Bootstrapping a Software Product

Lessons learned building and running a hosted web application as a solo founder.

Hi, I'm Garrett Dimon

Founder, designer, and developer of Sifter which is a very simple hosted bug and issue tracker.



About Sifter

Smallish Ruby on Rails App

- 2 Web/Application Servers
- 2 Database Servers (Master & Slave)
- 1 Job Server
- ~10,000 Active Users
- ~60 requests per minute
- ~250 requests per minute at peak

Disclaimer

These are simple opinions based off of our experiences. Every person, team, and application is different. Take it with a grain of salt.

There are plenty of successful businesses for which this stuff wouldn't be true.

Bootstrapping

Growing the business from profit. (as opposed to outside investment*)

^{*}We actually started with \$16,000. We spent \$10,000 on startup costs. We spent the other \$6,000 on advertising after launch. Totally possible to do it with less, but the money made it much less stressful.

Software Product

Digital stuff that you sell for money.*
(as opposed to consulting or services)

*It should literally make money when you're asleep. In our case, billing runs nightly and automatically puts money into our account. Services businesses can't scale exponentially. One person can only do so much work.

Examples...

- * Icons
- **★** Templates (Keynote Kung Fu)
- ★ Mobile Apps
- ★ Desktop Apps
- ★ Web Apps
- **★** PDFs or eBooks
- * Screencasts
- **★** Online Workshops (to some degree)

Idea - Profit

Hopes & Dreams

No Bureaucracy
Control Your Destiny
Mailbox Money
Do Fun Stuff*
Flexibility*
Family Time*
Get Rich*

Fears (Excuses?)

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Health & Disability Insurance
Not Enough Money*
Not Enough Skills*
Not Enough Time*
Not Enough Experience*
No Good Ideas / Crowded Market*
Failure*
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If this is what you'r expecting, you might want to think twice...



You should probably expect something more like this...



It's really a bit more like this...



1. Getting Ready

Start with a little money. Be ready to be broke. Anticipate a long journey.

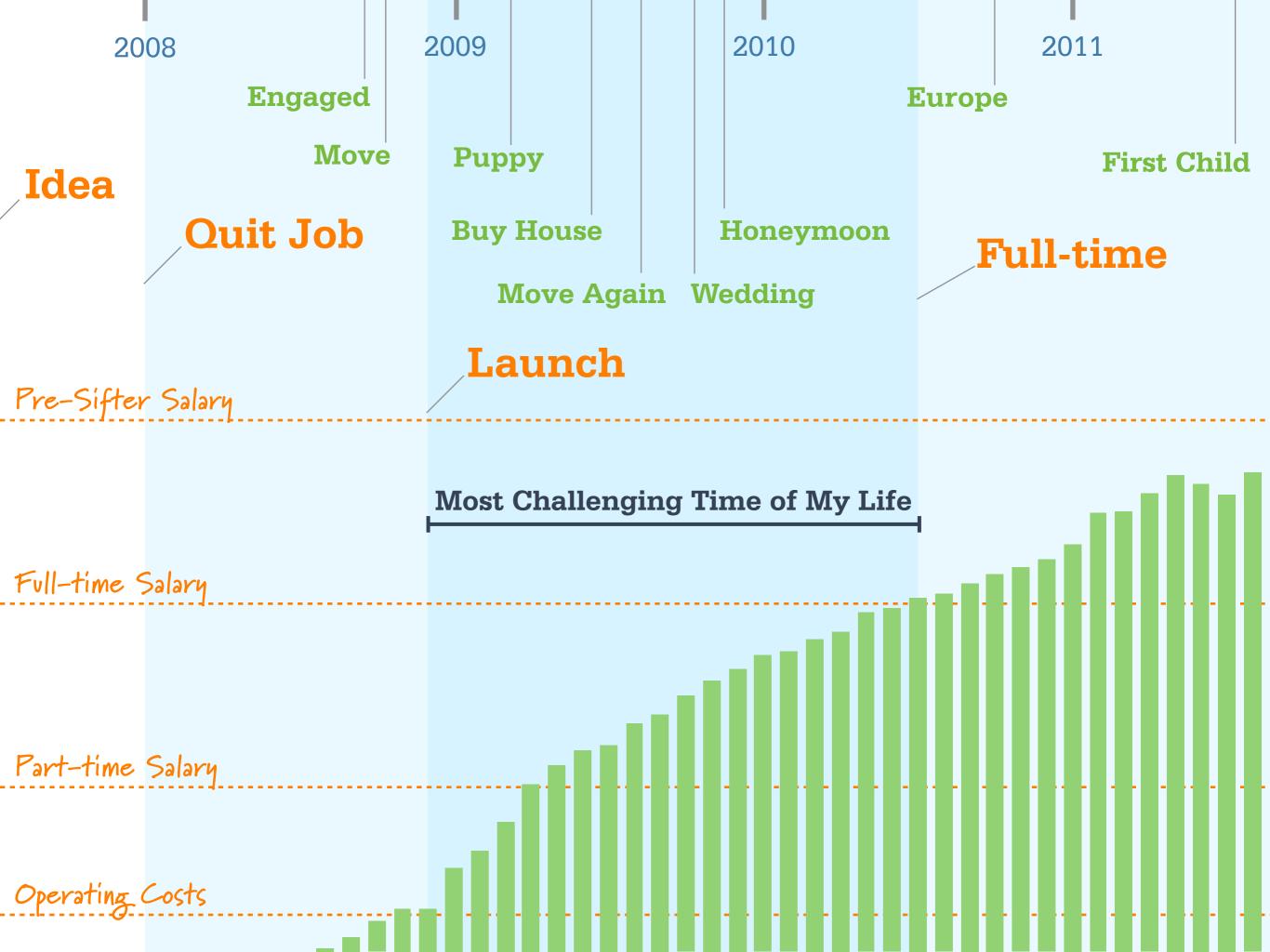
Explore. Still on the fence.



Prepare. Committed, but haven't shipped.

Transition. From part-time to full-time.

Work. Answering to paying customers.





Didn't put my life on hold.

Got engaged, married, bought a house, moved twice, went on a honeymoon, went to Europe, and had a child. Point being that while it's not easy to make sweeping life changes, it's certainly not impossible.

Bad Decision



Failed to recognize the stress it put on my wife.

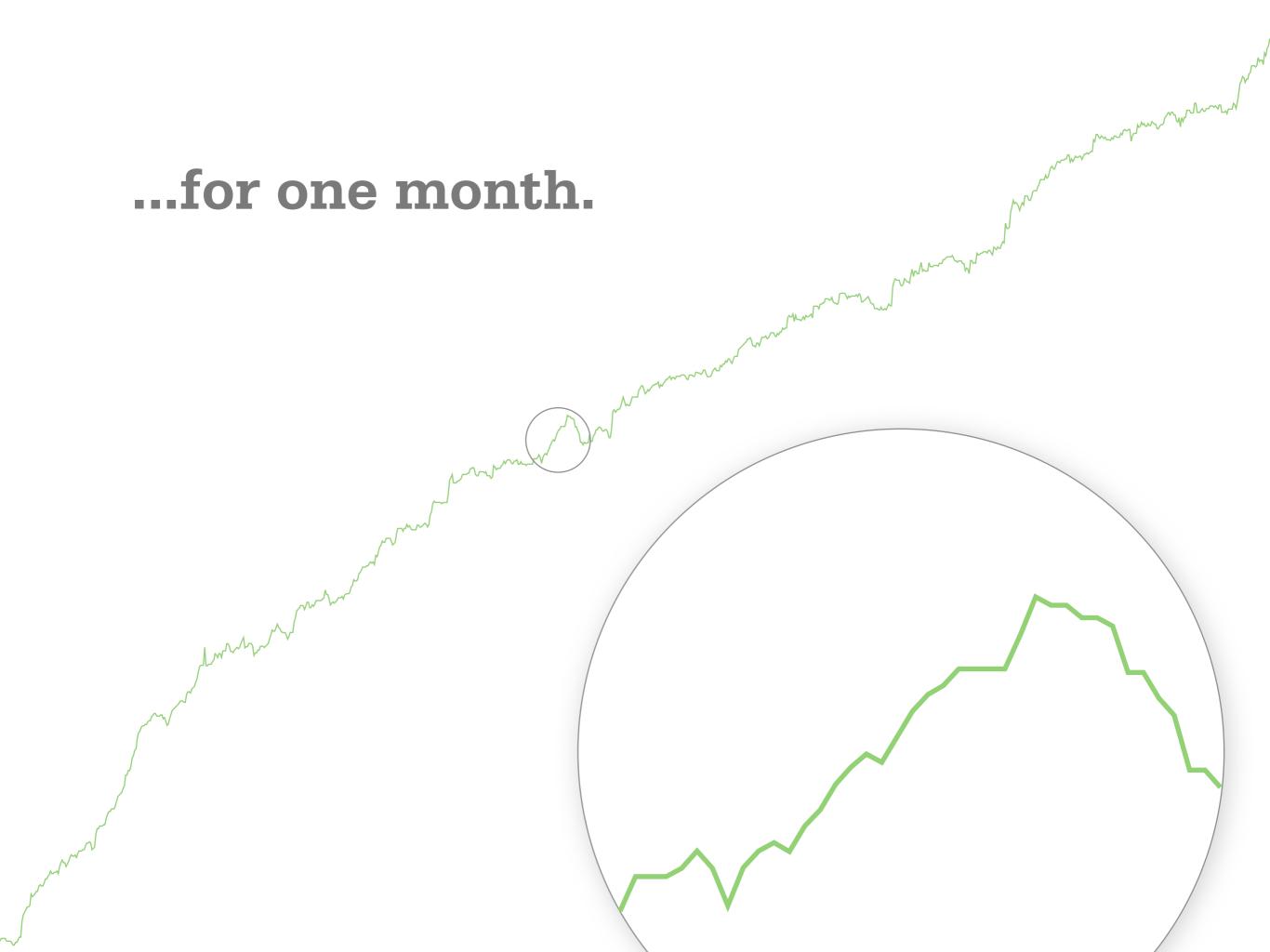
Sifter consumed an incredible amount of attention the first couple of years. Even when I wasn't working on it, I was thinking about it.

First and foremost, a start-up puts you on an emotional roller coaster unlike anything you have ever experienced. You flip rapidly from day-to-day one where you are euphorically convinced you are going to own the world, to a day in which doom seems only weeks away and you feel completely ruined, and back again. Over and over and over. And I'm talking about what happens to stable entrepreneurs.

Marc Andreessen

Our revenue growth...





Bad Decision



Focused too much on shortterm ups and downs.

Now, I try not to worry about anything until it's been a trend for a week. (That's not to say I ignore it. I just don't worry about it until it's a "real" problem.)





Looked back every few months at accomplishments.

Day-to-day it felt like we weren't getting anywhere, but looking at three months at a time, it was a different story.



Bad Decision



Let fraud get the best of me.

We had it under control. Cost us \$200 in fees, but I let it consume me for two weeks.



Went all-in and planned for it to be more than a side project.

With operating costs, \$1,000/mo. of revenue is nothing, and running a hosted web app isn't worth it. It didn't get "easy" until it supported me full-time and had profit of its own.



Got a business partner.

He brought more business knowledge and took a lot of the operational burden off of me. (Accounting, legal, insurance, etc.) Also, cash.



Brought on a technology advisor.

Helped with a lot of early tech decisions as well as helping us find our current systems administrator.

Bad Decision



Didn't get a tech partner.

I'm more of a designer first and developer second. Keith is more of a business person. Would have been nice to have someone focused exclusively on tech. Ultimately managed just fine, though.



One person has controlling interest and decision making responsibilities.

At some point, there needs to be a goto person. Mixed messages and blurred visions cause problems.

Bad Decision



Lacked confidence in myself.

Had our advisor work on it part-time instead of taking the leap myself. Early on, nobody was better for the company than I was.

2. Product Strategy

Focus, customers, feature requests, launching, and iterating.

Which of the following features are "must have for launch"?

- A) Emil Interration
- B) Atta hm nts
- C) Search
- D) API
- E) Mil stones
- F) O enID
- G) ext Formatting





Launched early.

Sifter didn't have search, file uploading, email integration, API, milestones, or OpenID. We still don't have text formatting.



Didn't add features as a knee-jerk reaction to a request.

Often, we'd get one request one day and the exact opposite request the next day.



Explained decision-making about including or excluding features to customers.

Forced us to think things through, and usually elicited good conversation to validate or invalidate an idea.



No custom statuses. This one decision defines Sifter.

This is simultaneously the number one complaint and number one favorite feature. It's polarizing. Keeping it simple has given us so much flexibility.



Made decisions too quickly.

Debating between a couple of minutes of downtime vs. 20 minutes of downtime. Making the decision too quickly led to bigger problems.



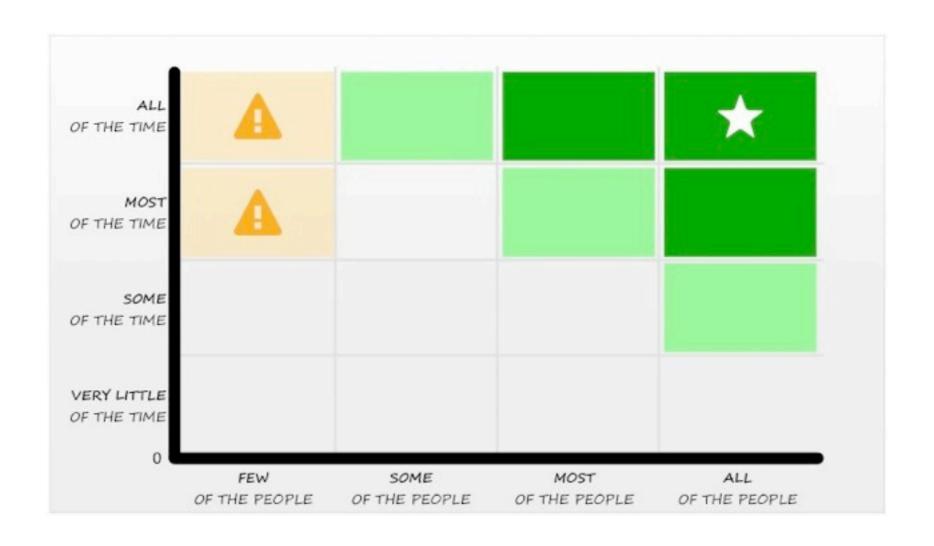
Handled bad situation with complete openness and honesty.

Made a mistake that led to 8 hours of data loss. Offered credit to all affected customers. Cost us about 10% of that month's revenue. All customers were understanding and grateful.



Fell into the feature trap.

Spent 2 months building features that only get used 2.3% of the time. The vocal minority can be very distracting.





Used data to guide decisions.

Customers ask for a feature. I check their account usage, our analytics, and Sifter logs for trends and usually find better solutions.



Embraced criticism.

If people take the time to criticize, it's because they feel that the product is already pretty solid. If it's way off, they don't say anything at all.



Worried about cancellations.

Added exit interview to understand cancelation reasons. Almost all cancellations are small companies or freelancers that used Sifter for 1 project and the project is over.



Take ridiculously good care of customers.

I never take time off, and it's rare for a customer to wait more than an hour for a response from support. Always same day.



Obsess about taking care of customers.

I would stress out if it took me longer than an hour to answer an email. Nobody ever expected hourturnaround except me. I'm harder on myself than even our most demanding customers.



Recognize toxic customers.

From time-to-time, customers lie or do other shady things. Best to just do whatever it takes to make them happy and move on. Spending time on toxic customers only hurts your other customers.



Let customers put accounts on hold indefinitely.

Was idealistic and thinking people would go on hold for 2-3 months at a time. 85% never returned. They simply went on hold instead of canceling. We continue to have an obligation, and they don't.



Advertised early.

Initial advertising got the word out. Subsequent advertising was significantly less effective.



Continued advertising.

Ultimately spent almost \$10,000 on advertising, but only the first \$5,000 was truly worth it. Might do some advertising once 2.0 is out, but probably won't.



Wrote. Blogged. Shared. Explained.

Built an audience. Validated ideas. Forced me to clarify my thinking. Writing and explaining things has a weird way of forcing you to understand something better than you would have otherwise.



Didn't worry about people stealing our ideas.

By the time they copy what you're doing, you'll be on to the next thing. They'll always be a step behind.

3. Pricing & Profit

Understanding value and making money.



Charged money during beta.

Not for revenue, but to filter people and test the billing system. We charged \$5 per month just as a barrier to entry. People will use any piece of crap software if it's free.

When you have to prove the value of your ideas by persuading other people to pay for them, it clears out an awful lot of woolly thinking.

Tim O'Reilly



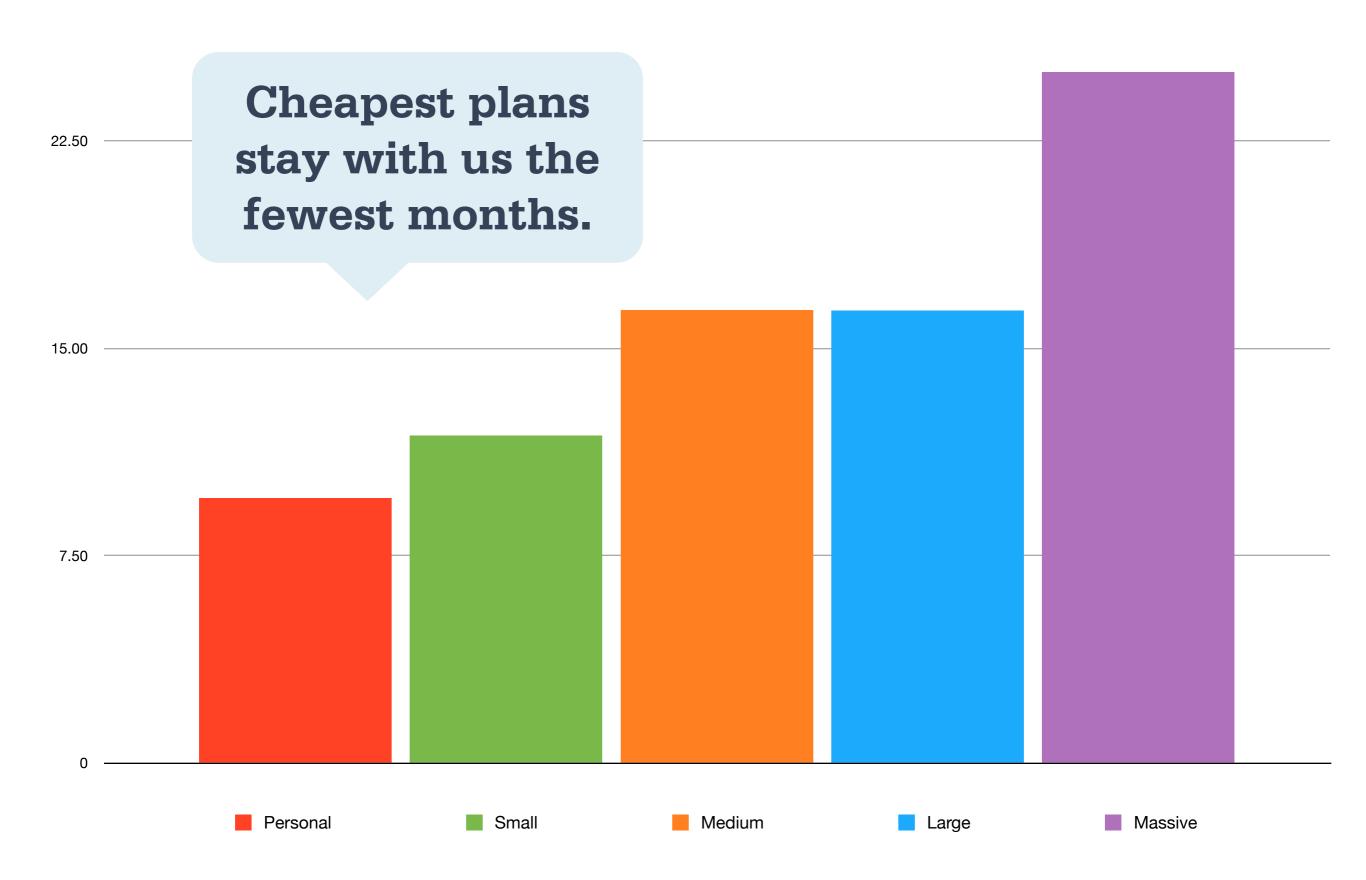
Didn't do free accounts or discounts.

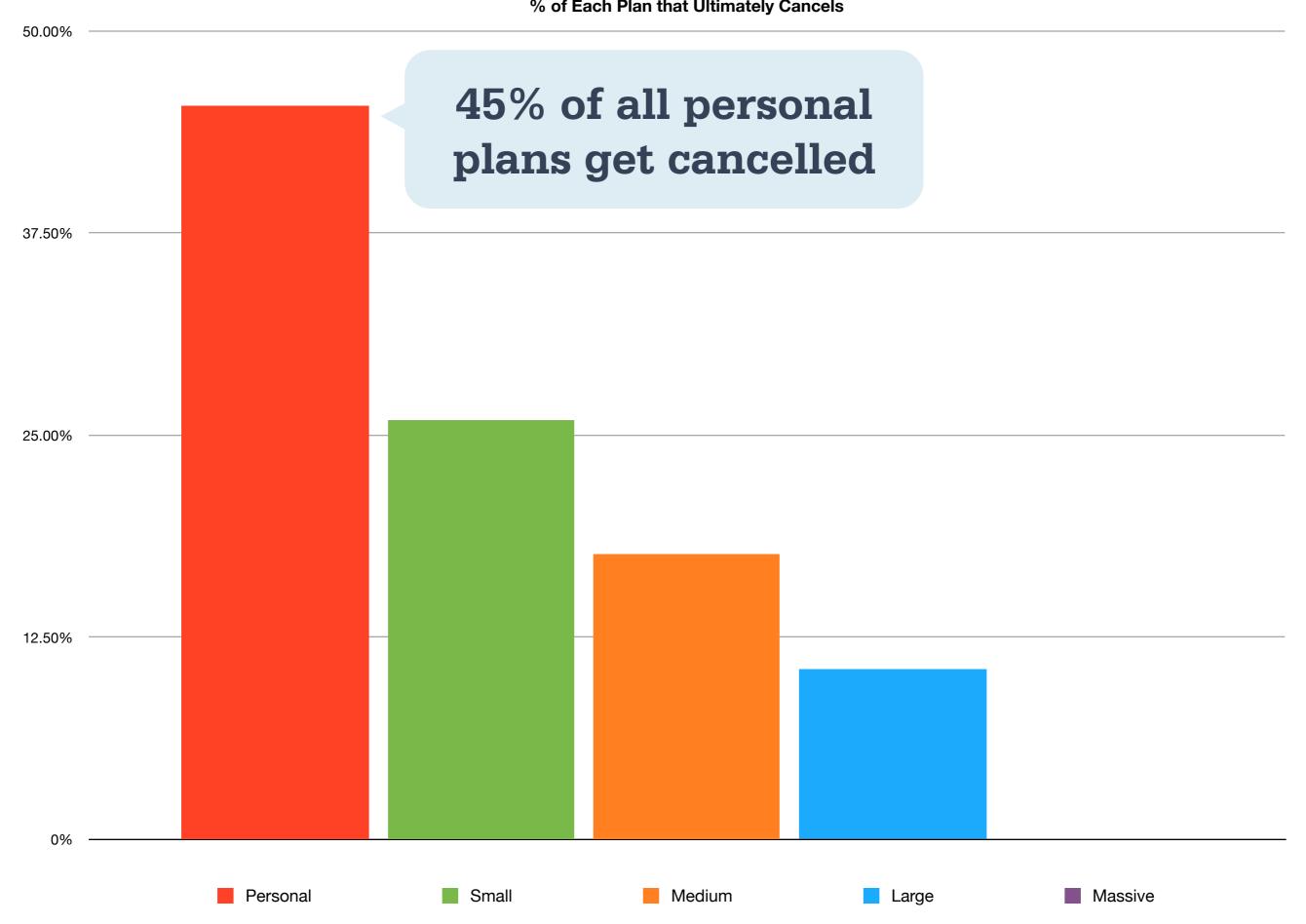
People will use anything if it's free. We want people to use it because they like it, not because it's free. Also, those generally make for the worst customers.

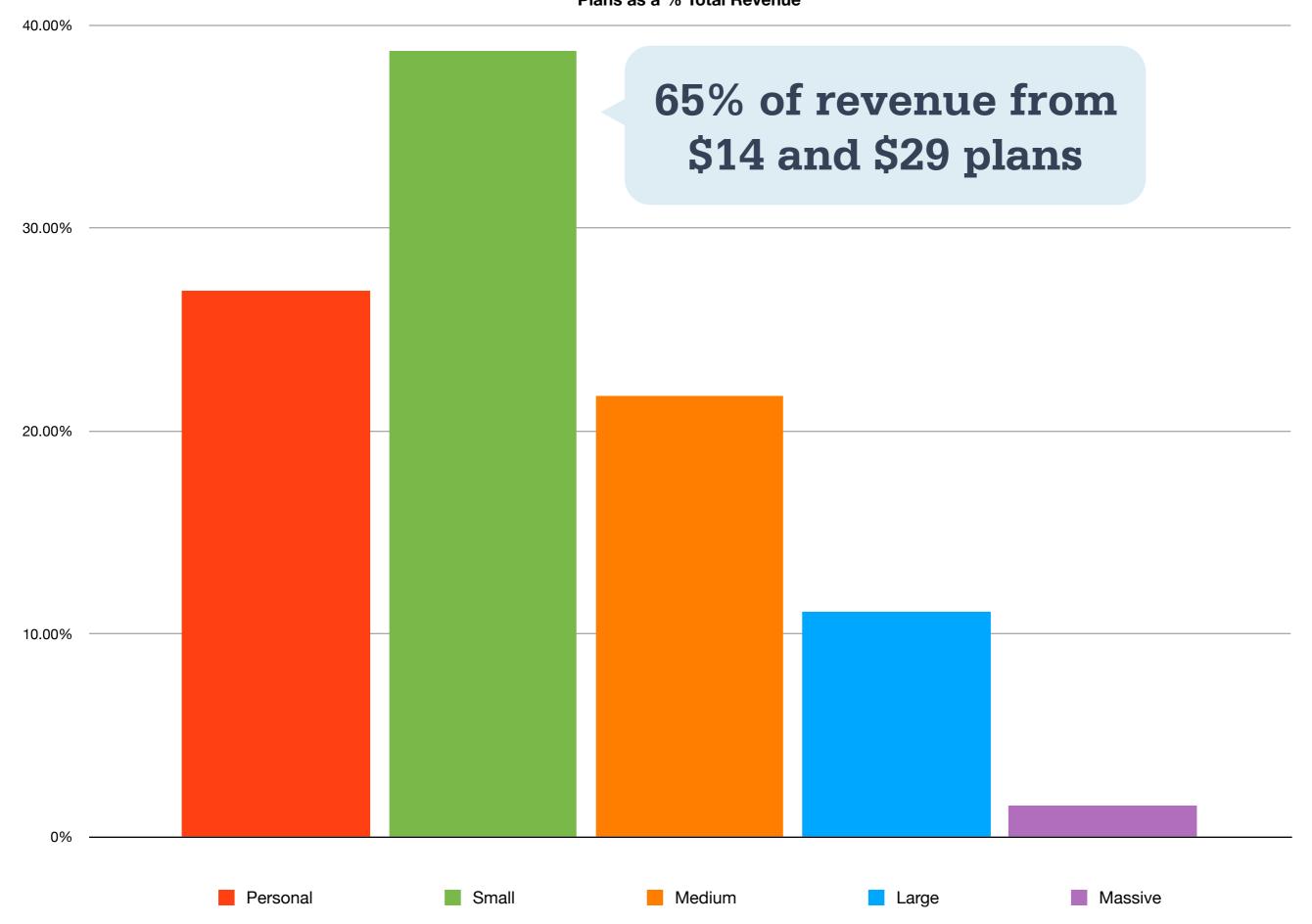


"Raised" prices.

Lowest price plans turnover rapidly and generally have more demanding users.









Aimed for monthly profitability. And didn't outgrow our revenue.

Weren't afraid to spend money, but tried to make sure that we always ended the month with more money than we started. A yearly budget is key because many significant costs are not monthly and would otherwise be off the radar until it's too late.



Run billing daily.

Constant stream of income, and billing problems only affect a small portion of customers.



Kept personal costs low.

No office space. No debt. Could have done better, though. You will be your company's single biggest cost center.



Watched financials like a hawk.

Kept a close eye on our bottom line, cash flow, and money in the bank.



Watched financials too closely.

I updated our numbers almost daily, and kept too much detail. Weekly is more than enough.

Know Your Costs

Hosting

Performance Monitoring

Source Code Management

Uptime Monitoring

Transactional Email

DNS Management

Exception Management

File Storage

Transaction Fees

SSL

Bookkeeping

Accounting

Legal

System Administration

Team Software

Business Insurance

Health Insurance

Merchant Account

Domains

Your Cost of Living

4. Tech & Operations

Start simple. Delay complexity.



Didn't open source the application.

If it wasn't providing my income, I wouldn't have made time for it. Would have been too difficult to stay excited about the vision.



Built our own billing system.

To our credit, we didn't have much of a choice at the time. These days there are plenty of choices.



Bootstrapping forced us to scale cautiously.

By letting our profits determine how much we invested in the company, we couldn't spend time on the wrong things.

Researchers found that certain factors – such age and gender of founders, location, and previous entrepreneurial experience – have little bearing on a startup's likelihood of failure. The most consistent predictor of failure, rather, was a startup's propensity to engage in premature scaling.

Startup Genome Project

Interviewed 3200 Startups

(Quote is really focused on "high-growth" startups.)



Waited too long to go full-time SSL.

The cost is negligible, and the value is infinite. With web applications, it's expected these days.



Obsessively worried about downtime.

In 3 years, we've had about 8 hours of unplanned downtime. Only half of that was under our control. I spent 8760 hours worrying about it.



Didn't obsess over automated testing.

Building a business, not a test suite. Sifter simply wasn't complicated enough in the beginning and we didn't know what we were building.



Didn't obsess over automated testing.

We did a little, but not much. We've definitely had to add it in as we go and as Sifter becomes more complex.



Waited too long to goto a high availability hosting environment.

The setup isn't trivial, and the up front costs are significant, but it's worth it. Easier to scale. More redundant. More insulated from problems. Faster.



http://bootstrapping.sifterapp.com

Thanks! Questions?

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