## Open Source as a Business

Strategy, Struggle & Success

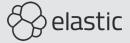
Philipp Krenn

@xeraa



### [...] allow software to be freely used, modified, and shared.

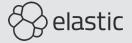
https://opensource.org/licenses



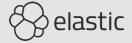
# Who is using OSS?



# Who is opening issues?



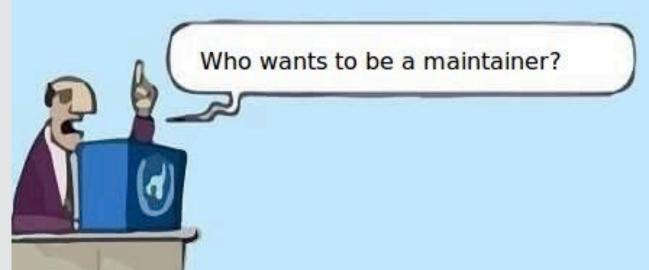
# Who is contributing back?



https://twitter.com/ geowolf/status/ 971811346823221248

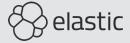




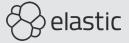


## Ninety-eight-point-five percent of the code ever put into the core of Puppet was put in there by somebody I paid.

https://www.geekwire.com/2018/might-time-big-cloud-share-wealth-open-source-startups/



## Open Source ≠ Business Model





Developer 9







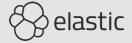




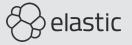


### Where is the

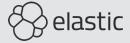




### Agenda Strategy Struggle Success

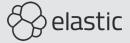


# Strategy

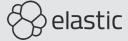


### Services

Support, Consulting, Training, Certification

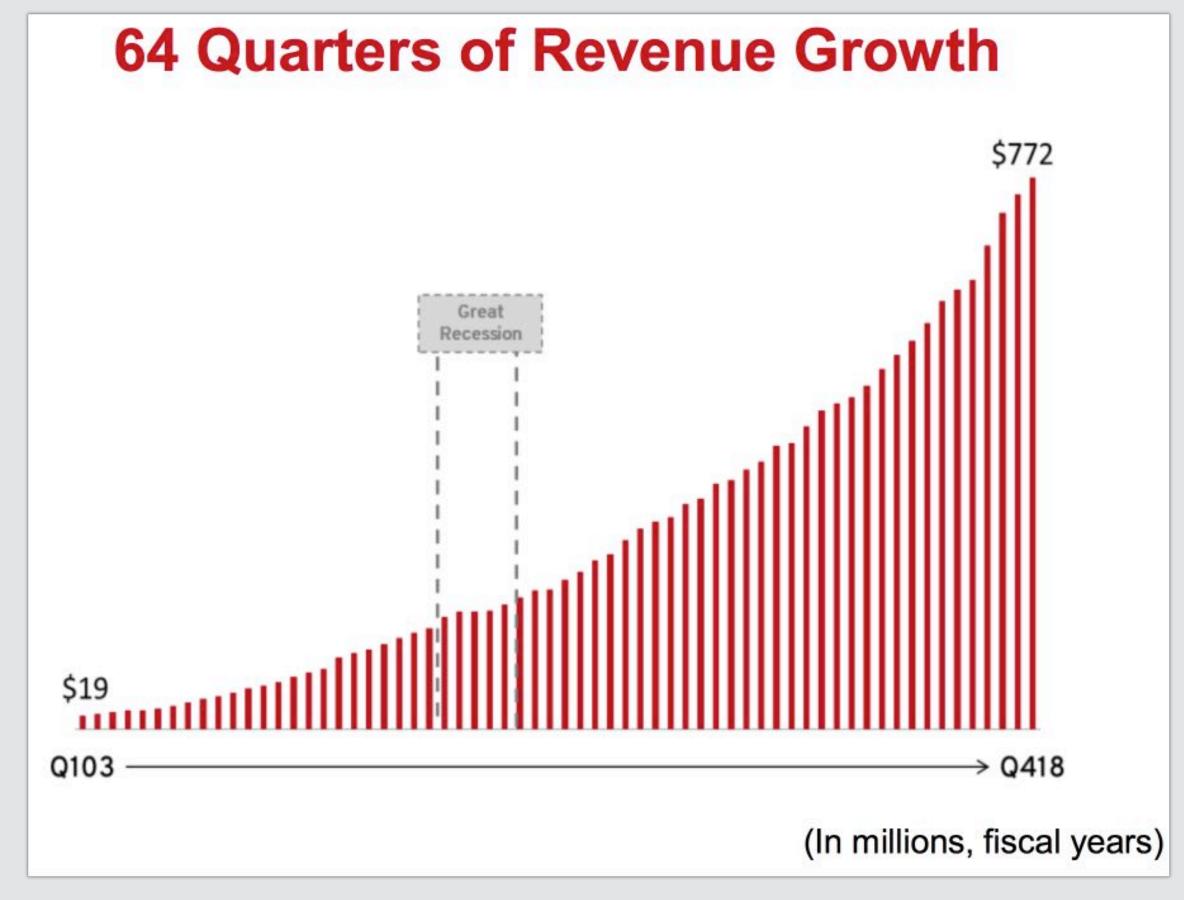


### CANONICAL





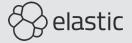






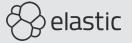
Support Problem

Ease of Use



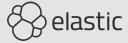
#### Support Problem

#### Renewal Rates

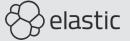


#### Service & Training Problem

#### Consulting-Only Competition



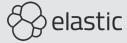
### Open Core





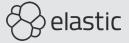


# 

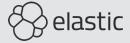




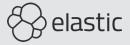
#### Competing Tools



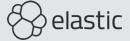
#### Cloud Providers



Lock-In



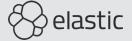
### Cloud Service





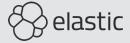


# **SENTRY**



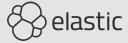


#### Cloud Providers

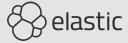


### The intent of open source software was not so that someone else can take the exact same software and offer it as a service.

https://www.geekwire.com/2018/might-time-big-cloud-share-wealth-open-source-startups/



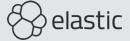








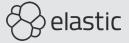
## Partnerships







## Donations



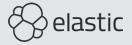




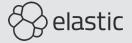
For Patreon/donations to be a viable business model, have to put in just as much work as you'd have to do selling services/product, likely ending up w less from donations

You can point to donation models that had it easy & I can point to traditional businesses that got lucky too

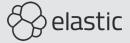
https://twitter.com/sehurlburt/status/1036091578060656640



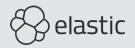
## Certified Partners



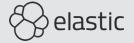
# moode



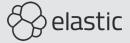
## Ads



# AdBlock



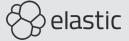
## Merchandise







# Bounties / Crowdfunding



(A)LY)(E)Z=\C\_I

## Struggle



### Contributors

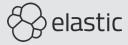


Users ••



Consumers

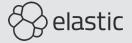






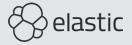
[...] Amazon, on one hand, bashes the open source ecosystem and highlights the advantage of its own tools, while at the same time taking projects like Presto, which was developed in the open by Facebook, and turning it into a packaged, revenue-generating product (the newly announced Athena service).

https://dzone.com/articles/did-amazon-just-kill-open-source

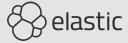


[...] If you are MSFT and I ask you if you've used Redis and you say "you mean Azure Redis Cache?", that's not a good sign.

https://twitter.com/jensenharris/status/984268950136537088

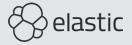






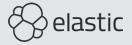
# RedisLabs Modules: AGPL Apache 2 modified with Commons Clause

RediSearch, Redis Graph, ReJSON, ReBloom, Redis-ML



Without limiting other conditions in the License, the grant of rights under the License will not include, and the License does not grant to you, the right to Sell the Software.

https://commonsclause.com



### Commons Clause

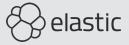
Still Open Source?
Why not AGPL?



### Confusion

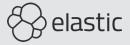
CC

Apache 2 modified with Commons Clause



Some rabid open-source wonks accused Redis Labs of trying to trick the community into thinking that modules were open source, because they used the word "Apache."

https://techcrunch.com/2018/09/07/commons-clause-stops-open-source-abuse/



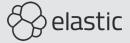
Be aware that the debate starting up about the Common Clause license due to Redis Labs adopting it will likely be heavily tainted by large corporations who have a lot of free labor to lose suddenly pretending to be huge champions of free software ideals.

https://twitter.com/taotetek/status/1032248562116186112

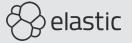


### Redis: BSD

"Redis will remain BSD licensed" http://antirez.com/news/120 "Redis is not "open core" http://antirez.com/news/121



## Philosophy







**Contact Sales** 

Products ▼

Solutions

Pricing

**Getting Started** 

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Edition ▼ Follow ▼

Search Blogs

Q

**AWS Open Source Blog** 

#### Open Source Korean Analyzer Support in Amazon Elasticsearch Service

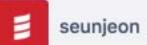
#### Need for an improved Korean analyzer in Amazon Elasticsearch Service (AES)

Processing content for search in Asian languages such as Chinese, Japanese, and Korean presents unique challenges. Typical processing done by a search engine, such as tokenizing based on whitespaces and stemming to derive root forms, is not sufficient for Asian languages, as many words are compound, with different meanings depending on their compound context. AES has improved its support for Korean language processing by adding support for the widely-used open source Korean language analyzer called the Seunjeon plugin. The launch announcement of the Seunjeon plugin support was accompanied by a blog post describing steps to use the plugin with AES. As part of the Seunjeon plugin support, we made several optimizations to the plugin to reduce its memory footprint in order to support instances running with low memory. This post covers the analysis done behind the decision to support the Seunjeon plugin, as well as details of the memory optimizations done to reduce its heap utilization.

#### Choosing the best Korean analysis plugin for Amazon Elasticsearch Service

We evaluated several Korean analysis plugins before deciding on the Seunjeon plugin. Below we cover the main alternatives that were considered along with the pros and cons of each:

- elasticsearch-analysis-openkoreantext This plugin supports all Elasticsearch versions up to 6.1.1. It uses the Twitter opensource korean-open-text module, which has a very
  powerful Korean analyzer and a built-in dictionary, and is licensed under the Apache License Version 2.0. The drawbacks of this plugin included a less-active community and the
  lack of capability to add a custom inline dictionary for tokenization. Although it provides a way to add custom dictionaries as files, they would need to be added inside the plugin
  folder in a pre-determined location which cannot be made dynamic, making adding a custom dictionary file difficult.
- 2. elasticsearch-twitter-korean This plugin only supports Elasticsearch up to version 2.3.
- 3. open-korean-text-elastic-search This plugin is obsolete and is no longer maintained.
- 4. Seunjeon This plugin supports all Elasticsearch versions up to 6.1.1, and leverages mecab-ko-dic internally to perform text analysis. It is licensed under Apache License Version 2.0 and includes the ability to specify a custom dictionary inline, as well as a relative file path. A minor shortcoming of this plugin is the necessity to edit the plugin descriptor file to use it with the newer versions of Elasticsearch (> 5.4).



Overview

<> Source

**Commits** 

**Branches** 

ໃຈ Pull requests

Pipelines

Issues

Downloads

eunjeon / eunjeon / seunjeon / Pull requests

#### Optimizing heap utilization



Author Vengadanathan

Reviewers

Description Description:

seunjeon is occupying heap of around 560 MB Initial optimization done by us reduced the heap utilization of the plugin to ~ 174 MB (around 68% reduction) in heap usage.

Profiling and metrics:

- Each query (when compared to unoptimized version of the plugin) will take additional .8-1ms (on an average) to execute because of decompression that we do when reading the feature array from memory.
- seunjeon lexiconDict is occupying heap of around 174 MB instead of existing 560 MB

Testing: All existing UT's and newly added UT's passed

#### Comments (10)



영호 유

I tested the performance of your code.

Considering the indexing-time, I tried to do a rather long document.

It took 15~20 times more time than un-patched.

```
elapsedTime = 7,326,618 us -> seunjeon
elapsedTime = 9,018,791 us -> seunjeon
elapsedTime = 8,779,136 us -> seunjeon
```







Dashboards

Projects

Issues

Log In



 $\equiv$ 

EQ



Lucene - Core / LUCENE-8231

#### Nori, a Korean analyzer based on mecab-ko-dic

□ Export ▼

#### Details

Priority:

Labels:

Type:

New Feature

Status:

RESOLVED

Major

Resolution: Fixed

Affects Version/s: None Fix Version/s:

7.4, master (8.0)

Component/s: None

None

Lucene Fields:

New

#### Description

There is a dictionary similar to IPADIC but for Korean called mecab-ko-dic:

It is available under an Apache license here:

https://bitbucket.org/eunjeon/mecab-ko-dic

This dictionary was built with MeCab, it defines a format for the features adapted for the Korean language.

Since the Kuromoji tokenizer uses the same format for the morphological analysis (left cost + right cost + word cost) I tried to adapt the module to handle Korean with the mecab-ko-dic. I've started with a POC that copies the Kuromoji module and adapts it for the mecab-ko-dic.

I used the same classes to build and read the dictionary but I had to make some modifications to handle the differences with the IPADIC and Japanese.

The resulting binary dictionary takes 28MB on disk, it's bigger than the IPADIC but mainly because the source is bigger and there are a lot of

compound and inflect terms that define a group of terms and the segmentation that can be applied.

I attached the patch that contains this new Korean module called godori nori. It is an adaptation of the Kuromoji module so currently

the two modules don't share any code. I wanted to validate the approach first and check the relevancy of the results. I

#### People

Assignee:

Unassigned

Reporter:

Jim Ferenczi

Votes: Watchers: 2 Vote for this issue 7 Start watching this issue

#### Dates

Created:

6 days ago

28/Mar/18 21:21

Resolved:

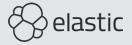
Updated:

6 days ago

If you are claiming your startup/company is open source and you aren't contributing to some form of upstream... then you aren't really.

Sorry not sorry.

https://twitter.com/jessfraz/status/954802380125736961





### ■ Elasticsearch-rails & -ruby are abandoned

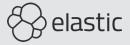
Elasticsearch



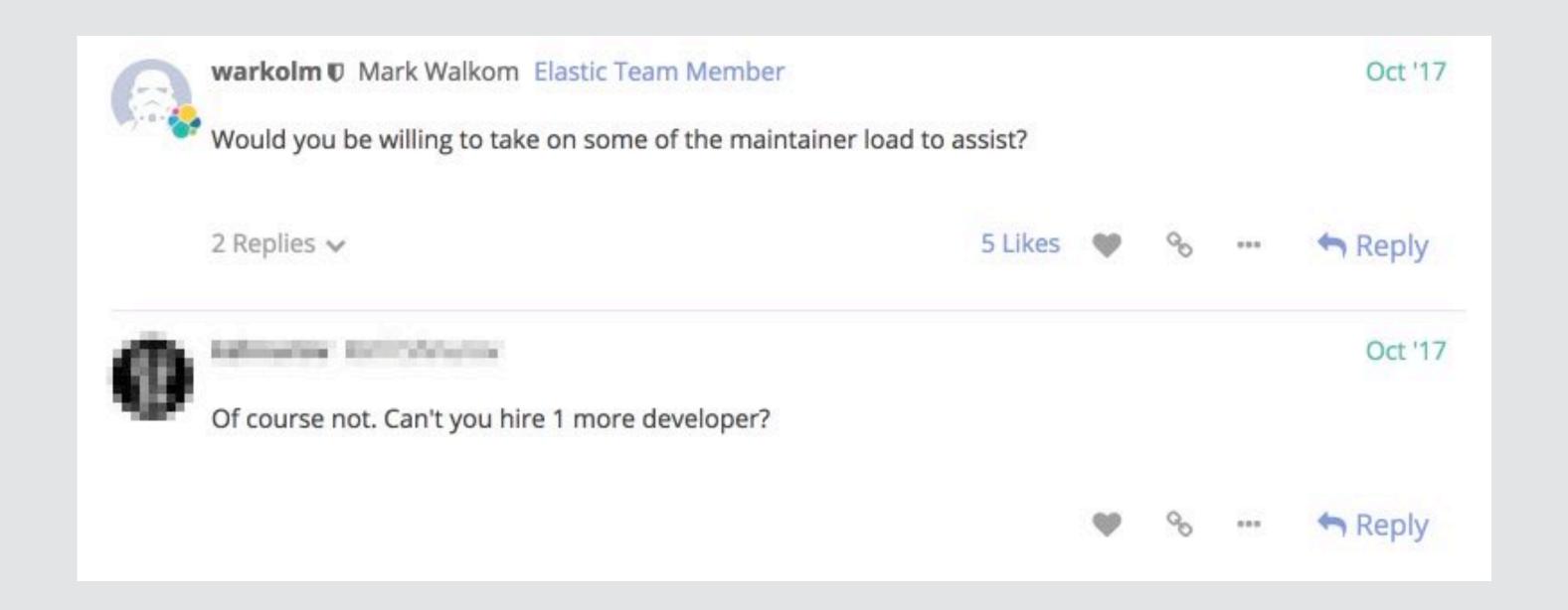
It was pointed out 3 months ago here 54 and nothing has changed - 66 PRs and a lot of bugs not being fixed.

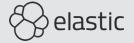
Latest commit was made 5+ months ago.

elasticsearch-rails will be incompatible with an upcoming Rails 5.2 and it looks like nobody cares. How can we rely on a product with such bad support?



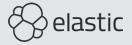
Oct '17





If you're unhappy with an open source project you're entitled to a full, immediate refund to the \$0.00 you paid for it. Alternatively, get involved with the project to make it better.

https://twitter.com/MikeMcQuaid/status/970000490468708352





#### softwaredoug Doug Turnbull

☑ Oct '17

Wow! Come on man, you're getting this stuff for free. Don't be a freeloader, if you see problems share the load! That's the joy and burden of open source 

Output

Description:

5 Likes





\*\*\*





A CONTRACTOR OF THE PARTY OF

Oct '17

Are you sure I'm using it for free? Elasticsearch is a commercial product with \$104m of funding and a lot of paid subscriptions 5, why the hell would I work for them for free?

Btw, you're walking on the streets and breathing air for free - do you clean them up and plant new trees from time to time (also for free)? Nope? Why not?











The first crucial aspect to address is that the Ruby client 3 and the Rails integrations 1 are two completely separate projects, which together contain eight different Rubygems (not counting the X-Pack integration, with a very different degree of problematic aspects. For any further discussion, let's keep this distintion in mind.

The Ruby client has 6 open pull requests 2 right now, with [5 pull requests] waiting for reply from the contributor. There are also 10 issues with questions waiting for reply 2, and 26 issues with general discussion waiting for reply 3. The client and associated libraries, like elasticsearch—extensions are consistently updated 2, with a lot of activity from October 2017, actively tracking the changes in the Elasticsearch 6.x branch. Travis CI currently fails because of incorrect snapshot URL for the Elasticsearch 6.0 package, not with a load of actual test failures. That, to me, doesn't look like an "abandoned" project at all. If it does to our community, I'm very much in favour of a discussion about how can we improve here.

The Rails integration is a different story, and I understand the frustration expressed in the original post by . The project itself consists of *three* totally different Rubygems: the integration with ActiveRecord models, the persistence layer, and the Rails helpers and extensions. All three are pretty different when it comes to complexity, usage — *and* community contibutions. Just compare the download numbers between elasticsearch—model 2 and elasticsearch—persistence 2:3 million versus 600 thousands. But one of biggest sources of troubles, manifesting in the number of issues and pull requests submitted, is actually elasticsearch—persistence, which skews the perspective quite significantly.

With that in mind, let's consider the technical details. For a good example, I've been actively and publicly telling people that the *ActiveRecord* pattern for the elasticsearch-persistence is too challenging from the development *and* usage standpoint, and that it's going to be deprecated in favour of the *Repository* 4 pattern. Now, you *can* hold it against the maintainer, in this case me, to not act on such a plan in a very long time. Doing this transition properly, which means undating the code with deprecation

#### Ruby on Rails Integrations Engineer

APPLY NOW

Location: Anywhere EMEA or US

Department: Engineering

At Elastic, we have a simple goal: to solve the world's data problems with products that delight and inspire. As the company behind the popular open source projects — Elasticsearch, Kibana, Logstash, and Beats — we help people around the world do great things with their data. From stock quotes to real time Twitter streams, Apache logs to WordPress blogs, our products are extending what's possible with data, delivering on the promise that good things come from connecting the dots. The Elastic family unites employees across 30+ countries into one coherent team, while the broader community spans across over 100 countries.

Right now, we are looking to add a talented Ruby Engineer with a deep understanding of Rails and real passion for open source development to collaborate within our small, but globally distributed team.

#### Responsibilities

Your primary responsibility will be to develop and maintain the integration between the Ruby on Rails platform and the Elastic

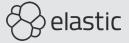






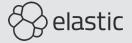
#### Venture Capital

Accelerated Development vs Business Dynamics



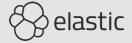
### Where is the





#### Development

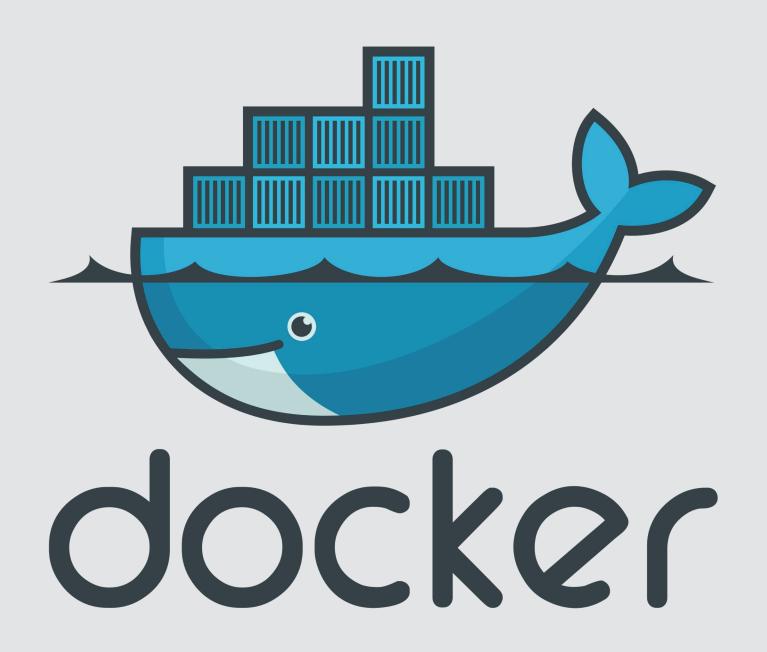
Hobbled Product vs Starving Company







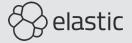






#### Releases

Multiple Products vs Proprietary Plugins



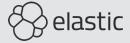
## DATASTAX





#### Open

Open Source vs Open Code

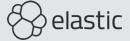


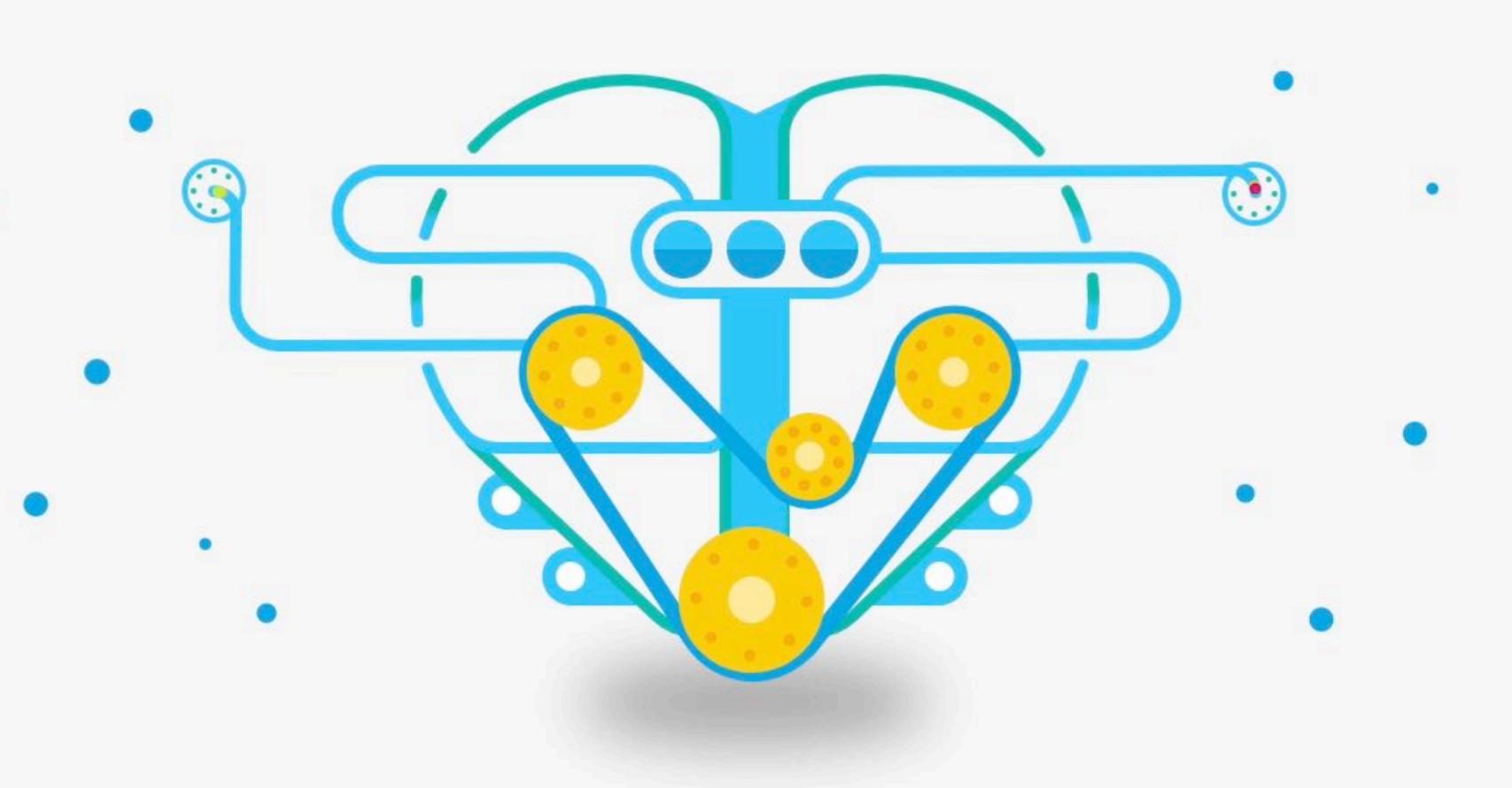






### Elastic's Strategy



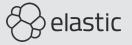


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THE ELASTIC STACK					
Elasticsearch	~	~	~	~	~
Kibana	~	~	~	~	~
Beats	~	~	~	~	~
Logstash	<b>✓</b>	~	~	~	~
APM - agents and server (Beta)	~	~	~	~	~
X-PACK					
Security (formerly Shield)			* Serve	~	~
Monitoring (formerly Marvel)		No.	~	~	~
Management		No.	~	~	~
Alerting (via Watcher)			~	~	~
Machine Learning				~	
			520		

APM (Rota)

### All Code Open

Not Open Source -Apache 2 & Elastic EULA





OPEN

Enrichment

#### **Data Collection Search Engine**

Dashboard Visualizations Agents

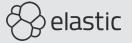
**Visualizations** 

Ingestions Enrichment

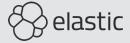
Distributed **Edge Collection** 



## Training Consulting



# Cloud















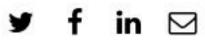


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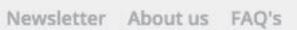
All

Apparel

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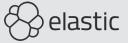




## Success



## Business Is Optional







Upgrade

#### Medium







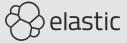


#### Optimizing impact: why I will not start an Envoy platform company

The following are my own views, and not that of my employer, Lyft.

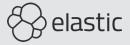
Although almost unbelievable to me, Envoy has gained exceptional traction since it was open sourced about 9 months ago. (If unfamiliar with Envoy see <a href="here">here</a> and <a href="here">here</a> and <a href="here">here</a> for more information). Very early on I received inbound requests from investors and entrepreneurs who were attracted to a new solution in the burgeoning area of microservice networking and management and who wanted to discuss the potential for commercial opportunities around the software. Over the last few months, especially as excitement for the software has increased (a substantial partnership with Google, the launch of <a href="Istio">Istio</a>, uptake and excitement of other large companies, etc.), the amount of inbound requests and push by the investment community to figure out a

## Business Is Complicated



It saddens me that closed source companies are acclaimed for merely putting a piece of code on GitHub, while commercial open source companies get the worse shit for any action that involves protecting their work.

https://twitter.com/icecrime/status/1032155227368185856



### Questions? Disagreement?

Philipp Krenn

@xeraa

