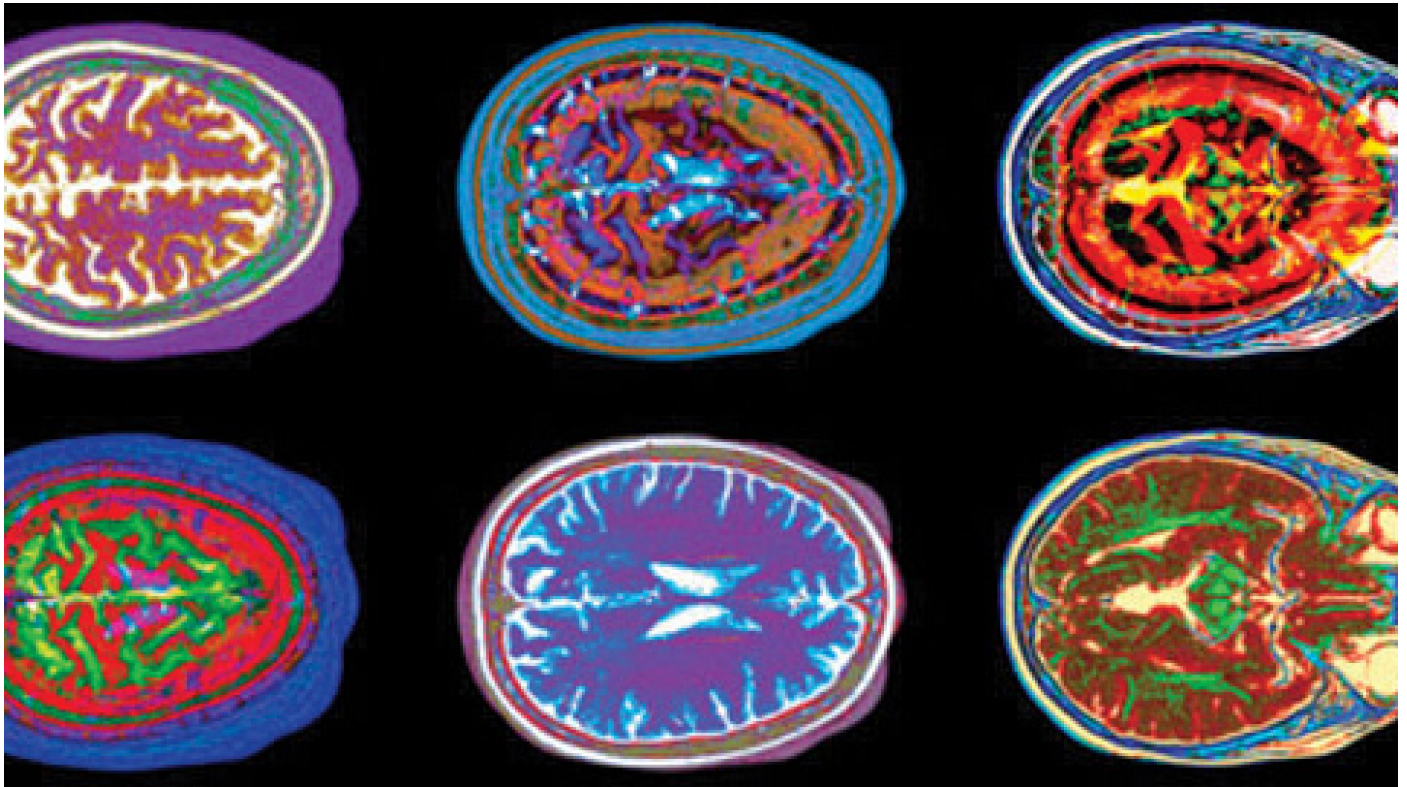


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How Great Entrepreneurs Think Think inside the (restless, curious, eager) minds of highly accomplished company builders. [🔗](#)

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What distinguishes great entrepreneurs? Discussions of entrepreneurial psychology typically focus on creativity, tolerance for risk, and the desire for achievement—enviable traits that, unfortunately, are not very teachable. So Saras Sarasvathy, a professor at the University of Virginia's Darden School of Business, set out to determine how expert entrepreneurs think, with the goal of transferring that knowledge to aspiring founders. While still a graduate student at Carnegie Mellon, Sarasvathy—with the guidance of her thesis supervisor, the Nobel laureate Herbert Simon—embarked on an audacious project: to eavesdrop on the thinking of the country's most successful entrepreneurs as they grappled with business problems. She required that her subjects have at least 15 years of entrepreneurial experience, have started multiple companies—both successes and failures—and have taken at least one company public.

Sarasvathy identified 245 U.S. entrepreneurs who met her criteria, and 45 of them agreed to participate. (Responses from 27 appeared in her conclusions; the rest were reserved for subsequent studies. Thirty more helped shape the questionnaire.)

Revenue at the subjects' companies—all run by the founders at that time—ranged from \$200 million to \$6.5 billion, in industries as diverse as toys and railroads.

Sarasvathy met personally with all of her subjects, including such luminaries as Dennis Bakke, founder of energy giant AES; Earl Bakken of Medtronic; and T.J. Rodgers of Cypress Semiconductor. She presented each with a case study about a hypothetical start-up and 10 decisions that the founder of such a company would have to make in building the venture. Then she switched on a tape recorder and let the entrepreneur talk through the problems for two hours. Sarasvathy later collaborated with Stuart Read, of the IMD business school in Switzerland, to conduct the same experiment with professional managers at large corporations—the likes of Nestlé, Philip Morris, and Shell. Sarasvathy and her colleagues are now extending their

research to novice entrepreneurs and both novice and experienced professional investors.

Sarasvathy concluded that master entrepreneurs rely on what she calls effectual reasoning. Brilliant improvisers, the entrepreneurs don't start out with concrete goals. Instead, they constantly assess how to use their personal strengths and whatever resources they have at hand to develop goals on the fly, while creatively reacting to contingencies. By contrast, corporate executives—those in the study group were also enormously successful in their chosen field—use causal reasoning. They set a goal and diligently seek the best ways to achieve it. Early indications suggest the rookie company founders are spread all across the effectual-to-causal scale. But those who grew up around family businesses will more likely swing effectual, while those with M.B.A.'s display a causal bent. Not surprisingly, angels and seasoned VCs think much more like expert entrepreneurs than do novice investors.

The following is a summary of some of the study's conclusions, illustrated with excerpts from the interviews. Understanding the entrepreneurs' comments requires familiarity with what they were evaluating. The case study and questions are too long to reproduce here. But briefly: Subjects were asked to imagine themselves as the founder of a start-up that had developed a computer game simulating the experience of launching a company. The game and ancillary materials were described as tools for teaching entrepreneurship. Subjects responded to questions about potential customers, competitors, pricing, marketing strategies, growth opportunities, and related issues. (The full case study and questions can be found here.)

Quotes have been edited for length, though we wish we had room to run them in their entirety. Sarasvathy remained almost silent throughout, forcing the founders to

answer their own questions and externalize their thinking in the process. The transcripts, riddled with "ums" and "ers," doublings-back on assumptions, and references to personal rules of thumb, read like verbal MRIs of the entrepreneurial brain in action.

Do the doable, then push it

Sarasvathy likes to compare expert entrepreneurs to Iron Chefs: at their best when presented with an assortment of motley ingredients and challenged to whip up whatever dish expediency and imagination suggest. Corporate leaders, by contrast, decide they are going to make Swedish meatballs. They then proceed to shop, measure, mix, and cook Swedish meatballs in the most efficient, cost-effective manner possible.

That is not to say entrepreneurs don't have goals, only that those goals are broad and—like luggage—may shift during flight. Rather than meticulously segment customers according to potential return, they itch to get to market as quickly and cheaply as possible, a principle Sarasvathy calls affordable loss. Repeatedly, the entrepreneurs in her study expressed impatience with anything that smacked of extensive planning, particularly traditional market research. (*Inc.*'s own research backs this up. One survey of Inc. 500 CEOs found that 60 percent had not written business plans before launching their companies. Just 12 percent had done market research.)

When asked what kind of market research they would conduct for their hypothetical start-up, most of Sarasvathy's subjects responded with variations on the following:

"OK, I need to know which of their various groups of students, trainees, and individuals would be most interested so I can target the audience a little bit

more. What other information...I've never done consumer marketing, so I don't really know. I think probably...I think mostly I'd just try to...I would...I wouldn't do all this, actually. I'd just go sell it. I don't believe in market research.

Somebody once told me the only thing you need is a customer. Instead of asking all the questions, I'd try and make some sales. I'd learn a lot, you know: which people, what were the obstacles, what were the questions, which prices work better. Even before I started production. So my market research would actually be hands-on actual selling."

Here's another:

"Ultimately, the best test of any product is to go to your target market and pretend like it's a real business. You'll find out soon enough if it is or not. You have to take some risks. You can sit and analyze these different markets forever and ever and ever, and you'd get all these wonderful answers, and they still may be wrong. The problem with the businessman type is they spend a lot of time with all their great wisdom and all their spreadsheets and all their *Harvard Business Review* people, and they'd either become convinced that there's no market at all or that they have the market nailed. And they'd go out there big time, with a lot of expensive advertising and upfront costs, because they're gonna overwhelm the market, and the business would go under."

The corporate executives were much more likely to want a quantitative analysis of market size:

"If I had a budget, I could ask a specialist in the field of education to go through data and give me ideas of how many universities, how many media, how many

large companies I will have to contact to have an idea of the work that has to be done."

Sarasvathy explains that entrepreneurs' aversion to market research is symptomatic of a larger lesson they have learned: They do not believe in prediction of any kind. "If you give them data that has to do with the future, they just dismiss it," she says. "They don't believe the future is predictable...or they don't want to be in a space that is very predictable." That attitude is a bit like Voltaire's assertion that the perfect is the enemy of the good. In this case, the careful forecast is the enemy of the fortuitous surprise:

"I always live by the motto of 'Ready, fire, aim.' I think if you spend too much time doing 'Ready, aim, aim, aim,' you're never going to see all the good things that would happen if you actually started doing it. I think business plans are interesting, but they have no real meaning, because you can't put in all the positive things that will occur...If you know intrinsically that this is possible, you just have to find out how to make it possible, which you can't do ahead of time."

That said, Sarasvathy points out that her entrepreneurs did adopt more formal research and planning practices over time. Their ability to do so—to become causal as well as effectual thinkers—helped this enduring group grow with their companies.

Woo partners first

Entrepreneurs' preference for doing the doable and taking it from there is manifest in their approach to partnerships. While corporate executives know exactly where they are going and follow a prescribed path to get there, entrepreneurs allow whomever

they encounter on the journey—suppliers, advisers, customers—to shape their businesses.

"I would literally target...key companies who I would call flagship: do a frontal lobotomy on them. There are probably a dozen of those I would pick. Some entrepreneurial operations that would probably be smaller but have a global presence where I'm dealing with the challenges of international sales...Building rapport with partners, with joint-venture colleagues as well as with ultimate users....The challenge then is really to pick your partners and package yourself early on before you have to put a lot of capital out."

Chief among those influential partners are first customers. The entrepreneurs anticipated customer help on product design, sales, and identifying suppliers. Some even saw their first customer as their best investor.

"People chase investors, but your best investor is your first real customer. And your customers are also your best salesmen."

Sarasvathy says expert entrepreneurs have learned the hard way that "having even one real customer on board with you is better than knowing in a hands-off way 10 things about a thousand customers." Merely gathering information from a large number of potential customers, she says, "increases all the different things you *could* do but doesn't tell you what you *should* do." Toward that end, many of her subjects described their preference for an almost anthropological approach to customer interaction: observing a few customers as they work or actually working alongside them.

"You can't go out and survey customers and say, 'OK, what kinda car do you really want?' I believe very much in living it. If you're gonna write a book about

stevedores, go work as a stevedore for a period of time. My company was going to design and sell products for physical therapy, so I worked in rehab medicine for two years."

Corporate executives, by contrast, generally envisioned more traditional vendor-customer interactions, such as focus groups.

"I would like to get from them...by meeting with them or getting their input on what they think of the limitation of existing programs....just kind of sit and listen to them telling me...what new features they'd like. And I'd just listen to them talk, talk, talk and then be thinking and develop something between what they want and what's possible technically."

Sarasvathy says executives rely less on firsthand insights, because they can afford to place bets on multiple segments and product versions. "Entrepreneurs don't have that luxury," she says.

Sweat competitors later

The study's corporate subjects focused intently on potential competitors, as eager for information about other vendors as about customers. "The corporate guys are like hunter-gatherers," says Sarasvathy. "They are hired to win market share, so they concentrate fiercely on who is in the marketplace. The first thing they do is map out the lay of the land."

"What information do I want about my competition? I want to see what kinds of resources they have. Do they have computer programmers? Do they have educational experts? Do they have teachers and trainers who can roll out this

product? Do they have a support structure in place? Geographically, where are they situated? Have they got one center or lots of centers? Are they doing this just in English, or do they have different languages? I'd be wanting to look at the finances of these companies....I'd probably be looking at their track record to see what kind of approach they take to marketing and advertising so I know what to expect. I might look and see what people they hire, see if I can hire away someone who might have experience."

By the time entrepreneurs start seeking investment, of course, they should be as far inside competitors' heads as they can get. But the study subjects generally expressed little concern about the competition at launch.

"Your competition is a secondary factor. I think you are putting the cart before the horse...Analyze whether you think you can be successful or not before you worry about the competitors."

And:

"At one time in our company, I ordered our people not to think about competitors. Just do your job. Think only of your work. Now that isn't entirely possible. Now, in fact, competitive information is very valuable. But I wanted to be sure that we didn't worry about competitors. And to that end, I gave the annual plan to every employee. And they said, 'Well, aren't you afraid your competitors are gonna get this information and get an advantage?' I said, 'It's much riskier to not have your employees know what you need to do than it is to run the risk of competitors finding out. Cause they'll find out somehow anyway. But if one of your employees doesn't know why they're doing their job, then you're really losing out.'"

Entrepreneurs fret less about competitors, Sarasvathy explains, because they see themselves not in the thick of a market but on the fringe of one, or as creating a new market entirely. "They are like farmers, planting a seed and nurturing it," she says. "What they care about is their own little patch of ground."

Don't limit yourself

Corporate managers believe that to the extent they can predict the future, they can control it. Entrepreneurs believe that to the extent they can control the future, they don't need to predict it. That may sound like monumental hubris, but Sarasvathy sees it differently, as an expression of entrepreneurs' confidence in their ability to recognize, respond to, and reshape opportunities as they develop. Entrepreneurs thrive on contingency. The best ones improvise their way to an outcome that in retrospect feels ordained.

So although many corporate managers in Sarasvathy's study wanted more information about the product and market landscape, some entrepreneurs pushed back on the small amount of information provided as being too limiting. For example, the description of the product as a computer game for entrepreneurship:

"I would cast it not as a product but as a family of products, which might perform a broader function like helping people make career decisions. I always look for broad market opportunities."

And:

"I wanna use this product as a platform to attract other products literally to build a market-share play. I see this as a missionary product, an entrée into some of the

best users and buyers."

The most fascinating part of the study relates to the product's potential. Asked about growth opportunities, the corporate managers mostly restricted their comments to the game as described:

"It depends on how it's marketed. I'm a little bit skeptical....I'm not certain entrepreneurs would go for that. Maybe they think they already know everything. But in terms of simulations for business schools or in further education, they seem to be very popular. And entrepreneurship degrees seem to be very popular as well. So, yeah, it could well be a lot of growth."

Here is where the entrepreneurs really let loose. Starting with the same information as one another and as the executives, they collectively spun out opportunities in 18 markets—not just academic institutions but also venture capital firms, consultancies, government agencies, and the military. As much as the ability to concoct new products, it is this tendency to riff off whatever ideas or materials are handy that defines entrepreneurs as a creative breed. Reading the transcripts, you can almost hear the enthusiasm mounting in their voices as the possibilities unfold:

"This company could make a few people rich, but I don't think it could ever be huge...You might have a successful second product about how to succeed and get promoted within a large company....That would give you a market of everybody with aspirations at IBM, AT&T, Exxon, etc....You could make another product for students. How do I graduate in the top 10 percent of my class at Stanford or Harvard or Yale?...A lot about how to be a good student is teachable. Now you've got a product you can sell to every student in the country. Next there is negotiation. You could practice being a good negotiator. There's not a salesman

in the United States who wouldn't buy one of those. Then you could genericize the thing to any situation which requires some sort of technical knowledge. Or learning situations within companies where you are trying to get people to understand that company's methods or objectives. So maybe I'm gonna change my opinion about the growth potential. It's easy to see how within an hour you could name 10 products that would each address huge markets, like all employees in Fortune 500 companies, who are rich enough to pay \$100 for it. It could be a hit on the scale of the Lotus spreadsheet. You can see a several-hundred-million-dollar company coming from it."

You might also glean from the preceding that entrepreneurs are eternal optimists. But you don't need an academic study to tell you that.

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