PART TWO

Entrepreneurial processes

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OPPORTUNITY RECOGNITION

Introduction

OPPORTUNITY RECOGNITION (OpR) is a vitally important area of entrepreneurship research. This is evidenced by a frequently cited definition of an entrepreneur as someone "who perceives an opportunity and creates an organization to pursue it" (Bygrave and Hofer 1991: 14). A recent *Academy of Management Review* article also confirmed this when it stated, "We define the field of entrepreneurship as the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (Shane and Venkataraman 2000: 218).

Until recently, remarkably little research has been done on the topic of opportunity recognition. Fortunately, significant contributions have been made in conceptualizing the phenomenon, and empirical studies have begun to generate new knowledge. This chapter endeavors to review several recent contributions to the opportunity literature and present a model of OpR, then to report on two studies of OpR, and, finally, to discuss implications of OpR for entrepreneurs and entrepreneurship education.

Literature review

Numerous scholars view opportunity recognition as a multi-staged and often complex process. The process perspective of OpR has proved to be a fruitful area of research because it acknowledges that OpR is a multifaceted phenomenon influenced by numerous factors. Long and McMullan (1984), for example, proposed a model of the opportunity recognition process with four stages: pre-vision, point of vision, opportunity elaboration, and the decision to proceed. Pre-vision is affected by both uncontrollable and controllable factors, such as environmental and job forces, as well as venture alertness cultivation, moonlight venturing, and job selection. Ardichvili *et al.* (2003) suggest that the opportunity identification process begins when alert entrepreneurs notice factors in their domain of expertise that result in the recognition and evaluation of potential business opportunities.

Christensen *et al.* (1989) proposed a definition of opportunity recognition that captures the essence of this concept. They suggested that opportunity recognition consists of either perceiving a possibility to create new businesses, or significantly improving the position of an existing business, in both cases resulting in new profit potential (Christensen *et al.* 1989: 3). (The concept of perceiving profitable new business possibilities is the definition used in the empirical analysis reported below.)

Bhave (1994), as part of his process model of venture creation, found two types of opportunity recognition. The first was externally stimulated opportunity recognition, in which the decision to start a venture preceded opportunity recognition. The entrepreneurs in this study engaged in a search for opportunities by filtering through them, massaging ideas, and elaboration. The second was internally stimulated opportunity recognition. Here, entrepreneurs discovered problems to solve or needs to fulfill and only later decided to create a new venture.

Other scholarly research has also contributed to developing a process approach to opportunity recognition. Kaish and Gilad (1991) found that entrepreneurs are opportunistic learners that pay special attention to risk cues about new opportunities. Cooper (1981) suggested that entrepreneurs perceive opportunities on the basis of an intuitive and informal feel for the market. Stevenson *et al.* (1985) suggested that entrepreneurship is driven to a greater extent by perception of opportunity than by resources controlled. Similarly, Stevenson and Jarillo-Mossi (1986) view entrepreneurship as the process of creating value by combining resources to exploit an opportunity. These studies suggest that opportunity recognition is a critically important aspect of the new venture formation process.

A comprehensive model of opportunity recognition

Recently, a model of opportunity recognition was introduced that addresses the OpR process (Hills *et al.* 1999). This approach suggests an OpR model based on theory from the creativity and psychology literature. The proposed model assumes that OpR is inherently a creative process. This is consistent with numerous studies that have emphasized the essential role of creativity in entrepreneurship. In his seminal work, Schumpeter (1942) described entrepreneurship in terms of creative destruction, whereby an innovation disrupts the equilibrium or status quo in the marketplace, allowing the entrepreneur to earn a profit. Long and McMullan (1984) described OpR as a process involving iterations of creative thinking. Christensen *et al.* (1994) discussed opportunity identification as the creative stage of the entrepreneurial process. Others have described OpR as including the actual creation of a new venture (Bhave 1994; Hills 1995) when the opportunity continues to be formalized on the basis of market feedback.

The elements of the creative process have been identified in several recent scholarly studies of creativity. In his book, *Creativity*, Csikszentmihalyi (1996) identified five basic elements – preparation, incubation, insight, evaluation, and elaboration – that have emerged over years of research into creativity. Drawing on this framework, we have identified five steps that can be divided into two phases. The two phases correspond roughly to the discovery and evaluation aspects of opportunity recognition identified by Shane and Venkataraman (2000). Discovery consists of preparation, incubation, and insight; formation involves evaluation and elaboration. The theoretical framework is illustrated in Figure 6.1. In the sections that follow, existing OpR and new venture research is reviewed briefly to inform the discussion of each of the five dimensions. Table 6.1 summarizes key scholarly contributions to the OpR literature using the creativity-based opportunity recognition framework.

Preparation

Preparation refers to the experience and knowledge that begins the OpR process. Such preparation is typically viewed as a conscious effort based on one's interest and curiosity about a given domain (Csikszentmihalyi 1996). In the context of OpR, preparation refers to the experience and prior knowledge (Shane 2000) that an entrepreneur brings to the process. This is consistent with research that indicates that more than 50 percent of start-up ideas emerge from

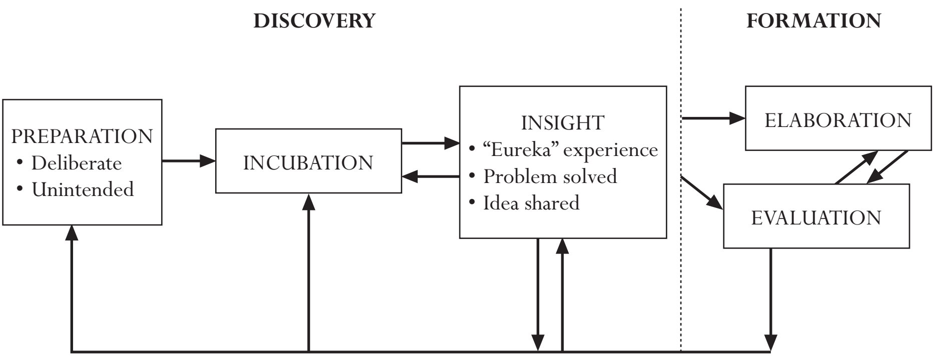

Figure 6.1 Creativity based model of entrepreneurial opportunity recognition

Source: Based on Hills, Shrader, and Lumpkin (1999).

Table 6.1 Highlights of the opportunity recognition literature

	Preparation	*Incubation*	*Insight*	*Evaluation*	*Elaboration*
Csikszentmihalyi (1996)	Conscious or subconscious immersion in problem(s)	Subconsciously mulling things over	"Aha!" experiences usually with a cognitive shift	Consciously deciding whether insight is valuable and worth pursuing	The process of actualizing the creative insight
Kirzner (1979)			OR depends on "entrepreneurial alertness," defined as the ability to notice opportunities without search		
Long and McMullan (1984)	Ad hoc or focused search influenced by controllable and uncontrollable factors		Point of vision is the sudden recognition of a new possibility; an "Aha!" experience	Amplification of vision to overcome major objections; may involve iterations of creative thinking and additional preparation	Decision to proceed
Koller (1988)	Work experience and/or desire to be an entrepreneur precede conscious search or passive discovery		Ideas recognized as opportunities because they use prior experience		
Teach *et al.* (1989)	Prior experience, technology, and market need precede deliberate search or accidental discovery			Some entrepreneurs use formal evaluation, while others eschew it	

Kaish and Gilad (1991)	Entrepreneurs are more alert, rely on non-traditional information sources	Preparedness allows entrepreneurs to recognize opportunities spontaneously	Entrepreneurs rely more on subjective impression than conventional economic analysis	
Gaglio and Taub (1992)	Pre-recognition stew of environmental, technological, social, economic, cultural, and personal forces simmers over time	“Eureka!” experience at moment of recognition	Idea developed by examining its value, market potential, and resource requirements	Decision to go, modify, or quit
Bhave (1994)	External circumstances and/or desire to start business motivate conscious search	Opportunities recognized and filtered; one selected	Opportunity refined; business concept identified that aligns skills and resources with market need	Organization created and gradually formalized on the basis of customer feedback
Christensen *et al.* (1994)	Profound technological and market knowledge required at creative stage		Formal strategic planning based on feasibility and desirability helps evaluate opportunities, set priorities, and in implementation	
Hills (1995); Hills and Shrader (1998)	Alertness and making time to think; specific needs and market knowledge mattered more than work experience		Business concepts refined through informal intuitive procedures	Once in the market, firm must quickly adjust to market requirements

Table 6.1 continued

	Preparation	*Incubation*	*Insight*	*Evaluation*	*Elaboration*
Singh *et al.* (1999)	alertness and social network affect number of ideas and opportunities recognized			which ideas are opportunities; more evaluation needed before decision to proceed	
De Koning (1999)	Ongoing information scanning without a specific objective produces initial ideas		Sudden convergence of ideas happens more than once during process	Thinking through, talking, information seeking, and resource assessment are used to develop concept	Commitment to create
Gaglio and Katz (2001)	Alertness to external change, which can be ignored, discounted, or further examined		Breaks existing means–ends framework		

a person's prior work experience (e.g. Bygrave 1997; Ronstadt 1988). However, since potential entrepreneurs may be unaware that they will someday launch a new venture, the preparation is often neither systematic nor deliberate but may simply be part of an individual's life experience.

Numerous factors may contribute to preparation for OpR, including work experience, technological and market knowledge, hobbies, and one's social networks.

Incubation

Incubation is the part of the process that occurs when a person is thinking about a problem or considering an idea. Discussions of the incubation phase often make reference to a specific problem that someone is trying to solve. Csikszentmihalyi (1996: 79) states that during incubation, "ideas churn around below the threshold of consciousness." It does not, however, refer to conscious problem-solving or systematic analysis. Instead, it is typically an intuitive, non-intentional style of considering possibilities or options. Incubation, because it involves the intermingling of ideas in an unstructured fashion, is the stage of the process in which the "new combinations" that Schumpeter (1942) emphasized might emerge. Gaglio and Taub (1992) aptly described incubation as "simmering" of the pre-recognition stew over time.

Insight

Insight refers to the point at which an entrepreneur consciously realizes that an idea may indeed represent an entrepreneurial opportunity. Gaglio and Taub (1992) referred to this as the "Eureka!" experience at the moment of recognition. Long and McMullan (1984) referred to it as an "Aha!" experience or "point of vision." Gaglio and Katz (2001) described this cognitive shift as one that breaks existing mean–ends frameworks. Prior research suggests that entrepreneurs sometimes have the experience of being immediately confident that an idea will work (Hills 1995). In other cases, a person gets an idea that solves the problem he or she has been considering or incubating. Such creative insights are common in studies of innovation (e.g. Amabile 1988). In some cases, potential entrepreneurs become consciously aware of opportunities through their social networks. Research indicates that entrepreneurs with wider networks of social contacts identify more ideas and recognize more opportunities than entrepreneurs with fewer contacts (Singh 1998).

Evaluation

Formation is the phase in the process when insights are formed into viable businesses. In the context of launching new ventures, evaluation often involves feasibility analysis. De Koning (1999) described a formation process whereby potential entrepreneurs tested and refined their ideas by talking through them with other people in their networks. In this phase of the process, ideas are also put to the test via various forms of investigation, such as preliminary market testing and financial viability analysis (Bhave 1994; Gaglio and Taub 1992). Long and McMullan (1984) suggest that entrepreneurs amplify a vision to overcome major objections through iterations of creative thinking and preparation. The basic question is: "Is the business concept sufficiently valuable and worthwhile to pursue?" Neglecting this type of analysis is one of the frequently cited reasons for new venture start-up failures (Vesper 1996).

Elaboration

Elaboration is the stage in which the creative insight is actualized. Csikszentmihalyi (1996) argues that elaboration is generally the most difficult and time-consuming part of the process. Elaboration represents a continuation of the process of business planning and may even extend into actual venture start-up. When a business idea has survived the formation stage, this is the stage when problems are resolved and many details are worked out through feedback and testing. Bhave (1994) described how organizations are created and gradually formalized on the basis of customer feedback. Furthermore, even after a venture has been launched, the opportunity is often refined or changed on the basis of the additional learning gained through actual trial and error. Hills (1995) and Hills and Shrader (1998) found that, once they enter the market, new ventures must quickly adjust to market requirements.

In summary, it should be noted that opportunity recognition is a recursive process. Although the components of the model can be called "stages" of the OpR process, it is important to note that they are not necessarily linear and may not follow any predetermined sequence. This allows for numerous approaches to OpR, which better reflects the equifinality of the OpR process demonstrated in the literature. Thus, the model of opportunity recognition presented here is comprehensive enough to provide a robust framework for studying this complex phenomenon, while at the same time its five components are simple and parsimonious.

Opportunity recognition behaviors

To address the issue of how entrepreneurs think about the OpR process, we investigated how entrepreneurs perceive opportunity recognition. Our overall research objective was to ask: how do the entrepreneurs' perceptions of the nature and importance of opportunity recognition inform us about how to teach this topic to entrepreneurship students and improve the practices of entrepreneurs? The 218 entrepreneurs in our sample included highly successful entrepreneurs, that is, those who have qualified to be included in the Chicago Area Entrepreneurship Hall of Fame, and a group of representative entrepreneurs, that is, a randomly selected group of business owners with substantial track records. Although the findings from these two groups are very similar, we will also point out differences in the two groups and how those differences might provide clues for understanding the opportunity recognition aspects of entrepreneurship.

Methodology

Sample and procedures

Two groups of entrepreneurs were surveyed for this research project. In one segment, a group of exceptionally successful entrepreneurs in the seven-county Chicago area was identified. Over a three-year period, more than 100 entrepreneurs were searched for and identified, both for this study and to be inducted into the Chicago Area Entrepreneurship Hall of Fame. Several steps were used to qualify an entrepreneur for inclusion into the Hall of Fame. Leading criteria for selection into the Hall of Fame included innovativeness, sales growth, and performance. The final selection was made by a panel of highly professional judges. The individuals selected are stellar entrepreneurs by any measure.

A total of 53 participated in this study and are referred to as “HFE” in Tables 6.2 and 6.3. Although the HFE companies ranged in size from $1.45 million to $448 million in annual revenues and employed between nine and 5,118 people, it should be noted that 39 percent had revenues between $5 million and $20 million and another 15 percent had sales between $21 million and $50 million. The mean values for this entrepreneurial sample were $42 million in annual revenues and 371 employees.

Data for the second segment of the study were collected by mail survey of business owners/entrepreneurs in the seven-county Chicago area, yielding a comparative representative sample. The sampling frame for this portion of the study was obtained from Dun and Bradstreet. The list included a randomly selected set of 1,500 organizations (from a total of 18,000) with revenues between $5 million and $100 million. A cover letter and questionnaire were mailed to 1,419 entrepreneurs. Eighty-one were eliminated either because their business entity was a non-profit organization or because the contact individual was not the owner, president, or CEO. Following the first mailing, another 128 of the 1,419 in the sample were eliminated because:

1. the firm had either moved or gone out of business,
2. the individual surveyed was no longer with the firm,
3. the business entity was a non-profit organization.

This left a total potential sample of 1,291 businesses. Following the mail survey and one postcard follow up, 187 useable surveys were returned for a response rate of 14.5 percent. Six franchisees and respondents who were not founders or co-founders were deleted, leaving 165 respondents who were entrepreneurs. Then, respondents were compared with non-respondents; this revealed that there was little difference between the two groups. In Tables 6.2 and 6.3, the sample of representative entrepreneurs is referred to as “RE.” The

Table 6.2 Opportunity recognition behaviors: Hall of Fame Entrepreneurs (HFE) and Representative Entrepreneurs (RE)

Item	*HFE*					*RE*				
	(0%)	*(1–2%)*	*(3–4%)*	*(5–10%)*	*(>10%)*	*(0%)*	*(1–2%)*	*(3–4%)*	*(5–10%)*	*(>10%)*
How many new, major business opportunities have you pursued (invested time and money) in the last five years?	2	29	33	24	12	1	30	29	27	13
How many of these new business opportunities can be said to be successes?	4	40	40	12	4	7	51	23	15	3
How many of these new business opportunities were unrelated to the existing business at the time?	28	42	21	9	0	56	30	10	2	2

Note
$n = 53$ HFEs, 165 REs.

Table 6.3 Key opportunity recognition behavior findings

Item	*HFE*						*REI*					
	(SA %)	*(PA %)*	*(N %)*	*(PD %)*	*(SD %)*	*Mean*	*(SA %)*	*(PA %)*	*(N %)*	*(PD %)*	*(SD %)*	*Mean*
1 New business opportunities often arise in connection with a solution to a specific problem.	53	41	2	2	2	1.60	56	39	3	2	0	1.51
2 I listen extremely well to what customers say they want and don't want as a way of identifying opportunities.	61	23	10	6	0	1.61	67	24	6	3	0	1.44
3 Being creative is very important to identifying business opportunities.	50	40	8	2	0	1.63	58	30	6	4	1	1.60
4 I am not a very creative person.	2	13	11	17	57	4.15	3	9	15	25	48	4.05
5 Identifying opportunities is really several learning steps over time, rather than a one-time occurrence.	44	42	10	0	4	1.78	61	31	5	2	1	1.50
6 Our company experiments with new venture ideas which result in both failures and successes.	40	42	8	4	6	1.92	35	42	13	9	1	1.99
7 Other people bring new venture business ideas to me.	25	35	23	13	4	2.35	14	44	26	11	5	2.49

Notes
SA = strongly agree = 1; PA = partly agree = 2; N = neutral = 3; PD = partly disagree = 4; SD = strongly disagree = 5.
n = 53 HFEs, 165 REs.

RE executives' companies ranged in size from $3 million to $100 million in annual revenues and employed between 2 and 1,100 people. The mean values for this entrepreneurial sample were $16.7 million in annual revenues and 121 employees.

Research instrument and analysis

Five focus groups were conducted, yielding a rich discussion of opportunity recognition and related issues used in the questionnaire design. In addition to numerous new survey items, the questionnaire replicated and modified selected items from previous studies by Teach *et al.* (1989), Christensen and Peterson (1990), and Kaish and Gilad (1991). The questionnaire was extensively pretested in the focus groups as well as in a convenience sample of 47 business owners (not reported here). Frequency analysis was used to explore characteristics and differences between the two sets of entrepreneurs studied. T-tests were used to compare the means of responses.

Findings

Table 6.2 indicates that both groups of entrepreneurs have considerable experience with opportunities. Nearly all of them have pursued major, new business opportunities in the past five years, with approximately one-third of both groups having pursued three to four opportunities and another quarter having pursued five to ten opportunities. Note that 12 percent and 13 percent, respectively, pursued more than ten major, new business opportunities in the last five years.

Although the success rates are by definition lower than the sheer pursuit of opportunities, 16–18 percent of the HFE and RE samples had five or more successes and 74–80 percent had one to four successes. Forty percent of the HFEs had three to four successes as compared with 23 percent of the REs. But this is the only notable difference concerning successes. It is striking that so many of the opportunities pursued were unrelated to their existing businesses: this is more often the case for the HFEs than for the REs. Tables 6.2 and 6.3 reveal several important insights for entrepreneurs. Practical implications and implications for entrepreneurship education are discussed further in the next sections.

Practical implications

Implication 1: opportunity recognition is inherently a creative process

Opportunity recognition involves a high degree of creativity. Table 6.3 indicates how strongly successful entrepreneurs associate creativity with opportunity recognition. Many scholars have acknowledged that creativity is essential to entrepreneurship and strong creativity skills are often associated with effective problem-solving (e.g. Senge 1990). Along with attributes such as imagination and spontaneity that are typically associated with creativity, other traits that are usually considered good for business also indicate high levels of creativity – self-confidence, resourcefulness, enthusiasm, and independence (Barron and Harrington 1981).

The importance of creativity has several implications for entrepreneurs. First, they must take steps to create an environment that is open and receptive to creative thought. This applies to entrepreneurs themselves as well as the people who work for them. An environment that is free of criticism and conducive to "out of the box" thinking may stimulate creative problem-solving. Second, if entrepreneurs do not consider themselves to be creative, they need to surround themselves with creative people who can enhance their opportunity recognition process.

Implication 2: opportunity recognition involves experimentation

All new ventures and innovative activity involves trying novel ideas that are unproven. This is a normal part of opportunity recognition as well. In fact, Vesper (1996) suggests that one way to test the viability of a business concept is to launch the business and see what happens. He recommends this in the context of ventures that have few start-up costs and low downside risks. The cost of launching such a business may actually be less than the cost of extensive market research and/or product testing that may be required to get some small businesses started.

Table 6.3 shows that more than 80 percent of the entrepreneurs experimented with new ideas, some of which were failures. This has important implications – entrepreneurs must not be afraid to make mistakes. Failures and false starts are a normal part of the OpR process, and the knowledge gained from such experiences often leads to future gains that are more solid. As Ronstadt (1988) has found, entering into a new business – even if it is not initially successful – opens doors and generates possibilities that may not have been apparent before.

Implication 3: high levels of domain knowledge enhance opportunity recognition

Most models of OpR emphasize the importance of preparation in opportunity recognition. Entrepreneurs with prior knowledge of a given domain are alert to opportunities in that business environment. Venture capitalists, when asked about the reasons for the rash of dot.com failures, stated that most of the new Internet-based businesses had been founded by entrepreneurs with a high degree of technical skill but insufficient domain knowledge – they were not prepared to run the businesses they had started because they did not know the industry or the competition.

Two implications that are especially salient can be drawn from these facts.

First, entrepreneurial ventures, no matter how exciting or fast growing they may seem, must acknowledge the rules of enterprise and business "wisdom" that apply to the industry and competitive environment in which the ventures are launched. Knowledge in a specific domain is required. Second, in opportunity recognition, as with all fields of business, there is no substitute for experience. Entrepreneurs who know a business domain will have a better chance of correctly recognizing opportunities than those who have no experience in the domain.

Implication 4: "good ideas" must be formed into viable business opportunities

Many entrepreneurship scholars agree that refining business ideas and investigating their feasibility is a critical pre-launch activity. Not every "good idea" is going to result in a viable business. Timmons (1994) suggested that recognizing opportunity involves:

1 evaluating the potential opportunity itself,
2 assessing the skill set and readiness of the entrepreneurs who might pursue it, and
3 ensuring that the necessary resources are available to sustain the venture launch.

Long and McMullan (1984) argued that opportunities are formed by refining ideas using elaboration and evaluation processes aimed at overcoming major objections to the venture idea.

Entrepreneurs need to recognize that most opportunities take time to emerge. Singh (1998) found that only a small portion of entrepreneurs proceeded directly from a business insight to the launch of that insight as a viable business. Entrepreneurs who evaluate ideas more closely may launch fewer businesses than those who do not take time to evaluate, but the businesses that are launched *with* evaluation are more likely to be successful than those that are launched *without* evaluating potential problems and risks.

Implications for entrepreneurship education

Implication 1: opportunity recognition is **not** *industry or business specific*

The information in Table 6.2 suggests that the opportunity recognition process occurs among entrepreneurs regardless of the business or industry environment in which they are currently engaged. Entrepreneurs are continually pursuing new business opportunities. Thus, the OpR process is ongoing – over one-third of the respondents in both samples indicated that they pursued at least one business opportunity per year on average. Although some prior research suggests that most opportunities arise from prior work experience, our results indicate that this is true in only about half of all cases. Such pursuits are not always specific to the entrepreneurs' existing enterprises – nearly half of all new opportunities pursued were unrelated businesses.

This suggests that teaching opportunity recognition skills is a particularly important component of entrepreneurship education. In fact, it can be argued that OpR skills stand alone as a topic of interest for educators because they are such a pervasive aspect of what business owners do.

Implication 2: opportunity recognition is *problem and/or customer specific*

Table 6.3 suggests that most opportunities are recognized in connection with a specific problem or need that has been identified among customers. More than 90 percent of the entrepreneurs surveyed strongly agree with these statements. The intensity of the responses suggest that the probability of entrepreneurial success may come from commercializing a solution to a heartfelt problem rather than following the conventional wisdom of merely satisfying a need. This leads to one important conclusion for an entrepreneurship educator: to enhance the probability of success, seek to recognize solvable problems that represent commercializable opportunities.

Two other suggestions emerge from these conclusions as well. One is to use a case-based approach to teaching entrepreneurship. Because cases generally present specific situations that need to be analyzed, a case approach permits students to be specific in their approach to OpR. A second implication is that the opportunities that are central to the entrepreneurial process can be identified by maintaining a market orientation. That is, focusing on customer needs and guiding a new venture by a customer orientation is likely to enhance overall success. It is also, according to the entrepreneurs surveyed, a very strong source of new venture opportunities.

Implication 3: teaching creativity skills can enhance opportunity recognition

The entrepreneurs' perspective on creativity is particularly interesting. Table 6.3 suggests that creativity is an essential aspect of opportunity recognition – 50 percent or more of both entrepreneurial samples strongly agree that it is very important. In addition, most of the entrepreneurs consider themselves very creative. Because they are obviously quite successful, this response suggests that they owe their success, at least in part, to their creative ability.

Thus, the opportunity recognition process could be enhanced by encouraging students to be more creative and by teaching the elements of creativity. That is, entrepreneurship educators could strengthen opportunity recognition skills by giving students an ability to think creatively, to speculate on opportunities and business conditions in an "out of the box" fashion, and to learn the art of creative leadership. This could enhance their ability to see opportunities that might not be apparent to untrained entrepreneurs or to those who may not regard themselves as creative.

Implication 4: experimentation and learning are essential to opportunity recognition

Table 6.3 suggests that opportunity recognition is more than just an "Aha!" experience. Although intuition and gut feel are very important to the entrepreneurial process, sometimes opportunities become apparent only after a period of experimentation or a series of failures. Ninety-two percent of the REs and 86 percent of the HFEs agreed that identifying opportunities takes several learning steps over time, rather than being a one-time occurrence. Opportunity recognition is a process that occurs over time and should be approached accordingly.

This finding is particularly important among students who have expectations of instant success. This suggests that a classroom environment that invites experimentation would enhance understanding of the opportunity recognition process. For example, it might be effective to create an exercise in which several alternatives are regarded as "correct" but an iterative, experimental process is required to uncover all valid conclusions. Students would need to go back and re-examine their decisions and their results over and over again until they understood what the elements of success are. Such continual learning via a trial-and-error approach could be used to help students understand the dynamics of opportunity recognition.

Implication 5: networking enhances the opportunity recognition process

Among successful entrepreneurs, a network of friends and associates who bring ideas to their attention is important to OpR. Table 6.3 indicates that a majority of entrepreneurs acknowledge the importance of other people in recognizing opportunities. Interestingly, the very successful HFEs were more strongly in agreement with this statement than the REs, which suggests that relying on other people for business ideas may be one of their keys to success.

This finding suggests that entrepreneurship educators might benefit from giving students more opportunities to network with colleagues and other entrepreneurs. Such networking is often a common part of a college or university experience; this finding suggests that networking opportunities should involve more depth in terms of learning what opportunities are available in the marketplace. This could take the form of sponsoring business planning activities that result in bona fide plans actually presented to real financiers, and setting up mentoring programs and in-depth internships with firms engaged in pursuing new venture opportunities.

Conclusion

Opportunity recognition is central to entrepreneurship. In this chapter, we have outlined scholarly contributions to the study of OpR and presented empirical evidence of the importance of OpR among two groups of entrepreneurs. Numerous issues related to the OpR process have been explored in terms of their practical implications for entrepreneurs and entrepreneurship education. Finally, we have presented a comprehensive creativity-based model of opportunity recognition. Our model attempts to demonstrate how opportunity recognition is essentially a creative process. Future research is called for in order to better understand the OpR process and, with that understanding, to train and support working and prospective entrepreneurs.

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