



By Contributing Editors John Gehl and Suzanne Douglas

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ON-AIR/ONLINE CROSSOVERS

NBC is pushing its prime time content into cyberspace. Two series, "The Pretender" and "Homicide," already interweave on-air and online plots and characters, and rumor has it the network plans to include other series, including at least one comedy, this fall. The trend toward merging the two media will continue, says NBC's VP and executive producer of digital productions. "These are not one-off anomalies. We are looking to push the creative and business opportunities of these mediums." (Broadcasting & Cable 28 Jul 97) <http://www.broadcastingcable.com>

IN SEARCH OF "PRECOMPETITIVE" TECHNOLOGIES

Despite the recent squeeze on research budgets, companies are filing for more patents than ever, and the recently released 1997 Battelle R&D Magazine research-funding forecast predicts the budget pendulum will swing in the other direction for the next few years. And while today's research labs are focusing on relevancy -- making sure the research complements the company's strategic goals -- they're not afraid of what's called "discontinuous" research -- radical studies that break with a company's normal investigations. Industry observers caution that these further-out studies

Looking at the accelerating rate of technological change, Shane Greenstein of the University of Illinois at Urbana-Champaign thinks that the biological metaphors for technology may have to be replaced by ones associated with earthquakes and tectonic movements. A biological metaphor such as "product life cycle" suggests an orderly progression that no longer does justice to the frantic pace of modern innovation. "With only rare exceptions, only technologists brag about the speed with which things change today. Vendors no longer boast about it; most just endure each new competitive episode and celebrate surviving another day. Except for the most technical user (or the most competitive office situation), the speed of change comes too rapidly for most users." (Shane Greenstein, "The Biology of Technology," IEEE Micro Jul/Aug 97) <http://www.computer.org>

The authors of a study of 686 middle managers from twenty Fortune 500 companies say there has been a shift of loyalty in the past decade: no longer are loyalty to an organization and loyalty to a career mutually exclusive. Instead, "today's manager -- a free agent in managing his or her own career in an insecure corporate environment -- can nonetheless be loyal to the company where he or she is developing that career." They also found that for many managers the move to another company actually increases their sense of organizational loyalty to the one they left. "Perhaps burned-out managers are refreshed and renewed by changing companies." There's a big difference between short-term, self-centered "job hopping" and long-term "career development" that transfers a manager's talents (and loyalty) to a more receptive corporate setting. (Linda K. Stroh & Anne H. Reilly, "Loyalty In The Age Of Downsizing," Sloan Management Review Summer 97)

MANAGEMENT BY LIGHT BULB Distinguished management theorist Warren Bennis says that all the really "great" groups encourage dissent: "They are the most verbal, argumentative entities. It is sort of like playing Frisbee with ideas, tossing ideas all over the place. If there is one word to characterize these groups it is logorrhea -- these are people who can't shut up." You can't have a great group without "an incredible amount of rejoicing and celebrating and the freedom to express different ideas, crazy ideas, without being cut down." What does it take to be the leader of a great group? The ability to show group members that a good idea really pays off. "Even if you're facing the quintessential, most highly acclaimed CEO in America right now, Jack Welch, you know that as tough as he is, if you really produce a terrific idea, the light bulbs will go off in his head." (Joel Kurtzman, *An Interview With Warren Bennis*, *Strategy & Business* 3Q 1997)

Management professors Ian MacMillan (Wharton) and Rita McGrath (Columbia) say that the creative organizations are the ones that think about their customers' entire experience with a product or service (which they call the "consumption chain") and find ways to distinguish themselves from competitors at each and every point in that chain. How? By methodically asking who-what-where-when-why questions about every aspect of the customer's use of the product or service. Example? Oral-B asked the question, how does a customer know that it's time to get a new toothbrush? -- and then developed a patented blue dye for coloring the center of the bristles; the color fades when the toothbrush is no longer effective. Similar questions led to the following differentiation strategies: CarMax and AutoNation "selling" cars by letting customers create their own selection process; Compaq targeting installation time as a source of differentiation and giving the customer a poster and a video; Nordstrom seeking differentiation with a "no questions asked" returns policy (and even gained national publicity when one Nordstrom store manager took back a set of tires even though the company does not sell tires). The trick is to take a long look at each and every single point in the customer's experience -- from the time of selecting it to the time of consuming or discarding it - and to brainstorm possible ways of distinguishing yourself -- at that single point -- from your competitors. (Ian C. MacMillan & Rita

When you try to new ideas in an organization the chances are high you'll be told: "That won't work here!" So one good way to be an effective change-agent is to look within the company itself for internal "best practices" that can be replicated throughout the organization. Begin by asking yourself what is crucial to your success -- revenue? profitability? margin? productivity? cycle time? customer satisfaction? Then collect the current data on the critical performance factor for the various units throughout the organization. "Using a common definition of performance to begin the process is essential. Without a common definition, and reliable data, the process will be ineffective. Reaching agreement on standards of performance may take time, but it is the only way performance can be truly compared between units." But once you have that common definition, graph the performance data to make it virtually impossible for lagging managers to ignore the obvious -- and act aggressively to try to bring their units up to best-practice levels. (Richard Baumbusch, "Internal Best Practices: Turning Knowledge Into Results," *Strategy & Leadership* Jul/Aug 97)

Management strategists sometimes talk too glibly about developing "customers for life" and a long-term, highly-trained, fully-committed workforce. You can't just create those outcomes by force of will: you have to live with the realities of the particular business you're in, the nature of your customers, the type of product or service you offer, and your ability to attract and retain competent employees. The basic question is whether your strategy should be relation-based or transaction-based. Activities that should be relation-based are ones where customers are making costly and important decisions about something they know relatively little about; examples would be financial planning or the purchase of special power tools. In contrast, a company that makes standardized products (such as rubber bands) or sells standardized services (such as tax preparation) should adopt a transaction-based strategy and be ready to compete on cost with short-term customer relationships and short-term employee relationships. The current trend in human resources is to take a lean-and-mean approach with employees at the same time the marketing department is trying to win "customers for life." "Because both choices are very appealing, a common response is to say, 'Let's do both!' But such a response is inappropriate because the two 'visions' are mutually exclusive." (Diana L. Deadrick, R. Bruce McAfee, & Myron Glassman, " 'Customers For Life': Does It Fit Your Culture?" Business Horizons Jul/Aug 97)

Military planners are envisioning a future where all communications on a battlefield are transmitted via laser, and a new prototype developed by Thermo Trax Corp. demonstrates this scenario. The device is a pair of binoculars equipped with a tiny, lightweight laser communications system that perches on the brow of the eyepiece. The system can handle voice, video and data at a speedy 1.2 gigabits per second, and developers predict that theoretically, such a system could handle 200,000 voice channels. (Popular Science Aug 97) <http://www.popsci.com>

Researchers exploring the capabilities of microelectronic mechanical systems have hit upon the idea of expanding the size of the tiny devices and using them to push air in a way that pieces of paper could be manipulated without anyone or anything actually touching it. By coating the surfaces of printed circuit board with components of millimeter- rather than micrometer-size, they envision a paper mover that uses sensors and tiny air jets to shift and position pieces of paper. A prototype array incorporates sensors and valves to operate about 50 air jets on which the piece of paper rides. "There would be all sorts of new things you could do in printing if you could move paper without touching it," says a scientist at the Xerox Palo Alto Research Center. (Science News 26 Jul 97) <http://www.sciencenews.org>

Computer-generated speech has gotten a bad rap for being mechanical- and monotonous-sounding, but the creator of a software program called Affect Editor hopes to change all that. When a user selects any of six emotions -- annoyed, cordial, disdainful, distraught, impatient or plaintive -- the software assigns one of 21 integers to each of numerous acoustical qualities representing aspects of pitch, voice quality, timing, articulation and loudness. For instance, plaintive speech is soft, low-pitched and slurred, with minimal variability and many pauses. Annoyed speech is characterized as loud, high-pitched, quick, with irregular rhythms, inflections and precise enunciation. The software is

on display at the Boston Computer Museum. (Technology Review Aug/Sep 97) <http://web.mit.edu/techreview/>

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