The accomplishments of the team of founders at Kiva are impressive on many levels. Their use of technology to connect Westerners who have money with people in the developing world who need small loans to start businesses achieves both economic and social benefits. It creates a form of valuable exchange that could not easily have occurred before widespread use of the Internet. Unlike many other platforms of exchange, Kiva adds to the world’s overall wellbeing in a way that conveys major benefits to a group that often misses out on the biggest advantages of economic interaction: those who (as economists might put it) lack significant initial wealth endowments. Getting this special kind of value creation going required that Matt Flannery, his wife Jessica, and other early members of the team at Kiva surmount major challenges. As impressive and interesting as their story is, though, Kiva’s significance as a test of our own societal capabilities might be even more important.

Kiva’s founders were tested in the sense that entrepreneurs usually are. They had to get things to work that never had before, to build technology, systems, and relationships that would enable beneficial interactions. But what emerges most clearly from this story is that it also presents a test of our societal institutions, organizations, individual and group inclinations, and much more. If Kiva represents a new form of exchange that creates value, if all parties involved in it wish to participate in that exchange, if this activity harms no one in any obvious way, and yet the inertia of existing ways of doing things fails to permit that, then who has really failed a test? Framed this way, the social welfare stakes seem very high.

As we move more deeply into the 21st century, the measure of our institutions may be how effectively they can adapt to new forms of value creation, especially technology-enabled forms that produce social returns in addition to strictly financial ones. This test may prove important commercially and competitively, as developed economies come to rely more on innovation to create economic value. One
of the central difficulties of innovation is that the commercial value of something new is often not obvious. To be good at innovation, whether as an individual, firm, or society, you need to be able to recognize and appreciate that even commercial value that does not always manifest in an obviously or entirely commercial way—not at first anyway. If, as I suspect, our ability to innovate in a commercially beneficial way depends on our ability to recognize value that extends beyond purely commercial terms, then the competitive stakes surrounding the Kiva story are very high too.

Kiva challenges the ability of the society in which it operates to seize upon valuable novelty. It is, thus, a test of our societal adaptability. To explore this idea, we need to develop from research a more exact notion of what might be called “societal creativity.”

DEVELOPING A NOTION OF “SOCIETAL CREATIVITY”

In 1960, Donald Campbell proposed a simple evolutionary model of creativity with two sequential stages: 1) Blind variation and 2) selective retention. This might seem technical, but it’s actually elegant in its simplicity.

In Stage One, a person, organization, or society generates varied outcomes. For the purposes of example, let’s focus on a group designing a new teapot. At this stage of teapot design, the group might sketch out ideas or build prototypes, each one different from the others. In Campbell’s model, the process for generating variants is “blind”—completely random. If you used a random process for generating teapot prototypes, you might produce some with spouts on the bottom (the tea would leak out) or with handles too close to the flame. But randomness is not required for the model to work. Good thing, because people are not very effective randomizers anyway. Most of the time when people create variation, it’s not purely random. People tend to avoid putting spouts on the bottom, for example. But non-random outcomes can still be interestingly varied.

In Stage Two, the person, organization, or society looks at the variants it has produced and decides which to throw away and which to keep. Most variants that result from most kinds of variation generation are not valuable, and thus ought to be thrown away. At this stage, you’d probably throw out the teapots with spouts on bottom and handles too close to the heat source. A small subset is valuable and ought to be retained. Features from this subset might be combined to build a better teapot. Now and then, on rare occasion, a variant is extremely valuable, often in some unexpected way. If this happened in teapot design, you’d have a breakthrough, an entirely new kind of teapot. Our difficulty in imagining a breakthrough teapot attests to the rarity of such variants.

This process is simple, but in practice there are lots of ways it can go wrong, and lots of places where differential skills and inclinations can come into play. For example, the people creating variants may be more or less good at creating interesting or potentially valuable variants. Some groups might be unimaginative when it comes to teapots. Organizations involved in operational execution—say, making
teapots on an assembly line rather than designing new teapots—may, in fact, have reflexes that cause them to minimize variation; in normal operations in such contexts, the surprises that result from variation are considered “quality problems.” Habits and behaviors that serve well in avoiding quality problems may prove a hindrance when the task shifts to inventing new teapots. Even if people can switch gears from operation to innovation, as they try to innovate, as they try to generate variation, their reflexes might lead them to generate variants similar to outcomes they have already experienced and thus not very innovative. In a well-developed continuous improvement system, like the Toyota Production System, quality problems can result in benefits. You might discover a way of improving a teapot when you goof while making one. But the variation that causes this improvement is unintentionally generated and probably is not particularly dramatic. And though incremental improvements might add up impressively over time, in the short term you are probably more likely to make moderately improved teapots this way than breakthrough teapots.

So far we’ve been dealing only with Stage One difficulties. When we get to Stage Two—recognizing value, retaining valuable variants and throwing away the ones that aren’t valuable—we encounter a new set of challenges. The most cursory look at the history of innovation reveals that seeing value in something truly new is a far from trivial task. This reality extends beyond the economic sphere. When audiences first heard Beethoven’s 3rd Symphony, the *Eroica*, they did not know what to make of it. On February 13, 1805, readers of Leipzig’s *Allgemeine musikalische Zeitung* read this report: “The reviewer belongs to Herr van Beethoven’s sincerest admirers, but in this composition he must confess that he finds too much that is glaring and bizarre, which hinders greatly one’s grasp of the whole, and a sense of unity is almost completely lost.” When Pierre Monteux conducted the world premier of Stravinsky’s *Rite of Spring*, the Paris audience erupted in outrage and threw vegetables at him and the orchestra. In scientific fields, many overflowed bathtubs before Archimedes, many saw apples fall before Newton, and many suffered pots boiled over on hot stoves before James Watt, but those others did not make discoveries or inventions from what they observed. More recently, in business, Xerox had famous difficulties in recognizing the value of what its Palo Alto Research Center staff had created in a remarkable period of just a few years in the early 1970s; firms other than Xerox captured most of the value that resulted from this research activity. Being able to recognize value is a capability. Louis Pasteur called it the “prepared mind” and argued that “fortune favors the prepared mind.” If you have taken care to build this capability, if you have prepared well, then you can recognize value and build upon it where others see nothing of value. If Stage Two is about sorting the valuable from the worthless, it is clear that those who attempt to innovate differ greatly in their ability to get this sorting right. In 1974, when Xerox could have beaten IBM into the PC market by seven years, they opted instead to introduce the Xerox 850, a mechanized typewriter of the sort that would quickly become obsolete when someone else introduced computer-based word processing.
The idea of the prepared mind, of a capability for recognizing and building upon non-obvious value, can be generalized to societies. To what extent are the capabilities of our institutions, public and private, configured to recognize and encourage new value when it appears? To nurture new forms of value creation?

The Kiva team has done its job with Stage One. Through a series of acts of individual and group creativity, they have created an interesting variant that has demonstrated great potential to produce value for all involved. Even in the long run—which is as yet unknown and which Kiva representatives admit might well include possibilities of fraud, default, and other difficulties—it would seem that this idea offers more benefit than cost. Given this assessment, can we, as a society, figure out a way to embrace the potential here? To allow Kiva to get on with it, building even greater value? Or, to be very specific: Can we accommodate the charging of interest rates within their system without triggering dysfunctional responses from the SEC or Homeland Security? Or will regulation, bureaucracy, or some other form of inertia place unreasonable limits on value creation? The jury is still out. It is our societal capability for recognizing, embracing, and building upon value—our societal creativity—that is being put to the test here.

KIVA AS A HARBINGER OF ALTERNATIVE FUNDING STRUCTURES

The example of Kiva raises fascinating issues around the subject of alternative funding models for business enterprises, and not just in the developing world. Imagine a Kiva like platform called “MakeTheWorldBeautiful.com” with a goal to help art-based businesses get started, wherever they are located. Just as development enthusiasts and well-intentioned souls seem willing to participate in Kiva, with or without being paid interest, so art enthusiasts might be willing to support art making.

I wonder too if we might be seeing, in organizations like Kiva, the predecessors of alternative, technology-enabled models for funding business ventures. With the emergence of so-called “Web 2.0” businesses, many of which are very small in their initial scale and very focused on small segments of readers or customers, it seems only natural that micro-scale financing approaches might find their way into the stories of some of those ventures.

Several realities feed this possibility. First, as it becomes possible to outsource many standard business services to low labor cost countries, starting certain kinds of businesses becomes more a matter of raising $5,000 than raising $5 million. Second, it’s pretty clear that standard modes of financing can’t successfully supply...
small amounts of seed money to Web 2.0 or other non-traditional businesses; increasingly, venture capital money is available to firms that fit a rather narrow and traditional profile. Third, investors in traditional early stage companies have to be “qualified” in terms of their net worth, to foreclose the possibility of later legal complaints that might obstruct IPO or sale of the company; if you don’t have a net worth in excess of $1 million, you can’t be a startup company Angel investor either. This state of affairs suggests that there might well be activity on a platform that enabled micro-financing of micro-businesses, in many different spaces where enthusiasts congregate virtually. Of course the SEC, which gets pretty riled over Kiva’s desire to pay interest, would surely want to be involved in micro-business finance. But it seems a very good fit with the “social networking” aspects of Web 2.0 applications.

Indeed, alternative, technology-enabled financing platforms might prove generally important to innovation in this new century. Although I have only anecdotal, case-based evidence for this, it seems that some of the most interesting and innovative activities happen in companies that are privately held or have some other similar capital structure. Some companies I’ve worked with point to their capital structure again and again as they explain why they believe they are more innovative than competitors. This may seem heretical to some economists and hard-core capitalists, but it’s a fact that managers of public companies must justify departures from conventional wisdom to shareholders. It’s not too hard to imagine the necessity to justify your actions leading you to take fewer risks. Privately held or alternatively financed firms may feel less burdened in this sense. The owners of privately held Vipp, a high-end, designer kitchen and bath accessories company, explained in our research interviews how freedom from such pressures made them more original in product design:

We look at [a new product] in this house and say, “This has the right feeling, it has the right quality, it has the right expression, it has the right materials.” We like it. Therefore, there must be people outside this house who like it as well. But of course it could be very expensive to just use this feeling, this intuition, and of course if you didn’t own the company you might have to have some more sure answers to why you do things. But we are the owners. We can believe so much in the product, saying “Okay, let’s go this way.” That means we can do things faster than probably other companies can.6

Perhaps alternative funding mechanisms—micro-loans or some arrangements not yet imagined or perfected, some variation on the Kiva model—might prove more suited to some innovation-based business models. This is speculation, of course, but the most common capital structures have been around for a long time and were conceived to serve the interests of industrial value creation. The dawn of an innovation economy doesn’t mean the end of industrial value creation, of course, but more variety in financing options for small firms attempting to serve niche markets would seem to be a potentially helpful development.
Robert D. Austin

Researchers like Eric Von Hippel have heralded the rise of “customer centered” innovation, in which communities of enthusiasts in specialized fields (e.g., kite surfing) convene via the web and share their expertise with each other. As Von Hippel points out, often these communities contain specialized expertise that manufacturers cannot match; in such a situation, the viable innovation strategy for manufacturers calls for observing these communities and adopting what “lead users” consider to be the most important innovations. A kite surfing manufacturer sees what modifications best kite surfers make to their gear, then designs those modifications into the original equipment. It’s only a short hop from this idea to the related idea of members of the community becoming the manufacturer. And it’s another short hop beyond that to imagine co-op or other financing arrangements via which members of the enthusiast community help fund each other’s highly specialized niche businesses. All this is enabled, of course, by the community-connecting magic of the Internet. Although I don’t know of any examples of this exactly, I’d be very surprised if it isn’t going on already, somewhere out in cyberspace. In a real sense, Kiva would be an ancestor, or a relative at least, of any such models that might eventually appear.

CONCLUDING THOUGHTS

In my enthusiasm for the originality of the Kiva idea and its potential to extend into many other areas, I fear that I have said too little about the remarkable benefits it enables that quite simply make the world a far better place. This is not at all due to lack of appreciation. To the founders and current community in and around Kiva I convey my earnest thanks and congratulations. It is a truly remarkable thing that they have accomplished. May the future hold still greater successes for the Kiva team and the members of its surrounding community.

4. This clever way of putting it was first adopted by Cannon; see Cannon, Walter B. “The Role of Chance in Discovery,” Scientific Monthly, 19 March 1940, p. 204. The general point was made much earlier by Mach; see Mach, Ernst. “On the part played by accident in invention and discovery,” The Monist, 6, 1896, pp. 161-175.