

# The Path to Disaster: The Product Development Model

*... for the gate is wide and the road broad that leads to destruction, and those who enter through it are many.*  
— Matthew 7:13

EVERY TRAVELER STARTING A JOURNEY MUST decide what road to take. The road well traveled seems like the obvious choice. The same is true in the search for startup success: Following a path of common wisdom—one taken by scores of startups before—seems like the right way. Yet for most startups, the wide road often leads straight to disaster. This chapter looks at how and why this is so.

Let me begin with a cautionary tale. In the heyday of the dot-com bubble, Webvan stood out as one of the most electrifying new startups, with an idea that would potentially touch every household. Raising one of the largest financial war chests ever seen (over \$800 million in private and public capital), the company aimed to revolutionize the \$450 billion retail grocery business with online ordering and same-day delivery of household groceries. Webvan believed this was a “killer application” for the Internet. No longer would people have to leave their homes to shop. They could just point, click, and order. Webvan’s CEO told Forbes magazine Webvan would “set the rules for the largest consumer sector in the economy.”

Besides amassing megabucks, the Webvan entrepreneurs seemed to do everything right.

The company raced to build vast automated warehouses and purchased fleets of delivery trucks, while building an easy-to-use website. Webvan hired a seasoned CEO from the consulting industry, backed by experienced venture capital investors. What’s more, most of their initial customers actually liked their service. Barely 24 months

after the initial public offering, however Webvan was bankrupt and out of business. What happened?

It wasn't a failure of execution. Webvan did everything its board and investors asked. In particular, the company religiously followed the traditional Product Development model commonly used by startups, including "get big fast," the mantra of the time. Its failure to ask, "Where Are the Customers?" however, illuminates how a tried-and-true model can lead even the best-funded, best-managed startup to disaster.

## The Product Development Model

Every company bringing a new product to market uses some form of Product Development Model (Figure 1.1). Emerging early in the 20th century, this product-centric model described a process that evolved in manufacturing industries. It was adopted by the consumer packaged goods industry in the 1950s and spread to the technology business in the last quarter of the 20th century. It has become an integral part of startup culture.

At first glance, the diagram appears helpful and benign, illustrating the process of getting a new product into the hands of waiting customers. Ironically, the model is a good fit when launching a new product into an established, well-defined market where the basis of competition is understood, and its customers are known.

The irony is that few startups fit these criteria. Few even know what their market is. Yet they persist in using the Product Development model not only to manage Product Development, but as a roadmap for finding customers and to time their sales launch and revenue plan. The model has become a catchall tool for every startup executive's schedule, plan, and budget. Investors use the Product Development model to set and plan funding. Everyone involved uses a roadmap designed for a very different location, yet they are surprised when they end up lost.



*The Product Development Model (Figure 1.1)*

To see what's wrong with using the Product Development model as a guide to building a startup, let's first look at how the model is currently used to launch a new product. We'll view the actions at each step in two ways: in general practice and in the specific example of Webvan, which managed to burn through \$800 million in three years. Then we will dissect the model's toxic consequences for startups.

What's wrong with the old model in general, and how did Webvan compound those wrongs in their billion-dollar implosion? Let's look at the model stage-by-stage.

## Concept and Seed Stage

In the Concept and Seed Stage, founders capture their passion and vision for the company and turn them into a set of key ideas, which quickly becomes a business plan, sometimes on the back of the proverbial napkin. The first thing captured and wrestled to paper is the company's vision.

Next, issues surrounding the product need to be defined: What is the product or service concept? Is it possible to build? Is further technical research needed to ensure the product can be built? What are the product features and benefits?

Third, who will the customers be and where will they be found? Statistical and market research data plus potential customer interviews determine whether the ideas have merit.

Step four probes how the product will ultimately reach the customer and the potential distribution channel. At this stage companies start thinking about who their competitors are and how they differ. They draw their first positioning chart and use it to explain the company and its benefits to venture capitalists.

The distribution discussion leads to some basic assumptions about pricing. Combined with product costs, an engineering budget, and schedules, this results in a spreadsheet that faintly resembles the first financial plan in the company's business plan. If the startup is to be backed by venture capitalists, the financial model has to be alluring as well as believable. If it's a new division inside a larger company, forecasts talk about return on investment. Creative writing, passion, and shoe leather combine in hopes of convincing an investor to fund the company or the new division.

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 would follow before the company's IPO (initial public offering).

## Product Development

In stage two, Product Development, everyone stops talking and starts working. The respective departments go to their virtual corners as the company begins to specialize by functions.

Engineering designs the product, specifies the first release and hires a staff to build the product. It takes the simple box labeled “Product Development” and using a Waterfall development process makes detailed critical path method charts, with key milestones. With that information in hand, Engineering estimates delivery dates and development costs.

Meanwhile, Marketing refines the size of the market defined in the business plan (a market is a set of companies with common attributes), 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 are in and prepare a Marketing Requirements Document (MRD) for Engineering. Marketing starts to build a sales demo, writes sales materials (presentations, data sheets), and hires a PR agency. In this stage, or by alpha test, the company traditionally hires a VP of Sales.

In Webvan’s case, Engineering moved along two fronts: building the automated warehouses and designing the website. The automated warehouses were a technological marvel, far beyond anything existing grocery chains had. Automated conveyors and carousels transported food items off warehouse shelves to workers who packed them for delivery. Webvan also designed its own inventory management, warehouse management, route management, and materials handling systems and software to manage the customer ordering and delivery flow processes. This software communicated with the Webvan website and issued instructions to the various mechanized areas of the distribution center to fulfill orders. Once a delivery was scheduled, a route-planning feature of the system determined the most efficient route to deliver goods to the customer’s home.

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 customer loyalty, and maximize repeat usage and purchases. The plan was to build Webvan’s brand name and customer loyalty through public relations programs, advertising campaigns, and promotional activities.

## Alpha/Beta Test

In stage three, alpha/beta test, Engineering works with a small group of outside users to make sure the product works as specified and tests it for bugs. Marketing develops a complete marketing communications plan, provides Sales with a full complement of support material, and starts the public relations bandwagon rolling. The PR agency polishes the positioning and starts contacting the long lead-time press while Marketing starts the branding activities.

Sales signs up the first beta customers (who 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 the headquarters. The venture investors start measuring progress by number of orders in place by first customer ship.

Hopefully, somewhere around this point the investors are happy with the company's product and its progress with customers, and the investors are thinking of bringing in more money. The CEO refines his or her fund-raising pitch, and hits the street and the phone searching for additional capital.

Webvan began to beta-test its grocery delivery service in May 1999 to approximately 1,100 people. At the same time, the marketing buzz started with a PR blitz as hundreds of articles appeared 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

Product launch and first customer ship mark the final step in this model, and what the company has been driving for. With the product working (sort of), the company goes into “big bang” spending mode. Sales is heavily building and staffing a national sales organization; the sales channel has quotas and sales goals. Marketing is at its peak. The company has a large press event, and Marketing launches a series of programs to create end-user demand (trade shows, seminars, advertising, email, and so on). The board begins measuring the company's performance on sales execution against its business plan (which typically was written a year or more earlier, when the entrepreneur was looking for initial investments).

Building the sales channel and supporting the marketing can burn a lot of cash. Assuming no early liquidity (via an IPO or merger) for the company, more fund raising is required. The CEO looks at the product launch activities and the scale-up of the

sales and marketing team, and yet again goes out, 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.)

If you've ever been involved in a startup, the operational model no doubt sounds familiar. It is a product- and process-centric model used by countless startups to take their first product to market.

Webvan launched its first regional Webstore in June 1999 (just one 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 top three grocery chains combined.

## What's Wrong With This Picture?

Given that the Product Development model is used by almost every organization launching a new product, asking what's wrong with it might seem as heretical as asking "What's wrong with breathing?" Nevertheless, for Webvan and thousands of other startups, it has failed miserably.

The first hint lies in its name. The Product Development model is not a marketing, sales hiring, customer acquisition, or even a financing model. Yet startup companies have traditionally used a Product Development model to manage and pace all these non-engineering activities. In fact, there are 10 major flaws to using the Product Development model in a startup.

### 1. Where Are the Customers?

To begin with, the Product Development model ignores the fundamental truth about startups and all new products. The greatest risk—and hence the greatest cause of failure—in startups is not in the development of the new product but in the development of customers and markets. Startups don't fail because they lack a product; they fail because they lack customers and a proven financial model. This alone should be a pretty good clue about what's wrong with using the Product Development model as the sole guide to what a startup needs to be doing. Look at the Product Development model and ask, "Where are the customers?"

## 2. The Focus on First Customer Ship Date

Using the Product Development model forces sales and marketing to focus on the first customer ship date. Most competent sales and marketing executives look at the first customer ship date, look at the calendar, and then work backwards figuring out how to do their job in time so the fireworks start the day the product is launched.

The flaw in this thinking is that “first customer ship” is only the date when Product Development thinks they are “finished” building the product. The first customer ship date does not mean the company understands its customers or how to market or sell to them. (Read the preceding sentence again. It’s a big idea.) Yet in almost every startup, ready or not, the sales, marketing, and business development people are busy setting their departmental watches to the first customer ship date. Even worse, a startup’s investors are managing their financial expectations by this date as well.

Investors say: “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 first customer ship results in a “Fire, Ready, Aim” strategy. Obviously, your new division or company wants to get a product to market and sell it, but that cannot be done until you understand who you are selling your product to and why they will buy it. The Product Development model is so focused on building and shipping the product that makes the fundamental and fatal error of ignoring the process I call Customer Discovery.

Think about every startup you’ve been in or known about. Haven’t the energy, drive, and focus been on finishing the product and getting it to market? Think about what happens after the first customer ship party is over, the champagne is flat, and the balloons are deflated. Sales now must find the quantity of customers the company claimed it could find when it first wrote its business plan. Sure, Sales may have found a couple of “beta” customers, but were they representative of a scalable mainstream market? (A mainstream market is where the majority of people in any market segment reside. They tend to be risk-averse, pragmatic purchasers.) Time after time, only after first customer ship, do startups discover their early customers don’t scale into a mainstream market, the product doesn’t solve a high-value problem, or the cost of distribution is too high. While that’s bad enough, these startups are now burdened with an expensive, scaled-up sales organization getting increasingly frustrated trying to execute a losing sales strategy, and a marketing organization desperately trying to create

demand without a true understanding of customers' needs. And as Marketing and Sales flail around in search of a sustainable market, the company is burning through its most precious asset—cash.

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

### 3. An Emphasis on Execution Instead of Learning and Discovery

In startups the emphasis is on “get it done, and get it done fast.” So it's natural that heads of Sales and Marketing believe they are hired for what they know, not what they can learn. They assume their prior experience is relevant in this new venture. They assume they understand the customer problem and therefore the product that needs to be built and sold. Therefore they need to put that knowledge to work and execute the product development, sales and marketing processes and programs that have worked for them before.

This is usually a faulty assumption. Before we can build and sell a product, we have to answer some very basic questions: What are the problems our product solves? Do customers perceive these problems as important or “must-have”? If we're selling to businesses, who in a company has a problem our product could solve? If we are selling to consumers how do we reach them? How big is this problem? Who do we make the first sales call on? Who else has to approve the purchase? How many customers do we need to be profitable? What's the average order size?

Most entrepreneurs will tell you, “I know all the answers already. Why do I have to do it again?” It's human nature that what you think you know is not always what you know. A little humility goes far. Your past experience may not be relevant for your new company. If you already know the answers to the customer questions, the Customer Development process will go quickly and reaffirm your understanding.

A company needs to answer these questions before it can successfully ramp up sales. For startups in a new market, these are not merely execution activities; they are learning and discovery activities critical to the company's success or failure.

Why is this distinction important? Take another look at the Product Development model. Notice it has a nice linear flow from left to right. Product Development, whether it is intended for large companies or consumers, is a step-by-step, execution-oriented process. Each step happens in a logical progression that can be PERT charted (a project management technique for determining how much time a project takes to complete), with milestones and resources assigned to completing each step.

Yet anyone who has ever taken a new product out to a set of potential customers can tell you a good day in front of customers is two steps forward and one step back. In fact, the best way to represent what happens outside the building is with a series of recursive circles—recursive to represent the iterative nature of what actually happens in a learning and discovery environment. Information and data are gathered about customers and markets incrementally, one step at a time. Yet sometimes those steps take you in the wrong direction or down a blind alley. You find yourself calling on the wrong customers, not understanding why people will buy, not understanding what product features are important. The ability to learn from those missteps is what distinguishes a successful startup from those whose names are forgotten among the vanished.

Like all startups focused on executing to plan, Webvan hired a vice president of merchandising, a vice president of marketing and a vice president of product management—to head three groups oriented around executing a sales strategy, not learning and discovering customer needs. Sixty days after first customer ship these three groups employed over 50 people.

#### 4. The Lack of Meaningful Sales, Marketing and Business Development Milestones

The one great thing you can say about Product Development using a Waterfall methodology is that it provides an unambiguous structure with clearly defined milestones. The meaning of requirements documents, functional specifications, implementation, alpha test, beta test, and first customer ship are obvious to most engineers. If the product fails to work, you stop and fix it. In stark contrast, sales and marketing activities before first customer ship are ad hoc, fuzzy, and absent measurable, concrete objectives. They lack any way to stop and fix what's broken (or even to know if it is broken, or how to stop at all).

What kind of objectives would a startup want or need? That's the key question.

Most sales executives and marketers tend to focus on execution activities because these are measurable. For example, in sales, revenue matters most. Sales uses revenue as its marker of progress in understanding customers. Some startup sales execs also believe hiring the core sales team is a key objective. Others focus on acquiring early “lighthouse” customers (prominent customers who will attract others). Marketers believe creating corporate presentations, data sheets, and collateral are objectives. Some think hiring a PR agency, starting the buzz and getting on the covers of magazines at launch are objectives.

In reality none of these is the true objective. Simply put, a startup should focus on reaching a deep understanding of customers and their problems, their pains, and the jobs they need done to discover a repeatable roadmap of how they buy, and building a financial model that results in profitability.

The appropriate milestones measuring a startup’s progress answer these questions: How well do we understand what problems customers have? How much will they pay to solve those problems? Do our product features solve these problems? Do we understand our customers’ business? Do we understand the hierarchy of customer needs? Have we found visionary customers, ones who will buy our product early? Is our product a must-have for these customers? Do we understand the sales roadmap well enough to consistently sell the product? Do we understand what we need to be profitable? Are the sales and business plans realistic, scalable, and achievable? What do we do if our model turns out to be wrong?

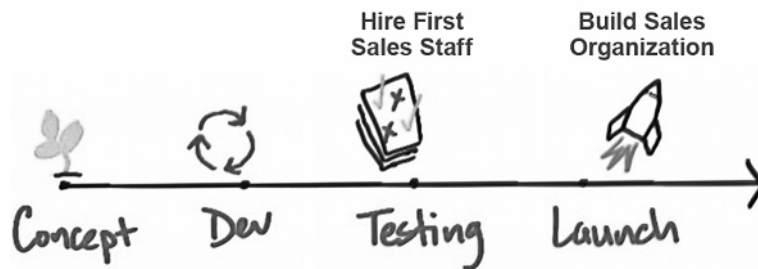
Webvan had no milestones saying “stop and evaluate the results” (2,000 orders per day versus 8,000 forecasted) of its product launch. Before any meaningful customer feedback was in hand, and only a month after the product started shipping, Webvan signed a \$1 billion deal (yes, \$1,000,000,000) with Bechtel. The company committed to the construction of up to 26 additional distribution centers over the next three years.

Webvan leapt right over learning and discovery in its rush to execution. There is a big difference between a process that emphasizes getting answers to the fundamental questions I’ve listed above and a process using the Product Development model to keep early sales and marketing activities in sync with first customer ship. To see what I mean, consider the Product Development model from the perspective of people in sales and marketing (Figure 1.2).

## 5. The Use of a Product Development Methodology to Measure Sales

Using the Product Development Waterfall diagram for Customer Development activities is like using a clock to tell the temperature. They both measure something, but not the thing you wanted.

Figure 1.2 shows what the Product Development model looks like from a sales perspective. A VP of Sales looks at the diagram and says, “Hmm, if beta test is on this date, I’d better get a small sales team in place before that date to acquire my first ‘early customers.’ And if first customer ship is on this date over here, then I need to hire and staff a sales organization by then.” Why? “Well, because the revenue plan we promised the investors shows us generating customer revenue from the day of first customer ship.”



***The View from the Sales Organization*** (Figure 1.2)

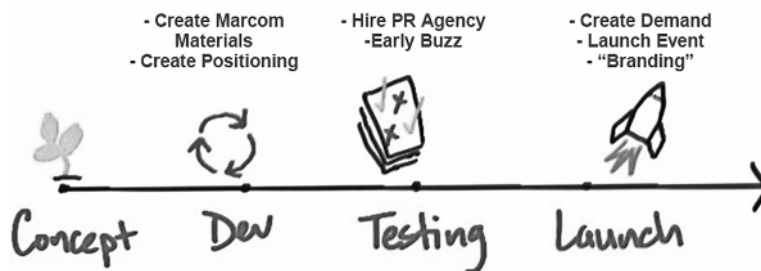
I hope this thinking already sounds inane to you. The plan calls for selling in volume the day Engineering is finished building the product. What plan says that? Why, the business plan, which uses the Product Development model to set milestones. The consequence of selling isn’t predicated on discovering the right market or whether any customers will shell out cash for your product. Instead the Product Development model times your readiness to sell. This “ready or not, here we come” attitude means you won’t know if the sales strategy and plan actually work until after first customer ship. What’s the consequence if your stab at a sales strategy is wrong? You’ve built a sales organization burning cash, cash that needs to be redirected in a hurry. No wonder the half-life of a startup VP of Sales is about nine months post-first customer ship. “Build it and they will come,” is not a strategy; it’s a prayer.

Webvan had this problem in spades. After first customer ship, Webvan had a nasty

surprise waiting for it. Customers refused to behave the way the Webvan business plan said they would. Six months after Webvan's June 1999 launch, the average daily volume of orders was 2,500. Sounds pretty good? Not bad for a startup? It was. Unfortunately, the Webvan business plan had forecast 8,000 orders per day, a number necessary for the company to achieve profitability. This meant the distribution center (designed to process product volumes equivalent to approximately 18 supermarkets) was operating at less than 30% of capacity. Oops.

## 6. The Use of a Product Development Methodology to Measure Marketing

The head of Marketing looks at the same Product Development Waterfall diagram and sees something quite different (see Figure 1.3). For Marketing, first customer ship means feeding the sales pipeline with a constant stream of customer prospects. To create this demand, marketing activities start early in the Product Development process. While the product is being engineered, Marketing starts creating corporate presentations and sales materials. Implicit in these materials is the “positioning” of the company and product. Looking ahead to the product launch, the marketing group hires a public relations agency to refine the positioning and begin generating early “buzz” about the company. The PR agency helps the company understand and influence key industry analysts, luminaries, and references. All this leads up to a flurry of press events and interviews geared to the product launch date. (During the Internet bubble, one more function of the marketing department was to “buy” customer loyalty with enormous advertising and promotion spending to create a brand.)



*The View from the Marketing Organization (Figure 1.3)*

At first glance this process may look quite reasonable, except for one small item: All

this marketing activity occurs before customers start buying—that is, before Sales has had a chance to test the positioning, marketing strategy, or demand-creation activities in front of real customers. In fact, all the marketing plans are made in a virtual vacuum of real customer feedback and information. Of course, smart marketers have some early interaction with customers before the product ships, but if they do, it's on their own initiative, not as part of a well-defined process. Most first-time marketers spend a large part of their time behind their desks. This is somewhat amazing, since in a startup no facts exist inside the building, only opinions. Yet even if we get the marketing people out from behind their desks and into the field, the deck remains stacked against their success. Look at the Product Development model. When does Marketing find out whether the positioning, buzz, and demand creation activities actually work? After first customer ship. The inexorable march to this date has no iterative loop that says, “If our assumptions are wrong, maybe we need to try something different.”

This “marketing death march” happened at Webvan. In its first six months of business, Webvan acquired an impressive 47,000 new customers. However, in those six months 71% of the 2,000 orders coming in per day were from repeat customers. This meant Webvan needed more new customers, and it needed to reduce the number of customers who ordered once and never used the service again.

These facts contradicted the marketing assumptions in the original business plan. As happens in most startups, those assumptions were wrong. Yet Webvan had scaled its spending (particularly on building and operating large distribution centers) on these unverified guesses.

## 7. Premature Scaling

Having Sales and Marketing believe that by first customer ship, come hell or high water, they need fully staffed organizations leads to another disaster: premature scaling.

Startup executives have three documents to guide their hiring and staffing: a business plan, a Product Development model and a revenue forecast. All are execution documents – they document spending and hiring as if success is assured. As mentioned earlier there are no milestones saying, “Stop or slow down hiring until you understand customers.” Even the most experienced executives succumb to the inexorable pressure to hire and staff to “plan” regardless of early customer feedback.

In Webvan's case premature scaling was an integral part of the company culture

and the prevailing venture capital “get big fast” mantra. Webvan 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 since Webvan’s spending was on a scale that ensures it will be taught in business school case studies for years to come.

As customer behavior continued to differ from the predictions in Webvan’s business plan, the company slowly realized it had overbuilt and over-designed. The business model made sense only at the high volumes predicted on the spreadsheet. The average daily volume of orders was significantly below the capacity the company needed to achieve profitability. To have any hope of achieving favorable gross margins, Webvan had to find a way to substantially increase its volume, number of customers, number of orders placed by its customers, and average order size.

## 8. Death Spiral: The Cost of Getting Product Launch Wrong

Premature scaling is the immediate cause of the Death Spiral. Premature scaling causes the burn rate to accelerate. Sales, salaries, facilities, infrastructure costs, recruiting fees, and travel expenses start cutting into the company’s cash flow. The pressure for revenue grows exponentially. Meanwhile the marketing department is spending large sums on creating demand for the sales organization. It is also spending “credibility capital” on positioning and explaining the company to the press, analysts, and customers.

By the time of first customer ship, if the company does not understand its market and customers, the consequences unfold in a startup ritual, almost like a Japanese Noh play. What happens when you fully staff sales and marketing and you haven’t nailed who your customers are and why they should buy your product? Sales starts missing its numbers. The board gets concerned. The VP of Sales comes to a board meeting, still optimistic, and provides a set of reasonable explanations. The board raises a collective eyebrow. The VP goes back to the field and exhorts the troops to work harder.

Meanwhile, the salespeople start inventing and testing their own alternatives—different departments to call on, different versions of the presentations. Instead of following a methodology of learning and discovering, the sales team has turned into a disorganized and disgruntled mob burning lots of cash. Back in the home office, the product presentation slides are changing weekly (sometimes daily) as Marketing tries to “make up a better story” and sends out the latest pitch to a confused sales

organization. Morale in the field and in Marketing starts to plummet. Salespeople begin to believe, “This product cannot be sold; no one wants to buy it.”

By the next board meeting, the sales numbers still aren't meeting plan. The VP of Sales looks down at his shoes and shuffles his feet. Now the board raises both eyebrows and looks quizzically at the CEO. The VP of Sales, forehead bathed in sweat, leaves the board meeting and has a few heated motivational sessions with the sales team. By the next board meeting, if the sales numbers are still poor, the writing is on the wall. Not only haven't the sales numbers been made, but now the CEO is sweating the company's continued cash-burn rate. Why? Because the company has based its headcount and expenditures on the expectation Sales will bring in revenue according to plan. The rest of the organization started to burn more cash, expecting Sales to make its numbers. Now the company is in crisis mode. Here two things typically happen. First, the VP of Sales is toast. At the final board meeting no one wants to stand next to him. People move their chairs to the other side of the room. Whether it takes three board meetings or a year is irrelevant; the VP of Sales in a startup who does not make the numbers is called an ex-VP of Sales (unless he was a founder, and then he gets to sit in a penalty box with a nebulous VP title).

Next, a new VP of Sales is hired. She quickly concludes the company did not understand its customers and how to sell to them. She decides the company's positioning and marketing strategy were incorrect. Now the VP of Marketing starts sweating. Since the new VP of Sales was brought on board to “fix” sales, the marketing department has to react and interact with someone who believes whatever was created earlier in the company was wrong. The new VP of Sales reviews the original strategy and tactics and comes up with a new sales plan. She gets a few months' honeymoon from the CEO and the board. Meanwhile, the original VP of Marketing tries to come up with a new positioning strategy to support the new Sales VP. Typically this results in conflict, if not outright internecine warfare. If the sales aren't fixed in a short time, the next executive to be looking for a job is not the new VP of Sales (she hasn't been around long enough to get fired), it's the VP of Marketing—the rationale being, “We changed the VP of Sales, so that can't be the problem. It must be Marketing's fault.”

Sometimes all it takes is one or two iterations of finding the right sales roadmap and marketing positioning to get a startup on the right track of finding exuberant customers. Unfortunately, more often than not, this marks the beginning of an

executive death spiral. If changing the sales and marketing execs doesn't put the company on the right sales trajectory, the investors start talking the "we need the right CEO for this phase" talk. This means the CEO is walking around with an unspoken corporate death sentence. Moreover, since the first CEO was likely to have been one of the founders, the trauma of CEO removal begins. Typically, founding CEOs hold on to the doorframe of their offices as the investors try to pry their fingers off the company. It's painful to watch and occurs in more than half of the startups with first-time CEOs.

In flush economic times the company may get two or three iterations around a failed launch and bad sales numbers. In tougher times investors are tighter with their wallets and make the "tossing good money after bad" calculations with a frugal eye. A startup might simply not get a next round of funding and have to shut down.

In Webvan's case, the Death Spiral was public and messy, since none of this was occurring in the intimate enclosure of a private company. The consequence of going public was the sea of red ink was printed quarterly for all to see. Rather than realize the model was unrealistic and scale back, the company continued to invest heavily in marketing and promotion (to get more customers and keep the ones they had) and distribution facilities (building new ones in new parts of the country to reach more customers). By the end of 2000 Webvan had accumulated a deficit of \$612.7 million and was hemorrhaging cash. Seven months later, it was bankrupt.

## 9. Not All Startups Are Alike

A fundamental truth about startups ignored in the Product Development model is they are not all alike. One of the radical insights guiding this book is that startups fall into one of four basic categories:

- Bringing a new product into an existing market
- Bringing a new product into a new market
- Bringing a new product into an existing market and trying to resegment that market as a low-cost entrant
- Bringing a new product into an existing market and trying to resegment that market as a niche entrant

These differences will be developed in detail in subsequent chapters. What's important to know now is the traditional Product Development model at times succeeds in getting a product out the door into a known market with known customers (first category). Executing past practices in this Market Type may work if the market is similar to that of past experiences. However, since most startups are not going after known markets (falling into the second and third categories), they don't have a clue where their customers are.

Webvan fell into the fourth category—bringing a new product (online grocery ordering and same-day delivery) into an existing market (the grocery business), and trying to create a niche of that market. One could even argue that Webvan's idea was so radical the company fell into the second category of startups—bringing a new product into a completely new market. In either case, Webvan's ability to predict customer acceptance and widespread usage was not based on facts, just untested business plan hypotheses. (Modeling customer adoption rates using traditional quantitative models like Bass Curve are impossible at first customer ship for category 2 and 3 companies. There aren't sufficient initial sales data to make valid sales predictions.)

Here's the point: Since the four types of startups have very different rates of customer adoption and acceptance, their sales and marketing strategies differ dramatically. Even more serious, each Market Type has radically different cash needs. A company creating a new market might be unprofitable for five or more years, while one in an existing market might generate cash in 12-18 months. As a result, the Product Development model is not only useless, it is dangerous. It tells the finance, marketing and sales teams nothing about how to uniquely describe and sell for each type of startup, or how to predict the resources needed for success.

## 10. Unrealistic Expectations

The Product Development model leads to fundamental and often fatal errors in the first year or two of a startup's life. We can sum up these errors in terms of three unrealistic expectations:

- The Product Development model can be relied upon to guide activities that have nothing to do with Product Development—namely, finding customers, a market, and a viable business model.
- Customer Development will move on the same schedule as Product Development.

- All types of startups and all new products will achieve acceptance and deployment at the same rate, namely starting at First Customer Ship.

In addition to these three errors, there is another consideration: Startups face enormous pressure from their investors to become profitable. Sometimes, to get funded, these new ventures make unrealistic financial assumptions—about market size, growth or by simply ignoring the consequences of the Market Type they have chosen. These optimistic expectations become the plan of record, forcing execution toward unrealistic and unachievable goals.

Webvan made all these mistakes, visibly and publicly. Yet most observers wrote off its failure as just one of the many “dot-com busts,” attributing the venture’s demise to something related to the Internet. The reality is more profound and germane. Webvan’s failure and the entire dot-com collapse resulted from falling victim to the three expectations I’ve just described; “build it and the customers will come” (regardless of the number of dollars raised) is not a successful strategy.

## So What’s The Alternative?

If the Product Development model isn’t an appropriate roadmap for startups, what is? To some, the phrase “thoughtful startup sales and marketing process” is an oxymoron. However, there are entrepreneurs who have been searching for a template for success with customers and markets.

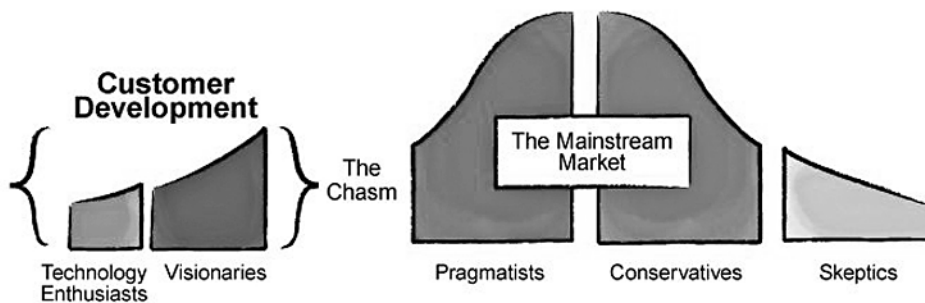
Since the early 1990s, the closest thing to a Holy Grail for sales and marketing activities in startups has been the Technology Life Cycle Adoption Curve and the notion of The Chasm.

### The Technology Life Cycle Adoption Curve

The Technology Life Cycle Adoption Curve (see Figure 1.4) was developed by Everett Rogers and popularized and refined with Geoff Moore’s notion of the “chasm.” It introduces entrepreneurs to five thought-provoking ideas:

- Technology is adopted in phases by distinct groups: technology enthusiasts, visionaries, pragmatists, conservatives, and skeptics.

- The first two groups—technology enthusiasts and visionaries—are the “early market.” The next two groups—pragmatists and conservatives—are the “mainstream market.”
- The shape of the overall market for any product approximates a bell curve. The early market starts small and grows exponentially into the mainstream market.
- There is a “chasm” between each of the different groups, with the largest chasm between the early and mainstream markets. These chasms are caused by the different product needs and buying habits of each group.
- The biggest problem in crossing the chasm is that few of the hard-won early marketing and selling lessons and successes can be leveraged into the mainstream market, as mainstream customers do not find early adopters to be credible customer references. Therefore, completely new marketing and sales strategies are necessary to win over this next, much larger group of customers.



***The Technology Life Cycle Adoption Curve (Figure 1.4)***

Let’s briefly consider why this notion doesn’t provide a good roadmap for early-stage startups. With this last piece in place, we’ll be ready to consider the alternative path this book describes, and I assert all successful startups follow. An entrepreneur on day one of a startup looks longingly at the graceful bell curve depicted in Figure 1.4, and dreams of marching her company to the pinnacle, determined to avoid those fearsome chasms. OK, this all sounds good. Now what? Take a good long look at the Technology Life Cycle Adoption Curve. Is it informative? Interesting? Does it lead you to think profound and wonderful thoughts about strategy? Well, forget it. If you are just starting your company this is the last time you are going to see this curve, at least for the next year. The problems you face occur much earlier than any chasm. In fact, you should be so lucky to be dealing with chasm-crossing activities, for they are a sign of success.

The Technology Life Cycle Adoption Curve provides true insight, because there are different types of customers in a company/product life cycle. However, this seductive curve leads early-stage entrepreneurs to four bad conclusions:

First, the curve naturally leads entrepreneurs to entertain dreams of glory in the mainstream market. In the early stages of building a company, those dreams are best forgotten. Not forever, but for now. Why? The sad reality is if you don't get the first part of early Customer Development right, you won't be in the mainstream. You'll be out of business.

Second, the curve invites us to think of technology enthusiasts as one part of the customer adoption curve. On the curve they look like just an early set of customers, but in reality they are not. Technology enthusiasts exist as one of those sales puzzles on the path to finding "real" paying early customers and a repeatable sales process. You need to deal with them and understand their influence in the sales roadmap, but they very rarely buy anything.

Third, the notion that a startup's customer base will grow in a smooth, continuous curve invites the tempting and dangerous idea that customer adoption is simply a sales execution problem. Even when the notion of a chasm is added, along with the observation that early-market customers and mainstream customers are different, only in entrepreneurs' dreams and business school cases does this take the form of an adoption curve. As we will see, the actual transition from one type of customer to another is at best a step function (and dependent on Market Type).

Fourth, the Technology Life Cycle Adoption Curve, along with the books written about it, emphasize "execution and adoption." That's all fine and good, but as my grandmother used to say, "You should be so lucky to have that problem." In the early stages of a startup, focusing on "execution" will put you out of business. Instead, you need a "learning and discovery" process so you can get the company to the point where you know what to execute.

So instead of dreaming up ways to cross the chasm, the first step for a startup is to focus on learning and discovery processes, from starting the company to scaling the business. Through trial and error, hiring and firing, startups that succeed have invented a parallel process to Product Development that is customer- and market-centric. I call it "Customer Development."

## Customer Development: Common Sense Meets the Product Development Model

It's interesting to imagine what would happen if a startup told its venture capital backers it had hired the world's best engineering team, but it wasn't going to use any process or methodology to get the product out the door. Can you imagine saying, "Nah, we don't need no stinking Product Development methodology. We'll just go by the seat of our pants?" Only in your dreams. Startups use a Product Development methodology to measure the progress of their development team, control their cash-burn rate and time their product launch. Yet we don't think twice when we hire the best marketing, sales, and business development talent, toss them into a startup and say, "Go figure out who wants to buy this, and quickly sell a whole bunch. Let us know when you are done, but keep it vague and wave your hands a lot when we ask you how much progress you are making." Seems silly doesn't it? Yet that's the state of the startup today. There is no recognized process with measurable milestones for finding customers, developing the market, and validating the business model.

The Customer Development model of a startup starts with a simple premise: Learning and discovering who a company's initial customers will be, and what markets they are in, requires a separate and distinct process from Product Development. The sum of these activities is Customer Development. Note I am making a concerted effort not to call Customer Development a "sales process" or a "marketing process." The reason will become clearer as we talk about how to organize the team for the Customer Development process in a later chapter. However, early on, we are neither selling nor marketing. Before any of the traditional functions of selling and marketing can happen, the company must prove a market could exist, verify someone would pay real dollars for the solutions the company envisions, and then go out and create the market. These testing, learning, and discovery activities are at the heart of what makes a startup unique, and they are what makes Customer Development so different from the Product Development process.

The Customer Development model is intended to be everything the Product Development model is not. Where Product Development is focused on first customer ship, the Customer Development model moves learning about customers and their problems as early in the development process as possible. In addition, the model is built on the idea that every startup has a set of definable milestones no amount of funding can accelerate. More money is helpful later, but not now. The Internet Bubble

was the biggest science experiment in this area. You cannot create a market or customer demand where there isn't any customer interest. The good news is these customer and market milestones can be defined and measured. The bad news is achieving these milestones is an art. It's an art embodied in the passion and vision of the individuals who work to make their vision a reality. That's what makes startups so exciting.

The ironic postscript to the Webvan story is that another company, Tesco, raced past pioneers such as Webvan to become the largest online grocer in the world. The people at Tesco did not raise a huge financial war chest to launch their service. They learned and discovered what customers wanted, and found a financial model that worked. They started their online grocery service by using their retail stores in the UK as the launching pad. By 2002 they had created a profitable online business handling 85,000 orders per week and had racked up more than \$559 million in sales. Tesco could set up its online grocery business for a fraction of the investment of Webvan because it was able to build off its existing infrastructure of over 929 stores. In June 2001 online grocery shopping returned to the United States when Tesco moved into the market, purchasing a 35% investment in Safeway's online grocery service.

Explicitly or implicitly, Tesco understood the process embodied by the Customer Development model. The next chapter describes this model in detail.