

Good enough engineering to start an internet company

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LISTEN NOTES

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Internet companies



Goals

- Starting an internet company is not hard...
- Know the existence of some tools...
 - There's a tool / service for that

Listen Notes

- Podcast search engine
- [ListenNotes.com](https://listennotes.com)

Office

- [WeWork](#)



Incorporation

- [Stripe Atlas](#)
 - ~10 days
 - Free \$5K AWS credits + some other perks
- \$500 one-time payment
- ~\$2000/year for taxes, accounting...

Legal stuffs...

- [Clerky](#)
 - Some common documents for fund raising, hiring contractors...
- [UpCounsel](#)
 - Uber for lawyers...
- Ask a friend...

Good Enough Domain Name

- [Namecheap](#) or [Godaddy](#)
- \$10/year to get a good enough .com
- \$100k+ to get a great one

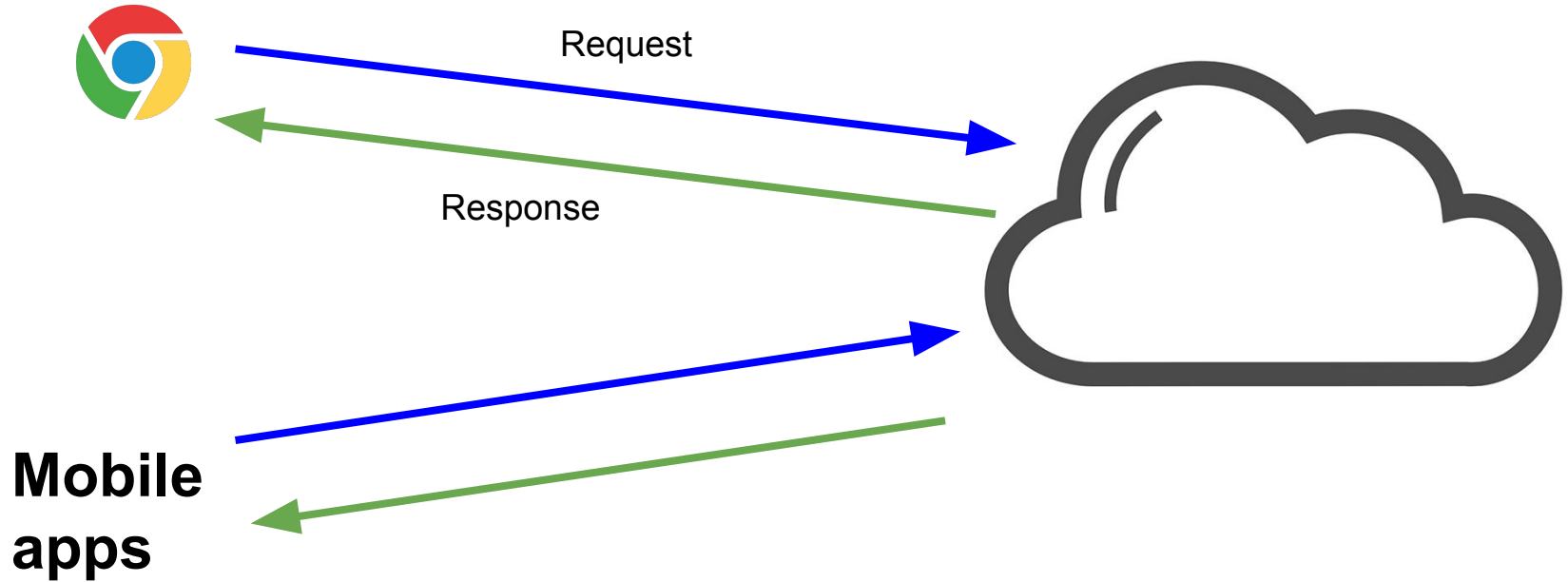
Examples:

- thefacebook.com (2004) => [facebook.com \(\\$200k, in 2005\)](#)
- getdropbox.com (June 2007) => [dropbox.com \(\\$300k, in Oct 2009\)](#)

Pro Tips

- Get social accounts as well.
 - `twitter.com/YourDomainName`
 - `instagram.com/YourDomainName`
 - ...
- Company email: `@mycompany.com`
 - [G Suite](#): \$6/person/month

Online services



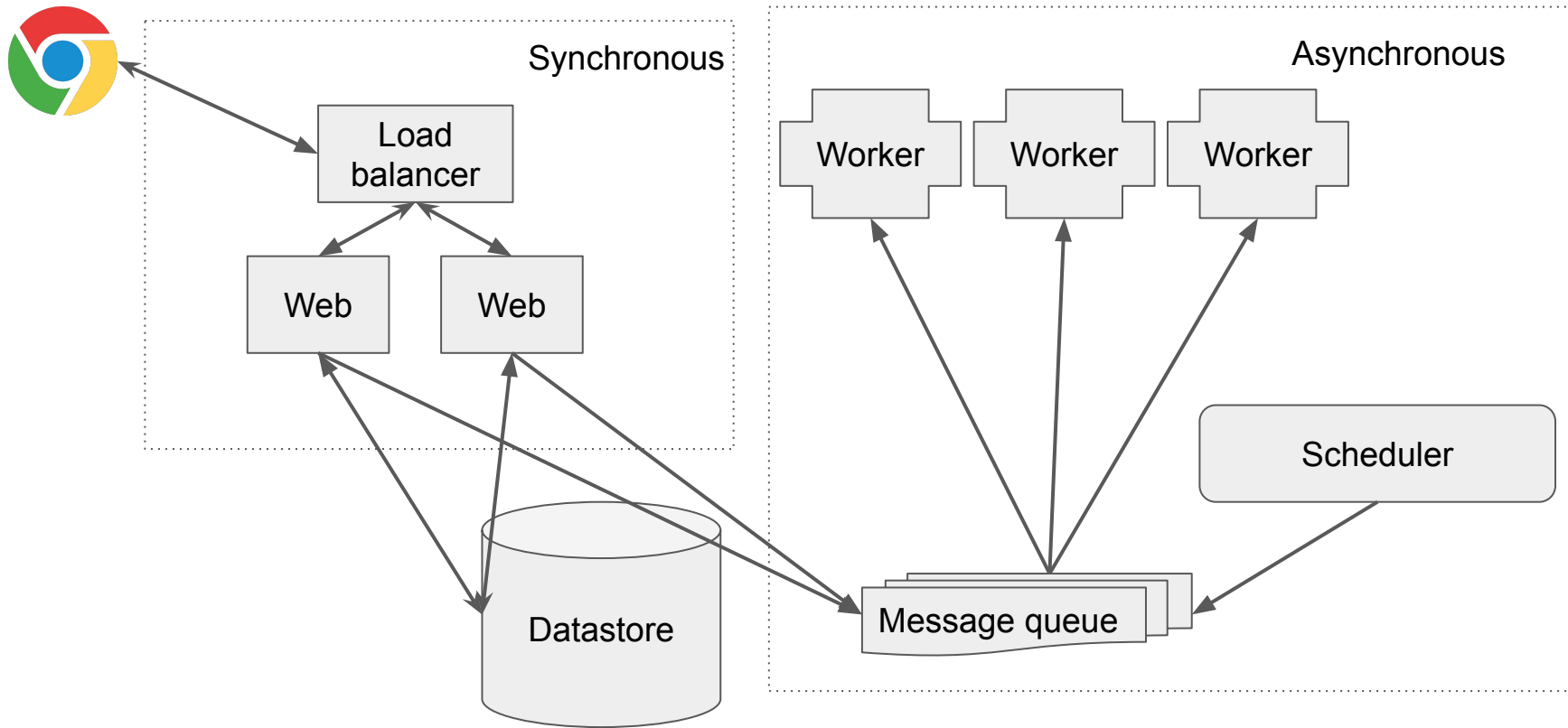
Good Enough Servers

VPS (Virtual Private Servers)

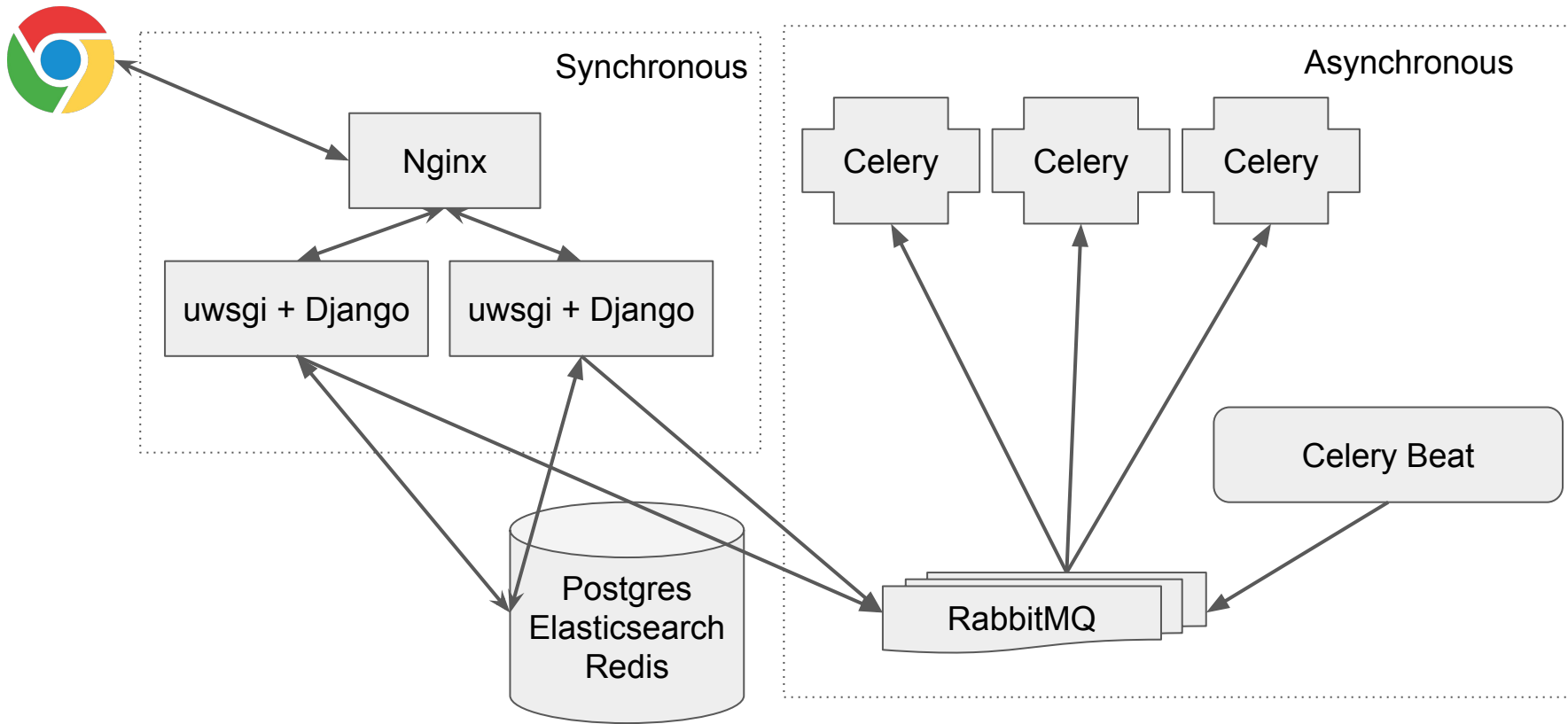
- [DigitalOcean](#) or [AWS lightsail](#)
- \$5/month to start

A VPS = root@ip address

Backend Architecture



Backend Tech Stack of Listen Notes



Pro Tips

- Use a process manager ([systemd](#) or [supervisord](#))

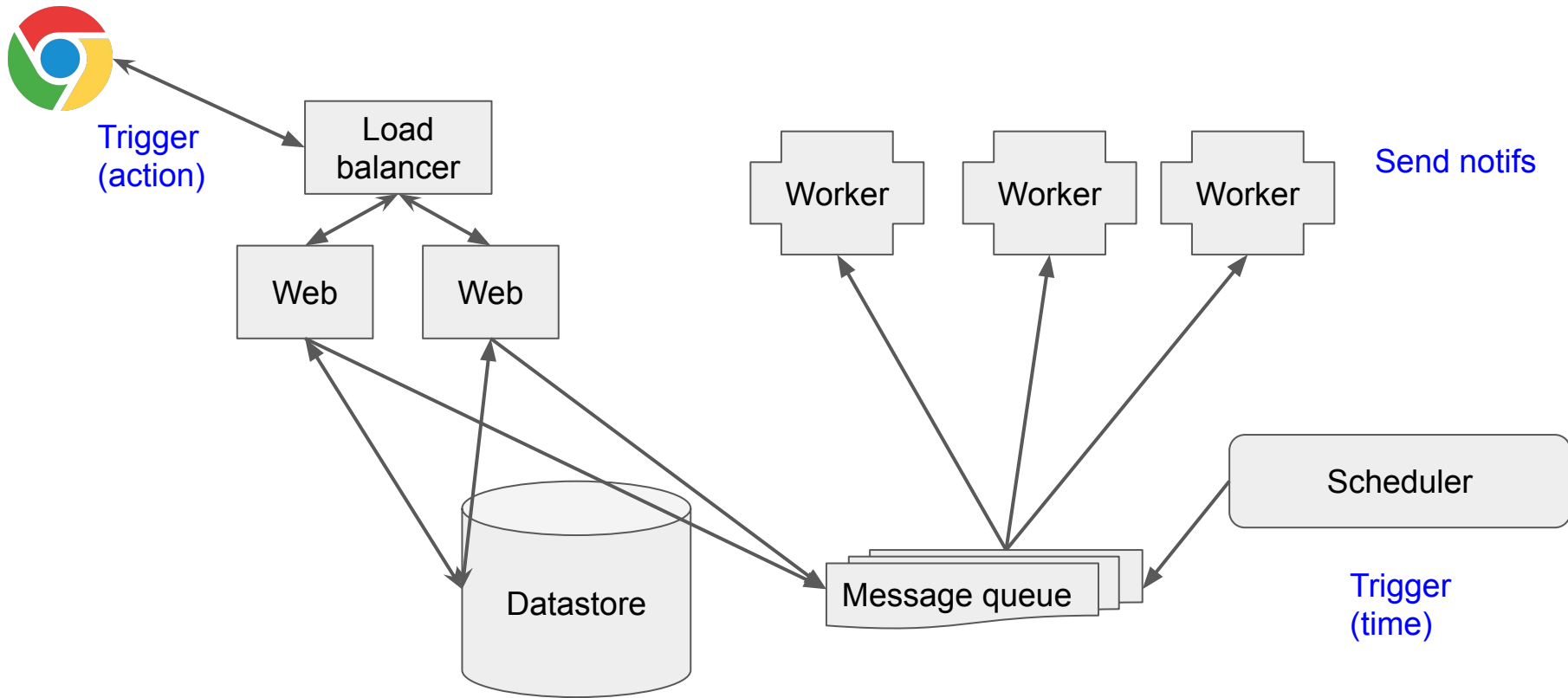
Recommendations:

- See tech stacks of real companies: stackshare.io/stacks
- Podcast: [Software Engineering Daily](#)

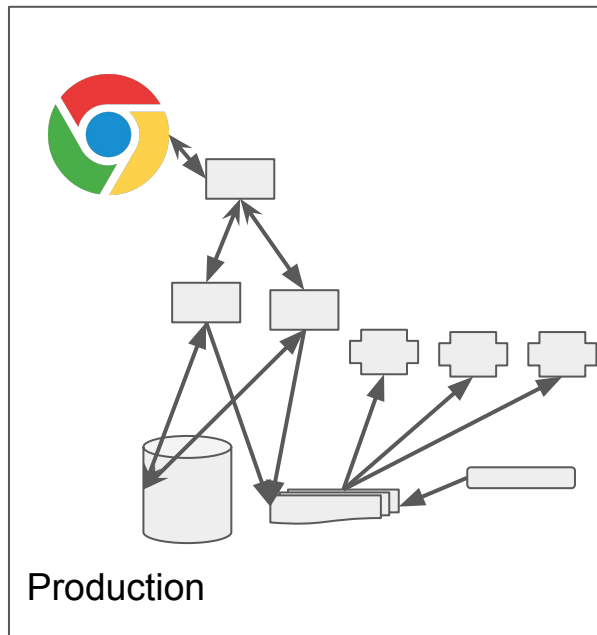
Sending notifications to users

- Why?
 - a. Notify users something happens (transactional)
 - b. Marketing
- Email
 - a. [Sendgrid](#) / [SES](#)
 - b. Mailchimp
- SMS
 - a. [Twilio](#)
- Push notification
 - a. iOS / Android

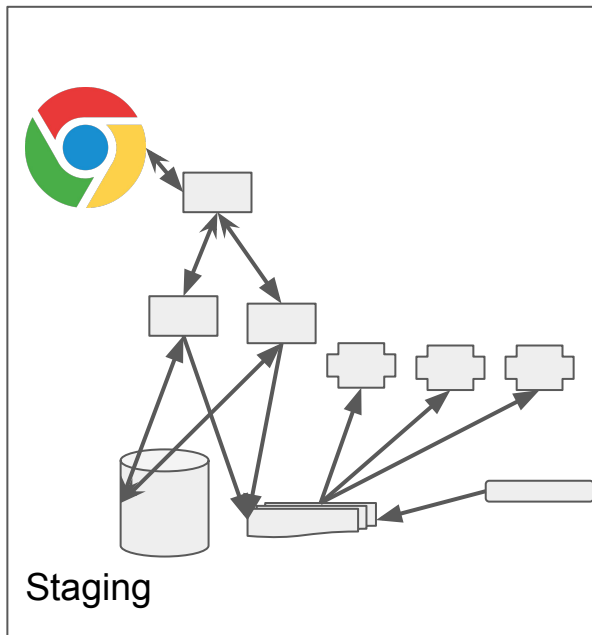
Sending notifications to users



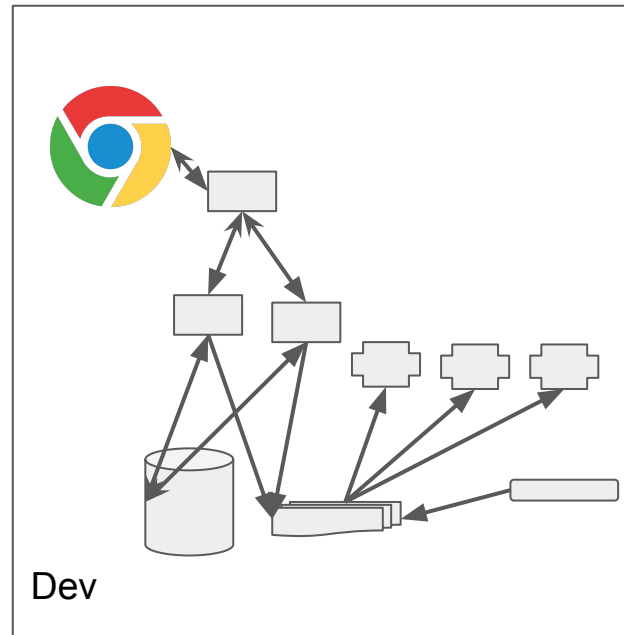
Environments



All users



Employees



Yourself

Dev

- [Vagrant](#) + [Virtualbox](#)
- [PyCharm](#)
- Git / [Bitbucket](#)

Listen Notes

Apps on different platforms...

- **Web (Reactjs + Bootstrap)**
- iOS
- Android
- macOS
- Windows
- Linux
- Alexa
- ...

Pro Tips

- Start with web or iOS (Good enough)
 - Instagram launched Android app in the same month when it got acquired by Facebook for \$1B.
- Build responsive website since day 1
 - [BrowserStack](#)

Infrastructure as code

- Server provision (Terraform)
- Server configuration (Puppet, **Ansible**, Chef)

Why?

- Elastic
- Repeatable

Deployment & feature release

- Weekly deployment / continuous deployment
- Feature toggle

Monitoring & alerting

- Datadog

[Monitor Alert] Recovered: IOWait too high Inbox x



Datadog Alerting <alert@ddg.co>
to Wenbin ▾

11:18 PM (2 minutes ago)



[Recovered] IOWait too high

@admin@listennotes.com



`avg(last_5m):max:system.io.await{*} > 120`

The monitor was last triggered at Tue Mar 05 2019 07:13:31 UTC (5 mins ago).

[\[Monitor Status\]](#) · [\[Edit Monitor\]](#)

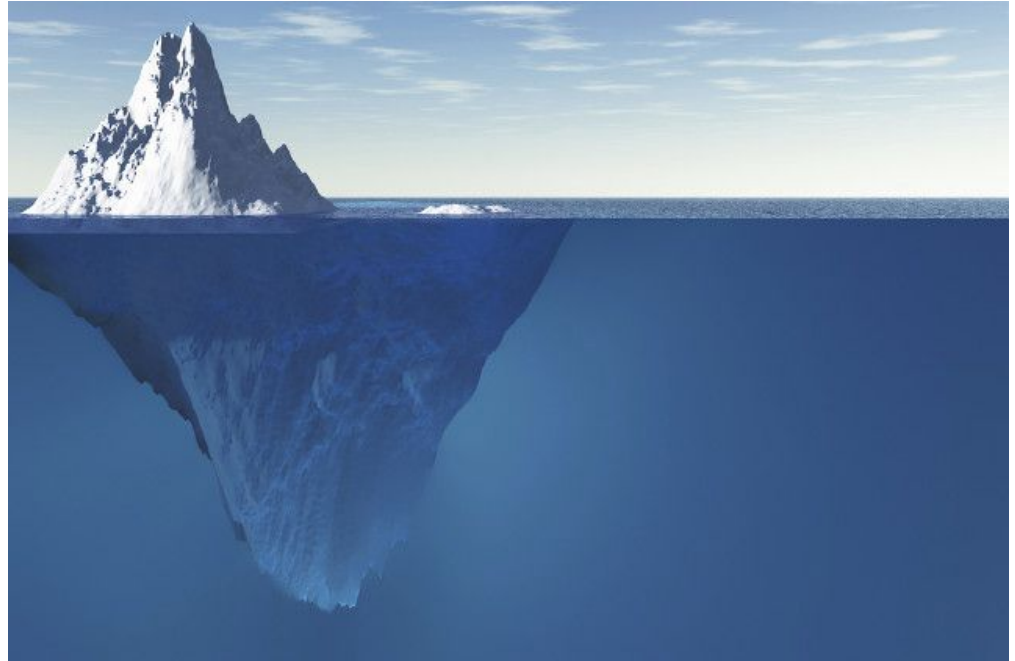
This alert was raised by account Listen Notes, Inc.

Recommendations

- [The Twelve-Factor App](#)

Internal tools

- Help development
- God's view
- Fight bad actors



Source: [TBO](#)

Ideally...

1. Start a company
2. Build a thing
3. Profit!

In reality

1. Start a company
2. Build a thing
3. Marketing
4. Make money
5. Repeat 2 ~ 4
6. Profit!

Recommendation:

- [Pinterest CEO says key to success was marketing, not engineering](#)

Marketing

- Buy ads
- Social media
-
- SEO
 - On-page / Off-page
 - Make it fast!
 - Maintain good reputation

Pro Tips

- [Search Quality Evaluator Guidelines](#)
- Know your numbers
 - [SimilarWeb](#)

Monetization

- Sell eyeballs to advertisers
 - If you are not paying, you are the product
 - How to make \$\$ from ads?
 - Direct sales
 - [Google Ad Manager](#)
 - Ads network
 - [Google Adsense](#)
 - [Carbon Ads](#)
- Sell goods / services to users
 - Stripe: [How Two Brothers Turned Seven Lines of Code Into a \\$9.2 Billion Startup](#)

Why don't you use...?

- Deep learning / AI
- Docker / Kubernetes
- Serverless
- Rust
- MongoDB
- ...

I like boring technologies

- Minimize technologies in the tech stack
- More community support
 - Easy to Google & find answers on StackOverflow :)
- Mature technologies make me sleep well at night.

Startup ideas?

Stripe, Cloudflare, Rollbar, Datadog, BrowserStack, Transifex, Carbon Ads, Digital Ocean, Linode, Sendgrid, Mailchimp, Twilio, Similar Web, Slack, stackshare...

Zucked:

<https://www.youtube.com/watch?v=xFFs9UgOAIE>

Start a company today

- Incorporation: \$500
- Domain name: \$10/year
- Server: \$5/month
- There's a tool / service for that

Questions?

This deck:

<http://bit.ly/good-enough-tech>

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