In a Nutshell

How do you feel about errors and inefficiency? How about a lack of planning and a lack of control? Many of us have pretty negative attitudes toward these things, and for good reasons. However, an over-emphasis on efficiency, control, structure and "zero defects" can hold back our creativity. To be optimally effective, managers need to balance pressures for quality and efficiency with opportunities for creativity and innovation.

With routine tasks being increasingly automated and the competitive environment becoming more dynamic, creative problem solving and innovation will play a greater role in determining future managers' success or failure. Creativity is the process of generating new and useful ideas. Innovation, on the other hand, is taking a new idea and putting it to use. Managers can increase their subordinates' creativity through the climate they create and the way they treat their subordinates. The implementation of creative ideas (i.e., innovating) must overcome people's resistance to change. Charismatic, transformational leaders are able to overcome that resistance.

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The Case of Kettering's Experiments with Red

One of my favorite stories about innovation is Charles Kettering's experiments that led to his discovery of a gasoline additive that reduces engine "knock." He thought that by getting the gasoline to fire more quickly in an automobile engine, the knock would be reduced. However, he did not readily identify a way to get it to fire more quickly. He began to look for examples of things that start quickly. Kettering observed that a plant called trailing arbutus starts quickly in the sense that it blooms earlier in the year than most plants. The arbutus also has distinctive red leaves, and Kettering surmised that it must be their redness that allowed the arbutus to bloom early. So, he decided to make gasoline red to see if it would then fire earlier and create less knock. He searched his lab for red dye, but could find none. He chose instead to add iodine to the gasoline. Sure enough, the iodine additive did cause the gasoline to fire more quickly and the knock was reduced. Kettering later attempted to replicate the experiment with red dye to confirm that it was redness that reduced the knock, but the red dye was not effective. It was certain chemical properties of the iodine that reduced the knock rather than it's color.

If Charles Kettering were your employee, and you observed the work processes described above, would you have been patient with those wild ideas? Kettering is one of the twentieth century's great inventors, but many of us would find it very difficult to allow one of our staff members to experiment in such an unconventional way. Leading creativity requires a degree with patience as employees explore their wild ideas.
Many of them will fail, and their processes will often seem to be inefficient. That's difficult for many managers to tolerate, but necessary for optimal creativity.

"Hands Off" Techniques--Creating the Climate for Creativity

Many of the most effective ways for managers to promote employees' creativity and innovation are "hands off" approaches. They are things managers can do to create the climate for creativity that don't involve directly interacting with their staff. The right organizational culture, resources available for experimentation, collaboration in work groups and interesting work help create the ideal context for employee creativity.

Organizational culture. Culture is the set of shared norms, values and beliefs in an organization. Many aspects of culture can affect creativity. Organizations that show that they value creativity by providing rewards and recognition for it naturally tend to get more of it. On the other hand, organizations that value risk minimization are somewhat less supportive of creativity. Climates characterized by political game-playing and interpersonal competition also tend to restrain creativity.

Resources for experimentation. Creativity is often the result of experimentation. Experimentation is resource intensive. To promote creativity, organizations should permit funds, materials, facilities, and the time needed for experimenting with new ideas. Time to reflect and be imaginative is essential to creativity. Research has found that pressures to be productive reduce creativity.

Collaboration. History's great innovations have often been the result of collaboration. Wilbur and Orville Wright worked as a team to invent the first airplane, and they also benefited greatly from the input of other aircraft designers. Work groups that have diversely skilled members, an openness to new ideas, high levels of trust, commitment to their work, and good communication foster creativity.

Interesting work. Interesting jobs stimulate intrinsic motivation, which in turn sparks creativity. The classic example of a boring, routine job that has been converted to an interesting job in several companies is auto assembly. Screwing lug nuts on trucks all day as they pass by on a conveyor isn't very interesting. However, working on a self-led team with other production workers to take a truck through all the various stages of assembly and eventually driving it out to the lot is much more interesting. Compared to mounting lug nuts, working on a team that performs the entire assembly of a truck ...

- requires more skills ...
- seems more important ...
- produces a more clearly identifiable outcome ...
- provides greater autonomy, and ...
- allows feedback from the work itself.

Such jobs enhance intrinsic motivation and arouse creativity.

"Hands On" Techniques--Interpersonal Determinants of Employee Creativity

Are staff members expected to be creative on the job? Are their creative ideas valued? Should they experiment and take risks? Managers also signal the answers to these questions in the way they treat their employees.

Openness to new ideas. Managers who expect their staff members to be creative get their input in decision making (i.e., use a participative style) and give consideration to their ideas. To boost creativity, managers must watch how they respond to their subordinates' original ideas. Many (if not most) new ideas aren't practical. However, criticism tends to discourage creativity. Hence, responses to novel ideas should be informational, not judgmental or critical. Managers should encourage adaptation and augmentation of impractical ideas rather than flatly rejecting them.

Support and encouragement. Managers who express a sincere interest in their staff members and build interpersonal trust also create a favorable context for creativity. Listening to, empathizing with and encouraging employees makes them feel safe to take risks and be creative.
Transformational Leadership—Converting Creative Ideas Into Innovation

Taking a creative idea that "looks good on paper" and successfully implementing it is often the toughest part of innovating. One of the reasons why it's so difficult is that new ideas often require people to take a risk and do something new. Employees' resistance to such change often kills innovation. It takes a special kind of leader to bring about change.

Transformational leaders have the ability to transform their organizations and their followers. They're able to motivate their followers to give extra effort and to confidently venture into unfamiliar territory. Transformational leaders can even shape the values of their followers. They encourage their followers to adopt values that are compatible with the organizations' needs and to give those values a higher priority than their individual needs.

Transformational leaders are charismatic. The word, charisma, comes from a Greek word that means chosen or graced. Charismatic leaders seem to have been endowed with a special gift that allows them to be effective leaders. They're able to gain the confidence of and inspire their followers.

Research on charismatic leaders has identified characteristics that we can all acquire and behaviors that we can all perform. Charismatic leaders (a) have an ambitious vision of what the group they lead can achieve, (b) are confident that the group can achieve the vision, (c) are enthusiastic about the vision, and (d) are able to convey the vision to others. People follow charismatic leaders when they are excited and confident about the leader's vision.

Practicing This Management Skill

Managing the Climate

- Recognize and reward employee creativity
- Encourage risk taking
- Promote collaboration, not selfish competitiveness
- Allocate resources for experimentation--especially time
- Assign projects to teams with diverse members
- Redesign jobs to make them more interesting

Managing Relationships

- Ask for employees' input in decision making
- Give informational--not critical--feedback on original ideas
- Build trust
- Listen effectively
- Communicate supportively

Leading Charismatically

- Have an ambitious vision for the group you're leading
- Clearly communicate that vision
- Be confident in yourself, the vision and your staff
- Be dynamic and enthusiastic

Sources


Winter, pp. 3-16.


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**About the Photo**

Inventor Bao-Shen demonstrates his 3D-Yoropen at the 30th International Inventions Show in Geneva, Switzerland, on May 1, 2002. The pen allows the writer to see what is being written from any angle, prevents fingers from pointing down, and writes from different positions. The photo was e-mailed to me from *Yahoo! News* (news.yahoo.com) on May 11, 2002.

**About the Newsletter and Subscriptions**

The *LeaderLetter* is written by Dr. Scott Williams, Department of Management, *Raj Soin College of Business*, Wright State University, Dayton, Ohio. It is a supplement to my MBA 751 - Managing People in Organizations class. It is intended to reinforce the course concepts and maintain communication among my former MBA 751 students, but anyone is welcome to subscribe. In addition, subscribers are welcome to forward this newsletter to anyone who they believe would have an interest in it. To subscribe, simply send an e-mail message to me requesting subscription. Of course, subscriptions to the newsletter are free. To unsubscribe, e-mail a reply indicating that you would like to unsubscribe.

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**E-mail Your Comments**

Whether you are one of my former students or not, I invite you to share any insights or concerns you have regarding the topic of this newsletter or any other topic relating to management skills. Please e-mail them to me. Our interactions have been invaluable. Let's keep the conversation going.

**Good, Clean Joke (or, at least a clean one)**

A major research institution has recently announced the discovery of the heaviest element yet known to science. This new element has been tentatively named "Managerium" (Latin for Manager). Managerium has 1 neutron, 12 assistant neutrons, 75 deputy neutrons, and 111 assistant deputy neutrons, giving it an atomic mass of 312. These 312 particles are held together by a force called morons, which are surrounded by vast quantities of lepton-like particles called peons.

Since Managerium has no electrons, it is inert. However, it can be detected as it impedes every reaction with which it comes into contact. A minute amount of Managerium causes one reaction to take over 4 days to complete when it would normally take less than a second. Managerium has a normal half-life of 3 years; it does not decay but instead undergoes a reorganization in which a portion of the assistant neutrons and deputy neutrons exchange places. In fact, Managerium's mass will actually increase over time, since each reorganization causes some morons to become neutrons, forming isodopes. This characteristic of moron-promotion leads some scientists to speculate that Managerium is formed whenever a large quantity of morons become densely concentrated which seems to create a Managerium. Initially, this hypothetical quantity is referred to as "Critical Morass." You will know it when you see it.

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www.wright.edu/~scott.williams/LeaderLetter/innovation.htm