

THE LEAN SERIES

Alistair Croll & Benjamin Yoskovitz

# LEAN ANALYTICS

Use Data to Build a  
Better Startup Faster

O'REILLY®

Eric Ries, Series Editor

# **Lean Analytics: Use Data to Build a Better Startup Faster**

**Alistair Croll**

**Benjamin Yoskovitz**



Beijing • Cambridge • Farnham • Köln • Sebastopol • Tokyo

# Praise for Lean Analytics

---

*“Your competition will use this book to outgrow you.”*

—Mike Volpe—CMO, Hubspot

*“Everyone has data, the key is figuring out what pieces will improve your learning and decision making. Everyone knows they need metrics, but finding ones that are specific, measurable, actionable, relevant, and timely is a huge challenge. In Lean Analytics, Ben and Alistair have done a masterful job showing us how to use data and metrics to peer through the haze of uncertainty that surrounds creating new businesses and products. This book is a huge gift to our industry.”*

—Zach Nies—Chief Technologist, Rally Software

*“Lean Analytics is the missing piece of Lean Startup, with practical and detailed research, advice and guidance that can help you succeed faster in a startup or large organization.”*

—Dan Martell—CEO and Founder, Clarity

*“Entrepreneurs need their own reality distortion field to tilt at improbable windmills. But that delusion can be their undoing if they start lying to themselves. This book is the antidote. Alistair and Ben have written a much-needed dose of reality, and entrepreneurs who ignore this data-driven approach do so at their peril.”*

—Brad Feld—Managing Director, Foundry Group; Co-founder, TechStars; and Creator, the Startup Revolution series of books

*“Lean Analytics will take you from Minimum Viable Product to Maximally Valuable Product. It’s as useful for product managers at today’s multi-billion dollar companies as it is for entrepreneurs who aspire to build those of tomorrow.”*

—John Stormer—Senior Director of New Products, Salesforce

*“The bad news is, there will always be people out there smarter than you. The good news is, Alistair and Ben are those guys. Using Lean Analytics will give you the edge you need.”*

—Julien Smith—New York Times bestselling author of *Trust Agents* and *The Flinch*

*“At Twitter, analytics has been key to understanding our users and growing our business. Smart startups need to embrace a data-driven approach if they’re going to compete on a level playing field, and this book shows you how.”*

—Kevin Weil—Director of Product, Revenue, Twitter

*“A must-read on how to integrate analytics deep into an emerging product, and take the guesswork out of business success.”*

—Peter Yared—CTO/CIO, CBS Interactive

*“Lean Analytics is a detailed explanation of the data-driven approach to running a business. Thoughtfully composed by two experienced entrepreneurs, this is a book I will make part of my training materials at Sincerely, Inc., and all future companies.”*

—Matt Brezina—Founder, Sincerely, Inc., and Xobni

*“Pearson’s Law states, ‘That which is measured improves.’ Croll and Yoskovitz extend our understanding of Lean management by bringing rigorous measurement techniques to a new frontier: the earliest stages of new product development and launch. If entrepreneurs apply their frameworks, they should see reduced waste and big improvements in startup success rates.*

—Thomas Eisenmann—Howard H. Stevenson Professor of Business Administration, Harvard Business School

*“This isn’t just a book about web analytics or business analytics—it’s a book about what organizations should and shouldn’t measure, and how to transform that data into actionable practices that will help them succeed. Alistair and Benjamin have compiled a robust set of case studies that illustrate the power of getting analytics right, and, if taken to heart, their tips and takeaways will make entrepreneurs, marketers, product and engineering folks better at what they do.”*

—Rand Fishkin—CEO and Co-founder, Moz

*“I bet you’d never imagined that success depends on your ability to fail. Fail faster, fail forward. And the secret to that success is your ability to learn and iterate quickly using data. Qualitative and quantitative. Let Alistair and Ben show you how to get to startup nirvana smarter!”*

—Avinash Kaushik—Author, *Web Analytics 2.0*

*“Lean Analytics shows you how to move insanely fast by getting your metrics to tell you when you’re failing and how to do something about it. Tons of honest, meaningful advice—a must-read for Founders who want to win.”*

—Sean Kane—Co-founder, F6S and Springboard Accelerator

*“There are only two skills that are guaranteed to reduce the chances of startup failure. One is clairvoyance; the other is in this book. Every entrepreneur should read it.”*

—Dharmesh Shah—Founder and CTO, HubSpot

*“First you need to build something people love. Then you need to attract and engage people to find and use it. Having a deep understanding of your data and metrics is fundamental in achieving this at scale. Lean Analytics is a detailed, hands-on approach to learning what it means to track the right metrics and use them to build the right products.”*

—Josh Elman—VC, Greylock Partners

*“Lean Analytics is the natural evolution of the Lean Startup movement, which began as a humble blog and has blossomed into a global movement. This book delivers concrete, hard-won insights spanning all business models and company stages. It’s a must-read for any business leader who’s looking to succeed in an increasingly data-driven world.”*

—Mark MacLeod—Chief Corporate Development Officer, FreshBooks

*“A vital part of the founder’s toolkit. If you’re starting a company, you need to read this.”*

—Mark Peter Davis—Venture Capitalist and Incubator

*“Lean Analytics is packed with practical, actionable advice and engaging case studies. You need to read this book to understand how to use data to build a better business.”*

—Paul Joyce—Co-founder and CEO, Geckoboard

*“Get this book now. Even if you’re only thinking about starting something, Lean Analytics will help. It’s a dose of tough love that will greatly increase your chances of survival and success. Start off on the right foot and read this book; you won’t regret it.”*

—Dan Debow—Co-CEO and Founder, Rypple; SVP, Work.com

*“Stop thinking and just buy this book. It’s the secret sauce. If you’re an entrepreneur, it’s required reading.”*

—Greg Isenberg—CEO, fiveby.tv; Venture Partner, Good People Ventures

*“This is a treasure for the Lean Startup movement—a dense collection of actionable advice, backed by real case studies. Lean concepts are easy to understand but often difficult to put into practice, but Lean Analytics makes the path clear and gives you the tools to measure your progress.”*

—Jason Cohen—CEO, WP Engine

*“With this book, Alistair and Ben bring a framework and lessons together for the thousands of new startups looking to do things fast and right. Time is everything as markets get continuously more efficient, and even over-capitalized quickly. Lean Analytics is great learning material for this generation of web and mobile startups.”*

—Howard Lindzon—Co-founder and CEO, Stocktwits; Managing Partner, Social Leverage; Creator, Wallstrip

*“Alistair and Ben are trusted leaders in their field already. With this book, they let you see how they got there.”*

—Chris Brogan—CEO and President, Human Business Works

*“With Lean Analytics, Ben and Alistair have, for the first time that I’ve seen, put real case studies and numbers together in an easy-to-read form, with actual successful startups as examples. These insights are hugely powerful for both early-stage founders and those at a later stage. It’s one of the few books that I know I’ll be going back to time and time again.”*

—Joel Gascoigne—Founder and CEO, Buffer

*“Daniel Patrick Moynihan famously said, ‘Everyone is entitled to his own opinion, but not to his own facts.’ This is never more true than in business. One of the best things about working with Alistair Croll is how he cuts through opinion with facts, turning marketing into learning, and product development into a conversation with customers.”*

—Tim O’Reilly—Founder and CEO, O’Reilly Media, Inc.

*“Not more numbers, but actionable metrics. In Lean Analytics, Alistair and Ben teach you how to cut through the fog of data and focus on the right key metrics that make the difference between succeeding and failing.”*

—Ash Maurya—Founder and CEO, Spark59 and WiredReach; author, *Running Lean*

*“We live in a day and age where data and analytics can (finally!) be used by anyone and everyone. If you’re not leveraging the power of data and analytics to figure out what works and what doesn’t, then you’re working in the dark. Listen to Alistair and Ben: they’re not only the light switch to get you out of the dark, but they know how the entire power plant runs. I can’t think of two people I would turn to quicker if I had a startup and wanted to leverage the power of data to make my business a success.”*

—Mitch Joel—President, Twist Image; author, *Ctrl Alt Delete*

*“Many entrepreneurs are overwhelmed by data they don’t know what to do with and by metrics that aren’t helpful in running their business. Lean Analytics tells important stories from many businesses—with real data—to provide a framework to define the right metrics and use them to execute better. Highly recommended!”*

—Mike Greenfield—Founder, Circle of Moms and Team Rankings

*“Lean Analytics helps you cut through the clutter and show you how to measure what really matters.”*

—Rajesh Setty—Serial Entrepreneur and Business Alchemist, [rajeshsetty.com](http://rajeshsetty.com)

*“I’ve heard way too many early entrepreneurs (myself included!) bristle at letting data drive product design. ‘It’s my product—how could users know better than me?’ This book, with its wealth of relatable stories and examples, lays out in clear terms exactly how and why analytics can help. It’s a shortcut to a lesson that can otherwise take painfully long to learn.”*

—Dan Melinger—Co-founder and CEO, Socialight

*“Ben and Alistair are startup experts in their own right, but they really went out of their way to solicit advice and input from as many other real-world practitioners as possible when writing this book. Their effort really pays off—Lean Analytics is chock-full of high-quality techniques for building your startup, put in terms that even a first-time entrepreneur can understand.”*

—Bill D’Alessandro—Partner, Skyway Ventures

*“Are you in search of what to measure, how to measure it, and how to act on that data in order to grow your startup? Lean Analytics gives you exactly that.”*

—Rob Walling—Author, *Start Small, Stay Small: A Developer’s Guide to Launching a Startup*

*“You need this book if you’re an entrepreneur looking to get an edge with your data.”*

—Massimo Farina—Co-founder, Static Pixels

*“Every entrepreneur’s goal is to follow the most efficient path to success, but you rarely know that path going in. Lean Analytics demonstrates the process of leveraging very specific metrics to find your business’s unique path, in a way that new entrepreneurs and veterans alike can understand.”*

—Ryan Vaughn—Founder, Varsity News Network

---

*For Riley, who's already mastered the art of asking "why" five times.*

—Alistair

*For my brother, Jacob, who passed away too soon, but inspires me still to challenge myself and take risks.*

—Ben

# Special Upgrade Offer

---

If you purchased this ebook directly from [oreilly.com](https://oreilly.com), you have the following benefits:

- DRM-free ebooks—use your ebooks across devices without restrictions or limitations
- Multiple formats—use on your laptop, tablet, or phone
- Lifetime access, with free updates
- Dropbox syncing—your files, anywhere

If you purchased this ebook from another retailer, you can upgrade your ebook to take advantage of all these benefits for just \$4.99. [Click here](#) to access your ebook upgrade.

*Please note that upgrade offers are not available from sample content.*

# Foreword

---

For some reason, the Lean Startup movement has proven excellent at producing bumper stickers. Odds are, if you're reading this, you know some of our most popular additions to the business lexicon: pivot, minimum viable product, Build-Measure-Learn, continuous deployment, or Steve Blank's famous "get out of the building." Some of these you can already buy on a t-shirt.

Given that the past few years of my life have been dedicated to promoting these concepts, I am not now trying to diminish their importance. We are living through a transformation in the way work is done, and these concepts are key elements of that change. The Lean Series is dedicated to bringing this transformation to life by moving beyond the bumper stickers and diving deep into the details.

*Lean Analytics* takes this mission to a whole new level.

On the surface, this new world seems exciting and bold. Innovation, new sources of growth, the glory of product/market fit and the agony of failures and pivots all make for riveting drama. But all of this work rests on a foundation made of far more boring stuff: accounting, math, and metrics. And the traditional accounting metrics—when applied to the uncertainties of innovation—are surprisingly dangerous. We call them vanity metrics, the numbers that make you feel good but seriously mislead. Avoiding them requires a whole new accounting discipline, which I call "innovation accounting."

Trust me, as an entrepreneur, I had no interest in accounting as a subject. To be honest, in far too many of my companies, the accounting was incredibly simple anyway: revenue, margins, free cash flows—they were all zero.

But accounting is at the heart of our modern management techniques. Since the days of Frederick Winslow Taylor, we have assessed the skill of managers by comparing their results to the forecast. Beat the plan, get a promotion. Miss the plan, and your stock price declines. And for some kinds of products, this works just fine. Accurate forecasting requires a long and stable operating history from which to make the forecast. The longer and more stable, the more accurate.

And yet who really feels like the world is getting more and more stable every day? Whenever conditions change, or we attempt to change them by introducing a truly new product, accurate forecasting becomes nearly impossible. And without that yardstick, how do we evaluate if we're making progress? If we're busy building the wrong product, why should we be proud to be doing it on time and on budget? This is the reason we need a new understanding of how to measure progress, both for ourselves as entrepreneurs and managers, as investors in the companies we fund, and the teams

under our purview.

That is why an accounting revolution is required if we're to succeed in this new era of work. And Ben and Alistair have done the incredibly hard work of surveying the best thinking on the metrics and analytics, gathering in-depth examples, and breaking new ground in presenting their own frameworks for figuring out which metrics matter, and when. Their work collecting industry-wide benchmarks to use for a variety of key metrics is worth the price of admission all by itself.

This is not a theoretical work, but a guide for all practitioners who seek new sources of growth. I wish you happy hunting.

Eric Ries

San Francisco

February 4, 2013

# Preface

---

The Lean Startup movement is galvanizing a generation of entrepreneurs. It helps you identify the riskiest parts of your business plan, then finds ways to reduce those risks in a quick, iterative cycle of learning. Most of its insights boil down to one sentence: *Don't sell what you can make; make what you can sell.* And that means figuring out what people want to buy.

Unfortunately, it's hard to know what people really want. Many times, they don't know themselves. When they tell you, it's often what they think you want to hear.<sup>[1]</sup> What's worse, as a founder and entrepreneur, you have strong, almost overwhelming preconceptions about how other people think, and these color your decisions in subtle and insidious ways.

Analytics can help. Measuring something makes you accountable. You're forced to confront inconvenient truths. And you don't spend your life and your money building something nobody wants.

*Lean Startup* helps you structure your progress and identify the riskiest parts of your business, then learn about them quickly so you can adapt. *Lean Analytics* is used to measure that progress, helping you to ask the most important questions and get clear answers quickly.

In this book we show you how to figure out your business model and your stage of growth. We'll explain how to find the One Metric That Matters to you right now, and how to draw a line in the sand so you know when to step on the gas and when to slam on the brakes.

Lean Analytics is the dashboard for every stage of your business, from validating whether a problem is real, to identifying your customers, to deciding what to build, to positioning yourself favorably with a potential acquirer. It can't force you to act on data—but it can put that data front and center, making it harder for you to ignore, and preventing you from driving off the road entirely.

## Who This Book Is For

This book is for the entrepreneur trying to build something innovative. We'll walk you through the analytical process, from idea generation to achieving product/market fit and beyond, so this book both is for those starting their entrepreneurial journey as well as those in the middle of it.

Web analysts and data scientists may also find this book useful, because it shows how to move beyond traditional “funnel visualizations” and connect their work to more meaningful business discussions. Similarly, business professionals involved in product development, product management, marketing, public relations, and investing will find much of the content relevant, as it will help them understand and assess startups.

Most of the tools and techniques we'll cover were first applied to consumer web applications. Today, however, they matter to a far broader audience: independent local businesses, election managers, business-to-business startups, rogue civil servants trying to change the system from within, and “intrapreneurs” innovating within big, established organizations.<sup>[2]</sup>

In that respect, *Lean Analytics* is for anyone trying to make his or her organization more effective. As we wrote this book, we talked with tiny family businesses, global corporations, fledgling startups, campaign organizers, charities, and even religious groups, all of whom were putting lean, analytical approaches to work in their organizations.

## How This Book Works

There's lots of information in this book. We interviewed over a hundred founders, investors, intrapreneurs, and innovators, many of whom shared their stories with us, and we've included more than 30 case studies. We've also listed more than a dozen best-practice patterns you can apply right away. And we've broken the content into four big parts.

- **Part I** focuses on an understanding of Lean Startup and basic analytics, and the data-informed mindset you'll need to succeed. We review a number of existing frameworks for building your startup and introduce our own, analytics-focused one. This is your primer for the world of Lean Analytics. At the end of this section, you'll have a good understanding of fundamental analytics.
- **Part II** shows you how to apply Lean Analytics to your startup. We look at six sample business models and the five stages that every startup goes through as it discovers the right product and the best target market. We also talk about finding the One Metric That Matters to your business. When you're done, you'll know what business you're in, what stage you're at, and what to work on.
- **Part III** looks at what's normal. Unless you have a line in the sand, you don't know whether you're doing well or badly. By reading this section, you'll get some good baselines for key metrics and learn how to set your own targets.
- **Part IV** shows you how to apply Lean Analytics to your organization, changing the culture of consumer- and business-focused startups as well as established businesses. After all, data-driven approaches apply to more than just new companies.

At the end of most chapters, we've included questions you can answer to help you apply what you've read.

## The Building Blocks

Lean Analytics doesn't exist in a vacuum. We're an extension of Lean Startup, heavily influenced by customer development and other concepts that have come before. It's important to understand those building blocks before diving in.

### Customer Development

*Customer development*—a term coined by entrepreneur and professor Steve Blank—took direct aim at the outdated, “build it and they will come” waterfall method of building products and companies. Customer development is focused on collecting

continuous feedback that will have a material impact on the direction of a product and business, every step of the way.

Blank first defined customer development in his book *The Four Steps to the Epiphany* (Cafepress.com) and refined his ideas with Bob Dorf in *The Startup Owner's Manual* (K & S Ranch). His definition of a startup is one of the most important concepts in his work:

*A startup is an organization formed to search for a scalable and repeatable business model.*

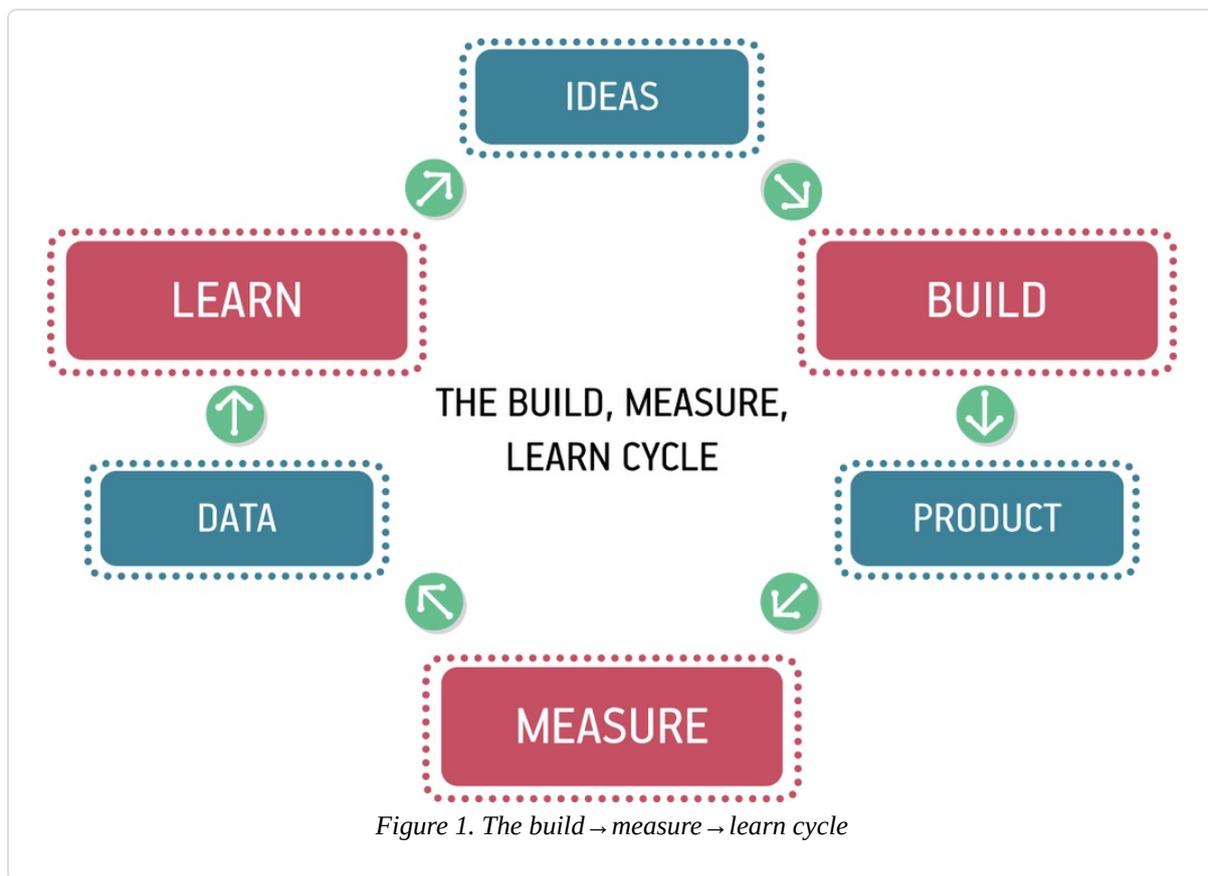
Keep that definition in mind as you read the rest of this book.

## **Lean Startup**

Eric Ries defined the Lean Startup process when he combined customer development, Agile software development methodologies, and Lean manufacturing practices into a framework for developing products and businesses quickly and efficiently.

First applied to new companies, Eric's work is now being used by organizations of all sizes to disrupt and innovate. After all, Lean isn't about being cheap or small, it's about eliminating waste and moving quickly, which is good for organizations of any size.

One of Lean Startup's core concepts is *build* → *measure* → *learn*—the process by which you do everything, from establishing a vision to building product features to developing channels and marketing strategies, as shown in **Figure 1**. Within that cycle, *Lean Analytics* focuses on the *measure* stage. The faster your organization iterates through the cycle, the more quickly you'll find the right product and market. If you measure better, you're more likely to succeed.



The cycle isn't just a way of improving your product. It's also a good reality check. Building the minimum product necessary is part of what Eric calls *innovation accounting*, which helps you objectively measure how you're doing. Lean Analytics is a way of quantifying your innovation, getting you closer and closer to a continuous reality check—in other words, to reality itself.

## We'd Like to Hear from You

Please address comments and questions concerning this book to the publisher:

O'Reilly Media, Inc.

1005 Gravenstein Highway North

Sebastopol, CA 95472

(800) 998-9938 (in the United States or Canada)

(707) 829-0515 (international or local)

(707) 829-0104 (fax)

We have a web page for this book where we list errata, examples, and any additional

information. You can access this page at:

[http://oreil.ly/lean\\_analytics](http://oreil.ly/lean_analytics)

The authors also maintain a website for this book at:

<http://leananalyticsbook.com/>

To comment or ask technical questions about this book, send email to:

[bookquestions@oreilly.com](mailto:bookquestions@oreilly.com)

For more information about our books, courses, conferences, and news, see our website at <http://www.oreilly.com>.

Find us on Facebook: <http://facebook.com/oreilly>

Follow us on Twitter: <http://twitter.com/oreillymedia>

Watch us on YouTube: <http://www.youtube.com/oreillymedia>

## **Safari® Books Online**

Safari Books Online ([www.safaribooksonline.com](http://www.safaribooksonline.com)) is an on-demand digital library that delivers expert content in both book and video form from the world's leading authors in technology and business.

Technology professionals, software developers, web designers, and business and creative professionals use Safari Books Online as their primary resource for research, problem solving, learning, and certification training.

Safari Books Online offers a range of product mixes and pricing programs for organizations, government agencies, and individuals. Subscribers have access to thousands of books, training videos, and prepublication manuscripts in one fully searchable database from publishers like O'Reilly Media, Prentice Hall Professional, Addison-Wesley Professional, Microsoft Press, Sams, Que, Peachpit Press, Focal Press, Cisco Press, John Wiley & Sons, Syngress, Morgan Kaufmann, IBM Redbooks, Packt, Adobe Press, FT Press, Apress, Manning, New Riders, McGraw-Hill, Jones & Bartlett, Course Technology, and dozens more. For more information about Safari Books Online, please visit us online.

## **Thanks and Acknowledgments**

This book took a year to write, but decades to learn. It was more of a team effort than most, with dozens of founders, investors, and innovators sharing their stories online and off. Our personal blog readers, as well as the hundreds of subscribers to our Lean Analytics blog who gave us feedback, deserve much of the credit for the clever parts; we deserve all of the blame for the bad bits.

Mary Treseler was the voice of our readers and called us out when we strayed too far into jargon. Our families stayed amazingly patient and helped with several rounds of reading and editing. We sent early copies of critical chapters to reviewers, who verified our assumptions and checked our math, and many of them contributed so much useful feedback that they're practically co-authors. Sonia Gaballa of Nudge Design did great work with our website, and the production team at O'Reilly put up with our unreasonable demands and constant changes. And folks at Totango, Price Intelligently, Chartbeat, Startup Compass, and others all dug into anonymized customer data to enlighten us on things like Software as a Service, pricing, engagement, and average metrics.

But most of all, we want to thank people who challenged us, shared with us, and opened their kimonos to tell us the good and bad parts of startups, often having to fight for approval to talk publicly. Some weren't able to, despite their best efforts, and we'll leave their stories for another day—but every piece of feedback helped shape this book and our understanding of how analytics and Lean Startup methods intertwine.

---

[1] <http://www.forbes.com/sites/jerrymclaughlin/2012/05/01/would-you-do-this-to-boost-sales-by-20-or-more/>

[2] An intrapreneur is an entrepreneur within a large organization, often fighting political rather than financial battles and trying to promote change from within.

# Part I. Stop Lying to Yourself

---

In this part of the book, we'll look at why you need data to succeed. We'll tackle some basic analytical concepts like qualitative and quantitative data, vanity metrics, correlation, cohorts, segmentation, and leading indicators. We'll consider the perils of being too data-driven. And we'll even think a bit about what you should be doing with your life.

*It depends on what the meaning of the word "is" is.*

—William Jefferson Clinton

# Chapter 1. We're All Liars

---

Let's face it: you're delusional.

We're all delusional—some more than others. Entrepreneurs are the most delusional of all.

Entrepreneurs are particularly good at lying to themselves. Lying may even be a prerequisite for succeeding as an entrepreneur—after all, you need to convince others that something is true in the absence of good, hard evidence. You need believers to take a leap of faith with you. As an entrepreneur, you need to live in a semi-delusional state just to survive the inevitable rollercoaster ride of running your startup.

Small lies are essential. They create your reality distortion field. They are a necessary part of being an entrepreneur. But if you start believing your own hype, you won't survive. You'll go too far into the bubble you've created, and you won't come out until you hit the wall—hard—and that bubble bursts.

You need to lie to yourself, but not to the point where you're jeopardizing your business.

*That's where data comes in.*

Your delusions, no matter how convincing, will wither under the harsh light of data. Analytics is the necessary counterweight to lying, the yin to the yang of hyperbole. Moreover, data-driven learning is the cornerstone of success in startups. It's how you learn what's working and iterate toward the right product and market before the money runs out.

We're not suggesting that gut instinct is a bad thing. Instincts are inspiration, and you'll need to listen to your gut and rely on it throughout the startup journey. But don't disembowel yourself. Guts matter; you've just got to test them. *Instincts are experiments. Data is proof.*

## The Lean Startup Movement

Innovation is hard work—harder than most people realize. This is true whether you're a lone startup trying to disrupt an industry or a rogue employee challenging the status quo, tilting at corporate windmills and steering around bureaucratic roadblocks. We get it. Entrepreneurship is crazy, bordering on absurd.

Lean Startup provides a framework by which you can more rigorously go about the business of creating something new. Lean Startup delivers a heavy dose of intellectual honesty. Follow the Lean model, and it becomes increasingly hard to lie, especially to

yourself.

There's a reason the Lean Startup movement has taken off now. We're in the midst of a fundamental shift in how companies are built. It's vanishingly cheap to create the first version of something. Clouds are free. Social media is free. Competitive research is free. Even billing and transactions are free.<sup>[3]</sup> We live in a digital world, and the bits don't cost anything.

That means you can build something, measure its effect, and learn from it to build something better the next time. You can iterate quickly, deciding early on if you should double down on your idea or fold and move on to the next one. And that's where analytics comes in. Learning doesn't happen accidentally. It's an integral part of the Lean process.

Management guru and author Peter Drucker famously observed, "If you can't measure it, you can't manage it."<sup>[4]</sup> Nowhere is this truer than in the Lean model, where successful entrepreneurs build the product, the go-to-market strategy, and the systems by which to learn what customers want—simultaneously.

## **Poking a Hole in Your Reality Distortion Field**

Most entrepreneurs have been crushed, usually more than once. If you haven't been solidly trounced on a regular basis, you're probably doing it wrong, and aren't taking the risks you need to succeed in a big way.

But there's a moment on the startup rollercoaster where the whole thing comes right off the rails. It's truly failed. There's little more to do than turn off the website and close down the bank account. You're overwhelmed, the challenges are too great, and it's over. You've failed.

Long before the actual derailment, you knew this was going to happen. It wasn't working. But at the time, your reality distortion field was strong enough to keep you going on faith and fumes alone. As a result, you hit the wall at a million miles an hour, lying to yourself the whole time.

We're not arguing against the importance of the reality distortion field—but we do want to poke a few holes in it. Hopefully, as a result, you'll see the derailment in time to avoid it. We want you to rely less on your reality distortion field, and rely more on Lean Analytics.

## **Airbnb Photography—Growth Within Growth**

Airbnb is an incredible success story. In just a few years, the company has become a