

THE ART OF INNOVATION – LESSONS IN CREATIVITY FROM IDEO, AMERICA’S LEADING DESIGN FIRM.
By Tom Kelley with Jonathan Littman.

New York: Random House. 2001. \$40.00 (Can) www.ideo.com – www.theartofinnovation.com.

SUMMARY AND INSIGHTS

#1 - INNOVATION AT THE TOP

1. The biggest single trend we’ve observed is the growing acknowledgement of innovation as a centerpiece of corporate strategies and initiatives. [3]
2. To those few companies sitting on the innovation fence, business writer Gary Hamel has a dire prediction: “Out there is some garage is an entrepreneur who’s forging a bullet with your companies name on it. You’ve got one option now—to shoot first. You’ve got to out innovate the innovators.” [3]
3. Tiger Woods’ golf swing is a product of a team effort [5]
4. Innovation is like the decathlon. Your organization doesn’t need to be the best in every category. What count is your final score. [6]
5. IDEO’s methodology is a five step approach [6-7]
 1. **Understand** the market, the client, the technology, and the problem.
 2. **Observe** real people in real-life situations to find out what makes them tick.
 3. **Visualize** new to the world concepts and the people who will use them.
 4. **Evaluate** and refine the prototypes in a series of quick iterations.
 5. **Implement** the new concept for practical use.

#2 - WINGING IT IN START-UP MODE

1. The boyish pranks [from IDEO’s early days] and wild play didn’t just pump up the team. They also created an atmosphere where you naturally took chances and solved problems. You could stumble, as long as you fell forward. [20]

#3 - INNOVATION BEGINS WITH AN EYE

1. Not big fans of focus groups or traditional market research. They go to the source and watch customers themselves.
2. In business too, your customers may lack the vocabulary or palate to explain what’s wrong, and especially what’s missing. Companies shouldn’t ask them too. [27]
3. Customers mean well—and they’re trying to be helpful—but it’s not their jobs to be visionaries. [27]
4. When you are off your own beaten path, you are more open to discovery. [28]
5. Innovation comes from being close to the action. Geography still matters in the internet age. This sensory immersion is what so many people still fly to other parts of the country for face to face meeting. This is why people still go to museums. [31]
6. By watching people work and live, it gives you a opportunity to provide goods and services that celebrate human behavior. [33]
7. Not everyone’s like you. Not everyone is a thirty-six year old six foot tall while male. Awaken your antenna to the endless variety of human nature, and you’re bound to make customers happier and find new markets. [36]
8. Many companies rigidly separate functions such as research, design, marketing, and manufacturing, creating walls between groups that have much to teach one another.
9. You learn from people who break the rules. Look at the people who do things differently around you. Those are the people who might teach you something you don’t know. [41]
10. Unless you wield monopolistic power, arrogance is not a good strategy. [42]

11. Observation and inspiration doesn't have to be formal. Each one of us can learn to be a better observer simply by taking stock of our environment. [44]

#4 - THE PERFECT BRAINSTORM

1. The problem with brainstorming is that everyone *thinks* they already do it. [55]
2. Brainstorming is more like playing the piano than tying your shoes. You're always learning and can get consistently better. You can become a brainstorming virtuoso. [55]
3. If you want to keep in shape, you need to exercise your brainstorming muscles more than once a month.
4. Brainstorms themselves are often playful but brainstorming as a tool—as a *skill*—is taken quite seriously. [56]

7 Secrets to Great Brainstorming [56]

1. Sharpen the focus.

Start with a well-honed statement of the problem at hand. Edgy is better than fuzzy. The best topic statements focus *outward* on a specific customer need or service enhancement rather than *inward* on some organizational goal.

2. Write playful rules.

Ideo's primary brainstorming rules are simple: "Defer judgment" and "One conversation at a time." The firm believes in its rules so strongly that they're stenciled in 8-inch letters on conference-room walls. "If I'm the facilitator and somebody starts a critique or people start talking, I can enforce the rules without making it feel personal," Kelley says. Other rules include, "Go for quantity," "Be visual," and "Encourage wild ideas."

3. Number your ideas.

"This rule seems counterintuitive -- the opposite of creativity," Kelley says. "But numbered lists create goals to motivate participants. You can say, 'Let's try to get to 100 ideas.' Also, lists provide a reference point if you want to jump back and forth between ideas."

4. Build and jump.

Most brainstorming sessions follow a power curve: They start out slowly, build to a crescendo, and then start to plateau. The best facilitators nurture the conversation in its early stages, step out of the way as the ideas start to flow, and then jump in again when energy starts to peter out.

"We go for two things in a brainstorm: fluency and flexibility," Kelley says. "Fluency is a very rapid flow of ideas, so there's never more than a moment of silence. Flexibility is approaching the same idea from different viewpoints."

5. Make the space remember.

Good facilitators should also write ideas down on an accessible surface. Ideo used to hold its brainstorms in rooms wallpapered with whiteboards or butcher paper. Lately, however, the group has started using easel-sized Post-it notes. "When the facilitator tries to pull together all the ideas after the session," Kelley says, "she can stack up nice, tidy rectangular things instead of spreading butcher paper all the way down the hall."

6. Stretch your mental muscles.

Brainstorming, like marathon running, should begin with warm-up exercises. Ideo studied various methods of prepping for a session. For a project on the toy industry, for example, Ideo divided the group into three teams: The first team did no preparation. The second listened to a lecture on the technology involved and read background books. The third team took a field trip to a toy store. Far and away, the toy-store team produced ideas in greater quantity and quality than the other two.

7. Get physical.

At Ideo, brainstorming sessions are often occasions for show-and-tell. Participants bring examples of competitors' products, objects that relate to the problem, or elegant solutions from other fields as springboards for ideas. Ideo also keeps materials on hand -- blocks, foam core, tubing -- to build crude models of a concept.

6 Ways to Kill A Brain Storm

1. Let the boss speak first.

Nothing kills a brainstorming session like a dominating CEO or the brownnosers who rush to agree with his every statement. Ideo recommends that bosses lock themselves out of idea-generation sessions all together. Send him out for doughnuts, and you'll get better results.

2. Give everybody a turn.

Kelley remembers packing 16 people into a room for one particular meeting. Each person had two minutes to speak. It was democratic. It was painful. It was pointless. It was a performance, not a brainstorm. "In a real brainstorm, the focus should never be on just one person," Kelley says.

3. Ask the experts only.

When it comes to generating truly innovative ideas, deep expertise in a field can actually be a drawback. "In a brainstorm, we're looking for breadth," Kelley says. Cross-pollination from seemingly unrelated fields can lead to authentic breakthroughs.

4. Go off-site.

By conducting off-site brainstorming sessions, you only reinforce the concept that great ideas only come on the beach or at high altitudes -- not in the proximity of your daily work.

5. No silly stuff.

Kelley remembers one brainstorming session doomed by the boss's opening remarks: All ideas had to result in something the firm could patent and manufacture. The silence that followed was deafening. Silly is important. Wild ideas are welcome. Brainstorming should be fun.

6. Write down everything.

Obsessive note taking is toxic to brainstorming. It shifts the focus to the wrong side of the brain. It makes the session feel like History 101. Doodles and sketches are fine. A short note that preserves a thought is acceptable. But detailed writing destroys momentum, dissipates energy, and distracts from the main purpose of the exercise: unfettered thinking. Each session should have an assigned scribe who records suggestions. And that person should *not* be the group facilitator.

#5 - A COOL COMPANY NEEDS HOT GROUPS

1. Thomas Edison generated an astounding 400 patents, producing innovation in the telegraph, telephone, phonograph, and the light bulb – *with the help of a fourteen-man team*. [70]
2. The myth of a lone genius can actually hamper a company's efforts at innovation and creativity. [70]
3. **The Makings of a Hot Group** [71]
 1. Totally dedicated to the end result
 2. A tight deadline
 3. Irreverent and nonhierarchical

4. Well rounded and diverse
5. Working in an open, eclectic space
6. Was empowered to achieve the goal
4. Great teams *need* great projects. Something that they are proud to tell their kids about.[74]
5. Passion fuels great teams [74]
6. Great teams need goals to shoot for [75]
7. Hot teams take chance [77]
8. Hot teams live in close quarters. Too much space, too large a budget, can dissipate energy and discourage a more immediate and emotional connection between team members. A larger building can kill communication and momentum. Small spaces increases communication and gives an opportunity to innovative solutions. [83]
9. Abolish “they” as in “they should fix it” or “they should do it”. “They” companies are control freaks. [84]
10. Lou Holtz (legendary football coach) has three questions about team: *Do you care about me? Can I trust you? Are you committed to the success of the team?* The best leaders respond to those questions in actions and not words. [85]
11. Age and experience are not factors to hot teams. Just by being on a top performing team means that they know what they are doing and are great people. [89]
12. Hot teams give. They pride themselves in the unique and creative gifts they give. IDEOers actually mailed out trees inside of their Christmas cards one year [89]
13. End of project gifts are a great way to celebrate success and even poke fun. [91]
14. Hot teams meet. Bimonthly lunches, ball games and even road trips all build into teams. [95]
15. Hot teams look the part. T-shirts, shrink wrapped cars, ball caps are all apart of building a great team at IDEO [97]
16. Hot teams need characters. Hot teams tend to have one or two certifiable weirdoes. Characters round out your team and provide a different point of view. [98]
17. Eight Crazy Characters for Hot Groups [98]
 1. **The Visionary**
 2. **The Troubleshooter**
 3. **The Iconoclast** (someone who challenges the status quo)
 4. **The Pulse Taker** (a person with a heart)
 5. **The Craftsman**
 6. **The Technologist** (the geek who knows all the answers)
 7. **The Entrepreneur**
 8. **The Cross-Dresser** (learned so much since they left school that their education was a past life)

#6 - PROTOTYPING IS THE SHORTHAND OF INNOVATION

1. Quick prototyping is acting before you get the answers [107]
2. Get in the habit of making stuff or airing trial balloon ideas. Odds are you’ll bounce your way to the insight that may inspire your next breakthrough [111]

#7 - BUILD YOUR OWN GREENHOUSE

1. Teams need places to thrive and grow [121]
2. Ideo considers their office space to be one of their premier assets [121]
3. Athletes need proper facilities. What not workers? [121]
4. The fewer rules the better[122]
5. Your spaces tell stories—about your workers and your company [122]
6. Ideo uses the park metaphor for office space. A central table with offices circling it.
7. Smaller staffs make it easy to put their stamp on a space [123]
8. If you can’t tell when you’re moving from one neighborhood to another, you probably don’t have neighborhoods.
9. Office space is unrelated to rank or seniority [125]

10. Space or status is not sacrosanct. One exec returned to find his office enclosed in plaster, another one had his made into an executive washroom, and another's was made into an indoor deck compete with redwood decking and lawn chairs.
11. Give people ownership of the space in their workplace and you'll be surprised at the positive results [129]
12. Create a team icon. Ideo has a DC-3 aircraft wing hanging from its work as an icon for one of its teams. [131]
13. Management needs to listen to its workers in creating office space [134]
14. Many companies lose momentum when there is too much elbowroom. "density-yields-buzz" [136]
15. Most libraries are an afterthought but IDEO has made an intentional effort to include its library into an intregal part of the workplace. Laser printers positioned within the space encourage workers to regularly visit and use the library. Within this library, there is a large collection of periodicals that come from disciplines outside of IDEO's normal areas of business to provide new ideas and thoughts. [140]
16. Should a great view just be for the CEO or the entire organization? [140]
17. If you company has a great story, tell it in your workplace [140]

#8 - EXPECT THE UNEXPECTED

1. How a new product or service is used in the marketplace is nearly impossible to divine. [153]

Seven Cross Pollination Tips

1. **Subscribe and Surf** to different magazines, TV shows, and the internet
2. **Play director.** Break the world down and watch people perform even the simplest tasks.
3. **Hold and Open House.** Show people what you are up to and invite comments.
4. **Inspire Advocates.** Mental diversity is extremely important. Listen to those who have passions for different areas.
5. **Hire Outsiders.** Fresh blood invigorates a company and brings new ideas.
6. **Change Hats.** Stand in your customers footsteps
7. **Cross-Train.** Bring in ideas from non-competitive industries to solve your problems.

#9 - BARRIER JUMPING

1. You can't simply skate over cultural differences. We ignore tradition to our peril. [128]
2. Ask people what has gone wrong [174]
3. The S curve. Every innovations as a period of introduction, growth, maturity, and decline.
4. Deal killers are FUD – **F**ear, **U**ncertainty, and **D**oubt

Barriers	Bridges
Hierarchy-Based Innovation and Structure are like oil and water.	Merit-Based
Bureaucracy the more forms you have to fill out, the less new things you will try.	Autonomy If you are the master of your own destiny, you will have the confidence to take risks
Anonymous If no one cares or notices, no one will care to innovate.	Familiar Friends and family will accept the occasional misstep. Good organizations make you feel comfortable to take risks and poke fun.
Clean Beware of clean desk policies. If you keep	Messy Personalized home bases for the many hours

laying down rules, don't be surprised if people keep thinking in the box.	we spend there. New York City is a metaphor for the office space – diverse and creative.
Experts Expertise is great until it begins to shut you off from new learning opportunities.	Tinkerers Tinkerers are always improving new ideas and things. Tinkerers ignore the status quo because they will be trying something different tomorrow.

2. Don't ignore the "affordances" things that give our lives comfort. [182] A cork on a wine bottle is an uneconomical and inconvenient way of sealing them but customers balk at a wine bottle with no cork. Bad affordances are the irritations that we want to get rid of.

#10 - CREATING EXPERIENCES FOR FUN AND PROFIT

1. No matter that the product or service might be, ultimately it's about some sort of human experience.
2. Go learn from Las Vegas [205]
3. Martha Stewart's success comes from her savvy understanding for our desire of authentic experience. [211]
4. Little experiences count. IDEO sent colorful postcards to people who don't get the job instead of bland form letters. Instead of cheap paper visitor badges, IDEO visitors get nice custom designed visitor badges.[217]

#11 - GETTING THERE FASTER

1. Innovation doesn't happen in a vacuum. Look for competitions you might enter for your teams that emphasize the playful side of innovation [228]

#12 - COLORING OUTSIDE THE LINES

1. "We kept believing that a mistake may not be a mistake when it reflects and essentially sound strategy." Charles Schwab
2. Snowboarding was dubbed America's "Worst New Sport" and now has 5 million riders [236]
3. After spending \$200 million into developing the SensorExcel, Gillette spent \$750 million on developing the Mach 3 razor. Within months the Mach 3 was outselling the Sensor 10-1 and the companies market share topped 70%, its highest in 40 years. The may have hurt an existing product but re-established themselves as an industry leader.
4. A staffer at IDEO opened an office in Europe before he had a written proposal or asked anyone's permission. He just announced he was doing it and no one bothered to stop him. [244]
5. The person who toils endlessly at his desk isn't likely the person who is going to hatch a great innovation [247]

#13 - IN SEARCH OF THE WET-NAP INTERFACE

How to Create a Great Product

1. **Make a Great Entrance** – welcome people to your product [269]
2. **Make Metaphors** – is there a guiding metaphor that will give you guidance on your product?
3. **Think Briefcase** – something that bridges the gap between home and work. Your PDA or cell phone is one of those devices and people love them.
4. **Color Inspires** – Most companies live in a black and white world of ink and paper. John Deere Green or International Harvester Red are examples of things being defined by color.
5. **Backstage Pass** – let people know what happens behind the scenes – iMacs, Amazon.com's confirmation e-mail's, or Netscape's animated shooting stars all let you know what is happening behind the scenes
6. **One Click Is Better Than Two** – FastCash buttons on ATM's, one click Amazon ordering, or the one push on button on my Palm III.

7. **Goof-Proof** – The undo key or the hot glue guns. Self sealing tires.
8. **First, Do No Harm.** Volvo in terms of safety compared to the iron which can burn down your home.
9. **Checklist** – make sure it is compatible with industry standards.
10. **Great Extras** – People respond to the right small touches. It is up to you to find them.

#14 - LIVE THE FUTURE

1. Go to the hotspots, the best conferences, the area where the action is happening. [284]
2. Everyone rights about the future, the hard part is trying to figure out if that comes true. [285]

Implications for Lakeview Church

1. Churches talk the need for team but few (there are some) go to the lengths that IDEO does to create and facilitate team.
2. Failure needs to be part of Lakeview Church. Failure that had a sound strategy and a learning opportunity is never a bad thing.
3. The best pockets of communication at Lakeview Church are when staff and offices are closely packed together. To much space means less buzz and less energy. One of the challenges of moving into the new building will be maintaining the compact feel we have now in the new offices.
4. Lakeview needs to do a better job of visually telling our story. The only visual clues as to who we are when you walk in our doors are the Lego shrine.
5. The more structure we create at Lakeview, the less innovative we will become. We need “structure-free” zones if we ever want to stay on the cutting edge of reaching people.
6. Most churches have a need to control ministries which is one of the reason that established churches stop innovating and become trapped in a specific style of ministry.
7. The celebration of achievements is something that we don’t do here well at Lakeview. Actually we don’t celebrate that well at all around here.
8. We still take too many non-creative short-cuts in how we interact, communicate, and live in our community. How can we do those things different?
9. Are we too conservative in how we interact with people in our own congregation? When was the last time we created a positive buzz or “wow!” with things that we have done?
10. As Lakeview grows larger, are we losing the entrepreneurial edge that we were once known for? What value is that edge to an organization like Lakeview?