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The Neuroscience of Leadership

by [David Rock](#) and [Jeffrey Schwartz](#)

Breakthroughs in brain research explain how to make organizational transformation succeed.

Mike is the CEO of a multinational pharmaceutical company, and he's in trouble. With the patents on several key drugs due to expire soon, his business desperately needs to become more entrepreneurial, particularly in its ability to form internal and external partnerships to reduce time-to-market. Yet his organization has a silo mentality, with highly competitive teams secretly working against one another. How can Mike change the way thousands of people at his company think and behave every day?

Businesses everywhere face this kind of problem: Success isn't possible without changing the day-to-day behavior of people throughout the company. But changing behavior is hard, even for individuals, and even when new habits can mean the difference between life and death. In many studies of patients who have undergone coronary bypass surgery, only one in nine people, on average, adopts healthier day-to-day habits. The others' lives are at significantly greater risk unless they exercise and lose weight, and they clearly see the value of changing their behavior. But they don't follow through. So what about changing the way a whole organization behaves? The consistently poor track record in this area tells us it's a challenging aspiration at best.

During the last two decades, scientists have gained a new, far more accurate view of human nature and behavior change because of the integration of psychology (the study of the human mind and human behavior) and neuroscience (the study of the anatomy and physiology of the brain). Imaging technologies such as functional magnetic resonance imaging (fMRI) and positron emission tomography (PET), along with brain wave analysis technologies such as quantitative electroencephalography (QEEG), have revealed hitherto unseen neural connections in the living human brain. Advanced computer analysis of these connections has helped researchers develop an increasing body of theoretical work linking the brain (the physical organ) with the mind (the human consciousness that thinks, feels, acts, and perceives).

The implications of this new research are particularly relevant for organizational leaders. It is now clear that human behavior in the workplace doesn't work the way many executives think it does. That in turn helps explain why many leadership efforts and organizational change initiatives fall flat. And it also helps explain the success of companies like Toyota and Springfield Remanufacturing Corporation, whose shop-floor or meeting-room practices resonate deeply with the innate predispositions of the human brain.

Managers who understand the recent breakthroughs in cognitive science can lead and influence mindful change: organizational transformation that



Illustration by Jason Holley

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takes into account the physiological nature of the brain, and the ways in which it predisposes people to resist some forms of leadership and accept others. This does not imply that management — of change or anything else — is a science. There is a great deal of art and craft in it. But several conclusions about organizational change can be drawn that make the art and craft far more effective. These conclusions would have been considered counterintuitive or downright wrong only a few years ago. For example:

- **Change is pain.** Organizational change is unexpectedly difficult because it provokes sensations of physiological discomfort.
- **Behaviorism doesn't work.** Change efforts based on incentive and threat (the carrot and the stick) rarely succeed in the long run.
- **Humanism is overrated.** In practice, the conventional empathic approach of connection and persuasion doesn't sufficiently engage people.
- **Focus is power.** The act of paying attention creates chemical and physical changes in the brain.
- **Expectation shapes reality.** People's preconceptions have a significant impact on what they perceive.
- **Attention density shapes identity.** Repeated, purposeful, and focused attention can lead to long-lasting personal evolution.

Change Is Pain

"Why do people resist change so stubbornly, even when it's in their own interest?" wonder CEOs like Mike. Changing the way others go about their work is harder than he has expected. New advances in neuroscience provide insight into why change can be so difficult, and there are several key findings.

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