



Open Source at Twitter

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Agenda

1

**Why do we
use Open
Source?**

2

**How do we
Support Open
Source?**

3

**How do we do
Open Source?**

Twitter's Core Values



PROGRESS

How we approach the world:

Reach every person on the planet.

Grow our business in a way that makes us proud.

Defend and respect the user's voice.

OPENNESS

How we treat each other:

Communicate fearlessly to build trust.

Recognize that passion and personality matter.

Seek diverse perspectives.

IMPACT

How we do our work:

Innovate through experimentation.

Ship it.

Be rigorous. Get it right.

Simplify.

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Twitter's User Community

328M

Monthly Active Users

79%

Outside the USA

82%

Mobile Users



Twitter's Engineering Community

3.6K

Employees World-wide

1.9K

Employees in SF HQ

40%

Technical Roles



Why Do People Use Open Source?

1. As a consumer/customer?
2. As a contributor?
3. As a Project Leader?
4. As a business?

#BenefitsOfOpenSource



Open sourcing improves quality. *If the libraries gain traction, you will get free testing and bug fixing. And even without that, when engineers know that their code is open to public commentary, they do a better coding job. And they may actually add documentation and comments.*

Open sourcing speeds up evolution. *Sooner or later someone will suggest or implement an improvement which you otherwise may not have thought of.*

Open sourcing may set a standard. *If the libraries gain traction, YOUR standard has a chance of winning over some other standard.*

Open sourcing is motivational. *The developers in your company will be more motivated when their software is opened up and offered to others.*

Open sourcing attracts talent. *You may be able to hire talented developers who are drawn to your company exactly because you open sourced some software libraries.*

Open sourcing generates favorable publicity. *You may gain additional exposure in open source circles, interest to their products and services via inexpensive marketing channels.*

#WhyDoWeUseOpenSource



Software has a marginal reproduction cost that approaches zero

Source code can be optimized for specific needs

Large network of peer reviewers (*“Many Eyes Make Any Bug Shallow” v.s. “Security through obscurity”*)

Shared development with contributions from corporations, government, academia and community

Low cost tools for software development and distribution are widely available

Influence activity in projects that are important (*Pants? Scala? Mesos?*)

Minimize development costs (*Carrying technical debt**)

Decrease time-to-market for products

Generate favorable publicity and mindshare

Attract the best talent to Twitter by showcasing our engineering prowess



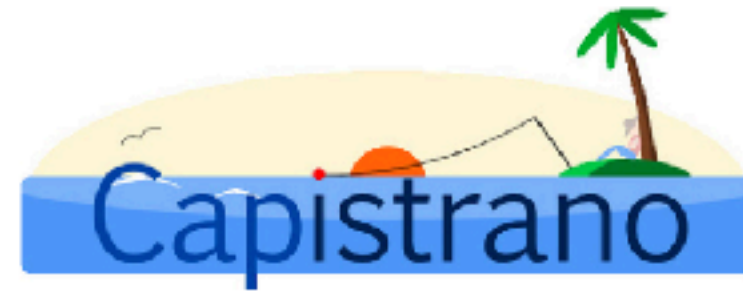
How do we Support Open Source?

#TwitterIsBuiltOnOpenSource



Jenkins

JAMMIT



Thrift



OpenJDK



Scala



Lucene



#CompaniesUseAndContributeToTwitterOSS



FullContact



Alibaba.com



and so on...

#TwitterSupportsFoundationsAndStandards





How Do We Inbound Open Source?

1. Licensing Guidelines
2. 3rd Party Dependency Policy
3. 3rd Party Dependency Distribution



How Do We Outbound Open Source?

1. Make The Case
2. Engineering Management and Community
3. Trademarks and Branding
4. Legal and Intellectual Property
5. Security Review
6. Community Architecture and Infrastructure
7. Communications and Publication
8. Feedback



Questions?

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