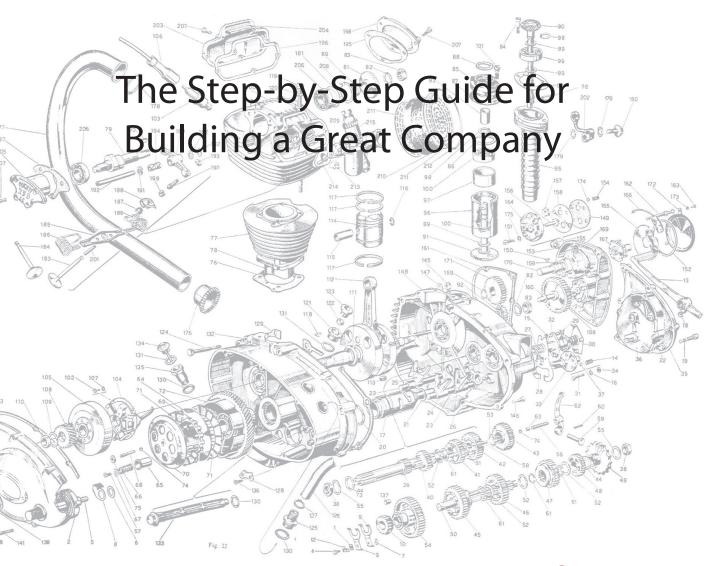
THE STARTUP OWNER'S MANUAL



Steve Blank and Bob Dorf



Vol. 1

THE STARTUP OWNER'S MANUAL



Steve Blank and Bob Dorf

WILEY

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How to Read This Book

CLEARLY, THE STARTUP OWNER'S MANUAL IS not a novel. This book is a step-by-step how-to guide that details a process for building a successful, profitable, scalable startup. It has more in common with a car repair manual than it does with your favorite page-turner. Don't attempt to read this book in a single sitting or long weekend. It will be your companion—and, we hope, your very best friend—for the six to 30 months or more that it often takes to begin building a successful, scalable startup business.

Organization

This book is organized in four distinct sections. The first, Getting Started, describes the Customer Development methodology and ends with the "Customer Development Manifesto," a series of 14 guiding principles for startups deploying the Customer Development process.

Don't read too much at a time.

The next section, Step One, "Customer Discovery," turns the founders' vision into a business model canvas and then into a series of hypotheses. Those hypotheses are turned into experiments, and tested with customers to see if your understanding of the customer problem and proposed solution mesh.

Step Two, "Customer Validation," expands the scope of the business model testing to see if you can get enough orders or users to prove that you have a repeatable and scalable business model.

The fourth key section, found in Appendix A, is a series of Checklists that help you track your progress at every stage of the Customer Development process. Use the checklists at the end of each step (yes, there's one for each) to make sure you have completed all the key tasks outlined in that step. Photocopy them, scan them, and circulate them to team members. But most important, use them to be sure you have completed each step—before you move on to the next.

Web/Mobile vs. Physical Channels

This book recognizes that Customer Development operates at different speeds for web/mobile startups versus products sold through physical distribution channels. The process to "Get/Keep/Grow" customers—the core job of *any* business—is different, and web products are built and obtain feedback faster. Recognizing this, we offer parallel tracks through the book: one focused on physical goods and channels, and one focused on web/mobile products and channels. Often, the book addresses them separately. When it does, we begin with the physical channel, then follow with web/mobile.

In each phase of customer discovery and validation, you'll see diagrams like this to help you understand where you are in the process:



The upper row indicates the recommended steps for physical channel startups. The lower row depicts steps for web/mobile startups. When the steps are nearly identical, the boxes merge.

₩hen we're discussing web and mobile channels, products, strategies or tactics, you'll see the ➡ at the start of those discussions, always in this typeface, alongside the text that shows you've "changed channels."

It's worth reading both versions of a step before turning to the one explaining "your" business type. When information in one channel is essential for startups in the other, we'll tell you so—and tell you what to read. Web/mobile startup founders should skim the physical section before they read and begin implementing the web/mobile processes in each section.

Paths Through This Book

- Read the glossary in the back of the book first. Customer Development has a language all its own.
- Before you dive into the details, *read the Customer Development Manifesto* on page 31-49.
- *If you are familiar with Customer Development*, skim Chapters 1-3, then start with Chapter 4, "the business model hypotheses."
- If you want to align co-founders, initial employees, investors and advisors around the Customer Development philosophy, have them read Chapters 1 and 2.
- *If you want a high-speed overview and little more*, there are two approaches:
 - (a) skim the checklists at the back of the book, which will give you a sense of all the tasks you must complete to implement Customer Development; or
 - (b) flip through the book, looking for "jumbo quotes" like this:

This book is not a novel...

It's a reference manual.

These quotes highlight the 100 or so "big ideas" found throughout the book and offer a "CliffsNotes" or "Twitter" sense of the nearly 600 pages of text.

- If you want a detailed checklist of the things founders need to get right, start with Chapter 4, "the business model hypothesis," and use the checklists in Appendix A page 469.
- If your startup is well under way, you might want to start at Chapter 7, "Pivot or Proceed," to gauge your progress. Then you can jump to Chapter 12, "Metrics that Matter," to see if you're ready to scale.
- To develop and test a web/mobile minimum viable product (MVP), read: Design Tests (page 191), Build Your Low Fidelity MVP (page 200), Low Fidelity MVP Problem Test (page 211), and Optimize Getting More Customers (page 380).
- To develop and test a physical minimum viable product (MVP), read: Customer Contacts (page 195), Problem Understanding (page 203), Customer Understanding (page 218), and The Sales Roadmap (page 344).
- To focus on web/mobile marketing (how to "get," "keep" and "grow" customers), read:
 - Hypotheses: Customer Source/Wiring (page 93), Channels (page 104), and Customer Relationships (page 144).
 - Build Your Low Fidelity MVP (page 200), Low Fidelity MVP Problem Test (page 211), Traffic/Competitive Analysis (page 225), High Fidelity MVP Test (page 237), and Measure Customer Behavior (page 245).
 - Get Ready to Sell: Craft Positioning Statement (page 293), Acquire/ Activate Customers Plan (page 304), Create a High Fidelity MVP (page 330), Build a Metrics Tool Set (page 338), and Hire a Data Analytics Chief (page 350).
 - Get Out of the Building: Prepare Optimization Plans/Tools (page 362), Optimize Getting More Customers (page 380), Optimize "Keep" and "Grow" (page 396), Test Sell Traffic Partners (page 409).

- To focus on *physical channel sales and marketing* (how to "get", "keep" and "grow" customers), read:
 - Hypotheses: Customer Segments Who/Problem (page 85),
 Channels (page 98), Customer Relationships (page 144), and
 Revenue Stream Pricing (page 180).
 - Prepare for Customer Contacts (page 195), Problem Understanding (page 203), Market Knowledge (page 222), Create Product Presentation (page 235), and Test Solution with Customer (page 239).
 - Get Out of the Building: Create Sales and Collateral Materials (page 296), Hire Sales Closer (page 329), Sales Channel Roadmap (page 332), and Develop the Sales Roadmap (page 344).
- Educators who want to teach Customer Development or the experiential Lean LaunchPad class should read:
 - Our website, www.steveblank.com, with links to our syllabi used at Stanford, Berkeley and the National Science Foundation.
 - o Before the class meets, have the students read:
 - The Customer Development Manifesto in Chapter 2
 - An Introduction to Customer Development in Chapter 2
 - Each week's lectures are organized around each of the individual hypotheses in Phase 1, pages 69-188.
 - For the Lean LaunchPad class, have students read:
 - Get Out of the Building and Test the Problem in Chapter 5, pages 189-226.
 - Get Out of the Building and Test the Product Solution in Chapter 6, pages 227-256.
 - All classes should read:
 - Pivot or Proceed, in Chapter 7, pages 270-273.
 - Metrics that Matter, in Chapter 12, pages 438-459.

A Few Helpful Tips

We see a direct correlation between the entrepreneurs' success and the degree to which their copy is dog-eared, beat up and tattered. USE the book, don't just read it!

We see a direct correlation between the entrepreneurs' success and the degree to which their copy is dog-eared, beat up and tattered.

Use the checklists. There are more than 40 at the back of the book—one for every step.

Don't read too much at a time. This is a reference manual. It's exhausting when read as a book. Take "small bites" of a few sections at a time, at most. Dog-ear it and use Post-it notes to mark your place, and keep the book close at hand so you can refer to it often.

Scan ahead. It gives you context for what you are currently doing. If you're starting work on Chapter 4, for example, quickly scan Chapter 5 first so you understand how what you're doing now supports what comes next.

For a helpful online tool to monitor your team's progress in the Customer Development process, visit http://www.zoomstra.com/foundersworkbook/

Entrepreneurship is not a cookbook or a checklist. At the end of the day, founders are artists. Don't expect everything to work like the book. It's impossible for this book to address every entrepreneurial decision and every type of startup. You're outside the building not only looking for facts, but for insight and inspiration. Not every piece of advice fits every situation you'll encounter. And not every piece of advice will always work. That's what entrepreneurs are for.

Preface

In 1602, the Dutch East India Company, generally regarded as the first "modern company," issued the first stock certificates. In the intervening 300 years, companies managed to start, build and grow without formally trained executives. By the 20th century, the complexity of modern corporations demanded a cadre of executives trained to administer large companies. In 1908, Harvard awarded the first master of business administration (MBA) degree to fill the need to bring professional education standards to big business. The MBA curriculum standardized and codified the essential elements an operating executive in a modern company needed to know: cost accounting, strategy, finance, product management, engineering, personnel management and operations.

Formal management tools are about 100 years old.

Fast-forward to the mid-20th century. The pairing of venture capital and startup entrepreneurship emerged in its modern form, and the startup industry they fostered has been exploding ever since. Yet for the past 50 years, finding the successful formula for repeatable startup success has remained a black art. Founders have continually struggled with and adapted the "big business" tools, rules and processes taught in business schools and suggested by their investors. Investors have been shocked when startups failed to execute "the plan," never admitting to the entrepreneurs that *no startup executes to its business plan*. Today, after half a century

of practice, we know unequivocally that the traditional MBA curriculum for running large companies like IBM, GM and Boeing *does not* work in startups. In fact, it's toxic.

With the benefit of hindsight, entrepreneurs now understand the problem, namely that *startups are not simply smaller versions of large companies*. Companies execute business models where customers, their problems, and necessary product features are all "knowns." In sharp contrast, startups operate in "search" mode, seeking a repeatable and profitable business model. The search for a business model requires dramatically different rules, roadmaps, skill sets, and tools in order to minimize risk and optimize chances for success.

By the beginning of the 21st century, entrepreneurs, led by web and mobile startups, began to seek and develop their own management tools. Now, a decade later, a radically different set of startup tools has emerged, distinct from those used in large companies but as comprehensive as the traditional "MBA Handbook." The result is the emerging "science of entrepreneurial management." My first book, *The Four Steps to the Epiphany*, was one of its first texts. It recognized that the classic books about large-company management were ill-suited for early-stage ventures. It offered a reexamination of the existing product-introduction process and delineated a radically different method that brings customers and their needs headfirst into the process long before the launch.

We are building the first management tools specifically for startups.

At the time I wrote it, the book was my proposed methodology for getting startups right. But just as it was published, agile engineering became the preferred product-development method. This iterative and incremental method created a need and a demand for a parallel process to provide rapid and continual customer feedback. The Customer Development process I articulated in *The Four Steps* fit that need perfectly.

Over the past decade, thousands of scientists, engineers and MBAs in my classes at Stanford's engineering school and U.C. Berkeley's Haas School of Business—plus those sponsored by the National Science Foundation—have discussed, deployed, assessed and enhanced the Customer Development process. It has since been implemented by tens of thousands of entrepreneurs, engineers, and investors worldwide.

While the fundamental, powerful "Four Steps" remain at its core, this book is far more than a second edition. Nearly every step in the process, and in fact the entire approach, have been enhanced and refined based on a decade of Customer Development experience.

Customer development is paired with agile product development.

Even more gratifying: now, a decade later, multiple books and authors, are filling shelves in the newly created section for the strategy and science of entrepreneurship. Some of the other areas in this emerging field of entrepreneurial management are:

- agile development, an incremental and interactive approach to engineering that enables product or service development to iterate and pivot to customer and market feedback
- business model design, which replaces static business plans with a nine-box map of the key elements that make up a company
- creativity and innovation tools for creating and fostering winning ideas
- the Lean Startup, an intersection of customer and agile development
- lean user interface design to improve web/mobile interfaces and conversion rates
- venture and entrepreneurial finance, to attract and manage funds that fuel the innovation

No one book, including this one, offers a complete roadmap or all the answers for entrepreneurs. Yet together, the texts in the entrepreneurial management science library offer entrepreneurs guidance where none existed before. Startups, driven by potential markets measured in billions of people, will use this body of knowledge to test, refine and scale their ideas far faster and more affordably than ever.

No one book, including this one, offers a complete roadmap...

My co-author Bob and I hope books like this one help speed the startup revolution and enhance its success—and yours.

Steve Blank Pescadero, Calif., March 2012

Who Is This Book For?

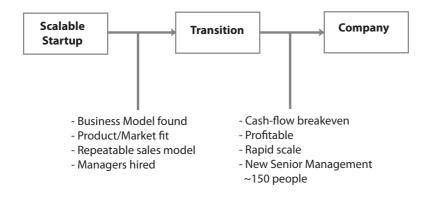
THIS BOOK IS FOR ALL ENTREPRENEURS and uses the term *startup* literally hundreds of times. But what exactly is a startup? A startup is not a smaller version of a large company. A startup is a temporary organization in search of a scalable, repeatable, profitable business model. At the outset, the startup business model is a canvas covered with ideas and guesses, but it has no customers and minimal customer knowledge.

But we've only defined the words *startup*, *entrepreneur*, and *innovation* halfway. These words mean different things in Silicon Valley, on Main Street, and in Corporate America. While each type of startup is distinct, this book offers guidance for each one

A startup is a temporary organization in search of a scalable, repeatable, profitable business model.

Small Business Entrepreneurship: In the United States, the majority of entrepreneurs and startups are found among 5.9 million small businesses that make up 99.7 percent of all U.S. companies and employ 50 percent of all nongovernment workers. These are often service-oriented businesses like drycleaners, gas stations and convenience stores, where entrepreneurs define success as paying the owners well and making a profit, and they seldom aspire to take over an industry or build a \$100 million business

Scalable startups are the work of traditional technology entrepreneurs. These entrepreneurs start a company believing their vision will change the world and result in a company with hundreds of millions if not billions of dollars in sales. The early days of a scalable startup are about the search for a repeatable and scalable business model. Scale requires external venture-capital investment in the tens of millions to fuel rapid expansion. Scalable startups tend to cluster in technology centers such as Silicon Valley, Shanghai, New York, Bangalore, and Israel and make up a small percentage of entrepreneurs, but their outsize return potential attracts almost all the risk capital (and press).



Scalable Startup (Figure i.0)

"Buyable" startups are a new phenomenon. With the extremely low cost of developing web/mobile apps, startups can literally fund themselves on founders' credit cards and raise small amounts of risk capital, usually less than \$1 million. These startups (and their investors) are happy to be acquired for \$5 million to \$50 million, purchased by larger companies often to acquire the talent as much as the business itself.

Large Company Entrepreneurship: Large companies have finite life cycles. Most grow by offering new products that are variants of their core products (an approach known as *sustaining innovation*). They may also turn to *disruptive innovation*, attempting to introduce new products into new markets with new

customers. Ironically, large companies' size and culture make disruptive innovation (really an effort to launch a scalable startup inside a big company) extremely difficult to execute.

...large companies' size and culture make disruptive innovation extremely difficult.

Social entrepreneurs build innovative nonprofits to change the world. Customer Development provides them a scorecard for assessing scalability, asset leverage, return on investment and growth metrics. These entrepreneurial ventures seek solutions rather than profits and happen on every continent in areas as diverse as water, agriculture, health, and microfinance.

While the Customer Development process helps scalable startups the most, each of these five startup types has entrepreneurship and innovation at its heart. And each improves its chances for finding the right path to success through the use of Customer Development.

Who Is This Book Not For?

There are cases where using the Customer Development methodology and this book is inappropriate.

Early-stage ventures fall into two types: those with customer/market risk and those with invention risk.

• Markets with invention risk are those where it's questionable whether the technology can ever be made to work, but if it does, customers will beat a path to the company's door. (Think lifesciences and cure for cancer.)

• Markets with customer/market risk are those where the unknown is whether customers will adopt the product.

For companies building web-based products, *product* development may be difficult, but with enough time and iteration, Engineering will eventually converge on a solution and ship a functional product—*it's engineering, not invention*. The real risk is in whether there is a customer and a market for the product as spec'ed. In these markets *it's all about customer/market risk*.

There's a whole other set of markets where the risk is truly *invention*. These are markets where it may take five or even 10 years to get a product out of the lab and into production (e.g., biotech). Whether it will eventually work, no one knows, but the payoff can be so large that investors will take the risk. In these markets *it's all about invention risk*.

Startups solve customer and market risk by reading this book.

A third type of market has *both invention and market risk*. For example, complex new semiconductor architectures mean you may not know if the chip performs as well as you thought until you get first silicon. But then, because there might be entrenched competitors and your concept is radically new, you still need to invest in the Customer Development process to learn how to get design wins from companies that may be happy with their existing vendors.

Startups solve invention risk by using simulation tools (computational fluid dynamics, finite element analysis, etc.). Startups solve customer and market risk by reading this book. When the issues are customer acceptance and market adoption, this book shows the path.

Introduction

A legendary hero is usually the founder of something—the founder of a new age, the founder of a new religion, the founder of a new city, the founder of a new way of life. In order to found something new, one has to leave the old and go on a quest of the seed idea, a germinal idea that will have the potential of bringing forth that new thing.

— Joseph Campbell, The Hero with a Thousand Faces

JOSEPH CAMPBELL POPULARIZED THE NOTION of an archetypal "hero's journey," a pattern that recurs in the mythologies and religions of cultures around the world. From Moses and the burning bush to Luke Skywalker's meeting Obi-wan Kenobi, the journey always begins with a hero who hears a calling to a quest. At the outset of the voyage, the path is unclear and no end is in sight. Each hero meets a unique set of obstacles, but Campbell's keen insight was that the outline of these stories is always the same. There are not a thousand different heroes but *one hero with a thousand faces*.

The hero's journey is an apt way to think of startups. All new companies and new products begin with a vision—a hope for what could be and a goal few others can see. It's this bright and burning founder's vision that differentiates an entrepreneur from a big-company CEO and separates startups from existing businesses.

Founding entrepreneurs are out to make their vision and business real. To succeed, they must abandon the status quo, recruit a team that shares their

vision, and strike out together on what appears to be a new path, often shrouded in uncertainty, fear and doubt. Obstacles, hardships and potential disaster lie ahead, and their journey to success tests more than financial resources—it tests their stamina, agility, and courage.

Take a new path, often shrouded in uncertainty, fear, and doubt.

Every entrepreneur is certain his or her journey is unique. Each travels down the startup path without a roadmap and believes that no model or template could possibly apply. What makes some startups successful while others sell off the furniture often seems like luck. But it isn't. As Campbell suggests, *the outline is always the same*. The path to startup success is well-traveled and well-understood. There is a true and repeatable path to success. This book charts that path.

A Repeatable Path

In the last quarter of the 20th century, startups thought they knew the correct path for the startup journey. They adopted a methodology for product development, launch, and life-cycle management almost identical to the processes taught in business schools for use in large companies. These processes provide detailed business plans, checkpoints and goals for every step toward getting a product out the door—sizing markets, estimating sales, developing marketing-requirements documents, prioritizing product features. Yet at the end of the day, even with all these processes, the embarrassing fact is that in companies large and small, established corporate giants as well as new startups, more than nine of 10 new products fail. It's true in every product category—high-tech or low, online or off, consumer or business—well-funded or not.

Even after decades of similar failures, investors are always surprised when a new venture fails to execute its business "plan." *And still they continue to rely on the same product-introduction processes*.

We now know what the problem is. Startups have been using tools appropriate for executing a known business. But startups are all about *unknowns*. To find the path to build a winning startup, entrepreneurs must try a new way:

Winners throw out the traditional product management and introduction processes they learned at existing companies. Instead, they combine agile engineering and Customer Development to iteratively build, test and search for a business model, turning unknowns into knowns.

Winners also recognize their startup "vision" as a series of untested hypotheses in need of "customer proof." They relentlessly test for insights, and they course-correct in days or weeks, not months or years, to preserve cash and eliminate time wasted on building features and products that customers don't want.

Winners recognize their startup is a series of untested hypotheses.

Losers blindly execute a rigid product management and introduction methodology. They assume that the founder's vision drives the business strategy and product development plans and that all they need to do is to raise funds for execution.

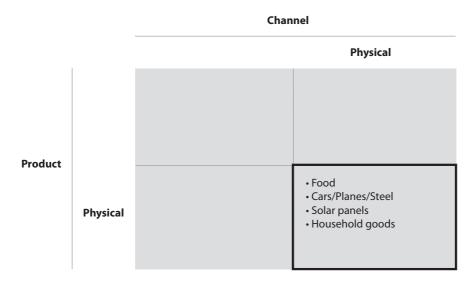
Founders, not employees, must search for a business model. The best way to search is for the *founders themselves* to *get out of the building* to gain a deep, personal, firsthand understanding of their potential customers' needs *before* locking into a specific path and precise product specs. That's the difference between winners and losers. It's also the Customer Development process detailed in this book.

Why a Second Decade?

Startups have now been using Customer Development for a decade, since the initial publication of *The Four Steps to the Epiphany*. If this is your first contact with the *Four Steps*, welcome aboard. For the tens of thousands who've embraced that first version, *The Startup Owner's Manual* offers a great deal more. The first version assumed startups were high-tech ventures in Silicon Valley selling products through a physical sales channel and aiming to be billion-dollar businesses. A lot has happened in 10 years, and this version embraces those changes. For example:

Bits: The Second Industrial Revolution

For thousands of years after the invention of the wheel, a *product* was a physical object one could touch, such as food, cars, planes, books, and household goods. These physical products reached customers via a physical sales *channel*: salespeople visiting customers, or customers visiting stores. Figure i.1 shows this intersection of *physical products sold through a physical channel*.



Physical Products Sold Through a Physical Channel (Figure i.1)

One of the breakthroughs in commerce was the invention of products that were ideas or promises that didn't exist in physical form, such as life and health insurance, stocks and bonds, and commodity futures.

In the 1970s, software began to be sold as a product unbundled from any particular computer. The ability to purchase *bits* was a new concept. By themselves the bits were useless, but when combined with a computer in the form of software applications, bits solved problems or amused people (word processing, balancing checkbooks, game play). These software applications and entertainment, all in the form of bits, were sold to consumers through specialized retail computer stores, a physical channel.

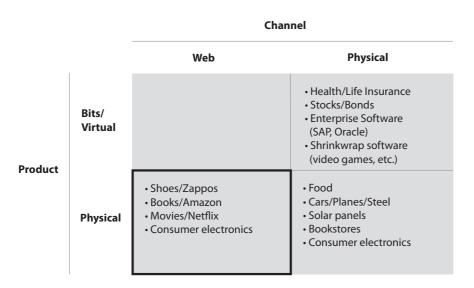
		Channel	
			Physical
Product	Bits/ Virtual		 Health/Life Insurance Stocks/Bonds Enterprise Software (SAP, Oracle) Shrinkwrap software (video games, etc.)
	Physical		FoodCars/Planes/SteelSolar panelsBookstoresConsumer electronics

Software Products Sold Through Physical Channels (Figure i.2)

Still other software applications were designed to solve problems companies had (database access, manufacturing automation, sales automation), and added the upper right box to Figure i.2, Software Products Sold Through Physical Channels.

As the Internet created a new form of sales channel, a new class of company emerged with the value proposition to sell physical products over the Internet. Amazon, Zappos, Dell, and a whole raft of other e-commerce companies filled a new niche: *physical products sold via a web channel*. This new sales channel created

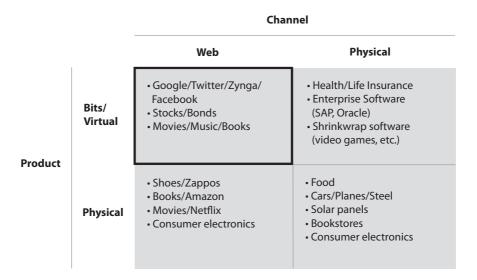
massive disruption in the existing world of physical distribution, as book and music retailers perhaps know best of all.



Physical Products in Web/Mobile Channels (Figure i.3)

Over the past decade a new class of product has emerged, where *BOTH the product and the channel are bits* (see Figure i.4). Startups can now be built for thousands rather than millions of dollars and in weeks rather than years. As a result, the number of startups founded each year has exploded. New applications such as social networks that duplicate the socialization we once had face-to-face are being mediated via machine. Search engines that scour the web, such as Google and Bing, exist only in bits, in a web/mobile channel.

More important, entire industries that started by selling physical products in physical locations have begun their migration to bits sold over the Internet. Originally, people sold books, music, videos, movies, travel, and stocks and bonds either face-to-face or in storefronts. Those channels are either radically transformed or disappearing as physical products turn into bits.



Software Products In Web/Mobile Channels (Figure i.4)

Speed, Time and Iterations: the "Second Industrial Revolution"

Regardless of the business, any enterprise focused on the bottom righthand box in figure i.1—Physical Goods Sold through a Physical Channel—has discovered over the past decade that the old rules and tools for physical businesses and channels no longer apply. They've learned that the closer a company gets to a web/mobile channel and a web/mobile product, the faster it can change, test and optimize both *product and offer*. They need a new process to quickly adapt to the new freedoms a web/mobile channel and product allow, and they've found it in Customer Development.

The Customer Development process gathers customer feedback about product, channel, price, and positioning, all of which can be modified and tested in near-real time, and uses it as immediate feedback to iterate and optimize. As a result, web/mobile channel startups can move forward at "Internet speed," an impossibility with physical distribution channels and products.

A mere decade ago, getting feedback on the features of a video game required recruiting focus groups to come in and play the game while being observed through one-way mirrors. Today, companies like Zynga test and tune the features of their

online games in days. Are sales slow because the game is too hard? You can adjust the scoring or other game variables and change the product itself quicker than you can say touchdown.

Customer Development is the process to organize the search for the business model.

Theoretically, when startups' products and channels are bits, they can gather and act on information 100 times faster than companies delivering physical goods via physical sales channels (10 times the number of iterative learning cycles, each using only 10 percent of the cash.) In fact, companies like Facebook, Google, Groupon, and Zynga grew faster in a decade than most industrial corporations grew in the 20th century. That's why we call it the Second Industrial Revolution.