

The Need for Adaptation in Successful Business Concepts: Strategies for Entrepreneurs

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Abstract

It is argued that timely adaptation of one's broadly-defined business concept has more to do with entrepreneurial success than having the right concept from the start or being in the right place at the right time. A conceptual model is proposed in which the need for adaptation is linked to three characteristics of the business itself: the level of ambiguity surrounding the venture, the level of risk involved, and the amount of control the entrepreneur has over key factors affecting venture outcomes. Types of adaptation strategies appropriate for each of the three conditions are identified. An approach to measuring adaptation is presented together with an application of the measure. Implications are drawn and suggestions made for ongoing research.

Introduction

Entrepreneurship has been defined in terms of "new combinations of resources" (Schumpeter, 1934; Stevenson, et al., 1989). As such, there is some level of novelty, newness and innovativeness involved in any start-up venture. The entrepreneur is dealing with the unknown, which implies both uncertainty and risk. The uncertainty concerns not only the nature and size of the opportunity, but also the design of a business concept that seeks to capitalize on that opportunity.

Opportunities exist in the external environment, and are created by such factors as new knowledge, demographic change, new sources of financing (e.g. an angel emerges), and changes in industry structures (see Drucker, 1985). Any given opportunity can be capitalized upon in a variety of ways. Consider the opportunity represented by the growing number of senior citizens with ample disposable income and who strive to live active, rich lifestyles. Business concepts that have successfully capitalized on this opportunity range from Depends disposable diapers and *Modern Maturity* magazine to new types of extended care real estate developments and financial service products.

While one could debate whether venture failure is more often related to an inadequate opportunity (i.e., either non-existent or too small) or a poor business concept (i.e., incomplete, inconsistent, ill-defined, or not sufficiently unique), certainly the latter is more controllable by the entrepreneur. Further, although much is made of the entrepreneur as a visionary, one might question how many entrepreneurs are sufficiently prescient as to define the business concept correctly from the outset. Having recognized an opportunity, some entrepreneurs actually do specify a business concept that succeeds with virtually no modification from the outset. However, it would seem more likely that one of the following scenarios develops in the large majority of instances:

- the entrepreneur has a well-defined and sound concept, doesn't stay with it long enough, and fails;
- the entrepreneur has a well-defined and sound concept, modifies it when it should not have been modified, and fails;
- the entrepreneur has a good concept that initially works, but market circumstances quickly change, and he/she makes the necessary adaptations;
- the entrepreneur's general concept has promise, but he/she succeeds only because of timely adaptation of the concept as circumstances evolve;
- the entrepreneur has an partially or completely ill-defined concept, makes significant changes to it, and succeeds;
- the entrepreneur's concept is poor from the beginning, he/she refuses to make modifications before it is too late;
- the entrepreneur's concept is poor from the beginning, and in spite of his/her willingness, no amount of modification can salvage it;

The first two scenarios above are concerned with timing, and the nature of the window of opportunity. The other five are concerned with good and bad concepts that succeed or fail as a function of how well the entrepreneur adapts the concept over time. It is our contention that these last five scenarios are not only the most common, but that timely adaptation represents one of the most critical factors explaining entrepreneurial success.

The purpose of this research is to examine the concept of adaptation as it relates to the creation of a successful start-up enterprise. In this context, adaptation refers to the entrepreneur's willingness and ability to make appropriate adjustments to the business concept as the venture evolves from an initial idea to a business plan, to an operational enterprise, a growing concern, and ultimately, a successful business. It also involves adjustments to the entrepreneur's harvest or exit strategy. A conceptual model is proposed relating adaptation to characteristics of the venture, and by extension, to personality traits associated with entrepreneurial success. An approach to measuring adaptation is presented. Strategies are proposed for facilitating the process of entrepreneurial adaptation. Managerial implications are drawn and suggestions are made for ongoing research.

Entrepreneurship and Adaptation: A Proposed Model

Research on entrepreneurship tends to focus either on the qualities and activities of the *firm*, or the underlying characteristics and orientation of the *people* involved in the venture. However, it is just as important to examine the interaction of these two areas, i.e., aspects of the business environment that demand certain characteristics on the part of the entrepreneur, as well

as the influence of the owner's characteristics on actions of the firm. Stated differently, it is not just the personality of the entrepreneur that matters, but also their behaviors, and the resultant impact of these behaviors.

When trying to understand the entrepreneur, many have studied his/her personality traits and thinking styles. Personality is an abstraction for those enduring characteristics of the person that are significant to his/her behavior over time (Lanyon and Goodstein, 1982). The one conclusion that can be drawn from over thirty years of research on the entrepreneurial personality is that there is not one all-encompassing personality profile. Different types of entrepreneurs can be identified (e.g., Miner, 1996). Thus, rather than a single set of attitudes and traits that define the entrepreneur, a range of characteristics are associated with this personality (Kao,1991; Timmons, 1990).

And yet, certain characteristics are consistently found in successful entrepreneurs, even if in somewhat varying degrees, while other characteristics are not consistently found. Three of the most consistent characteristics are the tendency for the entrepreneur to be fairly tolerant of ambiguity, to have a locus of control that is more internal than external, and to be willing to take risks that are relatively calculated. Alternatively, such characteristics as creativity, desire for independence, persuasiveness, and being well organized are found with less consistency or demonstrate much more variability.

It would seem that the traits found in entrepreneurial individuals have much in common with the underlying characteristics of the entrepreneurial venture. Thus, entrepreneurial ventures themselves are apt to involve considerable ambiguity, contain numerous variables that do not readily lend themselves to control, and entail a moderate to high level of risk. Each of these characteristics is likely to occur in varying degrees, as one is likely to encounter even more variability among ventures than among individuals. However, as one finds greater degrees of each of these characteristics in a venture, it would seem that the adaptability of the entrepreneur, as reflected in changes to the business concept, the resources required, and the approach to implementation, becomes especially paramount.

-Insert Figure 1 About Here-

This set of linkages between characteristics of the venture (and, correspondingly, of the entrepreneur) and the amount of adaptation required are illustrated in Figure 1. Specifically, the need for adaptation would seem to increase with higher levels of ambiguity, higher levels of risk (financial, market, technical, etc.), and lower levels of control over key operating variables. Adaptation is conceptualized in terms of a number of dimensions affecting the business, such as products or services offered, customer profile, marketing, distribution, personnel, financial and physical facility requirements. Let us further explore each of the components in Figure 1.

The Concept of Adaptation

Two of the theoretical foundations within the field of entrepreneurship are "population ecology" and "strategic adaptation" (Morris, Sexton, and Lewis, 1993). Population ecology posits that individual goal-driven behavior is much less relevant than environmental selection

procedures in determining entrepreneurial success or failure. Strategic adaptation assumes that the key to entrepreneurial success lies in the decisions of individual entrepreneurs who identify opportunities, develop strategies, assemble resource, and demonstrate initiative. Both perspectives are useful here, although this research clearly falls within the latter framework. Organizations do survive or fail as a function of their fit within an ecological niche in the marketplace. Not only do the strong survive, but the strong are those who are best able to read and interpret patterns in the environment and adapt over time. We believe that this ability to adapt is less a function of luck, being in the right place at the right time, or access to resources or information that others do not have, and more a function of the individual entrepreneur and his/her ability to learn.

Much emphasis is placed today on the "learning organization" and the "learning manager". In this context, learning refers to "the acquisition of new knowledge by actors who are able and willing to apply that knowledge in making decisions or influencing others in the organization" (Miller, 1996, 485). Yet another perspective on the concept includes the "unlearning of old routines as a parallel activity to the learning of new routines" (Markoczy, 1994, 5). The outcome of organizational learning is that "the range of potential behaviors is changed" (Wilpert, 1995, 59). Stated differently, adaptation is the result of learning. There is some evidence of a relationship between an organization's dependence on a "concentrated critical environment" and the amount of attention spent by an organization on learning about that environment in order to satisfy or influence it (Markoczy, 1994, 5). This relationship can be extended to include organizational adaptation, by describing how organizational practices and structures adapt to the demands of a given environment. Thus, we can see that an organization's ability to adapt is a direct result of its ability to learn collectively about the environmental factors that influence that organization.

Some of the factors that appear to determine an organization's ability to adapt to changing environments include leadership, culture strength, tradition, and the economics of the business (Burack, et al., 1994). The role of a leader in this context has been described as "facilitating the adoption of an organizational vision, maintaining the necessary, long-term focus on goals (even though the precise nature of those goals is continually evolving), and overseeing the continual adaptation of the organization to its changing environment" (Kobrak, 1993, 319). Specific requirements include teamwork, an intensity of involvement with people, a strong emphasis on their personal and professional development, a toleration of greater ambiguity of authority to empower the organization, and developing in employees a balanced mix of both an intellectual and an action orientation (Kobrak, 1993). The inference is that there must be a specific methodology in place that, for want of a better term, can be labeled "change management".

Relating specifically to entrepreneurial organizations, recent work suggests that individuals will react differently to the need to adapt to their environment based on such factors as their psychological make-up and the existence of tangible incentives to change (Starr and Fondas, 1992). Four motivational bases for adaptation in an entrepreneurial context have been identified: personality, anxiety or stress reduction, whether or not the individual specifically chose the position he or she is now in, and the existence and value of rewards. Such personality traits as the need for control and an individual's level of self-esteem are thought to affect one's ability or willingness to adapt to an environment. Further, characteristics such as an ability to

manage risk and tolerance for ambiguity have been shown to influence the performance of a new organization (Starr and Fondas, 1992).

Adaptation is likely to occur in different degrees and different ways depending on where an organization is in its life cycle. For instance, it has been posited by that innovation (as a form of adaptation) differs in type and rate between small and large firms (Lengnick-Hall, 1992). In start-up entrepreneurial ventures, adaptation would seem perhaps more critical than at any other stage in the life cycle. Not only are products, markets, channels, and marketing approaches not well-established, but the organization is not well-buffered from external developments, but there is often meaningful environmental turbulence, such that one bad move can mean the demise of the business. The ability to learn and adapt becomes a key venture competency. Of course, adaptation implies a level of flexibility, which is an attribute associated with start-up ventures. And yet, in start-up ventures, learning is not likely to be as well-organized or systematic as in other stages of the life cycle. External networks are not well-defined or solidified, and the company's intelligence gathering systems are typically unsophisticated and non-comprehensive in terms of the range of variables in the environment (e.g., competition, technology, etc.) that are regularly monitored.

Ambiguity and the Need for Adaptation

Ambiguity is present where situations have inconsistent features, contradictions or paradoxes. Budner (1962) defines an ambiguous situation as one that cannot be adequately structured or categorized by an individual because of the lack of sufficient cues. McCaskey (1982) describes ambiguous situations in terms of the following eleven characteristics:

- Nature of the problem is unclear, constantly shifting, and closely intertwined with a number of other problems;
- Information gathering is problematic and information is unreliable typically because the definition of the problem is vague and unclear;
- Multiple/conflicting interpretations exist from the same available information;
- Different value interpretations exist; Absent objective criteria, people rely on personal or professional values to make sense of the situation;
- Goals are unclear, conflicting or multiple.
- Time, money or attention is lacking, making things more chaotic;
- Roles are vague, responsibilities are unclear;
- There is no clearly defined set of activities that players are expected to perform;
- Success measures are lacking, people may be unsure of what success means;

- Cause-effect relationships are unclear, such that even if they are sure of the effects they desire, they are uncertain as to how to obtain them;
- Variable participation in decision making with the identity of key decision makers and influence holders changes as players enter and leave the decision arena.

When applied to the entrepreneurial venture, eight of these characteristics are commonly found. Only the presence of fairly well-defined goals, the availability of objective measures of success, and the fact that decision-making is dominated by the entrepreneur, represent major exceptions. Even in these areas, though, ambiguities do arise. Goals of investors may differ from those of the entrepreneur; what appears to be successful in terms of short-term financial measures may actually be a flawed business; and decision-making can be influenced by the occasional inputs of financiers, suppliers, distributors and customers, as well as by various family members in family-owned ventures. Further, the contemporary environment is one in which firms must innovate more, and do so more quickly. Higher levels of innovation, combined with rapid changes in technology and market structure, imply greater ambiguity.

The literature has put significant emphasis on the entrepreneur's tolerance of ambiguity. Tolerance refers to the tendency to perceive ambiguous situations as acceptable, if not desirable, whereas intolerance is the tendency to interpret such situations as sources of threat. Durrheim (1995) defines the primary characteristics of intolerance of ambiguity as (a) the need for categorization, (b) need for certainty (c) inability to allow for the co-existence of positive and negative features in the same object, such as good and bad traits in the same person, (d) the acceptance of attributes representing a rigid black and white view of life, (e) a preference for the familiar over the unfamiliar, (f) a positive rejecting of the different and unusual, (g) resistance to reversal of apparent fluctuating stimuli (g) the early selection and maintenance of one solution in a perceptually ambiguous situation, and (h) premature closure.

McCaskey (1982) found general agreement within the cognitive psychology literature on five basic principles of human nature. The most important principle suggested the mind is an inference machine that actively imposes order on highly ambiguous situations. In other words, the mind strives to bring order, simplicity and stability to the world it encounters. Some people seem to tolerate high levels of ambiguity before eventually imposing order, while others seem to prefer ambiguity as a way of avoiding unpleasant facts. For some, tolerating ambiguity implies personal failure in terms of their understanding or skills. McCaskey asserts that ambiguity is a rich, if frustrating, experience that can only be managed if one first allows the ambiguities to exist. He warns against denying ambiguity or attempting to impose clear meaning on ambiguous events before they have had time to properly manifest themselves.

Not surprisingly, then, Begley and Boyd (1986) demonstrated that founders of small firms displayed higher tolerance for ambiguity than did non-founders. Other research indicates that successful entrepreneurs tolerate risk, ambiguity and uncertainty (Timmons, 1990). Bird (1989) suggests that the entrepreneur's comfort with uncertainty and tendency to be energized by not knowing how, when or where a solution to a critical concern will come may be more important to the success of a venture than is his/her generalized risk preference.

However, it is not enough to simply conclude that entrepreneurs tend to be tolerant of ambiguity. The issue becomes one of determining how they manage that ambiguity. We believe the answer lies in continuous adaptation, and that the greater the ambiguity in a venture, the greater the need for adaptation. As noted above, the principal characteristics of ambiguous situations can lead to denial and risk averting behavior and, while large bureaucratic organizations can afford to respond in this manner, entrepreneurial organizations cannot (Jelinek and Litterer, 1995). Situations with inconsistencies and paradoxes require fluid, flexible and adaptive forms of organization. They suggest a need for entrepreneurs who can move quickly in any number of different directions. To deal with ambiguity, adaptability can take the form of a loose organization structure and controls, jobs that are typically less defined and are continually changed, augmentation of staff as needs arise, and a readiness for setbacks and surprises. Further, entrepreneurs must be able shift from function to function, and role to role, one day stuffing envelopes and the next, coordinating an investors' meeting. They must also be able to adapt their time frames from long-term to short-term and vice versa, in times of uncertainty (Bird and Jelinek, 1988).

Risk and the Need for Adaptation

Some would suggest that the essence of the entrepreneurial function is risk measurement and risk taking (Dickson and Giglierano, 1989; Hisrich and Peters, 1992). Risk in this context refers to the combined probability of loss and magnitude of loss involved in pursuing a given course of action. Entrepreneurs face uncertainty and possible loss in at least five key areas: (a) financial, (b) social and familial (c) emotional and physical (d) career or future employability and (e) organizational. Moreover, in entrepreneurial ventures, there is usually a concentration of risk in one or a few products, markets and people, and usually no cushion to absorb bad decisions (Cooper, 1989). Further, in addition to the inherent risk in a given venture, risk is greater the more limited the entrepreneur's control over resources, the more limited or unreliable the available information is, and the less time the entrepreneur has in which to make decisions.

Risk is perceived, and so is a psychological construct. Some have argued that the risk-taking propensity of entrepreneurs does not differ significantly from that of conventional managers (Vesper, 1982). Brockhaus (1982) suggests that risk-taking may not be linked to either the entrepreneurial decision, or to the success of the enterprise. However, more recent research indicates that entrepreneurs score higher on risk-taking than do non-entrepreneurs (Falbe and Larwood, 1995). And yet, they tend to be moderate or calculated risk-takers (Morris, 1997). Entrepreneurs are risk acceptors who are often perceived as being risk-oriented or risk-seeking by those who are more risk averse. They make calculated risk assessments, based on inputs not available to, or not appreciated by, others. At the same time, it may be that the process of entrepreneurship increases the desire for moderate levels of risk, thus causing a larger percentage of established entrepreneurs to appear to be moderate risk-takers. Another explanation may be that those entrepreneurs who have a propensity for low or high levels of risk may cease to be entrepreneurs at a greater rate than those with more moderate propensities (Brockhaus, 1982).

Calculated risk-taking implies an awareness of the various risk factors and underlying sources of risk that surround the venture. Entrepreneurs find themselves surrounded by the

uncertainty that results from a turbulent external environment and an untested business concept. Stevenson (1989) concludes that this set of circumstances pushes one in the direction of accepting risk as a given, and developing shorter time frames for decision response. Therefore, risk-taking, at least in the form of making quick decisions without complete information, is often the most rational choice. However, calculated risk-taking also implies an attempt on the part of the entrepreneur to find ways to mitigate, shift or share risks. Adaptation becomes a vehicle for doing so, in that an awareness of key risk factors leads to a recognition of the need to plan for contingencies, and to make modifications to one's approach as specific risk factors materialize. The greater the perceived risk, the more critical adaptation becomes as a risk management tool.

One critical form that adaptation takes as a risk-management strategy is what Hamel and Prahalad (1992) refer to as "coming to bat more often". This is an approach that moves the venture away from cautious approaches to new products and markets where the firm attempts to ensure a "home run". Instead, the emphasis is on a higher number of new product and service permutations, market trials and experiments, and entry into various niches. The firm quickly adapts based on the learning that results from more frequent, lower-risk market incursions.

Control and the Need for Adaptation

Entrepreneurial ventures also differ in how much control the entrepreneur has over key variables that ultimately determine failure or success. Where entrepreneurs have limited control over such variables as customer demand, price, distribution, market positioning, use of a technology, access to raw materials, availability of financial resources, availability and loyalty of qualified staff, or legal rights and liabilities, their venture becomes more vulnerable. Control is achieved in a variety of ways, ranging from patents and ownership of key physical assets to exclusive agreements, long-term contracts, and relationship building.

The related concept at the level of the individual entrepreneur is "locus of control". Locus of control is a generalized expectancy regarding the connection between personal characteristics and/or actions and experienced outcomes. Those who believe that outcomes are generally dependent on the work they put in, will exert themselves more, whilst those individuals living in less responsive milieus may fail to see the connection between effort and outcomes (Robinson, Shaver and Wrightsman, 1991).

A responsible individual who does not believe that the outcome of a business venture will be influenced by his efforts is unlikely to expose himself to the high penalties that accompany failure (Brockhaus, 1982). Rotter's (1966) locus of control theory states that an individual perceives the outcome of an event as being either within or beyond his personal control and understanding, and further hypothesizes that individuals with internal beliefs would more likely strive for achievements than would individuals with external beliefs. Others have verified that individuals with internal beliefs do in fact have a more pronounced need for achievement (see Bird, 1989).

An internal locus of control may therefore be associated with a more active effort to affect the outcome of the business venture through ongoing adjustments (Brockhaus, 1982). Bird (1989) argues that being able to make something happen is a defining behavioral competency of

entrepreneurs and that this “can do” belief is related to other beliefs about control. Entrepreneurs have been characterized as internals and believe their behavior to be relatively decisive in determining their fate (Gasse, 1982). One study demonstrated that internals more actively seek out strategic information and knowledge relevant to their situation (Seeman and Evans, 1962). Such information search would seem to be a critical requirement for adaptability. Brockhaus (1982) found that business owners who survived three years in business had a greater internal locus of control than those that had not survived.

While he/she may have more of an internal locus of control, the contemporary entrepreneur must compete in an environment where events are less controllable. Some of the reasons for this conclusion include the fact that:

- the rate of new start-ups is at historically high levels;
- the rate of new product and service development is unprecedented;
- markets are increasingly fragmented, segmented and niched;
- product life cycles, technology life cycles and windows of opportunity are getting shorter;
- assets are becoming obsolete faster, or have a longer life than the time period for which they create meaningful value.

As entrepreneurs find they have less control, adaptation becomes a critical strategy. Instead of owning assets and resources, they emphasize flexibility by actively seeking to leverage, lease, borrow, rent outsource or contract for resources. The venture with limited resources and control can also greatly enhance its image and apparent size and scope of operation through creative leveraging of resources. Entrepreneurs with limited control also find they are better able to influence events by forming strategic alliances and partnerships. These alliances typically have a very specific focus, and may have an intentionally limited life. Networks are another component of an adaptation strategy. The entrepreneur with limited control is able to magnify both his/her reach or influence through well-constructed and cultivated networks. The end-result of such leveraging, partnering, and networking is a more fluid business concept, where there are continuous modifications to the product mix, the served customer base, the facilities and location from which one operates, the financial structure of the enterprise, and so forth.

Summary Propositions and Corresponding Strategies

Based on the conceptual model and the discussion above, the following propositions can be formulated (the broadly-defined business concept is explained in more detail in the next section). After each of the propositions are some of the principal strategic approaches that should facilitate adaptation.

Proposition One: *The greater the ambiguity surrounding a venture, the more the successful entrepreneur will manage that ambiguity through a strategy of adaptation of the broadly-defined business concept.*

Corresponding Adaptation Strategies:

As ambiguity increases, adaptation is facilitated by having looser organizational structures, less fixed asset commitment, flexible design of jobs with multi-tasking, a reliance on contract staff to augment operations, mechanisms in place to provide more frequent performance feedback, and a dual focus in planning on short and long-term activities.

Proposition Two: *The greater the risk surrounding a venture, the more the successful entrepreneur will manage that risk through a strategy of adaptation of the broadly-defined business concept.*

Corresponding Adaptation Strategies:

Faced with higher levels of risk, adaptation will be facilitated by ongoing and systematic information gathering, a more balanced product/service mix (which implies ongoing experimentation with a variety of incremental innovations), and a strategy of risk sharing through outsourcing, resource sharing with other firms, and sponsorship from customers, suppliers, distributors, and/or investors.

Proposition Three: *The less control the entrepreneur has over key aspects of the venture, the more he/she will achieve success through a strategy of adaptation of the broadly-defined business concept.*

Corresponding Adaptation Strategies:

As the entrepreneur's control lessens, adaptation will be facilitated by strategies involving leveraging of resources, networking, and partnering.

It should also be noted that ambiguity, risk and control are not unrelated variables. For instance, more ambiguity can result in greater risk, lack of control can produce more ambiguity, and more control can lessen risk. However, the relationships can be complex. For example, under ambiguous circumstances (e.g., that which results from rapidly changing technology) having more control (e.g., ownership of key assets) might result in greater risk (e.g., that these assets quickly become obsolete). Similarly, lack of resources might force the entrepreneur to leverage (e.g., borrow money), meaning less control and more ambiguity, but also less risk (i.e., the financial risk is now shared). The question then becomes one of determining the implications for adaptation. One possibility is that different combinations of ambiguity, risk and control will lead to different types of adaptation. However, empirical work is first needed to determine the relative strength of the impacts of these three variables of adaptation of the business concept.

Toward a Measure of Adaptation

Further insights regarding these propositions and the general role of adaptation in successful entrepreneurial efforts require that progress be made on the measurement front. From a measurement standpoint, adaptability has been approached more as a personality trait than as an organizational behavior that results from learning. Our particular interest is for measures that capture the degree of adaptation of an original business concept as an entrepreneurial venture

evolves. As a first step in this direction, we propose the following self-report measures. First, the business concept must be defined in terms of its key components. While concepts can be broken down in a variety of ways, one approach is to distinguish the following seven components: products or services offered, target customer profile, distribution methods, facility or space requirements, marketing approach, personnel resources and financial requirements. Second, one must determine an appropriate time period over which adaptation can occur. On the one hand, meaningful changes, such as a change in one's product mix or target market, can take time to manifest themselves. On the other hand, things happen quickly in start-up ventures and one errant move can result in failure of the business. Thus, we propose a time period of two to three years for assessment purposes. The actual measure then becomes one of asking the entrepreneur to indicate the degree to which he/she has changed, modified or adapted each of these seven factors between the time they first came up with the concept and the present day. The response scales employ a five-point (1=extensively, 2=significantly, 3=moderately, 4=slightly, 5=no change) set of alternatives.

To demonstrate the application of this measure, a convenience sample of twenty-one owners of businesses at least two years old but founded within the past five years was obtained. Personal interviews were conducted in which the entrepreneur was first asked to explain changes that had been made in each of the seven areas, and then to estimate the amount of adjustment that had actually been made in each area using the scale described above.

Table 1 provides a summary of means and standard deviation for the degree of adaptation in each of the seven business concept adaptation areas. As expected, the degree of adaptation of the business concept in these successful firms was significant. All but one of the means are below 3, which represents considerable adaptation of the business concept. The highest degree of adaptation occurred in respect of products and services, personnel requirements, marketing and facility requirements.

-Insert Table 1 About Here-

A comprehensive measure of adaptation could then be computed by summing together the degree of adaptation of each of the seven dimensions reflected in Table 1. Cronbach's alpha for the set of adaptation items was .83, indicating internal consistency. Item analysis indicated all of the indicators contributed to the scale's reliability. The frequency distribution for this summated scale is illustrated in Figure 2. With a possible range of 7-35, the mean and standard deviation for the summated scale were 17.47 and 6.10, respectively.

-Insert Figure 2 About Here-

Conclusions and Implications

Much is made of the need for entrepreneurs to have vision, to identify substantive opportunities, and to develop innovative business concepts that fit with the opportunity (i.e., the ecological niche). A good business plan conveys both the opportunity and the concept. However, neither is etched in stone. Opportunities are fluid and move in new directions. While

any number of business concepts might profitably capitalize on a given opportunity, the extent to which they do so is probably a function of how each concept gets adapted over time. It may be far more important to have a concept that loosely fits the opportunity and then proactively adapt as things evolve, than to lock into specific commitments that limit the directions in which the venture can move. Examples of such limiting commitments might include positioning a company around a fixed product line that includes a mix of two (deep) product lines and two support services, and the corresponding personnel, capital equipment, inventory and facilities necessary to sell those particular products and services. It might include a long-term tie-in with a particular distribution channel, the hiring of a personal salesforce, overly aggressive pricing early on that leads to a particular image, and any number of other marketing mix alternatives.

Adaptability is also probably linked to intelligence gathering. It implies an external focus, and the need to continually interact with suppliers, customers and middlemen. Entrepreneurs must establish systematic methods for tracking developments in technology, regulation, customer needs, market segments, competitor activities, social change, exchange rates, and related environmental variables. As such, adaptation may well be associated with the firm's market orientation, which in recent conceptualizations is approached in terms of gathering, disseminating, and acting upon market intelligence.

In a broader sense, then, a key role for strategy in entrepreneurial firms is to guide or facilitate the adaptation process. There is a need to constantly challenge what we might call "*entrepreneurial myopia*", or the tendency of entrepreneurs to narrowly define the business concept and to view it as relatively fixed. By extension, and based on the linkages proposed in the earlier discussion, strategy must serve as a vehicle for interpreting ambiguity, managing risk, and finding creative ways to offset or overcome the limits to the entrepreneur's control over key aspects of the venture.

Based on this exploration of the concept of adaptation, a number of important directions for further research can be identified. While a measure of adaptation is proposed herein, more work is needed in developing and validating this measure, and ascertaining the underlying dimensionality of the construct. Work is also needed to refine measures of the level of ambiguity surrounding a venture and the level of control evidenced by the entrepreneur. The model presented in Figure 1 should be empirically tested not only to establish the legitimacy of the propositions derived from the model, but also to determine the relative importance of adaptation under conditions of high ambiguity, high risk and low control. Building on findings from such research, we can begin to develop insights regarding how interactions among these three variables affects the need for and types of adaptation that must take place. Further studies should also consider the changing role of adaptation based on the venture's stage of growth and size. It may well be that adaptation is influenced by age of the venture and experience in a particular industry. The linkage between internal or venture-specific variables and external environmental factors in affecting adaptation also warrants attention. Progress in these areas will help to better establish the role adaptation plays in entrepreneurial success, and provide a foundation for determining the types of adaptation that are most appropriate under varying circumstances.

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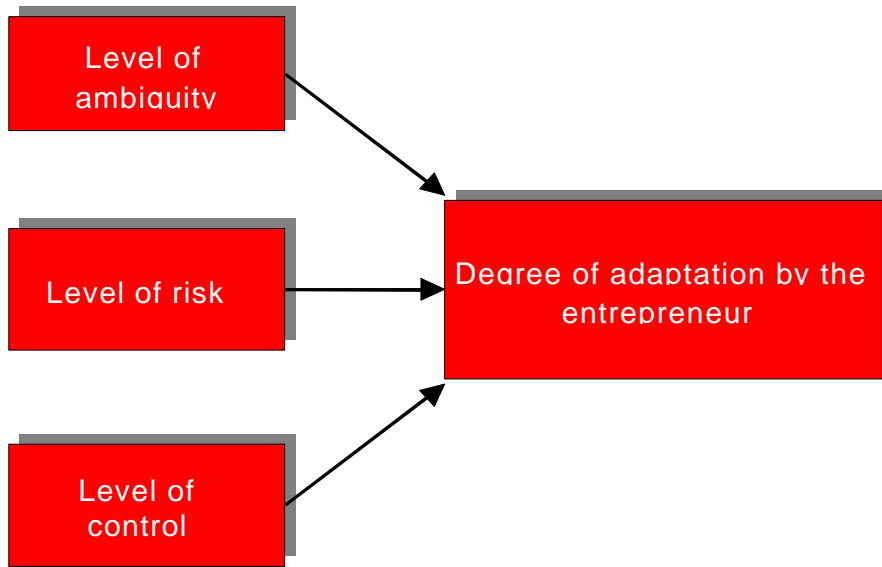


Figure 1: Conceptual model linking characteristics of the venture to the need for adaptation

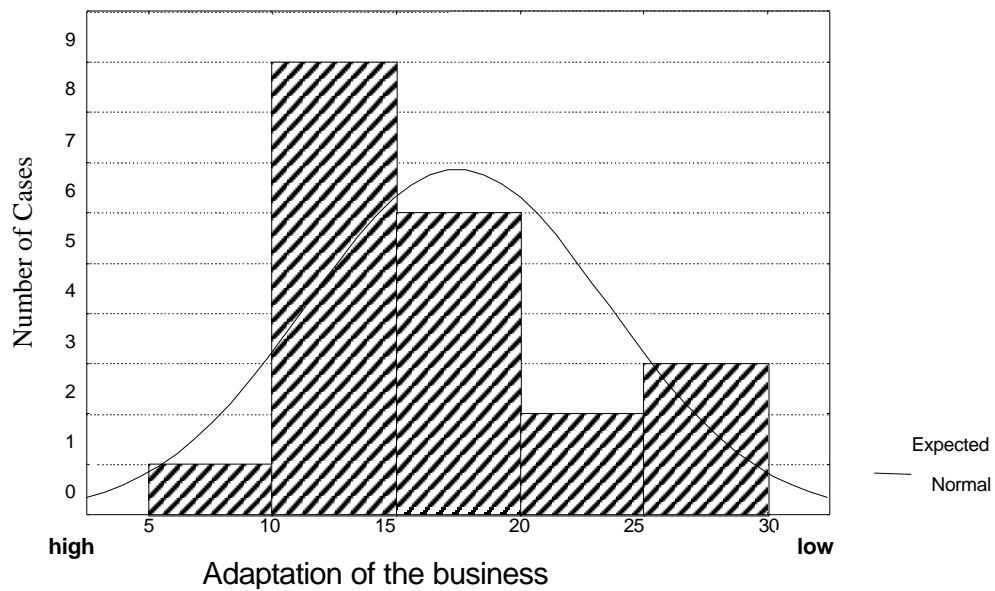


Figure 2: Frequency distribution for computed adaptation measure (mean=17.47, s.d.=6.10, range=7-35)

| Components indicating degree of adaptation | Mean | SD |
|---|-------------|-----------|
| Change in product/service | 2.19 | 1.12 |
| Change in customer profile | 2.61 | 1.20 |
| Change in physical facility requirements | 2.33 | 1.31 |
| Change in distribution | 2.76 | 1.22 |
| Change in marketing tools | 2.33 | 1.06 |
| Change in financial requirements | 3.04 | 1.68 |
| Change in personnel requirements | 2.19 | 1.28 |

5 point scale, where 1= extensive change and 5=no change

Table 1: Descriptive findings for degree of adaptation of the business concept