



Guiding Your Flight Progress

The Power of Dashboards

Building a Better Business Model Through
Trial and Error

EXCERPTED FROM

*Getting to Plan B:
Breaking Through to a Better Business Model*

BY

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CHAPTER 2

Guiding Your Flight Progress

The Power of Dashboards

AT THE RIPE AGE OF ELEVEN, Johnny Tart experienced his first summer heat wave. Temperatures maxed out at a sticky 104°F. As he sat lazily at his front window one Friday afternoon, he noticed how miserable the commuters looked walking home from the train station. His Chicago suburb was a sleepy one. There was nowhere to stop for a cold drink. Johnny leapt from his perch as an idea took shape in his mind. He would quench the thirst of the local commuters! He would set up a lemonade stand.

Johnny was not the first person in his neighborhood to sell lemonade. The previous summer, his neighbor Jennifer had set up a stand at the end of her driveway, but Johnny had the sense that he could do a better job. For starters, she ran her stand in the early afternoon, long before the commuter rush. She didn't open for business every day, as he planned to. And if he was honest, her lemonade, made from a sugary packet, didn't taste very nice. Jennifer's lemonade stand was more antilog than analog. Johnny assumed that his homemade lemonade, offered every afternoon to commuters, would combine for a great little business. But he had two lingering, unanswered questions—Will commuters stop and buy?, and How much will they pay?—which led to two leaps of faith:

- LOF 1: Commuters, eager to get home, will take a few minutes to stop in front of my house to buy a refreshing drink.

- LOF 2: People will happily pay a premium for a glass of my ice-cold homemade lemonade.

Without realizing it, Johnny was starting a process that we prescribe to data-starved entrepreneurs: dashboarding. Johnny had just accomplished the first task of dashboarding, asking the right questions about his venture. He also had two hunches (hypotheses) about the answers to these questions:

- H1: At least ten people per day will stop and buy my lemonade, if they are not in a rush.
- H2: With a bottle of Coke priced around \$1 at the convenience store on the other side of the tracks, they will gladly pay \$1.50 per cup.

He believed these hunches, but he had no evidence that they were true.

Let's take a break from Johnny's learning for a moment, because this is where many entrepreneurs make the mistake of stopping. They take their assumptions (Johnny's hypotheses) as fact. Some reckless entrepreneurs embrace this naïveté, having heard that "entrepreneurship is all about tenacity, so I'm going to barrel down this highway at one hundred miles per hour, because my Plan A is wonderful!" Their ventures are the wrecked cars you spot on the side of the road.

If either of Johnny's hypotheses were untrue—if few people stopped to buy his lemonade, and if shoppers thought his lemonade was extortionate at \$1.50 a glass—and he failed to respond swiftly, he would probably go out of business. When you leave stones unturned, you run the same risk. We prefer that you reach your destination.

Dashboards Defined

Let's revisit our analog and antilog process. At some point, we exhausted our ability to learn from other companies. Their examples would have given us "good enough" answers to some of our questions, and we could move on. But when analogs and antilogs reach the limit of what they can tell us, we are left with leaps of faith, each driven by a burning question that we cannot answer without some real-world data. So, as we saw in chapter 1, we draw from our leaps of faith a few hypotheses that state what we hope and believe to be true, and we then test them in some way, as quickly and cheaply as possible, and we measure the results. This

process—systematically recording our leaps of faith, the hypotheses that grow out of them, and the results of our hypothesis tests—is what we call dashboarding. Scientists do this in their sleep. They begin with a small set of critical leaps of faith, generate hypotheses with which to address them, and determine metrics to measure the results.

A dashboard—the systematic record you keep to guide and track this process—is a flexible tool for addressing your leaps of faith. It forces you to keep track of the questions you have about your venture, while keeping your assumptions (often guesses, really) in mind. It focuses your attention on the critical issues and more efficiently deploys your precious time and resources to removing the critical risks. And it provides a way to respond to the real-life data you generate.

Moving into the dashboarding stage in developing your business model means moving from *spectator*—observing others as you gathered analogs and antilogos, as Johnny did by recalling his neighbor’s limited success—to *doer*.

Johnny Dashboards His Way to Plan B

As we know, Johnny had hunches as to how his questions would be answered in practice. So he put into place some metrics to gauge his success (or not!):

- Number of customers and glasses per day that he sells
- The price at which customers most readily buy

On Monday, Johnny placed his family’s old card table at the end of his driveway and formally entered the lemonade business. He jotted down some interesting results:

- He only sold two glasses of lemonade at \$1.50 per glass.
- Several people stopped to chat without buying, and one grandfatherly gentleman told him that \$1.50 was too pricey; the lemonade stand he’d had in his youth had only charged five cents per glass.

Alas, Johnny’s hunches were wrong. He needed to make some changes if he wanted to make money. Armed with the data from Monday’s experiment, he made two improvements. First, he posted signs at the end of the street to advertise “Fresh Lemonade.” Second, he lowered his price to 50 cents for a small glass and \$1 for a large. Unfortunately, on Tuesday it

rained, but on Wednesday, business picked up, with six glasses sold—and \$5.50 in revenue. By dashboarding, Johnny spared himself from the hard lessons of failure and saved his customers from a thirsty walk home!

If Johnny was as systematic as we hope you will be as you dashboard your way to a better Plan B, he would have kept careful records so that he could make midcourse corrections if necessary. His record might have looked something like the one shown in figure 2-1.

Johnny's is a simple but prototypical dashboard that illustrates the key building blocks of the dashboarding process that we hope you will follow:

- Your leaps of faith
- The hypotheses you will test
- The metrics you will use to measure your results
- The results of your hypothesis tests over one or more periods
- The insights you draw for decision-making, based on the results you've obtained

FIGURE 2-1

A prototype dashboard for Johnny

Hypotheses	Metrics	Actual Monday	Actual Tuesday	Actual Wednesday	Insights obtained, course corrections needed
Leap of faith 1: Commuters will stop and buy a refreshing drink					
H1: At least 10 customers per day	Customer count	2 customers	No one stopped in the rain	6 customers	High pricing deters sales, they look, don't buy; no point in setting up if it rains; seems like demand is somewhat less than Johnny thought.
Leap of faith 2: People will pay a premium price					
H2: \$1.50 per glass will be acceptable	Total sales, price paid	\$3.00 total sales, \$1.50 per glass	—	\$5.50 in sales (1@ 50 cents, 5@ \$1)	\$1.50 too high, \$1 looks about right.

A dashboard is much more than routine paperwork to complete. It is a tool to help you to frame and respond to the lingering questions your venture faces. As you'll see in our examples in this chapter, dashboards must reflect the nature of your business, the management team, and your questions. In other words, one company's dashboard will look different from another's. And the dashboard you build before your venture takes off will be quite a different beast from the one you create two years into the business!

Why Should You Dashboard?

In business, we love to measure things. In an era where established companies suffer from data *overload*, it is rightly considered good business practice to keep a close eye on a much smaller set of metrics to focus everyone's attention on how the business is operating. After all, if it gets measured, it will get done, as the saying goes. Managers like to know how their sales teams are performing. A CEO appreciates quick snapshots of everything from employee turnover to sales results to bank balances.

In a growing number of companies large and small, these metrics are captured and reported each day, week, or month, using a dashboard that's not all that different in concept from the one Johnny would have prepared. Like the dashboard in your car or in a Boeing 777, these companies' dashboards keep track of the most critical indicators of how they are proceeding on their journey. The good news is that, in most established companies, crunching the numbers might take time, but at least the numbers exist to crunch!

Entrepreneurs, on the other hand, tend to suffer from the flipside: data *underload*. Most nascent ventures lack sufficient experience or enough solid information to launch their businesses outright. Based on only a wild guess, doing so would be as ill advised as flying in bad weather with no instrumentation. Pantaloon's Kishore Biyani (from chapter 1) wasn't sure that his Indian customers would respond well to his orderly store. After a small test, he saw that they never stopped walking the aisles to shop! He quickly refashioned his stores to mimic the chaos and racket found in traditional Indian markets, and sales shot up.

Entrepreneurs such as Biyani have a healthy respect for the fact that their business is toast if their assumptions are incorrect. And in case you missed this little point, initial assumptions—whether about a raw start-up or a new venture in a larger organization—are usually wrong. Testing and

measuring is excellent business practice in the start-up world. It's a process that you cannot afford to ignore.

Goal for Chapter 2: Learn to Iterate with Dashboards

A key theme of this book is that, most often, it is necessary to constantly iterate to find a path that will work—for your would-be customers, for you, and for your prospective investors. If all goes well as you iterate, identifying still more leaps of faith and testing hypotheses to address them, you'll eventually find your way to a Plan B or C or Z that will deliver you the kind of success you seek.

Doing this does not mean flying by the seat of your pants—nor without instrumentation. Both flexibility and methodical iteration are the keys to finding entrepreneurial nirvana. Dashboards will record the results of the tests of your hypotheses as they occur. But mere record-keeping isn't why dashboards are so important. More crucially, they will signal the mid-course corrections necessary to reach a viable Plan B. And they have some other tricks, too, as we'll see.

In this chapter, we examine two inspiring case histories. The first is a nonprofit where the analog-antilog-leaps of faith-dashboarding process is every bit as applicable as it is in the for-profit world. The other story is one of those rare cases where Plan A initially worked, though continued dashboarding ultimately revealed the need for a Plan B.

- In the GlobalGiving story, we see how analogs, antilogs, and leaps of faith lead directly to dashboards to interpret what is learned from real-world evidence, and how that learning—whether about initial plans or unanticipated market shifts—brings into crystal-clear focus the need for changing from Plan A to Plan B.
- Aggregate Knowledge's first dashboards confirmed that its Plan A was, remarkably, on track. But the founder kept dashboarding, uncovering some interesting challenges and opportunities for his business.

There are also three common themes that permeate these two stories. The first is their founders' laserlike focus on the biggest risks on the table

at each point in time. Second, we see how their dashboards changed over time, and how the founders used them to evolve their businesses. Third, there was a clear emphasis on quantitative measures, even though some hypotheses were more qualitative in nature. At the end of the day, though qualitative issues are important, getting the numbers nailed down is the only way to know whether you've got a business model that will work.

Case 1: GlobalGiving: Inspired by an Antilog

It was late 1998, and Dennis Whittle had just spent a year developing new processes that would help The World Bank, where he was a senior executive, fight poverty.¹ He had a \$5 million budget and the services of a top consulting firm. He, his colleague Mari Kuraishi, and their team of development professionals were running a program that had funneled billions of dollars to the Russian Federation for economic development.

Their efforts were deemed innovative and successful. Yet the *results* were disappointing and unsettling: Whittle and Kuraishi were not confident that the large amounts of money they were injecting into the country had had the impact they were seeking or that it had reached the people on the ground who needed the most help.

There was a familiar problem: funds targeted at urgent human needs didn't always end up where they were intended to go. All too often, the funds wound up in the personal Swiss bank accounts of government officials. In Whittle's view, a radical new approach was needed. He asked Kuraishi to join him and help shake things up.

Kuraishi quickly pulled together strategy staffers and personal friends from other parts of the bank for an all-day brainstorming session. They divided a whiteboard into two sections. The left side was labeled "Existing World Bank Processes" and the right, "What Is the Opposite?" On the left, they wrote things like "top-down loans; \$100 million; and two-year processing time; two hundred pages of documentation," and on the right, "bottoms-up grants; \$100,000 loans or grants; two-day processing time; two pages of documentation."

The outcome of this antilog-driven process was nothing like what constituted business as usual at The World Bank. Tagged The World Bank Development Marketplace, the resulting program would prove to be an important analog for GlobalGiving.

*The First Development Marketplace Sparks an Idea
for Whittle and Kuraishi*

In February 2000, seven hundred people crowded around 270 cramped booths in the usually pristine atrium of The World Bank. Each was intent on pitching an idea for alleviating poverty in the first-ever Development Marketplace. These finalists were selected from 1,130 applications from more than one hundred organizations based in more than eighty countries. The proposals were limited to four pages, and a fifteen-minute presentation.

At the end of this two-day carnival of ideas, James Wolfensohn, the president of The World Bank, stood on the stage and made awards totaling \$5 million to forty-four teams. The event was an overwhelming success. As Whittle explained, “The Development Marketplace not only surfaced exceptionally innovative ideas and projects, but it enabled funding decisions to get made in two days, lightning speed by World Bank standards. This was a radical and eye-opening innovation.”

When the awards ended, a South African woman approached Whittle and Kuraishi. In a strong voice, she said, “I did not win.” Whittle replied, “Well I am sorry, but this is a competition, and not everyone can win.” She retorted, “I am telling you that my idea is a good one, and just because The World Bank did not finance it does not mean that there are not others out there who will finance it.”

Whittle was haunted by the truth of the woman’s words. Several months later, he and Kuraishi walked away from successful careers in the development establishment. They were committed to building a true marketplace for development project funding where there could be more winners than losers. It would prove to be a challenging journey.

Whittle and Kuraishi Assemble Their Analogs

Whittle and Kuraishi felt strongly that the discipline and rigor of a for-profit business would be critical to the success of their new venture. That would mean raising capital, something neither of them had done. They were encouraged, however, by an analog—eBay—which by matching buyers and sellers for all kinds of goods had grown to more than 20 million users, a dazzling success in the dot-com world. Was an Internet marketplace the right vehicle for their noble venture?

The pair wondered if there were other organizations from which they could learn. Heifer International had been very successful with a charity model, using traditional marketing techniques like direct mail to raise upward of \$100 million a year for projects promoting economic self-reliance for individuals in developing countries. But the marketing cost was significant, reducing the funding that actually reached projects. And there was no direct connection between donors and projects. Heifer would be both an analog—demonstrating the possibility of engaging large numbers of donors—and an antilog, for the costly manner in which it raised its money.

*GlobalGiving Builds a Dashboard and Takes Crucial
Leaps of Faith*

With very little effort, Whittle and Kuraishi identified more than one thousand compelling projects in developing countries that could make a significant impact with a small to moderate infusion of funding. It seemed logical that if projects like these could be made visible to a large community of potential funders, money would flow. But their business was far from proven, and it felt too early to establish a foundation to channel charitable contributions to their favorite projects. So the pair established a partnership with the nonprofit Calvert Foundation. The Calvert Foundation had the necessary apparatus for accepting tax deductible donations under the U.S. tax system, an important incentive for U.S. donors.

But the crucial issue, a real leap of faith, was whether Whittle and Kuraishi could harness the Internet to generate direct philanthropic contributions to global development projects in an economically sustainable manner. In particular, there were three key questions:

1. Will attractive, high quality, legitimate projects participate over the Internet?
2. Will sufficient numbers of donors contribute directly over the Internet?
3. How can we fund and structure the marketplace to achieve financial sustainability? In other words, is there a business model that would work?

Though the analogs and antilogs were informative, there was only one way to answer these questions: launch a pilot site and test some hypotheses.

The pair's network in California's Silicon Valley helped to hook them up with a development team in India to create a barebones Web site. In 2002, their new venture, Development Space, came to life with twenty-five projects. Their initial dashboard is shown in figure 2-2.²

Though their dashboard does not look just like Johnny's prototype, the same elements—leaps of faith, hypotheses, metrics, results, and insights—are there. Unlike Johnny's, some of Whittle and Kuraishi's hypotheses—the quality of the business plans submitted, for example—are qualitative in nature. Dashboards can be used to gain insights into qualitative issues, too. Like Johnny's, though, a clear focus on the most critical issues that would determine the survival of the business is apparent.

The Data Speak

Happily, there was an immediate and positive response to the Development Space concept. Donations began to trickle in. The news media gave the venture positive coverage as well. But the challenges outweighed the good news. Development Space's results showed that customers needed an assurance as to the quality—indeed, the legitimacy—of the projects listed on their Web site. Based on the eBay analogy, Whittle and Kuraishi envisioned the same kind of user rating system that was so powerful for eBay. Why couldn't donors rely on the ratings of other donors to gain comfort about project quality?

Two things made this clearly unworkable. First, the Patriot Act, introduced after September 11, 2001, required significant vetting of charitable contributions to ensure that they were not going to organizations with terrorist ties. Second, before making a charitable contribution, donors wanted assurance from a credible third party that the project was sound. As Whittle explained, "People were comfortable buying things on the basis of the opinions of other consumers, but they wanted reliable expertise involved in helping them find legitimate projects to fund with their philanthropic dollars." The model would have to be adapted to identify projects through credible sponsor organizations who could conduct due diligence on the ground.

Another problematic hypothesis involved donors. Again, based on the eBay experience, the hypothesis was that if the marketplace existed, donors would come. But the marketplace for "used stuff" that eBay brought to the Web already existed in the form of classified ads and garage sales. The same wasn't true of the marketplace for global development.

FIGURE 2-2

Development Space start-up dashboard

Leap of faith question	Hypothesis	Metrics	Finding	Insight/response
1. Will attractive, high-quality, legitimate projects participate in the marketplace?	Projects will self-identify with minimal guidance. Business plans will be a good proxy for project quality. Due diligence can be conducted after projects apply.	<ul style="list-style-type: none">• Number of projects submitted• Size of projects• Type of projects/descriptions• Existence and quality of business plans• Value of business plans to prospective donors• Cost and reliability of due diligence	100 projects submitted; 25 qualified. Size range: \$1,000-\$250,000. Some too conceptual to appeal to donors (e.g., Argentina fiscal adjustment). Most projects had no business plans or needed extensive technical assistance to create them. Donors didn't care about business plans. Due diligence after the fact was unaffordable and unreliable.	Need to find projects by mining relationships in the field. We need a Plan B! Smaller, community-based projects most attractive to donors. Compelling project descriptions key to marketplace success. Solid relationships with sponsor organizations and a "chain of trust" are needed to ensure project quality and legitimacy, particularly post-Patriot Act. We need a Plan B!
	As with eBay, if the marketplace exists, donors will come.	<ul style="list-style-type: none">• Number of donors in first 8 months	<100	Marketing to prospective donors is required. We need a Plan B!
	Social and strategic investors will be the best sources of capital.	<ul style="list-style-type: none">• \$ raised	\$3 million investment from HP and World Bank's IFC seemed almost certain, but fell through. \$100,000 raised in relatively small increments.	After the dot-com bubble burst, investment capital unavailable. Are philanthropic grants the answer? We need a Plan B!
2. Will sufficient number of donors participate in the marketplace?	A for-profit structure paired with a foundation partner could work.		Having an online marketplace branded "Development Space" and directing donors to a nonprofit partner to make the contribution was a problem in terms of brand identity and credibility.	A structure is needed that would allow for a unified brand. We need a Plan B!
3. How can the marketplace be funded and structured to achieve financial sustainability?				

Source: GlobalGiving.

Total spending on foreign aid programs was running close to \$100 billion per year, with roughly one-quarter to one-third of the funds coming from private individuals, companies, and foundations. But there were few vehicles other than Heifer International that allowed donors to contribute directly to international development projects. And even Heifer made no clear link between individual donors and specific recipients.

Whittle and Kuraishi's idea was based on a new paradigm. Development Space would connect individual donors with specific projects. As was the case for Heifer, they would have to spend a significant amount of time and money educating and marketing to potential donors. Heifer, the hoped-for antilog, was looking like an analog after all, though a disappointingly expensive one.

Finally, the team found that relying on the Calvert Web site to process donations created a disjointed customer experience. In fact, donors felt as if they didn't know where their cash was going once they were sent to the Calvert Web site.

Development Space Faces a Funding Drought

To make matters worse, the dot-com bubble had burst. Financial investors weren't lining up to put money into an Internet marketplace for global development. And unfortunately, Whittle and Kuraishi needed a small infusion of cash to stay true to the pleas of the South African woman, as well as many other worthy projects. It had been more than two years since her words had kick-started their entrepreneurial journey.

Taken alone, their difficulties might have caused them to give up. But Whittle and Kuraishi were determined to keep going. As Whittle recalled, "Even though the marketplace was not taking off as quickly as we had expected, we could see that the potential was there. We were learning at a rapid pace and needed to adapt our approach based on what we learned." The data, as reflected in the initial dashboard shown in figure 2-2, were speaking loudly and clearly. It was time for Plan B.

Plan B: Development Space Becomes GlobalGiving

Whittle and Kuraishi created a Plan B that was markedly different from their first set of ideas. On the project side, new emphasis was placed on building a sponsor network and relying on sponsors to identify and help position suitable projects for the marketplace. Ashoka, a highly credible organization

that identifies and builds networks among promising social entrepreneurs in the developing world, signed up as the first project sponsor. With Ashoka came a chain of relationships, as well as trust, giving projects credibility.

But the venture was desperate for new donors. This was the area where the initial hypotheses were furthest from the reality that unfolded. Hewlett-Packard (HP) had been interested in Development Space from the start. As a technology company committed to innovation and social responsibility, HP was looking for ways that technology could accelerate economic development beyond the then popular “bridging the digital divide” concept of giving everyone access to the Internet. Excited by the possibility of using the Internet to transform global development funding, HP invited Development Space to be a part of its employee giving campaign. This was a big “Aha,” a way to aggregate donors in a potentially much more efficient fashion, without spending scarce resources on marketing.

The time was ripe for Development Space to establish a foundation of its own, to clear up the confusion created when donors were directed to the Calvert Foundation. At the same time, the company changed its name from Development Space to GlobalGiving, a name that the new foundation took as well. A separate board was set up for the foundation. Appropriate mechanisms were put in place to provide the level of independence needed to ensure legal compliance.

GlobalGiving had evolved a financial model that depended on many components, one of which was philanthropic support of the foundation. About the same time, Whittle and Kuraishi launched a major fundraising campaign, targeting foundations and high net worth individuals. Despite the drought, they attracted enough money to take the next steps.

Finally, the original, barebones technology platform needed work. Whittle and Kuraishi needed better tools for tracking and analyzing traffic and user behavior, and they needed a new-look Web site to improve usability and the overall donor experience.

With all of these changes, it was time for a new dashboard to affirm or refute their new leaps of faith (see figure 2-3). The three initial leaps of faith remained unchanged, as neither the company’s ability to attract enough good projects, enough donors, nor build a business model that would work had been proved in the first iteration. Based on the learning from the earlier dashboard, however, the hypotheses were changed to reflect the decisions that embodied GlobalGiving’s Plan B.

FIGURE 2-3

GlobalGiving second dashboard

Leap of faith question	Revised hypothesis	Metrics	Finding	Insight/response
1. Will attractive, high-quality, legitimate projects participate in the marketplace?	A network of trusted sponsor organizations will identify attractive, quality projects.	<ul style="list-style-type: none"> Number of projects submitted Size of projects Type of projects/descriptions 	300 qualified projects <\$100,000 in size. Community-based projects.	Project sponsors (first was Ashoka) created credibility; floodgate opened. Hypothesis confirmed! Must limit number of projects to maintain balance with donor volumes.
	Project sponsors will validate quality and legitimacy, create a chain of relationships and trust.	<ul style="list-style-type: none"> Number of trusted project sponsor organizations Cost and reliability of due diligence 	Ashoka signed on first, four others followed. Projects are donor-ready.	Sponsorship is the way to go. No follow-on due diligence necessary. Hypothesis confirmed!
2. Will sufficient number of donors participate in the marketplace?	Donors can be aggregated through companies/corporate partnerships.	<ul style="list-style-type: none"> Number of corporate relationships Number of donors achieved through relationships \$ in donations 	3–4 key corporate partnerships/sponsorships to build credibility and momentum.	Good vehicle for getting started, but expense of doing customization and servicing relationships is too high for this to be a viable long-term strategy. We need a Plan C as a donor strategy!
3. How can the marketplace be funded and structured to achieve financial sustainability?	Corporations and foundations are the best targets.	<ul style="list-style-type: none"> \$ raised 	Less than the \$5 million in corporation and foundation money sought.	The sale cycle is long. Time to breakeven will be significantly longer than originally expected. Major time and energy will have to be invested in raising money for an extended period of time. Plan C needed here, too.
	Need to create a foundation to collaborate with for-profit organization under a coherent brand.	<ul style="list-style-type: none"> Structure acceptable to funders? Ability to accept private investment maintained? Flexibility to reinvest earnings in foundation? 	All foundation funders OK with hybrid structure. YES YES	Hybrid structure provides flexibility but governance is complex.

Source: GlobalGiving.

When the new site was launched, things started to pop. With Ashoka as a project sponsor, the floodgates opened, in part due to the credibility that Ashoka lent. Three hundred projects came so fast and furiously that the team temporarily stopped adding projects to avoid an untenable imbalance between the number of projects listed and the volume of contributions coming in. Once HP's employee giving campaign got under way, the almost immediate uptick in the number of donors and dollars provided an all-important psychological boost for the team. Perhaps Heifer's aggressive marketing spending could remain an antilog, after all!

HP also helped promote this idea to other companies. Partnerships with several other companies, including Visa, Advanced Micro Devices, and The North Face soon followed, augmenting the original open marketplace model with customized sites for specific organizations.

Is GlobalGiving's Plan B Working?

As we write, more than five years after Development Space was launched, the company has funded more than a thousand projects, and GlobalGiving has established a strong sponsor network, as well as robust mechanisms to ensure project legitimacy. While these numbers are not on track with early projections, momentum continues to accelerate and the team remains committed and optimistic. Whittle and Kuraishi now laugh about some of their early hypotheses and how much they have learned. Importantly, they continue to learn not only from their own experiences but from new analogs as well.

What lies ahead for GlobalGiving? Building its growing base of donors is the highest priority. The focus here is on providing such a compelling experience that visitors can't wait to tell everyone they know. Whittle and Kuraishi believe this is possible, in part based on the experience of another analog, Kiva, which delivers microloans by donors in the West to individuals in the developing world. There are two elements in the Kiva analog from which GlobalGiving has learned. First, donors giving through Kiva have felt a connection to the people they are helping, and they've spread the word. Kiva's adeptness at telling the stories of the individuals seeking loans—from the baker in Kabul who needed a new oven to the fish seller in Kenya who needed additional supplies—made each loan request a compelling human interest story. For Kiva, effective storytelling has been a key ingredient in getting donors to open their hearts and their wallets.

Second, offering projects at a sufficiently small size lets donors have a direct impact—a key element to opening wallets. GlobalGiving, as it enters its third phase, is determined to leverage as much as it can on Kiva's successful approach.

By 2008 GlobalGiving had successfully facilitated a reported \$14 million in donations from 41,500 people to more than 1,300 projects worldwide. In the process it managed to create a viable business model.³ The philanthropic support it receives is its most important source of cash. But it also derives revenues from small transaction fees and from the corporations whose employees it services. A very innovative way to fuel a venture endeavoring to change the world.

Lessons from GlobalGiving

The GlobalGiving experience demonstrates the power of the analog-antilog-leap of faith-dashboard process in launching a bold social venture that faced many unknowns at the outset and breaks new ground. By remaining focused on their leaps of faith while making major changes to key strategies—all based on the insights revealed through their dashboards—Whittle and Kuraishi have overcome seemingly insurmountable obstacles and moved ever closer to their goal of making their operation a financially sustainable one.

We now turn to another pair of entrepreneurs. They shared an equally bold vision, one focused on an entirely different problem and a different set of customers. And they are the lucky ones—their Plan A met early success! Read on to see how their dashboards took them further still.

Case 2: Aggregate Knowledge Does Online Discovery

In Paul Martino's view, search engines can't solve every Web user's needs, especially when users do not know quite what they're looking for. Martino's discovery engine was developed for just such instances.⁴ He reasoned that individuals' affinity to certain topics (what someone likes to read, for example) provided a better indication of their interests than what they *said* they were looking for.

His concept was a “formative” one: what you read online “formed” and informed a clearer view of what kind of person you might like to date—someone who reads similar things, listens to similar music, likes the same sorts of food, and so on. Martino’s insight was that technology could suggest areas or items of interest to users based on the behaviors of other like-minded people. Add to this affinity idea the concept of the wisdom of the crowds en masse and voilà, his vision of “online discovery” was born.

AK’s Analogs and Antilogs

In 2005, Martino and Chris Law, his good friend and colleague, cofounded Aggregate Knowledge (AK). Their goal was ambitious: to provide users with information about events, media, and commerce that was deemed relevant based on each person’s previous decisions. For example, if you searched for the score of the latest Chicago Bulls game, AK’s discovery engine might provide you with upcoming Bulls game times and locations and the ability to purchase courtside tickets. Or, if you were looking at buying a red dress online, the AK engine would suggest other items that people who bought the same red dress had ordered. How about a flashy pair of red heels? The top-selling salsa CD?

Unlike existing online recommendation systems, however, Martino’s system would employ the wisdom of crowds across the entire Internet, not just the commonalities of a discrete group on a particular site.

The genesis of Martino’s idea for AK was simple. He and Law were working at Tribe.net, an online classified service that combined social networks with groups and listings. Tribe could provide information for finding San Francisco’s most recommended orthodontist, but it didn’t do a good job helping users find dating partners. Martino figured that the key to finding good dating partners online was to connect individuals based on the news and message boards they read, something Tribe didn’t do.

Personify Inc., another start-up, was both an analog and an antilog. The company provided analytics software to help companies gain insight from their customers’ behavior, and Personify’s idea and its team had attracted substantial venture capital.⁵ Personify’s value proposition was compelling; however, the company’s analytics engine was not scaling sufficiently. It could only process and provide suggestions when there was a limited amount of data. But with so little data, its discovery results tended to be inadequate. Thus, in Martino’s view, Personify didn’t have the technical

firepower it needed to succeed. The AK engine would have to be vastly more scalable.

Fortunately, searching for things on the Internet was not a new concept in 2005. So when Martino and Law considered their company's revenue model, they looked to a number of analogs for lessons. Google topped their list. Google's technology and reach proved that it was feasible to search from hundreds of millions of sources of data and provide almost instantaneous results. And the bigger its dataset the more useful Google was to its users. Google had become the paradigm of choice for how users found things on the Web. And fortunately for Google's founders and investors, Google had become a targeting tool for paying advertisers who used keywords to offer relevant marketing messaging to online searchers. "Can we be another Google?" Martino wondered.

There was an antilog, too. Epiphany Inc. helped companies keep track of and support their customers. It was proving that its customers had little tolerance for long and complicated software deployment cycles. The fact that it took Epiphany months to deploy its tool to customers instead of days or weeks was proving to be a drag on sales. Martino's tool would have to have short deployment cycles. Clunky architecture simply wouldn't do. Martino reasoned that if he could provide discovery like Personify, make his solution scalable like Google, and make it easy, fast, and inexpensive for customers to deploy, unlike Epiphany, then Aggregate Knowledge would have a winning solution. Easy to say, but was it possible to do?

AK's Leaps of Faith

Three leaps of faith were crucial, as shown on AK's June 2006 dashboard.⁶ In keeping with Martino's deep background in science and technology, this first of his dashboards was focused on just the three pressing issues, using simple, pared-down language (see figure 2-4).

LOF 1: Would B2B customers use AK's technology on their own sites? Martino believed they would—a leap of faith for which, at the outset, Martino had no evidence.

LOF 2: Would the AK research engine really scale, technically speaking? It would, in Martino's view—a second leap of faith.

LOF 3: What was the best route to market? Who knows?

FIGURE 2-4

Aggregate Knowledge dashboard 1

Hypothesis	Metrics	Results
LOF 1: Would B2B customers use AK's discovery technology as part of their sites?		
3 trials	# of trials in development	2 under way, who to do the third?
LOF 2: How well does AKRE 1.0 work?		
1.0 Feature Set compelling	Deliver essential features that exercise core product value	Engineers on board, getting up to speed
Scaling 1 billion/month	# of data hits	Early data is exceeding expectations
LOF 3: How do we go to market?		
Merchants or publishers	Identify subset of potential merchants and publishers that have a strong interest in product value	Initial market segments identified
Fee or revenue share pricing model	Test various pricing scenarios against actual customers	Early discussions, not as important until after-market selection

Source: Aggregate Knowledge.

If these leaps of faith had been left unexamined, Martino would not have been able to confidently say that his technology was on the optimal path, and he would have been running very high risks of failure. Martino used dashboards regularly and relied on them to navigate this early period of AK's development. And as we'll see, he relied on even more granular dashboards following from each successive wave of leaps of faith as his company evolved. "Keeping the multiple moving parts of a nascent business organized and accounted for is always a challenge for a start-up CEO. I used a dashboard to keep track of every point of development because I wanted to make sure that we were spending our time and our investor's money on the things that would be determinative of our ultimate business model and success. If we had it wrong we wanted to know, and quickly, so we could course correct before we ran out of time."

The second leap of faith had to do with the technology. Could the team build a product, Version 1.0, which would operate at Web scale and in real time? If not, Martino would find his idea in the discovery graveyard with the likes of some other infamous antilogs!

The final leap of faith was AK's go-to-market strategy. Which customers should they start with? Were media sites more likely to want what AK offered, or were commerce sites? Who would be willing to pay? How much? And what was the top-line sales potential of each of the potential market segments?

To test his hypothesis that such a system could, indeed, be built and that users could be attracted, Martino needed a couple of well-known B2B clients with millions of unique monthly visitors and hundreds of thousands of transactions. If the technology faltered under stress he would have to rethink his approach. He convinced two pilot customers—one media company, one e-commerce site—to let AK run trials. It was AK's first real test, and his first leap of faith answered!

The Data Speak

Martino kept close tabs on AK's performance. He measured the number of results served, the number of hits, the number of page views, the speed with which the results were delivered, and other metrics. These were the metrics that would indicate whether the technology would work.

From this limited set of data, it seemed as though the company's technology could scale. Good news, both for AK's technology and its ability to attract customers who would pay. Having easily found pilots from each of his target industries, Martino surmised that both media and commerce would make good target segments. But he had some new concerns.

Aggregate Knowledge's Second Dashboard

Martino had two new leaps of faith: First, it was far from clear how much customers would pay. Second, it was not clear what the true market potential really was. Excerpts taken from AK's second dashboard to address these issues are shown in figure 2-5. This second iteration, in January 2007, applied more of a functional lens and additional quantifiable metrics including the number of prospective customers in the sales pipeline, the number testing AK's product, the number of paying customers, and more.

This new dashboard read like a list of critical tasks for key functional leaders in marketing and sales. Instead of dashboard items being strategic leaps of faith, this was more granular, penetrating into the next layer of issues. The metrics assigned to each of these tasks gave functional leaders clear and measurable objectives to shoot for. For the sales team, how many

FIGURE 2-5**Aggregate Knowledge dashboard 2 (+ 6 months)**

Sales			
Hypothesis	Metrics	Results	Insight
Pipeline (Y qualified leads)	# of engaged prospects	>Y	Well on the way. Getting correct retail/media mix in the pipe now.
Trials (Z new)	# of trials under way	>Z	Several this month and a few more next month already signed.
Paying customers (W new)	# of customers under contract	<W	Need to figure out right time period for trials to convert

Source: Aggregate Knowledge.

sales meetings were they having? What was the pace of commitment? How many trials were started? If the answers to Martino and Law's leaps of faith proved correct, then the sales team should be able to generate sales, right? In the front office, were the office processes working well enough to keep the product moving forward and customers satisfied?

As a direct result of what Martino and Law had learned from their antilogos, the marketing group closely watched the product's setup wizard, measuring the number of days it took to deploy the solution with a new customer (not shown in the excerpted portion of the AK dashboard that appears in figure 2-5). And, since discovery was all about the quality of the recommendations, the new dashboard closely tracked the percentage of attribution (also not shown). How often could a B2B customer attribute a sale or mouse click to the recommendation provided by Aggregate Knowledge?

While pleased with the level of detail that this new dashboard gave him for managing the growing business, Martino found it somewhat difficult in another way. It covered the key functional questions, but it didn't provide him with focus on the larger priorities for the company. As a result, Martino and Law had to regularly step back and ask themselves whether they were measuring the right things.

Ramping Up: An Audacious Plan B

By July 2007, AK had grown to forty employees. The company had proved that it could generate a positive gross margin on the paying pilots that were

in place. It had proved that the discovery notion resonated with customers across the retail and media spaces—both with users and with the online sites where the AK discovery engine had been deployed. The AK team could work effectively together to upgrade and improve their service. And the technology worked well enough to make their customers more money. A winning proposition, it seemed!

Indeed, Patrick Byrne, CEO of Overstock.com, a pilot customer, said, “Over 20 percent of all products purchased on Overstock during the holiday season were directed through the discovery window that Aggregate Knowledge powers on our site. Our customers love the new choices they are given, and we are thrilled with the results—higher sales conversions, larger shopping cart sizes, and increased customer engagement and satisfaction.”⁷ Martino, Law, and their team had developed and launched a recommendation engine that helped Overstock more effectively sell its eight hundred thousand SKUs, and had deployed it on Overstock’s site in a manner of days, not months. Proven progress, indeed!

With so many proven hypotheses under the company’s belt, AK was moving into acceleration mode. No longer did the company simply want to be a discovery tool for individual companies, it aspired to become a discovery platform across multiple online businesses.

It would create a larger network to pool data from and market a new network-based product. It would provide each B2B customer with the benefits of everyone else’s experience and a chance for each customer to build new on-site real estate that they could monetize across the network, like online advertising. AK’s customers would make money by selling their click-stream assets to one another, with Aggregate Knowledge tending the store.

The key to such a breakthrough was scalability. Martino and Law did not want to settle for good, they wanted to be great. Rather than execute against a plan based solely on the product and value proposition they had already proved, they wanted to see if there was a chance to reach for something much bigger. Growth was their primary concern. Another dashboard, AK’s third, was needed to guide this stage of the journey (see figure 2-6).

AK’s third dashboard focused on making the business and technology into a scalable network and platform. Functional leaders were assigned larger company priorities—including, for the VP of sales, getting companies with large networks on board—and were responsible for tracking their

FIGURE 2-6

Aggregate Knowledge dashboard 3 (+ 1 year)

Top priorities			
Hypothesis	Metrics	Results	(Function head responsibility) insight
Network product deployed with acceleration	# of installations	On track	(VP Eng) Product plan completed; hiring in place; launch with new small to midsize Discovery Networks; v1 done.
Agreements with X midsize to large discovery networks	# of networks	Trailing	(VP Sales) Trial agreements signed for the basket of Discovery Network tests we need to do.
Competitive assessment completed	Identify strategic partners	On track	(CEO) Determine friends, foes, best/worst partners. This includes the analytics and reporting strategy.

Source: Aggregate Knowledge.

progress toward achieving those priorities. This method allowed leaders to create and manage their own functional dashboards, drilling down to the task level with their own functional teams, while permitting Martino and the executive team to address the critical leaps of faith regarding scale.

Let's focus on the product area again to see how AK's third dashboard tracked its progress at a functional level. As the leader of the product team, Law's priority was to develop and implement a companywide product-management process. This included not just staffing and integrating with the rest of the organization that touched the product, but also driving the product road map and customer feedback process. These major priorities were assigned to leaders in his organization who then managed them as part of the marketing dashboard with specific performance metrics. Take for example the VP of engineering. His dashboard now tracked tasks related to the process flow—including getting the new network product deployed—and integration of the science into the process, in order to test its speed, responsiveness, and flexibility. No longer did Martino need to track every detail. He watched his team's progress on their priorities and let each leadership team manage the nitty gritty. Getting himself out of the

proverbial weeds allowed him to make the big, strategic decisions—based on an updated competitive assessment—more quickly because he could focus on the newly emerging leaps of faith concerning the network and new platform opportunities.

Is Aggregate Knowledge's Plan A Still Working?

By the end of AK's third year, Martino noticed something unusual in its dashboards: the sales team was not acquiring as many new customers as expected and competition was putting pressure on its pricing. He decided to spend ninety days on the road speaking directly to customers. What he found was that few customers had the sophistication to realize the value of Aggregate Knowledge's full power, and competitors were offering a smorgasbord of alternatives that could incrementally address the customer's smaller and more immediate needs. Paul needed a Plan B. He looked for new analogs (advertising networks) and antilogs (Web analytics companies) and determined that Aggregate Knowledge's special sauce had the potential to uniquely address a serious customer pain: targeting the best personalized advertising message to each user. This was his new leap of faith. Fortunately, through dashboarding Martino was quickly alerted to the slowing pace of sales and was able to swiftly refocus his resources. Doing what any smart entrepreneur would do, he began to test his hypotheses using yet another dashboard. Stay tuned.

Lessons from Aggregate Knowledge

The AK example shows how useful a dashboard can be, even when it affirms that Plan A is on the right track. It shows how both quantitative and qualitative data provide insights into progress, and it shows the wider use of a dashboard, as we discuss more fully below. It also shows how AK's dashboards evolved over time, from crucial, high-level strategic questions—huge leaps of faith—to more detailed performance measures as the company matured.

For Aggregate Knowledge, the dashboard was much more than a navigational tool. The company used it to set priorities, provide transparency for the employees, and motivate the right behaviors. Every week, Martino published the dashboard to the entire company. Doing so had positive results. First, it provided all employees with a clear understanding of the company's priorities. Second, it sparked communication among the executive team. Martino also tied his executive team's bonuses to their dashboard results,

motivating his leaders to work on the things that mattered most to the company. While specific objectives were subject to change, getting answers was rewarded regardless.

Finally, the Aggregate Knowledge story shows how fast a company can progress when its hypotheses are spot-on. With a store of analogs and antilogs to draw on, Martino and his team hit the ground running. Similarly, AK's dashboards saved it when the company ran into trouble with its initially successful Plan A. Without benefit of dashboards, the problem could have gone unnoticed or unheeded for too long, making Plan B unachievable.

Lessons Learned About Dashboarding

We opened this chapter on dashboarding with a simple story about Johnny and a simple prototype dashboard to illustrate the basic ideas. Then we pushed you quickly into the deep end, showing you real dashboards for more complicated real organizations. There are three themes that we hope have come through about which we'd like to say a bit more:

- The laser-like focus that dashboards provide
- The way dashboards evolve over time
- An emphasis on numbers, though not exclusively

Dashboarding for Focus

In the GlobalGiving story, we saw how the company's dashboards brought into crystal clear focus the need for changing from Plan A to Plan B. In contrast, AK's dashboards made it clear that, for an extended period, AK's strategy was largely on track. Whichever the outcome, dashboards help entrepreneurs—and managers in established companies, too—focus their time and energy on the crucial issues that matter most at the current moment in the company's development.

Dashboards Evolve over Time

In both of this chapter's cases, we saw how the dashboards evolved based on the learning they uncovered. Thus, there's no simple formula for what a dashboard should look like in one company or another, at a given point in time. There's art in their development, and science in their use.

Focus on Numbers

This book is about breaking through to better business models, about getting to a Plan B that, as we saw for GlobalGiving, is better than Plan A. Doing so is an inherently quantitative task, as the next several chapters will make abundantly clear. While some elements of most dashboards address qualitative issues, you'll be missing the boat if the vast majority of your hypotheses are not quantitative in nature.

Finally, there's one more insight we hope you have gleaned from the cases in this chapter: to get the most out of dashboarding, there are three things that matter most:

- The quality of the questions you ask to identify your leaps of faith
- What you do with the data
- The speed at which you get on with your next steps

In Johnny's trial run, he proved his hypotheses wrong. The next day, he made adjustments, and his lemonade business was stronger for it.

Drawing on what we discussed in this chapter, it should be clear that quality questions are what drive your leaps of faith. Which questions about your company make you feel uneasy and keep you up at night? What would you like to know that you don't? What assumptions have you made that might be wrong? What information would lead you to a different conclusion than the one you are operating under? Your dashboard must address these big questions—your leaps of faith.

The way in which these questions are asked and tested depends on the culture of the company and the context of the situation. If you are in an early stage, like GlobalGiving and Aggregate Knowledge, many of the questions are fundamental. They are about whether your idea will work technologically and whether it holds any value in the marketplace. As you grow and evolve, your questions become foundations for how you refine your plan for greater success. They help you focus on the right market and market segments, customer preferences therein, the right pricing and payment strategy, the right distribution channel, the right financial model, the right partners, and so on. In all of these cases, as leaps of faith are answered or dismissed as no longer relevant, new ones emerge.

Q&A with John and Randy

At this point, you may be harboring a couple of questions about how to apply dashboarding to your new venture—or even to your old one! Here are two that come to our minds:

- How formal must my dashboard be? Must I have all these parts?
- What are the implications of dashboarding for business planning?
It seems as if, in these examples, the key figures normally found in a business plan materialize over time.

How Formal Must Your Dashboard Be?

The cases in this chapter relied on dashboards that differed in their formality. GlobalGiving's dashboards were much like the prototype we set out for Johnny in figure 2-1, the textbook example, in a sense. There were specific leap of faith questions, one or more specific hypotheses for each of them, and clearly specified metrics that indicated how progress was to be measured. In addition, in the final two columns there were places to record the results and—importantly—draw conclusions about just what those results meant and what to do next.

Aggregate Knowledge was perhaps less formal, but no less rigorous in identifying what the key questions were at each stage in the company's development. There's no single right answer about how you must do this in your company, but these two examples indicate the range of how dashboards can be effectively employed.

The dashboards shown here also differ in how the leaps of faith were presented. Some companies treat them as questions to be answered and state them accordingly. Others identify them as assumptions or untested beliefs that have been identified and state them declaratively. Either approach works—do what is comfortable for you.

What About Business Planning?

We'll return to this question in more detail in the final chapter, chapter 9. But at this point, it should be clear that a detailed business plan would have been a disservice to companies like GlobalGiving and Aggregate Knowledge. That's because a detailed plan would have obfuscated the burning

questions and lessened the focus on critical priorities. Any revenue projection would have been sheer folly. And without really knowing what shape the business would take, in GlobalGiving's case, any forecast of expenses would have been pie in the sky.

In each of the two cases, dashboarding allowed the teams to identify the leaps of faith that would mean life or death to their companies. As a result, they could focus their scarce time and precious resources on resolving those issues before moving on to tackle the next set of hurdles.

The stories of GlobalGiving and Aggregate Knowledge hint at one more key issue for which dashboards are especially well suited: developing an evidence-based business model whose economics will stack up. We saw how GlobalGiving's conception of the business changed to make its project sourcing much more efficient. We saw how AK's evolving set of dashboards provided real-world, in-the-marketplace evidence of how quickly customers could be acquired and a host of other issues that make the difference between staying in business and running out of cash. This kind of learning translates easily into numbers, and numbers—not words—are the language of every company's business model.

What's Next?

The *process* for developing a viable business model—whether Plan A, Plan B, or Plan Z—is now in place, with analogs, antilogs, leaps of faith, and dashboards laying the foundation.

In the chapters that follow, we turn our attention to the *content* that can make an innovative business model sing and dance. We dive into the five elements of a business model: revenue, gross margin, operating expenses, working capital, and investment. And we check in on Johnny to see how his lemonade stand is faring.

As we shall see, whether in early- or later-stage companies, creating a business model that can turn your idea into the next eBay or Amazon—or turn your long-established company into a juggernaut that disrupts your entire industry—means mixing and matching analogs and antilogs and identifying and addressing leaps of faith, then dashboarding your way to mid-course corrections as you learn.

The content issues are the lifeblood of the business—the arteries through which cash flows—that creates value for customers, shareholders, and others. And—if you apply them well—value for you, too!

NOTES

Chapter 2

1. All quotations and data regarding GlobalGiving are taken from interviews conducted by Debra Dunn with Dennis Whittle in December 2007 and January 2008.
2. We thank GlobalGiving for allowing us to share its dashboards with our readers. They have been edited for clarity.
3. "GlobalGiving Fact Sheet," <http://www.globalgiving.com/aboutus/media/backgrounder.html>.
4. The Aggregate Knowledge case history was developed through a series of interviews by Suzanne Stoller with Aggregate Knowledge founders Paul Martino and Christopher Law in July 2007.
5. "Personify Raises \$20 Million in New Funding," *Business Wire*, April 18, 2001.
6. We are grateful to Aggregate Knowledge for sharing its real-life dashboards with us, portions of which are shown in this chapter. Key data have been eliminated to ensure confidentiality.
7. "Aggregate Knowledge Unveils the Internet's First Discovery Service," *PR Newswire*, January 30, 2007, retrieved from Factiva.com.

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