

Estimating the Extent Entrepreneurial Intentions Become Reality: A Note

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Abstract

Data from Small Business Development Centers (SBDC) throughout the United States were used to develop preliminary estimates of the proportion of nascent ventures that become organizations as measured by Katz and Gartner's (1988) properties of intent, boundary, and exchange. Results indicate that over 75 percent of individuals with entrepreneurial intent started a business. Of these, approximately 80 percent had hired employees or generated sales revenue within one year.

Introduction

Entrepreneurship is the creation of new combinations (Schumpeter, 1934). Of all of the venues in which new combinations can be created, the independent new venture is perhaps the most important and certainly the most widely studied. Researchers, however, face serious obstacles in the identification of populations of new ventures and the collection of data about the startup process. Several studies have addressed these problems by evaluating some of the existing sources of samples and data on new venture start-ups (Aldrich, Kalleberg, Marsden, and Cassell, 1989; Birley, 1984; Busenitz and Murphy, 1996; Williams, 1993). These studies show that each has strengths and weaknesses that must be considered because the choice of database may have a material impact on the types of ventures studied as well as empirical results.

These studies have made a valuable contribution to the literature. Furthermore, the databases that have been evaluated represent some of the best sources of samples of new ventures that are currently available, or are likely to be available for some time to come. However, these databases share a common problem in that each is composed almost exclusively of ventures that have become organizations. None capture nascent ventures that never complete the gestation process from conception to birth.¹ As Aldrich, Kalleberg, Marsden, and Cassell (1989) and Reynolds and Miller (1992) noted, if a substantial proportion of nascent ventures never become full fledged organizations, analysis of only those that do may yield conclusions that cannot be generalized to those that do not. As an example of this, Carter, Gartner, and Reynolds (1996)

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Throughout this article the terms "nascent venture" and "emerging organization" will be used interchangeably to denote organizations that are still in the process of gestation, i.e., have not yet been born.

identified somewhat different patterns of behavior between aspiring entrepreneurs who eventually started a business, gave up, or were still trying. Our knowledge of the entrepreneurial process will benefit, therefore, the earlier in which we are able to identify nascent ventures.

Research by Reynolds and Miller (1992) has indicated that by far the most frequent first event in the life history of a nascent venture is the intention of the lead entrepreneur to found a business. Bird's (1988) theoretical work suggests that entrepreneurs' intentions shape the subsequent goals, strategies, and organizational forms of emergent organizations. Therefore, from an empirical perspective using intention as a basis for sample selection seems to be the most logical approach if one wants to capture data at the earliest stage in the venture development process. Likewise, the stage of intention appears to be the most theoretically relevant as that stage is where the seeds of a venture's future development, or lack thereof, are sown.

Fortunately, Katz and Gartner's (1988) work on the properties of emerging organizations has provided some insights into possible sources of data for identifying ventures at the time of entrepreneurial intention, before other features that signal a venture's emergence as an organization have been completed. One of the sources of data mentioned by those authors is the client files of the Small Business Development Center (SBDC) program. SBDC files seem a particularly useful source for several reasons. First, the program is run on a national basis with SBDCs in operation in all 50 states, Washington D.C., Puerto Rico, Guam, and the Virgin Islands. Second, the SBDC's client files are, by and large, computerized, thus minimizing some of the problems in data transfer and analysis. Third, the SBDC's usually maintain their files over a period of years. Therefore, current data are available on ventures that have not yet started in a particular year. Data are also available on ventures that, at a previous point in time were at a very early stage of development.

Given the need to identify ventures early in their development, the purpose of this article is to provide a preliminary assessment of the frequency in which entrepreneurial intentions are transformed into new ventures. This article seeks to address this issue by using data from the most recent national study of the SBDC program (Chrisman, 1995).

Conceptual Development

Before discussing the methods by which we identified the proportion of nascent ventures that became new organizations, it is important to lay the theoretical groundwork for this study. The most important theoretical issue is how one determines when a new venture has been conceived and when it has completed its gestation and is born. Our primary guide in this endeavor was the work of Katz and Gartner (1988), arguably the most comprehensive theoretical treatment of the concept of emerging organizations. Katz and Gartner specified four properties of emerging organizations, intention, boundary, resources, and exchange. They argue that all of these properties are necessary for an organization to exist. However, for the purpose of this study we examine only three of those properties: intention, boundary establishment, and exchange. The exclusion of resources is not meant to downplay their importance but to recognize that their accumulation and use occurs throughout the entrepreneurial process and are integral to the development of the other properties of emerging organizations. In this respect, our view of

resources is in line with that of Gartner and Shane (1995) who seen the control of resources as a requirement of entrepreneurship. It is difficult, if not impossible, to separate resources from the other properties of emerging organizations.²

Katz and Gartner (1988) define intention as the search for information that can be used to help fulfill the goal of venture creation. We take this to mean that intention is an active rather than a passive concept. Thus, we are concerned with evidence of serious intention -- e.g., seeking expert advise, conducting market research -- rather than merely an expression of a desire to form a business as an indication that a venture has been conceived.

Two of Katz and Gartner's properties are used to measure venture creation. The first, boundary, is defined as the establishment of a barrier between the emerging organization and its environment. The establishment of a boundary may be either formal, as when an entrepreneur selects a legal form of organization, or informal, as when an entrepreneur consciously makes the transition from mere intention to a concrete decision to proceed with business founding (Learned, 1992). The presence of a boundary thus suggests that it becomes more difficult for an entrepreneur to abandon the process of creation without some cost, monetary or psychic.

Exchange is a cycle of transactions within organizational subsystems or between an organization and environmental entities, whether individuals or other organizations. According to Katz and Gartner (1988), exchange will occur in an *ongoing* manner only after the other three properties are in place and marks the emergence or birth of a nascent venture. Reynolds and Miller (1992) seem to agree, notwithstanding their finding that *initial* sales, hiring, or financing were sometimes among of the earliest events in the gestation process rather than the last. In fact, those authors argue that first sales may be the optimal choice for the birth date of a new firm.

These properties are consistent with the opportunity, creation, and exchange stages identified by Bhava (1994). Although both the pace of development and sequence of events will vary, these three properties appear to represent critical demarcations in the gestation process of nascent ventures.

Methodology

This study was based on data obtained from the third national impact study of the counseling activities of the Small Business Development Center (SBDC) program in the United States in 1992 (Chrisman, 1995; also see Chrisman and Katrisha, 1994). In 1992, the

² For example, entrepreneurial intent implies some expenditure of resources already accumulated in investigating and pursuing opportunity. At a minimum, this would involve an entrepreneur's time. The establishment of a boundary likewise suggests a commitment of resources in the entrepreneur's possession, as well as a distinction between resources possessed and those that an entrepreneur hopes to control in the future. Finally, gaining control of resources that are not in the entrepreneur's possession requires exchange. For example, employees, revenues, and financing are all resources that are obtained through exchange.

participating SBDCs provided long term assistance (a minimum of five hours) to 43,461 clients.³ The entire population of long term clients was sent a mail questionnaire in the Spring of 1994. Responses were received from 5,396 clients, a 12.4 percent response rate.

The focus of the analysis was on those clients who sought assistance in starting a business but had not yet done so at the time of the SBDC's intervention. These clients showed intent in that they endeavored to obtain assistance that could be applied toward the goal of starting a venture. We believe that using these clients has some advantage over measuring intent by asking individuals in the general population whether they plan to start a business or not. Long term clients of the SBDC have demonstrated that their intent is serious by taking the time and trouble to seek outside assistance. Thus, this database is less likely to be contaminated with individuals who *express* intent but never actually *do anything* about it.

In the context of this study, clients provided data on the year their business was started, or if it was not started. This was consistent with the approach used by Carter, Gartner, and Reynolds (1996) in their study of start-up event sequences. As this start date represents a recognition on the part of the individual that an organization has been formed, it meets the definition of boundary discussed above. If no boundary was formed before a client sought assistance from the SBDC, we could be reasonably certain that a venture had not yet been created. On the other hand, if a boundary existed prior to the counseling then, for our purposes, the venture had already been created. Thus, we classified ventures started in 1992 (the year in which counseling was received) or later, or that had not started at the time of the study, as nascent ventures. In all, we were left with usable data on 2025 nascent ventures. From this group we were able to determine the proportion of nascent ventures that had become organizations.

We measured exchange by whether the ventures had either made sales or hired employees within one year after seeking SBDC assistance. Clients were asked to provide this information for 1993, the year after assistance was received. A study by Brush and Vanderwerf (1992) suggested that self-reported performance data of this type are reliable. Unfortunately, data on sales and employment were not available to track exchange in subsequent years. However, research by Reynolds and Miller (1992) and Carter, Gartner, and Reynolds (1996) suggest that most new business births will occur within this time window.

Finally, we also collected data on the geographic sector of the U.S. in which the ventures were located.⁴

³ The study included nascent ventures who received assistance from the following SBDCs in 1992: Alabama, Alaska, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin. We did not include data obtained from the SBDC in commonwealth of Puerto Rico in this study even though that SBDC participated in the original impact study.

To determine if the sample was representative of the population we divided it according to early versus late respondents and tested for bias along four dimensions: boundary (year started or not started), employees in 1993, sales in 1993, and geographic location. Chi-square tests and ANOVAs revealed no significant difference on any of these dimensions except for geographic sector. Since some of the state SBDCs had sent out the questionnaires earlier than others, we decided that additional testing was necessary to establish whether that finding was an artifact of the timing of the questionnaire or a reflection of a real bias among respondents. Therefore, we repeated our analysis for nascent ventures in each of the four geographic sectors of the U.S. used in this study, East, South, Midwest/North, and West, comparing early and late respondents on the year started (boundary), employees, and sales variables. Out of all these tests the only indication of a possible bias was in terms of the sales of early and late respondents in the Eastern sector of the U.S., with early respondents having significantly higher sales than late respondents.

Oppenheim (1966) argued that late respondents are very similar to nonrespondents. Given the general lack of difference between early and late respondents, we were reasonably comfortable that our sample was representative of the population of long term clients served by the SBDC program in 1992.

Results

Tables 1 provides demographic breakdowns of nascent ventures by geographic sector.⁵ Table 2 provides a breakdown of the number of entrepreneurs who claimed they started a business after receiving SBDC assistance. Again, this is an indication of the extent to which serious entrepreneurial intent is translated into boundary formation. According to our data, almost 78 percent of the nascent ventures in our sample had created boundaries between 1992 and 1994. This proportion is substantially higher than the 48 percent found by Carter, Gartner, and Reynolds (1996). As suggested above, we believe that this may be partially due to the fact that this database ensures that the intent is a serious one, demonstrated by action rather than merely a verbal commitment.

Excluding missing data, of the ventures that established boundaries, 82 percent had employees and 80 percent had sales one year after receiving SBDC assistance (Table 2). In other words, 63 percent of the nascent ventures had employees by the end of 1993, and 60 percent had sales. This finding suggests a somewhat more optimistic picture on the ability of aspiring entrepreneurs to fulfill their start-up goals. In this respect, the results of our analysis are quite similar to those of Carter, Gartner, and Reynolds (1996).

⁴ The SBA's regional classification of states were used as a basis to delineate geographic sectors (See Table 1).

⁵ It should be noted the participation rates of state SBDCs had an impact on the numbers of clients served in different geographic locales. Thus, our national sample does not necessarily reflect the *extent* of start-up activities across different geographic sectors.

In Table 3 the proportion of ventures started and not started is provided by geographic sector. As shown, there was a significant difference in the proportion of nascent ventures who established a boundary, with those in the East and West more likely than average to do so and those in the South and Midwest/North less likely. This is an interesting regional phenomenon that deserves further investigation.

However, we found no significant difference by geographic sector in the proportion of ventures with boundaries that engaged in exchange. As Table 4 shows, the proportion of ventures with employees was statistically equal for the four regions of the United States. Furthermore, the proportion of started ventures with sales revenues in 1993 was not statistically different by geographic sector either (Table 5). This is again an interesting finding that deserves further study since it suggests that once a boundary is established, geographic region has no impact on whether a venture becomes a contributing part of the economy.

Conclusion

Using data from the SBDC program in the United States, this article has attempted to provide some preliminary, benchmark estimates of the proportion of nascent ventures who create businesses as measured by the properties of boundary and exchange (job creation, sales generation). Our findings indicate that approximately 75 percent of nascent ventures with serious intentions establish boundaries within one year. Furthermore, we found that of those who establish boundaries, around 80 percent have become active participants in the economy either through the hiring of employees or the generation of sales. Again, these numbers suggest a more optimistic picture of the start-up process than has been presented heretofore.

Our results imply that researchers must be careful in how they measure intent because it may have a material impact on the estimates of the entrepreneurial population and the proportion of startups occurring among aspiring entrepreneurs. Thus, measures that rely upon merely an expression of a desire to start a business on the part of the entrepreneur, without evidence of action, may lead to an overestimation of the numbers of nascent ventures in society and underestimation of the proportion that become organizations.

Our study also suggests that there is some reason to believe that the prospects or potential for startups among nascent ventures may vary somewhat across geographic regions with respect to boundary creation. On the other hand, there is a level of consistency in terms of the proportion of ventures with boundaries that engage in exchange that many might find surprising. Given the exploratory nature of this study we can only assert the need for further research on nascent ventures in general and across different geographic sectors in particular.⁶

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TABLE 1
GEOGRAPHIC SECTORS OF NASCENT VENTURES *

	<u>Number</u>	<u>Percentage</u>
East	591	29.2%
South	743	36.7%
Midwest/North	446	22.0%
West	245	12.1%
TOTAL	2025	100.0%

* The SBA's regional classification of states were used as a basis to delineate geographic sectors. The breakdowns were as follows:

EAST (Regions I, II, III): Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.

SOUTH (Regions IV and VI): Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, and Texas. (Tennessee did not participate in the study.)

MIDWEST/NORTH (Regions V and VII): Illinois, Indiana, Iowa, Michigan, Missouri, Nebraska, Ohio, Wisconsin. (Kansas and Minnesota did not participate in the study.)

WEST (Regions VIII, IX, and X): Alaska, Idaho, Montana, Nevada, North Dakota, Oregon, South Dakota, Utah, and Washington. (Arizona, California, Colorado, Hawaii, and Wyoming did not participate in the study.)

TABLE 2
NUMBER OF NASCENT VENTURES THAT
ESTABLISHED BOUNDARIES

	ALL NASCENT VENTURES		VENTURES STARTED	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
Started Venture (Boundary)	1575/2025	77.8%		
With Employees (Exchange) (missing = 43)	1257/1982	63.4%	1257/1532	82.0%
With Sales (Exchange) (missing = 240)	1071/1785	60.0%	1071/1335	80.0%

TABLE 3
VENTURES STARTED BY GEOGRAPHIC SECTOR

	VENTURES STARTED		VENTURES NOT STARTED		ALL VENTURES	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
East	482	81.6%	109	18.4%	591	100.0%
South	553	74.4%	190	25.6%	743	100.0%
Midwest/ North	333	74.7%	113	25.3%	446	100.0%
West	207	84.5%	38	15.5%	245	100.0%
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TOTAL	1575	77.8%	450	22.2%	2025	100.0%

* There was a significant difference between geographic locations in the proportion clients who indicated they had started a venture (Chi Square $df=3 = 18.59$; $p < .001$).

TABLE 4
VENTURES STARTED WITH EMPLOYEES BY
GEOGRAPHIC SECTOR *

	VENTURES WITH EMPLOYEES		VENTURES WITHOUT EMPLOYEES		TOTAL	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
East	397	84.1%	75	15.9%	472	100.0%
South	440	81.5%	100	18.5%	540	100.0%
Midwest/ North	263	82.2%	57	17.8%	320	100.0%
West	157	78.5%	43	21.5%	200	100.0%
TOTAL	----- 1257	82.0%	---- 275	18.0%	----- 1532	100.0%
Missing					43	

* There was no significant difference between geographic locations in the proportion of ventures started with employees (Chi Square $df=3 = 3.19$; $p < .37$).

TABLE 5
VENTURES STARTED WITH SALES BY GEOGRAPHIC
SECTOR *

	VENTURES WITH SALES		VENTURES WITHOUT SALES		TOTAL	
	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>	<u>Number</u>	<u>Percentage</u>
East	339	81.5%	77	18.5%	416	100.0%
South	362	78.0%	102	22.0%	464	100.0%
Midwest/North	221	81.0%	52	19.0%	273	100.0%
West	149	81.9%	33	18.1%	182	100.0%
TOTAL	----- 1071	80.2%	----- 264	19.8%	----- 1335	100.0%
Missing					240	

* There was no significant difference between geographic locations in the proportion of ventures started with sales revenue (Chi Square $df=3 = 2.25$; $p < .53$).