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## Who Adds Value to Ventures? Understanding the Roles and Relative Contributions of Key Advisors in High-Technology Startups

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During the process of starting and growing a company, entrepreneurs seek help from their key advisors, which include its directors, advisory board members, financiers, as well as others informally affiliated with the venture. This paper examines how the various groups add value to a venture and assesses the relative value of their contributions. Through a survey of high technology entrepreneurs, we find that directors, advisory board members and informal advisors add significant value by offering their expertise in various fields. Surprisingly, investors add relatively little value, even in such key areas as strategic planning and finance. While professional venture capitalists add more value than private investors, even the venture

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capitalists' contribution was perceived lower than those of the other advisors in key areas. Our results suggest that the contributions of investors may have been overestimated in conventional literature.

#### Introduction

During the process of starting and growing a company, entrepreneurs seek not only physical or financial resources, but also expertise, guidance and contacts. Much of the help comes from the company's key advisors formally affiliated with the venture. These usually consist of the company's board of directors (BOD), the advisory board (AB) and financiers (INV). Other advisors often include individuals and parties informally affiliated (OTHER), e.g., personal mentors, business partners or suppliers, who often offer valuable advice to new businesses. The value-added resources provided by both formal and informal advisors have long been shown to substantially impact the performance of a venture (Castaldi & Wortman, 1984; Zahra & Pearce, 1985).

In this paper, we examine how and to what extent the various groups add value to a venture and compare their relative contributions. In particular, we analyze the contributions of investors — a group often discussed in academic and trade journals, yet still widely misapprehended in practice. The key questions addressed in this research include:

- How and to what extent does each advisory group add value to an entrepreneurial company? What are the major contributions of each group?
- How do their contributions compare? Who adds more value than others?
- How valuable are the contributions of venture capitalists (VCs) and private investors? Do investors really add as much value to new ventures as they often claim? Is it important for ventures to have value-added investors, i.e., should entrepreneurs actively seek out certain investors even if that means lower valuation or inferior term sheet?

The questions addressed here are particularly relevant for entrepreneurs in the earlier stages of their operation when they are in the process of formalizing relationships with their advisors and investors. Entrepreneurs find it useful to know what and how much to expect from an advisory board member, director or investor; whom other entrepreneurs rely on for mentorship; or whether or not investors are as good of a source of strategic advice as they claim to be. Preventing a mismatch in expectations can mitigate future potential conflict.

In particular, there has been much discussion on the topic of value-added investors (Hellmann and Puri, 2002; Gorman and Sahlman, 1989; Sapienza and Timmons, 1989). Many investors including VCs claim to add value beyond their financing, through their reputation, contacts and expertise. Some VC firms market themselves as adding more value than others by being more "hands-on". Post-investment stage research has examined the interactions between entrepreneurs and VCs with inconclusive results (Hellmann and Puri, 2002; Rosenstein et al., 1990, 1989; Gorman and Sahlman, 1989; Sapienza and Timmons, 1989; Sapienza, 1992; MacMillan et al., 1988; Ehrlich et al., 1994). Entrepreneurs could benefit a better understanding of the level of contribution investors make to their ventures.

Previous studies have examined the relationships between entrepreneurs and their advisors, but this research has usually addressed one group at a time. Our research is unique in that it quantitatively compares the relative contributions made by all the major constituents

(BOD, AB and INV) as well as informal advisors (OTHER). This approach allows for new managerial insights that previous studies were unable to offer.

#### I. The Entrepreneurial Organization and its Advisors

Stevenson and Sahlman (1988) have argued that small companies should become more active in managing their advisors. The following discussion highlights the major research on the roles and responsibilities of each advisory group:

The Board of Directors (BOD) of an organization commonly consists of key executives, investors and select outside individuals with relevant expertise. It usually has a controlling, strategic and service-oriented function in commercial companies (Strebel, 2004; Zahra & Pearce, 1989; Andrews, 1981). Over the last few decades, several researchers have asserted the need for successful, privately held firms to have a working board of directors (Danco, 1975, 1981; Heidrick, 1984; Jacobs, 1985). Its role in smaller enterprises is similar – to assist the company in determining objectives and strategies, provide specialized expertise, and even act as arbitrators for feuding partners and family members (Danco, 1981; Mace, 1971).

Different boards, depending on their structure, size, composition and commitment, vary significantly in the level and type of contributions they make. Active and able board members can add to the capacity of management by giving advice and counsel on problems within the business. Furthermore, networks mediated by BODs can contribute to increased flexibility in strategic decision making (Borch & Huse, 1993). Several studies have argued that they should play a more important role in the strategy development of small business firms (Castaldi & Wortman, 1984; Huse, 1990; Mace, 1948).

A growing number of high technology ventures rely on official advisory boards (ABs) with the intention of tapping into the members' expertise, usually under a formal fee or equity arrangement. According to *Inc. Magazine*, ABs are popular in family-held companies, where a "guidance but not governance" role is well suited to dealing with family owners (Hadzima, 1994). ABs are also common in high technology (including biotechnology) ventures where special expertise is sought (e.g., clinical trial management). Nevertheless, some practioners and academics have questioned the roles and benefits of ABs which often maintain loose arrangements with their ventures (Morkel and Posner 2002). Often, they are viewed as mere promotional mechanisms to help a company appear credible. Very few studies have attempted to measure the benefits of having an AB. One exception is Morkel and Posner (2002) who found in a survey that a substantial percentage of advisory boards (41-60%) may be effective and value-adding.

Many investors including VCs, claim to add value beyond their financing, e.g., through avenues such as their reputation, contacts and expertise. Some promise to add more value than others by being more "hands-on". Post-investment stage research has examined the interactions between entrepreneurs and VCs with inconclusive results (Hellmann and Puri, 2002; Rosenstein et al., 1990, 1989; Gorman and Sahlman, 1989; Sapienza and Timmons, 1989; Sapienza, 1992; MacMillan et al., 1988; Ehrlich et al., 1994). For example, Gomes-Mejia et al. (1990) assert that many CEOs viewed VC managerial intervention as counterproductive, while Hellmann and Puri (2002) and Sapienza (1992) find that VCs' involvement can make positive contributions to the performance of ventures.

Although many studies have examined the contributions of VCs, most fail to compare them to those of other advisors, such as the ABs and BODs. One notable exception is Rosenstein (1989), who found that CEOs of ventures did not perceive that VCs on their boards

added more value than other board members. It is important for entrepreneurs to understand the level of support VCs provide, especially for the more promising entrepreneurs for whom investment is not critical for survival or who are offered multiple term sheets from VC firms each claiming to offer good advice. Ehrlich et al. (994) find that VC firms require significant reporting and management time, while Hsu (2004) points out that VC financing, especially those from better known firms, can be very costly to entrepreneurs.

Another important source of advice for ventures include friends, mentors, service providers (such as consultants, attorneys and bankers), and business partners (including suppliers and customers) whom we group together under "OTHER" or as informal advisors. They make significant contributions for ventures usually without having formal financial arrangements for the services they provide. Some of these people, inside the personal or extended networks of entrepreneurs, can significantly impact the performance of an organization (Dubini & Aldrich, 1991). McGrath et al. (2003) found that software executives looking for advice tended to call upon people whom they knew well and that these advice networks were an important source of information about business, technical, and social issues. The entrepreneurial community appears filled with anecdotes of mentors, attorneys or suppliers who have made significant contributions to ventures – going well beyond the call of their duty. Despite the importance of these informal advisors, few studies have examined their contributions.

#### II. Value-Adding Activities

We developed a short list of value-adding activities for our study. We began with the 20 investor involvement activities discussed in MacMillan et al. (1988) and Ehrlich et al. (1994). For practical reasons, we shortened the list to 8 activities after a series of brainstorming sessions with an initial sample of entrepreneurs. While this is not an exhaustive list, it covers some of the most important contributions that entrepreneurs expect from their advisors.

*Credibility.* An early stage venture with little history can immediately gain a certain level of credibility by associating itself with established individuals or organizations (Hubbard, 2000). Such a boost in credibility can facilitate meetings with partners and customers that a new venture may otherwise be unable to arrange. Thus, advisors or investors who can add to credibility can make a significant impact on an organization's performance.

**Technical Expertise.** Strong technical expertise can significantly impact the performance of a venture. One of the primary roles of a BOD or an AB member is to provide relevant expertise to an organization (Strebel, 2004, Danco, 1981; Mace, 1971). Most venture capitalists usually have an industry focus, enabling them to provide specific skills, such as customer understanding to their portfolio companies (Sapienza, 1992; Gorman & Sahlman, 1989).

Financial Expertise. Financial expertise is important for a wide range of activities such as financial control, cash management, raising capital and interfacing with investor groups. Many entrepreneurs have little practical experience with many aspects of financial management. Even those with financial experience often prefer to receive guidance from their advisors. In a study of entrepreneurial firms that received equity investments, Ehrlich et al. (1994) found that interfacing with investor groups, obtaining alternative equity financing and monitoring financial performance were among the top activities for which entrepreneurs sought help from their lead investors.

Business & Marketing Strategies. One of the board's primary responsibilities is to assist in determining the objectives and strategies of its company (Strebel, 2004, Danco, 1981; Mace, 1971). Studies show evidence that both strategic planning and outside assistance can have a positive impact on venture performance (Chrisman, 1989; Bracker & Pearson, 1986). Formulating business strategy and serving as a "sounding board" are among the top activities in which ventures wanted involvement from their investors (Ehrlich, 1994; MacMillan, 1981).

Sales Leads & Contacts. Few contributions are of more direct benefit for an early stage enterprise than assistance with sales or promising sales leads. A well-connected group of advisors can often be the source of early sales leads. MacMillan (1983) asserts that building relevant contacts and networks is a key factor in any firm's success – which directors and other advisors often bring.

Entrepreneur Mentoring. An entrepreneur's personal capacity as a manager and a leader undoubtedly has an impact on the performance of his or her organization. Mentoring may come in a wide range of areas including leadership, personnel management, operational management or technical knowledge. Saxenian (2002) discovers that mentoring plays an important role in the success of Asian American entrepreneurs in Silicon Valley.

**Recruiting & Staffing.** The success of an enterprise depends heavily on having the right management and technical talent. Entrepreneurs often rely on their advisors to identify managers with needed capabilities. Sanford et al. (1994) confirmed that entrepreneurs frequently sought expertise in the area of staffing from their investors.

*Managerial Systems & Control.* First-time entrepreneurs need substantial guidance in developing organization charts and reporting structures and in implementing compensation incentives, hiring protocols and operational processes. Some studies have suggested that entrepreneurs viewed operational and administrative issues as their most important concerns in starting a new business (Davis, Jones & Kraft, 1981; Voziki & Glueck, 1980).

#### III. Method

The main part of our survey asks the respondents to rate the level of contributions of each of the 4 groups – AB, BOD, INV and OTHER. A seven-point Likert scale ranging from "Insignificant" to "Very significant (positively changing the fortune of the company)" was used for each of the 8 contribution categories.

To create a pool of potential respondents, we tapped into the MBA alumni pool from UCLA and USC, the University of Chicago and the University of Pennsylvania. Almost all communication was conducted via email. Out of 112 participants, 51 (45%) surveys were complete and relevant.

Surveys were discarded when a company did not have a working BOD or an outside INV. We also rejected surveys whose BODs did not have at least one outside board member who was not a lead investor. In 55% of our sample, the BOD had at least 1 non-investor outside member, many of whom were former executives and industry experts. On the average, our sample had fewer non-investor outside board members (average 0.7) than Rosenstein et al. (1993) whose sample had 1.3 non-investor outside board members. We attribute this difference to the fact that our sample had more early stage companies. A board member who was a professional investor (angel or VC) was categorized as an investor, not as a director, in our analysis. Overall, 25 of our companies had professional VCs as lead investors; 23 had private

individuals or angel investors as lead investors; and for the remaining 3 companies strategic investors were the lead investors.

In our final sample, 32 respondents stated that they had at least one OTHER advisor who added value to their businesses. Participants were asked to identify who, other than an INV or member of an AB or the BOD, provided the most help to identify their OTHER advisors. They included former angel investors, business partners (including Intel and Microsoft), retired executives, and personal acquaintances.

Some additional profile information of our final sample is as follows:

- The entrepreneurs were between the ages 33 and 48, with the median age of 41
- They all had MBAs from top 25 business schools
- The majority (72%) lived in Southern California.
- They were all in technology, most (75%) were in IT (software, computer and electronics) with the remaining (25%) in biotechnology
- Their companies were in business between 1 and (minimum requirement) 5 years, with an average of 2.4 years.
- Their companies ranged from 0 to \$50M in revenue and from 4 to 245 employees.

#### IV. Results

Table I lists the mean values obtained from the survey for the level of contributions made by each of the advisor groups. Overall results indicate that AB, BOD and OTHER made similar average contributions (3.8, 3.8, 3.7), while the average contribution from INV was smaller (3.1). It is noteworthy that AB and BOD made significant contributions in Technology Expertise, Financial Expertise and Strategy while INV lagged behind consistently. OTHER seemed particularly effective in Mentoring.

One-way analysis of variance (ANOVA) was utilized to examine if the differences in the means were similar or significantly different. F-tests show that the mean contribution levels were not significantly different between the groups in Sales Leads & Contacts and in Recruiting & Staffing. This makes sense considering that neither activity is considered the primary responsibility of any group.

On the other hand, the ANOVA results indicated that a more thorough examination was necessary for the other activities. Various combinations of paired t-tests were run to confirm the following observation summarized in Table II.

It is clear from the results that ABs added more than just Credibility or name value. They were also highly valued for their contributions to Technical Expertise and Strategy. The BOD also played an important role. It was instrumental in adding to Strategy and Financial Expertise, and it added more value in Systems & Control than any other group. Interestingly, INVs added the least amount of value to ventures (other than through their financial investments). One might have assumed that they would be more involved and motivated to add value. Another surprising finding was the level of contributions made by OTHER. Although in many cases they received no formal compensation, these unofficial advisors added significant value through Mentoring and other activities. Their level of contribution was not significantly different from AB and BOD in Credibility, Strategy, and Financial Expertise.

Having observed that INVs contributed relatively little to ventures, we examined if there were any differences in the contribution levels between private investors and professional VCs. We divided our sample of 51 respondents into 25 companies whose lead investor was a

VC and 23 whose lead investor was a private individual (3 were strategic investors). Results are illustrated in Table III.

We found that VCs added significantly more value with respect to Financial Expertise, in such activities as planning, managing cash and follow-on financing. This makes sense since VCs have stronger financial backgrounds than private investors.

#### V. Discussion

The results of our study are generally consistent with those of prior studies. This research corroborates the value of having a working BOD as asserted in Strebel (2004), Danco (1981, 1975), Heidrick (1984) and Jacobs (1985). Furthermore, it suggests that a BOD excluding the investors can add significant value to a venture. This makes sense considering that many of the non-investor BOD members are deliberately recruited for their strong expertise in one or more areas. Many of them also have operating experiences, which many investors do not.

We note that ABs can add significant value to a venture, particularly by providing Credibility, Strategy and Technical Expertise. Many early stage ventures are able to recruit high-profile individuals to be in the advisory board, in part because these roles require minimal commitment. Nevertheless, once on board, AB members appear to add significant value.

Our findings show that the category OTHER can add significant value to a company, particularly through personal mentoring. We learned that some entrepreneurs were unwilling to confide with their BODs or INVs for certain issues and turned to their personal advisors for help. In most situations, entrepreneurs sought advice from people they trusted and had personal relationships with, consistent with findings by McGrath et al. (2003). Detailed interviews revealed that some of the OTHER advisors were individuals sufficiently qualified to be BOD or AB members but were not interested in an official arrangement. Overall, the data show that significant contributions were made by individuals without any formal ties (e.g., pay or equity) to the organization.

On the other hand, INVs add much less value than might be expected. While counterintuitive at first, anecdotes and explanations provided by the surveyed entrepreneurs helped validate our observation. "Investors are chosen for their ability to write a check, not for their ability to help", one interviewee clarified. "In comparison to their marketing pitch, their contribution was disappointing," said another. Most survey participants, when they were shared the results – particularly the low scores of investors – expressed that they were not surprised. One entrepreneur of a biotech company even described how a VC group nearly destroyed his company with poor hiring moves.

Comparing the value-added of VCs to BODs, we find that VCs have a lower mean in most situations. However, these differences are not statistically significant except for Strategy. This finding is similar to Rosenstein (1993), where contributions of VCs on boards were found to be not significantly different from those of other board members.

As one might have expected, VCs provided more Financial Expertise than private investors. This result is consistent with Ehrlich et al. (1994), where the major difference between VCs and private investors was that VCs were more involved with obtaining alternative equity and debt financing, monitoring financial performance and serving as a sounding board. Apart from Financial Expertise, our results show no other statistically significant difference between VCs and private investors.

Our results do not imply that investors do not add any value in the absolute sense. They clearly do, as confirmed by our results and other studies such as Gorman & Sahlman (1989) and Sapienza (1992). Certainly, a group of intelligent individuals can provide useful advice. However, the celebrated stories of legendary investors who can elevate a startup dramatically in a very short time are far less common than reported in popular press or often expected by entrepreneurs.

Furthermore, our results raise new questions about the true importance of landing value-adding investors, something widely stressed in real life and in academic literature. While receiving investment from experienced and influential venture capitalists would be very helpful, there appears to be little need for ventures to limit themselves to such investors only. Our findings suggest that there may be other parties as well or better equipped to help ventures than the VCs. If entrepreneurs are able to obtain the expertise they need from a wide range of people (and our data suggest that entrepreneurs should do so actively), they might as well align themselves with investors who offer the best terms.

#### VI. Conclusion

It is important to note that the study has some limitations. First, it was conducted mostly from a homogeneous group within a single region working in similar industries. Thus, these findings may not apply to others, e.g., those who don't have the comparable educational or business background of our sample or who work in other industries. For example, entrepreneurs with little management experience might have found more value in the advice of their financiers. Similarly, entrepreneurs with weaker personal connections than our sample might have found their investors to be more important.

Only a few of the VCs in our sample would be classified as "first-class" VCs as described by MacMillan et al. (1989). The recent years have seen a significant rise in the number of VCs, many with limited credentials and capabilities. Our results might have been different if all our investors had been first-class VCs. Nevertheless, it should be mentioned that not all entrepreneurs funded by first-class VCs are satisfied with the support they receive. One interviewee, who had received investment from one of the premier VC firms in Silicon Valley, complained about the lack of help he had received. He also added that only those companies overseen directly by the two legendary senior partners of the VC firm received adequate assistance. He felt that the other partners and associates of this prestigious VC firm neither had the experience nor the contacts to significantly help his and other ventures.

The research could be extended in many ways. One research idea may be to extend this paper and the work of Stevenson and Sahlman (1988) to examine effective means of managing one's advisors. Another idea may be to develop a better understanding of the informal advisors who are often so helpful to the success of a new venture. It would be interesting to explore who they are and what motivates them to help.

#### REFERENCES

- Andrews, K.R. "Corporate strategy as a vital function of the board." *Harvard Business Review*, Vol. 59, No. 6 (Nov-Dec. 1981), pp. 174-179.
- Birley, Sue. "The role of networks in the entrepreneurial process." *Journal of Business Venturing*, Vol. 1, No. 1 (1985), pp. 107-117.
- Borch, O.J., and Huse M. "Informal strategic networks and board of directors." *Entrepreneurship Theory and Practice*, Vol. 18, No. 1 (1993), pp. 23-36.
- Bracker, J.S., and Pearson, J.N. "The impact of consultants on small firm strategic planning." *Journal of Small Business Management*, Vol. 23, No. 3 (1985), pp. 23-30.
- Castaldi, R., & Wortman, M.S. Jr. "Boards of directors in small corporations: An untapped resource." *American Journal of Small Business*, Vol. 9, No. 2 (1984), pp. 1-10.
- Chrisman, J.J. "Strategic, Administrative, and Operating Assistance: The Value of Consulting to Pre-Venture Entrepreneurs." *Journal of Business Venturing*, Vol. 4, No. 6 (1989), pp. 401-418.
- Danco, L.A., and Javonic, D.J. *Outside directors in the family-owned business*. Cleveland, Ohio: University Press, 1981.
- Davis, C.H., Jones, B.M., and Kraft, F.B. "Small business owners/managers information needs: an empirical overview." *Proceedings of the International Council for small Business*, June (1981), pp. 45-52.
- Dubini P, and H. Aldrich "Personal and extended networks are central to the entrepreneurial process." *Journal of Business Venturing*, Vol. 6, No. 5 (1991), pp. 305-313.
- Erlich, S.B., De Noble Alex F. De., Richard R. Weaver "After the Cash Arrives: A Comparative Study of Venture Capital and Private Investor Involvement in Entrepreneurial Firms." *Journal of Business Venturing*, Vol. 9, No. 1 (1994), pp. 67-82.
- Fred, V.H., and Hisrich, R.D. "The venture capitalist: A relationship investor." *California Management Review*, Vol. 37, No. 2 (1995), 101-113.
- Gabarro, John J. and Kotter, John P. "Managing Your Boss." *Harvard Business Review*, Vol. 71, No. 3 (May-Jun1993), pp. 150-157.
- Gomez-Mejia, L.R., Balkin, D.B., and Welbourne, T.M. "Influence of venture capitalists on high tech management." *Journal of High Technology Management Research*, (1990)
- Gorman, M., and Sahlman W.A "What do venture capitalists do?" *Journal of Business Venturing*, Vol. 4, No. 4 (1989), pp. 231-248.
- Hadzima, J.G. "The fundamentals of a family-business advisory board." *Inc. Magazine*, (1994) {RALPH WARD, JULY 2000}

- Hellmann, T., Puri, Manu "On the fundamental role of venture capital." *Economic Review Federal Reserve Bank of Atlanta*, Vol. 87, No. 4 (2002), pp. 19-23.
- Hsu, D. H. "What Do Entrepreneurs Pay for Venture Capital Affiliation?" *The Journal of Finance*, Vol. 59, No. 4 (2004), pp. 1805-1844.
- Hubbard ,C. "Venture capital firm's rep is as valuable as funding." *Atlanta Business Chronicle*. Vol.22, No. 44, (March 31, 2000), pp. A5
- Huse, M. "Board composition in small enterprises." *Entrepreneurship and Regional Development*, Vol. 2 (1990), pp. 363-373.
- Mace, M.L. Directors: Myth and reality, Harvard University Press, Boston, 1971.
- MacMillan, I.C. "The politics of new venture management." *Harvard Business Review*, Vol. 61, No. 6 (Nov-Dec1983) pp. 8-12.
- MacMillan, I.C., Kulow, D.M., and Khoulian, H. "Venture capitalist involvement in the investments: extent and performance." *Journal of Business Venturing*, Vol. 4, No. 1 (1989), pp. 27-47.
- McGrath, Cathleen, Vance Charles M. & Gray, Edmund R. "With a Little Help from Their Friends: Exploring the Advice Networks of Software Entrepreneurs." *Creativity and Innovation Management*, Vol. 12, No. 1 (2003), pp. 2-10.
- Morkel, Andre, Posner, Barry "Investigating the effectiveness of corporate advisory boards." *Corporate Governance*, Vol. 2, No. 3 (2002), pp. 4-12.
- Rosenstein, J., Bruno, A.V., Bygrave, W.D., and Taylor, N.T. "Do venture capitalists on boards of portfolio companies add value besides money?" *Frontiers of Entrepreneurship Research*, (1989)
- Rosenstein, J., Bruno, A.V., Bygrave, W.D., and Taylor, N.T. "How much do CEOs value the advice of venture capitalists on their Boards." *Frontiers of Entrepreneurship Research*, (1990)
- Rosenstein, J., Bruno, A.V., Bygrave, W.D., and Taylor, N.T. "The CEO, Venture Capitalists, and the Board." *Journal of Business Venturing*, Vol. 8, No. 2 (1993), pp. 99-113.
- Rosenstein, J. "The board and strategy: Venture capital and high technology." *Journal of Business Venturing*, Vol. 3, No. 2 (1988), pp. 159-170
- Sapienza, H.J. "When Do Venture capitalists add value?" *Journal of Business Venturing*, Vol. 7, No. 1 (1992), pp. 9-27.
- Saxeninan, A.L. "Silicon Valley's new immigrant high-growth entrepreneurs." *Economic Development Quarterly*, Vol. 16, No. 1 (2002), pp. 20-31.
- Stevenson, H.S., and Sahlman, W.A. "How small companies should handle advisors." *Harvard Business Review*, Vol. 66, No. 2 (1988), pp. 28-33.

- Strebel, P. "The Case for Contingent Governance", *MIT Sloan Management Review*, Vol. 45, No. 2 (2004) pp. 59.
- Vozikis, G.S., and Glueck, W.F. "Small business problems and stages of development." *Proceedings of the Academy of Management*, August (1980) 373-377
- Zahra., S.A., and Pearce, J.A.II "Board of directors and corporate financial performance: A review and integrated model." *Journal of Management*, Vol. 15, No. 2 (1989), pp. 291-334.

Table I

Contribution	Advisory Board	Board of Directors <sup>1</sup>	OTHER	INV	df	F
Credibility	4.7	4.5	4.4	3.9	3,161	3.3*
Technical	4.2	3.6	3.0	3.0	3,160	7.2**
Financial	4.2	4.2	3.7	3.2	3,159	4.8*
Strategy	4.5	4.5	4.1	3.1	3,161	14.1**
Sales Leads	3.8	3.4	3.9	3.4	3,160	1.76
Mentoring	3.7	3.8	4.3	2.7	3,159	9.2**
Recruiting	2.5	2.5	3.0	2.3	3,161	1.5
Systems	2.8	4.2	2.8	3.4	3,161	6.1**
Average	3.8	3.8	3.7	3.1		

Table II

Contribution	Key results of paired t-tests				
	Significant	Not significant			
Credibility	AB, BOD, OTHER > INVs (with p<0.01)	AB, BOD, OTHER			
Technical	AB > INV, OTHER (with p<0.01)	AB, BOD			
Financial	AB, BOD $>$ INVs (with p $<$ 0.05)	AB, BOD from OTHER			
Strategy	AB, BOD $>$ INVs (with p $<$ 0.05)	AB, BOD from OTHER			
Sales Leads		AB, BOD, INV, OTHER			
Mentoring	OTHER > INV (with p<0.01)	OTHER from AB, BOD			
Recruiting		AB, BOD, INV, OTHER			
Systems	BOD > AB, INV and OTHER (with p<0.01)	AB, INV, OTHER			

p < 0.05 \*\*p<0.01 1. Excludes the lead investor who is often on the Board

Table III

Contribution	Private investors	Venture Capitalist	t-statistic
Credibility	4.2	3.8	1.04
Technical	2.6	3.1	1.62
Financial	2.7	3.7	2.88**
Strategy	3.2	3.4	1.35
Sales Leads	3.6	3.4	0.46
Mentoring	2.9	3.1	1.47
Recruiting	2.6	2.2	0.83
Systems	3.4	4.0	1.32
Average	3.1	3.3	

<sup>\*</sup>p < 0.05 \*\*p<0.01