

Applying Creativity to Health Care: Learning from Innovative Companies

By Peter Valenzuela, MD, MBA

In this article...

Take a look at various types of innovation and consider what health care needs to do to innovate.

In the *Innovator's Prescription*, Clayton Christensen points out that much of what we do in medicine is inefficient, expensive, and inappropriate. He identifies the need to view the health care challenges through a different lens.

In order to better understand this directive, we must first gain insight into what innovative companies are doing outside the health care industry. More specifically, we must evaluate the types of innovation as well as examine the culture, people, organizational structure, and leadership of creative organizations.

The health care industry is undergoing dramatic change—with good reason. U.S. research indicates that health care costs increased over 1.5 times more than employee wages. In addition, average out-of-pocket costs for all Americans are now 32 percent of household income. Even more alarming is the fact that more than 60 percent of all bankruptcies are linked to medical bills.¹

Despite the increasing costs, patients receive the correct diagnosis and subsequent treatment only 55 percent of the time.² Worse, the U.S. ranks last among seven countries on health system performance based on quality, efficiency, access, equity and healthy lives.³

In order to address these issues, Congress has developed legislation incorporating the Institute for Healthcare Improvement's Triple Aim: improving patient experience, improving health of populations, and reducing per capita costs. Payers are following suit with a similar approach. Although many argue that this will not be enough to effect significant change, it is a wakeup call to those in health care.

Types of innovation

Innovation is a form of creation that can start internally or externally. Outside innovation assumes that customers have outcomes they want to achieve and are not happy with the way things operate today.

With outside innovation, organizations engage customers to co-design products and services. A prime example of this is the open source model where complex programs are co-created and evolved by a community of software experts.

Internal innovation is more traditional and is based on the premise that the organization's experts design products and services that customers may not realize they need. Internal innovation can occur from the bottom up or from the top down.

Top-down innovation has obvious advantages in that those in power select the most-talented team, provide funding, and allocate time and other resources as needed. This methodology is used by Canon's Reprographic Products Development Center that develops teams with designers and production engineers to create sleek cameras.⁴

Bottom-up innovation starts on the ground floor of the organization. These are employees willing to go through the process of convincing several levels of management of the value of their ideas. The best example of this is Richard Drew, a lab technician with 3M who refused to take no for an answer in developing masking tape and Scotch tape.⁵

Innovation is broken up into three levels:

1. Incremental innovation simply enhances existing services or products. An example would be the iPad 2 model.
2. New-to-the-market innovation delivers a new product or service that was previously non-existent. This tends to require more effort, time and resources. An example of this type of innovation is the Dyson hand dryer.
3. Breakthrough innovation results from something that has never been achieved before. It cannot be compared to



any existing product or practice. An example of breakthrough innovation is the creation of the World Wide Web.

Based on the current health care environment, incremental change will not suffice in making a significant impact in our country. Change must be based on new, breakthrough models with both top-down and bottom-up leadership.

Furthermore, all external customers need to be involved in the process since they have a vested interest and the expertise to co-design a better system.

Culture

Jason Fried, best-selling author of *Rework* and CEO of software company 37 Signals, defines culture as “the by-product of consistent behav-

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ior.” He stated that artificial cultures are made up of mission statements, declarations and rules on how to paint, but real culture is a patina. Culture is not words, but action.

According to Fried, culture cannot be shaped by the occasional casual Friday or bring-your-dog-to-work day. If those are important for employees, then they should be allowed every day of the week.

Josh Linkner, best-selling author of *Disciplined Dreaming* and founder of promotions company ePrize, notes that even the most resistant corporate bureaucracies can cultivate creativity and become competitive in the shifting marketplace. Linkner identi-

fies seven critical rules that shape innovative cultures:

1. Fuel passion by developing a sense of purpose, promoting collaboration and having fun.
2. Celebrate ideas through praise, career opportunities, and perks.
3. Foster autonomy by limiting the number of hoops employees must jump through to get work completed.
4. Encourage courage by advising employees to say what they think, even if it’s controversial, and to question actions inconsistent with company values.

5. Fail forward by learning from experiments that did not work and taking risks that will lead one step closer to the perfect solution.
6. Think small like start-up companies by being nimble and curious while embracing change.
7. Maximize diversity to better connect with customers and understand the world from their perspective.

The physical environment also makes a significant impact in culture. Unfortunately, this is often overlooked in large organizations. Companies have no problems investing in equipment and buildings, but cut corners on creativity and innovation.

In health care, spending \$1 million to purchase an imaging machine is acceptable, but spending \$20 dollars to buy markers or Play-Doh for idea generation is frivolous. To understand how important the work environment is to creativity, look no further than the “Googleplex” in California. It includes a large cafeteria with food service for employees and their guests. It also has game rooms to encourage breaks and reinvigorate employees.⁶

People and productivity

People are the heart of all successful organizations. When organizations lack confidence in their team’s preparedness and commitment, they compensate through increased control. Requiring employees to sit in one place for extended hours at a time creates a factory-like culture that stymies idea generation.

Leaders need to understand that rules should be created to guide efficiency instead of employee mistrust. With that in mind, Best Buy, IBM and Sun Microsystems have implemented Results Only Work Environment (ROWE) programs based on output rather than “sit-put.” In ROWE,

employees are compensated based on achievement of specified goals rather than on hours worked. One Gallup study showed productivity at Best Buy, using ROWE, was up an average of 35 percent, along with decreased staff turnover and improved employee satisfaction.⁷

Meetings are often used by large organizations to manage employees. However, they can also hinder productivity and innovation. Creative companies understand the impact of constant interruptions and how they break up the work day. They also understand the expenses associated with meetings.

Jason Fried recommends keeping a tally at the top of the meeting agenda that totals the dollar amount of the meeting based on the number of staff members in attendance and their hourly pay. This decreases the likelihood to schedule information-only meetings and incentivizes the group to stay on subject with actionable outcomes. It also ensures that only those that absolutely must be in attendance are invited. Other creative companies, such as MySpace Music, conduct 10- to 20-minute “stand-up” meetings at the site of the problem that end with clear decisions instead of propagating future meetings.⁸

Organizational structure

Creative companies minimize top-heavy management models. A recent *Harvard Business Review* article noted that multiple layers of management are detrimental to organizations for three reasons.

1. First, as organizations grow management overhead increases incrementally and may account for as much as 33 percent of payroll.
2. Second, traditional hierarchies increase the risk of large, disastrous decisions due to the limited number of individuals who can challenge the decision. This is

especially true when the “uncontestable” leader makes the decision. Not uncommonly, plans created by those too far from the work are unsuccessful.

3. Third, multiple layers of management translate to additional levels of approval and the inability to effect change in a timely fashion.⁹

Innovative companies encourage autonomy and empower teams. At Silk Route Global, a high-growth international logistics company, the team is focused on staying nimble and finding new ideas. To achieve this goal, the CEO abandoned the organizational chart and removed the hierarchy altogether.⁶

Some may argue that Silk Route Global can afford this luxury because it lacks the size of many large corporations. However, Morning Star is the world’s largest tomato processor with over \$700 million in annual revenue and 400 full-time employees.⁹ Operating as a private company, Morning Star has no titles and no promotions. Employees negotiate responsibilities with their peers, and compensation is decided through their peers as well.

Even larger than Morning Star, ITW is a \$16 billion company that manufactures a wide range of products including industrial packaging and food equipment. In order to continue its success, ITW thinks small. Once a business unit reaches \$200 million in revenue, the unit is divided into two \$100 million units. The company would rather have ten independently run, innovative \$100 million units than a single monolithic \$1 billion unit.⁶

Leadership

The *Innovator’s DNA* describes a six-year study detailing the leadership characteristics most commonly found in innovative entrepreneurs. The goal was to uncover what separated innovative companies from the rest with a focus on identifying

how innovative leaders differed from other executives and entrepreneurs.

More than 3,000 executives, 500 founders of innovative companies, and 25 innovative entrepreneurs were surveyed in the study. What they found is that genetics plays a lesser role in the individual's ability to think creatively. They concluded that five skills separate the most accomplished innovators from the rest:

1. **Associating**—Creating links between seemingly unrelated items. eBay was launched after Pierre Omidyar connected his fascination with more efficient Internet markets with his fiancée's love of collecting Pez dispensers and the inability to find Pez dispensers in local classified ads.
2. **Questioning**—Why? What if? Why not? Michael Dell founded Dell Computer after asking why a computer costs five times as much as the sum of all the parts.
3. **Observing**—Raising one's level of awareness, observing in great detail what is happening in the world, and then imagining what could be different. Scott Cook's idea for Quicken software came from observing his wife's frustration with keeping track of home finances.
4. **Experimenting**—Experiment and dabble until they stumble on the best solutions. One form of experimentation is living and working overseas. Former Proctor and Gamble CEO, A.G. Lafley, studied history in France and headed retail operations in a U.S. military base in Japan.
5. **Networking**—Focus on finding diverse people with radically different perspectives. Technology, Entertainment, and Design (TED) conferences bring artists, entrepreneurs, scientists, and many other extraordinary people together to present their ideas and projects.¹⁰

When evaluating leadership, one must be cognizant that inherent prejudices still exist against young people or those new to the industry. Most organizations, especially those in the health care sector, feel that younger individuals lack the experience and insight to solve problems.

However, creative thinking operates contrary to conventional wisdom. Individuals who are considered "novices" may have advantages detecting trends, adopting new technologies and approaching problems from different angles. Innovative leaders must be judged on skills and attributes instead of age.

In the end, the way health care currently operates in the U.S. is unsustainable. By 2020, national health spending is expected to reach \$4.6 trillion and comprise approximately 20 percent of gross domestic product.¹¹

Innovation is vital to cutting costs, improving quality and enhancing patient experience. To achieve this goal, health care organizations will need the right culture, diverse personnel, lean infrastructures, and creative leadership.

Josh Linkner notes that in the Industrial Age, businesses won by extracting the most manual labor out of workers. In the Information Age, businesses won by being the most precise and efficient. In today's Age of Creativity, those businesses able to develop and implement creative solutions will come out ahead.



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References

1. The Rising Cost of Health Care. Healthcare.gov, Combined info-graphic based on Commonwealth Fund, Center for Studying Health System Change, Healthcare.gov. Accessed at <http://awesome.good.is/transparency/web/1110/rising-cost-of-healthcare/flat.html> on January 31, 2012.
2. McGlynn E.A. and others. Quality of Health Care Delivered to Adults in the United States. *New England Journal of Medicine*. 348(26):2635-45, June 26, 2003
3. Davis K, Schoen C., Stremikis K. Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compares Internationally, 2010 Update. Commonwealth Fund. June 2010.
4. Gaynor G.H. *Innovation by Design*. New York: AMACOM. 2002.
5. Kelly L., Littman J. *The Ten Faces of Innovation*. New York: Currency/Doubleday. 2005.
6. Linkner J. *Disciplined Dreaming*. San Francisco: Jossey-Bass. 2011.
7. Conlin M. Smashing The Clock: No schedules. No mandatory meetings. Inside Best Buy's radical reshaping of the workplace. *Businessweek*. December 11, 2006. Accessed at http://www.businessweek.com/magazine/content/06_50/b4013001.htm on January 31, 2012.
8. Belsky S. *Making Ideas Happen*. New York: Penguin Group. 2010.
9. Hamel G. First, Let's Fire All the Managers. *Harvard Business Review*, December 2011.
10. Dyer JH, Gregerson HB, Christensen CM. The Innovator's DNA. *Harvard Business Review*. December 2009.
11. National Health Expenditure Projections 2010-2020. CMS.gov. Accessed at http://www.cms.gov/NationalHealthExpendData/03_NationalHealthAccountsProjected.asp#TopOfPage on January 31, 2012.