to such factors as involvement in many active investments, preferred management style of the venture capitalist, and years in the industry. The later factor of tenure in the industry, may suggest a knowledge base that has been established by the venture capitalist through experience with decision making and control. Therefore, although the control process reported by venture capitalists appears to lack formality and perhaps, sufficient analysis, the experience of the venture capitalist allows him or

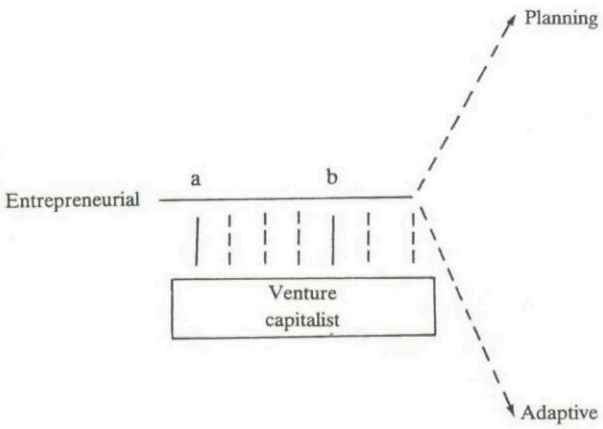
her to rely on an intuitive control process (Simon, 1987). However, the low level of involvement by the venture capitalist in the new venture organization will not contribute to the development of a complex organization with an administrative core necessary to complement the technical core provided by the entrepreneur.

In Figure 1a, the venture capitalist's involvement in the new venture organization is shown to be relatively low after the initial due diligence leading to the investment. The next time involvement intensifies is at the initial public offering (IPO). This figure suggests that the evolution of the firm beyond the entrepreneurial phase is left to the entrepreneur to respond to increasing environmental and competitive threats. The outcome of either a planning or adaptive organization is indeterminate.

In Figure 1b, the outcome of a planning type of organization, occurs through the active involvement of the venture capital firm over the organization's life cycle. Furthermore, the organization's opportunity for survival occurs as a result of the establishment of a strategic form of organization with an administrative and technical core.

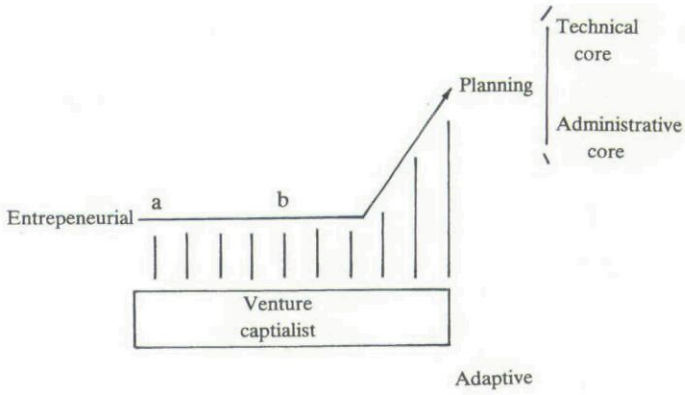
VII. Conclusion

On the basis of preliminary interview and survey data, it has been suggested that venture capitalists are less involved in the NVO than necessary for long term survival. It is recommended that VCs seek a higher level of involvement in the strategic operation of their affiliated firms. This is posited to contribute to more successful organizational forms. If venture capitalists lack the necessary skills for fulfilling the administrative component, effective recruiting could be undertaken through their well developed networks within their industry specialty. Additionally, venture capital firms may broaden their skill base to represent a full



a Initial investment
b Initial public offering

Fig. 1a. Venture capitalist and New Venture Organizations: The dual core life cycle model.



a Initial investment
b Initial public offering

Fig. 1b. Venture capitalist and New Venture Organizations: The dual core life cycle model.

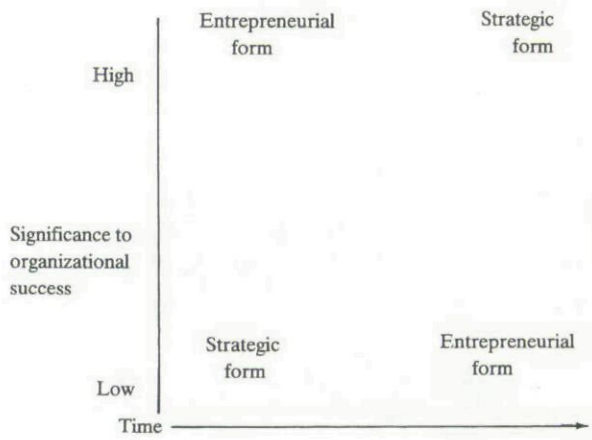


Fig. 2. A life cycle matrix of organizational survival.

service consulting organization as some of the public accounting firms have done. It is important to again emphasize that the results presented in this paper are preliminary and need more empirical data for increased validity. Also, as has been suggested by one of the reviewers, these results will be affected by the stage of the investment. As shown in Table I, the data are split between start-up and second stage financing. Those NVOs in the second stage may require less involvement from the VCs and as suggested by Gorman and Sahlman (1989), the major reason for under-performance or failure may be inadequate senior management. In general, as maintained in this paper and recently supported (see, e.g., Kazanjian and Drazin, 1989), there are different requirements for organizational survival in each stage of its life-cycle.

In summary, it is suggested that the mortality of new organizations is predominantly influenced by available resources in the environment. These resources include financial, administrative, technical, and human. The extent to which these exist will affect survival. Effective collaboration between venture capitalists and entrepreneurs could increase the opportunity for the new venture organization to attain these necessary resources for long term growth and survival.

Note

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