

Book ReWiring the Corporate Brain

Using the New Science to Rethink How We Structure and Lead

Danah Zohar Berrett-Koehler, 1997

Recommendation

If you're looking for a philosophical, out-of-the-mainstream approach to restructuring your company, author Danah Zohar offers it. She presents an exhaustive, if at times repetitive, case for replacing inflexible, old-line companies with more agile, quantum organizations. Problematically, Zohar devotes too many words to theory and not enough to practical steps for restructuring, and her book is light on examples of companies that have successfully used quantum theory to reorganize. Still, her underlying case is strong. Anyone stuck in a staid bureaucracy would prefer a company where assumptions are actively questioned. To her credit, Zohar offers a starting point for the difficult task of streamlining stodgy organizations. *BooksInShort* recommends her ideas to any manager seeking an unusual and thoughtful look at corporate restructuring.

Take-Aways

- Companies pay lip service to restructuring and reengineering, but true change requires us to rewire our brains.
- Real change requires a fundamental shift at each of the three levels of the self: mental, emotional and spiritual.
- The sciences of the 20th century show the relationships between systems.
- A company's vision isn't a five-year plan but a sense of identity and motivation.
- A company must always acknowledge its spiritual core.
- The human brain provides a model for creative thinking in corporations.
- Quantum systems are chaotic and thrive on uncertainty and ambiguity.
- Newtonian organizations are bureaucratic, focusing on top-down control, tight structure and imposed solutions.
- While debate is the preferred method of communication in Newtonian organizations, dialogue is radically different and more productive.
- Servant leadership is the goal of quantum thinking and quantum leadership.

Summary

The Reality of Change

Corporate executives and high-paid consultants love to tout processes of change, such as restructuring and reengineering. But most corporate change is superficial, a rearranging no more significant than shuffling furniture in a room. True transformation requires executives to rewire their brains - to rip out the old wires and completely change the way they think.

"Deep, transformational change requires that we literally rewire our brains, that we grow new neural connections. That means we must feel the old wires being wrenched loose."

Because corporations organize humans, they operate on the same levels as humans. People have three levels: mental, emotional and spiritual (which doesn't necessarily refer to religion). Most attempts at change aim at only one level. To transform an organization successfully, an effort to change must focus on all levels. This reflects the holistic nature of the world acknowledged by 20th-century science. People don't consist of compartments titled "Mind," "Heart" and "Spirit," nor should a company be divided into "Product Development," "Marketing" and "Finance." A corporation must nurture all three types of thinking - mental, emotional and spiritual.

Adding Meaning to the Hierarchy

Maslow's hierarchy of needs divides human requirements into basic needs and growth needs. Basic needs are survival, the most essential, followed by safety. Growth needs go from belonging to esteem and self-actualization. This hierarchy is illustrated by a triangle with survival at the bottom and self-actualization at the bottom. While this hierarchy is useful, it's too hierarchical itself. It assumes that self-actualization - which can be interpreted as spiritual fulfillment - is an afterthought, but not an essential part of life. This isn't true. The need for meaning is a primary human requirement, one that has led people to sacrifice comfort, relationships and food for a greater purpose.

"All the sciences of the twentieth century, both physical and biological, are holistic. They show that the world does not consist of separate, isolated parts but rather of intricately interrelated systems."

Consider replacing Maslow's hierarchy with the more accurate "Layers of Self," a chart showing four concentric circles with spiritual factors in the center circle. This central circle is labeled the quantum self, which is defined as an organization's basic vision and values. A company's vision isn't just a five-year plan; it's a deep-seated sense of identity, motivation, aspiration and the organization's role in the wider world. The second circle represents transpersonal issues such as principles. The third circle encompasses important relationships, such as family, and the final circle includes practical, business and social factors. Spiritual factors lie at the center because meaningful change in an organization requires concomitant change on the spiritual level of reflection, meaning and value. Like an individual, an organization must remain in contact with its spiritual level. The spiritual realm provides the only way for a company to rethink assumptions, change leadership patterns and transform itself.

Types of Thinking

The human brain is an amazing organ that is always adapting and rewiring itself. The brain provides a model for the type of creative thinking that an organization must embrace if it hopes to change successfully. But creative thinking is just one of three kinds of thought the brain engages in. These are:

- 1. Serial thinking is logical and unambiguous. It's the type of thought required for mathematical problems and it recognizes only black and white, not shades of gray. Corporate structures typically are based on serial thought, as reflected in rules requiring people to punch time clocks, take breaks at certain times and follow dress codes.
- 2. Associative or parallel thinking is emotional and experience-based. For instance, associating hunger with food or the color red with danger is parallel thinking. Associative thinking also includes trial-and-error learning, the type of thought used for skills such as riding a bicycle or driving a car. The disadvantage of this type of thinking is that it is slow and inaccurate. Also, bad habits are difficult to unlearn.
- 3. Creative thinking, also known as quantum thinking, comes from the spiritual level of the self. This kind of thought challenges assumptions and breaks old habits. Quantum thinking also is holistic. It combines the information from serial thinking and

associative thinking and then processes the information into a coherent story.

Old Paradigm Vs. New Paradigm

When studying organizations, it's useful to do so in the context of old and new paradigms of science. Old paradigm science is fragmented and atomistic. New paradigm science is holistic and integrated. The old paradigm focuses on separate parts, while the new paradigm looks at the relationships among parts.

"The organization, potentiality and thinking processes of the human brain are our most powerful models for creative thinking in organizations."

Most corporations are Newtonian organizations. They are tradition-bound and bureaucratic, relying on centralized control, hierarchy and predictability. Newtonian organizations are unwilling and unable to change. Such companies tend to stifle individual creativity. The new model for corporations shows that companies must become less Newtonian and more closely follow the scientific disciplines of the 20th century, such as relativity, quantum mechanics, chaos and complexity theory. Twentieth century science also is holistic, acknowledging the connections between systems. These concepts move away from simplicity and certainty; instead, they embrace pluralism, diversity, ambiguity and contradiction. Newtonian science, while a useful building block, represents the old paradigm. Quantum mechanics and relativity represent the new paradigm. In short, the Newtonian model is essentially simple, law-abiding and certain, while the quantum model is complex, chaotic and uncontrollable.

"The need for meaning is primary. There are countless documented instances of people sacrificing comfort, companionship, food, even life itself in pursuit of meaning, higher morality or higher ideals."

The Newtonian approach defines modern commerce. The pin factory described by economist Adam Smith provides a prime example. Through division of labor, each worker concentrated on a specific task, such as making the heads of pins. This approach is more efficient than having each worker make whole pins. This sort of specialization has taken hold in Western medicine, education and management. But according to quantum physics, the world is not made of separate, solid things. At the most basic level of reality, physical systems are patterns of dynamic energy.

"In any human being or in any human organization, real change requires a fundamental shift at each of the three levels of the self."

Iron laws rule old paradigm science. But new paradigm systems rely on uncertainty and ambiguity. The reason for this difference can be found in the Western mind. Westerners tend to look for concrete explanations to mysterious events. Newtonian determinism became popular because it helped explain the world to people who felt they were being buffeted by unpredictable natural catastrophes. That mindset has carried through to Western management styles, while Asian managers tend to be more comfortable with uncertain circumstances.

"Quantum and chaotic systems thrive on uncertainty and ambiguity."

Newtonian science is by definition reductive - it reduces systems to their smallest parts. For example, Adam Smith's division of labor reduces production to its individual components. But quantum science is emergent - the properties of systems emerge just at the edge of chaos. Under this theory, systems are self-organizing. They can't be controlled by any outside forces. In the old paradigm, the parts define the whole. In the new paradigm, the whole is greater than the sum of the parts. In management terms, the old paradigm represents top-down management, while the new paradigm embraces bottom-up management. The old paradigm is reactive, while the new paradigm encourages imagination and experimentation. Newtonian organizations tend toward the bureaucratic and focus on top-down control, tight structure and an obsession with efficiency. The quantum leader, on the other hand, draws inspiration and insight from the group he's leading.

"Many a Newtonian organization has created a bureaucratic Frankenstein's monster with its emphasis on top-down control, tight structure and imposed plans or solutions, and its obsession with efficiency."

Old-paradigm, mechanistic science focuses on knowing the answers to life's mysteries. Heisenberg's Uncertainty Principle casts some insight on this approach. This principle says that the answers of any inquiry are influenced by the questions asked. It also says that

studying a system interferes with it and, therefore, changes the results. This concept can be applied to an interview with a potential employee. Under the old paradigm approach, the interviewer would ask the candidate only for facts, such as employment history and educational background. The interviewer would come away with a number of facts but little impression of the job candidate's personality. Under the new paradigm, the interviewer might take the candidate to lunch and chat about hobbies. The interviewer would learn more about the potential employee as a person but few facts.

Managing Under the New Paradigm

The new and old paradigms produce much different results when applied to management styles. Newtonian management yields competition, while quantum management brings cooperation. Newtonian management defines one best method; quantum management allows for many effective viewpoints. In a Newtonian organization, employees are passive units of production. In a quantum organization, employees are partners.

"Dialogue is essentially an attitude. It is a radically different attitude toward oneself, toward others, toward knowledge and problems and relationships."

You can see these differences if you compare Western managers with Eastern managers. The two cultures have divergent views of the self. In Asia, the culture creates stability through discipline of the self. In the West, stability is achieved by excluding the self and emotions, and by organizing the predictable parts of relationships.

Debate Versus Dialogue

The differences between the old paradigm and the new paradigm are apparent in communication. An organization can host two types of discussion: debate or dialogue. Debate is about knowing, while dialogue is about finding out. Debate seeks answers; dialogue asks questions. Debate has winners and losers, while dialogue results in sharing. Debate is about power, while dialogue emphasizes respect and reverence. Debate seeks to prove a point or defend a position, while dialogue hinges on listening and exploring new possibilities. Dialogue is an attitude, one that puts quantum thinking into practice. Dialogue doesn't necessarily seek consensus, but by organizing into dialogue groups, companies can improve communication and understanding among employees.

The Servant Leader

The end result of all this new-paradigm thought and communication is to create a servant leader. This is the essence of quantum thinking and quantum leadership. Andrew Stone, joint managing director of the British company Marks & Spencer, provides an example of the servant leader. Well-read but lacking formal education, Stone left school at 15 and lived on the streets in England. He later joined the Israeli army to fight in the Six Days War. When he joined Marks & Spencer, the retailer hired him not because he was qualified but because it feared becoming bureaucratic. Stone rose through the ranks, adopting quantum management. He hosts weekly "bitch sessions" in which critical directors can gripe about whatever is bothering them.

"Servant leadership is the essence of quantum thinking and quantum leadership."

When Stone wanted his thirteen directors to develop a new global procurement policy, he presented a vague outline to a dozen colleagues. He told his colleagues, frustrated by his lack of detail, that he excelled at generating ideas, while they were good at implementing them. The meeting turned into a freewheeling dialogue where many ideas were given. His ambiguous approach released the creativity of his colleagues. What's more, by seeking their input, Stone created a process by which everyone felt a part of the solution, rather than merely having the new procedure foisted on them.

About the Author

Danah Zohar, a management consultant and lecturer, is the author of The Quantum Self and The Quantum Society. She has a bachelor's degree in physics and philosophy from the Massachusetts Institute of Technology and did postgraduate work at Harvard. She lives in Oxford, England, where she teaches in the Leading Edge course at Oxford Brookes University and in the Oxford Strategic Leadership Program at Oxford University's Templeton College.