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CREATIVITY AND THE BUSINESS IDEA

LEARNING OBJECTIVES

1

To identify various sources of ideas for new ventures.

2

To discuss methods available for generating new venture ideas.

3

To discuss creativity and the techniques for creative problem solving.

4

To discuss the aspects of the product planning and development process.

5

To discuss aspects of e-commerce and starting an e-commerce business.

OPENING PROFILE

FREDERICK W. SMITH

Who would think that an entrepreneur with a \$10 million inheritance would need more capital to get his company off the ground? The business world is filled with stories of companies, large and small, that started in a garage with an initial investment of a few hundred dollars. But none of those companies needed a nationwide distribu-

tion system in place, complete with a fleet of airplanes and trucks, before accepting its first order. And none of those garage start-ups grew to be Federal Express.

www.fedex.com

Frederick W. Smith, a Memphis native whose father made his fortune in founding a bus company, conceived of the idea for his air-cargo company while studying economics at Yale University in the 1960s. The professor of one of Smith's classes was a staunch supporter of the current system of air freight handling in which a cargo package literally hitched a ride in any unused space on a passenger flight. Fred Smith saw things differently and, in a paper, described the concept of a freight-only airline that would fly all packages to one central point, where they would then be distributed and flown out again to their destinations. This operation could take place at night when the airports were less crowded, and, with proper logistics control, the packages could be delivered the next day. Whether it was the novelty of the idea, the fact that it went against the professor's theories, or the fact that it was written in one night and was turned in late, the first public display of Smith's grand idea earned him a C.

Smith's idea constituted far more than a concept for a creative term paper, however. He had seen how the technological base of the country was changing. More companies were becoming involved in the production and use of small, expensive items such as computers, and Smith was convinced that businesses could use his air-cargo idea to control their inventory costs. Overnight delivery from a single distribution center to anywhere in the country could satisfy customers' needs without a company needing a duplicate investment in inventory to be stored in regional warehouses. Smith even thought of the Federal Reserve Banks as a potential customer with the vast quantities of checks that had to be delivered to all parts of the country every day. But the Vietnam War and a family history of patriotic service intervened. Smith joined the Marine Corps and was sent to Vietnam, first as a platoon leader and then as a pilot.

After nearly four years of service and 200 ground support missions as a pilot, he left Vietnam, ready to start building something. He went to work with his stepfather, first managing and subsequently purchasing a controlling interest in Arkansas Aviation Sales, a struggling aircraft modification and overhaul shop. Difficulty in getting parts to the shop in Little Rock, Arkansas, revived his interest in the air-cargo concept. He commissioned two feasibility studies, both of which returned favorable results based on a high initial investment. The key to this company would be its ability to serve a large segment of the business community from the very beginning, and the key to the required level of service was cash. Full of optimism, Smith went to Chicago and New York, confident that he would be returning with basket loads of investment checks. Progress turned out to be slower than Smith had anticipated, but through his boundless energy, belief in his idea, and technical knowledge of the air freight field, he was finally able to get enthusiastic backing (around \$5 million in capital) from New Court Securities, a Manhattan-based, Rothschild-backed venture-capital investment bank. This commitment from New Court spurred substantial additional financing. Five other institutions, including General Dynamics and Citicorp Venture Capital, Ltd., got involved, and Smith went back to Memphis with \$72 million. This was the largest venture-capital start-up deal in the history of American business.

Federal Express took to the skies on March 12, 1973, to test its service. Servicing an 11-city network (extending from Dallas to Cincinnati), it initially shipped only six packages. On the night of April 17, the official start-up of Federal Express, the network had been expanded to include 25 cities (from Rochester, New York, to Miami, Florida), shipping a total of 186 packages. Volume picked up rapidly and service was expanded; it looked as though Federal Express was a true overnight success. Smith's understanding of a market need had been accurate, but he had not counted on OPEC causing a massive inflation of fuel costs just as his company was getting started. By mid-1974, the company was losing more than \$1 million a month. His investors were not willing to keep the company going, and his relatives were suing him for mismanaging the family fortune (nearly \$10 million of Smith money was invested). But Smith never lost faith in his idea and finally won enough converts in the investment community to keep the doors open long enough to straighten out the pricing problems caused by OPEC. After losing \$27 million in the first two years, Federal Express turned a profit of \$3.6 million in 1976. The development and growth of Federal Express were tightly regulated. Due to old laws designed to protect the early pioneers of the passenger airline industry, Smith was required to obtain approval for operating any aircraft with a payload in excess of 7,500 pounds. Since the major airlines—at the time, the giants of the industry—were not ready to share the cargo market, he was not able to obtain this needed approval and had to operate a fleet of small Falcon jets instead. While this situation worked well at start-up, by 1977 his operation had reached the capacity of these smaller planes. Since the company was already flying several planes on the most active routes, it did not make sense to buy more Falcons. Smith took his salesmanship to Washington and, with the help of a grassroots Federal Express employee effort, was able to obtain legislation creating a new class of all-cargo carriers. This gave Smith the operating latitude he needed.

Although Smith had the approval to operate large jets, he needed to find a way to purchase them. The corporate balance sheet of the company was still a mess from early losses, and the long-suffering early investors needed some reward. Smith took his company public on April 12, 1978, raising enough money to purchase used Boeing 727s from ailing passenger airlines. The investors were indeed richly rewarded, with General Dynamics watching its \$5 million grow to more than \$40 million by the time Federal Express was first traded on the New York Stock Exchange in December 1978. The company has continued to perform well since its public offering, combining technical innovation and an obsession with customer orientation (Federal Express was the first company to win the Malcolm Baldrige National Quality Award in the service category, and in 1994 it became the first global express transportation company to receive simultaneous worldwide ISO 9001 certification) to ensure exceptional growth. Today, Federal Express, the world's largest express transportation company, boasts the following: 215,000 employees worldwide; 43,500 vehicles in its ground fleet; 643 total aircraft in its air fleet; and daily delivery of 3.3 million packages worldwide. From a 1974 operating budget of \$150,000, sales have steadily increased (except for 1992), reaching \$5.5 million in 1978, \$14 billion in 1999, and \$18 billion in 2000. In 2002 the revenues increased to \$20.6 billion and stock price reached \$65.31 per share, increasing 35 percent from the previous year. In 2002 the company also announced first-in-its-history cash dividends.

At the heart of Frederick Smith's success story is the creativity and uniqueness of the initial business concept. This part of the new venture creation process is perhaps the most difficult to actualize. What specific features does the new product or service need? A wide variety of techniques can be used to obtain the new product idea. Smith expressed his original idea in a paper he wrote to complete a college course. For others—such as Bob Reis of Final Technology, Inc., and Frank Perdue of Perdue Chickens—the idea came from work experience. No matter how it occurs, a sound unique idea for a new product (or service), properly evaluated, is essential to successfully launching a new venture. Throughout this evaluation, as well as in the development of the business plan, the role that the Internet and e-commerce will play must be kept in mind.

SOURCES OF NEW IDEAS

Some of the more frequently used sources of ideas for entrepreneurs include: consumers, existing products and services, distribution channels, the federal government, and research and development.

Consumers

Potential entrepreneurs should continually pay close attention to potential customers. This attention can take the form of informally monitoring potential ideas and needs or formally arranging for consumers to have an opportunity to express their opinions. Care needs to be taken to ensure that the idea or need represents a large enough market to support a new venture.

Existing Products and Services

Potential entrepreneurs and intrapreneurs should also establish a formal method for monitoring and evaluating competitive products and services on the market. Frequently, this analysis uncovers ways to improve on these offerings that may result in a new product or service that has more market appeal.

Distribution Channels

Members of the distribution channels are also excellent sources for new ideas because of their familiarity with the needs of the market. Not only do channel members frequently have suggestions for completely new products, but they can also help in marketing the entrepreneur's newly developed products. One entrepreneur found out from a salesclerk in a large department store that the reason his hosiery was not selling was its color. By heeding the suggestion and making the appropriate color changes, his company became one of the leading suppliers of nonbrand hosiery in that region of the United States.

Federal Government

The federal government can be a source of new product ideas in two ways. First, the files of the Patent Office contain numerous new product possibilities. Although the patents themselves may not be feasible, they can frequently suggest other more marketable product ideas. Several government agencies and publications are helpful in monitoring patent applications. The *Official Gazette*, published weekly by the U.S. Patent Office, summarizes each patent granted and lists all patents available for license or sale. Also, the Government Patents Board publishes lists of abstracts of thousands of government-owned patents; a good resource of such information is the *Government-Owned Inventories Available for License*. Other government agencies, such as the Office of Technical Services, assist entrepreneurs in obtaining specific product information.

Second, new product ideas can come in response to government regulations. For example, the Occupational Safety and Health Act (OSHA) mandated that first-aid kits be available in business establishments employing more than three people. The kits had to contain specific items that varied according to the company and the industry. The weatherproofed first-aid kit needed for a construction company had to be different from the one needed by a company manufacturing facial cream or a company in retail trade. In response to OSHA, both established and newly formed ventures marketed a wide variety of first-aid kits. One newly formed company, R&H Safety Sales Company, was successful in developing and selling first-aid kits that allowed companies to comply with the act.

Research and Development

The largest source of new ideas is the entrepreneur's own "research and development," efforts, which may be a formal endeavor connected with one's current employment or an informal lab in a basement or garage. One research scientist in a Fortune 500 company developed a new plastic resin that became the basis of a new product, a plastic molded modular cup pallet, as well as a new venture—the Arnolite Pallet Company, Inc.—when the Fortune 500 company was not interested in developing the idea.

AS SEEN IN *ENTREPRENEUR* MAGAZINE

PROVIDE ADVICE TO AN ENTREPRENEUR ABOUT BECOMING MORE CREATIVE

You decided to build a creatively agile company based on a firm belief that creativity will help you and your company thrive . . . or you're a skeptic who, nonetheless, is willing to give it a try. In either case, experience is the best teacher. Begin by experimenting.

Learning how to be more creative is like learning any skill: You gain expertise over time. Starting small can help deal with skepticism among the staff and your own uncertainty. Begin by trying some techniques by yourself or with a few colleagues. By practicing creative techniques and attitudes, you'll gain the confidence and skill to build a company that includes everyone in its creative practice. Remember the goal is always to find a way to tap the creativity of everyone in your company.

I've used the following exercise many times because it's simple yet evocative. Making a collage from magazine images is a great prompt for new ideas. It's non-threatening because everyone can tear pictures out of magazines and arrange them—and it's fun because you get to make a mess. Decide on the issue or problem that needs some fresh thinking or new solutions. It should be clearly defined before beginning to let the collage spark ideas and associations. If you identify the most fundamental issue before you begin, the ideas that emerge will be more useful. You can pose the question or problem before or after you have collected the images. Experiment with what works best for you.

Give yourself or your group five minutes to look through the magazines and tear out images that speak to you. They don't have to be related to the problem

you're trying to solve. Arrange your images by pasting them on a background or just on the surface in front of you. If you're doing this with others, share your thoughts and associations. Have a discussion about the meaning of the collage as a whole and also the relationship of the individual images within the collage. Why, for example, is one image in the center and another on the edge? Are the images active or reflective? Do the images show nature or cityscapes? The choice of images will help you identify what has meaning for you as well as spark new thinking about the issue under consideration. This simple exercise will surprise you with the depth and amount of ideas it can generate.

ADVICE TO AN ENTREPRENEUR

An inventor has read the above article and comes to you for advice:

I want to spur creativity and innovation in my organization, but I fear that if I bring in magazines and suggest we start ripping out pictures, they will think that I have gone nuts.

1. Does thinking outside the box always feel a little uncomfortable?
2. How can I get others to take it seriously?
3. What other creativity techniques would you recommend?

Source: Reprinted with permission of Entrepreneur Media, Inc., "Food for Thought: Creativity Is an Acquired Taste, So Start Your Company Off with Small Bites," by Juanita Weaver, March 2003, *Entrepreneur* magazine: www.entrepreneur.com. Please contact Jeremy at Scoop Reprint Source to assist you with your reprint needs: (800) 767-3263, ext. 307.

METHODS OF GENERATING IDEAS

Even with a wide variety of sources available, coming up with an idea to serve as the basis for a new venture still poses a problem. The entrepreneur can use several methods to help generate and test new ideas, such as: focus groups, brainstorming, and problem inventory analysis.

Focus Groups

focus groups Groups of individuals providing information in a structured format

Focus groups have been used for a variety of purposes since the 1950s. A moderator leads a group of people through an open, in-depth discussion rather than simply asking questions to solicit participant response. For a new product area, the moderator focuses the discussion of the group in either a directive or a nondirective manner. The group of 8 to 14 participants is stimulated by comments from other group members in creatively conceptualizing and developing

a new product idea to fulfill a market need. One company interested in the women's slipper market received its new product concept for a "warm and comfortable slipper that fits like an old shoe" from a focus group of 12 women from various socioeconomic backgrounds in the Boston area. The concept was developed into a new product that was a market success. The basis of the advertising message came from comments of focus group members.

In addition to generating new ideas, the focus group is an excellent method for initially screening ideas and concepts. Using one of several procedures available, the results can be analyzed more quantitatively, making the focus group a useful method for generating new product ideas.¹

Brainstorming

brainstorming A group method for obtaining new ideas and solutions

The *brainstorming* method allows people to be stimulated to greater creativity by meeting with others and participating in organized group experiences. Although most of the ideas generated from the group have no basis for further development, sometimes a good idea emerges. This has a greater frequency of occurrence when the brainstorming effort focuses on a specific product or market area. When using brainstorming, these four rules should be followed:

1. No criticism is allowed by anyone in the group—no negative comments.
2. Freewheeling is encouraged—the wilder the idea, the better.
3. Quantity of ideas is desired—the greater the number of ideas, the greater the likelihood of the emergence of useful ideas.
4. Combinations and improvements of ideas are encouraged; ideas of others can be used to produce still another new idea.

The brainstorming session should be fun, with no one dominating or inhibiting the discussion.

A large commercial bank successfully used brainstorming to develop a journal that would provide quality information to its industrial clients. The brainstorming among executives focused on the characteristics of the market, the information content, the frequency of issue, and the promotional value of the journal for the bank. Once a general format and issue frequency were determined, focus groups of vice presidents of finance of Fortune 1000 companies were held in three cities—Boston, Chicago, and Dallas—to discuss the new journal format and its relevancy and value to them.

Problem Inventory Analysis

problem inventory analysis A method for obtaining new ideas and solutions by focusing on problems

Problem inventory analysis uses individuals in a manner that is analogous to focus groups to generate new product ideas. However, instead of generating new ideas themselves, consumers are provided with a list of problems in a general product category. They are then asked to identify and discuss products in this category that have the particular problem. This method is often effective since it is easier to relate known products to suggested problems and arrive at a new product idea than to generate an entirely new product idea by itself. Problem inventory analysis can also be used to test a new product idea.

An example of this approach in the food industry is illustrated in Table 5.1. One of the most difficult problems in this example was in developing an exhaustive list of problems, such as weight, taste, appearance, and cost. Once a complete list of problems is developed, individuals can usually associate products with the problem.

Results from product inventory analysis must be carefully evaluated as they may not actually reflect a new business opportunity. For example, General Foods' introduction of a compact cereal box in response to the problem that the available boxes did not fit well on

TABLE 5.1 Problem Inventory Analysis

Psychological	Sensory	Activities	Buying Usage	Psychological/Social
A. Weight <ul style="list-style-type: none"> • Fattening • Empty calories B. Hunger <ul style="list-style-type: none"> • Filling • Still hungry after eating C. Thirst <ul style="list-style-type: none"> • Does not quench • Makes one thirsty D. Health <ul style="list-style-type: none"> • Indigestion • Bad for teeth • Keeps one awake • Acidity 	A. Taste <ul style="list-style-type: none"> • Bitter • Bland • Salty B. Appearance <ul style="list-style-type: none"> • Color • Unappetizing • Shape C. Consistency/texture <ul style="list-style-type: none"> • Tough • Dry • Greasy 	A. Meal planning <ul style="list-style-type: none"> • Forget • Get tired of it B. Storage <ul style="list-style-type: none"> • Run out • Package would not fit C. Preparation <ul style="list-style-type: none"> • Too much trouble • Too many pots and pans • Never turns out D. Cooking <ul style="list-style-type: none"> • Burns • Sticks E. Cleaning <ul style="list-style-type: none"> • Makes a mess in oven • Smells in refrigerator 	A. Portability <ul style="list-style-type: none"> • Eat away from home • Take lunch B. Portions <ul style="list-style-type: none"> • Not enough in package • Creates leftovers C. Availability <ul style="list-style-type: none"> • Out of season • Not in supermarket D. Spoilage <ul style="list-style-type: none"> • Gets moldy • Goes sour E. Cost <ul style="list-style-type: none"> • Expensive • Takes expensive ingredients 	A. Serve to company <ul style="list-style-type: none"> • Would not serve to guests • Too much last-minute preparation B. Eating alone <ul style="list-style-type: none"> • Too much effort to cook for oneself • Depressing when prepared for just one C. Self-image <ul style="list-style-type: none"> • Made by a lazy cook • Not served by a good mother

Source: From *Journal of Marketing* by Edward M. Tauber. Copyright © 1975 by American Marketing Association (AMA-Chicago). Reproduced with permission of American Marketing Association via Copyright Clearance Center.

the shelf was not successful, as the problem of package size had little effect on actual purchasing behavior. To ensure the best results, problem inventory analysis should be used primarily to identify product ideas for further evaluation.

CREATIVE PROBLEM SOLVING

Creativity is an important attribute of a successful entrepreneur. Unfortunately, creativity tends to decline with age, education, lack of use, and bureaucracy. Creativity generally declines in stages, beginning when a person starts school. It continues to deteriorate through the teens and continues to progressively lessen through ages 30, 40, and 50. Also, the latent creative potential of an individual can be stifled by perceptual, cultural, emotional, and organizational factors. Creativity can be unlocked and creative ideas and innovations generated by using any of the *creative problem-solving* techniques indicated in Table 5.2.²

creative problem solving
A method for obtaining new ideas focusing on the parameters

Brainstorming

The first technique, brainstorming, is probably the most well known and widely used for both creative problem solving and idea generation. In creative problem solving, brainstorming can generate ideas about a problem within a limited time frame through the

TABLE 5.2 Creative Problem-Solving Techniques

- | | |
|-------------------------|------------------------------|
| • Brainstorming | • Forced relationships |
| • Reverse brainstorming | • Collective notebook method |
| • Brainwriting | • Attribute listing method |
| • Gordon method | • Big-dream approach |
| • Checklist method | • Parameter analysis |
| • Free association | |

spontaneous contributions of participants. A good brainstorming session starts with a problem statement that is neither too broad (which would diversify ideas too greatly so that nothing specific would emerge) nor too narrow (which would tend to confine responses).³ Once the problem statement is prepared, 6 to 12 individuals are selected to participate. To avoid inhibiting responses, no group member should be a recognized expert in the field of the problem. All ideas, no matter how illogical, must be recorded, with participants prohibited from criticizing or evaluating during the brainstorming session.

Reverse Brainstorming

reverse brainstorming
A group method for
obtaining new ideas
focusing on the negative

Reverse brainstorming is similar to brainstorming, except that criticism is allowed. In fact, the technique is based on finding fault by asking the question "In how many ways can this idea fail?" Since the focus is on the negative aspects of a product, service, or idea, care must be taken to maintain the group's morale. Reverse brainstorming can be effectively used before other creative techniques to stimulate innovative thinking.⁴ The process usually involves the identification of everything wrong with an idea, followed by a discussion of ways to overcome these problems.

Brainwriting

Brainwriting is a form of written brainstorming. It was created by Bernd Rohrbach at the end of the 1960s under the name Method 635 and differs from classical brainstorming by giving participants more time to think than in brainstorming sessions, where the ideas are expressed spontaneously. Brainwriting is silent, written generation of ideas by a group of people. The participants write their ideas on special forms or cards that circulate within the group, which usually consists of six members. Each group member generates and writes down three ideas during a five-minute period. The form is passed on the adjacent person, who writes down three new ideas, and so on, until each form has passed all participants. A leader monitors the time intervals and can reduce or lengthen the time given to participants according to the needs of the group. In a variation of this idea-generation method, the participants are located at their own workplaces and the sheets are rotated by e-mail, in which case the time interval can be longer.⁵

Gordon method
Method for developing
new ideas when the
individuals are unaware
of the problem

Gordon Method

The *Gordon method*, unlike many other creative problem-solving techniques, begins with group members not knowing the exact nature of the problem. This ensures that the solution is not clouded by preconceived ideas and behavioral patterns.⁶ The entrepreneur starts by

AS SEEN IN *ENTREPRENEUR* MAGAZINE

TRY THIS TECHNIQUE FOR CREATIVE SOLUTIONS

You've heard the stories about how chance, an accident or a mistake led to valuable inventions—penicillin, Velcro and Post-It Notes are just a few. But you don't have to rely on fate to provide inspiration. You can create conditions that spark new ideas any time by using creativity techniques such as the novel prompt. Once you've clarified the ideas you're looking for—say, a spinoff of a highly successful product or ideas for a new ad campaign—introduce a novel and unlikely prompt as a catalyst for the free association of ideas. After you generate lots of ideas, sort and refine them into practical and innovative actions.

A novel prompt can be anything: a word, an object, a fantasy, a color. The theory behind this technique is that by using something unusual to launch your thinking, you'll generate ideas you wouldn't otherwise. Many people find objects are the most evocative prompts. You can use one or more objects for this exercise. The following example uses three.

Place a mask, a bell and a moveable child's toy (or any objects you like) on the table in clear view. Notice everything you can about each object: its function, color, shape, texture. Focus on only one object or each in turn, or the objects in relation to each other. List the qualities of the objects and then see what they suggest to you, or think about the function of the ob-

ject and see what that generates. For example, if you're trying to generate new marketing strategies, the mask might suggest what people don't know about your product or service; the bell may evoke ideas about the reach and clarity of your message. The child's toy may be green, which reminds you of spring, and that prompts the idea of doing a special promotion. Let your ideas flow freely.

Don't stop until you come up with at least 10 ideas. When you first begin to free-associate, it may seem difficult to come up with that many, but keep going. This forces you to move past your limiting judgments about what is appropriate or possible. You never know what will work or what will spark another idea that might work. Remember, in this generating stage, the ideas that come to you don't have to be realistic. You want to go for volume. Quality control comes later. By using the novel prompt technique, inspiration no longer has to depend on chance.

TRY THIS!

Choose a topic, use this technique, and come up with 10 ideas.

Source: Reprinted with permission of Entrepreneur Media, Inc.. "Ideas on Demand. You Don't Have to Wait for Inspiration." by Juanita Weaver. April 2003. *Entrepreneur* magazine: www.entrepreneur.com. Please contact Jeremy at Scoop Reprint Source to assist you with your reprint needs: (800) 767-3263, ext. 307.

mentioning a general concept associated with the problem. The group responds by expressing a number of ideas. Then a concept is developed, followed by related concepts, through guidance by the entrepreneur. The actual problem is then revealed, enabling the group to make suggestions for implementation or refinement of the final solution.

Checklist Method

checklist method

Developing a new idea through a list of related issues

In the *checklist method*, a new idea is developed through a list of related issues or suggestions. The entrepreneur can use the list of questions or statements to guide the direction of developing entirely new ideas or concentrating on specific "idea" areas. The checklist may take any form and be of any length. One general checklist is as follows⁷:

- Put to other uses? New ways to use as is? Other uses if modified?
- Adapt? What else is like this? What other ideas does this suggest? Does past offer parallel? What could I copy? Whom could I emulate?
- Modify? New twist? Change meaning, color, motion, odor, form, shape? Other changes?
- Magnify? What to add? More time? Greater frequency? Stronger? Larger? Thicker? Extra value? Plus ingredient? Duplicate? Multiply? Exaggerate?

- Minify? What substitute? Smaller? Condensed? Miniature? Lower? Shorter? Lighter? Omit? Streamline? Split up? Understated?
- Substitute? Who else instead? What else instead? Other ingredient? Other material? Other process? Other power? Other place? Other approach? Other tone of voice?
- Rearrange? Interchange components? Other pattern? Other layout? Other sequence? Transpose cause and effect? Change pact? Change schedule?
- Reverse? Transpose positive and negative? How about opposites? Turn it backward? Turn it upside down? Reverse roles? Change shoes? Turn tables? Turn other cheek?
- Combine? How about a blend, an alloy, an assortment, an ensemble? Combine units? Combine purposes? Combine appeals? Combine ideas?

Free Association

free association

Developing a new idea through a chain of word associations

One of the simplest yet most effective methods that entrepreneurs can use to generate new ideas is *free association*. This technique is helpful in developing an entirely new slant to a problem. First, a word or phrase related to the problem is written down, then another and another, with each new word attempting to add something new to the ongoing thought processes, thereby creating a chain of ideas ending with a new product idea emerging.

Forced Relationships

forced relationships

Developing a new idea by looking at product combinations

Forced relationships, as the name implies, is the process of forcing relationships among some product combinations. It is a technique that asks questions about objects or ideas in an effort to develop a new idea. The new combination and eventual concept is developed through a five-step process⁸:

1. Isolate the elements of the problem.
2. Find the relationships between these elements.
3. Record the relationships in an orderly form.
4. Analyze the resulting relationships to find ideas or patterns.
5. Develop new ideas from these patterns.

Table 5.3 illustrates the use of this technique with paper and soap.

TABLE 5.3 Illustration of Forced Relationship Technique

Elements: Paper and Soap		
Forms	Relationship/Combination	Idea/Pattern
Adjective	Papery soap	Flakes
	Soapy paper	Wash and dry travel aid
Noun	Paper soaps	Tough paper impregnated with soap and usable for washing surfaces
Verb-correlates	Soaped papers	Booklets of soap leaves
	Soap "wets" paper	In coating and impregnation processes
	Soap "cleans" paper	Suggests wallpaper cleaner

Source: William E. Souder and Robert W. Ziegler, "A Review of Creativity and Problem Solving Techniques," *Research Management* (July 1975), p. 37.

Collective Notebook Method

collective notebook method Developing a new idea by group members regularly recording ideas

In the *collective notebook method*, a small notebook that easily fits in a pocket—containing a statement of the problem, blank pages, and any pertinent background data—is distributed. Participants consider the problem and its possible solutions, recording ideas at least once, but preferably three times, a day. At the end of a month, a list of the best ideas is developed, along with any suggestions.⁹ This technique can also be used with a group of individuals who record their ideas, giving their notebooks to a central coordinator who summarizes all the material. The summary becomes the topic of a final creative focus group discussion by the group participants.

Attribute Listing

attribute listing Developing a new idea by looking at the positives and negatives

Attribute listing is an idea-finding technique that requires the entrepreneur to list the attributes of an item or problem and then look at each from a variety of viewpoints. Through this process, originally unrelated objects can be brought together to form a new combination and possible new uses that better satisfy a need.¹⁰

Big-Dream Approach

big-dream approach Developing a new idea by thinking without constraints

The *big-dream approach* to coming up with a new idea requires that the entrepreneur dream about the problem and its solution, in other words, thinking big. Every possibility should be recorded and investigated without regard to all the negatives involved or the resources required. Ideas should be conceptualized without any constraints until an idea is developed into a workable form.¹¹

Parameter Analysis

parameter analysis Developing a new idea by focusing on parameter identification and creative synthesis

A final method for developing a new idea—*parameter analysis*—involves two aspects: parameter identification and creative synthesis.¹² As indicated in Figure 5.1, step one (parameter identification) involves analyzing variables in the situation to determine their relative importance. These variables become the focus of the investigation, with other variables being set aside. After the primary issues have been identified, the relationships

FIGURE 5.1 Illustration of Parameter Analysis

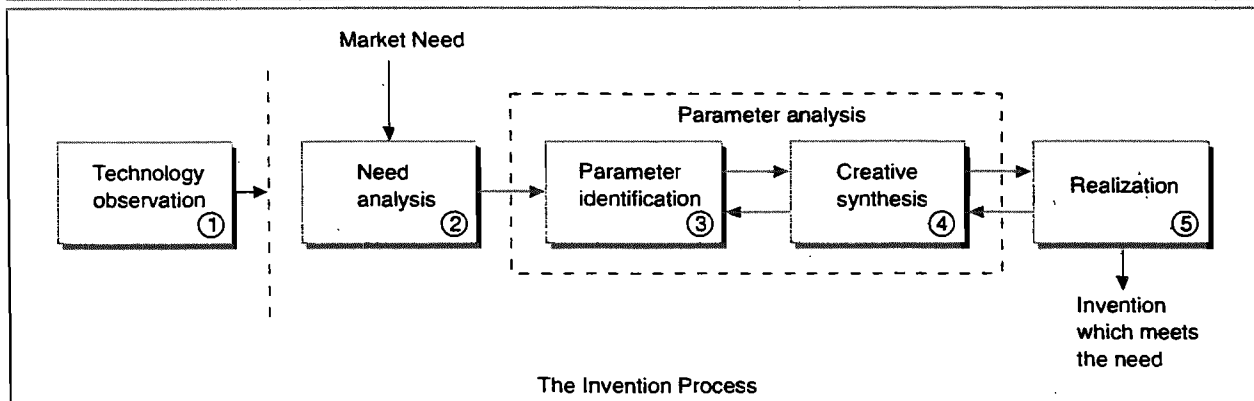
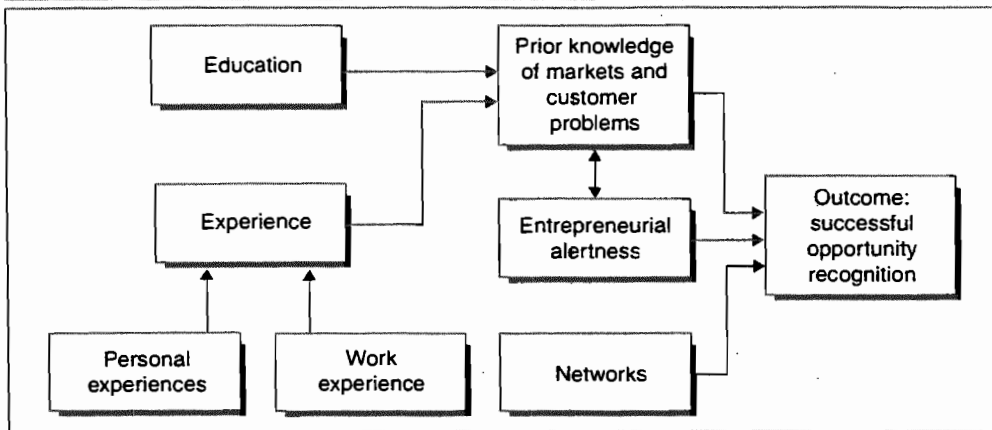


FIGURE 5.2 A Model of the Opportunity Recognition Process

Source: From Alexander Ardichivili and Richard N. Cardozo. "A Model of the Entrepreneurial Opportunity Recognition Process." *Journal of Enterprising Culture*, vol. 8, no. 2 June 2000. Reprinted with permission of World Scientific Publishing Co. Inc.

between parameters that describe the underlying issues are examined. Through an evaluation of the parameters and relationships, one or more solutions are developed; this solution development is called *creative synthesis*.

OPPORTUNITY RECOGNITION

Some entrepreneurs have the ability to recognize a business opportunity which is fundamental to the entrepreneurial process as well as growing a business. A business opportunity represents a possibility for the entrepreneur to meet a large enough unsatisfied need that is worthwhile. There has been significant research done on the opportunity recognition process and several models developed.¹³ One model that clearly identifies the aspects of this opportunity recognition process is indicated in Figure 5.2.

As is indicated, the keys to recognizing an opportunity lies in the knowledge and experience of the individual entrepreneur and where appropriate the entrepreneurial business. This prior knowledge is a result of a combination of education and experience, and the relevant experience could be work related or could result from a variety of personal experiences or events. The entrepreneur needs to be aware of this knowledge and experience and have the desire to understand and make use of it. The other important factors in this process are entrepreneurial alertness and entrepreneurial networks. There is an interaction effect between entrepreneurial alertness and the entrepreneur's prior knowledge of markets and customer problems. Those entrepreneurs who have the ability to recognize meaningful business opportunities are in a strategic position to successfully complete the product planning and development process and successfully launch new ventures.

PRODUCT PLANNING AND DEVELOPMENT PROCESS

Once ideas emerge from idea sources or creative problem solving, they need further development and refinement. This refining process—the product planning and development process—is divided into five major stages: idea stage, concept stage, product development stage, test marketing stage, and commercialization; it results in the start of the *product life cycle* (see Figure 5.3).¹⁴

product life cycle The stages each product goes through from introduction to decline