

## HOW DESIGN THINKING TRANSFORMS ORGANIZATIONS AND INSPIRES INNOVATION

How do I make myself more creative?

How do we make products that have minimal environmental impact?

How do we educate future innovators?

What might the disruptive innovation be coming?

# CHANGE

How do we expand innovation beyond new technology?

How do we balance the needs of people, technology, and business?

How do I have more impact through innovation?

How might we manage an innovation portfolio?

What if everyone in an organization helped innovate?

How might we make energy conservation relevant to consumers?

How might our customers help us innovate?

What if we could avoid water-borne diseases through better design?

What if airport security was a hassle-free experience?

# BY DESIGN

How does design help people move out of poverty?

How might design thinking help farmers in Africa?

How might we redesign large-scale systems?

How might we make health care a better experience that costs less?

# TIM BROWN

How might we design wellness into work?

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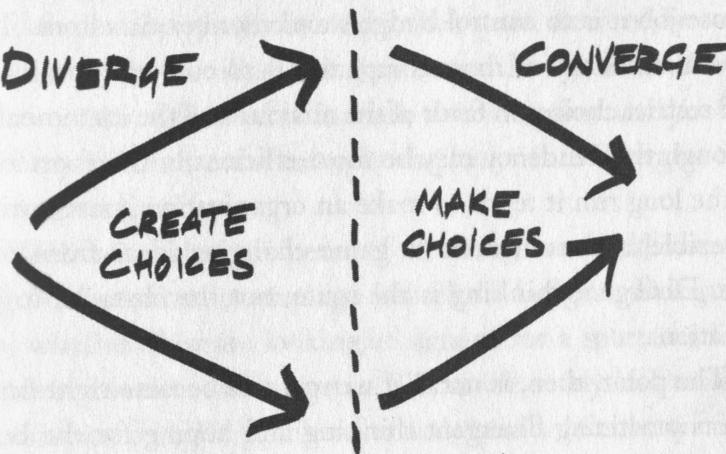
ful leap from height to height; it tests our emotional constitution and challenges our collaborative skills, but it can reward perseverance with spectacular results.

## convergent and divergent thinking

To experience design thinking is to engage in a dance among four mental states. Each has its own moods and manners, but when the music suddenly starts it can be difficult to recognize where we are in the process and which is the right foot to put forward. The best guide, in launching a new design project, is sometimes just to choose the right partner, clear the dance floor, and trust our intuition.

Woven into the very fabric of our culture is an emphasis on thinking based upon logic and deduction; the psychologist Richard Nisbett, who has studied approaches to problem solving in Western and Eastern cultures, has gone so far as to suggest that there is a “geography of thought.” Whether the problem lies in the domain of physics, economics, or history, Westerners are taught to take a series of inputs, *analyze* them, and then *converge upon* a single answer. At times we may find that the best—as opposed to the right—answer will have to do or that we may have to choose among equally compelling alternatives. Just think about the last time you and five friends had to agree on where to go out for dinner. Group thinking tends to converge toward a single outcome.

Convergent thinking is a practical way of deciding among existing alternatives. What convergent thinking is *not* so good at, however, is probing the future and creating new possibili-



ties. Think of a funnel, where the flared opening represents a broad set of initial possibilities and the small spout represents the narrowly convergent solution. This is clearly the most efficient way to fill up a test tube or drive toward a set of fine-grained solutions.

If the convergent phase of problem solving is what drives us toward solutions, the objective of divergent thinking is to multiply options to create choices. These might be different insights into consumer behavior, alternative visions of new product offerings, or choices among alternative ways of creating interactive experiences. By testing competing ideas against one another, there is an increased likelihood that the outcome will be bolder, more creatively disruptive, and more compelling. Linus Pauling said it best: "To have a good idea, you must first have lots of ideas"—and he won *two* Nobel Prizes.