

7

Fostering Creativity and Innovation

LEARNING OUTCOMES

After reading this chapter, you should be able to:

1. Interpret the steps in the creative process
2. Distinguish between creativity and innovation and understand how they work together
3. Recognize and resolve impediments to creativity and innovation in organizations
4. Employ various tools and approaches to enhancing creativity
5. Explain the role of leadership in enhancing organizational creativity and innovation

Creativity at J.Crew ▶

On the inside cover of a spring 2013 mail catalog, Jenna Lyons, Creative Director of J.Crew wrote “You may remember us from years ago—J.Crew, all about the classics. You’ll still find them here, but we’ve changed a lot since then. These days, you might be surprised by what you find.”

In that short statement, Lyons summarizes a much more complex series of developments that have occurred at J.Crew over the last 10 years. Not only has the company tripled its annual revenue, but it has become an almost cult-like brand. Much of the credit for the change goes to Mickey Drexler who became chairman and CEO at J.Crew in 2003. Under Drexler and Lyons (as Creative Director), the J.Crew product design would be no longer dictated by corporate strategy. In fact, this approach would be turned on its head: the focus would be on the creative process and building a unified aesthetic for the brand. Early in his tenure, Drexler appointed Lyons not only Creative Director, but also president of the company. “What it says,” Lyons argues, “is that no financial decision weighs heavier than a creative decision. They are equal.”¹

But maintaining the creativity of the product design staff is not an easy job. Managing creative people is difficult, and Lyons recognizes that some designers require a lot of emotion and a lot of stroking. In the world of design, there are no right or wrong answers and, as Lyons notes, when someone creates something and puts it in front of you, that thing came from inside of them, and if you make them feel bad, it’s going to be hard to fix, because you’ve actually crushed them.”² Lyons’s approach is to model the creativity and freedom she wants. (Incidentally, it’s hard to find anyone working at J.Crew wearing socks—in fact, look through a catalog and notice that, while J.Crew sells socks, almost nobody is pictured wearing them.) Lyons also gives her designers and her staff implicit permission to take risks. When new designs don’t work out, Lyons simply requires that people take responsibility and move on to fix the problem. But when new designs do work out, they



To generate creative ideas we search beyond reason, we venture out into the impossible, the fantastic world of dreams. . . . Yet we know that a truly creative idea is not silly for it must be solid, rational, and logical.

—Dimis Michaelides, global business consultant and author of The Art of Innovation

Companies have to nurture [creativity and motivation]—and have to do it by building a compassionate yet performance-driven corporate culture. In the knowledge economy the traditional soft people side of our business has become the new hard side.

—Gay Mitchell, Executive VP, HR, Royal Bank

The things we fear most in organizations—fluctuations, disturbances, imbalances—are the primary sources of creativity.

—Margaret J. Wheatley

are widely heralded and become central to the company's identity.

Recently Lyons worked on a bold overhaul of the catalogs, of which 40 million are distributed each year. The redesigned catalog supports the creative image of J.Crew and its new posture as a leading fashion icon. And it gives Jenna Lyons the chance to tell the story of the last 10 years in very simple and direct terms—when in truth the move toward an all-out emphasis on creativity and design excellence required a huge change in the way the company operated. But, as we noted, it's paying off big time.



Managing
Innovation

Creativity and innovation are essential to meeting the challenges of a rapidly changing and global corporate environment. Recall that in the 2010 IBM Global CEO Study, creativity was identified as the single most important attribute of future leaders. Creativity suggests innovation and originality—the ability to see old problems in novel ways and to devise new ways of thinking, analyzing, and doing. How do we tap creativity and make organizations more innovative?

One of the first steps in becoming more innovative is to challenge ourselves to think differently about what creativity means to us and our organizations. According to the conventional wisdom, organizations are focused on achieving efficiency, management control, predictability, and rules. In contrast, creative and innovative organizations are fluid, embrace uncertainty, and thrive on the freedom to think and act outside of normal procedures. Contrary to a management philosophy based on avoiding errors, innovation requires both risk taking and failure. On a personal level, we may initially think of “creative types” as different from us: eccentric, unpredictable, and even a little strange. But increasingly we have come to realize that each of us has a role to play in making our organizations creative, innovative, and responsive.

Creativity and innovation are essential to sustained business success. They are what helps organizations keep up with changing markets, enhance customer satisfaction, improve the quality of products and services, take advantage of new technologies, and increase profitability. Further, creativity is not just the responsibility of the traditional research and development department or the stereotypical “creative types.” According to Apple CEO Tim Cook, “Everybody in our company is responsible to be innovative, whether they're doing operational work or product work or customer service work.”



Creativity and
Innovation

Creativity: the generation of new and useful ideas

Innovation: the successful implementation of creative ideas

The Importance of Creativity and Innovation

Creativity and innovation are not necessarily the same thing, but one isn't very useful without the other. While the terms are often used interchangeably, **creativity** is the generation of new and useful ideas, while **innovation** is the successful implementation of

SELF-ASSESSMENT 7.1

HOW CREATIVE ARE YOU?

Rate yourself on the following dimensions of creativity:

	Not skilled at all	A little skilled	Somewhat Skilled	Very Skilled
1. Perceiving problems	1	2	3	4
2. Thinking intuitively	1	2	3	4
3. Developing lots of ideas	1	2	3	4
4. Being imaginative	1	2	3	4
5. Visualizing my thoughts	1	2	3	4
6. Creating new combinations of ideas	1	2	3	4
7. Communicating ideas	1	2	3	4
8. Reconceptualizing problems	1	2	3	4
9. Relaxing and allowing my mind to wander	1	2	3	4
10. Discovering new ways of doing things	1	2	3	4
11. Seeing things from multiple perspectives	1	2	3	4

Based on this inventory, think about the following questions:

1. In what ways are you creative?
2. What limits your creativity?
3. What do you do to stimulate and support creativity in others?

those ideas.³ In order to be successful, organizations need both creativity and the ability to innovate based on that creativity. Creativity, by itself, does not directly improve performance. A company's ability to take action or innovate based on that creativity is the key to success.⁴

Interestingly, the people who are best at producing new ideas may not be the same people who are best at putting those ideas into practice. For the purposes of this chapter, we will treat creativity as the beginning of the process and innovation as the next step. We will begin by exploring creativity, how it works and how to enhance it. We will then explore how to build organizations that are innovative: resilient, adaptive, and responsive to changing markets, technologies, and other environmental factors.

First, however, we should ask some fundamental questions. What are the consequences of creativity for organizations? Why should organizations strive to be innovative? Creativity is directly and positively linked to organizational effectiveness and to improvements in quality and productivity. It increases the quality of solutions to organizational problems, helps to stimulate innovation, revitalizes motivation, and promotes team performance.⁵ Creativity helps organizations respond to challenges, demands, and opportunities for change.

In addition to driving innovation, there are other benefits to creativity as well. Employees and potential employees strongly value the chance to use their creativity. For example, in a poll conducted by Louis Harris and Associates of the class of 2001, the top-ranked qualities desired in a job were committed coworkers, creativity, responsibility, and the ability to work independently.⁶ Managers who are creative and have opportunities to use their creativity on the job are less likely to want to leave their organizations.⁷ Innovation and creativity can also reduce workplace stress. Helping people to become more innovative and creative “not only makes the work environment less stressful but also leads to the introduction of procedures which enhance productivity and quality of work.”⁸

In short, creativity allows organizations to be responsive and to develop new and better ways of serving customers and using resources wisely. The opportunity to be creative helps to motivate people, keeps them interested in and committed to their work, and reduces stress. Creativity is not just something for “creative types” or a matter of a “flight of fancy” if people happen to have some extra time. It is a critical component of managing organizational behavior and business success and everyone can play a role, even if it is just to stay out of the way!



End of Creativity?

What Is Creativity?

There is no single, commonly accepted definition of creativity. Creativity has been described as “any form of action that leads to results that are novel, useful, and predictable”;⁹ as “seeing things that everyone around us sees while making connections that no one else has made”;¹⁰ as “a process or change from what is and has been to what might be”;¹¹ and as “the entire process by which ideas are generated, developed, and transformed into value.”¹² What is particularly important to note is that creativity is not about doing random things, creativity is measured by how well it solves a problem or accomplishes a goal. Creativity occurs when something actually works, is useful, and accomplishes some purpose. In the arts, the purpose of creativity might be to achieve a particular aesthetic, provoke an emotion, or to make a statement. In business, the purpose can be to make a product more attractive, make a system more responsive, or to make a process more efficient and effective.

Views of Creativity

Definitions and interpretations of creativity differ, in part, because they emphasize different aspects of creativity in different settings. As shown in Table 7.1, these varying perspectives can be grouped according to whether they focus on the personal characteristics or attributes of individuals, the possession of a group of conceptual abilities, the demonstration of particular behaviors, or creativity as an integrated process.¹³ Each of these perspectives provides insights and has practical implications for how we view creativity in ourselves and others.



How Creativity Works

TABLE 7.1 ALTERNATIVE VIEWS OF CREATIVITY

Perspective on Creativity	Main Points	Practical Implications
Creativity as a trait	People have innate characteristics that predispose them to be creative.	Some people have traits that make them naturally creative; such people probably will be creative wherever they are situated.
Creativity as cognitive skills and abilities	Creativity is based on conceptual skills and abilities such as divergent and abstract thinking.	Creativity can be enhanced by learning and improving certain cognitive skills.
Creativity as behavior	Creativity is whatever results in the formation of new ideas or solutions that are useful.	The value of the creativity lies in what useful outcomes are produced.
Creativity as a process	Creativity is a process of generating and testing ideas.	The creative process may or may not yield a new product or process; individuals can play different roles in the process.
Integrated views of creativity	Creativity is a function of the interaction among the person, the environment, and the task.	Some types of tasks and organizational environments can be more or less conducive to creativity.

Characteristics of Creative Individuals

The traditional way to look at creativity is in terms of the traits, attributes, or characteristics that predispose a person to be considered “creative.” While this way of thinking about creativity may be somewhat outdated, it still may teach us something useful about what it means to be creative. The trait perspective assumes that personal characteristics are more important than the nature of the organizational environment in which the person works. In other words, it suggests that creative people have particular traits that will probably make them creative wherever they are situated. For example, creativity has been described as synonymous with originality. In fact, people who demonstrate originality have been found to be more intelligent and to have a preference for complexity—traits that also are associated with creativity.¹⁴

This trait approach to creativity also looks at the personalities of creative people. Figure 7.1 presents the various adjectives and personality traits that have been associated with creative people. Some of the adjectives used that were negatively associated with creativity were *affected*, *commonplace*, *conventional*, *submissive*, and *suspicious*. Those who see creativity as residing in the personal characteristics of the individual would not deny that we all have some creative potential. Rather, it suggests that some of us simply have greater innate creative potential, in the same way as we all can learn to express ourselves artistically, even though only some of us will become artists. But there are limits to this approach. As with trait theories of leadership (which we examine later), trait theories of creativity give us only part of the picture. Creativity involves more than simply the presence of certain traits; it also involves certain skills, motivations, behaviors, and environmental factors.

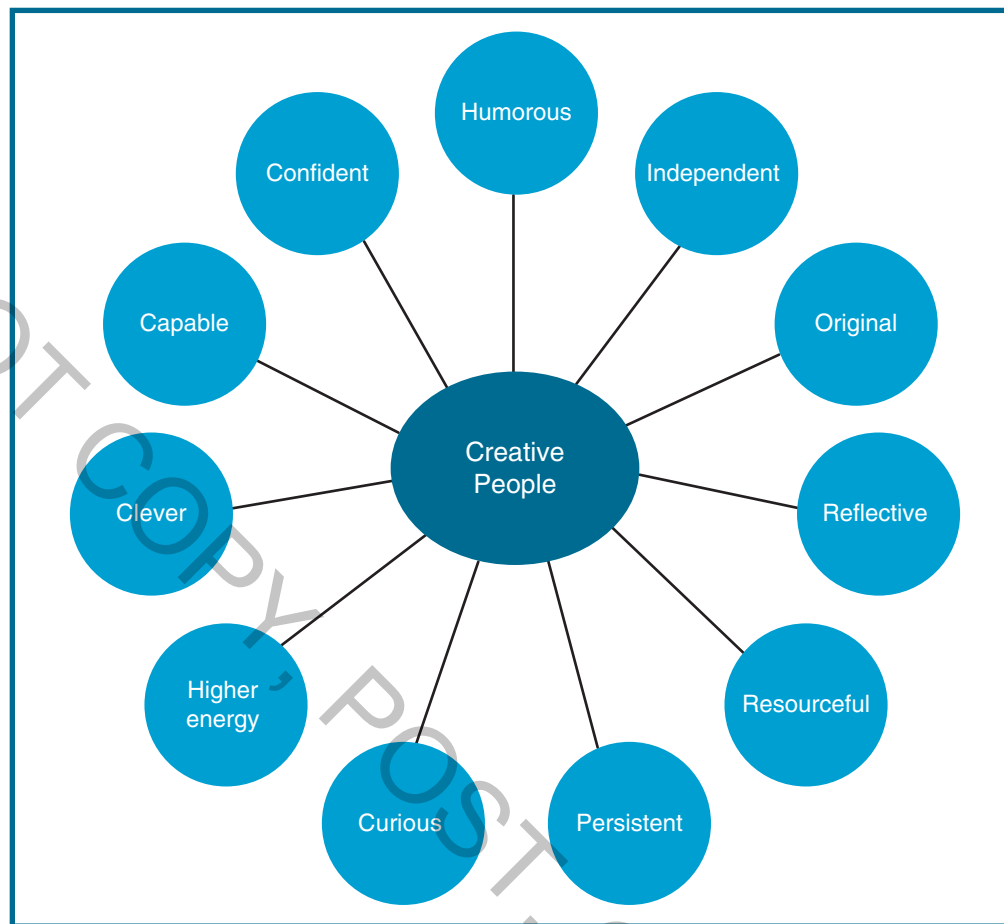


Creativity and Innovation in the 21st Century



The Creative Personality

FIGURE 7.1 CHARACTERISTICS OF CREATIVE PEOPLE



Conceptual Skills and Abilities

Creativity also involves the use of a particular set of conceptual skills and abilities. This perspective differs from trait approaches in that it focuses more on cognition than on personality characteristics. For example, creativity is based on the ability to think on more than one plane or more than one level at a time.¹⁵ “The more adept a person is at rising from lower applied areas to higher intellectual and imaginative planes, the more creative such a fortunate individual is likely to become.”¹⁶ Creative people possess cognitive skills in divergent thinking and ideational fluency (the ability to generate alternatives or a stream of ideas), linguistic ability, and a strong ability to find associations between things or ideas.¹⁷

Although there is a degree of overlap between views of creativity that rely on personal characteristics and those that emphasize conceptual and cognitive skills, there is an important distinction. Skills can be learned, whereas characteristics cannot. While we may have differing innate abilities, we all can learn to be more creative by expanding and enhancing our conceptual and cognitive abilities.

Creativity as Behavior

The behavioral view of creativity focuses on actions and activities that result in the development of something new. From this perspective, creativity is something a person does rather than who and what the person is. What is important is that behavior is judged to be creative based on the extent that it solves a problem or addresses a need. “The ideas must be novel—different from what’s been done before—but they can’t be simply bizarre; they must be appropriate to the problem or opportunity presented.”¹⁸ Again, the emphasis is on the behavior, not on the innate characteristics or cognitions of the individual.

This view of creativity focuses on the outward behavioral manifestations of creativity and places them in context. Importantly, this view of creativity adds the element of usefulness, thereby distinguishing creativity from simply bizarre, erratic, or unusual behavior. Accordingly, creativity not only brings forward new ideas; it is a process that results in actions or behaviors that are functional and useful in a given situation. In that sense, it is not nonconformity for its own sake but rather nonconformity with a purpose.

Creativity as a Process

Creativity also can be seen as a process. In this view, creativity is a highly complex phenomenon involving multiple phases and stages. Creativity is a process of sensing problems, making guesses, formulating hypotheses, and communicating ideas.¹⁹ Creativity involves the engagement of a person in a process where the person “behaviorally, cognitively, and emotionally attempts to produce creative outcomes.”²⁰ The emphasis here is on the process rather than on the outcome, the result. This involves both the generation of ideas and the testing of ideas. This perspective on creativity is useful for thinking about the stages in the creative process and about the roles that different individuals might play in each of these stages.

An Integrated Perspective on Creativity

Perhaps creativity can best be viewed as encompassing all of these views. This view would require that we think of creativity in a way that takes into account expertise in a particular domain, creative thinking ability, and the intrinsic motivation of the individual in a particular work or social environment.²¹ It takes creative and innovative individuals and groups, supported by a conducive organizational culture and environment to achieve creative outcomes.²² Taken together, then, creativity can be viewed as the development of a valuable and useful new product, service, process, or procedure by people working together in a complex social system.

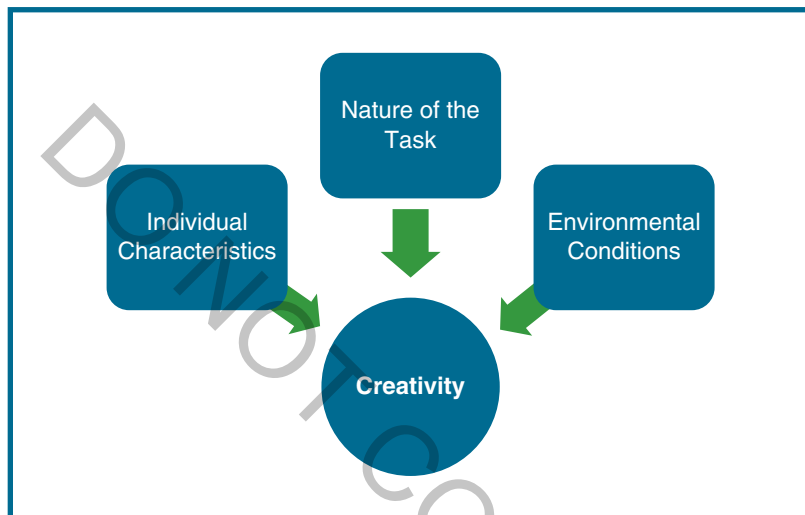
This integrated perspective is illustrated in Figure 7.2, which indicates the mutual influence of personal factors, environmental characteristics, and the nature of the task. This perspective emphasizes the intrinsic motivation of an individual in a particular context, shifting the focus from what levels and types of creativity people are capable of to what they are willing to do. That is, people are most likely to be creative when they love what they do and do what they love.²³ Intrinsic motivation is included as part of an integrated perspective because it involves not only the personal interests and personalities of individuals but also how interesting the problems or tasks are.

This integrated approach is a useful one for leaders and managers in today’s increasingly complex and global environment. It recognizes that we all are potentially creative, although some of us might be more naturally suited to some parts of the creative



Creative People
Must Be Stopped

FIGURE 7.2 INTEGRATED VIEW OF CREATIVITY

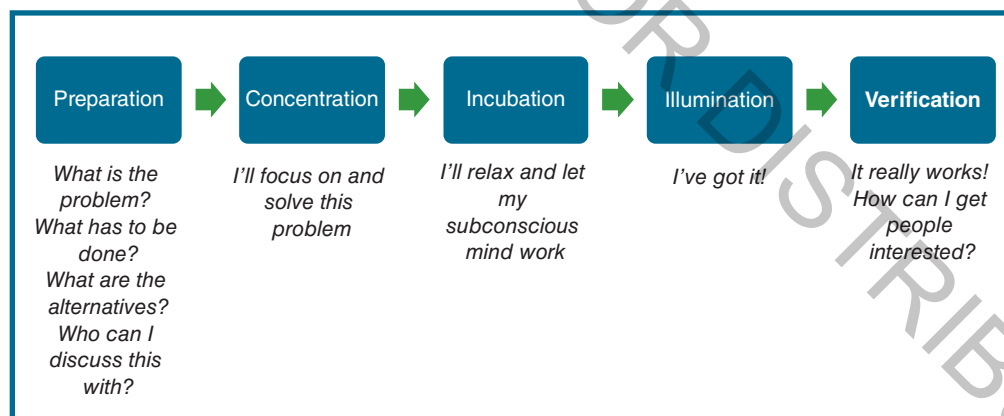


process than others. It suggests that we can learn skills that will enhance our own creativity and that we can support creativity in others. It recognizes that creativity takes place in context and that creativity must be useful and appropriate to the setting or problem at hand. It leads us to think about ways in which the organizational environment may enhance or impede the development of creative ideas and solutions to problems. Finally, it suggests that creativity is an important component of a larger process of change and innovation (a subject that is dealt with in more depth in Chapter 15). Finally, because we all have the capacity to be creative, in a sense, we are all “the creative type.”²⁴

The Creative Process

Creativity is more than a flash of insight. Instead, creativity can be thought of as a process with five identifiable steps or stages: (1) preparation, (2) concentration, (3) incubation, (4) illumination, and (5) verification.²⁵ These stages are illustrated in Figure 7.3.

FIGURE 7.3 STEPS IN THE CREATIVE PROCESS



1. *Preparation* is the first step in the creative process. In the preparation stage, all parts of the problem are thoroughly investigated. This includes consciously gathering and examining information, defining the problem, and generating alternative ideas for addressing the problem. Of particular importance is figuring out what the right questions are. “Questions are places in your mind where answers fit” (Christensen, <http://www.inc.com/magazine/201210/jason-fried/a-conversation-with-innovation-guru-clayton-christensen.html>). In the preparation stage, a person not only searches

for facts but also searches for ideas and alternative perspectives. Preparation is a conscious mental activity. Therefore, most efforts at enhancing creativity are focused on this stage of the creative process.

2. In the *concentration* stage, the energy and resources of the person (or of the organization) are focused on solving the problem. The individual, in essence, concentrates his or her efforts on the problem or situation. There is a choice to engage with the process and a commitment to find a solution. This stage is not so much a matter of mental activity as it is a matter of choice.
3. The *incubation* stage is a largely unconscious phase of the creative process. It is, in essence, the “black box” of creativity. There is an internalization and subconscious ordering and reordering of information gathered in the preparation stage. The person cannot force this process; the best that the individual can do is attempt to relax and allow the subconscious to work and ideas to surface. This may involve the combination of previously unrelated thoughts and a subconscious struggle between what is and what might be. Conscious thought and effort probably interfere, rather than help, in this stage. In fact, research has demonstrated that psychological distance leads to clearer and more integrated thought and judgment.²⁶
4. *Illumination* is the “Eureka!” of the creative process. This is the moment of insight or discovery when the answer simply seems to arrive in the person’s conscious mind from his or her subconscious mind. It has been called an epiphany, a revelation, or a brainstorm—a sudden realization of something new or novel. But when viewed as part of the creative process, such insights actually occur after the individual has gathered information and gone through a period of subconscious mental activity during which the brain has “worked on” the problem.
5. The final stage of the creative process is *verification*. This involves testing and verifying the idea or insight as viable. In other words, the creative solution is evaluated against some standard of appropriateness or acceptability, and the creator seeks corroboration and acceptance of the idea.

In addition to these identifiable stages, Foster²⁷ provided a useful summary of the characteristics of the creative process, including the following:

- Long rather than short in duration
- Ambiguous rather than certain and concrete
- Information rich rather than based on “existing” information
- Involving multiple mental models rather than a particular point of view
- Oriented to defining problems rather than finding short-term fixes
- A continuing process rather than a one-time event

The creative process may unfold in a much less linear, orderly fashion than we might expect or prefer.



In the preparation phase of creativity, the individual is focused on gathering information, defining the problem, and generating alternative ideas.



Based on what has been called “chaordic systems thinking” (CST), we can see the creative process as marked by the coexistence of both chaos and order.²⁸ Put simply, the process may look chaotic because it is so dynamic and complex, but there are actual patterns and order in the process that can be recognized. Rather than being fearful of or distrusting the chaos and uncertainty, this perspective suggests that we recognize that creativity and new ways of thinking are often found at the edge of chaos.²⁹ Efforts to force order and control into a process that is, by its nature, a bit messy can be counterproductive.

It is useful to remember the following:

- Recognition of the steps in and characteristics of the creative process is important from several perspectives. First, creativity does not just “happen.” It is a process that can be observed, nurtured, and supported over time. It is a process that requires an investment in time, a search for information, a commitment to openness, and a tolerance for uncertainty and ambiguity.
- Second, we do not all have to be highly skilled at all stages of the creative process; some of us might be better at generating ideas, others might be skilled at synthesizing concepts, some might be good information gatherers, and still others might be excellent “validators” of others’ insights. Thus, we can play different roles in the creative process—an idea that is elaborated in the sections that follow.
- Third, not all of the stages of the creative process are amenable to conscious mental effort. As a result, most techniques and training to improve creativity focus on the preparation stage when conscious mental activity is dominant. Such techniques and training activities, which have been shown to be highly effective, are described in later sections of this chapter.
- Finally, being creative requires not only tolerating uncertainty and unpredictability, but embracing the idea that creativity can be to some extent **chaordic**—chaotic and orderly at the same time.

Chaordic: chaotic and orderly at the same time

Roles in the Creative Process

All phases of creativity ultimately stem from the work and insights of individuals. But there are different types of individuals. Similarly, different individuals are more or less adept at playing varying roles in the creativity and innovation process. While he uses the term “innovation” differently than we have here, Kirton’s Adaptation/Innovation Inventory³⁰ helps us to understand where different individuals might fall on the creativity spectrum. Kirton described *adaptors* as the type of people who try to find better ways of doing their work. These are the people who make improvements in existing practices, devise ways of cutting costs, and develop approaches to modify programs so as to better meet the needs of customers. Goldsmith³¹ found that adaptors prefer short-term efficiency, seek consensus, and value conformity to rules and group norms. *Innovators*, on the other hand, are the



According to Apple CEO Tim Cook, “Everybody in our company is responsible to be innovative, whether they’re doing operational work or product work or customer service work.”

dreamers and big thinkers. They have an ability to take two previously unrelated ideas of things and combine them in a new way. Innovators seek change-oriented solutions, look for new paradigms, are less tolerant of rules, and prefer big changes over small ones. In simple terms, adaptors do things better and innovators do things differently.

Obviously, organizations need multiple types of creativity and people who fall on both ends of Kirton's adaptor/innovator scale.³² The key is to find a balance. Too much innovation can result in organizations being in constant flux, thereby failing to secure and perfect improvements before changing to something else. The goal may be creativity, but too much innovation can lead to chaos. On the other hand, if creative efforts are limited to making only small improvements and changes to the status quo (as preferred by adaptors), then organizations might stagnate. Sometimes incremental improvements simply are not enough; in all organizations, there are times when quantum change is needed. According to Kirton, when innovators and adaptors collaborate, adaptors provide stability, order, and continuity; are sensitive to people; help to maintain cooperation; and provide a safe foundation for the innovators' riskier ideas. Innovators, on the other hand, bring to such collaborations the task orientation and dynamics needed to bring about change.

Social and Structural Factors

Creativity is related to the social connections within and outside the organization. "Communication with others in the domain should enhance one's understanding of the area and facilitate the generation of approaches that are feasible and appropriate, but also unique."³³ When individuals connect with other people, they exchange information and ideas, increasing the likelihood that new approaches and solutions will be created.

The degree of creativity these social connections foster will depend on the "strength and the position" of the relationship. Under some circumstances, weak ties can actually facilitate creativity more than strong ties. When the relationship is strong, the "parties truly like each other and are concerned about one another, see each other relatively frequently, and have similar perspectives and outlooks on the importance of their relationship."³⁴ Since the parties involved in a close relationship often share very similar points of view, they may be less likely to challenge ideas. Weak ties, on the other hand, may give individuals more information and "the exposure to different approaches and perspectives."³⁵

There is a limit, however, to how many of these social connections a person can effectively and productively handle. When an individual has too many weak ties, he or she may spend too much time exchanging and processing information. This can result in higher levels of stress and conflict rather than in higher levels of creativity. Weak relationships may foster creativity up to a point, beyond which the number of ties may even constrain creativity at work. The people who have the greatest potential for creativity are those who occupy what the authors call "peripheral network positions." People in these positions have enough connections within the organizations to stay informed and gain organizational knowledge, but their outside connections give them the opportunity to hear something new.

Impediments to Creativity

There are a number of common impediments or barriers to creativity.³⁶ Removing these barriers can be the first step in fostering creativity in ourselves and others. Figure 7.4 summarizes the impediments to creativity.



Boost U.S.
Economy



Conform and
Inspire Creativity

FIGURE 7.4 IMPEDIMENTS TO CREATIVITY

Impediments to Creativity				
Incorrect problem definition	Judging too quickly	Stopping at first idea	Lack of support	Hostility to sharing knowledge

Defining the Problem Incorrectly

If the problem is defined incorrectly, incompletely, or inappropriately, then creative approaches to solving it will be misplaced. One of the ways in which this can occur is when individuals engage in what is called **vertical thinking**.³⁷ Vertical thinking occurs when a problem is defined in a single way and there are no deviations or alternative definitions considered until the solution is reached. For example, an organizational problem might be defined as one of excessive costs in a particular service unit. If there are no challenges to this definition of the problem, then people will logically pursue cost-cutting efforts such as reducing hours of service, laying off staff, decreasing the variety of services, and postponing purchases of equipment and supplies. But such approaches might make the problem worse if it is later discovered that the real problem was failure to understand and respond to changes to increasing customer needs.

Judging Ideas Too Quickly

People often reject ideas that are inconsistent with their current thinking. We all have heard people defend current practices by saying, for example, “We’ve always done it that way.” Although constancy and consistency might be a human need and a virtue in certain circumstances, blind adherence to the status quo in organizations is not. As Allison argued in his analysis of the Cuban missile crisis,³⁸ sometimes organizations (and the people in them) try to fit problems into particular organizational routines, whether or not the situation really calls for a novel response.

Stopping at the First Acceptable Idea

Because people often are under pressure to come up with solutions to problems, sometimes the response is to accept the first good idea that comes along. Time pressures, different problems competing for our attention, or simply lack of recognition that other ideas might be better can lead us to choose alternatives too quickly. Obviously, this can result in forgoing what might have been a later—but better—idea.

Lack of Support

Creative ideas can wither on the vine. If someone comes up with an interesting and original idea but no one listens or considers it, then the idea probably will not go anywhere. We might learn over time that curiosity and questioning are not welcome in our work environment. Sometimes we are not creative because it takes a great deal of mental energy, and the demands of our daily jobs simply consume all of our reserves. Moreover, thinking does not *look* like working.

Vertical thinking: when a problem is defined in a single way until the solution is reached

What Would You Do?

► You have just become the creative director of a major fashion magazine, meaning you supervise artists, designers, writers, and other creative types. You are thinking that your previous management style, which was pretty directive, won’t work here. What would you do?

We might be concerned with appearing busy and engaged with our work and, as a result, become mentally and creatively lazy. The truth is that it often is easier and less demanding to keep doing things in the way we always have.

Hostility to Sharing Knowledge

In some organizations, there is not only a lack of support, but also an outright hostility to creativity and the sharing of ideas. This may take the form of supervisors insisting the workers do not deviate from standard procedures, to not “waste time” by talking among themselves, or routinely tell employees that “we don’t have time to experiment” or “we tried that once and it didn’t work.” In such cases, “it is unrealistic to expect or assume that individuals are basically willing to share knowledge even when incentives are introduced.”³⁹ For example, if there is an organizational norm that employees should not know more than their managers, it is unreasonable to expect any initiative from the lower levels. If managers believe that they are solely responsible for innovation, “competition” from someone who is at a lower level in the organizational hierarchy may be unwelcome. Creativity is also thwarted in organizations where mistakes are taboo. When mistakes are punished, employees will avoid risk and are often scared to admit when they make a mistake. There is also what is called the “NIH syndrome” (Not-Invented-Here Syndrome) where ideas from outside the organization are considered less valuable than ideas that come from the inside. This obviously limits a potentially important source of information and inspiration for creativity.⁴⁰

The truth is that it is relatively easy to kill creativity. First, there are structural, psychological, and behavioral barriers to creativity found in all formal organizations. Traditional organizations, after all, are designed for predictability and control, not creativity. Second, however, you can make it worse by simply dragging your feet, failing to act on other’s ideas, postponing action, calling for endless analysis, over-estimating costs and risks, and sticking to the way it has always been done before. Achieving creativity and innovation, on the other hand, requires conscious, strategic, and determined effort. Fortunately, based on the experience of innovative and creative companies, we have learned a great deal about how to be successful in doing so.

Fostering Creativity in Organizations

Successful companies recognize that if people choose to exercise their creative abilities, then they have to be motivated to do so, and that this motivation comes from within the person and through collaboration, not from incentive programs or competitions. Extrinsic motivations (those coming from outside a person), like money, are much less effective: “Money doesn’t necessarily stop people from being creative, but in many situations, it doesn’t help.”⁴¹ Instead, not interfering, and trying to build on people’s natural interests and passions, most effectively fosters creativity.⁴²

The motivation to be creative resides largely within individuals, but their social environment also influences creativity. A positive climate can create an atmosphere in which creativity and innovation flourish, whereas a negative one can squash such efforts. In other words, it is important to both unleash the creative talents of people as well as create an environment which does not inhibit, punish, or discourage creative thinking. Organizations also need the capacity to adapt and use innovations developed elsewhere.⁴³ Innovation requires resources and time, and organizations do not possess limitless amounts of either. It makes good sense to both encourage internal innovations and take advantage of ideas that come from outside.



Organizational
Cultures Influence



CREATIVITY AND CHANGE

IMPLEMENTING INNOVATIVE IDEAS: SOL AND ROBERT PRICE

Sol Price created the concept of low-cost, broad service retailing, starting with FedMart and Price Club and evolving into Costco. In this he was an industry leader and fostered innovations that influenced many others. For example, Sam Walton, who started Walmart admitted he had “borrowed” many of Price’s innovations. But Price was not only a business innovator; he was also interested in addressing significant social problems. Through his charitable foundations, for example, he spearheaded the development of City Heights, an economically distressed area of San Diego, leading to new school programs in the area and the building of a new library and police station. In his forward to Sol’s son Robert’s book about his father, Jim Sinegal, a friend of the Prices’ and cofounder of Costco Wholesale, wrote that Sol’s “lessons and philosophy—that business is about more than making money and that the company also has an obligation to serve society—are still valuable reminders for many of us in business today. The fact that he instilled these concepts in so many who were around him is, in my mind, his greatest legacy.”

Those that followed Sol Price’s career recognize that he was much better at conceiving of new businesses as opposed to operating those businesses. For that, his son Robert entered the scene, recognizing the importance of disciplined operations. Robert assumed his larger role in the company at the time the transition was made from FedMart to Price Club, and became chief executive officer and chairman of the board. Under his leadership,



Today’s Costco stores still rely on retailing principles developed by Sol Price.

Price Club combined merchandising features with a new warehouse format and differed from its competitors because of the number of items offered for sale.

Throughout their careers, Sol Price and his son Robert Price devoted a great deal of thought, energy, and commitment to causes in which they believed. Sol believed that philanthropy was an obligation of those who had been able to accumulate wealth, that they were obligated to share their good fortune by “giving back.” Sol often said that “progressive taxes, public policies that promote fairness, and philanthropy directed to support vital not-for-profit organizations in the community are all part of recognizing the fact that financial success is a shared activity.”⁴⁴ The more pragmatic reason for philanthropy and a progressive tax system was to avoid a “have and have not” society.⁴⁵

In his book about his father, Robert writes, “Whatever I’ve learned about business I learned from my father—everything—from how to read a financial statement to management to good judgment and fair dealings. He also taught me to be humble, to appreciate the unpredictability of life, to care for people, to remain hopeful, and always to be there for people who are in need.”⁴⁶

In my interview with Robert Price, he commented on what he and his father have in common: “intellectual curiosity, a strong value system, a desire to do good whether in business for philanthropy, dissatisfaction with the conventional, mental restlessness, optimism, a concern for the underdog. I am somewhat risk-averse; a cautious temperament more like my mother, a good leader but nowhere as self-confident and capable of inspiring confidence as my father.”

1. What did your parents teach you about taking risks? About being creative? About intellectual curiosity?
2. How have you experienced the difference between creativity and implementation of creative ideas?
3. Sol Price was a creative leader with a great personal impact. Do you think that one individual can carry the creative load of a company today?

Source: Price, R. E. (2012). *Sol Price: Retail revolutionary and social innovator*. San Diego, CA: San Diego History Center. Supplemented by an interview with Robert Price by Robert Denhardt in the spring of 2013.

Creativity and innovation are also enhanced by diversity in the work environment. Multicultural experiences not only benefit individual creativity, organizational diversity also enhances creativity.⁴⁷ The link between diversity and creativity has been shown to be even stronger when organizations have high levels of involvement and engagement across cultural, racial and ethnic groups. When people of different backgrounds and experiences come together to collectively explore new and creative ideas, both the individual and the organization benefit.

What else can managers do to create a climate that encourages creativity? Two factors seem particularly important: (1) challenging work and (2) supportive supervision.

Challenging Work

As suggested previously, intrinsic task motivation is an important component of creativity. Intrinsic task motivation is driven by “deep interest and involvement in the work, by curiosity, enjoyment, or a personal sense of challenge.”⁴⁸ Intrinsic motivation is the motivation to work on something you want to—because it is exciting, satisfying, involving, challenging, and personally interesting. A key factor in this regard is choice. Research has shown that if a person chooses to do something just because he or she wants to, then that person will approach the task more creatively than if given external incentives or rewards.⁴⁹ Obviously, then, intrinsic motivation is heavily influenced by an individual’s preferences, values, interests, and attributes. But it also has to do with the nature of the task. Even the most curious, committed, and creative individual might not exhibit these talents if placed in a repetitive, rigid, and uninteresting job. Moreover, the individual probably will be miserable. With a high level of intrinsic motivation, on the other hand, the individual will be more likely to fully engage his or her expertise and creative thinking abilities. Intrinsic motivation can be so powerful that it even can make up for deficiencies in expertise, knowledge, and creative thinking skills because it drives people to look to other domains or to exert the effort to acquire those skills.⁵⁰

Job design is critical in this respect. Challenging jobs with complex tasks, high levels of autonomy, skill variety, significance, and feedback are associated with higher levels of motivation and creativity than are jobs that are simple and routine.⁵¹ When jobs are designed to be interesting and challenging, people are more likely to be excited about and willing to invest themselves in their work in the absence of external controls and constraints.⁵² It also has been found that intrinsic interest and creativity can be enhanced by designing jobs in a way that gives people choices about how to perform their job tasks.⁵³ Intrinsically creative jobs, then, are jobs in which there is a measure of worker control and freedom in deciding what work to do and how to do it.



In 2013, Forbes gave Citibank and Merck top rankings among companies in the S&P 100 as the best for women, minorities, and people with diverse sexual orientation.

What Do You Think?

- ▶ A friend argues that Microsoft is not an innovative company, because it takes creative ideas from elsewhere and then implements them. What do you think?

Supportive Supervision

How you interact with your employees can have a significant effect on their creativity at work. Supervision that is supportive of employees fosters their creative achievement, whereas supervision that is controlling usually diminishes it.⁵⁴ Research has shown that supervisors who encourage risk-taking and novel ideas help unleash creative potential.⁵⁵ Supervisors can be supportive by demonstrating concern for employees' feelings, encouraging employees to voice their concerns and needs, providing positive and information-rich feedback, and facilitating worker skill development.⁵⁶ Doing so can bolster workers' feelings of self-determination and control, which in turn can positively influence intrinsic motivation and creativity. Because offering people more choices in what they do enhances intrinsic motivation, participative decision making also is important in creating an organizational climate supportive of creativity. Workers who believe they have meaningful input into organizational decision making are more creative than those who do not.⁵⁷

Conversely, supervision that is controlling and limiting, sometimes called **micromanaging**—where employees are closely monitored, allowed few choices, denied opportunities to participate in decisions, and pressured to think, act, or behave in particular ways—can easily thwart creativity. Supervision that is overly controlling undermines intrinsic motivation and shifts workers' attention away from the job itself and toward external concerns.⁵⁸

Organizational and Work Group Culture

Organizations that are successful at developing innovative and creative approaches to business have organizational cultures in which there are fair and constructive evaluation of ideas, reward and recognition for creativity, mechanisms for developing new ideas, and a shared vision.⁵⁹ An organization with a climate or culture that supports and enhances creativity might express these values in a number of ways. In addition to supervisory attitudes and practices discussed in the preceding subsection, organizations can cultivate these values, for example, by talking about the values of creativity, developing a shared sense of organizational vision, providing time and opportunities to develop new ideas, offering special recognition and rewards for creative solutions to problems, providing creativity training and education, and other activities and actions that reflect an attitude or mind-set that is receptive to creative efforts. The climate of an individual's work group also can have a positive effect. When group leadership is democratic and collaborative, the structure is flexible, and the group is composed of people with diverse backgrounds, creativity is enhanced.⁶⁰

As noted in Chapter 12, leaders play a particularly important role in shaping organizational culture. Transformational leadership, in particular, has been shown to be an important factor in organizational innovation. This suggests that leaders who want to foster creativity should build positive relationships with employees based on their needs, aspirations, and skills, focus on a shared vision, as well as inspire, encourage and stimulate employees to think in new ways.⁶¹

Cultural artifacts are also important in communicating and reinforcing a culture of innovation. Symbols and cultural artifacts “shape the attitudes and behavior of new as well as veteran employees.”⁶² In order to create a culture of innovation, organizations often have to modify or even create new myths and stories, language, and metaphors. Telling success



Creativity as
a System

Micromanaging:

when employees are closely monitored, allowed few choices, denied opportunities to participate in decisions, and pressured to act in particular ways



GLOBAL SOCIETY

ALESSI EMBRACES FAILURE

“Alessi is an example of an Italian design factory, meaning a small or medium-size company that specializes in one area, such as furniture, lighting, or, for Alessi, accessories. In my opinion, there is a kind of historical DNA in Italy, dating at least from the Italian Renaissance, when workshops that had these very specialized, niche production factories originated,” is how Alberto Alessi describes his family-owned company.

In 1921, Giovanni Alessi, a skilled lathe turner, established his company in a village on the foothills of the Alps in Novara, Italy. Because of his skills and creativity, it was not long before the household objects the company manufactured from fine metals, such as nickel-coated brass flask holders and cheese trays, became collectibles all over the world. His son Carlo trained as an industrial designer and moved the company to the forefront of design, not only by putting his own skills to work, but also by hiring famous freelance designers who contributed to Alessi’s reputation for unusual yet practical objects.⁶³

Alessi’s design objects are part of permanent museum collections more than any other design company. By relying on hundreds of cutting-edge designers such as Philip Starck and Michael Graves, from all over the world, the company has maintained its leading position. The current head of the company, Alberto Alessi, believes that one secret to working with a group of designers with big egos who contract with the company is keeping them

separate.⁶⁴ As the person who has final say on what the company will market, he relies on his own intuition for inspiration: “I have a good nose to smell the true spirit of our times. Intuition comes from inside, not by watching what somebody has done or established trends. I prefer to stay home and listen to people.”⁶⁵

Alessi is not a mass-production company. It’s a research lab for the applied arts where failure is celebrated. To Alberto Alessi, failure is the source of success. He values it so much that he prominently displays his company’s biggest flops in a museum and has published a book about the prototypes that never made it to market.⁶⁶ He says: “We work as close as we can to the borderline and accept the risk of failing into the other area.”⁶⁷ These failures remind Alessi that they have to stretch their limits. While Alessi is a savvy marketer and uses a special formula to decide what to market, the company considers itself to be an artistic endeavor. Alberto Alessi likens what his company and its designers do to Picasso’s creative process: “Picasso shows us a completely different approach: starting from yourself, as a creator, and using your sensibility and your intuition in order to touch other people’s hearts or sensibility or intuition. And by the way, he also built an interesting business.”⁶⁸

1. What is the key to Alessi’s success?
2. How do management practices and organizational culture encourage creativity?

stories about innovation can reinforce those cultural values and make the employees feel free to express their ideas. Value systems and behavioral norms are also powerful tools that can enhance innovation. If innovation is recognized and rewarded over time, employees can become more aware that the organization values such behavior. Physical artifacts and surroundings can be important in fostering creativity as well. The shape and the size of the office, the building itself, the amenities around the building—sport courts, parks, and so forth—not only encourage creativity but also can increase overall productivity of the organization.⁶⁹



The “Tell Your Stories Here” sitting area is one of the features that Sara Morishige Williams had installed in the new Twitter offices seen in San Francisco. Why do you think symbols and physical artifacts have an impact on organizational creativity?

What Would You Do?

► Your employees have suggested that they be given one full afternoon each week to visit art galleries, listen to concerts, read the latest novels, and otherwise stimulate their creativity. What would you do?

Workload Pressures and Resources

The effect of workload pressure on creativity is difficult to gauge. On the one hand, excessive workload demands can undermine creative efforts. On the other hand, some degree of pressure or urgency can have a positive influence, particularly when it arises out of the nature of the problem itself.⁷⁰ Similarly, some time pressure can enhance creativity, but too much can stifle it.⁷¹ Part of the issue seems to be whether the time and workload pressure is externally imposed as a form of control (in which case it would tend to hamper creativity) or the urgency and challenge come from the person’s perception of the problem or the work itself (in which case creativity can be enhanced).

The resources allocated to a project also can affect creativity. The obvious effect of extreme resource restriction is to limit what people can accomplish. In addition, however, if a business does not commit adequate resources to a particular project or task relative to others, it can also have a symbolic and psychological effect in that it may lead to the belief that the work is not valued or considered important by the organization.⁷² Of course, money is not the only resource that can be invested in creative efforts. Another way in which organizations can emphasize creativity is to provide the time needed to think about problems and to develop innovative solutions.⁷³

Positive Emotions

Emotions also play an important role in creativity. Put simply, positive emotions (such as happiness), foster creativity and creativity fosters positive emotions. “Creative activity appears to be an affectively charged event, one in which complex cognitive processes are shaped by, co-occur with, and shape emotional experience.”⁷⁴ Positive emotions can help loosen inhibitions, increase visual and spatial attention and enhance the ability to use language. Fortunately, positive affect and creativity can be mutually reinforcing. When people have opportunities to exercise creative problem solving, and have success in doing so, they can experience positive emotions, which can lead to more creativity.

There are a number of ways to enhance positive emotions at work including using humor, eliminating extreme workload pressures, making sure groups have some members with positive affect, meditation, and even providing background music.⁷⁵

Leadership style and emotional intelligence, as described in Chapter 12, also play an important role in fostering positive emotions and creativity. Leaders who demonstrate emotional intelligence are also more likely to foster creativity in their organizations.⁷⁶ Individuals with higher levels of emotional intelligence are also more likely to be creative themselves.⁷⁷



Fostering Creativity: Techniques and Tools

Creativity is not something that you are necessarily born with, it takes practice. The environment for this practice matters. Job design, supervision, organizational climate, and the allocation of adequate time and resources can have a potent and synergistic effect on individual and organizational creativity. When people have interesting and challenging jobs, when they are supervised in an open and supportive manner, and when they work in an environment that encourages and rewards creativity, they are more likely to respond with creativity and enthusiasm.⁷⁸

But it should be remembered that motivation—including the motivation to be creative—resides within the individual. Although it can be influenced, it cannot be directly controlled. In other words, despite environmental conditions designed to promote creativity, different individuals will respond in varying ways. Furthermore, we can unintentionally and unwittingly contribute to inhibiting our own creativity by blaming others or by blaming the organization for producing conditions that discourage creativity.⁷⁹ In this case, our own defense mechanisms might lead us to blame the organization for our lack of creativity, to avoid change, and to deny the importance and intrinsic value of public service work. It is important to remember that just as all of us are products of our work environments, we also contribute to shaping those environments. As we work to foster creativity in others, we also need to be self-reflective and take responsibility for the levels of enthusiasm, creativity, and energy that we invest in our work.

Creative skills can be enhanced by learning and practicing. Businesses often use creativity training to build and foster creativity approaches and skills. The following subsections offer a sampling of some of the tools used in organizations to enhance creativity.

The Idea Box or Matrix Analysis

In matrix analysis, a two-dimensional “idea box” is used to explore new ideas or alternatives.⁸⁰ There are four steps to generating an idea box:

1. specifying your purpose or what you are trying to accomplish,
2. identifying the parameters of the problem,
3. listing variations, and
4. trying different combinations.

Consider a situation in which your purpose is to more closely connect and “customize” your chain of coffee shops to the neighborhoods where they are located, but you are not sure how to do it and resource limitations are such that you will be limited in the number of approaches you can use. You could begin by asking yourself what the parameters of the problem might be. For example, perhaps you could consider methods of input, timing or frequency, subjects, and target groups as your parameters. For each of those parameters, you would develop options. Methods of input might include social media, neighborhood open houses, mailed questionnaires, or suggestion boxes. For target groups, you might think about seniors, teenagers, neighborhood groups, and businesspeople. Table 7.2 provides an example.

Using the idea box, you then would randomly combine one item from each column (e.g., an open house held semiannually on facilities for seniors, a questionnaire mailed quarterly

TABLE 7.2 EXAMPLE OF AN IDEA BOX

	Input	Timing	Subject	Target Group
1.	Social Media	Once	Events	Seniors
2.	Open Houses	Quarterly	Facilities	Teenagers
3.	Questionnaire	Semiannually	Access and hours	Neighborhood Groups
4.	Suggestion Boxes	Ongoing	Community involvement	Businesspeople

to businesspeople). The matrix, or idea box, provides a structure to combine and recombine ideas to develop new alternatives. The 4 × 4 box depicted yields 1,024 different combinations—a far greater number than you are likely to generate without the aid of such a structure. Of course, it is not necessary to consider all of these combinations. The purpose of the idea box is simply to get you to start thinking about multiple options.

Synectics

The word **synectics** means joining together different and apparently unconnected or irrelevant elements. In synectics, problems are defined by “making the strange familiar,” and ideas are sought by “making the familiar strange.”⁸¹ In the former case, the aim is to understand or define the problem using terms that are familiar to you. In the latter case, the purpose is to make the familiar strange by purposely distorting, inverting, or transposing the problem to something unfamiliar. This can “transpose both our usual ways of perceiving and our usual expectations about how we or the world will behave.”⁸² Synectics uses four types of metaphors in this process: (1) the personal analogy, (2) the direct analogy, (3) the symbolic analogy, and (4) the fantasy analogy.



Synectics

What Do You Think?

► Many organizations struggle to balance creativity and innovation with more structured ways to keep the basic functions of the organization running smoothly. Many wonder if these can be reconciled. What do you think?

In using a *personal analogy*, you actually imagine yourself as the object or problem. For example, if the purpose is to reduce the incidence of shoplifting, then you might want to imagine yourself as a shoplifter. Or if the purpose is to reduce air pollution, then you might want to imagine yourself as the air. This might sound far-fetched, but such an exercise probably will increase the number of ways that you think about the problem. Even Einstein used visual and muscular analogies in understanding mathematical constructs. The *direct analogy* is similar to the problem or issue in terms of facts, knowledge, or technology. For example, in organizational theory, we often talk about organizations functioning as organic systems, using a biological metaphor where there are inputs, a conversion process, outputs, and a feedback loop. The *symbolic analogy* uses an image or symbol to represent the problem. For example, developing a work team might be thought of as analogous to creating a collage with a common theme, or your role as a supervisor might be thought of as analogous to the role of a conductor, a coach, a gardener, a teacher, or a tugboat. Finally, in a *fantasy analogy*, you might ask yourself, “What is my wildest fantasy about how to make this work?” The purpose is to imagine the best of all possible worlds or outcomes. This frees you to think about problems without becoming prematurely limited by present constraints and limitations.

Playing with analogies as a means to making the familiar strange and the strange familiar can lead us to think about problems and solutions in new ways. By thinking about the

Synectics: joining together different and apparently unconnected or irrelevant elements

problem in the form of an analogy, new insights about the nature of the problem and possible solutions can emerge. For example, imagine that the problem is a work group with low levels of creativity and innovation. You might ask yourself what this problem reminds you of or how it makes you feel:

Is it like working underwater? If so, then how can you create bubbles that will allow ideas to float to the surface? Ensure that people have flippers and oxygen tanks? Build islands of dry land? Drain the pool?

Is it like trying to open a rusted lid on a jar? If so, then how can you loosen the lid? Remove the rust? Prevent rust? Break the jar?

Does it look like a bleak winter landscape? How can you add color? Change the season? Get yourself out of hibernation?

Mindmapping

Mindmapping is a technique designed to help us think visually and spatially about issues and problems. Mindmapping uses pictures and images to define a vision, a problem, or a situation. It can be a simple representation intended to be used as a memory trigger or as a detailed representation of a situation, process, or “territory.” A mindmap should begin with a central image in the middle of the page. Then colors, pictures, and symbols should be used to map the situation, using only one key word per image. All lines branch from the central image. Mindmapping can be done individually or in a group. One possibility is to draw individual maps and then pair people off to explain their maps to each other and create a shared map. The map can be a depiction of a process, a goal, an interaction, or the multiple facets of a complex problem. The following questions can help to get the process going:⁸³

- How can we visually describe our goals?
- What metaphors might describe how we work together?
- How would we like to see ourselves?
- What is the environment we are trying to create?
- What are some of the possible scenes from our future?

Mindmapping can be a highly useful tool for organizing information, generating and communicating ideas, and creating a framework for solving problems. There are a number of variations, such as a tree and a fish bone map. Using a tree, some dominant idea or problem is linked to a set of its components or branches. In fish boning (a technique popular in Japan), problems are diagrammed in terms of cause and effect. The head of the fish is the problem, and the fish bones are labeled as the various causes of the problem. Whatever type of picture or representation is used, a map does not need to stand alone. It can be used as a supplement to other forms of idea generation, communication, and presentation. Several web-based or standalone programs are available to help with mind mapping. For example, see Visual Root (<http://www.visualroot.com/roots.php>) or Free Mind (http://freemind.sourceforge.net/wiki/index.php/Main_Page).

Design Thinking

Design thinking is an approach to using creativity to solve problems that incorporates graphic and industrial designers’ original methods to “engage people, communicate information,



Unleash Your
Creativity

Mindmapping: a specific technique to aid visually and spatially thinking about issues and problems

Design thinking: an approach to creativity that incorporates graphic and industrial design methods which involves brainstorming and rapid prototyping to test ideas



generate ideas, or inquire into a design problem.”⁸⁴ This process, based on the process used in the physical design of objects (e.g., chairs, computers, and bicycles), is being applied to organizational problems as well. It offers a way to approach issues and problems that is directed at “inventing” ways of doing things that make sense to the humans who use them in a particular context. Some see design thinking as a complement to scientific thinking. In scientific thinking, the scientist analyzes facts to find patterns and insights. In design thinking, the designer “invents new patterns and concepts to address facts and possibilities.”⁸⁵ Others see design thinking as a combination of analytical and intuitive thinking.⁸⁶ Miller suggested that even organizations deeply ingrained in traditional analysis can develop and use innovative and intuitive skills by focusing less on what has been reliable in the past, and focus more on what will be valid in the future.⁸⁷ The goal is to create “useful, usable, and desirable” outcomes for the people who will use or benefit from the design.⁸⁸ Accordingly, the process actively engages the people who will ultimately use the design at all stages of the design process.⁸⁹

Framing questions in a positive light, using “how might we” instead of “can we,” can be an effective strategy for generating new ideas.

The process can be taught to nondesigners using relatively simple, hands-on workshops. For example, a team from the School of Design at Carnegie

Mellon University worked with the United States Postal Service as part of a project to transform its cumbersome and difficult to use *Domestic Mail Manual* into a highly usable and useful guide. The process of design thinking was introduced to the Postal Service using an exercise in organizing objects. In one of the first meetings, each of three teams were given a pile of random “stuff” and told they had 15 minutes to organize it. The three teams used very different approaches—one team created a sculpture, one sorted according to the potential use of the objects, and another categorized the objects by the material they were made from. The various approaches were used as the basis for a dialogue about the human experience of organizing and design. Over the course of the project, research was conducted on each of four customer groups—(1) household mailers, (2) small business mailers, (3) large and online businesses, and (4) specialty or “exceptional” mailers—to create focused, easy-to-use guides for each group.⁹⁰

Design companies, like Continuum and IDEO, use two methods that are highly adaptable to most business environments. The first is that ideas are generated using the “how might we?” approach. This wording is surprisingly effective in generating ideas because positive framing helps avoid the “we can’t do that because” response. Instead, it asks us to think through possibilities in relation to our objectives rather than barriers to implementation. They also use a method called “rapid prototyping.” In rapid prototyping, ideas are tested using simple, quick, and inexpensive mock-ups of new products, services, or processes. The goal is to find and correct design flaws early in the process, long before there is any commitment to a particular approach. These mockups may take the form of a skit; a physical model built from string, duct tape, and clothespins; or a picture board.



Design Thinking:
Empathy and
Collaboration



Innovation
Through Design
Thinking

Enhancing Your Personal Creativity

In our efforts to create a positive climate for others to be creative, it also is important to think about how to support our own creativity. Fortunately, there are a number of ways for individuals to improve their own creative process. Many are analogous to the types of things that help to foster creativity in others, but it also is worthwhile to think about them as things that we can do for ourselves.



Personal Creativity

- *Be aware.* To be creative, it often is necessary to have an understanding of the current situation. What are the facts? What information is available? By immersing ourselves in a particular subject, we ground our creativity in reality. After all, as noted earlier, creativity is the development of novel and useful ideas. How can we know what is novel or useful if we do not know how things work at present?
- *Be persistent in your vision and values.* Applying consistent energy in a particular direction increases the probability of realizing your goals. A vision, or purpose or goal, guides our efforts and motivates us to be persistent. Creativity is, at its core, a personal enterprise in that it brings forth something that you, as an individual, value. Maintaining a vision requires self-reflection, the creation of a clear idea or picture of what you want to accomplish, and a conscious investment of energy.
- *Consider all of your alternatives.* Dream up as many ideas as you can. Do not rush to find a solution. Avoid mental idea killers such as when we say to ourselves, “Oh, that will never work,” “That’s dumb,” or “We already tried that and it didn’t work.” Keep your evaluation of alternatives separate from your development of ideas and alternatives.
- *Entertain your intuition.* Allow your intuition to give the answers that you are seeking. Relax and allow your mind to work. Creativity involves hard work, but the importance of the intuitive part of the creative process cannot be overlooked. Your intuitive self compiles information and creates new images and symbols that can lead to new inspirations.
- *Assess your alternatives.* In evaluating your alternatives, two factors are critical. First, be open to the best solution. Let go of your ego, hidden agendas, desire for a convenient solution, and even self-interest in considering what the best solution might be. Second, use not only your analytical abilities but also your intuition (or “gut feelings”) in evaluating alternatives. Are you excited about the idea? Does it feel right?
- *Be realistic in your actions.* If your creation is to be realized, then it usually requires you to take action. Even the greatest idea will be unlikely to go anywhere unless someone sells it, works out the details, and implements it. Even Einstein had to defend his data and ideas. New ideas have to be supported within formation and then effectively communicated to others.
- *Evaluate your results.* Many of us want external praise and rewards for our creative efforts. It also is important to set up constructive feedback for yourself. For most of us, the creative process needs a point of completion when we acknowledge what we have accomplished and the results we have achieved. Even if things do not turn out as we hoped they might, self-reflection allows us to evaluate the parts of the process that did and did not work well.⁹¹



Can You Teach Creativity?

► Summary and Applications for Managers

Everyone has creative potential. Creativity is more than simply novelty; it involves the development of new, useful, imaginative, and appropriate approaches to meeting challenges and solving problems. Because creativity is one of the greatest and most important personal and organizational resources, it should be nurtured, supported, and encouraged. There are a number of practical steps that can be taken to bolster your own creativity as well as to encourage the creativity of others in organizations. These methods are highlighted in what follows.

1. *Debunk the myths of creativity.* All people have creative potential; it is not limited to the artistic, eccentric, or unusual among us. Moreover, different people can contribute to the creative process in different ways, all of which are important and constructive for organizations and the people who work in them. Creativity involves the development of novel and *useful* or *appropriate* ideas. To be creative in organizations, we need not embrace or implement the bizarre or unusual. Rather, creativity is about using imagination to make things work better.
2. *Change your vocabulary.* Nothing squashes creativity faster than a negative response. Killer phrases such as “Yes, but . . .,” “We already tried that and it didn’t work,” and “We can’t do that” can be substituted with phrases such as “Yes, and . . .,” or “How might we . . . ?” Remember that it is important not only to use these creativity-building phrases with others but also to use them in our “self-talk.” Do not fall into the trap of being overly critical of your own ideas.
3. *Use participatory management approaches.* Using these approaches can increase intrinsic motivation and allow you to actively encourage creative thinking as part of the decision-making process. Creative collaboration is enhanced when everyone understands that a democratic process for generating ideas can lead to something unexpected and valuable. Overcontrolling supervisory approaches have been shown to hamper creativity. Open participatory approaches can encourage creativity and a willingness to try new things.
4. *Make time and information available for creative efforts.* Information fuels creativity by triggering the imagination and providing the foundations of innovation. Make sure that people have the information they need to think creatively, but also realistically, about finding new and better ways of doing their jobs and meeting organizational challenges. Individuals and groups also need time to be creative. Time pressures are undeniable and often unavoidable. But unless it is absolutely necessary, demanding that a task be done or a problem be solved immediately might cost time and money in the long run if it hampers the development of more creative and effective approaches.
5. *Analyze your organizational climate.* Ask yourself the following questions. Does your organizational climate encourage or hinder creativity? Are interactions between people characterized by trust and respect? Are new ideas welcomed and encouraged? Do people feel safe in asking questions and making suggestions? Is supervision characterized by control and micro-management or by guidance, support, and openness? Within a framework of a shared vision and organizational goals, are people encouraged to do what they love and to love what they do?
6. *Relax and let your mind work.* There is a point in the creative process when you just need to allow the mind to work, letting your subconscious make new connections and recombinations of ideas. This means that taking a short walk, doodling, or simply taking a “breather” or mental break can be important in allowing creative ideas to emerge in your mind. Laughter also can be a good way of breaking down barriers and relaxing your mind.
7. *Use techniques and tools to foster creativity.* Use techniques and tools to foster your own creativity as well as that of others. A sampling of techniques discussed earlier in this chapter included idea boxes, mindmapping, synectics, and design

thinking. These and other tools can help you and others to stimulate your creativity. A variety of training programs also are available to build creative thinking skills.

8. *Identify problems that need creative solutions.* Identify problems that need creative solutions, and challenge yourself and others to find answers. Creativity requires a willingness to look at what is and consider what might be. This willingness can be encouraged by explicitly identifying issues and problems and by asking people to contribute creative energy to addressing them.
9. *Make work interesting and do not oversupervise.* Ask yourself what you can do to make your work and your employees' work more complex, challenging, and interesting. Creativity is enhanced when people have choices in

their work and when they feel challenged to do complex and important tasks. Allowing workers to have some flexibility and discretion in how they will accomplish work tasks creates situations that invite innovation, experimentation, and creative approaches. Avoid unnecessarily controlling or overspecifying *how* someone must accomplish a particular objective.

10. *Challenge yourself and others to be creative.* Managing a successful business demands creativity. A rapidly changing, increasing global and complex business environment requires us to solve problems and meet challenges that are messy, difficult, and complicated. In the middle of everyday demands, deadlines, and routines, it is important to sometimes remind yourself and others that innovation and creativity is the lifeblood of survival.

▶ Key Terms

Chaordic 212

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Vertical thinking 214

▶ Exercise 7.1 Understanding Your Creative Style

Go back and review your answers to the questions in the Self-Assessment near the beginning of the chapter. Do you have any new ideas about what

you might do to enhance or develop your creativity? How might you help others to be more creative?

▶ Exercise 7.2 Mindmapping Exercise

Think about a goal that you have for your career or education. Spend a few minutes visualizing the goal. Then create a mindmap that represents how you see the process for achieving that goal. Be attentive to choosing a central image that you think best captures your goal. What has to occur for you to reach that goal? Who and what is involved? What is the nature of the goal? What are the consequences of achieving it? What are the barriers and obstacles? How do you view the future? What factors will

influence your efforts? Include pictures, images, and symbols for as many facets of the process and the goal as you think are important.

Sometime after completing your mindmap, go back and look at it again. What can you see that might help you to think differently about your approach to the goal? What does the map tell you about the key factors involved? What are the barriers to reaching the goal? What are the things that might contribute

to its attainment? What do you want to change? Does the map satisfy you as a depiction of how to reach the goal? What would you like to add? What

would you like to erase? What can you learn from the process?

► Exercise 7.3: Using Analogies

Think about your present role in an organization. It can be work, school, family, or any other organization or group with which you are involved. Identify a problem that you encounter in this role that you would like to resolve. Using the following as a guide, take a piece of paper and write down some ideas and create some doodles using four types of analogies:

1. *Personal analogy.* If you were this problem, what would you look like? How would you feel?
2. *Direct analogy.* What is the problem like? What metaphors could you use to describe it?
3. *Symbolic analogy.* What symbol or image best captures what this problem looks like? Feels like? Sounds like?

4. *Fantasy analogy.* What is your wildest fantasy about how to solve this problem? How would solving the problem change the future? What is the best possible outcome?

Now go back and think about your analogies and their implications. If the problem you are trying to resolve actually *was* one of these analogies, then what would you do? For example, if you compared the problem with your present organizational role to a flower that was not blooming, then how could you actually make a flower bloom? Fertilizer? Water? Sunshine? What ideas does that give you for addressing the problem?

► Exercise 7.4 Adapting Innovations

One of the best ways to fuel your creativity is to seek out ideas from other individuals and organizations. Read through several journals or magazines to see what innovations other companies are coming up with. Then answer the following questions:

1. What particularly intrigues you about this innovation? Why do you think it is needed and might or might not work in your organization?

2. In what ways might the innovation be adapted to your particular organization's characteristics or needs? How can you build from or depart from what is already being done in another company?
3. Where and how would you begin to work toward getting such an innovation implemented? What factors do you think will support its adoption? What might be the significant barriers?

► Case 7.1 A Creativity Challenge

You have just received a promotion to become the manager of the communications office for your company. You are thrilled about your new job and anxiously await the opportunity to work with your staff of seven people both to improve how your company responds to requests for information and to create new avenues for communication between the company and its customers.

At the conclusion of your first staff meeting, you ask your staff to help you begin identifying what they think are some of the problem areas and opportunities that the unit can and should address. The silence that follows is very unsettling to you. Nonetheless, you wait for someone to speak. Finally, the most senior staff member says, "There is never any money around here to try anything new." Another

comments, “What’s the point? Our unit isn’t a priority. Everything we’ve tried has been shot down.” Another adds, “People don’t respond to our efforts to communicate with them. They just don’t seem to care about what we are doing.” After a few more similar comments, you conclude the meeting by expressing appreciation for their comments and your hope and vision that things will change for the better. Still, you feel rather discouraged.

Later, in private meetings, you talk with your staff about your desire to approach problems creatively and to come up with some new and innovative approaches to achieving the unit’s mission. In the course of these discussions, you learn that the prior manager not only did not solicit ideas but also routinely shot them down if they were raised. His

favorite response to suggested innovations was, “We tried that once and it didn’t work.” Staff confided that they had learned a long time ago that they just needed to keep their heads down and do their jobs. One commented, “Besides, it’s enough to just keep up with all the requests we get. We don’t have staff to do anything else!”

1. What are some of the characteristics of the past management practices and organizational climate that are thwarting creativity?
2. What are some measures that you can take to begin to foster creativity in the individuals you work with and in your unit as a whole?
3. What tools might be helpful?



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► Endnotes

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