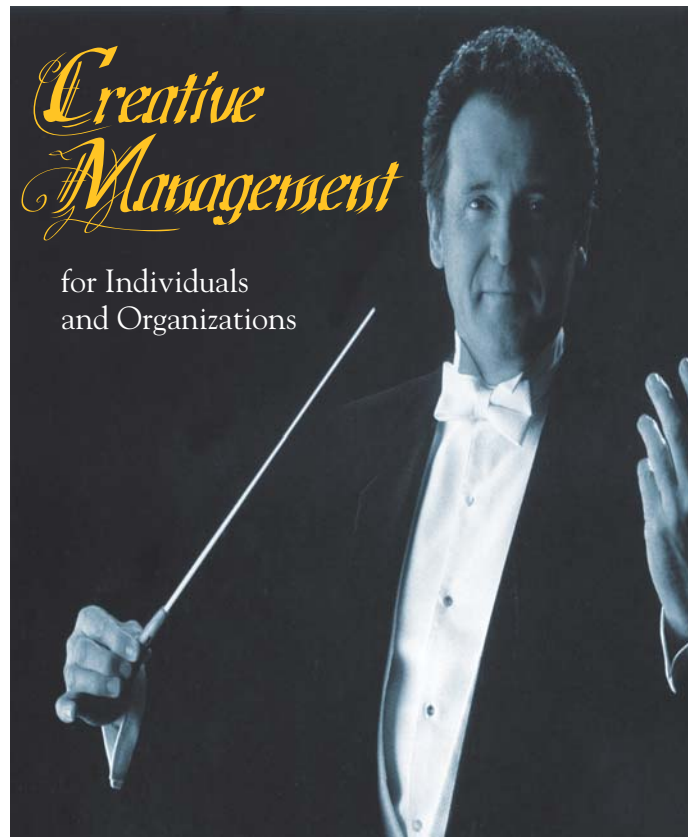


The word innovation has deservedly become synonymous with progress and growth. It has also become the buzzword of the business community, intended to imply forward thinking and progressiveness, either for the corporation or individual.

Fostering innovation in organizations is not a trivial task. It requires more than claims and pronouncements. It demands a complementary set of actions and processes that create an atmosphere conducive to creativity. Creative organizations accept change as a necessary means for progress. Change does not come easily or rapidly. It takes dedication, coordination, and leadership to make change a productive contributor to growth. Creativity is not demanded, but understood, fostered, and supported throughout the organization. Trivializing the process only highlights ignorance of it.

While in the arts the creator of an idea and its implementer and leader are generally the same person (the artist), in industry the process is much more complex and requires the participation of many others. Creation of a new product or process consists of two very distinct stages. Stage 1 is conceptual and in the mind of an individual or a small team of people. In Stage 2 the various skills required for its implementation are integrated to generate a coherent outcome. During Stage 2, the need for other innovations surfaces, each of which becomes a new innovation, perhaps on a smaller scale (but not always). Stage 1 is usually the simpler one since it involves fewer people and needs much less coordination and financial resources. It depends mainly on the skills and temperament of the creative mind. It is only after Stage 2 that the beneficial outcome of the creative process is put forth for the use of the general public. This is also when the role of management and the culture of the organization become very important. Thus, it is not harsh to say that absence of creativity is an organizational fault.



By Ali Daneshy, President, Daneshy Consultants Intl.

Individual Creativity

Experts divide our thinking processes into two main categories: vertical (also called sequential or logical) and lateral (also called peripheral). In vertical thinking each step of the thought process is a logical and relevant extension of the previous thought, much like following directions on a road map. The map is our past experiences and training and covers the territory familiar to our thinking and knowledge. Much of our formal education, especially in mathematics and sciences, is built around a vertical thinking process. This is a very powerful tool of the brain and controls much of our daily activity.

In lateral thinking the two sequences of thought are linked together through a fuzzy chain. The thinking process is not necessarily logical and is more in search of a direction than following one! Thoughts are not directed at finding a solution but rather are seeking alternatives. To illustrate the difference, in vertical thinking once our road map reaches a river we look for a bridge or other means of crossing to the other side. In lateral thinking we

ponder, how do we get to the destination without crossing the river at all? While the creative mind has a more natural tendency to think laterally, mental provocation (intentional self or externally induced) can also stimulate our brain to think laterally. Concept generation requires frequent movement between the two thinking processes, constantly seeking alternatives and selecting paths best suited for the prevailing environment. Mental provocation contributes to, and helps, generation of ideas. We can train our minds (and others') to use both thought processes routinely in our daily activities.

At the initial search for a solution, our natural tendency (which is reinforced through the formal education process) is to go straight to a solution. This

usually follows a vertical thinking process. When the solution does not offer itself easily and we encounter a dead end, our mind loses its sense of direction and recognizes the urgency for change and the need for alternatives. It is at this stage that the creative mind begins to think laterally. With the exception of occasional lucky breaks, the search for a solution demands persistence, patience, and concentration. Along the way, the seeds of a new approach are gradually embedded in the brain. When the solution comes, it is usually unexpected, strikingly simple, and close, and generates exhilaration and excitement for its creator. Initially, the periphery of the solution is clearer than its internal detail and definition. It is at this stage that others enter the process and provide the complementary skills required to fill the detail. The teams thus formed are usually informal and collected by the originator of the idea based on his/her own skills and temperament. The outcome of this process is a clearer concept. These teams are also the first screens for the new idea.

Certain characteristics are stronger in creative people. Among these are mental agility, a preference for complexity over simplicity, multiple and diverse skills, capacity for hard work, resilience, good communication, more interest in concept than detailed design, intellectual curiosity, playfulness and spontaneity, a sense of destiny, and, above all, the ability to avoid early judgment of new ideas and willingness to accept a new thought for its own sake. Creative people are usually easily provoked, and are provocative themselves. They are usually unconcerned about what others think of them, have strong egos, and are motivated more by peer recognition than monetary rewards.

An organization whose culture endorses employee empowerment, supports teamwork, and is resilient to provocative thinking is a fertile ground for creativity. In my opinion, the rigid bureaucracy and the central top-down decision-making processes of the developing countries is counterproductive to creativity. It is therefore no surprise that the creative contribution of the individuals in these countries is much higher when they move to more fertile environments!

Management Creativity

The originator of a concept usually receives much of the glory. While concept generation is a necessary first step, it is not the entire process. Indeed, patent offices are full of ideas and designs that have not progressed beyond the written word. Creative thought is just a thought until someone exercises the leadership needed to give it shape and reality. The birth of a new concept is akin to the birth of a child. It takes a long time and much dedication and focus from many for the child to become a mature and productive adult.

My favorite example of linkage between creativity and management is the story of a young man who was being interviewed for a sales position with a measuring-tape sales company. Trying to assess the applicant's creative sales talent, the recruiter asked how he would use the measuring tape to determine the height of high-rise buildings in New York City. The applicant thought briefly and then replied, "I will go to the building, get the name of the architectural companies, and call and ask them how tall the buildings are." The recruiter said, "But you are not using our measuring tapes." To which the applicant replied, "Sorry. You are right. It would help if I offer them your measuring tape as a reward for their help!"

The young man did not get the job and the company lost on a novel idea for selling their measuring tapes as gifts.

Creativity results require supportive managers and leaders, who are the first link between the individual and the organization. As such, their role is crucial and their contribution is at least as significant as that of the creator of the idea. Most ideas are screened and executed at this level without further involvement from the rest of the organization. Because of their direct linkage with people, managers are also in a very good position to recognize the creative individuals and to provide them with an opportunity to put their talent to productive use.

Creative managers encourage their staff to find better ways for doing everything and recognize their good ideas. They are willing to absorb risk taken by their subordinates, do not demand detailed information and data to be able to make decisions, and are willing to bend company rules for the overall long-term good of the organization. They are effective not only within the boundaries of their own responsibilities, but also in the "white spaces" that always exist within groups. They are usually good listeners, are analytical and can make quick decisions, and are not afraid of, and do not dwell on, past failures. They identify and fill the skill gaps between the idea and its implementation. They are persuasive and can build the linkages necessary to bridge concept and action. They also coach and lead the teams to keep them on track during the implementation phase. There is a usual tendency for teams to want to improve the product/process constantly during the development stage. A good manager is able to sift through these improvements and select those that are essential and delay others in the interest of time. And above all, the manager is the link between the team and executive management.

Organizational Creativity

While individuals dominate the early stages of creativity, taking them beyond the thought stage requires organizational support. This is a much more complex phase, during which the organization becomes the dominant player through its commitment of human and financial resources. The creative individual gradually relinquishes his/her dominant role and serves as support for the rest of the implementation team. This is also where most failures occur, through lack of understanding, support, or absence of coordination between critical players.

Creative organizations are dynamic working places. They accept and adopt change as a step necessary for progress. They have a proper mix of rules and systems for conducting a successful business, taking care of clients, generating good profits for shareholders, evaluating and prioritizing projects, and empowering both individual and teams to foster entrepreneurship, innovation, and creativity. They leave enough white spaces between their rules and organizational boundaries to provide a playing ground for their creative managers and employees. When appropriate, their culture allows flexibility for people and groups to operate on the fringes of the daily work assignments. Indeed, creative minds usually find these white spaces and fringes and use them to promote and progress with their ideas. A good analogy is writing software. While programming languages have very rigid rules for entering and ordering code, there is enough flexibility to allow creation of the tremendous advances we have witnessed in this area. The system leaves the individual free to operate within the rules, and occasionally take advantage of them, for the improvement of the final outcome. To expedite implementation of a new idea, the creative organization is willing to bend the rules, deviate from its traditional and historical organization, and accept a different chain of leadership.

Creating a culture of creativity requires adopting diversity as a strong driver for progress and change. It encourages accepting the "out of norm." It promotes formation of self-directed teams and empowers them to do their work.

The most common blocks to creativity in organizations are fear of failure, preoccupation with rigid structure and policy, attachment to tradition, a drive for over-certainty, reluctance to exert influence, and excessive reward for success (which encourages going only for the sure thing!). Ironically, these are also the same traits that creative minds do not comprehend or sympathize with. It is therefore not coincidental that creative people seek and find creative organizations.



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