

A NEW VENTURE CREATION MODEL

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ABSTRACT

This research represents an attempt to elucidate the premise that venture initiation and creation are acts of human volition, and to understand why one human and not another chooses to create a venture. The model developed herein begins with cognition and entrepreneurial drive, couples those with knowledge, creativity and experience, and filters the outcome through intuition to create an entrepreneurial vision. Interactive analysis and iteration results in a refined vision which culminates in the creation of a new venture.

INTRODUCTION

Much of the attention and effort in the entrepreneurship literature has centered upon the development of a model of entrepreneurship. Bygrave (1989) suggests that this is a natural desire which scientists have, but that the entrepreneurship discipline is far too young for the evolution of a mathematically rigorous model. Such models function poorly when the vagaries of human behavior are interjected into the works. In fact, one of our entrepreneurship colleagues suggests that such desires led to the elimination of the entrepreneur from economic thought. Barreto (1989) examined the roles played by the entrepreneur in economic thought, and concluded that it began in the form of the risk bearer in Cantillon's (1755) view during the eighteenth century, shifting to a perspective as coordinator in the writings of Say (1821) in the early nineteenth century. This progressed to a perspective of the entrepreneur as arbitrator in Kirzner's (1973) view, then, finally, to a role as innovator in the Austrian school of thought. All of these perspectives shared the view of the entrepreneur as the central player in the entrepreneurial function (Barreto, 1989), and were incorporated to varying degrees in development of microeconomic theory in the early neoclassical era between 1870 and 1914.

The next stage of microeconomic theory, the mature neoclassical era or orthodox economic era, between 1914 to 1930, featured two of the greatest authors, Schumpeter (1934) and Knight (1921), and the entrepreneur gained broad acceptance and recognition in the science as a key agent in the market system. Barreto (1989) sadly observed that the entrepreneur disappeared during the modern microeconomic era, dating from the 1930s. In Barreto's (1989) view, this resulted from the desire for a perfectly interlocking, self-contained model of microeconomics, which form a grand, unified whole. The four classical roles of the entrepreneur had no place in a world populated with perfectly informed, perfectly rational agents, and so, the entrepreneur was quite deliberately omitted from the orthodox explanatory scheme (Barreto, 1989).

The modern trend in economics continues to seek ever more mathematically sophisticated models. Franklin Fisher (1989), when discussing the history of the American rubber tire industry, commented that the job of a theory was to discover the characteristics of an industry. One observer had suggested that one could not really understand the tire industry without understanding something about Harvey Firestone. Fisher (1989) observed that if we had a generalizing theory of oligopoly, we would be able to explain the characteristics of the industry which made Firestone's behavior a successful strategy. Bhidé (2000) suggests that such reasoning is equivalent to an historian who attempts to explain the evolution of Germany and Italy without mentioning Bismarck and Garibaldi. Sutton (1996) suggests that attempts to explain why things develop one way rather than another rapidly outrun the systematic and measurable influences that models attempt to describe. In fact, such efforts inevitably are drawn into the historian's realm of personalities. In Bhidé's (2000) words, to understand economic phenomena, we must examine the issue of the entrepreneurial personality.

These authors would argue that the trend has continued, and spread from economists to entrepreneurship researchers who also attempt to remove the entrepreneur from increasingly sophisticated models. As one of the strongest champions for eliminating the entrepreneur observes, individuals do not demonstrate consistencies in behavior across time or in diverse situations, nor are personality traits reliable predictors of future behavior (Gartner, 1989). These are views which appear to be shared by many

entrepreneurship researchers. The apparent conclusion then, is that one must study the process of entrepreneurship absent the entrepreneur because his or her behavior varies over time and cannot be predicted with any of the insights or instrumentation which we now possess or understand. In our view, this is fraught with peril. Carland, Hoy and Carland (1988) suggested that one could not understand the dance without understanding the dancer. That metaphorical illustration does not suggest that the dancer is easy to understand. In fact, we suspect that if one studied dancers, one would find that their behaviors vary across time and in diverse situations. Further, we wonder whether any of the insights or instrumentation which we now possess or understand could predict a dancer's behavior. That certainly does nothing to negate the need to understand the dancer if we wish to understand the dance. It simply means that the process is wonderfully more complex and challenging than we might have thought. Gartner (1988) seems to want to study the dance because the dancer does not acquiesce to predictable behavior. Our interpretation of such a position is that it mirrors the desires of modern economists: we must have objects of study which permit us to evolve rigorous, mathematical models. In our view, nothing has happened in the discipline to negate Bygrave's (1989) observation about the need to abandon such attempts in favor of exploratory study.

A contributing factor to the problem is the tendency of entrepreneurship researchers to take statistical reasoning to heart. Gartner (1989), in an impassioned plea for better research quotes a noted statistician to define the word "theory." As Gartner (1989) points out, Kerlinger (1973) defined a theory as "...a set of interrelated constructs...that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena" (p. 4). Gartner (1989) takes that definition to heart and expounds upon the need for explaining and predicting, and describing the need for definitions of all of the variables as well. We take issue with this mathematical definition. It assumes measurement. A variable in this view is a number or set of numbers which represents some well defined contributor to some recognizable phenomenon. It is essentially a mathematical forecast. When dealing with the vagaries of human behavior and the complexity of human cognition and volition, we cannot begin to explain these processes in mathematical terms. That does not mean that we cannot study them. Sandberg (1992) notes that Gartner's (1988) desire to focus on process simply postpones the researcher's encounter with ambiguity. Further, Gartner's (1988) interest in organizational processes have inherent ambiguity as well, both from a definitional and a measurement perspective. More importantly, Sandberg (1992) notes, there are well established techniques in strategic management research for dealing with ambiguity. Sandberg (1992) closes with an observation that both the entrepreneurship and the strategic management disciplines owe their prominence to an increased attention to the behaviors of human actors in strategic contexts, whether inside or outside organizations, and he calls for a shift of the unit of analysis to the individual.

At our stage of disciplinary evolution, we need to understand that the definition of theory must be exploratory, not determinative. Kerlinger's (1973) definition would work well in physics, perhaps, but not in entrepreneurship. A theory in a young discipline is a model or framework which identifies linkages between elements which are related to the phenomenon. It is neither deterministic or predictive. It simply aids researchers in developing and expanding their understanding and insight of the phenomenon. If it accomplishes that end, then the theory is valuable. Bygrave (1989) suggests that some day, our discipline may evolve to the level of sophistication to permit such models. If so, it must be far into the future because we must evolve entirely new measurement techniques to quantify entirely new behavioral processes. In short, we must begin to understand cognition and the human mind.

Westhead and Wright (1998) avow that there is a need to consider the entrepreneur as the appropriate unit of analysis, rather than the firm. We concur and, given the stage of development of our discipline, we believe that we need to study both the dancer and the dance. If mathematical constructs make that difficult, we must abandon such constructs. To do otherwise will doom our discipline to evolving models which only work under conditions of perfect knowledge and perfectly rational agents. If there is anything about entrepreneurs upon which researchers could be expected to agree, it is that they are not perfectly rational. Despite that issue, can we begin to understand entrepreneurs in general? Can we examine the most basic aspect of their actions, the creation of a business, in some way which allows us to gain insight into the process? Those

questions were the impetus for this study. We will examine this complex creature, the entrepreneur, and propose a framework to support insight into the process of venture creation.

NEW VENTURE MODELS

Numerous empirical attempts have been made to establish a model of new venture performance. Table 1, drawn from Ensley (1999) and Teal (1998), depicts the major modeling efforts in the literature. As the table suggests, most studies have attempted to link certain variables, such as business level strategy and industry structure, to new venture performance (Romanelli, 1987; McDougall, 1987; Stuart & Abetti, 1987). While there are many studies which have emulated the linear model of new venture performance espoused by Sandberg (1986), there have been differing results.

Table 1: New Venture Performance Models	
Study	Model Constructs
Biggadike, 1976	Entrepreneur & Strategy
Von Hippel, 1977	Entrepreneur & Capitalization
Hobson & Morrison, 1983	Entrepreneur & Strategy
Miller & Camp, 1985	Strategy
Sandberg, 1986	Entrepreneur, Strategy, & Industry Structure
MacMillian & Day, 1987	Strategy
Romanelli, 1987	Strategy & Industry Stage
McDougall, 1987	Strategy, Origin, Industry Structure & Interactions
Stuart & Abetti, 1987	Environment, Strategy, Structure & Entrepreneur
Hall, 1989	Subjective Judgement
Kunkel, 1991	Strategy, Industry Structure & Interaction
Jenssen, 1991	Entrepreneur & Industry
McCarthy, 1992	Strategy, Environment, Resources & Change
McDougall, Robinson & DeNisi, 1992	Origin, Strategy, Industry Structure & Interaction of Strategy & Structure
Bolland, 1993	Origin, Strategy, & Industry Structure
Blunden, 1993	Capitalization & Type of Funding
Stearns, Carter, Reynolds & Williams, 1995	Location, Strategy, Industry & Interaction
McGee, Dowling & Megginson, 1995	Team Experience, Strategy & Cooperative Arrangements
Robinson, 1995	Strategy, Industry Structure & Interaction
Teal, 1998	Entrepreneurial Team, Strategy & Industry Structure
Ensley, 1999	Entrepreneurial Team, Strategy, Industry Structure & Interaction of Strategy & Structure

In his study, Sandberg (1986) finds that industry structure and business strategy are important to new venture performance, but he is unable to empirically link the characteristics of the entrepreneur to new venture performance. He notes that this finding is troubling because most new venture research has centered on new venture performance as a function of the entrepreneur (Brockhaus, 1980; Carland, Hoy, Boulton & Carland, 1984; Katz & Gartner, 1988). Therefore, despite his findings, Sandberg (1986) is unwilling to delete the characteristics of the entrepreneur from the model such as management competence and industry experience, because venture capitalists tend to value those characteristics as the most important criteria in funding decisions.

Sandberg (1986) conceptualized the “E” in the new venture performance model at the individual level and measured the characteristics of the individual. Yet, the new venture performance models espoused by McDougall (1987) and McDougall, Robinson and DeNisi (1992), explain a great deal of the variance in new venture performance but do not include dimensions attributed directly to the entrepreneur. McDougall et al. (1992) argue that industry structure is important as well as the fit or interaction of strategy and environment to new venture performance. Other researchers also support the proposition that new venture success is dependent on business strategy and industry structure (Cooper, Willard & Woo, 1986; Miller & Camp, 1985; Biggadike, 1976) as opposed to the characteristics of the entrepreneur.

In contrast to the work of those who would take the entrepreneur out of the new venture performance model, recent research efforts have attempted to put the entrepreneur back into the model. Herron (1992) argues that many of the findings of the research can be traced to methodological phenomena and therefore represent statistical anomalies. He argues that the lack of a necessary set of validated scales for construct measurement of entrepreneurial characteristics greatly hampers research in this area. Chandler and Hanks (1994) demonstrate empirically that environment and the competence and experience of the entrepreneur as they relate to strategic choice have a direct effect on new venture performance. Simply, the manner in which the entrepreneur affects the performance of new ventures is through strategic choice. They argue that, from a strategic choice perspective, the entrepreneur chooses a particular strategy when choice is the greatest, when the firm is new. Previous strategic choices cannot constrain strategic choice when no prior strategic choice has been made. Entrepreneurs make a difference because they use their experiences, competencies, and background to choose business strategy and organizational environment (Weick, 1979). In this same vein, Gartner, Shaver, Gatewood, and Katz (1994) argue that the problem with research such as Sandberg’s (1986) is that the entrepreneur is misunderstood and mis-specified. The entrepreneurs’ ability to think and understand is important to new venture performance because thinking and understanding are the basis of strategic choice (Child, 1972).

In our view, these models are all premature. They attempt to use sophisticated mathematical techniques to link various quantifiable and measurable variables to some index of venture performance such as revenues, profits, or growth. If we are honest, we will recognize that these techniques simply search for relationships among numerical data points in a given data set. How can we begin to have any theoretical foundation to support the evolution of such models, if we don’t understand how the venture was created in the first place? Perhaps this omission is one of the contributing reasons for the missing entrepreneur in so many of the models.

The process of entrepreneurship is initiated by an act of human volition (Bygrave and Hofer, 1991), which means that the entrepreneur is the nucleus of entrepreneurship (Gasse, 1982; Mitton, 1989). Despite this seemingly well accepted premise, there have been remarkably few attempts to model the process of venture creation. Table 2 displays some of the major efforts.

The first obvious issue is that there are far fewer attempts to understand new venture creation. The second observation is that these models are theoretical or normative, rather than empirical. In Stewart’s (1996) perspective, this may be the result of a desire to eschew dispositional research. He observes that Mischel (1968), who is often cited by individuals who argue against dispositional research, hypothesized that dispositions are least likely to be operative in “strong” organizational situations which cue appropriate behavior. Apparently, most entrepreneurship researchers believe that new ventures are created in “strong” situations. A better application of Mischel (1968) might be the recognition that the entrepreneurial event is characterized by

instability and ambiguity, and therefore, dispositional research, especially with regard to behavior, is appropriate (Stewart, 1996).

Vesper's (1980) perspective of knowledge seems sound, but is noticeably lacking from the other researchers' attempts to understand the process. Gartner (1985) proposed that the interaction of the entrepreneur's personality, the environment, and the characteristics of the organization, led to the process of entrepreneurship, including the venture creation and growth. How the organizational characteristics are involved in the creation phase, he did not describe. Moore's (1986) model goes beyond the creation phase to describe venture growth which is affected by personal characteristics as well as organization characteristics. Nevertheless, the role of personality characteristics early in the process is noteworthy. Principal among these characteristics is creativity (Moore, 1986). In her view, the environment is the source of opportunity for venture creation as well as a supportive agency during implementation and growth phases.

Table 2: New Venture Creation Models

Study	Model Constructs
Vesper, 1980	Knowledge, Idea, Connections, Resources, Implementation
Gartner, 1985	Personality, Environment, Organization, Implementation
Moore, 1986	Personality, Environment, Innovation, Implementation
Bygrave, 1989	Personality, Environment, Innovation, Triggering Event, Implementation
Gartner, 1989	Psychological Predisposition, Precipitating Event, Identification of Opportunity, Environmental and Financial Support, Implementation
Manning, Birley & Norburn, 1989	Venture Characteristics, Linkages, Determinants, Implementation
Gnyawali & Fogel, 1994	Entrepreneurial & Business Skills, Socio-Economic Factors, Government Policies, Financial Resources, Implementation
Stewart, 1996	Achievement Motivation, Risk Taking Propensity, Preference for Innovation, Psychological Predisposition

Bygrave's (1989) work is essentially the Moore (1986) model expanded to make the triggering event more prominent. In addition, he describes a sociological foundation for that trigger. He also continues the model into venture growth. His narrative seems to downplay the value of personality characteristics, but the expression of personality in his model is far broader than Moore's (1986) original work and includes more specific personality traits.

In contrast to his earlier effort, Gartner's (1989) revised model downplays the entrepreneurial personality and gives prominence to financial support and the existence of a supportive environment. His identification of opportunity is an interesting concept, however, his narrative does not elaborate or explain that phenomenon. The Manning, Birley and Norburn (1989) model attempts to completely remove individuals from the function as it includes only the characteristics of a venture, and describes determinants in community terms. The Gnyawali and Fogel (1994) framework is far more detailed than most of the works described here. They observe that entrepreneurial and business skills drive an ability to enterprise, while government and socio-economic factors drive a propensity to enterprise. The interaction of those propensities with opportunity create a likelihood to enterprise, and the availability of financial resources convert that into new venture creation. Finally, the last model, Stewart (1996), is really a model of the development of a predisposition for venture creation. It does feature personality as a prominent factor in such predisposition, but it does not describe how the factors drive the actual creation of a venture.

Unfortunately, none of the existing models of new venture creation, in our view, conform to observation of the phenomenon. As Bygrave (1989) points out, the most important test of a paradigm is that it be grounded in observation. In our view, the process of venture creation must derive directly from a cognitive process, as it is a deliberate act of volition. Further, it must be driven by something, as the entrepreneur is characterized by free choice. Despite any triggering event in his or her life, the individual can choose not to create a venture. Why, then, does the individual choose the venture initiation? To answer this question, we need to explore the entrepreneurial psyche in some detail.

THE ENTREPRENEURIAL PSYCHE

The entrepreneurial psyche has been a subject of debate for generations and many have felt it too complicated for consideration in venture creation and performance. Yet, the discussion is incomplete without understanding the initiating factor. The outcome of the process of entrepreneurship is obvious for all to see: the creation of a new venture. That the venture may be the culmination of the dreams of a life time seems unimportant in the face of the incontrovertible: the tangible outcome of the process (Carland, Carland, Ensley & Stewart, 1994). But we cannot lose sight of another fact that is beyond debate: the trigger of the act is an individual. The key is the individual, the initiating force, the one who sees the opportunity, the challenge, and the one who takes that challenge (Carland et al., 1994).

Cognition has been variously defined as "...immediate discovery, awareness, rediscovery, or recognition of information in various forms, comprehension or understanding" (Meeker, 1969); "...Thinking and learning; the study of cognition focuses on how humans and other organisms acquire, organize, store, and use information" (Owen, Blount & Moscow, 1978); and "...refers to all the intellectual activities of the mind, such as thinking, knowing, remembering, perceiving, recognizing, or generalizing" (Pulaski, 1971). As such, cognition appears to be the foundation upon which all else is built. In other words, the initiating factor to any outcome is the individual and the cognition of that individual.

Adhering to the cognitive construct are all of the knowledge, skills and abilities, creative impulses and experience acquired through life. Those constructs make us not only human but capable of tremendous creations and processes. These constructs are learned by trial and error, or they represent traits with which we are blessed genetically, or they are taught to us by our parents, teachers and peers. In short, they are the culmination of who we are.

Coupled with cognition is entrepreneurial drive. A relatively new, yet promising perspective of the entrepreneurial psyche, it involves cognitive or managerial style (i.e., Hoy & Boulton, 1983; Brodzinski, Scherer & Wiebe, 1990; Dugan, Feeser & Plaschka, 1990; Carland, Carland & Stewart, 1996). Carland, Carland and Hoy (1992) combined the cognitive stream of research with more traditional research on entrepreneurial personality traits, a body of literature which includes many contributions (i.e., Hartman, 1959; Davids, 1963; Hornaday and Aboud, 1971; Palmer, 1971; Liles, 1974; Borland, 1974; Mancuso, 1975; Gasse, 1977; Timmons, 1978; Sexton, 1980; Vesper, 1980; Welsh & White, 1981; Williams, 1981; Dunkelberg and Cooper, 1982; Carland, 1982; Carland, Hoy, Boulton & Carland, 1984, 1988). They concluded that entrepreneurship was best understood as an individual drive: the drive toward entrepreneurial behavior. In that same vein, Carland, Carland and Stewart (1996) describe the entrepreneurial psyche as a *gestalt* of multiple personality factors including the need for achievement, the propensity for risk taking, the preference for innovation, and cognitive style. They demonstrated that the various factors are normally distributed and that the varying strengths of the traits in an individual entrepreneur combine to affect that individual's behavior. It is this gestalt of drives which combine to produce differences in entrepreneurial behavior (Carland, Carland & Stewart, 1996).

A MODEL OF NEW VENTURE CREATION

When cognition and entrepreneurial drive are infused with the knowledge, creativity and the experience of a lifetime, it is then filtered through the enigma of intuition. Intuition is truly the driver which allows some of us the ability to see what is not there (Carland et al., 1996). Jung (1959) avows that the primary function of intuition is to transmit images or perceptions into the mind which could not be perceived in any other way. Consequently, intuition is an unconscious perception which encompasses the greatest awareness of possibilities (Jung, 1959). Intuitive cognition, Jung (1959) says, possesses an intrinsic character of certainty and conviction. It may be the source of a vision of what is not there, but intuition endows the individual with faith and confidence in the vision.

In our view, it is this perception of the invisible linkages between knowledge and experience, fueled by creative insight, which allows an individual to develop a vision of a venture which does not yet exist. It is much more than simply recognizing an opportunity, although the vision may involve exactly that. It may be a vision of an approach which is tried and true, or a complete copy of another's concept or idea. Alternatively, there may be no opportunity existent at all. The vision may be of a process which can create an opportunity which does not yet exist. The vision may be of a future state, which may or may not come to pass, in which an opportunity will arise. This vision is propelled by entrepreneurial drive as much as it is by cognition. That means that the individual is actively thinking about starting a venture and actively bringing the full force of his or her creative instinct, knowledge and experience to bear on the need and desire to create a venture. Cognition is active and ongoing and may result in one, or in a continuous stream of ideas. Take that drive and that active cognition, filter it through a mental process which evolved in humans to make it possible for them to unconsciously perceive linkages and relationships, and a vision emerges.

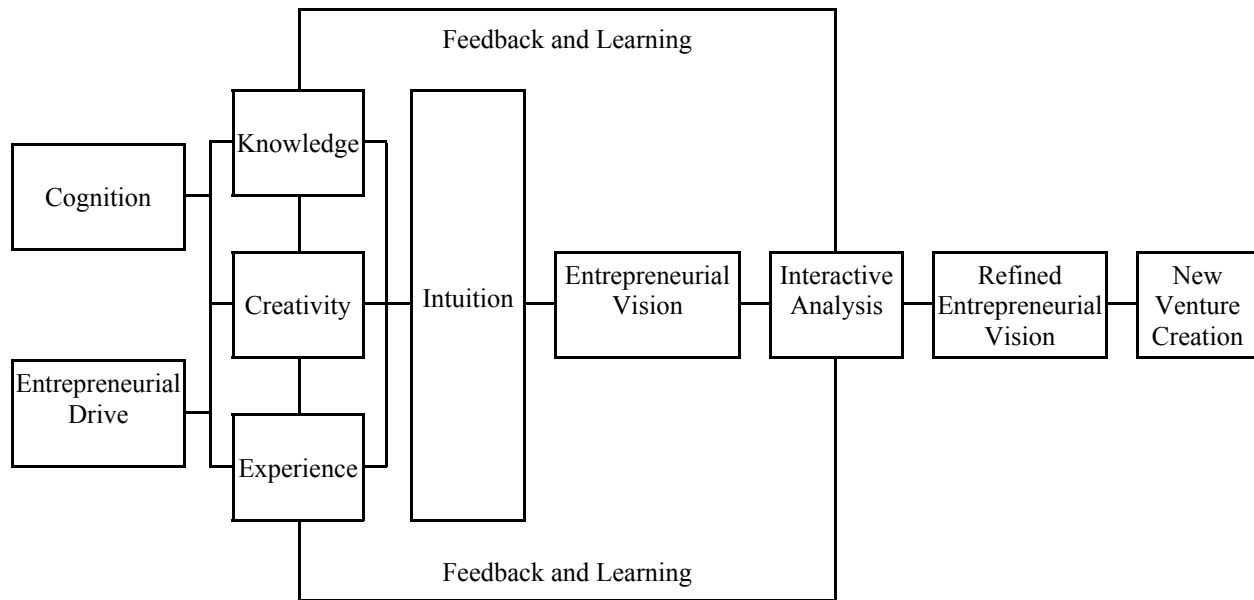
In our view, this vision is not affected by the availability of financial resources, by the limitations of financial or practical matters, or by any factors outside the mind of the entrepreneur. In fact, we believe that the visions are not even limited by governmental actions or legal restrictions. For example, entrepreneurial activities flourished in the old USSR even when they were illegal, and we saw in the United States, entrepreneurs engaging in illegal operations during prohibition, and again, in drug trafficking. The vision is created by one's cognition, as a result of one's entrepreneurial drive. We must note that the vast majority of entrepreneurial visions are never launched, or, they are launched, but are not successful. In any model of new venture creation, these visions must be included as well as those that are financially successful.

The vision must now survive an iterative and interactive analysis to aid in the separation of the truly great possibility from the utterly impossible. Concrete evaluations of resources, personnel, operationalization and ultimate implementation play into the considerations of interactive analysis. Learning occurs within the iterative dynamic of comparison of the dream with the reality of implementation and the conceptualization of a successful outcome. This process could take moments, it could take months, or, it could take years. In fact, it might never be completed. Whether the vision emerges as a venture which the entrepreneur is actually willing to launch or not, the process is the same. The cognitive outcome is subjected to review and scrutiny, and the entrepreneur continues to grow in knowledge and experience, and continues to refine or revise a vision, or even abandon a vision in favor of a new one.

The final and ultimate result of this insight and evaluation is the one perspective that seems to us to be the defining outcome of the process: entrepreneurial vision. No matter what the label for this process, all of us recognize that the entrepreneur had the ability to see what is not there. The vision is the key. It is the insight to identify an under-served market or a new approach to an existing market; the intuition to design new products, services or methods which can capture markets; and, it is the sixth sense that leads to an understanding of time, place, product and market (Carland et al., 1996).

Thus it is entrepreneurial vision that leads to the creation of a venture. The creative act is the ultimate outcome of a process initiated by the twin triggers of cognition and entrepreneurial drive, tempered by knowledge, creativity, and experience, filtered by intuition, evaluated through interactive analysis and learning, and culminating in an entrepreneurial vision. This process is described graphically in Exhibit 1.

Exhibit 1: The New Venture Creation Model



CONCLUSIONS

Although one might argue that the field of entrepreneurship is young, there has been a great deal of research in that area and more is being planned as entrepreneurship has finally come into vogue as a popular concept in universities today. Yet, with all the existing research and that planned for the future, there is still a lack of consensus on the initiation of new venture creation. Understanding the phenomenon of entrepreneurship is unlikely given that we seem to jump into the middle of the process, venture performance and growth, while ignoring its antecedents.

This research represents an attempt to elucidate the premise that venture initiation and creation are acts of human volition, and to understand why one human and not another chooses to create a venture. The model developed herein begins with cognition and entrepreneurial drive, couples those with knowledge, creativity and experience, and filters the outcome through intuition to create an entrepreneurial vision. Interactive analysis and iteration results in a refined vision which culminates in the creation of a new venture.

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