

Balancing Business, Community and Legal Currents: The Art & Science of Successful OSS Compliance

Ibrahim Haddad, Ph.D.

Head of Open Source Innovation Group | Samsung Research America –
Silicon Valley



How did I get here?

Jan 2000

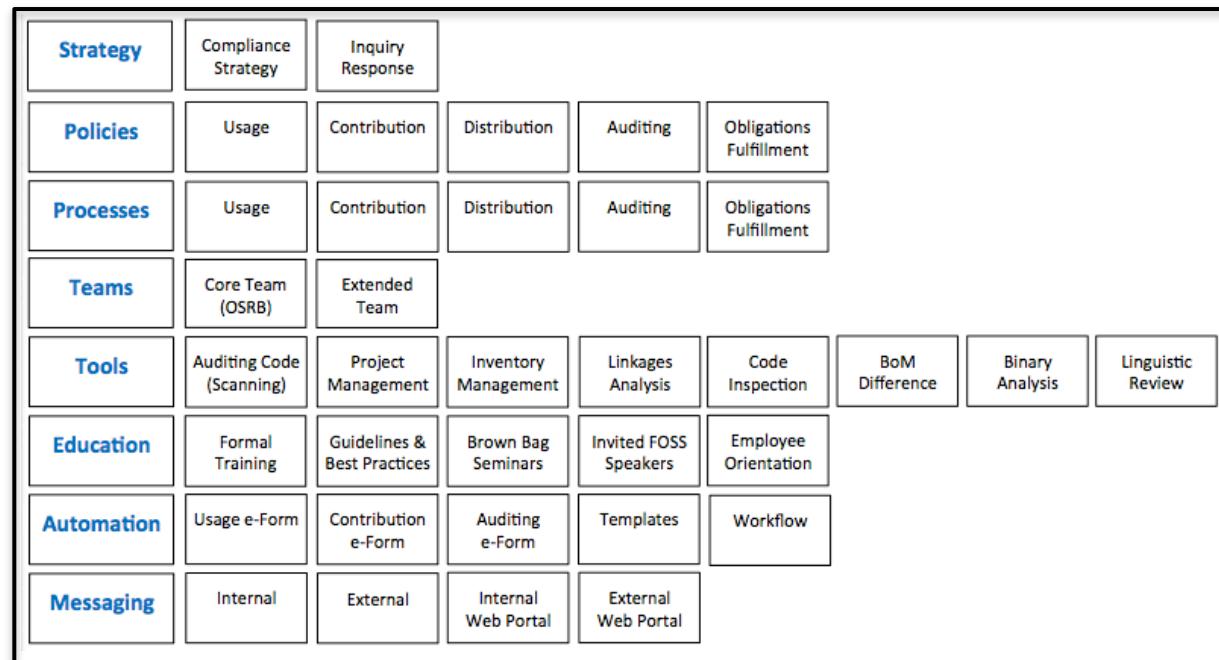


Basic Elements of a Compliance Program



Compliance 101

- **Companies using open source software must:**
 - Observe the obligations of FOSS licenses
 - Protect their IP
 - Protect the IP of 3rd party software providers from unintended disclosure
 - **Basic Elements of Compliance**
 - Policy
 - Process
 - Guidelines
 - Staffing
 - Training
 - Audits
 - Tools and Automation
 - Inquiries



Snapshot of Compliance Program Elements



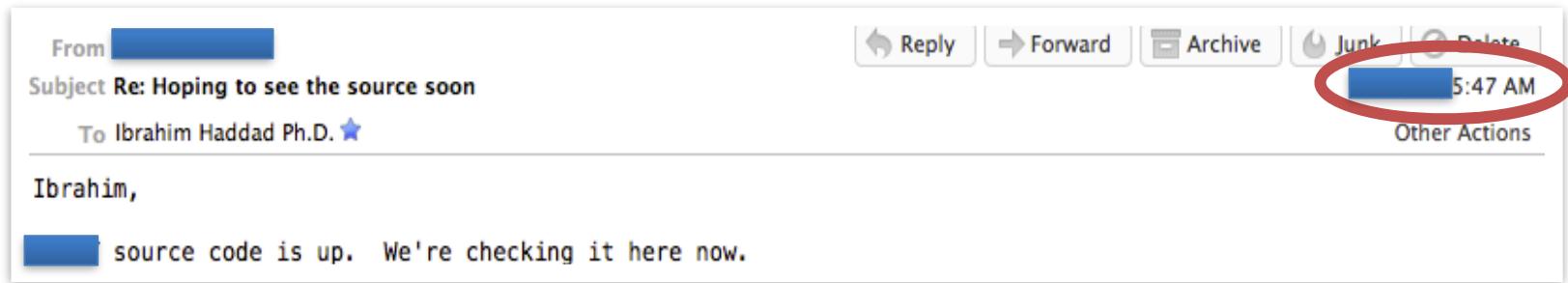
Compliance: A Balancing Act





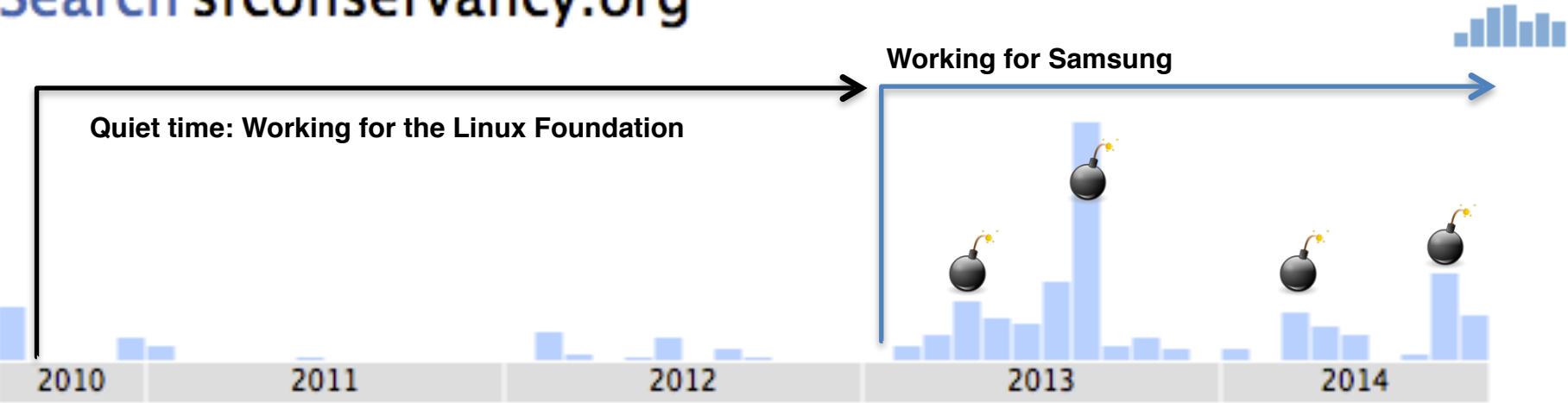
Verifying Code at 5:47 am

Good times :-)



Email Activities for the past ~5 years

Search sfconservancy.org



Search gpl-violations.org

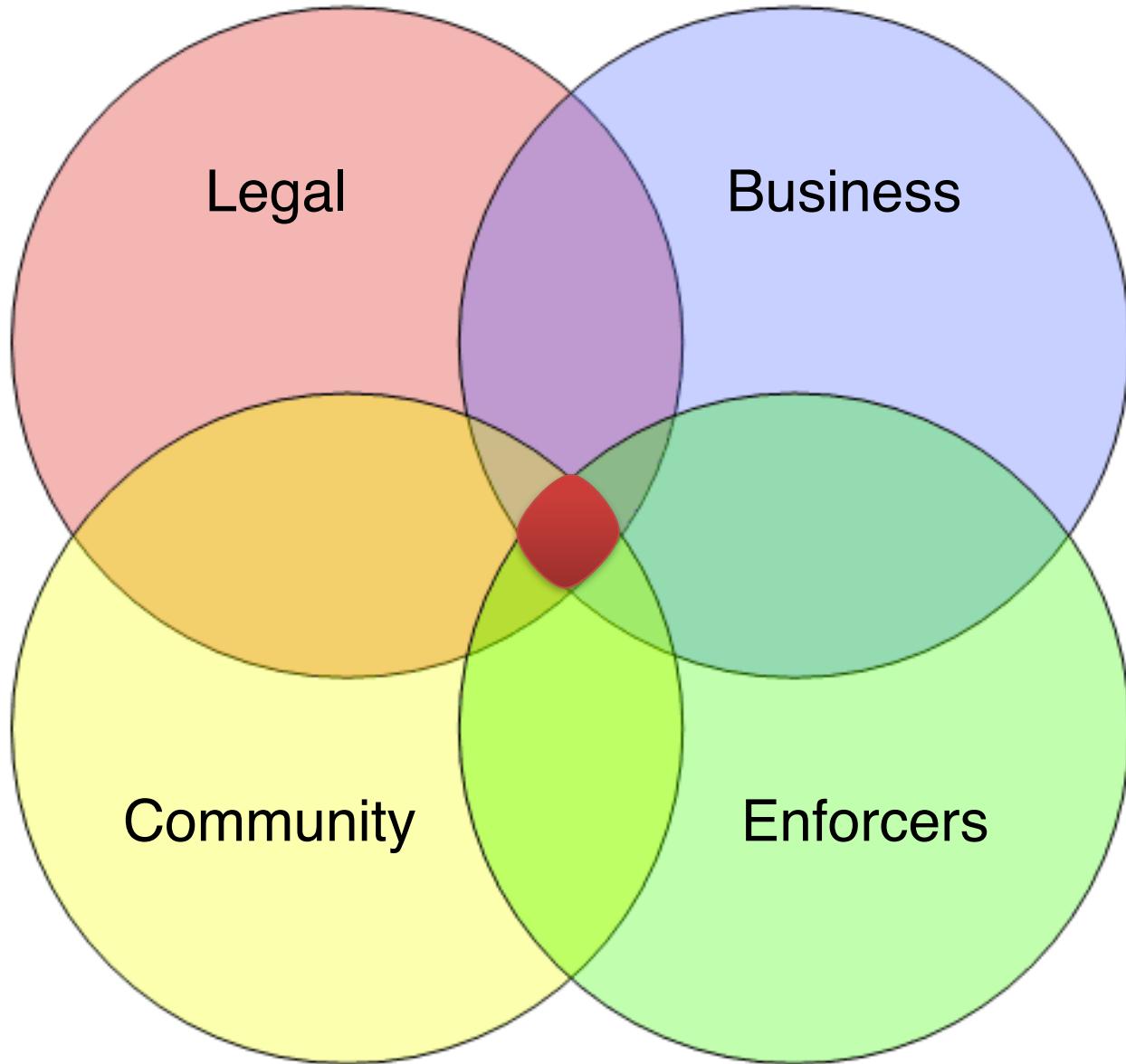


Balancing what?

- Internal & External Legal Counsel opinions / requirements
- Business needs
- Community needs
- Enforcers, whistle blowers

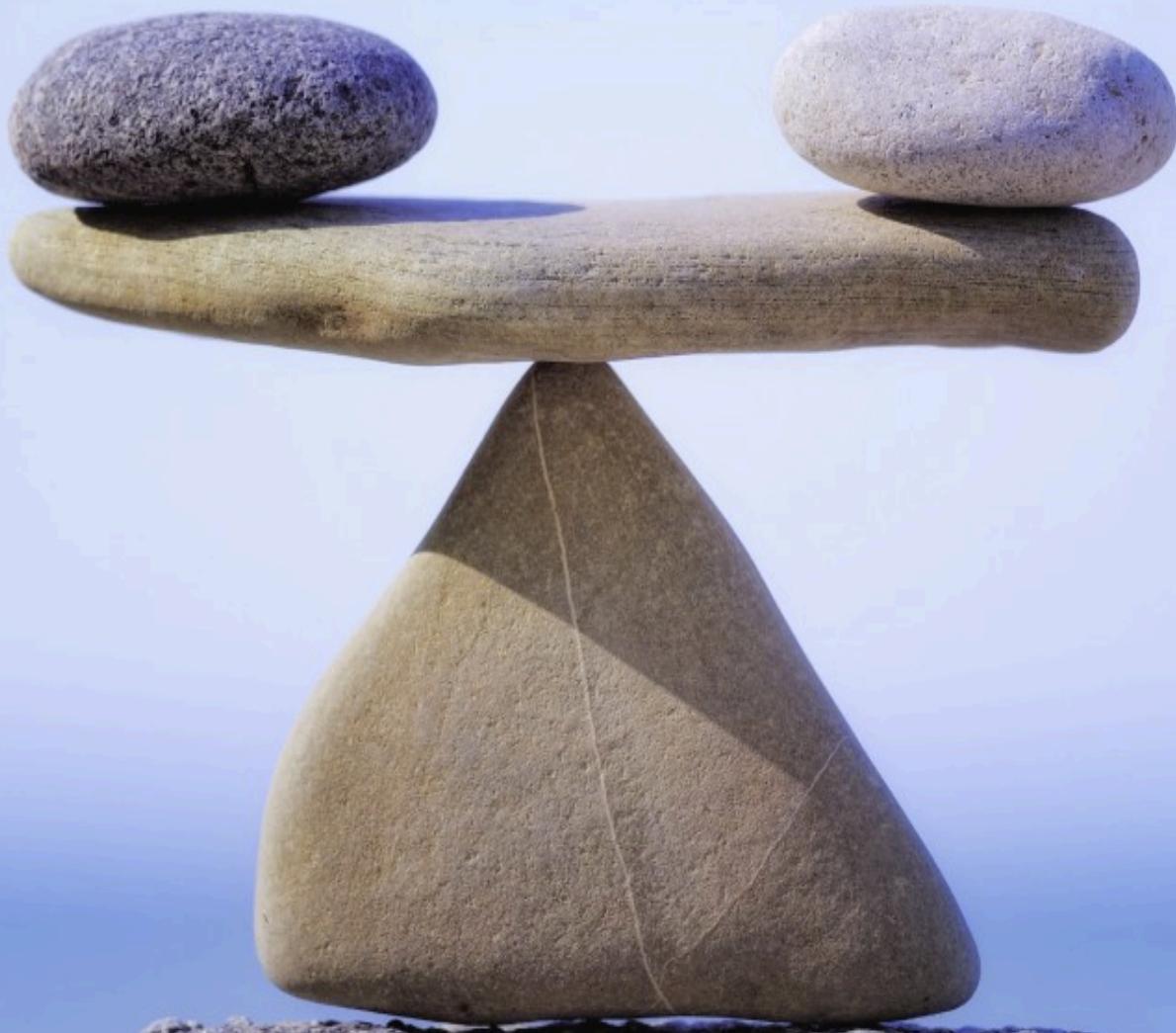
It's easier to make enemies than to make friends.

Sweet Spot

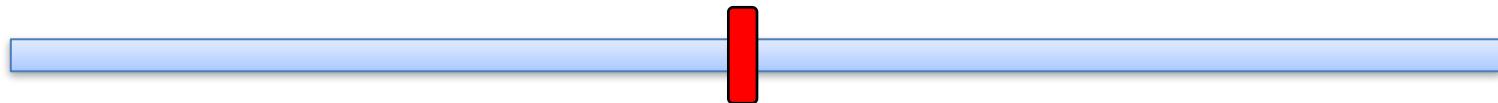


How to balance?

Welcome to the Art & Science of Compliance.



The Art & Science Compliance Meter



Art
(Creative Activity)

Science
(Systematic Approach)

Policy

- **The 1 line compliance policy.**

We must ensure that all of <COMPANY NAME>'s incoming software (in house, 3rd party commercial, open source, other) is compliant with the license it is provided under by following the open source compliance process defined in <URL>.

Policy

- The 72 pages master policy

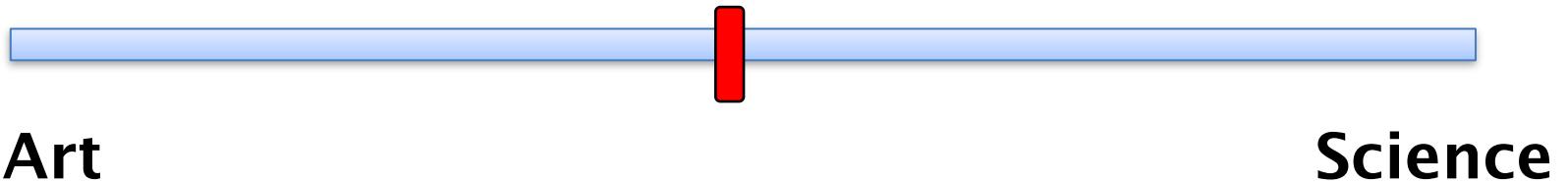
72 pages policy + various mini policies ranging from 10 to 22 pages.

[The largest mini policy at 22 pages is on “Open Source Compliance Practices When Engaging With Business Partners】

Fun Fact:

1 policy page per 1000 employee. The math works!

Policy: Art / Science Meter

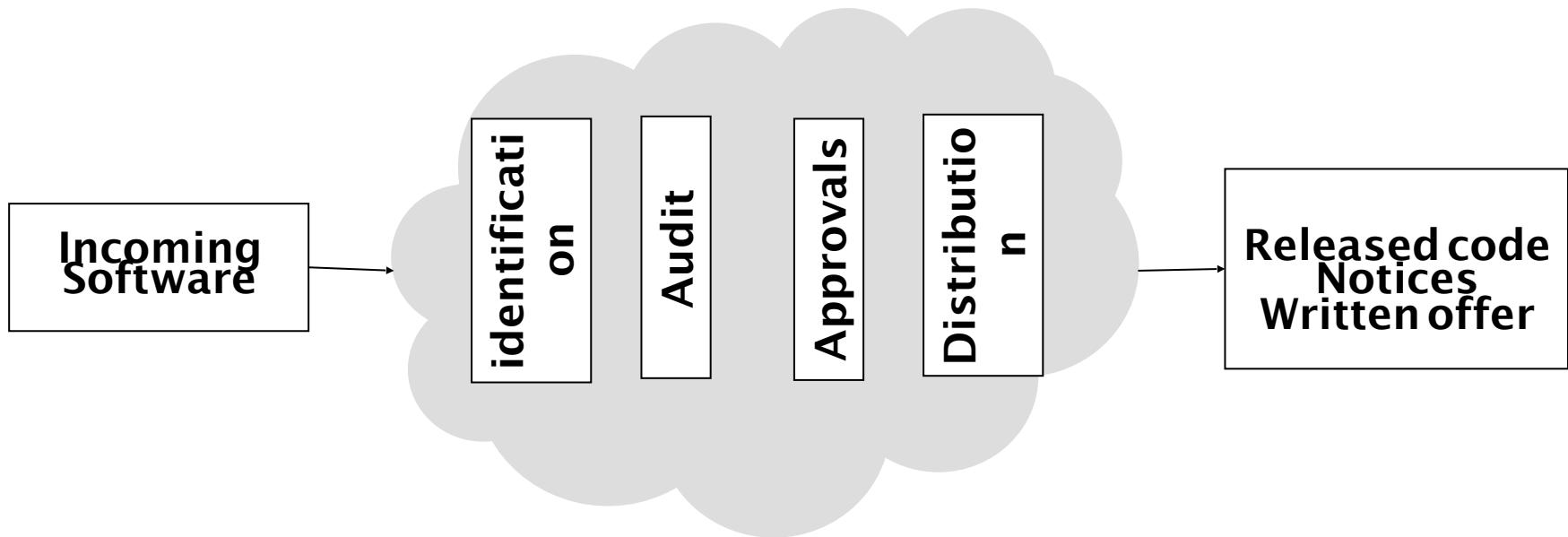


Process

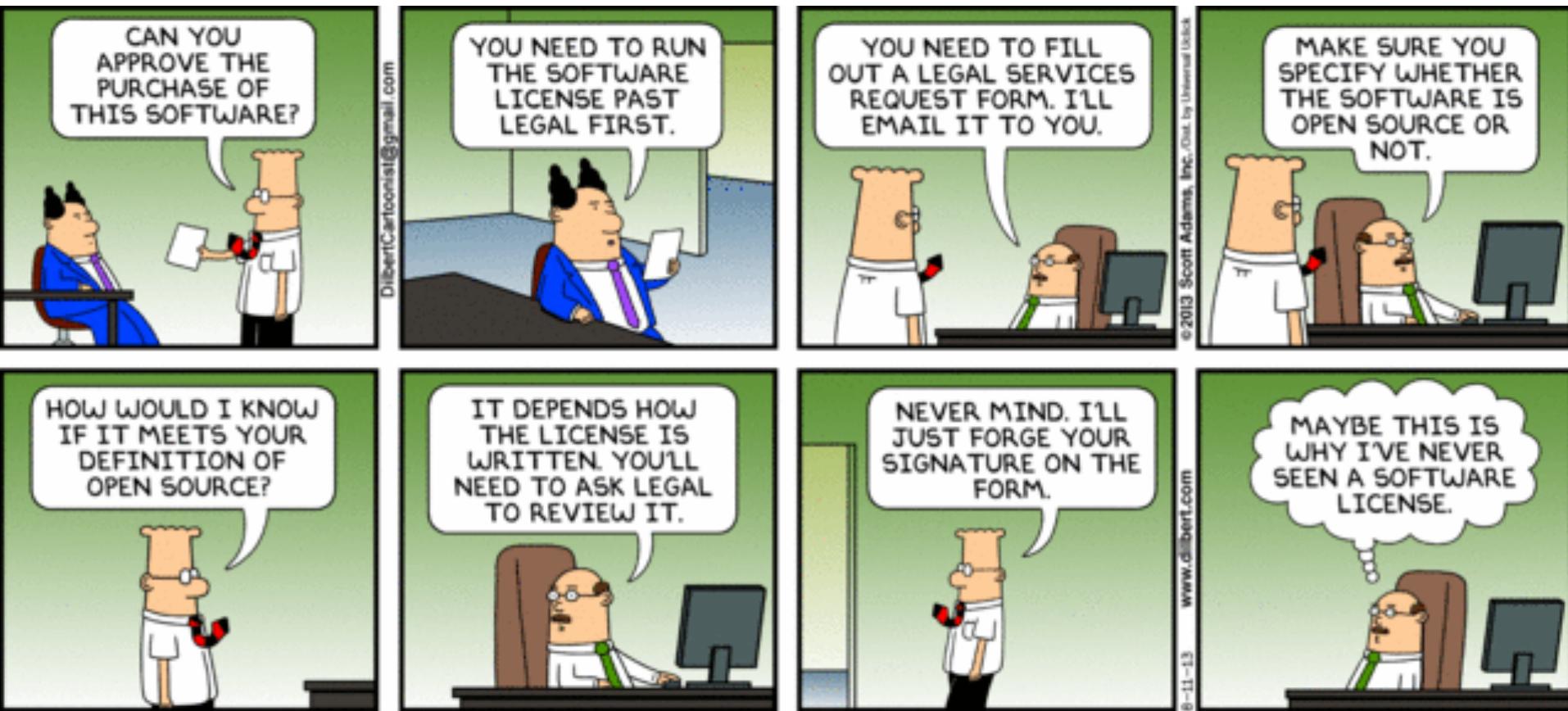
● The way we ensure the policy is applied.

● Simple process:

- Check all incoming software
- Identify origin, license, obligations, notices, etc.
- Upon product release, meet the conditions of the licenses



Do you think all engineers request approval?



Process Story (1)

- **What to do when you are severely understaffed?**
 - 1 JIRA ticket – 5 milestones in the JIRA process (identification, auditing, reviews, approval, fulfillment).

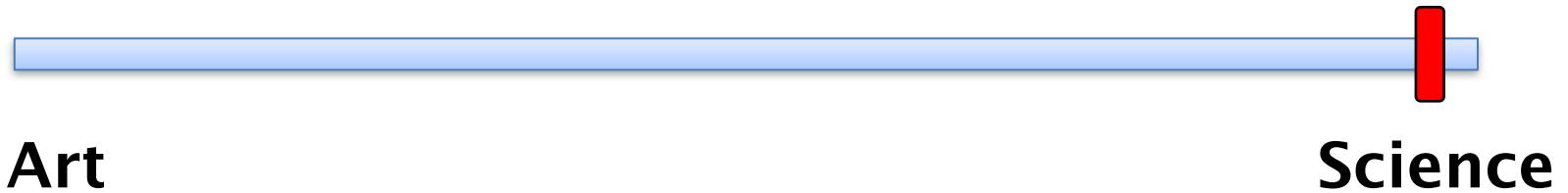


Process Story (2)

- Bring people into your world: Palm story.
- GPL-Violations story and the first edition Palm .



Process: Art / Science Meter



Guidelines (Balancing with Legal Staff)

● License Compatibility Matrix

● License Playbooks

● Legal Best Practices

● Compliance 911

Guidelines (Balancing with Engineering Staff)

● HOW-TOs

● Do's and Don'ts

● Engineering best practices

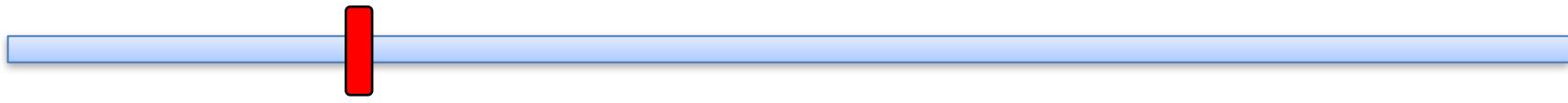
Guidelines Story

- Comment found in source code while auditing it.

“I stole this code from <URL>”

Guidelines: Art / Science Meter

License
Playbooks

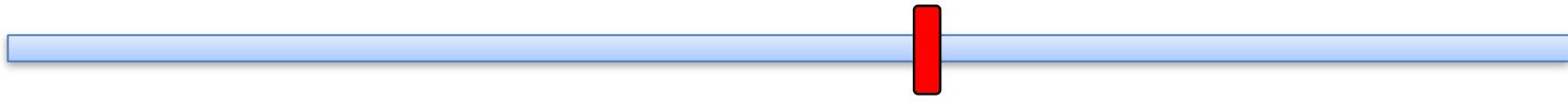


Art

Science

Guidelines: Art / Science Meter

Engineering
Guidelines

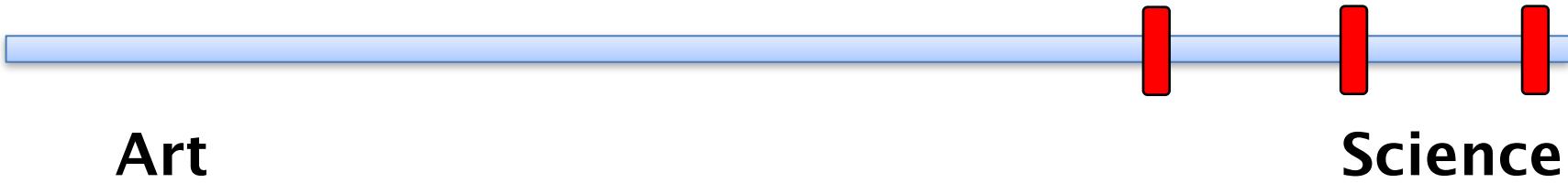


Art

Science

Guidelines: Art / Science Meter

Compatibility How-To
Matrix Do's & Don'ts ⁹¹¹



Compliance Staffing: Art / Science Meter

Building
Compliance
Team



Art

Science

Right Mindset



Easy To Find/Hire

Hard To Find

Staffing Story (you need an executive sponsor)

Ibrahim, I am not convinced we need to do any of this compliance stuff and we need to transfer the compliance resources to development. Can you figure out a plan for this?

Compliance requires an executive sponsor.

Training

- Crucial to the adoption of compliance.
- Ranges from a brown bag talk to a 3-days workshop.

- **STORY:**

Compliance Seminar #1 - Less than 10 people attended.

Compliance Seminar #2 (a week later) – Full house

Any guess on what influenced the increased attendance? (2 factors)

Must provide proper motivation!

Audits and Tools

- **Tools**

- Project management
- Auditing
- Linkage analysis
- BoM diff tool

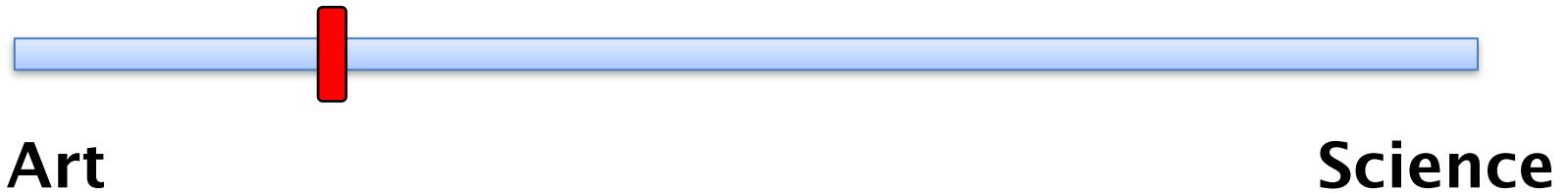
Running the Audits



Art

Science

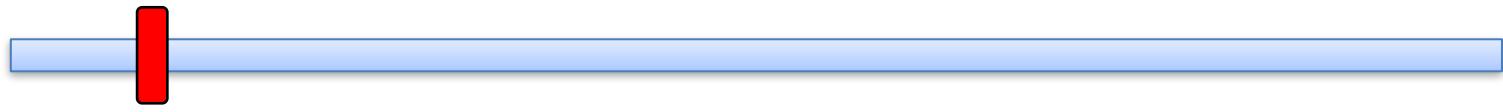
Interpreting the Audit Results



Automation

- We ship 100s of products every year, many with multiple firmware and OTA updates. How to deal with this industrial scale compliance?
- Elon Musk on Automation.
- Open source compliance for Samsung is exponentially more difficult to manage than for other companies providing online services (built with open source code) to billions of users.

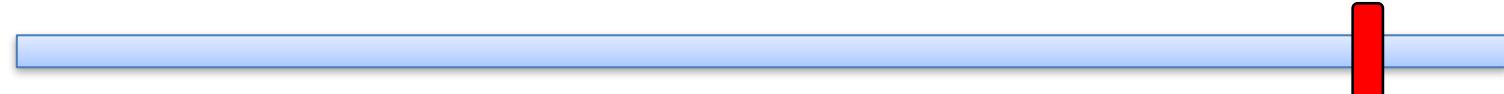
Coming up with a solution



Art

Science

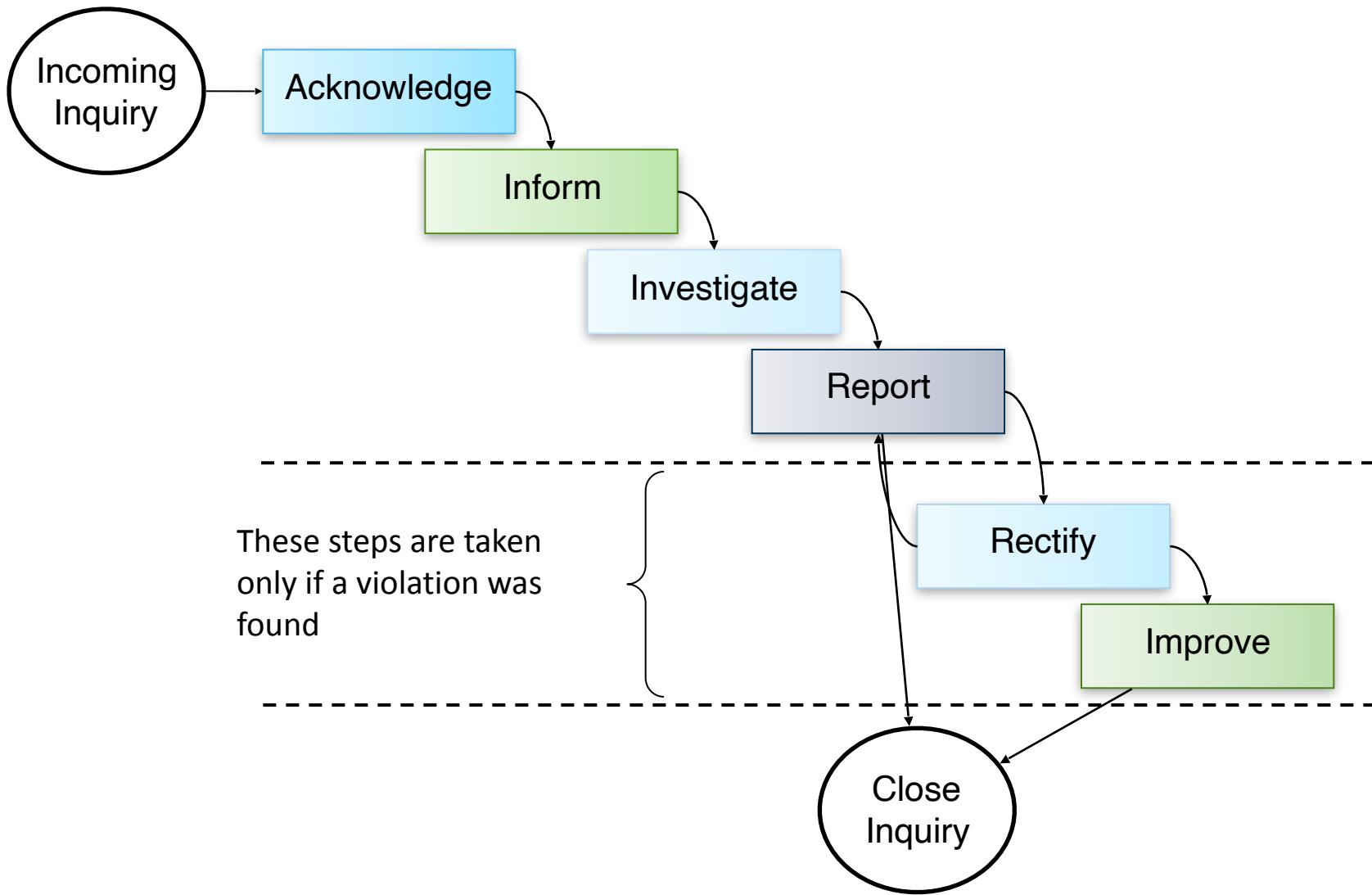
The Automation Solution



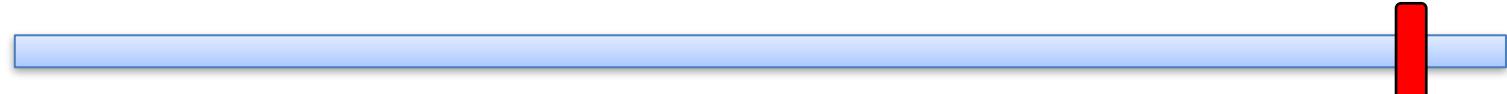
Art

Science

Inquiries / Challenges



Managing Inquiries – Process



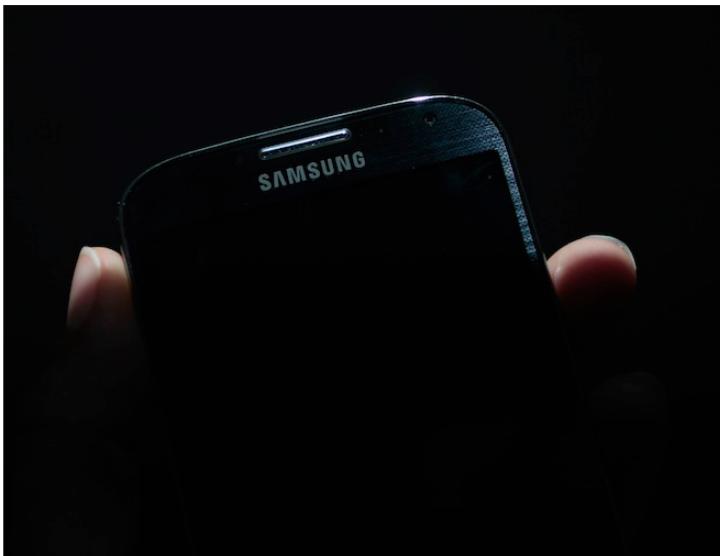
Art

Science

Resolving Rightful Inquiries

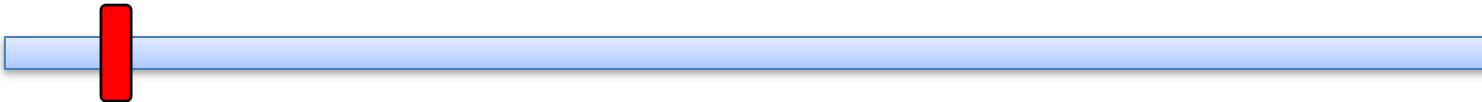
Busted for Dodging Linux License, Samsung Makes Nice With Free Code

BY ROBERT MCMILLAN 08.20.13 | 6:30 AM | PERMALINK



WIRED

"After discussing with multiple open source organizations and getting their thoughts on this matter, we proceeded with the code release," said Ibrahim Haddad, the head of Samsung's open-source innovation group, in an email interview. "We take our responsibility to abide by open source licenses seriously and recognize the value that open source software brings to our products."



Art

Science



Closing



Relationships Matter



Software Freedom
Law Center

openinvention*network*[®]



Software Freedom
Conservancy



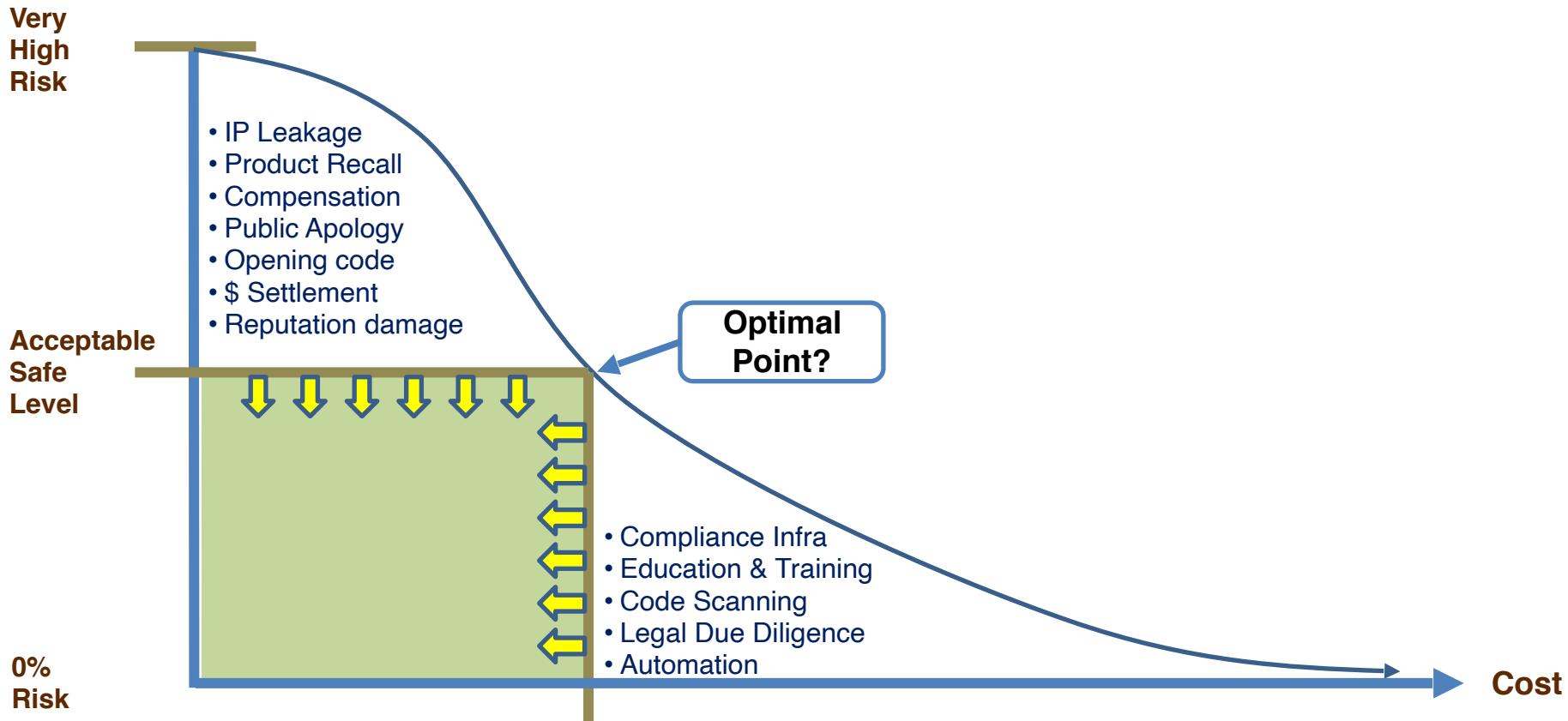
Let's save the GNU!

gpl-violations.org



FREE SOFTWARE
FOUNDATION

How good is good enough?



Source: Yunjae Jung, Samsung SDS

Final Thoughts

- We've come a long way in compliance and we learned a lot.
- Compliance today is now more of a scalability and a cost issue, not as much of a license interpretation debate.

The Next Frontier:

- How can we take cost out of compliance and provide a consistent , bullet proof and repeatable approach that helps companies avoid compliance hiccups?

We need Artists & Scientists to attack the Scaling,
Automation and Cost challenges.

Samsung Open Source Compliance Course

SlideShare: @SamsungOSG

Direct URL:

<http://www.slideshare.net/SamsungOSG/guide-to-open-source-compliance>

Thank you!

Ibrahim Haddad, Ph.D.
Head of Open Source Innovation Group
Samsung Research America – Silicon Valley
[@IbrahimAtLinux](https://twitter.com/IbrahimAtLinux)

