Lessons from a creative culture

*by Constantine Andriopoulos
and Manto Gotsi*

*L*unar Design has a talent for translating innovative thinking into successful business strategies. In their research, Constantine Andriopoulos and Manto Gotsi identify four principles that support this impressive track record: a collaborative approach to management; a no-fear work environment; an emphasis on moving beyond the comfort zone; and a practice that celebrates individuality and encourages diversity.

As companies struggle to find products and services that give them a competitive edge in an increasingly commoditized marketplace, unleashing creativity and innovation in the workplace has become an essential corporate priority. But how do some companies make it seem so easy? We recently looked inside Lunar Design, a leading Silicon Valley product development consultancy. They are known for designing successful, cool stuff that has brightened the everyday lives of many of us—products like the Palm m100, the Oral-B CrossAction Toothbrush, the Hewlett-Packard Pavilion Home PC, and the Nova Cruz Xootr Scooter.

As any successful designer can tell you, creativity is about summoning passion for solving problems and following key principles for generating creative results. Nurturing creativity

Constantine Andriopoulos, Department of Management Studies, University of Aberdeen

Manto Gotsi, Department of Management Studies, University of Aberdeen

within commercial realities can often be a struggle unless, as at Lunar, these key principles are understood and acted upon. In the course of our research, we observed four principles we think are worth passing along.

#1: Start with a collaborative approach to management.

Organizational theorists increasingly recognize that people inside companies are driven by the same combination of emotions and motivations as external customers. They too have "buying" decisions to make—whether, for instance, to buy into their company's vision and objectives or instead to take ownership of organizational goals and project their own agendas. They, too, seek to build relationships with their companies based on trust and mutual benefit. In this process, the catalyst for

About the authors

Lauralee Alben, of AlbenDesign, is dedicated to creating new ways to apply design sensibilities and strategies. She is the founder of the Sea Change Consortium, an association of professional consultants committed to creatively responding to today's complex economic, social, and environmental challenges by consulting with diverse organizations, running workshops, and giving keynote speeches. Alben is currently consulting with Procter & Gamble on designing a culture change within one of their research and development departments.

Alben was selected, in 1997, by the Design Management Institute as the first recipient of its prestigious Muriel Cooper Prize, which is awarded to those who show original thinking and future promise, and exemplify a spirit of exploration in the digital environment. Her design work and articles have appeared in many computer, design, and business publications. Until 2000, Alben was a principal of AlbenFaris Inc., a firm that specialized in the design of interactive experiences for clients including the Monterey Bay Aquarium, Apple, IBM, Netscape, and SONY.

Constantine Andriopoulos got his PhD in marketing from the University of Strathclyde, in Glasgow, Scotland, and is currently a lecturer in management at the University of Aberdeen. His doctoral thesis identified processes through which creativity can be mobilized within the working environment. Andriopoulos has researched and acted as a consultant to several leading creative organizations. His findings have been published in a number of academic journals. His research interests include organizational creativity and innovation, as well as corporate brand management in the creative industry.

Tara Bodden is a strategist with Stone Yamashita Partners. She specialized in corporate litigation before joining Stone Yamashita Partners. Her clients included Xerox, New York Life Insurance Company, Shell Oil Company, Revlon, and Citibank. Bodden received a BA in international relations from Georgetown University, an MA in social and political theory from Sussex University in England, and a JD from Santa Clara University.

Kevin E. Connolly, chief product officer for State Street Investor Services, is responsible for product leadership worldwide, including the development and articulation of product strategy, for setting the direction of the corporate product portfolio, and for the development of a framework to support senior executives in efficient product investment decisions.

Prior to this role, Connolly managed the delivery of State Street core services to a top customer in the US public funds sector. The success of that relationship led to multiple new state-level public pension fund mandates. Since joining State Street in March 1994, Connolly has served as vice president for the California Public Employees' Retirement System relationship and managed State Street's West Coast servicing office. Before joining State Street, he held a number of positions at The Boston Company.

Connolly is a graduate of Boston College, with a bachelor's degree in biology. He obtained a master's degree in business administration from the

F.W. Olin Graduate School of Business at Babson College, Wellesley, Massachusetts.

Manto Gotsi is completing her PhD in marketing from the University of Strathclyde, in Glasgow, Scotland. Her research focuses on why and how organizations should and could align their corporate cultures with their corporate branding efforts. Gotsi has presented her work in leading international marketing conferences, and findings from her research have been published in a number of marketing and management journals. She is currently a lecturer in management at the University of Aberdeen.

Peter H. Jones is principal of Redesign Research, a consulting practice for interactive product design, customer research, and innovation strategy. His projects include user experience research for Web-based product concepts, creative approaches to product and usability evaluation, field evaluation of product strategy, and user interface redesign for business and information services. A designer and management consultant in software product development, he has designed custom and commercial products, Web sites, and information services for large firms and start-ups.

Jones's *Team Design: A Practitioner's Guide to Collaborative Innovation*, originally published in 1998, has been revised for 2002. He instructs classes in human-computer interaction and conducts educational and participatory workshops in software design and product innovation. He publishes articles and lectures on HCI and software design, extending research interests in design and innovation management. His Union Institute dissertation researched the organizational dynamics of embedded values in innovation practice. His master's degree work explored the effects of interface design on user mental models, at The University of Dayton. He can be reached at peter@redesignresearch.com.

Paul Cheng-Hsin Liu is currently Associate Professor in the Department of Technology, College of Engineering, Computer Science, and Technology at California State University in Los Angeles. He holds a PhD in industrial engineering from Auburn University. Liu has a strong background in manufacturing processes, automation, statistical quality control, and

virtual reality. He is a member of SME, IIE, ASQ, and IEEE and is certified as Manufacturing Engineer and Quality Engineer.

Jim Long has worked at Herman Miller Inc. for the last 14 years in a variety of roles, all centering on new product development. Currently a member of the Herman Miller Creative Office, he has led research for the company, contributed to new business startups, and pioneered product innovations. His work has focused on organizational culture and its relationship to physical space; the practice of facility management; the measurement of productivity, effectiveness, and human performance at work; the future of the workplace; the rate of change of work processes and tools; and the development of competitive advantage with intellectual property. He recently led the research done toward development of Herman Miller's award-winning Resolve system.

Long has spoken on innovation in new product development, the future of the workplace, and organizational culture to many audiences in the design and development world. He received a BA and a BS from the University of Michigan. He also has an MA in management.

Patrick Reinmoeller is assistant professor of strategy and business environment at the Rotterdam School of Management, Erasmus University, in Rotterdam, The Netherlands. He also teaches knowledge management, strategic renewal, and strategic design as a visiting professor at the Castellanza University and the Polytech Milan, in Italy. Reinmoeller has served on the faculty of the graduate school of knowledge science in the Japan Advanced Institute of Science and Technology after doing his postdoctoral research at Hitotsubashi University in Tokyo. He has lectured on management and organizational theory at Kanazawa Gakuin University.

Reinmoeller earned his PhD at the University of Cologne. He was educated in Germany, Italy, and Japan and has worked in strategy consulting and marketing in Europe, Japan, and the United States. His academic research focuses on how organizations and their managers can foster innovation by enabling knowledge processes. He is the author of two books, several articles in

success seems to be a democratic and participative leadership style that encourages the open exchange of ideas and priorities. Leaders must not only communicate their vision effectively through formal communication channels; they must also "walk the talk" and encourage employees to think and act beyond current wisdom. Employees, on the other hand, should have the opportunity to voice their opinions and concerns about the company and its actions. It's all part of creating a sense of "ownership" throughout the organization, as in: "This is not just the company I work for; this is my company."

Our research within Lunar Design showed just that. The company organizes bimonthly staff meetings in which its financial situation, current and potential clientele, new products, and awards are openly discussed. In the meeting we attended, senior management shared recent success stories and openly communicated concerns about the future. Staff also shared their thoughts and concerns, presented work they have been proud to be a part of, and rewarded colleagues for their contributions to the company's success. Followed by an informal lunch, it all felt like part of an extended family. Every semester, the company also organizes a day "off-line" that is used to update everyone on the more strategic issues. They discuss the company's plans for the future and the action plans that need to be adopted to take advantage of opportunities and face threats within their industry. This is also a time for the regular check-up on whether values-in-use reflect the company's desired values and objectives. It's all part of corporate transparency and creating a climate of trust across the organization.

> *Creative employees should work in an environment that tolerates mistakes and considers failure a part of the path toward achieving innovation, rather than a reason to criticize employees' performance and create a climate of fear and insecurity*

How do employees respond to these initiatives? An "all for one, one for all" attitude is widespread. There are no politics or hidden agendas distracting people's minds from the creative process. On the contrary, employees acknowledge and support each other's work and do not waste valuable time and energy protecting their own ideas or feeling threatened by others' agendas.

#2: Create a "no-fear" climate.

Creativity requires constant experimentation, which implicitly involves the fear of failure. Not all creative endeavors are successful; mistakes are part of the process, and a no-fear attitude is an essential component of innovation. It is therefore clear that creative employees should work in an environment that tolerates mistakes and considers failure a part of the path toward achieving innovation, rather than a reason to criticize employees' performance and create a climate of fear and insecurity.

In Lunar Design, we found a culture that supports perpetual experimentation. Ideas are not judged or punished within Lunar—they are the company's most valuable assets. In some corporate cultures, you would never even consider telling your manager what you think you should be working on—because you could be reprimanded. At Lunar, however, employees are encouraged to discuss anything regarding their company and the ways things work out (or not). They voice opinions, share the successes and obstacles of their creative endeavors, and build confidence in their capabilities.

The brainstorming process is another vivid example of how Lunar's culture deals with new ideas. At the brainstorming sessions we attended, it was clear that employees are not allowed to judge others' ideas either positively or negatively. As people told us, the whole point in this initial process is to generate ideas and not to judge them or filter them; it is about throwing them out on the table and mobilizing colleagues' creative thinking. The pool of ideas generated within the brainstorming session then comprises the basis upon which different concepts are tested against the project's requirements.

Lunar Design also initiates its own internally driven project work to leverage the development of new materials, processes, and technologies or address product categories that could greatly
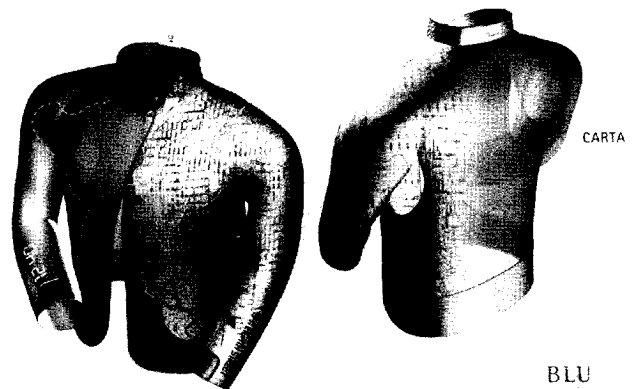
benefit from the attention of thoughtful design and engineering. This program, called Moonshine, is intended to demonstrate Lunar's creativity in areas outside the traditional fee-for-service realm. Because the projects undertaken within Moonshine are "blue-sky" in nature, team members can develop solutions that are quite different from client projects, which are typically driven by criteria such as manufacturing cost and regulatory and brand requirements. The self-selected project categories, self-imposed criteria, and internal evaluation process inherent in these programs results in an atmosphere that could be described as a "designer's playground." Moonshine project criteria revolve around developing something new and noteworthy within an established budget and predetermined timeframe. Moonshine projects are ideal for risk-taking. Since the projects are internal to Lunar, failing to achieve project goals has no impact on a client's business. No matter what the result, team members are provided with the opportunity to explore potentially uncharted territory and expand their design skills. In addition, these projects keep Lunar's designers fresh, sharp, and energized, which is highly beneficial to their clients.

The BLU E-fiber Jacket is a typical example of a Moonshine project (see figure 1). Attending an industrial design workshop on soft goods, Lunar designers began to ponder how digital-age technology might influence the design of clothing. If a jacket (or some such garment) could be made of a lightweight "display media," how might that affect the jacket's design and functionality? What might happen when "e-paper" comes into its own—when displays are as thin, cheap, and flexible as paper? Clothing has long been understood to be utilitarian, as well as attractive, but what might the impact of e-paper and, say, Bluetooth technology be from a fashion perspective? How might our understanding of clothing change? How might this new understanding affect social behaviors?
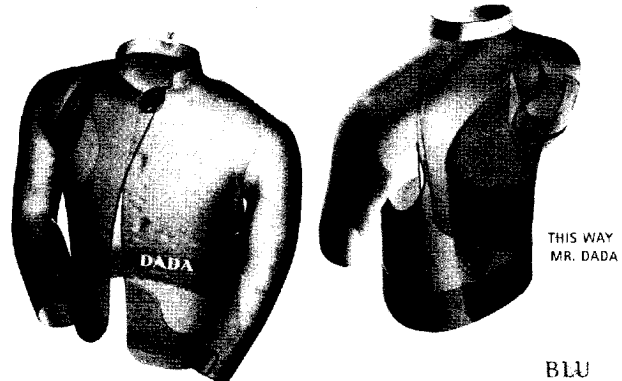
The result of this questioning was the creation of a family of "display garments." These garments would be made from an "e-fabric," composed of a matrix of microscopic beads that would pick up radio frequencies and orient the array into a desired image. The BLU family consists of three garments. Carta integrates real-time mapping with GPS technology; Your Ad
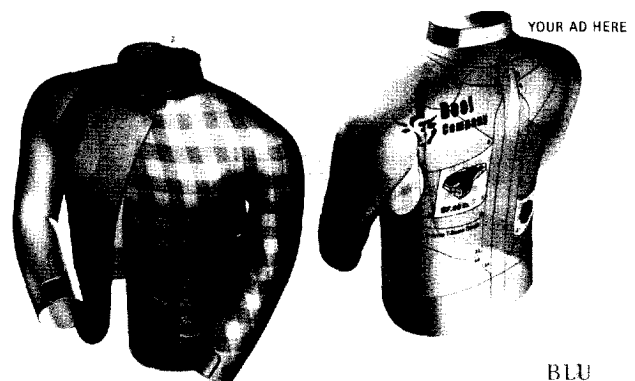
Figure 1. The BLU E-fiber jacket.

Here weds personal style and ad revenue; and Dada blends art with sidewalk performance.

The BLU project was driven by the team's burning desire to create something new. The team was not approached by a client seeking innovation in a specific market; Lunar acted as its own client by identifying the product opportunity, setting its own constraints, and evaluating its design solutions. The result was a project that received much media coverage and a group of designers who were thrilled to have an opportunity to frolic in their "playground."

Although the Moonshine program is an effective way for designers to experiment and work on their wildest ideas, sustaining this "anything is possible" climate within client work is not as easy. We believe that its success largely depends on the existence of an appropriate safety net that deals with creative failures and mistakes within the organization. At Lunar Design, it is clear that failure is not penalized as long as established processes and analytical methods are effectively applied within project work. Rather than punish creative mistakes, the company strives to systematically identify the factors that allowed mistakes to occur and to explore what it could do to develop processes or change systems to prevent similar mistakes. People also ensure that their mistakes are known to fellow employees, as a proactive way of creating and disseminating knowledge from past experience.

Of course, encouraging people to stick to the status quo could be a safer option—but it is not much help if, like Lunar, you are a company that aims to breathe, live, and produce creative results on a day-to-day basis.

#3: Encourage stretching beyond the comfort zone.

Unleashing creativity in the workplace also necessitates a "stretching beyond the comfort zone" approach when it comes to trusting people with challenging projects. Creative experimentation requires employees to frequently distance themselves from their own established comfort zones and get into unknown territories, where fresh perspectives can be more easily mobilized. Involving people in important and challenging projects, even from their early days of employment, is therefore essential for unleashing an unbiased pool of ideas and also for building their confidence in their work, abilities, and creative potential. As we've already stressed, uncertainty is inherent in creative work. Employees therefore need to develop self-reliance, which will help them to take advantage of ambiguity in their work and produce innovative solutions.

At Lunar Design, we found that people are challenged from the moment they join the company. Employees are encouraged to get involved in a diverse range of projects, even if some projects do not fit into their existing portfolio experience—they are not forced to do the same kind of work all the time. It's all about showing confidence in people's potential and providing them with opportunities to approach projects with unbiased and fresh perspectives.

This approach is part of a carefully managed learning process. When opportunities arise, people are assigned challenging projects, and their performance is assisted and monitored by more senior members of staff. They will test employees, under the supervision of a senior manager or someone who has a lot of experience in that particular line of work, and then evaluate their strong and weak points and how they have dealt with the new territory.

We believe that when organizations encourage their employees to be involved in challenging projects, they advance their employees' knowledge and broaden their intellectual boundaries. In return, this accumulated knowledge and experience assists creative employees to develop more-efficient processes to deal with client work and come up with effective solutions. Organizations that don't encourage employees to stretch into unknown territory can fall into the trap of pigeonholing people according to their expertise and past experience. We believe this practice makes it more difficult for a company to innovate routinely.

An interesting example of stretching designers beyond their comfort zone can be found in

> *Organizations that don't encourage employees to stretch into unknown territory can fall into the trap of pigeonholing people according to their expertise and past experience*

Figure 2. Examples from the Sony monitor project.
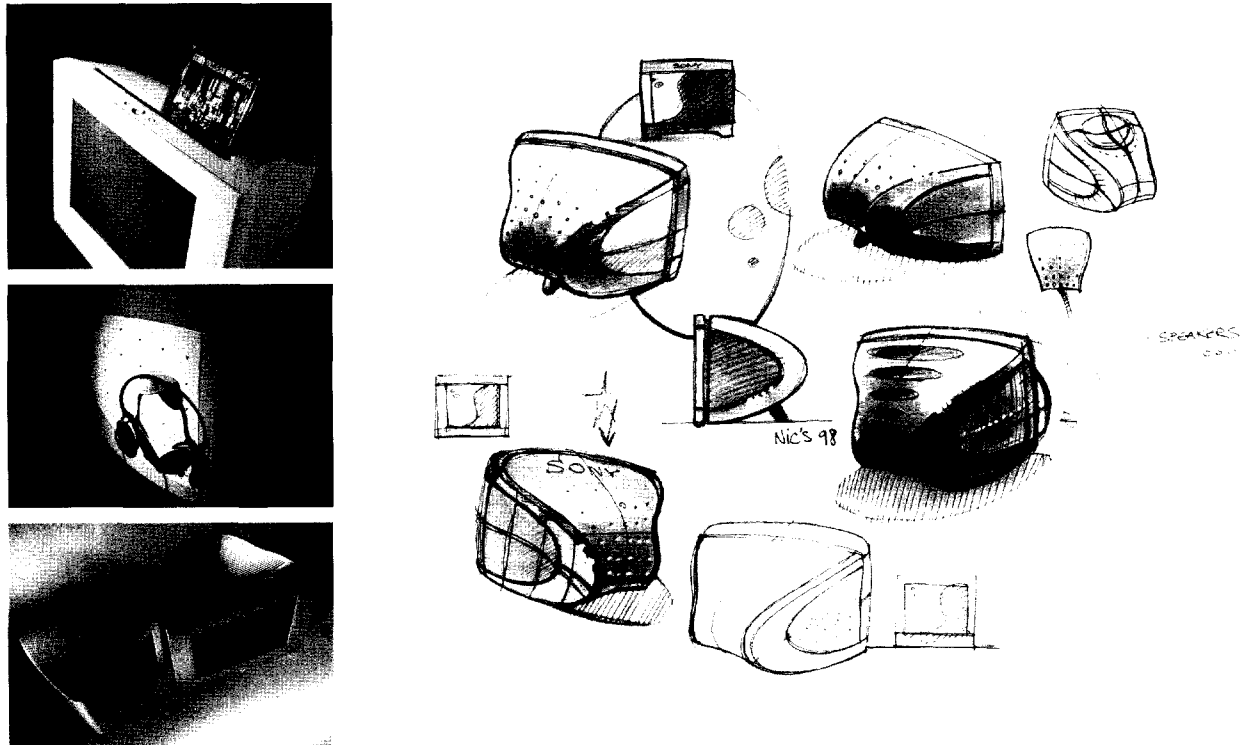
Lunar's practice of hiring competitors to work on their projects. For a variety of reasons—project scale, diversity, and simply to bring new perspectives to long-lasting accounts—Lunar has routinely and directly involved their competitors in projects they lead and manage. While not always a popular strategy with Lunar's designers, hiring competitors to collaborate on projects is very stimulating and productive for the growth of designers' capabilities, as well as for the work itself.

#4: Celebrate individuality and encourage diversity.

Creative organizations should also nurture a cultural environment that allows individual personalities to flourish. Creative people need room for expression. Employees at Lunar Design are encouraged to bring their passions and talents to the workplace and customize their space to their personal taste. The creative process is frustrating enough on its own. People need to be able to feel comfortable wherever they are. There is no dress code. People wear what they like; some even walk around wearing socks. Employees personalize their own offices and often bring in musical instruments to jam with

other Lunar musicians in their spare time. This is not strictly business; it is strictly personal.

Creative employees also need to have autonomy over their work. At Lunar Design, they are given the freedom to adopt their own working practices in order to solve the issue in question and accommodate their creative thinking and aesthetic preferences.

The Sony monitor project (figure 2) demonstrates how designers can identify unmet user needs and develop design solutions to meet those needs. Sony initially sought out Lunar to develop an aesthetic design that was expressive and dynamic. The designers went beyond the design brief and envisioned feature opportunities for the monitors. They believed staying organized was an important need for the target market, which consisted of young professional women and technology-savvy, information-overloaded 20-somethings. Two ideas that were generated in response to this need were incorporated into the monitors. One was a pegboard accessory organizer that enabled users to hang items such as headphones from a hook that attaches into the holes molded into the side of the monitor; the other was a recessed slot on the top surface of the monitor to display photos or

Figure 3. The Palm m100.
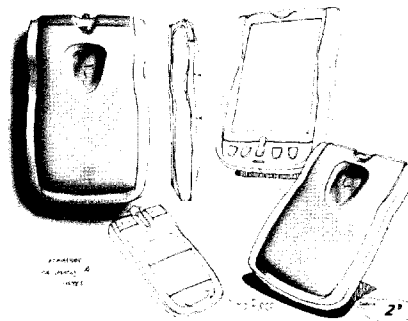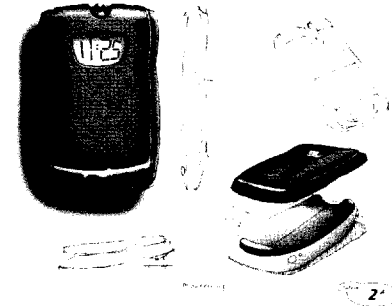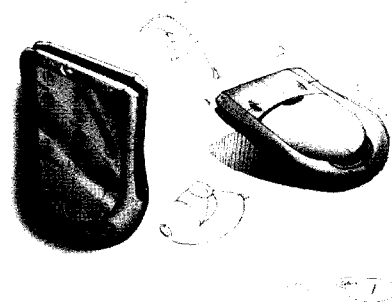
store CDs and other items.

For the Palm m100 (figure 3), Lunar provided substantial design strategy leadership and feature innovation. Although its role was initially limited to giving the product its form, Lunar led the definition of symbolic archetypes for Palm's entire product family and conceptualized its innovative product features. One designer, through her individual design initiative, envisioned integrating a clock display into the product, which would be visible through a window in the cover plate. Lunar's strategic insight and the lead designer's passion to explore and express her individual insights created a product with highly differentiating form and a key differentiating feature.

Both the Sony and Palm projects are good examples of how the individual insight of designers can add value. Creative organizations must cherish diversity, encourage nonconformism, and promote individual contributions by valuing each employee's skills, abilities, expertise, and personality. They should encourage individuality rather than suppress it. This is important since the flow of different viewpoints, stimuli, and creative thoughts can comprise the basis upon which constructive judgment and discussions can take place before reaching a final decision for a project. It is therefore essential to employ people with strong points of view, who will be able to formulate and implement new ideas. But in order for teams to work effectively, there should be a general awareness of the skills, personalities, and specialization available within the company.

Diversity within the environment also helps

to maximize employees' tolerance threshold toward different kinds of people in the workplace. The more employees are exposed to co-workers with different backgrounds, skills, educations, and aesthetic preferences, the more they capitalize on each other's strengths rather than develop a "them and us" attitude in the workplace. This in return minimizes conflicts among employees, since negative stereotypes tend to disappear when people work in close cooperation, especially on problems in which cooperation increases the chances of team success. Celebrating individuality and encouraging diversity, therefore, have a central role to play in increasing stimuli within the workplace and supporting creative achievement.

To sum up

There is no doubt that initiating and sustaining creativity in the workplace is a delicate and difficult process and that, often, the pressures that commercial reality dictates do not make it any easier. In our research, we've found Lunar Design's approach to unleashing creativity to be effective—and this is what the people who work there say they feel, as well. Creative behavior requires a culture of trust, and Lunar's culture provides a good example of how to establish and maintain it.

In that culture, we found that adopting a participative, transparent approach to management, maintaining a no-fear climate with regard to perpetual experimentation, encouraging stretching beyond the comfort zone, and promoting individuality and diversity in the workplace are key to sustaining trust throughout the organization and ultimately nurturing creativity in the workplace. ▓ *Reprint # 02132AND57*

Find related articles on www.dmi.org with these keywords: *corporate culture, creativity, innovation, organizational management*