THE INNOVATOR'S METHOD BRINGING THE

LEAN START-UP

INTO YOUR ORGANIZATION

NATHAN FURR JEFF DYER

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The Innovator's Method

How do we turn Intuit into an eight-thousand-person start-up? That's what we are trying to do.

-Brad Smith, CEO, Intuit

N 2008, INTUIT celebrated its twenty-fifth anniversary and named Brad Smith as CEO. Founded by Scott Cook, Intuit—maker of successful financial software packages like Quicken, QuickBooks, and TurboTax had achieved remarkable success, growing revenues to more than \$3 billion and creating a market value of \$10.2 billion. But Cook and Smith were worried. Intuit had seemingly reached a performance plateau, and its market value had begun to fall. Annual revenue growth had dropped in half, from 15 percent (1998–2003) to 8 percent (2004–2008), and annual income growth had slowed even more dramatically, from 31 percent to 6 percent. Not surprisingly, Intuit's annual market value growth had taken a hit as well, dropping from 14 percent to 5 percent.

Worse, after studying Intuit's new product launches over the prior decade, Cook discovered that fewer than 10 percent could be called successful from a revenue and profit perspective. Meanwhile, Intuit's net promoter score (NPS), a measure of whether customers like a product enough to promote it to friends and colleagues, had flattened.¹ Finally,

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the company's innovation premium (IP), a measure of stock price premium paid by investors because of expectations of future growth through innovation, had dropped from 57 percent in 2000 to 20 percent in 2008.² After twenty-five years, by every measure, it seemed as if the company had reached the telltale limit of the S-curve: Intuit was moving from growth to maturity, with the threat of failure not far behind.

Cook and Smith didn't want that to happen. But what could they do?

The Innovation Crisis: Unprecedented Uncertainty

Intuit was experiencing what happens to most successful start-ups as they grow into large, established corporations: execution becomes the highest priority as they scale the business to meet the demands of existing customers. Over time, the focus on execution crowds out innovation. Intuit was losing the ability to perform what Peter Drucker called management's fundamental task: "to create a customer."³ Ironically, as companies focus on capturing value from customers, they often lose the ability to create customers.

And something more had changed. It's a cliché to say that the world is more uncertain than ever before, but few people realize the extent of the increase in uncertainty over the past thirty years. More important, they don't understand that greater uncertainty has created the need to change the way most organizations are managed. The challenge of creating a customer is more complex and uncertain than ever before. Here's why.

There are two types of uncertainty that influence a firm's ability to create a customer: *demand uncertainty* (will customers buy it?) and *technological uncertainty* (can we make a desirable solution?).* Uncertainty arises from the unknowns associated with solving any problem, which

^{*}There is a third type of uncertainty called *environmental uncertainty*, which refers to the uncertainty of the macroeconomic environment and government policy; but demand and technological uncertainty are more directly relevant to creating a customer.

are sometimes called "unknown unknowns," such as hidden customer preferences or undiscovered elements of a technical solution.

The more unknowns there are about customer preferences and behavior, the greater the demand uncertainty. For example, when Jenn Hyman of Rent the Runway came up with the idea to rent designer dresses over the internet, demand uncertainty was high because no one else was offering this service.⁴ In contrast, when Samsung and Sony were deciding whether to launch LED TVs, which offered better picture quality at roughly the same price as plasma TVs, there was lower uncertainty about demand because customers were already buying TVs.

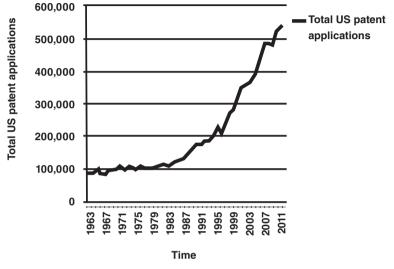
Technological uncertainty results from uncertainty regarding the technologies that might emerge or need to be created for a new solution to emerge. For example, a wide variety of clean technologies (including wind, solar, and hydrogen) are vying to power vehicles and cities at the same time that a wide variety of medical technologies (chemical, biotechnological, genomic, and robotic) are being developed to treat diseases. As the overall rate of invention across industries increases, so does technological uncertainty.

To better understand the uncertainty facing firms like Intuit, we studied the depth and degree of the shift in demand and technological uncertainty. First, we looked at multiple measures of the rate of technological change. One measure is the rate of invention patenting (see figure 1-1).

This is an imperfect measure, but clearly it reflects a striking increase in the rate of invention in the past twenty years.⁵ Not surprisingly, there has been a similarly dramatic increase in total R&D spending.

As new technologies emerge, companies are rising, and falling, at a much faster pace than ever before. This phenomenon is amplified by increasingly faster changes in customers' demands for a new mix of products and services. For example, consider how quickly entertainment preferences have changed. For more than three decades—between 1950 and 1980—we accessed TV shows and movies primarily through three networks (ABC, NBC, CBS) or at movie theaters. Then with the advent of the VCR, we've progressed to watching movies on our home TV screens

FIGURE 1-1



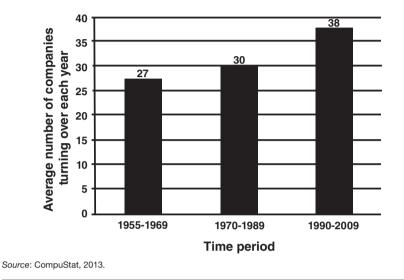
Total US patent applications

via videocassettes and then DVDs, to watching them on our computers, then on our laptops, then on tablets, and now on our phones, mostly via internet streaming. When the DVD emerged, it was adopted more quickly than any previous consumer electronic device selling just over three hundred thousand units in the first year—until the iPad, which sold three million units in its first eighty days.⁶ In short, customer preferences are not only changing but also changing at an accelerating pace.

A closer look at demand uncertainty among the *Fortune* 500 underscores this pattern. The churn among this highest-echelon group increased significantly between 1950 and 2010 (see figure 1-2): in 1960, twenty-seven firms moved in and out of the *Fortune* 500 per year, but now the churn has increased to thirty-seven firms—an almost 40 percent increase. This means that the average firm now stays in the *Fortune* 500 for seven years, compared with twelve years in the recent past. Other academic studies confirm that competitive advantage has become harder to sustain over a broad range of high- and low-tech industries.⁷

Source: US Patent and Trademark Office, "U.S. Patent Statistics Chart, Calendar Years 1963–2012," http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm.

FIGURE 1-2



Average annual Fortune 500 turnover

It's not an exaggeration to say that a second Industrial Revolution has occurred, a revolution fueled by new technologies and customers and accompanied by radical uncertainty. Companies don't hold on to customers as long as they used to, and new technologies and competitors are emerging faster than ever before.

What drives these dramatic increases in uncertainty? There are many reasons, but two disruptive technologies have played a crucial role: personal computing and the internet. Another key is the emergence of capitalism in countries such as China, India, Russia, and Brazil.

Personal computing has placed powerful analytical tools into the hands of everyone having the motivation to master them. It has democratized and decentralized complex problem solving. Similarly, the internet has had a profound effect as a low-cost marketing and distribution channel for anyone wanting to sell a product. This means that more new products can be launched to a larger audience, and faster, than ever before.

Finally, as China, India, Russia, and Brazil have joined the global economy, they have expanded the pool of potential entrepreneurs by 2.5 billion people. These new entrepreneurs enjoy lower technical

barriers to entry (with open source software, programming platforms, and cloud technologies), lower capital barriers (with the growth of venture capital, angel funding, and crowd-funding), lower production barriers (with the adoption of 3-D printers and global suppliers), and lower distribution and marketing barriers (with the internet and the emergence of direct shipping and social media). As a result, there are simply more competitors than ever before.

These changes have increased uncertainty to a tipping point—a threshold where the traditional ways we organized and managed corporations will no longer work to sustain growth in the future. This is especially true of companies in the industries having the highest uncertainty, such as computer software and medical equipment (see "How Much Uncertainty Do You Face?"). In fact, the computer software industry—where Intuit competes—is at the high end of the uncertainty spectrum, with volatile revenues, heavy R&D spending, and new entrants emerging at an unprecedented rate. Intuit's Scott Cook was aware of the difficulty of predicting and meeting customer demand. That's why many of the company's new products had flopped. He had also seen new competitors come along to attack Intuit in new ways, with different technologies and business models. He realized that he needed to figure out a new way to manage in the highly volatile computer software industry if he hoped to compete with the start-ups. Here's where the Intuit story gets interesting.

How Much Uncertainty Do You Face?

Not everyone faces the same levels of uncertainty. Some industries have greater inherent demand or technological uncertainty. Consider the 2×2 matrix shown in figure 1-3. The horizontal axis plots each industry based on technological uncertainty, measured as the average R&D expenditures as a percentage of sales in the industry over the past ten years. The vertical axis plots each industry's demand uncertainty, measured as an equal weighting of



Demand and technological uncertainty by industry (2002–2011)



Source: Compustat, 2013.

Note: Quadrants drawn at median values: (1.4, 67.5).

Note: Beer & liquor, insurance, utilities, precious metals displayed at demand uncertainty = 30 for visual purposes. True demand uncertainty values are 28.9, 14.4, 21.6, respectively

revenue (logarithmic scale)

industry revenue volatility, or change, over the past ten years and percentage of firms in the industry that entered or exited over the past ten years. Although these are imperfect measures, they identify the industries facing the highest, and lowest baseline levels of uncertainty (see figure 1-4).

Where does your industry sit? Do you face high or low uncertainty? As you can see, some industries face low uncertainty; examples include providers of personal services, such as hair styling and dry cleaning, who have used similar technologies to provide solutions for well-known demands. By contrast, in the lower-right quadrant in figure 1-3 are industries that face lower demand

FIGURE 1-4

Industries ranked by level of uncertainty

	measures of uncertainty			
Industry	R&D % of sales	Revenue volatility	Firm turnover*	
1. Medical equipment	8.2%	90.7%	13.1%	
2. Computers	5.8%	98.8%	12.0%	
3. Computer software	9.8%	69.9%	14.4%	
4. Pharmaceutical products	17.4%	63.3%	12.7%	
5. Measuring & control equipment	9.3%	97.0%	8.8%	
6. Machinery	3.2%	100.5%	9.3%	
7. Agriculture	10.8%	123.3%	4.9%	
8. Electronic equipment	5.2%	61.5%	10.5%	
9. Chemicals	3.0%	71.2%	9.2%	
10. Electrical equipment	9.8%	35.0%	9.2%	
24. Business services	3.2%	46.2%	6.5%	
40. Business supplies	1.4%	34.8%	5.0%	
41. Shipping containers	0.5%	65.1%	4.9%	
42. Real estate	1.3%	57.6%	3.0%	
43. Beer & liquor	2.3%	12.8%	3.7%	
44. Personal services	0.3%	59.7%	4.4%	
45. Tobacco products	1.0%	20.3%	5.2%	
46. Insurance	2.2%	30.4%	0.9%	
47. Wholesale	0.1%	14.1%	6.3%	
48. Utilities	0.2%	45.6%	0.2%	
49. Precious metals	0.1%	40.7%	1.5%	
*Percentage of (entrance + exits) / to	tal firms in the	industry ner ve	ar	

Measures of uncertainty

*Percentage of (entrance + exits) / total firms in the industry per year

uncertainty but high technological uncertainty. For example, aircraft makers can generally predict the demand for aircraft production. The challenge they face is technological uncertainty; Boeing and Airbus spend large sums developing advanced new aircraft like the Boeing 787 and the Airbus A350.

In the upper-left quadrant are industries that face high demand uncertainty but low technological uncertainty. For example, restaurants and hotels often have difficulty predicting demand for their services, because many factors influence whether, when, and where people eat out or travel. However, the technologies of offering food or lodging have not changed much over the years.

Finally, industries in the upper-right quadrant—such as software, pharmaceuticals, and medical equipment—face high uncertainty in both demand and technology. For example, who would have predicted that medical robots would perform surgeries? When Intuitive Surgical launched the Da Vinci System medical robot—which allows surgeons to operate using 3-D visualization and four robotic arms—the company faced significant technical as well as demand uncertainty.

Our analysis suggests that, on average, the top ten most uncertain industries require greater innovation management skills than the bottom ten. However, even if your industry provides clues about average uncertainty, every problem is characterized by its own level of uncertainty. For example, although Webvan was a food retailer in an industry with relatively low uncertainty, its online platform of home delivery faced both high demand uncertainty (will customers buy groceries online?) and high technological uncertainty (can we fulfill orders in a cost-effective way?). Demand uncertainty was high, because the company had few facts about demand and many assumptions. The same was true of technological uncertainty; it had many assumptions about which fulfillment technologies would work best.

The ratio of assumptions to facts equals your *uncertainty ratio*. If your problem is characterized by a low uncertainty ratio, you can probably apply traditional management. If you have a high uncertainty ratio, then *The Innovator's Method* should guide you. Unfortunately for Webvan's investors, the company was not successful in experimenting to resolve its high-uncertainty problems before a full-scale launch—\$500 million—that proved disastrous.

A New Way to Manage: Intuit's Transformation

The story of Intuit's journey gives managers an archetype for a new way of managing in a high-uncertainty industry. Intuit's transformation arguably began in 2004 with its adoption of the net promoter score. NPS is based on a single question posed to customers: How likely are you, on a scale of 0 (not at all likely) to 10 (extremely likely), to recommend this product or service to a colleague or friend? A product's NPS is the percentage of promoters (those who score themselves 9 or 10) minus the percentage of detractors (scores 0-6).⁸

Net promoter score = % promoters minus % detractors

Historically, Intuit products had dominated their markets by being significantly easier to use than competitors'. But soon competitors were catching up, so Intuit launched an effort to improve ease of use and NPS. It spent even more time with customers, observed detractors, and redesigned products. "We put a big focus on making our products easier to use," says Kaaren Hanson, design vice-president. "And when this company decides to go after something, we do it. So we pulled the lever." But these traditional management moves failed to move the meter. "Our net promoter scores didn't budge," Hanson says. "And it didn't result in a big jump in sales, which is what we expected. We pulled the damn lever, and nothing happened."⁹

In other areas of the company, customer response to new products was especially disappointing. "We were humbled when we looked back at ten years of innovation," says CEO Brad Smith, who took over for Steve Bennett in 2008. "We'd launched fifty-four products, and fewer than five had achieved any commercial success, measured by revenue or profit. And we were bad at shutting down the failures. When we did, we got labeled as not being patient enough."¹⁰

Design for Delight

Intuit's leaders knew they needed to figure out what would move customers and discover how to improve the success rate of new products. So a team was pulled together. "We went out to understand what was beyond ease," says Hanson. "And we looked at a lot of the usual suspects. We looked at Nike, we looked at the W Hotels, we looked at Harley-Davidson, and we looked at Apple. You name it, we probably looked at them."¹¹ The Intuit team realized that the most successful companies didn't just offer products that were easier to use; they offered products that delighted customers.

Products that delight customers do the unexpected. They solve a problem customers didn't know they had, or they evoke a positive emotion. But how does a company create products that delight customers?

The team discovered that design thinking offered critical new tools not in their familiar management tool set. Cook had the benefit of sitting on the board of Procter & Gamble and saw up close how P&G incorporated techniques like design thinking into product development. Drawing on design thinking principles, Cook, Hanson, and her team created a training program called Design for Delight (D4D), a program intended to transform Intuit into a design-driven innovation machine. Intuit's D4D initiative was based on searching for a big unmet customer need and then applying three principles.

- *Gain deep customer empathy.* Understand customers better than they understand themselves.
- *Go broad to go narrow.* Generate lots of solutions before winnowing the list.
- Experiment rapidly with customers. Seek feedback early and often.

Hanson realized that to infuse D4D principles into the DNA of all eight thousand employees, she needed to get top management on board. To jump-start the process, Hanson and Cook helped plan a two-day offsite for Intuit's top three hundred managers. At first the group paid polite attention, but as the audience plowed through a five-hour PowerPoint presentation, Cook saw that the design thinking approach was falling flat. But then Alex Kazaks, a young associate

professor at Stanford, led the team in a unique participatory exercise: Kazaks asked each person to design, and prototype, a wallet for the person next to him. As the managers worked through the design challenge, creating prototypes, getting feedback, and redesigning, the hands-on experience helped them see the value of design thinking as a tool to discover and deeply understand customer needs to create new value.

Hanson then organized a series of design forums, typically attended by roughly three thousand employees, to teach people the key principles and let them practice D4D. However, after several forums and a huge effort, Hanson discovered a disappointing fact: the company wasn't changing enough to produce different results. "We did this for about a year," says Hanson, "and what I was hearing in the hallways—that made me feel absolutely nauseous—was that 'design for delight' is this flavor of the month. This was very disheartening, because we actually had senior leaders involved and engaged. As it turns out, senior leaders are not enough."¹²

Innovation Catalysts and "Lean Start-In" Workshops

Structural changes were needed deep inside Intuit. Hanson and her team began thinking about how to create deeper expertise in D4D. If she could create D4D coaches—what Intuit now calls "innovation catalysts"—she thought they could coach teams applying D4D in their everyday work.¹³ So she selected nine individuals from a variety of business units and fields—design, research, and product management—to become the new D4D experts.

The innovation catalysts were charged with assisting project teams to give them the confidence to use the D4D playbook. Hanson asked the catalysts to spend 25 percent of their time on "big-payoff projects." Why? Hanson knew that without a visible win, the program would fade quickly. As the first few successes trickled in, the demand for expert help grew. Over the next few years, Hanson's team recruited and trained an additional two hundred innovation catalysts, who spent roughly 10 percent of their time coaching teams.

As Intuit rolled out the D4D program, the catalysts found that design thinking provided highly useful tools for gaining deep customer empathy. But it didn't have great tools for testing potential solutions once customer pain points were discovered. Cook and his team became familiar with *lean experimentation*, ideas popularized by Eric Ries in *The Lean Startup* and by Steve Blank in *Four Steps to the Epiphany*. The tools of lean experimentation were well suited to test a *leap-of-faith assumption*, a term used at Intuit to refer to a hypothesis being tested through experiment.

So Intuit began running "lean start-in" workshops. Employee teams brought an idea to meet a big unmet customer need, and in two days the team went through the entire cycle of identifying a customer pain point, prototyping a solution, and testing with customers.¹⁴ These workshops have become a useful vehicle for developing and prototyping new ideas. Indeed, the combination of forums, workshops, and catalysts has not only helped everyone at Intuit understand the new D4D playbook but also provided deep expertise to successfully execute the plays.

Implementing the Innovator's Method

What exactly was happening inside Intuit? As managers were adopting ideas from design thinking and lean start-up, they were learning how to systematically experiment their way to success. Moreover, they began to create start-up teams throughout the company that used a similar process to that used by start-ups to bring new products to market.

As we observed what was happening at Intuit—and what happened at other innovative corporations and start-ups—we realized that these companies were using a similar process for testing and validating ideas.

This process, what we call the innovator's method, consists of four steps to solve high-uncertainty problems and turn insight into a successful innovation (see figure 1-5).

Step 1. Insight: savor surprises. Leverage the behaviors identified in our earlier book, *The Innovator's DNA*—questioning, observing, networking, and experimenting—to search broadly for insights about problems worth solving.

Step 2. Problem: discover the job-to-be-done. Rather than starting with solutions, start by exploring the customers' need or problem—the functional, social, and emotional job-to-be-done—to be sure you're going after a problem worth solving.

Step 3. Solution: prototype the minimum awesome product. Instead of developing full-scale products, leverage theoretical and virtual prototypes of multiple solution dimensions. Then iterate on each solution to develop a minimum viable prototype and eventually a minimum awesome product.

Step 4. Business model: validate the go-to-market strategy. Once you've nailed the solution, you're ready to validate the other components of the business model, including the pricing strategy, the customer acquisition strategy, and the cost structure strategy.

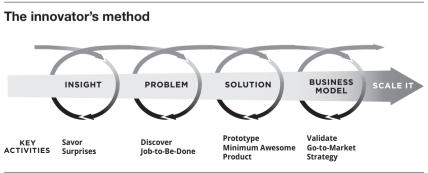


FIGURE 1-5

Each step in the method is critical and involves an experimentation loop to test leap-of-faith assumptions in a repeated "hypothesis, test, learn" loop.¹⁵ Let's return to Intuit and see how it has applied the innovator's method.

Insight: Savor Surprises

The innovator's method starts with generating insights into potential customer problems by looking for surprises or other clues, such as symptoms of a problem. We use the word *problem* interchangeably to mean a need or problem that can exist for external customers or internal users. (For example, at Intuit, half the projects are targeted at solving an unmet customer need; the other half target internal needs, such as developing better technology tools to serve customers or creating a better working environment.) The insight can come from anyone, and that explains why Intuit gives 10 percent unstructured time to every employee to generate ideas and participate in a start-up team. In a convenience sample, we found that insights were developed most often through user or customer observations and through conversations with customers, Intuit employees, and various individuals outside Intuit.

Insights often start when you notice a symptom or a surprise, which provides the clues to an opportunity. For example, Intuit's Barath Kadaba and Deepa Bachu (an innovation catalyst) were looking for opportunities to create new businesses to improve the financial lives of the 1.2 billion residents of India. After initial observations and analysis, Bachu and a team of three other people decided to explore the needs of India's 150 million farmers, a large segment of potential customers with many challenges.

The team spent three weeks following farmers—in the fields, in their villages, and at the markets where they sold their produce. As they watched, they were surprised at the incredible challenges farmers had selling their produce at a good price. As they listened to farmers complain, worry, and often lose money, they had the clues of a potential problem to solve. Furthermore, the team was surprised by the powerful

role played by middlemen in the market, who had no incentive to provide farmers with accurate information on supply and demand. These symptoms and surprises pointed to a potential opportunity. If the problem was as serious as Bachu thought it was, and if Intuit could come up with a solution that would translate into higher prices for farmers, Bachu knew it could be a big opportunity for Intuit.¹⁶

Problem: Discover the Job-to-Be-Done

Managers tend to start by building solutions, but we emphasize the need to first deeply understand the problem. Keep in mind that "problem" may mean either a customer's pain or a customer's desire, such as a desire for connection, expression, fulfillment, and the like. At the core you are trying to discover the functional, social, and emotional elements of the job-to-be-done—the need for which customers might purchase your product. For example, although a BMW may do a similar functional job as another car (transport), a BMW can also accomplish important social jobs (prestige, status) or emotional jobs (feels "cool") that may be overlooked at first blush.

At Intuit, teams follow up on an insight into an unmet customer need by using a technique called *pain-storming*. According to Rachel Evans, one of the innovation catalysts who developed it, "The purpose of a pain-storm is to get crisp on what we think the problem is so we can test our hypotheses."

Pain-storming involves creating a customer's "journey line" to understand how customers now complete a task and identify their main pain points (and emotions) along the way. The team then conducts a root-cause analysis to understand the causes of the biggest pain points. Of course, it doesn't work if team members just sit in their offices and imagine what customers might want. Instead, Intuit's team members directly observe and talk to customers in their offices or homes. As CEO Smith told us, "To walk a mile in your customer's shoes, you have to take your own shoes off first."¹⁷ In short, you must "be the customer." As Bachu and her team spent weeks living with, observing, and talking to farmers and middlemen in seven agricultural markets, she learned firsthand about the pain farmers felt when faced with a decision to sell perishable crops, whose prices might fluctuate as much as 50 percent in a single day. The team validated their initial observation that the farmers had no information on supply or demand to guide them, resulting in spoilage or suboptimal prices. They also validated the fact that farmers were often exploited by the middlemen, who had an incentive to minimize market price transparency. As the team members gained confidence that they had identified an important problem worth solving, they translated the problem into a vision statement for the customer: "10 percent higher prices for farmers." Drawing on the insights into the causes of the farmers' problem—and using the vision statement as a guide—the team then was ready to focus its energies on developing a solution.

Solution: Prototype the Minimum Awesome Product

After identifying a customer problem worth solving, most managers unleash the product development team to build a full-featured, errorfree product to attract as many customers as possible. Although this approach makes sense in familiar markets, it is the wrong thing to do when you face uncertainty. Instead, managers should search broadly for a variety of solutions and then use a series of four prototypes to converge on the solution that best solves the job-to-be-done (theoretical prototype, virtual prototype, minimum viable prototype, and minimum awesome product).

Although rapid prototypes may seem like old news, there is a subtle process to leveraging prototypes in the right way to rapidly validate your hypotheses. In the early days, although Intuit adopted the idea of rapid prototyping to test solutions, they found it led to premature development, as high-potential solutions were quickly thrown into Intuit's traditional software development process. This process often yielded long development cycles and disappointing results. Intuit's leaders soon

realized that the better way to gain momentum was to fake the product in order to get something into users' hands more quickly. This *virtual prototype*, as we would call it, allowed the Intuit team to quickly test many, many solutions with customers to determine if they had any potential.

For example, the Mobile Bazaar team (Intuit's name for the team searching for a solution to the farmers' pricing problem) experimented with several simple prototypes to test potential solutions. One prototype was an eBay-like auction where the farmers could auction their products directly to buyers. However, initial tests of virtual prototypes, drawn in PowerPoint, suggested such a system would be complex for farmers to set up and use (most of them were not well educated, nor did they have experience with computers).

The team observed, however, that all the farmers had cell phones and knew how to send and receive text messages. So the team tested virtual prototypes, and then a minimum viable prototype, of a solution that involved gathering information on prices that buyers and middlemen were prepared to pay; this information was then sent to farmers in real time through text messages. Farmers then would use that information to decide when, and to whom, they would sell. The team "faked the back-end" by having three team members manually send text messages to farmers to see how they responded. Farmer response to this solution was extremely positive. Within one year, Mobile Bazaar had 180,000 farmer subscribers, and tests showed that farmers' prices had increased an average of 16 percent.

In addition to demonstrating the use of specific prototypes, the Mobile Bazaar example demonstrates a more general principle of the innovator's method: "go broad to go narrow." At Intuit, teams apply this principle by generating as many solutions as possible during what the company calls a "solution-jam" before reducing the concepts to a short list for prototyping. After selecting at least three solutions, the team initiates a "code jam," with the goal of creating a working software prototype of each solution that isn't perfect but is good enough to test with customers. In this way, Intuit progresses from pain-storming to a customer-tested prototype within four weeks, thereby enabling rapid experimentation with customers numerous times before the solution is put into software development.

However, as we will argue, truly delighting customers comes from the unexpected: it comes from understanding a problem in a way that others haven't and then going beyond customers' expectations in providing a solution. Therefore, the ultimate goal of this stage of the process is to create a *minimum awesome product*—one that remains "uncomfortably narrow" in feature set but is awesome at what it does.¹⁸

Business Model: Validate the Go-to-Market Strategy

At Intuit, Kaaren Hanson argues, "Until you've figured out how to delight a customer, don't even think about the business model."¹⁹ But once you've discovered a solution customers want, you're ready to figure out the best way to get your solution into the hands of customers at a price that generates the revenues called for in your strategy. However, although most managers assume they understand how to get products to market, many companies have killed their new products by forcing them into existing business models. For example, managers often use the same distribution channels, a similar marketing strategy, a similar pricing strategy, and so on, as they use for existing products. But even when innovations appear similar, they often require their own unique business models. Properly aligning the business model involves discovering and validating your go-to-market strategy directly with your customers. This process requires validating how to acquire and influence customers, how to set price, and which resources will be required to deliver your solution to the market.

Intuit currently manages this process by dividing innovation into groups. Innovations related to its core financial software products (Quicken, QuickBooks, and TurboTax) are labeled "Horizon 1" (H1) products and generally borrow the existing business model. But products only partially related to the core are labeled "Horizon 2" (H2), and new or unrelated products are labeled "Horizon 3" (H3). The new H3 and H2 products, in particular, require rapid experimentation to test assumptions about the new business model. Furthermore, H3 products require a unique set of metrics to measure progress in nailing the new business model. Rather than measure financial performance, such as ROI or contribution to top-line revenue, Intuit starts by measuring what it calls the "love metrics" (see chapter 8). The point is that you can't assume that new solutions will work with your existing business model.

Mobile Bazaar typifies an H3 business, and the team is still in the process of experimenting with the business model. Unlike Quicken or TurboTax, the Mobile Bazaar distribution channel to customers will operate via cell phones (as will all digital marketing), and pricing must also be different (likely through subscription or a "free" advertising supported or freemium model). Intuit has not attempted to scale Mobile Bazaar at this point, because it has not yet validated a profitable business model.

A New Style of Leadership

Corporations are designed for execution, not innovation. But as uncertainty increases in the world around us, the way we manage has to change to meet these circumstances. To apply the innovator's method requires a new style of leadership. In the age of uncertainty, leaders are no longer chief decision makers. Instead, they're chief experimenters who formulate hypotheses with their team, conduct experiments, and let the data speak for themselves. "We want our leaders to be coaches and facilitators, not decision makers," says Cook. "The experiments that the team runs should provide the data to help the team make decisions so the leader doesn't have to."²⁰

Thus the manager's role shifts to coach and facilitator of "fast and frugal" experiments. If the manager, or anyone else on the team, says, "I think we should do X" or "I believe X," that statement is translated into a leap-of-faith assumption, and the next question should always be, "What's the fastest way to run an experiment to help us know whether

we should do X?"²¹ "With our new focus on experimentation, our leaders should stop trying to be Jobs or Bezos and predict the future," says CEO Smith. "Our leaders should nurture innovation wherever it comes from. With lean experimentation, employees can come to leaders and have the boldness to say, 'I've got an idea, and here's the proof."²²

So within each of the first few steps (problem, solution, and business model), Intuit teams follow this process: (1) writing down the most important leap-of-faith assumption, (2) designing an experiment to test it, (3) conducting the experiment to provide the answer, and then (4) looping back to figure out the next leap-of-faith assumption that the team needs to answer.

Leaders have to walk the talk. Key decisions they want to make should be tested as leap-of-faith assumptions. Remember, in high uncertainty, anything you believe to be true is only your best guess. What is your leap-of-faith assumption?

Intuit's Results

How has Intuit's application of the ideas we describe here affected innovation at the company? First, Intuit has become an experimentation machine. In 2006 the TurboTax unit ran only one customer experiment; in 2012 it ran more than six hundred, and by 2013 it had run almost 2,500 customer experiments in a single year. Not surprisingly, this increase in market experiments has produced a plethora of successful new products. Mobile apps have increased from zero in 2008 to fifty in 2013, including the very successful SnapTax app, which generated 350,000 downloads in its first three weeks.

But the proof is in the financial pudding. In 2010 Intuit generated \$10 million in revenues from products launched in the prior three years. That number jumped tenfold—to \$100 million—by 2012, and the company expects to earn much more as these nascent businesses mature.²³ Perhaps more important, Intuit's product launches and product improvements are being well received by the market, and profits are up

considerably. Operating income has more than doubled, from 7 percent annual growth from 2004 to 2008 to 15 percent annual growth from 2008 to 2012.

And investors have rewarded Intuit. Its market cap jumped from \$10 billion in 2008 to \$17 billion in 2013—a 70 percent increase (for comparison Intuit's market cap increased only from \$9 to \$10 billion from 2003 to 2008). Moreover, Intuit's innovation premium has jumped from 20 percent in 2008 to 30 percent in 2012—a 33 percent increase. Intuit is once again acting, and performing, like an innovative company and, some might say, like a start-up (see "Is Your Company an Eight-Thousand-Person Start-Up?").

Is Your Company an Eight-Thousand-Person Start-Up?

If you're working in a larger organization, you may wonder, What does this start-up stuff have to do with me? Although we describe both start-ups and established companies, the issue isn't the size of the company. The issue is the type of problem you face and how you are solving it: uncertainty requires a different management approach that is critical for either entrepreneurial or corporate start-ups. However, because start-ups often spend their time solving high-uncertainty problems, you may incorrectly associate the innovator's method with start-ups rather than with the type of problem.

We define a start-up as does Eric Ries in *The Lean Startup*: as "a temporary organization designed to search for a business model under conditions of extreme uncertainty."²⁴ The definition includes three important dimensions. First, anyone (or team) who is creating a new product, service, process, or business—no matter the size of the company—is the founder of a start-up. The definition includes corporate and entrepreneurial start-ups.

Second, a start-up has a special purpose and structure; it's a temporary organization focused on searching for a problem, a solution, and a business model. Third, the founders are trying to launch something new under

conditions of uncertainty. It isn't clear whether there will be demand for the new product (demand uncertainty) or whether the technological solutions will work as desired (technological uncertainty). If you're a start-up founder (manager or entrepreneur), you should apply this method to avoid the number 1 pitfall that kills start-ups: scaling the business before you've nailed it.

Similarly, we define "customer" as anyone with a problem or need, whether inside or outside the organization. You can apply the innovator's method to solve problems with some uncertainty *inside* your organization, whether in IT, HR, or finance. Wendy Castleman, an Intuit innovation catalyst, recalled such a process for an internal customer. An employee in IT observed that billing agents took fifteen minutes to answer customer questions. This spark of an insight and further observation identified the core problem: billing agents had to look across multiple systems to identify the various components of a customer bill. So she designed a series of experiments, testing different prototyped approaches to solutions for agents, ultimately finding a new tool that decreased call times from fifteen minutes to three!

Using a similar approach, Intuit's Full-Service Payroll team wanted to see whether they could improve the customer experience of calling in for support. One idea was to answer the phone in a more personal way. Instead of saying, "What is your EIN number?" they hypothesized that they would get higher customer satisfaction by beginning with, "How can I help you today?" They tried it with one agent, and the results were stunning. The agent's NPS scores jumped more than 20 points, well beyond the rest of the team (or her prior scores). They quickly rolled out the change to the rest of the team, and the experiment ultimately led to a 21-point increase in their NPS scores. The point? The innovator's method works for internal as well as external customers.

A Guide to This Book

In this chapter we've examined how an established organization can implement the key steps in the innovator's method, and we've introduced leadership principles that enable the method to flourish. Now

you'll take a deep dive into the leadership principles that will help you apply the method as well as each step of the method. Rather than give you theory and let you figure out how to implement it, we focus on giving you both the big idea (why to) and the tools and tests we've seen successful innovators use (how to). (See appendix A for a summary of the model and the tools and tests discussed in each chapter. See www .theinnovatorsmethod.com for further tools and tips.) Here's an overview of the chapters to come.

In chapter 2, we explain why being a good manager can make you a bad innovator. We describe how your role changes when you're managing for innovation in a high-uncertainty environment. Chapter 3 discusses how managers generate insights—the seeds of innovation by applying five key skills (questioning, observing, experimenting, networking, and associating) and by searching broadly to understand the job-to-be-done. Then in chapter 4 you'll learn how to determine whether your insight represents a problem worth solving. Discovering the job-to-be-done (functional, social, and emotional job) is the critical first step, and one that's often overlooked. This chapter has tests for determining whether you've discovered a worthwhile problem.

In chapter 5 you'll find tools to help you broaden and then narrow your solution ideas as you use progressively detailed prototypes to discover an awesome solution. Once you've generated a solution to a worthwhile customer problem, you're ready to figure out your go-tomarket strategy. In chapter 6 we introduce the business model snapshot, which pinpoints six components of your business model that you need to identify before fully launching your product. These include value (your value proposition and pricing strategy), customer acquisition (customer relationships and channels), and cost structure (activities and resources).

The great benefit of the innovator's method is that it gives you the tools you need to resolve uncertainty; it teaches you how to experiment to answer your questions and then pivot when necessary. But because you face uncertainty, your chances of guessing right on the first try are nearly zero; this means that changes—pivots and iterations—are critical. In chapter 7 we reveal crucial principles for mastering the pivot.

Once you've turned many of your hypotheses into facts, you can scale your idea to reach a broader market. But the process that helped you nail the business model doesn't help you scale it. Now it's time to reapply traditional management while keeping your ability to test the remaining uncertainties. In chapter 8 we explain the often overlooked art and science of scaling.

Lastly, not everyone has support from the top management team, and at times you may find yourself the only believer in your idea. In chapter 9 we address how to adapt the method to work for you individually and for a team, or use it to ignite innovation in the organization more broadly. We also explain how to adapt the method based on whether you're pursuing disruptive or incremental innovations.

In the conclusion chapter, we tell the story of how Regeneron, an established corporation in a technically complex industry, used the ideas in this book to become one of the world's leading biotechnology companies. Using this example, we discuss the future of management and competitive advantage.

A tectonic shift has exponentially increased the level of technological and demand uncertainty faced by companies. Even established organizations need to be good at solving high-uncertainty problems—the kinds of problems they have tended to leave to start-ups. The need for managing uncertainty is a serious challenge, because established organizations must execute under an existing business model to meet the needs of existing customers. As a result, they typically adopt management practices that run counter to managing for innovation.

But Intuit, and dozens of other companies we studied, have shown that it's possible to reconceptualize the role of management and to create processes and infrastructure to radically decentralize the process of idea generation and assessment. When anyone in an organization is

encouraged to be the founder of a start-up (a new product, a new service, a new process) and knows how to do it, it unleashes the kind of creative energy that can counter, or even embrace and exploit, uncertainty.

That doesn't mean that the innovation process is easy and clean. In practice innovation is always messy and recursive. There are often politics, contradictions, and setbacks. But with that caveat, we have tried to simplify the mess to clearly explain the most common steps and tools we observed successful innovators use. We describe the innovator's method in terms of four common elements (insight, problem, solution, and business model) to help you clearly grasp and understand them. Although we generally observed that successful innovations start with an insight into a big problem and then progress through the steps we describe, in practice, these steps often overlap each other, or sometimes occur in a slightly different order—that is the nature of dealing with an uncertain world. Ultimately each element of the innovator's method is more important than the order, as is understanding the key tools and tactics to turn your ideas into innovations. As you encounter these challenges and confusions, embrace them as part of uncertainty, remembering that although uncertainty can be frustrating, it is also the source creativity, innovation, and new growth. The innovator's method is your guide to help you recognize what to do when.

Next Steps

Thank you so much for reading Chapter 1 of The Innovator's Method, we hoped you enjoyed it! Please mark your calendars for the launch of The Innovator's Method on September 9th, 2014 to purchase your full copy on Amazon!

—Jeff Dyer and Nathan Furr The Innovators DNA

For more information: Please visit us at: Or email us at:

http://www.theinnovatorsmethod.com imethod@innovatorsdna.com