I

Getting Started

CHAPTER 1

The Path to Disaster: A Startup Is Not a Small Version of a Big Company

The definition of insanity is doing the same thing over and over and expecting different results.

—Albert Einstein

While this story is old, its lessons are timeless. In the heyday of the dot-com bubble at the end of the 20th century, Webvan stood out as one of the most electrifying new startups, with an idea that would potentially touch every household in America. Raising one of the largest financial war chests ever seen (more than $800 million), the company aimed to revolutionize the $450 billion retail grocery business with online ordering and same-day door-to-door grocery delivery. Webvan believed this was one of the first "killer applications" for the Internet. Customers could just point, click, and order. Webvan's CEO told *Forbes* magazine that Webvan would "set the rules for the largest consumer sector in the economy."

Beyond amassing megabucks, the Webvan entrepreneurs seemed to do everything right. Backed by experienced venture-capital investors, the company raced to build vast automated warehouses and bought fleets of delivery trucks while building an easy-to-use website. Webvan hired a seasoned CEO from the consulting industry. What's more, most initial customers actually liked the service. But barely 24 months after the initial public offering, Webvan was bankrupt and out of business. What happened?

…barely 24 months after the initial public offering, Webvan was bankrupt.

This was not a failure of execution. Webvan did everything its board and investors asked. In particular, the company fervently followed the traditional new-product introduction model commonly used by most new ventures and embraced the mantras of the time: "first mover advantage" and "get big fast." Webvan's failure to ask "where are the customers?" illuminates how this tried-and-true model led one of the best-funded startups of all time down the path to disaster.

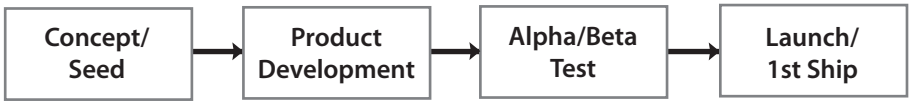
The Traditional New-Product Introduction Model

In the 20th century, every company bringing a new product to market used some form of product management model (Figure 1.1). Emerging early in the century, this product-centric model described a process that evolved in manufacturing industries. The consumer packaged-goods industry adopted it in the 1950s, and it spread to the technology business in the last quarter of the century. There it became an integral part of the startup culture.

At first glance, the new-product introduction model outlined in the diagram at right appears to be helpful and benign. It illustrates the process of getting a new

product into the hands of waiting customers. A new product moves from development to customer testing (alpha/beta test), and using feedback from this initial testing, the product engineers fix technical errors in the product until the product launch date and first customer ship.

The new-product introduction model is a good fit for an existing company where the customers are known, the product features can be spec'ed upfront, the market is well-defined, and the basis of competition is understood.



New Product Introduction Diagram *(Figure. 1.1)*

As for startups, a scant few fit these criteria. Few even know who their customers are. Yet many persist in using the new-product introduction model not only to manage product development but as a roadmap for finding customers and setting the timing for the startup's sales, launch and revenue plans. Investors use the new-product introduction diagram to set and plan funding. All parties involved in the startup use a roadmap leading toward a very different location, yet they're surprised to end up lost.

What's wrong with the old model, and how did it contribute to the billion-dollar Webvan implosion?

Concept and Seed Stage

At the concept and seed stage, founders capture their passion and vision for the company, sometimes on the back of a napkin, and turn them into a set of key ideas, which becomes the outline for the *business plan*.

Next, issues surrounding the product are defined. What is the product or service concept? What are the product features and benefits? Can it be built? Is further technical research needed? Who will the customers be, and where will they

be found? Statistical and market research and a few customer interviews fuel the evaluation and business plan.

This step also brings forth a first guess at how the product will ultimately reach the customer, including discussions of competitive differences, distribution channels, and costs. An initial positioning chart explains the company and its benefits to venture capitalists or corporate higher-ups. The business plan now gets market-size, competitive and financial sections, with an appendix containing Excel spreadsheets forecasting revenue and expenses. Creative writing, passion and shoe leather combine in the concept and seed phase in hopes of convincing an investor to fund the company or the new division.

Once a waterfall process starts, the proverbial train has left the station…

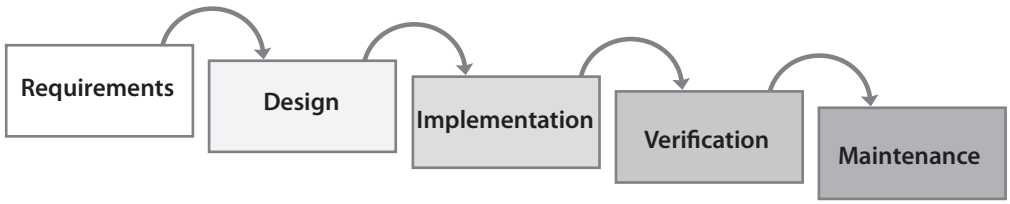
Webvan did all of this extremely well. Founded in December 1996, with a compelling story and a founder with a track record, Webvan raised $10 million from leading Silicon Valley venture capitalists in 1997. In the next two years, additional private rounds totaling an unbelievable $393 million followed before the company's IPO.

Product Development

In stage two, product development, everyone stops talking and starts working. The respective departments go to their figurative corners as the company begins to specialize by function. Marketing refines the size of the market defined in the business plan and begins to target the first customers. In a well-organized startup (one with a fondness for process), the marketing folk might even run a focus group or two on the market they think they're in and work with Product Management on a market requirements document (MRD) for engineering to specify the product's final features and functions. Marketing starts to build a sales demo, writes sales

materials (websites, presentations, data sheets), and hires a pr agency. In this stage, or by alpha test, the company traditionally hires a VP of Sales.

Meanwhile, Engineering focuses on specifying and then building the product. The simple box labeled "Product Development" typically expands into a "waterfall" or "spiral" or incremental process of interlacing steps, all focused on minimizing development risk of a defined feature set (Figure 1.2). This process starts with the founder's vision, which may be expanded into an MRD (and a product requirements document), and expands further into detailed engineering specifications. With those in hand, Engineering begins implementation fueled by cold pizza and long nights and weekends. Once a waterfall process starts, the proverbial train has left the station and the product is nearly impossible to revise. As a rule, the "train" can run almost nonstop for 18 or perhaps 24 months or more, uninterrupted by changes or new ideas no matter how good they might be for the business.



The Product Development "Waterfall" Model *(Figure 1.2)*

In Webvan's case, Engineering moved along two fronts: building the automated warehouses and designing the website. The automated warehouses were a technological marvel, with automated conveyors and carousels transporting food items off the shelves to workers who packed them for delivery. Webvan also designed its own inventory, warehouse, and route management systems and software to manage the entire customer order and delivery process. This software communicated with the Webvan website and issued order-fulfillment instructions to the distribution center. Once a delivery was scheduled, the system's custom route-planning feature determined the most efficient route for delivering the goods to customers' homes.

At the same time, planning began for a marketing and promotion program designed to strengthen the Webvan brand name, get customers to try the service in

the first target market, build strong customer loyalty, and maximize repeat usage and purchases. The plan was to build Webvan's brand name (down to stickering every cup holder in San Francisco's AT&T Park) and customer loyalty through public relations programs, advertising campaigns and promotional activities. Spending for all these activities was part of the business plan.

Alpha/Beta Test

In stage three, the alpha/beta test, Engineering continues building along the classic waterfall development model, working toward the first customer ship date. And, by beta test time, working with a small group of outside users to test the product and ensure that it works as specified. Marketing develops a complete marketing communications plan, sets up the corporate website, provides Sales with a full complement of support materials, and starts the public relations bandwagon rolling. The pr agency polishes the positioning and starts contacting the long-lead-time press and blogs, while Marketing starts the branding activities.

Sales signs up the first beta customers (who may volunteer to pay for the privilege of testing a new product), begins to build the selected distribution channel, and staffs and scales the sales organization outside headquarters. The sales VP works toward achieving the revenue plan as specified in the business plan. Investors and board members start measuring progress by the number of orders in place by first customer ship. The CEO hits the streets and the phone or the parent-company headquarters, searching for additional capital.

Webvan began to beta-test its grocery delivery service in May 1999 with about 1,100 customers. At the same time, the marketing buzz started with a pr blitz with hundreds of articles touting the newest entrant in the online grocery business. Private investors poured hundreds of millions of dollars into the company.

Product Launch and First Customer Ship

With the product working (sort of), the company goes into "big-bang" spending mode. The product and the company are launched. The company has a large press event, and Marketing launches a series of programs to create end-user

demand. In anticipation of sales, the company hires a national sales organization; the sales channel has quotas and sales goals. The board begins measuring company performance based on sales execution against its business plan, albeit one typically written at least a year earlier, when the company first sought investment.

Building a sales channel and supporting marketing burn a lot of cash. Assuming no early liquidity event for the company, more fund-raising is often required. The CEO looks at the product-launch activities and the scale-up of the sales and marketing team and goes out yet again, palm up, to the investor community. (In the dot-com bubble economy, investors used an IPO at product launch to take the money and run, before there was a track record of success or failure.) This operational model no doubt sounds familiar to many: a product- and process-centric model used by countless startups to take their first products to market.

Webvan launched its first regional web store in June 1999 (just a month after starting beta test) and filed for its public offering 60 days later. The company raised $400 million and had a market capitalization of $8.5 billion the day of its IPO—larger than the market cap of the top three grocery chains combined. The elation was short-lived.

The 9 Deadly Sins of the New Product Introduction Model

For new products like Webvan, the business plan fails as a roadmap because both the product and the customer are unknown. For most startups, these nine flawed assumptions are the most toxic of all:

1. Assuming "I Know What the Customer Wants"

First is the founder's unwavering belief that he or she understands who the customers will be, what they need, and how to sell it to them. Any dispassionate observer would recognize that on Day One, a startup has no customers, and unless the founder is a true domain expert, he or she can only guess about the customer, problem, and business model. On Day One, a startup is a *faith-based* initiative built on guesses. Yet the traditional product introduction methodology has founders take these many business model guesses as facts and go design a product and start spending money to build it on a race to "first customer ship"—all before talking to a single customer.

On Day One, a startup is a *faith-based* initiative...

To succeed, founders need to turn hypotheses or guesses into facts as soon as possible by getting out of the building, asking customers if the hypotheses were correct, and quickly changing those that were wrong.

2. The "I Know What Features to Build" Flaw

The second flawed assumption is implicitly driven by the first. Founders, presuming they know their customers, assume they know all the features customers need. These founders specify, design, and build a fully featured product using classic

product development methods without ever leaving their building. But wait—isn't that what startups *should* do? No—that's what companies with existing customers do.

…it's unknown whether the features appeal to customers.

The waterfall development process (see Figure 1.2) proceeds sequentially and without interruption for as long as a year or two. Progress is measured by each new line of code written or new piece of hardware built throughout the process until the product is released. Yet without direct and continuous customer contact, *it's unknown whether the features appeal to customers*. Fixing the inevitable product mistakes after building and shipping the entire product is costly and time-consuming, if not deadly. It can render the product obsolete by launch. Worse, it often causes huge engineering waste, with hundreds of hours of work tossed aside, or tons of code cut and dropped to the floor, when customers say the new features aren't ones they care about. Ironically, startups were often crippled by the very methodology they traditionally used to build new products.

3. Focus on Launch Date

The traditional product introduction model focuses engineering, sales and marketing on the all-important, immovable launch date. Marketing tries to pick an "event" (trade show, conference, blog, etc.) where they can "launch" the product. Executives look at that date and the calendar, working backward to ignite fireworks on the day the product is launched. Neither management nor investors tolerate "wrong turns" that result in delays. In fact, traditional engineering schedules have test cycles with the names *alpha, beta*, and *release* but rarely allow time to improve the product. They're still geared to putting out the original product with minimal bugs, though.

The product launch and first customer ship dates are merely the dates when a product development team thinks the product's first release is "finished." It doesn't

mean the company understands its customers or how to market or sell to them, yet in almost every startup, ready or not, departmental clocks are set irrevocably to "first customer ship." Even worse, a startup's investors are managing their financial expectations by this date as well.

The chorus of investor voices says, "Why, of course that's what you do. Getting the product to market is what sales and marketing people do in startups. That's how a startup makes money." This is deadly advice. Ignore it. Focusing only on launch results in a "fire, ready, aim" strategy that ignores the customer discovery process—a fundamental and generally fatal error. Obviously, every startup or company wants to get a product to market and sell it, but that can't be done until the company understands *who* it's selling to and *why* they'll buy. The forced march ignores the iterative loop that says, "If our assumptions are wrong, maybe we need to try something different." It shuts off the "build, test and learn" flow and assumes that customers will come based merely on good engineering execution.

Time after time, only after launch does a startup discover that not enough customers visit its website, play the game, bring their friends, or convert to orders. Or it discovers that early customers don't scale into a mainstream market, or the product doesn't solve a high-value problem, or the cost of distribution is too high. While those discoveries are bad enough, the startup is now burdened with an expensive, scaled-up sales and marketing organization—effective only at burning mountains of cash—that's now trying to figure out what went wrong and how to fix it.

At Webvan, the dot-com mania may have intensified the company's drive to launch, but its single-minded focus was typical of most startups. At first customer ship, Webvan had close to 400 employees. It hired more than 500 more during the next six months. By May 1999, the company had opened its first $40 million distribution center, built and scaled for a customer base it could only guess at, and it had committed to 15 other distribution centers of the same size. Why? Because the Webvan business plan said to do so, regardless of whether the customers agreed.

4. Emphasis on Execution Instead of Hypotheses, Testing, Learning, and Iteration

Startup cultures emphasize "get it done, and get it done fast." So it's natural that heads of engineering, sales and marketing all believe they are hired for *what they know how to do, not what they can learn*. They assume that their experience is relevant to this new venture and that all they need do is put that knowledge to work managing the execution that's worked for them before.

While established companies *execute* business models where customers, problems, and necessary product features are all knowns, startups need to operate in a "*search*" mode as they test and prove every one of their initial hypotheses. They learn from the results of each test, refine the hypothesis and test again, all in search of a repeatable, scalable and profitable business model.

Relentless execution without knowing what to execute is a crime.

In practice, startups begin with a set of initial hypotheses (guesses), most of which will end up being wrong. Therefore, focusing on execution and delivering a product or service based on those initial, untested hypotheses is a going-out-of-business strategy.

In contrast, the traditional product introduction model assumes that building a startup is a step-by-step, sequential, execution-oriented process. Each step unfolds in a logical progression that can be captured in a PERT chart (a project management technique that maps the steps and time required for project completion), with milestones and resources assigned for the completion of each step. But anyone who has ever taken a new product out to a set of potential customers knows that a good day in front of customers is two steps forward and one step back. The ability to learn from these missteps distinguishes a successful startup from those that have vanished.

Like all startups focused on executing to a sequential product introduction plan, Webvan hired vice presidents of merchandising, marketing and product management—all oriented around executing a given sales and marketing strategy instead of listening to customers and discovering customer needs. Sixty days after first customer ship, those three VPs employed more than 50 people.

The ability to learn from missteps distinguishes a successful startup.

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5. Traditional Business Plans Presume No Trial and No Errors

The one great advantage of the traditional product development model: it provides boards and founders an unambiguous path with clearly defined milestones the board *presumes* will be achieved. Most engineers know what *alpha test, beta test*, and *first customer ship* mean. If the product fails to work, everyone stops to fix it. In stark contrast, before first customer ship, sales and marketing activities are ad hoc and fuzzy, and seldom have measurable, concrete objectives. They lack any way to stop and fix what's broken (and don't even know *if* it's broken or *how* to stop).

Financial progress is tracked using metrics like income statement, balance sheet and cash flow even when there's no revenue to measure. In reality, none of these are useful for startups. Board directors have simply adopted the traditional metrics used in large companies with existing customers and known business models. In a startup, these metrics don't track progress against the startup's only goal: *to find a repeatable and scalable business model.* Instead, traditional metrics get in the way.

Instead of asking, "How many days to the beta test?" or, "What's in our sales pipeline?" a startup's board and management team need to ask specific questions about results of its long list of tests and experiments to validate all components of its business model.

If a startup's board of directors isn't asking these kinds of questions, it's wasting time without adding value. No matter what, directors and founders must stay focused on one financial metric that always matters: cash burn rate and number of months' worth of cash left in the bank.

If a startup's board of directors isn't asking these kinds of questions, it's wasting time...

Webvan had no milestones saying, "Stop and evaluate the launch results." Otherwise, it might have noticed the stark contrast between the 2,000 daily orders it was getting and the 8,000 in the business-plan forecast. Before any meaningful customer feedback was in hand and only a month after shipping began, Webvan signed a $1 billion deal (yes, $1,000,000,000) with Bechtel to build 26 additional distribution centers over the next three years.

6. Confusing Traditional Job Titles with What a Startup Needs to Accomplish

Most startups have simply borrowed job titles from established companies. But remember, these are jobs in an organization that's executing a *known* business model. The title *Sales* in an existing company reflects a team repeatedly selling a known product to a well-understood group of customers with standard presentations, prices, terms, and conditions. Startups by definition have few if any of these known elements. In fact, they're out searching for them!

Because target customers, product specs and product presentations may change daily, early-stage startup executives need dramatically different skills from executives who are working in an established company selling established products or line extensions. The demands of customer discovery require people who are comfortable with change, chaos, and learning from failure and are at ease working in risky, unstable situations without a roadmap. In short, startups should welcome the rare

breed generally known as entrepreneurs. They're open to learning and discovery—highly curious, inquisitive, and creative. They must be eager to *search* for a repeatable and scalable business model. Agile enough to deal with daily change and operating "without a map." Readily able to wear multiple hats, often on the same day, and comfortable celebrating failure when it leads to learning and iteration.

Webvan's CEO and VPs all came from large-company backgrounds and experience. They were surprised and uncomfortable with the chaos of a startup and tried to solve the problem by scaling the company rapidly.

...measuring progress against a product launch or revenue plan is simply false progress.

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7. Sales and Marketing Execute to a Plan

Hiring VPs and execs with the right titles but the wrong skills leads to further startup trouble as high-powered sales and marketing people arrive on the payroll to execute the "plan." Here's how it typically unfolds:

Following the business plan and the traditional product introduction model, the board and founders agree to a launch date, a burn rate, a revenue plan and a set of milestones. The sales VP begins to hire the core sales team, design sales pitches, and make appointments and attempts to acquire early "lighthouse" customers (prominent customers who will attract others). At the same time, the sales team uses revenue goals specified in the business plan to track its progress in understanding customers. Meanwhile, the marketing VP is busy designing websites, logos, presentations, data sheets and collateral, and hiring pr agencies to create buzz. These tactics become marketing objectives, *even though they're merely tactics*. Marketing discovers whether its positioning, messaging, pricing and demand-creation activities will work *only after first customer ship*.

Executives and board members accustomed to measurable signs of progress against "the plan" will focus on these execution activities because this is what they

know how to do (and what they believe they were hired to do). Of course, in established companies with known customers and markets, this focus makes sense. And even in some startups in "existing markets," where customers and markets are known, it might work. But in a majority of startups, measuring progress against a product launch or revenue plan is simply false progress, since it transpires in a vacuum absent real customer feedback, instead of searching for an understanding of customers and their problems and replacing assumptions with facts.

Webvan set off on this kind of plan-driven "marketing death march." In its first six months, it acquired an impressive 47,000 new customers, but 71 percent of its 2,000 daily orders were repeat orders, which meant Webvan needed to quickly secure many more new customers and reduce its high customer attrition rate. Making matters worse, Webvan had scaled its spending based on unverified and, it turned out, highly optimistic marketing guesses.

8. Presumption of Success Leads to Premature Scaling

The business plan, its revenue forecast, and the product introduction model assume that every step a startup takes proceeds flawlessly and smoothly to the next. The model leaves little room for error, learning, iteration or customer feedback. Nothing says, "Stop or slow down hiring until you understand customers," or, "pause to process customer feedback." Even the most experienced executives are pressured to hire and staff per the plan regardless of progress. This leads to the next startup disaster: *premature scaling*.

In large companies, the mistakes just have additional zeros in them.

Hiring and spending should accelerate only after sales and marketing have become predictable, repeatable, scalable processes—not when the plan *says*

they're scheduled to begin (or when the "lighthouse" account is signed or a few sales are made).

In large companies, the mistakes just have additional zeros in them. Microsoft and Google, powerhouses though may they be, launch product after product—Google's Orkut and Wave, Deskbar, Dodgeball, Talk and Finance; Microsoft's "Kin," Vista, Zune, "Bob," WebTV, MSNTV, PocketPC—on rigid schedules driven by "the model" and the presumption of success. Shortly thereafter, a lack of customer response delivers a fast, quiet funeral for product and management alike.

At Webvan, premature scaling permeated a company culture dominated by the prevailing venture-capital mantra of the time, "get big fast." It spent $18 million to develop proprietary software and $40 million to set up its first automated warehouse before it had shipped a single item. Premature scaling had dire consequences, assuring that the Webvan case will be taught in business schools for decades to come. As customer demand failed to live up to Webvan's business plan, the company slowly realized it had overbuilt and overdesigned. While Webvan had executed to its plan, it had also failed to pay attention to its customers.

…no business plan survives first contact with customers.

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9. Management by Crisis Leads to a Death Spiral

At Webvan, the consequences of all the mistakes began to show by the time of first customer ship. The story usually unfolds like this:

Sales starts to miss its numbers and the board becomes concerned. The sales VP arrives at a board meeting, still optimistic, and provides a set of reasonable explanations. The board raises a collective eyebrow. The VP returns to the field to exhort the troops to work harder. Sales asks Engineering to build custom versions of the product for special customers, since this is the only way that the increasingly desperate sales force can close the sale. Board meetings become increasingly tense. Shortly thereafter, the sales VP is probably terminated as part of the "solution."

A new sales VP hired and quickly concludes that the company just didn't understand its customers or how to sell them. She decides that the company's positioning and marketing strategy were incorrect and that the product was missing critical features. Since the new sales VP was hired to "fix" sales, the marketing department must now respond to a sales manager who believes that whatever was created earlier in the company was wrong. (After all, it got the old VP fired, right?) A new sales plan buys the new sales VP a few months' honeymoon.

Sometimes all it takes is one or two iterations to find the right sales roadmap and positioning to attract exuberant customers. In tougher times, when dollars are tighter, the next round of funding may never come.

But the problem at Webvan was not an incorrect sales strategy or positioning statement. The problem is that *no business plan survives first contact with customers.* The assumptions in the Webvan business plan were simply a series of untested hypotheses. When real results came in, they learned that the guesses in their revenue plan were wrong. Focusing on executing their business plans, Webvan iterated their strategy and their search for a business model by firing executives.

Failure is an integral part of the search for a business model.

Webvan went public in 1999, and its sea of red ink was reported quarterly for all to see. Rather than acknowledge its unrealistic plan and scale back or retrench, the company kept spending against its flailing strategy, accumulating a $612 million deficit in the process. Seven months after its IPO, Webvan filed for Chapter 11 bankruptcy.

The ironic Webvan postscript: two other companies on two continents saw the same opportunity at the same time but developed their businesses by following Customer Development precepts even though they hadn't been published at the time. Peapod and Tesco are both successful, growing, and profitable today.

They started smaller, without carving hypothetical assumptions and plans in stone, and learned what customers wanted as they developed business and financial models that worked. Tesco, a UK company that used retail stores as its launch pad and "warehouse," today delivers more than 85,000 orders a week and earns more than $559 million in sales. Peapod, an American company, has delivered more than 10 million grocery orders to more than 330,000 customers. Explicitly or implicitly, both understood the test-and-iterate process of Customer Development.