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Reprint R0909C

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In the fall of 2007, Cisco Systems announced an external innovation competition called the I-Prize. Our goal was to find an idea that would spawn a new billion-dollar Cisco business. As basic criteria, the idea had to fit into the company's strategy and take advantage of our leadership position in internet technology. We believed that by opening ourselves to the wider world we could harvest ideas that had so far escaped our notice and in the process break free from company-centric ways of looking at technologies, markets, and ourselves.

In the end, more than 2,500 innovators from 104 countries submitted some 1,200 distinct ideas. After a challenging process of winnowing and evaluation, we chose as the winner an idea for a sensor-enabled smart-electricity grid. It's an endeavor with long-term prospects that will certainly stretch us, but it's also a perfect fit for our strategy and competencies.

This was not our first experience with crowdsourcing. We had been running an internal innovation competition for several years, so it was a natural next step to extend participation beyond our walls. And Cisco is no stranger to bringing aboard new technology from outside—we have a strong track record of investing in start-ups or acquiring them outright. But there is quite a difference between shopping for the most promising developed technologies and prospecting among pure ideas.

The evaluation process was far more labor-intensive than we'd anticipated; significant investments of time, energy, patience, and imagination are required to discern the gems hidden within rough stones. Anyone attempting to do innovation on the cheap should look elsewhere.

Indeed, the I-Prize competition was not undertaken as a money-saving activity, in the sense of using crowdsourcing to generate an influx of "free" intellectual property. We were looking for a novel innovation in which Cisco would make a significant long-term investment—and for which the idea owner would win a $250,000 prize. Here's how we did it.

Calling All Innovators

The world is a far more complicated environment than a large company. Many routine arrangements with employees (involving, among other things, ownership of intellectual property and work products) do not apply. Negotiations must be handled efficiently and with the least possible friction when forging temporary but potentially entangling relationships with outsiders.

We tackled this problem of complexity from a couple of different angles. Good technology and processes were part of the solution. At a minimum, we would have to register thousands of participants and offer them a user-friendly way to present their ideas. And since we were, in effect, convening a community of innovators, we also wanted to give participants the opportunity to interact with one another about their ideas. Both of these technology problems turned out to be relatively easy to address. We chose a hosted idea-management platform from a company called Brightidea, whose tool allowed people to sign up, contribute ideas, and comment and vote on everyone else's submissions.

Developing a sensible legal framework that addressed intellectual property issues proved more challenging. Who would own what and under what circumstances? Our lawyers regaled us with tales of absolutely everything that could go wrong—such as the possibility that somebody would submit ideas that belonged to someone else. We needed to make sure that participants attested to ownership of the IP. By submitting an idea, you were pledging that, to the best of your knowledge, it was your own and not someone else's. We also needed to protect the company in cases where participants submitted ideas that Cisco was already working on, to avoid claims that we had stolen them; as a further precaution, only the small team of Cisco judges had access to the ideas.

Naturally, we didn't want people drowning in legalese. We tried to strike a balance between covering all the bases and not intimidating or discouraging people. When participants came to the site, they were prompted to register—no anonymous contributions were allowed. They then created a participant profile, so that we knew with whom we were interacting and participants knew who their fellow innovators were.

We were mindful that all of our decisions in organizing the competition would say something about our company culture. We knew that people would go through our terms and conditions with a fine-tooth comb, and that they would not hesitate to broadcast suspect or onerous requirements. Demonstrating basic fairness was important to us. The winner of the competition would cede to Cisco the commercial rights to the idea in exchange for $250,000. But we believed it would be heavy-handed to assert ownership of all other submissions, many of which held the seeds of potentially viable businesses. So we made it crystal clear that ownership of all but the winning idea would revert to the innovators. If you didn't win, you were free to take your idea elsewhere, set up a business, or do nothing with it.

Above all, we wanted to make sure people saw this as a fun activity and not some ploy to subcontract cheap ideas and get them into the company in an underhanded way.

The Winnowing Process

The misconception about crowdsourcing for innovation is that merely by turning on a website and putting up a reward, you're going to get polished, perfectly baked ideas, complete with business models. In no time you'll have recipes for cold fusion by the bucket load.

That's not what happens. Few of the ideas are fully formed. If you're too critical too soon in the process, you'll eliminate a lot of potential value. But because these ideas are far from being finished products, it takes quite a bit of expertise to narrow the field. That meant we needed human filters.

For each innovation idea we asked five basic questions:

- Does it address a real pain point?
- Will it appeal to a big enough market?
- Is the timing right?
- If we pursue the idea, will we be good at it?
- Can we exploit the opportunity for the long term, or would this market commoditize so quickly that we wouldn't be able to stay profitable?

The good news is that some ideas are ridiculous or irrelevant, and you can eliminate them out of hand. And if you've got 10 variants of the same thing, you pick the one that's most compelling and then jettison the rest. But because most of the ideas are undeveloped,

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you're still going to have to put together a full business plan and a requirement document. Getting to that point from the germ of an idea—as little as a paragraph of text in some cases—is a long haul.

There's no question that our process was painstaking. Our goal was to carve 40 semifinalists out of the initial 1,200 ideas. A team of six Cisco people (including me) worked full-time on this for three months. The benefit of having experienced internal judges was that we could see ways in which a so-so idea might be modified to make it more powerful and attractive. Team members would offer insights on how an unimpressive-seeming idea might shine in a different market or with a different business model or if an underemphasized aspect were to be more fully developed.

Our technology platform supported two other forms of evaluative input: voting and comments. Registered participants could vote on the ideas, using a thumbs-up or thumbs-down mechanism. (Only 40% of the people who registered contributed ideas; the majority commented and voted on others' ideas.) This raised a storm of controversy when some participants accused others of gaming the system by getting friends to vote for their ideas. On balance, voting was less useful than comments in helping us choose the 40 semifinalists. Voters seemed to favor the "coolness" factor over commercial and technical viability, whereas some commenters showed deep subject-matter expertise and insight.

Some of the finalists said that they felt they'd had a crash course in entrepreneurship.

We recognized that our internal evaluators might suffer from "expert bias," gravitating to ideas that felt familiar or rejecting ones we had pursued unsuccessfully in the past. So we created three lists: a "people's choice" ranking based on voting, flawed as it was; a "most active" list of the ideas that had generated the most comments; and the ideas deemed best by Cisco evaluators.

We arrived at our 40 semifinal ideas by seeing where the three very different lists overlapped. We were surprised to find that submitters with related or quite similar ideas had discovered one another and used the comment functionality to strike up conversations. As it turned out, 70% of the final 40 ideas belonged to teams that joined forces in this way.

Refining the Ideas

In running the internal version of the I-Prize, we had learned the importance of providing idea-incubation support to the finalists. So we assigned a mentor to work with each individual innovator or team to address the idea's weaknesses and make the most of its strengths. We wanted to see if the finalists could, with a little bit of guidance, make their idea better during a six-week refinement phase. Each team was given a private WebEx space in which to collaborate.

We also provided a version of a checklist we use internally as a business-plan template. It asks questions about the product's purpose and market; its attributes; the customers; the revenue stream and profit potential; and the likely response from competitors.

Then we took another run through the 40 ideas, now further developed and improved. Our goal was to get down to 10—a number at which we could interview the idea owners. We arranged for the finalists to come to TelePresence rooms around the globe. (TelePresence is Cisco's remote HD video collaboration technology.) Clusters of people from all over the world had teamed up on ideas without ever having met. The most far-flung team had members in California, Singapore, and India.

The judging panel was made up of our evaluation team plus Cisco executives from areas of the business related to particular ideas. And we invited the Silicon Valley entrepreneur Geoffrey Moore to sit in on some of the presentations and offer feedback to the idea owners.

Later on, some of the finalists sent us e-mails saying that they felt they'd had a crash course in entrepreneurship.

Ultimately, we chose the winning entry because that technology is central to what is sure to be a decades-long transformation of the nation's—and the world's—electricity grid. It wasn't just a good technology idea; the team had also thought about the new business opportunities it would create for us.

Was It Worth the Effort?

Running such a competition isn't easy. Surely we underestimated the amount of sheer labor and complexity it would involve. But what we gained was invaluable. We learned how people around the world think about Cisco and the markets we ought to be pursuing. Like any other company, we tend to see the world in a certain way—we should be in this

business, but not that one. Many of the entrants had a much more expansive and, in some ways, optimistic view of what Cisco could do if we set our minds to it.

A second benefit was that the competition gave us a global view of potential new business opportunities. By mapping the ideas to the 104 countries that produced them, we gained perspective on what solutions would be more relevant for, say, China or India than for Spain or the UK.

In addition, we were reminded that people too often see a technology revolution when what's really going on is a business-model innovation. A look at other industries taught us to put a high value on ideas that combine interesting technology with a smart, innovative business model. For example, the insurance industry is looking at GPS technology as a way to personalize insurance rates based on how many miles, and in what areas, a policyholder drives. The technology enables a business model that would otherwise be inconceivable.

Of course, not all of the I-Prize ideas were entirely off our radar; often we were already investigating them. So the competition validated some of those investment decisions.

And as a company, we learned that if you ask, you can reach a worldwide audience of smart, passionate people eager to help you drive innovation.

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