

Creativity can be hard to categorize, but we know it when we see it. In business, in the arts, in science and in education, our ability to innovate can make the difference between success and failure. In this issue of *FOCUS*, we explore how creativity manifests itself in the workplace and the classroom at a time when the technology is changing how we interact. We also interview Boise State professors about their individual creative processes.

Corporate Creativity

As the world speeds up, businesses find innovation is crucial to survival

By Janelle Brown

Electrons pulsate through digital lines at a speed faster than you can breathe, move, think. Within microseconds, the high-frequency signal travels to a computer server hundreds of miles away, then to another server, then finally to a computer monitor. Digital code. Pure information. It pours in, faster and faster and faster and faster

Michael Megale's e-mail is piling up. He tries to ignore it. Can't. Thirteen messages arrive in 25 minutes. The computer alerts him each time with a soft, insistent beep.

"I can feel my adrenaline going up," says Megale, director of diversified foods at Lamb Weston Inc. in Boise and an '80 Boise State graduate in marketing, as three more e-mails come in.

Megale turns to the screen and takes a quick peek, then disengages from his virtual world. He smiles, then shrugs. "I need to keep up with these," he says.

Megale's days are crowded with e-mails, phone calls and rapid-fire decisions. "Our business is speeding up. So is the





OLIVIA LAYTON/NIHOF

Inventiveness takes many forms, says Nagasundaram, who teaches workshops on creativity.

customer's," says Megale, whose company is the largest producer of processed potato products in North America and a major supplier of McDonald's french fries. "People want one-stop shopping. We're consolidating, and that means we're providing more services with fewer resources."

Like his counterparts in other businesses, Megale works hard to keep ahead of the changes. "Creativity is an absolute necessity," Megale says. "You have to be creative in order to survive."

Creativity. It's usually associated with those in the arts, with young children, or with right-brained types with time on their hands. But at its essence, the drive to create is an innate part of human nature.

And in today's technology-driven world, where information flows at nearly the speed of thought, perhaps nowhere is creativity more crucial than in business. Corporations are touting their innovative spirit as never before with slogans such as Hewlett-Packard's "Invent" or Lucent Technologies' "Expect Great Things" — while at the same time, the comic strip "Dilbert" and the books it has spawned poke well-placed jabs at corporate realities.

It may seem paradoxical, but both views may be correct, according to Boise State professors in a range of disciplines and those in the workplace. The challenge, they say, is tapping into a creative mind-set when the pressure mounts, the time crunch worsens, e-mail rules your life and too much data pours in.

"Today, you've got to reach multiple marketplaces very quickly, and that demands creativity," says Bill Ruud, who has served as Boise State's dean of the College of Business and Economics and as vice president for Institutional Advancement. Ruud turns to Webster's to point out that "creativity" actually has three distinct definitions: to have the power to create, to be imaginative, to be productive. All three skills are essential, Ruud believes.

But mastering them isn't easy. "Creativity has a frou-frou image. You imagine Carmina Burana, not management decisions," notes Murli Nagasundaram, a Boise State computer information systems professor who conducts workshops on creativity. He's quick to point out, "That's wrong."

Nagasundaram picks up a large blue ball emblazoned with a picture of Winnie the Pooh. If you were attending one of his workshops, Nagasundaram just might throw the ball at you to shake things up. For now, though, Nagasundaram merely holds the ball and puts a finger to the side.

"When you're on this side of the world, you can't see over here," he says pointing to the other side. "Creativity is about shifts in perspective or thinking."

Looking at things differently allows creative solutions to appear, Nagasundaram explains. Not that it's effortless. "Change is often gut-wrenching," he says. "Except for small children, we don't like change."

GREGG ALGER stands in front of a gleaming dark table in a conference room at Fisher's, an office equipment company in Garden City. The walls are a muted gray, the leather chairs soft, the high-tech gadgetry discreetly tucked away.

It's a place where you can relax. A place that feels safe. A place even a technophobe could talk about computer systems without getting scared.

Alger, company president and an '89 Boise State marketing graduate, uses the room to show clients what the latest computers, software, digital copiers and scanners could do for their businesses.

"I use this room in a creative manner to separate us from the Xeroxes of the world," says Alger, pointing to a large "SMART Board" on the wall that projects a computer screen. Alger activates the board by pressing the "print" function with his finger, then retrieves a colorful

document from a nearby printer. It's a powerful demonstration, capable of shifting a customer's vision of what's possible. For those wary of new technologies — and Alger sees many of them — it's also reassuring.

"It terrifies them," says Alger of the way some customers feel about the digital world. "The big thing many businesses are facing is, how do we get on the Web."

While the Internet and other new technologies offer tremendous opportunities, Alger understands the resistance to change. "Just look at the automobile," he says. "When it was first invented, few people dreamed it would ever replace the horse. Every product has its cycle."

The Internet is about speed. Creativity is about process. As the complexity of our lives increases and the pressures build to do more faster, can we still find that creative edge?

"Technology doesn't lessen creativity, but it changes it," replies Elisa Barney-Smith, a Boise State electrical engineering professor. "It used to be that the challenge was how do you get a wagon to Idaho. Now, it's how do you get computer bits through a thin piece of wire when there are other computer bits there."

Creativity is a practice that requires attention, adds Ed Petkus, a Boise State marketing professor "It's how we dress, how we cook, it's in the so-called mundane things of life we shouldn't think of as mundane."

The busyness of modern life and the free flow of information can actually enhance creativity, according to Gundy Kaupins, a Boise State management professor. "Today, there are so many more ways to communicate," Kaupins says. "More information leads to more creativity."

But information overload can also create problems, adds Kaupins and others. "I used to get 10 e-mails a day. Now I get 100," says Kaupins, who challenges himself to answer in as few words as possible.

E-mail and the Internet have been a boon to Joanna Kania-Bartoszynska, a Boise State mathematics professor. New research in her field is archived on the Web, allowing Kania-Bartoszynska to check out new breakthroughs long before they are published in conventional journals.

"It inspires you," says Kania-Bartoszynska, who recently com-

pleted a sabbatical at Columbia University. "You might get an idea that is similar to somebody else's, and you can see how the concepts are connected. You don't want to redo what others have done."

But Web-surfing and e-mail can also be what Alger calls an "activity trap." Alger sometimes gets jokes e-mailed to him by buddies, but he doesn't even click on them. "It's just the newness of the product," Alger says. "It took a while to figure out how to use the telephone effectively, too."

CANDI ALLPHIN bursts into a conference room on the sixth floor of the U.S. Bank Building in downtown Boise and apologizes for being a few moments late. She was "lost" in an automated phone system, she explains, trying to work her way through a menu of options to get connected to the right extension. She never did reach the right party. Frustrated, she finally hung up.

Despite that annoyance, Allphin doesn't hesitate when asked how technology and creativity mesh in her workplace. Sure, there are a few techno-glitches now and then, says Allphin, a vice president of business banking at U.S. Bank, an '89 Boise State graduate in management and current president of the Alumni Association. But she believes new technologies ultimately help because they free her to concentrate on the creative aspects of her job — working with people.

"In banking, anybody can provide products and services," Allphin says. "The only thing that differentiates us is our people. Good rapport is crucial. Our business is built on trust."

Allphin finds creative challenges in managing a team of bank development officers who work with small- to middle-sized commercial business clients in four states. It's a job that demands flexibility, decision-making skills and the ability to juggle many tasks at once. Allphin uses a telephone with a headset, e-mail, a cell phone and a Palm Pilot to communicate quickly.

"You can get inundated with information and you have to decide what's important," Allphin says.

Creativity sells. Or so it would seem, judging from marketing efforts by Hewlett-Packard, Lucent and others such as Apple Computer, which won an Emmy for its "Think Different" campaign; the telecommunications company Viatel, which proclaims, "Our only limits are in our imagination"; and Siegelgale, which claims, "ideas that transform."

"It's not just spin," says Boise State's Ruud. "But the challenge for the consumer is to separate real creativity from image: Does this university or computer or automobile really provide me with something new and better, or is it just a bunch of crap?"

Perhaps it's both. A challenge of the Information Age is that there's often endless data but little context, notes Boise State historian Todd Shallat. "You have a culture where more and more it's about image," he says.

Shallat notes that the perceptions of creative endeavor changed as goods that were hand-made by artisans in rural societies began to be mass-produced in factories. "When you link creativity to output, it changes the definition," he says. For example, instead of valuing a handmade vase, society values the fact that 1,000 vases can be produced in a single day. In university settings, creative output is sometimes measured by the quantity of papers published, not by their quality, Shallat adds.

The comic strip "Dilbert" offers a perceptive look at the con-

traditions between what society claims to value, and what it actually does. "Dilbert is about the homogenization of culture, how it dehumanizes us and robs us of our individuality," Shallat says. The offbeat, cynical strip is popular because it's relevant.

And the flashy, feel-good ads touting corporate creativity? Every society pines for what it doesn't have, suggests Shallat. Early Americans were desperate for culture because they felt they had little. They valued independence because they had been dependent on England. "The 1960s was called the 'peace era,' but it was a very violent time," he adds.

"Today, Americans talk a lot about the importance of creativity," Shallat says. "What does that tell you?"

DEBRA FUGAL would argue that her customers demand creativity. The '97 Boise State graduate in human resources and her husband, Lowell, own Custom Confections in Boise, a lollipop-making business. Their niche is novelty items such as "lip" lollipops, interactive pops with stickers or toys inside, and a new honey pop that can be used to sweeten teas.

Coming up with ideas for catchy new pops and getting them on the market quickly is key to the Fugals' business success. They point to the eye-popping display of colorful candy that fills counters and wall space in their office. Every lollipop there has its own history: many were big sellers, a few missed their market. Figuring out what the public wants isn't always easy, the Fugals say.

"People quickly get bored with things. They want to know what's next," says Lowell Fugal. Adds Debra Fugal: "For today's generation, everything is instant. People expect and demand change."

That preoccupation with change will drive the creative spirit in the years ahead, predict both those in the workplace and at Boise State. And while the pressures aren't likely to ease, the consensus is that we'll find ways to adjust.

"The workplace, ultimately, reflects the state of society. If society demands creativity, then those organizations that don't respond will go under," notes Nagasundaram. But the "huge lag" between where companies are and where they're headed contributes to the Dilbert-type pressures their employees

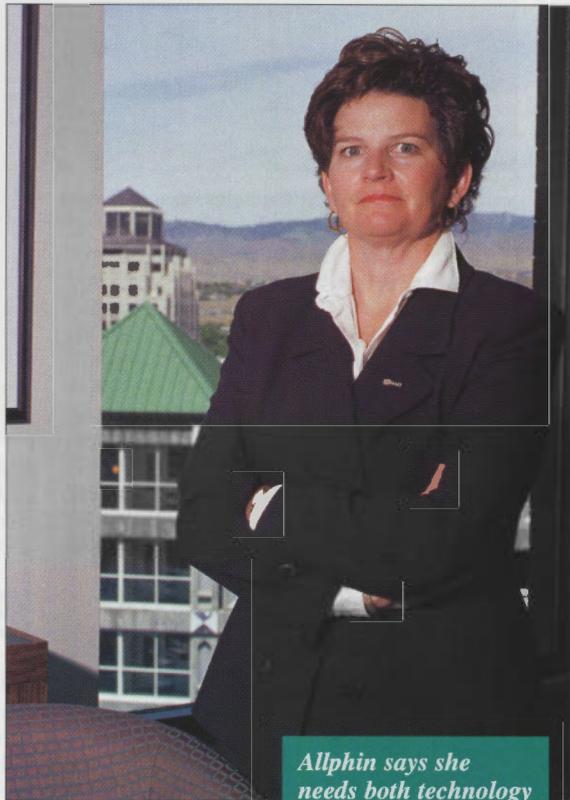
may feel, he says.

Technology can also be a double-edged sword. "We're all hiding behind that thing," says Lamb Weston's Megale, pointing at his computer. "When I'm there, I'm not selling anything, I'm not talking to customers, I'm not thinking outside the box."

Megale turns from the computer and adds, "It's still a people business. We sell more than price, we sell service and quality. The human element is still the most important."

That human spark will likely fuel changes we can't even imagine right now. Computers, after all, are just machines, notes Boise State computer science professor John Lusth, that do boring, straightforward things. "When we're freed from the mundane, we can use our creativity," Lusth says.

Just don't expect the tensions that surround creative enterprise to disappear anytime soon, warns Shallat. "Creating is aggressive, contentious and challenging," he says. "That isn't going to change." □



CHECK SCHEER PHOTO

Allphin says she needs both technology and creativity as a bank vice president.