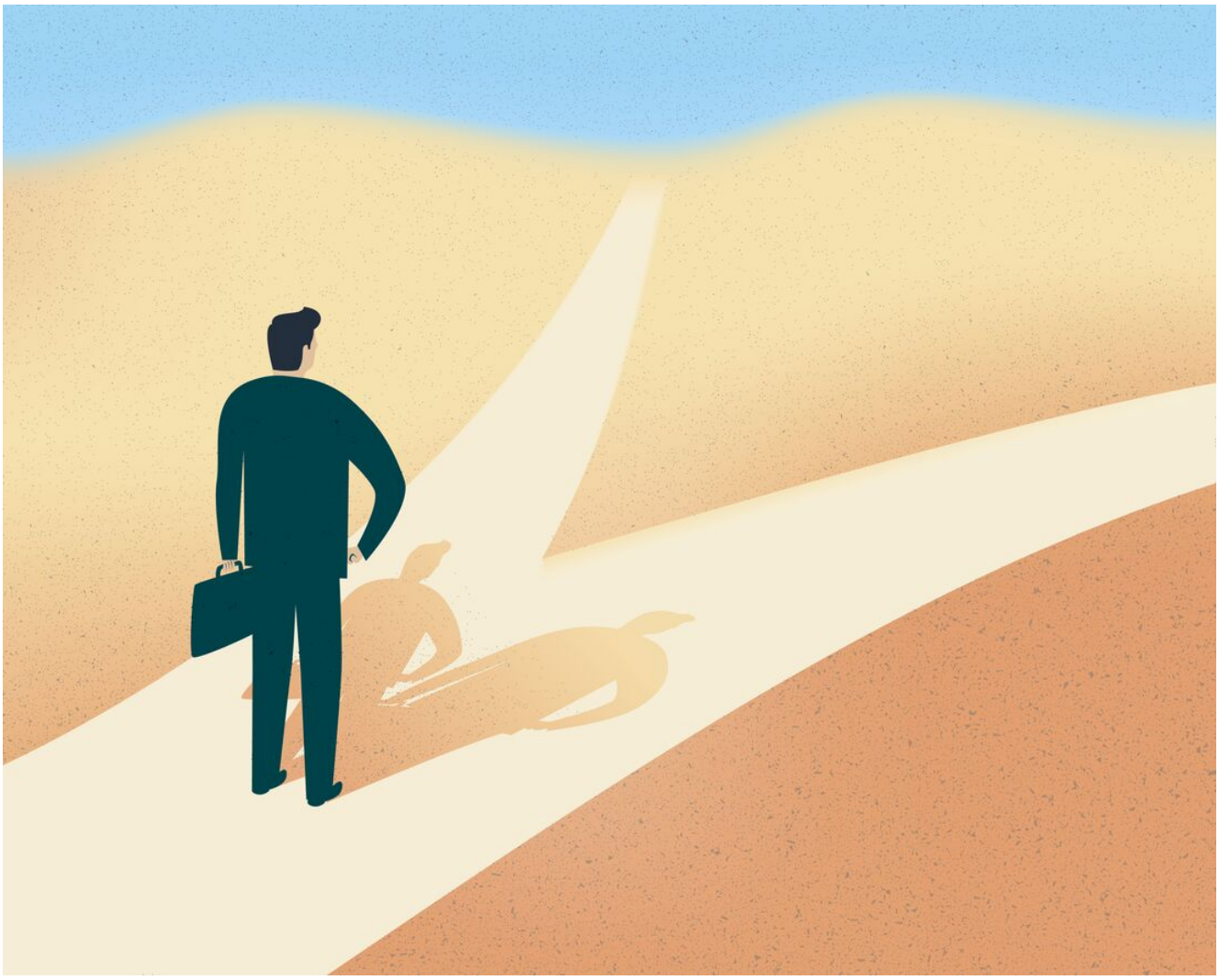
Multiple paths to value: test two, choose one



April 1, 2017

“Test two, choose one” is the recommended approach for decision-making under conditions of uncertainty. With multiple paths to create and capture value, entrepreneurs need to weigh key factors to optimize make-or-break choices.

By Joshua S. Gans & Scott Stern

In the late ’90s, when the internet was still in its infancy, several U.S. entrepreneurs hatched almost the exact same business idea around the same time: a platform to buy groceries online and have them delivered to your home. They all planned to launch in big cities, where delivery was cheaper, and they all promised convenience, time savings and user friendliness for busy professionals. They diverged on one key aspect, though. Was it better to create an online store that substituted for traditional grocers? Or was it better to collaborate with existing stores and serve as their online sales channel?

This situation — where multiple startups come up with the same basic idea yet stake their futures on sharply different visions of how to realize it — goes with the territory of entrepreneurship. Realistically, there are only so many large-scale experiments that can be carried out to test which is the better way to go.

In the case of online grocery shopping, two bets were placed: Webvan developed its own vertically integrated store, while Peapod outsourced its online sales service to existing grocers. In the end, neither set the world on fire — though Peapod has managed to survive, unlike Webvan, which burned through millions of dollars of investor funds before tanking.

These are familiar tensions: there are multiple pathways to create and capture value, but limited resources will constrain you to choose just one; that choice is crucial, but working out which path to take requires knowledge that can only be gleaned through experimentation and learning; yet the process of experimentation and learning inevitably requires some level of commitment that forecloses certain options.

Webvan cannot be blamed for not knowing in advance which strategy would work, just as it could not afford to experiment with an endless number of business models until it found the right one. And once it had chosen to go big and try to disrupt supermarkets, it could not easily turn around and cooperate with those supermarkets if it all failed. This is the paradox of entrepreneurship.

So, what should entrepreneurs do? In our years of research and through experience with startups both at MIT and the University of Toronto, we have found certain strategies that can be adopted to hone and optimize such choices.

This article outlines three principles to help business strategists beat the paradox of entrepreneurship, whittling down their choice sets until they are faced with two equally viable alternatives. That is when to “test two, choose one,” which is the recommended approach for decision-making under conditions of uncertainty.

The dilemmas of entrepreneurial strategy

Entrepreneurial strategy is much like growing a large decision tree. Starting with the seed of an idea, the founders nurture and then prune choices in order to transform that idea into an organization that eventually flourishes. Transitory by nature, entrepreneurial strategy is not a fixed document or business plan. Rather, it is a set of choices that the founders and their teams must make to test various hypotheses related to value creation and value capture. It entails experimentation and a partial commitment, at the very least.

When it comes to testing hypotheses, most businesses are spoiled for choice. Take Dropbox. As an MIT student, Drew Houston identified a common problem: repeatedly forgetting your USB but still needing access to your files. There were various possible ways to address this. He could have developed an in-house enterprise solution. He could have partnered with software companies to develop an app. Or he could opt to synchronize files across computers using cloud computing, which, as we now know, is how he eventually developed a multibillion-dollar business. But Houston’s initial dilemma serves to highlight several crucial axioms.

Axiom 1: There is more than one alternative path by which value can be created and captured for a given idea. Startups have arguably the broadest set of alternatives for creating and capturing value from an idea and the greatest freedom of choice. However, as stated in the next axiom, they face severe limitations when it comes to exploring those alternatives.

Axiom 2: Resource constraints prevent pursuit of more than one alternative at a time. Most startups do not have sufficient resources or strategic flexibility to explore multiple commercialization paths for a given idea. Instead, they must balance the tension of having an extensive choice of paths but not having enough resources to pursue them all at once.

Axiom 3: Uncertainty prevents a ranking of paths. Entrepreneurs usually have so little ex-ante information that attempting to rank the alternatives is impractical. That is why early-stage entrepreneurs need to engage in commitment-free experimentation, to develop an understanding of the relative merits of various approaches.

Axiom 4: Learning requires making a partial commitment; but committing yourself to one path conditions the others. There is no getting around the fact that, to test the viability of an idea, you have to actively experiment. But by experimenting, you start to shape the market and influence other paths, even to the point of making those others unviable.

In summary, entrepreneurs cannot know in advance exactly which business model will work, nor can they experiment with them all. They have to make choices without enough information to rank those choices, and their choices will be consequential.

Under such circumstances, the key is not to commit yourself until you reach a point where you have two equally viable and attractive alternatives that cannot be ranked without making some commitment to one of them.

To guide entrepreneurs through this complex process, we elaborate on three basic principles that can help.

A version of this article is published in IESE Insight magazine Issue 33 (Q2 2017).